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JOURNAL OF INDIAN SCHOOL OF POLITICAL ECONOMY is devoted to a study of the Indian Economy, Polity and Society. Emphasis is on reviewing developments since Independence with roots in the British administration where relevant. When a review is based on statistical data, as far as possible, full statistical base data are presented. The Journal is intended to be a quarterly. However, in the first year, we brought out only two issues, January-June and July-December 1989. In 1990, we brought out three issues January-April, May-August, and September-December 1990. Beginning 1991, we are bringing out four quarterly issues. This is the first issue of 1993.

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INCOME TAX IN INDIA SINCE 1860

M. M. Sury

Income-tax is the only notable source of direct tax revenue in India. This article provides an historical analysis of the various aspects of income-tax in India. The main emphasis is on post-Independence developments of the tax relating to revenue significance, rate structure, exemptions, concessions, evasion, and federal aspects. Recent reforms in income-tax and their critical evaluation are given special focus.

PRE-INDEPENDENCE DEVELOPMENTS

Consequent upon the financial difficulties created by the events of 1857, income-tax was introduced in India for the first time in 1860. However, the imposition of income-tax remained irregular until 1886, when a systematic legislation was enacted for its operation on a permanent basis. Since then the form of income-tax has undergone a series of changes to meet the requirements of Government finances and economic policy.

The Act of 1860 was passed only for five years and therefore it lapsed in 1865. It was replaced in 1867 by a license tax on professions and trades and the latter was converted into a certificate tax in the following year. The certificate tax was replaced in 1869 by a general income-tax which, after remaining in force for four years, was abolished in 1873. In 1876, Government imposed a license tax on the traders to create a famine fund to deal with the famine of 1876-78. This license tax on traders remained in operation till 1886 when it was merged in the income-tax Act of that year. '...the whole period (1860-1886) was one of continuous trial and error with different schemes of direct taxation, no less than 24 Acts being passed in 26 years' [Todhunter Committee, 1924-25, Vol. I, para 259].

The Income-Tax Act, 1886

The Act of 1886 levied a tax on the income of residents as well as non-residents in India. The Act defined agricultural income and exempted it from tax liability in view of the already existing land revenue, a kind of direct tax. (In the 1860 legislation, agricultural income was also subject to taxation). The absolute exclusion of agricultural income from the purview of income-tax law continued till the Government of India Act, 1935 made it a provincial (State) subject. This provision was retained in the Constitution of independent India.

The Act of 1886 exempted life insurance premia paid by an assessee on policies on his own life or on that of his wife, a provision that has continued in one form or another till now. Under another provision of the Act, a Hindu undivided family was treated as a distinct taxable entity, a position maintained by all subsequent Income-Tax Acts.

The assessment and collection procedures of income-tax in the earlier days of its operation were simple and somewhat arbitrary. 'The Income-tax Act of 1886 laid an obligation only on companies to file every year statements of their net income and it was entirely within the discretion of the Collector to devise means for finding out other persons likely to have taxable income and to adopt the appropriate method of determining their income ... the procedure for assessment was summary, and the Collector could intimate the amount of income and tax determined by him to the assessee either through a list published in his office or through an individual notice.' The total income assessed was Rs 33 crore for assessees with income above Rs 2,000 in 1886-87. Net collection from income-tax was Rs 1.37 crore in 1886-87 [Matthai Commission, 1953-54, Vol. II, Ch. 1, paras 60, 74 and 78].

The Act of 1886 remained in force for 32 years i.e., until 1918; during this period a number of amendments were made in it including the introduction of the principle of graduation in income-tax in 1916 and of super-tax in 1917.

The Income-Tax Act, 1918

The Act of 1918 also brought under charge receipts of casual or non-recurring nature pertaining to business or profession. This was con-

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trary to the generally accepted meaning of income that it should, *inter alia*, be received with some degree of regularity. The Act granted exemption to contributions to provident funds governed by the Provident Funds Act.

Although income-tax in India has been a charge on net income since inception, it was in the Act of 1918 that specific provisions were inserted for the first time pertaining to business deductions for the purpose of computing net income. Prior to that, deductions were granted on the basis of executive orders. For example, there was no specific provision for depreciation allowance in the Act of 1886, but the Act of 1918 inserted in the statute itself the provision for depreciation allowance on the straight-line method.

The Act of 1918 remained in force for a short period and was replaced by a new Act (Act XI of 1922) in view of the reforms introduced by the Government of India Act, 1919.

The Income-Tax Act, 1922

The Act of 1922 provided for the first time the set-off of loss from one source against income from other sources in the same year. An amendment of the Act in 1939 permitted carry-forward of unabsorbed business losses for a period of six years with the restriction that carried forward loss could be set-off only against the profits of the same business. Pursuant to a recommendation of the Income Tax Investigation Commission (1948), the income-tax law was appropriately amended in 1953 to provide for the set-off of speculative losses, even during the same year, only against the speculative gains.

Under the Act of 1886, the paying officers had the obligation to deduct tax at source from the salaries of Government servants and employees of local bodies. However, the Act of 1922 extended to all employers the responsibility to deduct tax at source on salaries. Prior to 1922, there was no separate department for income-tax administration. The assessment and collection of income-tax was done by the land revenue officers as a subsidiary duty. It was only in 1922 that a separate Central Department was created to deal with income-tax administration.

The Indian Taxation Enquiry Committee, 1924-25

The Government of India appointed this Committee under the Chairmanship of Sir Charles Todhunter to examine in detail the entire field of taxation in India. Chapter IX of its report contained recommendations pertaining to income-tax. The Committee rejected the idea of differentiation between earned and unearned income for income-tax purpose.

A major recommendation of the Committee pertained to the distribution of income-tax revenue between the Centre and the provinces. Prior to 1919, income-tax was a 'divided head' of revenue. However, the Montague-Chelmsford Reforms resulted in a complete separation between Central and Provincial finances, and income-tax formed a part of Central revenues. The Todhunter Committee opined that in the event of any division of taxes between the Centre and the Provinces, the choice of income-tax as the main balancing factor was inevitable. The Government of India Act, 1935 did assign to the provinces a part of the net proceeds of income-tax levied by the Centre.

Income Tax Enquiry Committee, 1935

This Committee was appointed by the Government of India 'to make an investigation of the Indian Income-tax system in all its aspects and to report upon both the incidence of the tax and the efficiency of its administration.' Many amendments based on its recommendations became law in 1939. According to one such amendment the then prevailing step rates system of income-tax was changed to slab rates system in 1939. Under the step system of rates all persons in a particular income bracket bear the same effective rate on every rupee of their income. Under a slab system of rates, tax on each slab of income is calculated separately and then added up. Under another amendment, closely-held companies were required to distribute 60 per cent of their profits net of tax as dividend. The Income Tax (Amendment) Act, 1939 provided also for the taxation of profits of the business of mutual life insurance which had remained exempt from taxation prior to 1939.

Another notable development in the evolution of income-tax was the imposition of Excess Profit Tax in 1940. It was levied on profits earned by businesses and professions during the period from September 1, 1939 to March 31, 1946. A 'standard profit' was calculated for each accounting year falling within the above years. Standard profit was approximately equated with the profits earned in normal times,i.e., in the pre-war years. Companies started before 1936 had the following five options to choose from for determining standard profit: profits during 1935-36 or 1936-37 or average of the profits during 1935-36 and 1936-37 or 1936-37 and 1937-38 or 1937-38 and 1938-39. In the case of companies started after 1936, the 'capital standard' was used. Thus, a statutory percentage of 8 per cent of the capital invested was considered the standard rate of profit. Excess profit tax was levied at the rate of 50 per cent on the excess over the standard profits earned between September 1, 1939 and March 31, 1941. For the period April 1, 1941 to March 31, 1946, the rate of excess profit tax was 66-2/3 per cent.

Soon after Independence, the Income Tax Investigation Commission submitted in 1948 a report which dealt mainly with the problems of evasion and avoidance of income-tax. Its recommendations were implemented through the Income-tax (Amendment) Act, 1953. During pre-Independence period, revenue-raising was the main purpose of income-tax system. There were hardly any concessions/exemptions for savings, investments, industrial growth, and other desirable socio-economic objectives. Incentives for these activities started building up in the system soon after Independence. Thus, a provision introduced in 1949 exempted from tax new industrial undertakings for the first five years of their manufacturing operations.

CONSTITUTIONAL PROVISIONS

Taxation of income in India may be classified into two broad categories: (a) taxation of non-agricultural income, a Central subject, and (b) taxation of agricultural income, a matter for State legislation. The two relevant entries in List I (Union List) of the Seventh Schedule of the Constitution which empower the Parliament to levy income-tax are: entry 82, "taxes on income other than agricultural income", and entry 85, "corporation tax". According to Article 366 (6) "corporation tax means any tax on income, so far as that tax is payable by companies."

The States are empowered to make laws with respect to taxes on agricultural income, *vide* entry 46 of List II (State List) in the Seventh Schedule. However, from the assessment year 1974-75, agricultural income is taken into account to determine the rate of tax on non-agricultural income in certain cases. Very few States have, however, imposed tax on agricultural income, and wherever it is imposed the revenue is negligible.

Although income-tax is levied and collected by the Centre, the proceeds are shareable with the States under Article 270 (1) of the Constitution. However, the proceeds attributable to Union Territories, taxes payable in respect of Union emoluments, and corporation tax are kept out of the divisible pool in accordance with the provisions contained in clauses (2), (3) and (4) of Article 270. Similarly, the surcharge levied for purposes of the Union is also excluded from the divisible pool under Article 271. The Finance Commission recommends the formula for the distribution of income-tax revenue between the Centre and the States and the distribution of States' share among the States themselves. Thus, income-tax plays an important role not only in Central finances but also in the finances of State Governments.

REVENUE SIGNIFICANCE

In 1950-51, personal income-tax accounted for almost one-third (32.7 per cent) of Central tax collections. However, the relative contribution has declined over the years and was less than one-tenth (9.3 per cent) in 1990-91 (Table 1). In the case of corporation tax, the relative contribution was 9.9 per cent in 1950-51 while in 1990-91 it was 9.3 per cent. In the intervening period, however, moderate changes are noticeable in the proportionate share of corporation tax.

Two implications of these trends are noteworthy. The sharp decline in the relative revenue significance of personal income-tax indicates lower tax burden on household incomes. The corporation tax which was wholly borne by private sector in the early fifties, in the absence of public enterprises, is now substantially paid by the public sector undertakings. Thus, the effectiveness of corporation tax on the private corporate sector has lessened over the last 40 years. Lamenting over these trends a recent tax report observed, 'It is a matter for concern that the share of taxes on income particularly personal income-tax has registered a sharp decline over the years and despite efforts to raise more revenue from these taxes, no appreciable improvement seems to have come about' [Chelliah Committee, 1991, para 3.5].

TABLE 1. TRENDS IN THE RELATIVE SHARES OF PERSONAL INCOME TAX AND CORPORATION TAX IN CENTRAL GOVERNMENT TAX COLLECTIONS: SELECTED YEARS

(Rs Crore)

Central Taxes	1950-51	1955-56	1960-61	1965-66	1970-71	1975-76	1980-81	1985-86	1990-91
A + B Total Tax	404	483	888	2,060	3,206	7,608	13,179	28,671	57,576
collection	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
A. Direct Taxes	174	171	290	602	870	2,205	3,004	5,657	11,025
of which	(43.1)	(35.4)	(32.6)	(29.2)	(27.1)	(29.0)	(22.8)	(19.7)	(19.1)
(i) Corporation tax	40	37	111	304	371	862	1,310	2,865	5,335
	(9.9)	(7.7)	(12.5)	(14.7)	(11.6)	(11.3)	(9.9)	(10.0)	(9.3)
(ii) Personal Income tax	132	131	166	271	473	1214	1,506	2,509	5,371
	(32.7)	(27.1)	(18.7)	(13.2)	(14.8)	(16.0)	(11.4)	(8.7)	(9.3)
B. Indirect taxes	229	315	599	1,457	2,337	5,403	10,175	23,014	45,551
	(56.7)	(65.2)	(67.5)	(70.7)	(72.9)	(71.0)	(77.2)	(80.3)	(80.9)

Figures in parentheses are corresponding percentages of total tax collection.
Source: Government of India, Ministry of Finance, *Explanatory Memorandum on the Budget of the Central Government* (various years), and *Receipts Budget* (various years).

Why has the share of personal income-tax in Central tax collections dipped so low? One reason is the low stake of Central Government in the proceeds of this tax. The share of the States in the net proceeds of income-tax has gradually increased ever since the recommendations of the First Finance Commission [For a summary of the recommendations of various Finance Commissions relating to income-tax, see, Sury, 1992]. It reached the level of 85 per cent with the recommendations of the Seventh Finance Commission, and this level was retained by the two subsequent Finance Commissions. Centre's share in the proceeds of income-tax is low at 15 per cent and it virtually acts as a collecting agency on behalf of the State Governments. This arrangement has dampened the efforts of the Centre to increase revenue from income-tax. The high share of the States in income-tax has proved counter-productive because the Centre has diverted its attention to sources which strengthen its own revenue position. Taking note of the deteriorating situation, the Sarkaria Commission observed, 'It is a fundamental principle of taxation that the taxing authority should have interest in its proceeds. In order to maintain this principle and giving a more meaningful choice to the Union among fiscal alternatives, it is necessary to enlarge the base of devolution to the States but with a lower percentage share in individual taxes. This can be done by bringing into the divisible pool a major Union tax but still keeping a sizeable revenue source for exclusive utilisation by the Union' [Sarkaria Commission, Part I, 1988, para 10.6.15].

The Sarkaria Commission, therefore, recommended that the net proceeds of corporation tax may be made permissibly shareable with the States through an appropriate amendment of the Constitution. Simultaneously, it made it clear that in the event of the inclusion of corporation tax in the divisible pool, necessary adjustments will have to be made by suitably lowering the shares of States in income-tax and Central excise duties.

INCOME TAX ACT, 1961

Meaning of Income

The present law of income-tax is governed by the Income Tax Act, 1961 (hereinafter called the Act) which is amended from time to time by the annual Finance Act and other amending Acts. The Act which came into force on April 1, 1962, replaced the Indian Income Tax Act, 1922 which had remained in operation for 40 years.

As in most other countries, income is exemplified rather than defined. The Act does not define the term 'Income', but section 2 (24) of the Act describes the various receipts as income which include, *inter alia*, profits and gains, dividends, voluntary contributions received by a charitable trust, the value of any perquisite or profit in lieu of salary, any capital gains, any winnings from lotteries, crossword puzzles, etc. Apart from the aforesaid receipts, any other receipt is taxable under the Act if it comes within the general and natural connotation of the term Income. The description of the term 'income' in section 2 (24) is inclusive and not exclusive. It is indeed very difficult to reduce the concept of income to a precise and unambiguous definition. Various forms of imputed and accrued incomes pose serious practical difficulties of measurement, and guidance is sought from judicial pronouncements on the subject. 'It will be impracticable to reduce the principles evolved by judicial decisions in the leading cases on this subject (income) into an exhaustive and self-contained definition of income in our taxation Act. We are also of the opinion that perhaps more harm than good may result from including in the taxation Act a rigid definition of income. We think that guidance in this matter should continue to be drawn in the future, as heretofore, from the extensive case law on the subject' [Matthai Commission, 1953-54, Vol. II, Ch. 3, para 3].

It is noteworthy that income which is subject to charge of tax varies according to the residential status of the taxpayer. In the case of a person 'resident' in India, all income derived from whatever source is within the scope of taxation. However, in the case of a 'non-resident', the tax liability extends only to income which (i) is received or is deemed to be received in India by or on behalf of the non-resident or (ii) accrues or arises, or is deemed to accrue or arise, to the non-resident in India. It is evident that income which accrues or arises outside India (i.e., foreign income) is beyond the scope of tax liability in India in the case of a non-resident.

Incomes Exempt from Tax

The Act describes incomes that are exempt from the purview of income-tax. These exemptions are meant to serve various socio-economic objectives through the medium of tax policy. The plethora of exemptions granted under various sections of the Act has narrowed the base of income-tax considerably, besides making the law compendious.

The important types of income altogether excluded from the scope of total income under section 10 are agricultural income, share of profit from a firm, casual and non-recurring receipts, death-cum-retirement gratuity, pension and leave salary, any retrenchment compensation received by a workman, payment at the time of voluntary retirement, payments from provident funds, payments from superannuation fund, house rent allowance, awards for literary, scientific, and artistic work and income of scientific research associations, universities, hospitals, and sports associations. A detailed description of incomes exempt from tax is given in Appendix I.

Tax Holiday Schemes

1. *Tax Holiday for Newly Established Industrial Undertakings in Free Trade Zones*

This scheme of section 10A provides for a complete tax exemption in respect of the profits and gains of an industrial undertaking set up in any free trade zone. From the assessment year 1987-88, complete tax exemption can be claimed in respect of any 5 consecutive assessment years falling within a time frame of eight years beginning from the year in which the industrial undertaking commences production. The objective of this concession is to encourage the establishment of export-oriented industries in free trade zones. Free trade zone means the Kandla

Free Trade Zone, the Santacruz Electronics Export Processing Zone and others specified by the Central Government for the purpose of section 10A.

2. Tax Holiday for New Established Hundred Per Cent Export-Oriented Undertakings

Under provisions of section 10B, any profits and gains made by an assessee from a hundred per cent export-oriented undertaking are not included in the total income of the assessee. This benefit is available to the assessee in respect of any 5 consecutive assessment years (referred to as holiday period) falling within a period of eight years beginning with the initial assessment year in which the undertaking commences production.

Heads of Income

Income-tax is a composite tax on the aggregate of incomes from various sources. However, taxable income is first computed under different heads of income and then aggregated. From the aggregated amount certain deductions are made to arrive at taxable income. Section 14 of the Act prescribes five broad heads under which the income of an assessee is classified for purposes of computation of total income and the charge of income-tax. These are (A) salaries; (B) income from house property; (C) profits and gains of business or profession; (D) capital gains; and (E) income from other sources. The method of computing income and the permissible deductions differ with each head of income. The heads of income are intended to indicate the classes of income to which different rules of computation are applied. The aggregate of income under these heads is termed as 'gross total income' which, when reduced by the deductions available under sections 80D to 80U (also called Chapter VIA deductions) gives 'total income' on which the charge is applied. A brief explanation of the different rules governing the computation of taxable income under each of the above-mentioned heads is as follows.

A. *Salaries*

Under section 17(1), salary is defined to include (i) wages, (ii) any annuity or pension, (iii) any gratuity, (iv) any fees, commissions, perquisites or profits in lieu of or in addition to any salary or wages, (v) any advance of salary, (vi) any payment received in respect of any period of leave not availed, (vii) any annual accretion to the balance at the credit of an employee participating in a recognised provident fund to the extent it is taxable, and (viii) transferred balance in a recognised provident fund to the extent it is taxable. It also includes perquisites, i.e., the value of any benefit or amenity provided by the employer like rent-free accommodation. However, section 17 provides for exemption from tax in respect of perquisite in the form of medical facilities provided by the employer. Broadly speaking, whatever is received from the employer is salary.

From the aggregate amount of salary a standard deduction is allowed (Sec. 16). Prior to the assessment year 1975-76, the computation of income under the head salaries allowed deduction of expenditure, from gross salary income, incurred by a taxpayer on purchase of books and for maintenance of conveyance for employment purposes. The deduction was allowed to the taxpayer only on production of proof of having incurred such expenditure. The procedure was obviously cumbersome for the salaried persons and to simplify it the Finance Act of 1974 substituted it with a standard deduction for all types of expenditure incurred toward employment. The maximum amount of deduction allowed for this purpose was fixed at Rs 3,500. According to the provisions of the Income-tax Act, the standard deduction was granted, 'in respect of deduction incidental to employment of the assessee'. However, this clause was deleted by an amendment introduced by the Finance (no. 2) Act, 1980. Consequently, standard deduction is now claimable by an employee regardless of the fact whether or not any expenditure incidental to employment has actually been incurred. For example, even a pensioner is eligible to claim it though he does not incur, under normal circumstances, any expenditure to collect his pension.

Thus, standard deduction, originally envisaged as a device to arrive at an assessee's net salary income, has virtually become a blanket deduction against salary income. It shows how tax designing is subject to pressures and influences.

Maximum standard deduction was raised from Rs 3,500 to Rs 5,000 in 1981-82, to Rs 6,000 in 1983-84, to Rs 10,000 in 1986-87, and to Rs 12,000 in 1988-89. Thus, at present all salaried employees are entitled to a standard deduction at the rate of 33.3 per cent of salary income or Rs 12,000 whichever is less. In case where the employee is in receipt of a conveyance allowance, the standard deduction is limited to Rs 1,000. As a special consideration for women, the standard deduction was increased from Rs 12,000 to Rs 15,000 from the assessment year 1993-94 in respect of working women having total income upto Rs 75,000.

B. *Income from House Property*

The scope of the income charged under this head is defined by section 22 and the computation of income under this head is explained by sections 23 to 27. Income-tax is payable by an assessee on the annual value of property consisting of buildings and land appurtenant thereto of which he is the owner. The annual value of such property, called house property, is deemed to be the sum for which the property might reasonably be expected to let from year to year. The annual value is ascertained by taking into consideration all relevant facts such as rent received, the terms of the lease, the municipal valuation, rent paid for similar property in the locality and so on. The concept of taxation under this head does not extend to properties used for the purpose of any business or profession carried on by the owner of the property because house property is regarded as any other business asset. One house used by the owner for his own residence is exempt from tax. From the annual value of the house property, various deductions are allowed in computing the net annual value of a house property.

C. *Profits and Gains of Business or Profession*

This head of income is beset with complicated rules of computation, often leading to controversies and litigation. According to section 2 (13), business includes any trade, commerce, or manufacture or any adventure in the nature of trade, commerce, or manufacture. A profession, under section 2 (36), is an occupation requiring purely intellectual skill or manual skill such as that of a lawyer, accountant, engineer, surgeon, author, etc. Section 28 defines various incomes which are chargeable to tax under the head profits and gains of business or profession. Sections 30 to 44D specify the method of computation of income under this head by describing the nature and amount of permissible and non-permissible deductions. Broadly speaking, all expenses that are wholly or exclusively laid out or expended for the purpose of business and that are not of capital nature are deductible.

1. *Deductions Expressly Allowed*

Following expenses are admissible as deductions while computing taxable income under this head. (1) Rent, taxes, repairs, and insurance for buildings (Sec. 30); (2) Repairs and insurance of machinery, plant and furniture (Sec. 31); (3) Depreciation (Sec. 32); (4) Investment allowance (Sec. 32A)[1]; 5. Investment Deposit Account Scheme (Sec. 32AB)[2]; (6) Development allowance (Sec. 33A)[3]; (7) Expenditure on acquisition of patent rights or copyrights (Sec. 35A); (8) Deduction in respect of expenditure on know-how (Sec. 35AB); (9) Amortisation of certain preliminary expenses (Sec. 35D); (10) Deduction for expenditure on prospecting, etc., for certain minerals (Sec. 35E); (11) Other deductions like insurance premium; bonus or commission to employees, interest on borrowed capital; employer's contribution to provident fund, gratuity, staff welfare schemes, bad debts; transfers to special reserves; family planning expenditure (Sec. 36); (12) Entertainment expenditure, expenditure on advertisements, travelling expenses, and other general deductions (Sec. 37); (13) Payment of interest to any partner by a firm subject to a maximum of 18 per cent per annum (Sec. 40B).

2. *Expenses Expressly Disallowed*

The following expenses, *inter alia,* are expressly disallowed while computing taxable income under this head: (1) Expenditure on advertisement in any souvenir, brochure, etc., of a political party [Sec. 37 (2B)]; (2) Expenditure on the maintenance of guest houses [Sec. 37 (4)]; (3) Any interest or salary payable outside India from which due tax has not been deducted at source; any tax calculated on the basis of profits or gains of the business or profession [Sec. 40(a)]; (4) Payment to partner [Sec. 40(b)].

D. *Capital Gains*

Under section 45 of the Act, any profits or gains arising from the transfer of a capital asset are chargeable to tax under the head 'capital gains'. Tax treatment of capital gains is discussed separately.

E. *Income from other Sources*

Income of every kind, which is not chargeable to tax under any of the other four heads and which is not to be excluded from the total income, is chargeable to tax under the residuary head 'income from other sources' Some examples of incomes included under this head are: (i) dividends, (ii) winnings from lotteries, crossword puzzles, races including horse races, card games, gambling or betting, (iii) income from machinery, plant or furniture belonging to the assessees and let on hire, (iv) interest on bank deposits and loans, and (v) interest on securities issued by the Government; and interest on debentures and other securities issued by a local authority, a company, or a public sector corporation.

Anti-Tax Avoidance Provisions

To counteract practices of tax avoidance, the Act contains provisions under which income of other persons is included in assessee's income. Sections 60 to 65 of the Act deal with instances where the assessee attempts to reduce his tax liability either by transferring his assets in favour of his family members or by arranging his sources of income in such a manner that tax incidence falls on others, whereas benefit of income, directly or indirectly, is derived by the assessee himself. To counter such attempts, the Act incorporates provisions under which certain incomes are included in the assessee's total income, though such incomes legally belong to other persons. In other words, incomes arising to the spouse, minor child, son's wife, son's minor child and other persons are clubbed with the assessee's income in certain circumstances. In this respect, the Act deviates from the general principle that a person can be assessed in respect of his own income.

Prior to the assessment year 1993-94, section 64 of the Act provided that in computing the total income of any individual, there shall be included all such income as arises to a minor child of such individual from: (a) the admission of the minor to the benefits of partnership in a firm, (b) assets transferred to the minor child by such individual otherwise than for adequate consideration, and (c) assets transferred by such individual to any person otherwise than for adequate considerations, to the extent to which income from such assets was for the immediate or deferred benefit of such individual's minor child. Since these provisions were cumbersome and often led to litigation, the law with regard to clubbing of minors' income was recast and simplified by the Finance Act, 1992.

From the assessment year 1993-94, all income of a minor is included in the income of his parent. However, the income derived by the minor from manual work or from any activity involving his specialised knowledge is not included in the income of his parent. The law also provides that the income of the minor is to be included in the income of that parent whose total income is greater. Where the marriage of the parents does not subsist, the income of the minor is includible in the income of that parent who maintains the minor child. The Finance Act, 1992 also inserted a new clause 32 in section 10 to provide that in case the income of an individual includes the income of his minor child in terms of section 64, such individual shall be entitled to exemption of Rs 1,500 in respect of each minor child.

Set-off and Carry Forward of Losses

As already noted, income chargeable under the Act is computed under five different heads. The aggregation of 'gross total income' is relatively easy if income under each head and from each source is positive. However, loss may be sustained in one or more sources under one or more heads of income. Therefore, in the computation of 'gross total income' of an assessee, appropriate adjustments should be made for the losses suffered by him. Sections 70 to 80 of the Act deal with provisions concerning set-off of losses and their carry forward. The following three steps may be followed to understand the procedure of set-off and carry forward of losses. (a) Inter-source adjustment under the same head of income. (b) Inter-head adjustment in the same assessment year. Provisions of (b) are applied only if a loss cannot be set-off, fully or partly, under (a). (c) Carry forward of loss. Provisions of (c) are applied only if a loss cannot be set-off, fully or partly under (a) and (b).

The purpose of these provisions is to mitigate the disincentive effects of fluctuating income. Under a system of progressive income-taxation based on yearly assessment, a taxpayer whose income fluctuates from year to year will surrender a larger proportion of his income in tax than a taxpayer with the same average income more evenly distributed over the years. To counter this violation of the principle of horizontal equity, some form of income averaging method may be adopted. The set-off and carry forward provisions are proxy for income averaging principle.

Deductions from Gross Total Income

Gross total income of an assessee is obtained by adding up incomes under different heads. While computing incomes under various heads, certain deductions are allowed, which are in the nature of expenses incurred in earning the specific incomes under different heads. These have already been discussed while dealing with various heads of income. The Act provides certain special deductions under Chapter VI-A and these are intended to promote various socio-economic objectives like industrialisation of backward areas, small-scale industries, export promotion and to help the assessees in meeting certain essential expenditures. These deductions are made from the gross total income of the assessee and not from any particular head of income.

The aggregate amount of deductions allowable cannot exceed the gross total income. No such deduction is allowed against long-term capital gains. Thus, where the gross total income includes long-term capital gains, the gross total income is reduced by such long-term capital gains for the purpose of deductions. These deductions are allowed under various clauses of section 80 of the Act (i.e., sections 80D to 80U). Some of these deductions are in respect of certain payments while others relate to certain incomes. The list is given in Appendix II.

Rebates

Till March 31, 1990, the schemes of tax incentives to promote savings and investments were based entirely on deductions from gross total income. When a deduction is made from income, an assessee gets tax relief at the highest marginal rate of tax applicable to him. Apparently, this system confers higher amount of tax benefit to a person with higher income compared to a person with lower income. To do away with this iniquitous system, the Finance Minister introduced in the 1990-91 budget a new scheme of tax rebate on gross amount of savings. The new scheme covered under section 88 provided for a rebate (or tax credit) on tax to the extent of 20 per cent of the sum invested in National Savings Certificates, provident funds, life insurance policies, etc. The maximum amount eligible for rebate was Rs 50,000 generally and Rs 70,000 in the case of authors, playwrights, artists, musicians, actors, and sportsmen, thereby permitting a maximum rebate of upto Rs 10,000 and Rs 14,000, respectively. Thus, all taxpayers derive the same amount of tax benefit on a given amount of savings irrespective of their level of income. This new scheme with uniform tax rebate led to simplification in tax deduction at source by the employers. It is a good example of how equity and simplicity criteria can be combined in the tax system.

In the Finance Act, 1992, the scheme of tax credit under section 88 was further liberalised in the case of authors, playwrights, etc., to compensate them for the fluctuating nature of their income. As against the 20 per cent tax rebate allowed normally, it was raised to 25 per cent in their case. Also, the ceiling of the maximum rebate in their case was raised from Rs 14,000 to Rs 17,500. With a view to allowing this concession only to a person having significant portion of his income from the above-mentioned profession, the enhanced rebate is allowed only to such persons whose income from his profession as author, playwright, etc., is at least 25 per cent of his total income.

The Finance Act, 1992, inserted a new section 88B to provide for a special tax relief in the form of an additional rebate of 10 per cent from the tax payable by persons who have attained the age of 65 years and have a gross total income not exceeding Rs 50,000. This special relief starting from the assessment year 1993-94 was designed to help senior citizens meet the increased expenses in their old age.

The Finance Act, 1992 extended also the scope of section 88 by including under it the National Saving Scheme (formerly under section 80CCA), and the Equity-Linked Saving Scheme (formerly under section 80CCB). The maximum amount eligible for rebate was increased from Rs 50,000 to Rs 60,000 or the ceiling of tax rebate was increased from Rs 10,000 to Rs 12,000. Within the overall ceiling of Rs 60,000, a sub-ceiling of Rs 10,000 was fixed in respect of investments in Equity-Linked Savings Scheme in order to ensure continued viability of other saving scheme contained in section 88.

From the foregoing description of exclusions, deductions and rebates it is clear that income tax law provides liberal concessions to a variety of socially desirable activities almost on permanent basis. The supposedly high statutory rates of income-tax turn out to be illusory in view of various exemptions/concessions which lower the effective rates of taxation significantly. These 'tax expenditures', each with a rationale of its own, have the combined effect of eroding the tax base and impairing the progressivity of the tax system. Little surprise if the total number of income taxpayers is 70 lakh, representing 2.5 per cent of the country's working population.

Moreover, the system of exemptions/concessions has caused considerable instability in the income-tax law. According to one estimate, there have been 3,300 amendments to the Income-Tax Act during 1961-90 [Palkhivala, 1990, Vol. I, p. 9]. Not only that, there is considerable fickleness and *ad hocism* about amendments, particularly those pertaining to exemptions/concessions. This state of affairs has often led to uncertainty and confusion among taxpayers and tax collectors. 'The instability of our tax laws is another of their worst features. The laws are riddled with uncertainties and statutory amendments are as unpredictable as they are frequent. Surely, after more than half a century of the working of the income-tax Acts of 1922 and 1961, it should be possible to have an enduring tax structure' [Chokshi Committee, 1978, para I-0.10].

Units of Assessment

There are seven categories of persons (i.e., units of assessment or taxable entities) chargeable to tax under the Act. According to section 2 (31) the word 'person' includes (1) An individual, (2) A Hindu undivided family (HUF), (3) A Company, (4) A firm, (5) An association of persons or a body of individuals whether incorporated or not, (6) A local authority, and (7) Every artificial juridical person, not falling within any of the preceding categories. However, individuals, and companies are the two main taxpaying entities. For the assessment year 1988-89, individuals accounted for 76.5 per cent of returns filed, 52.2 per cent of income returned, and 40.9 per cent of tax payable. For the same year, Companies accounted for 1.2 per cent of returns filed, 22.4 per cent of income returned, and 46.3 per cent of tax payable [AIITS, 1990, p. IV].

Depending upon the residential status, companies are classified into 'domestic' and 'foreign' companies. Domestic companies, in turn, are divided into two main categories: (a) widely-held companies, and (b) closely-held companies.

These distinctions are important because the rates of tax vary for different types of companies (See Appendix III).

RATE STRUCTURE

Prior to 1916, income-tax was levied at a flat rate of 5 pies in a rupee on all incomes above Rs 2,000. With a rupee containing 192 pies, the rate of tax worked out to 2.6 per cent approximately. It was in 1916 that the income-tax came to be levied at graduated scale and this principle has been followed since then. In 1945-46, the maximum rate of income-tax was 57 pies in a rupee (29.7 per cent). In 1946-47, there was a steep rise in the maximum rate of income-tax to 15-1/2 annas in a rupee (96.9 per cent). The Taxation Enquiry Commission (1953-54) recommended 92 per cent rate of tax (including surcharge) on the highest slab of income.

The Report of the Direct Taxes Enquiry Committee (DTEC) 1971, was a milestone in the area of income-tax rates. The Committee made a number of far-reaching suggestions for unearthing black money, preventing evasion and avoidance of taxes, and reducing arrears. One important recommendation of the Committee related to reduction in the rates of direct taxes which in its view were mainly responsible for tax evasion because they made tax evasion profitable and attractive. For example, the rates of individual income-tax were quite high till the year 1973-74. However, pursuant to the recommendations of the DTEC, the Government initiated a series of rate reductions in individual income-tax. Table 2 summarises the decline in the maximum marginal rate of income-tax beginning with the year 1974-75. The rate of tax was reduced from 97.7 per cent in 1973-74 to 77 per cent in 1974-75, and further down to 66 per cent in 1976-77. It is

TABLE 2. TRENDS IN THE MAXIMUM MARGINAL RATE OF INDIVIDUAL INCOME TAX

(Per cent)

Financial Year	Top Marginal Rate	Surcharge, if any	Rate including surcharge
1973-74	85	15	97.7
1974-75 1975-76	70	10	77.0
1976-77	60	10	66.0
1977-78 1978-79	60	15	69.0
1979-80	60	20	72.0
1980-81 1981-82 1982-83	60	10	66.0
1983-84	60	12.5	67.5
1984-85	55	12.5	61.9
1985-86 1986-87	50	Nil	50.0
1987-88 1988-89	50	5	52.5
1989-90	50	8	54.0
1990-91 1991-92	50	12	56.0
1992-93	40	12	44.8

Note: The maximum marginal rate of individual income-tax is applicable to incomes over Rs 1 lakh.
Source: Government of India, *Finance Acts* (various years).

noteworthy that DTEC had recommended a maximum marginal rate of 75 per cent [Wanchoo Committee, 1971, para 2.52]. The downward trend in the rate of income-tax was temporarily reversed during the brief Janata Government rule at the Centre. The top marginal rate of income-tax was increased from 66 per cent in 1976-77 to 69 per cent in 1977-78, and further up to 72 per cent in 1979-80. However, the policy of low direct tax rates started by the Congress Government in 1974 and carried forward in 1976 was further reinforced after it came back to power at the Centre in 1980. After a series of revisions the maximum marginal rate of individual income-tax was 54 per cent (including employment surcharge of 8 per cent), applicable from the assessment year 1991-92. Consequent upon the recommendations contained in the interim report of the Chelliah Committee on Tax Reforms, the marginal rate was fixed at 44.8 per cent (including surcharge) from the assessment year 1993-94. It is noteworthy that Chelliah Committee had recommended 40 per cent maximum rate inclusive of surcharge for income exceeding Rs 2 lakh. Still, pressure continues for further lowering of the marginal rate and some enthusiasts have suggested the abolition of income-tax altogether.

The philosophy of low tax rates presupposes improved tax compliance to control the growth of black money, and broadening of the tax base. It is argued that high tax rates increase premium on tax evasion which, in turn, generates black money. Unfortunately, neither of the two intended objectives has been achieved. The number of individual income-tax payers is stagnating at around 70 lakh for a long time. Similarly, statistical evidence is lacking to support the contention that reduced rates have checked the growth of concealed incomes. Contrarily, recent estimates of black money are staggering and suggest an increase in tax-evaded income as per cent of GDP [Government of India, 1985, p. 161].

Low tax rates are welcome provided they improve compliance and revenue yield. However, to expect that lowering of rates would improve compliance automatically is unrealistic because tax evasion occurs at all levels of income. Since income-tax is the only major direct tax in India, it must be sufficiently progressive to ensure more equitable distribution of income and wealth. The present marginal rate of 40 per cent is much below the 75 per cent recommended by the DTEC. The argument that high rates of income-tax will discourage savings is untenable because provisions exist in the income-tax law under which not only savings but returns on savings (i.e., interest) are exempt from tax upto specified limits. Such provisions can be further strengthened, if necessary.

Broadly speaking, the present system of income-tax is 'global' in nature in that it does not discriminate between different sources of income. Income from various sources is pooled together for determining tax liability. Elements of schedular system (under which different sources of income are taxed differently) exist insofar as agricultural income is excluded from the tax base, and long-term capital gains, though included in the definition of income, are given special concessions.

As already noted, income-tax revenue originates mainly from two taxpaying entities viz., Companies, and individuals. Although the concept of taxable income and the procedure for its computation is the same, except for minor differences, for all taxable entities, the income-tax rates vary among the different entities. From the standpoint of differential tax treatment, the tax on companies (also referred to as corporation tax) is essentially a proportional tax while the tax on non-corporate entities (also referred to as personal income-tax) is basically a progressive income-tax. The different constituents of the non-corporate entities viz., individuals, HUF, and firms, in turn, are subject to varying rates of income-tax. Likewise, the rate of tax on the corporate entities differs depending on whether a company is 'domestic' or 'foreign', 'widely-held' or 'closely-held', 'industrial' or 'trading'. In general, a domestic company is taxed at a lower rate than a foreign company. Among the domestic companies, widely-held companies bear lower tax rates as compared to closely-held companies. Again, among the domestic companies, the industrial companies are taxed at a lower rate than the non-industrial companies. The distinction in corporate tax rate between trading companies and industrial companies was abolished in the

1991-92 budget.

It may be noted that a company is liable to income-tax however small its income may be while a basic exemption is allowed to individual taxpayers. Basic exemption is allowed to permit a minimum standard of living or some level of income which does not reflect the taxpaying capacity of a person. The basic exemption limit was raised from Rs 12,000 to Rs 15,000 in 1981-82, to Rs 18,000 in 1985-86, to Rs 22,000 in 1990-91, and further upto Rs 28,000 in 1992-93. Table 3 records trends in the basic exemption limit for individual income-tax payers during the post-Independence period. The exemption limit has generally been raised from time to time to make adjustments for inflation. Only once it was actually reduced from Rs 4,200 to Rs 3,000 in 1957-58. Proposing the reduction the Finance Minister remarked, 'The minimum limit had been raised over the past few years mainly for administrative reasons. An income of Rs 4,200, modest though it is in absolute terms, is quite a large multiple of the average level of incomes in the country. It is reasonable to expect that those with an income over Rs 3,000 should also make their contribution, however small, to the public exchequer, and should come within the range of direct taxation' [Speeches of Union Finance Ministers, p. 155].

TABLE 3. TRENDS IN THE BASIC EXEMPTION LIMIT FOR INDIVIDUAL INCOME TAX PAYERS

Financial Year	Basic Exemption limit (Rs)
1947-48	2,500
1948-49 to 1950-51	3,000
1951-52 and 1952-53	3,600
1953-54 to 1956-57	4,200
1957-58 to 1965-66	3,000
1966-67 to 1969-70	3,500
1970-71 to 1973-74	5,000
1974-75 and 1975-76	6,000
1976-77	8,000
1977-78 to 1979-80	10,000
1980-81	12,000
1981-82 to 1984-85	15,000
1985-86 to 1989-90	18,000
1990-91 and 1991-92	22,000
1992-93	28,000

Source: Government of India, *Finance Acts* (various years).

Rates of income-tax are fixed by the annual Finance Act and not by the Income-tax Act. (In the case of other direct taxes, viz., wealth tax, and gift tax, the rates are specified in a schedule to the Act imposing the tax). Rates of income-tax applicable to various entities for the assessment year 1993-94 are given in Appendix III. A notable feature of the rate structure is the imposition of surcharge on income-tax wholly for the purposes of the Centre. Surcharge was levied in 1951 and continued uninterrupted when it was completely abolished in 1985-86. However, a drought surcharge was levied at the rate of 5 per cent in 1987 on incomes above Rs 50,000 and the same was replaced by an employment surcharge of 8 per cent in 1989. It was increased to 12 per cent in December 1990. For the assessment year 1993-94, surcharge is applicable at the rate of 12 per cent if total income exceeds Rs 1,00,000.

Though the regular assessment in respect of any income is made in a later assessment year, the tax on such income is payable by way of advance payment or deduction at source. Section 208 of the Act makes it obligatory to pay advance tax in every case where the advance tax payable is Rs 1,500 or more. Similarly, there are provisions under various sections of the Act regarding tax deduction at source as, for example, deduction of tax from salaries (Sec. 192).

TREATMENT OF CAPITAL GAINS

A tax on capital gains was in operation in India for a short period in respect of capital gains which arose during the period April 1, 1946 to March

31, 1948. Following the recommendations of Nicholas Kaldor, the tax was revived in 1956 and made applicable on capital gains made on or after April 1, 1956. It is levied within the framework of Income Tax Act. Profits or gains arising from the transfer of a capital asset are chargeable to tax under the head 'capital gains'.

The procedure to compute capital gains involves the following steps. Firstly, the full value of consideration received or accruing as a result of the transfer of the asset is ascertained. The second step is to deduct from the full value of consideration (a) the cost of acquisition of the asset including cost of any improvements made to the asset, and (b) expenditure incurred in connection with the transfer of such asset (brokerage, legal expenses, etc.).

Incidence of tax on capital gains depends upon whether such gains arise from the transfer of a short-term or a long-term capital asset. A short-term capital asset is one which is held by an assessee for less than 36 months from the date of its acquisition. If the asset is held for a longer duration, it is regarded as a long-term capital asset. Capital gains arising from the transfer of a short-term capital asset are taxable like an ordinary income in the case of all assessees. However, capital gains relating to long-term assets get preferential treatment. The Act provides for the exemption from tax of long-term capital gains arising from the transfer of certain assets in certain circumstances if the conditions specified for the purpose are fulfilled. For example, under Section 54 any long-term capital gains arising on the transfer of a residential house is exempt from income tax if the individual has within a period of one year before or two years after the date of such transfer purchased, or within a period of three years constructed a residential house. The amount of exemption available is equal to the amount so utilised or the amount of capital gain, whichever is less.

Pursuant to the recommendations contained in the interim report of the Chelliah Committee on tax reforms, the capital gains tax was drastically recast by the Finance Act, 1992. The cut-off date for valuation of assets acquired in earlier years was shifted from April 1, 1974 to April 1, 1981. In another significant move, a system of indexation was introduced for the first time under which long-term capital gains are now computed by allowing the cost of the asset to be adjusted for general inflation. The new procedure for computing capital gains effective from the assessment year 1993-94 is as follows. The cost of acquisition and the cost of improvement of the asset will be linked to a Cost Inflation Index. Long-term capital gains will be computed by deducting from the sale proceeds the indexed cost of acquisition and the indexed cost of improvement, and the expenditure incurred in connection with the transfer. Beginning with 1981-82 as the base year, the Central Government will notify each year the Cost Inflation Index having regard to 75 per cent rise in consumer price index for urban and non-manual employees. The cost of acquisition will be adjusted with reference to the rate applicable for the relevant year. There will be similar indexation of cost of improvement. The new procedure is related to the period of time for which the asset is held and takes into account the inflation that may have crept in over time. It will favour those whose capital gains accrue over a longer period while those making capital gains over a shorter period will pay a higher tax.

Prior to the assessment year 1993-94, income arising under the head 'Capital gains' was included in the gross total income of the assessee and after allowing deductions under Chapter VI-A, the total income was subject to tax and surcharge at the rates in force. Rebate under section 88 was available from the tax computed on the total income in respect of deposits payments made in approved schemes and instruments. However, the Finance Act, 1992 inserted a new section 112 in the Income Tax Act to provide that long-term capital gains will be subject to a flat rate of income-tax. The rate of tax will be 20 per cent in the case of individuals and HUFs, and 30 per cent in the case of all other assessees such as companies, firms, association of persons and bodies of individuals. Deductions under Chapter VI-A and rebate under section 88 were withdrawn in respect of long-term capital gains. In the case of an individual if the liability to tax arises only because of the inclusion of long-term capital gains in the total income, tax will be levied at a flat rate of 20 per cent on the excess over the minimum exemption limit. Surcharge at the appropriate rates in force will however apply, wherever applicable.

The introduction of inflation indexing for capital gains will complicate the income-tax law. It is surprising that salary incomes which suffer the most due to inflation have been left out and instead capital gains have received the coveted treatment of inflation adjustment.

The flat rate of 20 per cent for capital gains as compared to the marginal rate of 40 per cent for other incomes has reduced the effective progressivity of income-tax besides producing differential tax liabilities at given levels of income, violating the principle of horizontal equity. Moreover, this differential will induce people to earn income in the form of capital gains (often speculative) rather than as business profits, dividends, or interest. The inducement will be stronger at higher income levels because of the high tax rates applicable thereon. To conclude, Indian income-tax system treats capital gains for tax purposes on a footing different from other sources of income. The differentiation is done in the case of long-term capital gains which alone qualify for concessionary tax treatment. Since capital gains are accidental in nature and bear no relationship to efforts on the part of the recipient, their preferential tax treatment is untenable.

EARNED VERSUS UNEARNED INCOMES

The Indian Taxation Enquiry Committee (1924-25) examined, for the first time, the desirability of differentiation between earned and unearned incomes for income-tax purpose. The Committee, however, rejected the idea, maintaining that it was premature in the context of the Indian conditions. It was in 1945 that a distinction between earned and unearned incomes was introduced when assessees were allowed to exclude from their earned incomes a fixed proportion subject to a maximum limit.

The Taxation Enquiry Commission (TEC), 1953-54, made several recommendations regarding income tax, some of which dealt with broad structure of taxation while others related to matters of detail like inclusion and exclusion of certain categories of income from taxation, grant of concessions to promote objectives of economic policy and so on. A notable recommendation of the TEC pertained to the withdrawal of the concession relating to earned income beyond a certain level of income which it suggested should be Rs 24,000. Agreeing with this recommendation that earned income relief should not be allowed on higher brackets of income, the Government, as a first step, reduced the allowance in the 1955-56 budget by stages on incomes in excess of Rs 25,000, the concession ceasing when the level of Rs 45,000 was reached. Under the recast scheme an allowance of 20 per cent subject to a maximum of Rs 4,000 was granted to earned incomes not exceeding Rs 25,000. For incomes in excess of this amount the allowance of Rs 4,000 was reduced at the rate of 20 per cent of the excess over Rs 25,000 so that for an earned income of Rs 45,000 the allowance was reduced to nil. From 1957-58, the relief was given in the form of a lower surcharge on earned income than on unearned income. The surcharge was fixed at 5 per cent of the tax on earned incomes upto Rs 1 lakh and 10 per cent on incomes in excess of that sum while for unearned incomes, a uniform surcharge of 20 per cent was imposed. However, the distinction between earned and unearned incomes, introduced in 1945, under which the earned income was treated leniently was completely abolished from April 1, 1968, and was widely criticised as a retrograde fiscal measure.

The present law of income-tax does recognise and tax different sources of income differently, though to a limited extent. Thus, long-term capital gains enjoy special concessions under the income-tax law. As stated above, this form of preferential tax treatment is not tenable. Till 1990-91, differentiation principle was followed in the case of company taxation when trading and investment companies were subject to a higher flat rate tax (50 per cent) than industrial and other companies (45 per cent).

TREATMENT OF COMPANIES

Companies have been treated as separate taxable units from the very beginning. In the 1886 Act, profits of a company were taxed at a flat rate. In 1916, companies with an income of less than Rs 1,000 were exempted from paying income-tax.

The Act of 1918 inserted a new provision under which dividends received by a shareholder were included in his total income for the purpose of determining the rate of tax on his other income. The dividends as such continued to be exempt in the hands of the shareholders. Under the differentiation principle introduced in 1948, companies with total income not exceeding Rs 25,000 were required to pay income-tax of only 2-1/2 annas in the rupee (15.5 per cent) as against 5 annas in the rupee (31.2 per cent) on other companies.

Prior to the year 1960-61, a company was deemed to have paid income-tax on behalf of its shareholders on dividends declared out of income on which the company had paid income-tax. Each shareholder was entitled for a tax credit against his income-tax liability to the tune of the tax deemed to have been paid on his behalf by the company. The tax credit entitlement of a shareholder was determined on the basis of gross dividend income, instead of net dividend income, and the rate at which the tax deemed to have been paid by the company was the rate applicable to companies in that given year in which the dividend was declared or paid. If, for example, a shareholder received net dividend of Rs 900 paid entirely out of the profits of a company, and the income-tax rate (including surcharge) applicable to the company in that year was 40 per cent, the gross dividend was calculated by the formula $G = N/(1-R)$, where G = gross dividend, N = net dividend, and R = income-tax rate. For the above example $G = 900/(1-0.4)$, or $G = 1500$. The difference between G and N i.e. Rs 600 was taken to be the tax payment made by the company on behalf of the shareholders.

However, the super-tax paid by companies was assumed as paid by a company on its own behalf. Thus, there was an important distinction between income-tax and super tax paid by companies, the former on behalf of shareholders and the latter on its own behalf. The super-tax was often called the real corporation tax. The distinction was rendered irrelevant when beginning with the year 1960-61, a company was deemed to have paid income-tax on its own behalf.

The scheme of tax credit to shareholders was discontinued with effect from the financial year 1960-61 and since then all dividends received by shareholders are subject to personal income-tax. In other words, a company is regarded as separate entity for purposes of income-tax. Thus, presently dividends are taxed twice, first in the hands of the company and second in the hands of the shareholders. This is an example of double taxation of a source of income, *viz.*, dividends. Business community has often demanded that dividends should be totally exempted from tax and treated as an allowable expenditure in the hands of the company.

Under the law, the parent (or holding) company and its subsidiary company are separate legal entities and therefore taxed separately. Thus, if a holding company receives dividends from its subsidiary, the former has to pay tax on such dividends. Taxation of inter-corporate earnings is designed to prevent concentration of economic power in the hands of corporate giants. However, this provision is said to give rise to treble taxation of such dividends; first in the hands of the earning company, then in the hands of the receiving company, and finally in the hands of individual shareholders. The law provides certain concessions to facilitate inter-corporate investment. Prior to the assessment year 1991-92, the adverse situation was partially remedied by section 80M of the Act under which a company was entitled to a deduction of 60 per cent of dividend received by it from another domestic company. An important change was introduced from the assessment year 1991-92 under which dividends received by a domestic company from another domestic company are exempt to the full extent to which the assessee company itself distributes dividends during the relevant period.

It may be noted that company or corporation tax is an important source of direct tax revenue for the Central Government because it is not shareable with the States.

TREATMENT OF SMALL TRADERS

The growing small business sector is a tax haven in the Indian economy. It is very difficult to enforce a reliable system of book-keeping to assess earnings of this sector. In his 1992-93 budget, the Finance Minister introduced, on an experimental basis, a presumptive tax system for persons engaged in retail trade with an annual turnover upto Rs 5 lakh. The objective of the new simplified procedure for taxation was to widen the tax base by encouraging shopkeepers (including those engaged in vocations like tailoring, typewriting, photocopying, repair work, etc.) and other small retail traders to pay their taxes. The scheme as incorporated in the Finance Act, 1992, has the following features. The scheme is optional and open to individuals not assessed to tax earlier and who have income from the business of retail trade having an annual turnover upto Rs 5 lakh. The person opting for the scheme will be deemed to have a turnover of Rs 5 lakh and his total income will be deemed to be 7 per cent of this turnover i.e., Rs 35,000 on which the tax works out to Rs 1,400 after allowing for the basic exemption of Rs 28,000. A retail trader opting for the scheme has only to file the simplified statement (name, address, nature of business, etc.) and pay the tax of Rs 1,400 by 15th March of the financial year in which the income is earned. The scheme will be in force initially for two assessment years 1993-94 and 1994-95.

INCOME TAX EVASION

The Income Tax Investigation Commission, 1948, investigated all matters relating to taxation of income, with particular reference to preventing evasion and avoidance. The Commission recommended several changes in the law to plug loopholes in the income-tax system. It recommended, *inter alia*, that the law should be amended so as to allow speculative losses to be set-off only against speculative gains.

The Taxation Enquiry Commission, 1953-54, which dealt at length with the administration of income-tax, found staggering levels of tax evasion. To quote: 'It is observed from statistics in connection with the 'Disclosure Drive' that income as originally included in the returns sent to the income-tax department by assessees who made disclosures was grossly understated, the difference between the income as originally returned and that disclosed later to the Department being, on the average, as much as 600 per cent. Such other statistics as have been made available to us by the Central Board of Revenue also give evidence of the fact that evasion is prevalent on a considerable scale' [Matthai Commission, 1953-54, Ch. 12, para 2]. The Commission maintained that improvement and strengthening of the enforcement machinery was the only way to tackle evasion effectively.

Nicholas Kaldor, a British economist, made the first systematic study of income-tax evasion in India in the mid-fifties. He estimated income-tax loss through tax evasion at Rs 200 to Rs 300 crore for the year 1953-54 [Kaldor, 1956, p. 105]. The estimates of Kaldor were based on certain tentative figures relating to national income provided to him by the Central Statistical Organisation. Kaldor made it clear that his estimates were tentative and needed to be interpreted with caution. However, another study by the Central Board of Revenue for the same year recorded much lower estimate of tax evasion of Rs 20 to Rs 30 crore [Tyagi Committee, 1958-59, para 7.5]. One main reason for the wide divergence between the two estimates was the inclusion in Kaldor's estimate of what the Central Board of Revenue counted as avoidance rather than evasion. Kaldor himself had admitted while tendering oral evidence before Direct Taxes Administration Enquiry Committee, 1958-59 that his estimate represented the loss of tax not only through evasion but also through avoidance [Tyagi Committee, 1958-59, para 7.5]. It is, therefore, generally agreed that the income-tax evasion estimates of Kaldor were on the high side.

The Direct Taxes Enquiry Committee, 1971, also considered, inter alia, the problem of tax evasion and established the income on which tax was evaded for 1968-69 at a figure of Rs 1,400 crore. The amount of tax evasion for the same year was put at Rs 470 crore [Wanchoo Committee, 1971, paras 2.17 and 2.18].

The National Institute of Public Finance and Policy estimated the ratio of tax-evaded income to GDP in the range of 3.7 per cent to 5.7 per cent in 1975-76 and 4.2 per cent to 8.6 per cent in 1980-81 [Government of India, 1985, p. 161]. With GDP at current prices and at factor cost being Rs 1,14,271 crore in 1980-81, the range of tax-evaded income amounted to Rs 4,799 crore to Rs 9,827 crore in that year. Applying an average income-tax incidence of 35 per cent, the income-tax evasion in 1980-81 ranged between Rs 1,679 crore and Rs 3,439 crore. A recent report on tax reforms has 'estimated that not more than 30-35 per cent of legally taxable income is being disclosed, on the average' [Chelliah Committee, 1991, para 6.6].

Apart from the foregoing estimates, some evidence of a general nature also suggests widespread non-reporting and under-reporting of taxable income in India. For the assessment year 1988-89 the number of individuals who had each a taxable income between Rs 5 lakh and Rs 10 lakh was only 4,100 [AIITS, 1990, p. VI]. Although it is difficult to suggest the actual number of such individuals, it can safely be said that the reported number is much less than one would expect considering the living styles of people in metropolitan cities of India.

Tax evasion leads to the creation of black money which, in turn, is a menace to the economy in its own way. The nexus between tax evasion and black money and its distortion of the redistributive role of tax policy was noted by the Seventh Plan as follows: 'With a sizeable proportion of income and wealth evading taxation, the redistributive impact of progressive taxation had been severely blunted. A reduction in the scale of black income generation would improve distribution of income and wealth after taxation. Besides, if the magnitude of tax evasion is significantly reduced, there would be a greater volume of tax revenue, and a greater volume of public expenditure benefiting the poorer section of the population would become possible' [Planning Commission, 1985, Vol. 1, para 6.22].

The Direct Tax Enquiry Committee, 1971, had suggested various measures to fight the evil of tax evasion. Some of the measures suggested were as follows: (i) reduction in tax rates; (ii) minimisation of controls and licenses; (iii) regulation of donations to political parties; (iv) creating confidence among small taxpayers; (v) substitution of sales tax by excise duty; (vi) vigorous prosecution policy, and (vii) compulsory maintenance of accounts. To give effect to the recommendations made by the Committee, the Government enacted the Taxation Laws (Amendment) Act, 1975. This Act, *inter alia*, provided stringent punishment for tax evaders. In cases where tax evasion exceeded Rs 1 lakh or prosecution was for the second or subsequent offence, the maximum punishment prescribed was seven years rigorous imprisonment. Also, the discretionary powers to courts to award monetary punishment as an alternative to imprisonment or to reduce the term of imprisonment less than the minimum period, was withdrawn. Side by side, efforts have been made, from time to time, to curb tax evasion and avoidance through voluntary disclosure schemes.

TAXATION OF AGRICULTURAL INCOMES

When income-tax was introduced in India in 1860, agricultural income was also subject to taxation. However, the Act of 1886 defined agricultural income and exempted it from the purview of income-tax law, and this arrangement continued till the Government of India Act, 1935 made it, for the first time, a provincial levy. The Constitution of free India retained the distinction between agricultural and non-agricultural incomes and allotted the power to tax the former to the States.

Agricultural income-tax, which could have been a dependable source of revenue for the States, has remained largely untapped as yet. The share of this tax in the total revenue from States' taxes is negligible and has hovered around 1 per cent since Independence. Moreover, land revenue which formed the mainstay of States tax revenue during pre-Independence years and even in the early post-Independence period, has receded into insignificance over the years (Table 4).

The Taxation Enquiry Commission (1953-54) had suggested the taxation of agricultural income by all States on equity considerations. A more comprehensive examination of the question of direct taxation of agriculture was undertaken by the Committee on Taxation of Agricultural Wealth and Income (Raj Committee). Appointed in February 1972 by the Government of India, the Committee was required, under the terms of reference, to suggest methods by which direct taxation of agricultural wealth and income could be used more effectively for raising additional resources for development. It was further asked to recommend specifically ways and means by which taxation of agricultural wealth and income could be used to reduce economic disparities and promote more efficient utilisation of the available land and labour resources. The Committee submitted its report in October 1972.

TABLE 4. RELATIVE SIGNIFICANCE OF AGRICULTURAL INCOME TAX AND LAND REVENUE IN STATES' OWN TAX REVENUE

(Rs Crore)

	1950-51	1960-61	1970-71	1980-81	1990-91 (RE)
A. Total Revenue from States' Own taxes	221 (100.0)	454 (100.0)	1,527 (100.0)	6,616 (100.0)	30,324 (100.0)
B. Revenue from Agricultural Income-tax	3 (1.6)	20 (2.1)	10 (0.7)	46 (0.7)	176 (0.6)
C. Land Revenue	49 (22.3)	97 (21.3)	113 (7.3)	145 (2.2)	603 (2.0)

Figures in parentheses indicate the corresponding percentage of the total revenue from State's taxes.
Source: Reserve Bank of India, *Report on Currency and Finance* (various years).

Raj Committee disfavoured on practical considerations, a full-scale coverage of agricultural incomes under the Central income-tax. However, it suggested partial integration of agricultural incomes with non-agricultural incomes for the limited purpose of determining the rates of taxation. It also maintained that the additional revenue realised as a result of the partial integration of agricultural with non-agricultural income in the above manner should go entirely to the State of origin of the agricultural income so aggregated. Consequently, the present Central income-tax takes into account the income of an assessee from agriculture for the purpose of determining the rate of tax. It is noteworthy that under this form of partial integration, revenue realised does not go to the state of origin. Although averse to the idea of full integration of agricultural and non-agricultural incomes for income-tax purposes, the Committee favoured the possibility with certain cautions, of integrated taxation of agricultural and non-agricultural wealth. While the power to tax agricultural income belongs exclusively to the States, there is no constitutional impediment to an integrated taxation of agricultural and non-agricultural wealth by the Centre.

As its main recommendation, the Committee suggested the imposition of Agricultural Holding Tax (AHT) which in its view would secure for the States the additional revenue from well-off sections of agriculturists with much less harassment of the assessees than is likely if Central income-tax is extended to the farm sector. The Committee accepted the view that incidence of direct taxation should be broadly the same on comparable income and wealth groups irrespective of the sources and the forms in which wealth is held. In devising a system of direct taxation of agriculture, it is necessary to ensure progressivity, a principle that has not governed the land revenue. The Committee emphasized that for purposes of direct taxation, the family should be the basic unit of assessment so as to prevent large-scale avoidance.

Although the recommendations of the Committee were widely welcomed, it is unfortunate that the State Governments have generally remained lukewarm in taxing agriculture directly. Exemption of agricultural incomes from taxation deprives the States of a potential source of revenue. Emphasizing the need for taxing agricultural sector, the Sixth Plan noted: 'Direct taxes on agriculture at present constitute less than 1 per cent of the total agricultural income. Land revenue, which is the principal direct tax on agriculture, is generally a flat rate levy and, consequently, regressive in character. Fixation of minimum support and procurement prices for major agricultural crops and provision of various inputs such as fertilisers, irrigation, and electricity at subsidised or concessional rates have helped raise agricultural incomes particularly of large farmers. It is, therefore, necessary to consider measures for raising additional resources from agricultural sector and introducing a measure of progressivity in agricultural taxation' [Planning Commission, 1981, para 7.10].

The near absence of direct taxation of agricultural sector is partly due to the preponderance of big landlords and other vested interests in State legislatures. It shows how rural rich have effectively resisted additional tax burden upon themselves. The absence or inadequacy of tax on agricultural incomes is an example of the insufficient use of taxation powers allotted to the States. Moreover, the exclusion of agricultural incomes from the income-tax base provides opportunities for tax evasion by camouflaging taxable income and black money as gains from agriculture. It is not uncommon among urban elite to own agricultural farms on the outskirts of metropolitan cities for the sole purpose of diverting their high non-agricultural incomes from taxable zones to tax havens. The unequal tax treatment of similar incomes, even though from different sources, violates the principle of horizontal equity.

States, on their part, have highlighted serious problems in the assessment of agricultural incomes. These include shrinkage of the tax base due to ceiling on holdings, widely dispersed potential assessees, fluctuations in production due to uncertain weather conditions, lack of accounting practices in the agricultural sector, etc. Although disinterested in levying tax on agricultural incomes, States have also expressed themselves against any move to transfer the tax to the Union List. More interestingly, the Centre too is not enthusiastic to adopt the tax as was made clear in the Long Term Fiscal Policy: 'It is often stated that exclusion of agricultural income is a major shortcoming of the personal income-tax base in India and constitutes an important explanation for the weak revenue-raising capacity of the personal income-tax. Taxing agricultural income presents many conceptual and administrative problems. Land revenue and taxation of agricultural income are States' subjects under the Constitution. The Centre has no intention of seeking any change in this position' [Government of India, 1985, para 5.36]. For proper assessment of agricultural incomes, some knowledge of local conditions is required and so the primary responsibility of administering agricultural income-tax should preferably be left to the States. Therefore, the taxation of agricultural incomes continues to remain a doubly neglected child of the Indian tax system.

It is well-known that since Independence agriculture has remained the focus of developmental efforts in terms of irrigation facilities, availability of better quality seeds, subsidised fertilisers and electricity, credit and marketing facilities, and support prices for the main crops. The success of green revolution in many parts of the country is reflected in the increased productivity per hectare of various crops, and also in the total production of foodgrains estimated to be 176 million tonnes at present as compared to 50 million tonnes in 1950-51. It is also well-known that the benefits of green revolution are unevenly distributed, creating an affluent elite group in rural areas. It is this class which must pay its due to the national exchequer, and revenue so raised may be earmarked for ameliorating the conditions of the downtrodden in villages. The States must exercise their constitutional power and tax the upper income agriculturists.

A recent report on tax reforms has recommended that agricultural income above Rs 25,000 accruing to non-agriculturist assessees should be brought under the tax net. '...the provisions for the taxation of agricultural income by the Central Government that we have recommended would not affect those agriculturists who (a) have agricultural income not exceeding Rs 25,000 per year; or (b) have non-agricultural income not exceeding Rs 28,000. This means that agriculturists who have only agricultural income or who have also non-agricultural income but have agricultural income not exceeding Rs 25,000 will be left out. Thus, the tax will fall mainly on the larger non-agricultural assessees whose agricultural incomes exceed Rs 25,000' [Chelliah Committee, 1992, para 3.70]. The Committee has suggested that the tax proceeds attributable to the agricultural component of income should be distributed in their entirety among the States on the basis of origin.

In terms of the recommendations of Chelliah Committee, a person having agricultural income say of Rs 26,000 and non-agricultural income of Rs 29,000 (above the exemption limit of Rs 28,000) pays tax on both the incomes while another person having agricultural income of say Rs 3 lakh (or even more) and non-agricultural income of Rs 27,000 has no tax liability on any of his income. Such an arrangement will hardly stand the test of equity.

NOTES

1. Introduced by the Finance Act, 1976, investment allowance is provided in respect of eligible assets to any assessee who carries on a business the profits and gains of which are chargeable to tax in India. It was allowed at the rate of 35 per cent in respect of certain new plant and machinery installed after June 30, 1977, but before April 1, 1987. The Government, however, announced to reintroduce investment allowance in respect of assets installed after March 31, 1988. The scheme was withdrawn in 1990.

2. Under the Investment Deposit Account Scheme 1986, the amount deposited with the Development Bank or profit of the eligible business can be utilised for purchase of new machinery or plant subject to certain conditions. The Scheme was withdrawn in 1990.

3. An assessee who carries on the business of growing and manufacturing tea in India is entitled to development allowance in respect of expenditure incurred for plantation of tea bushes on any land in India owned by him. The sum allowable as development allowance is equal to 50 per cent of actual cost of planting tea bushes on any land not planted at any time with tea bushes.

REFERENCES

AITTS, 1990; *All India Income Tax Statistics, Assessment Year 1988-89* (Directorate of Income Tax, New Delhi).

Chelliah Committee, 1991; *Interim Report of the Tax Reforms Committee* (Chairman, Raja Chelliah), Government of India, Ministry of Finance, New Delhi.

Chelliah Committee, 1992; *Final Report of the Tax Reforms Committee, Part I* (Chairman, Raja Chelliah), Government of India, Ministry of Finance, New Delhi.

Chokshi Committee, 1978; *Final Report of the Direct Tax Laws Committee* (Chairman, C. C. Chokshi), Government of India, Ministry of Finance, New Delhi.

Government of India, 1935; *Income Tax Enquiry Committee*.

Government of India, 1948, *Income Tax Investigation Commission* (Chairman, Sir Srinivasa Varadachariar).

Government of India, 1985; *Long-Term Fiscal Policy*.

Government of India, 1985; *Aspects of the Black Economy in India*.

Kaldor, Nicholas, 1956; *Indian Tax Reforms - Report of a Survey* (Published by Ministry of Finance, Government of India, New Delhi).

Matthai Commission, 1953-54; *Report of the Taxation Enquiry Commission* (Chairman, John Matthai), Vol. II, Government of India, Ministry of Finance, New Delhi.

Palkhivala, N.A., and B.A. Palkhivala, 1990; *The Law and Practice of Income Tax* (Bombay: N.M. Tripathi Private Ltd.), Vol. I.

Planning Commission, 1981; *Sixth Five Year Plan* (1980-85), Government of India, New Delhi.

Planning Commission, 1985; *Seventh Five Year Plan* (1985-90), Government of India, New Delhi.

Raj Committee, 1972; *Report of the Committee on Taxation of Agricultural Wealth and Income* (Chairman, K. N. Raj), Ministry of Finance, Government of India, New Delhi.

Reserve Bank of India, *Report on Currency and Finance* (Various years).

Sarkaria Commission, 1988; *Report of the Commission on Centre-State Relations* (Chairman, Justice R. S. Sarkaria), Part I, Government of India, New Delhi.

Speeches of Union Finance Ministers, 1984; *Speeches of Union Finance Ministers, 1947-48 to 1984-85*, Government of India, Ministry of Finance, New Delhi.

Sury, M. M., 1992; 'Centre-State Financial Relations in India: 1870-1990', *Journal of Indian School of Political Economy*, Vol. 4. No. 1.

Todhunter Committee, 1924-25; *Report of the Indian Taxation Enquiry Committee* (President, Sir Charles Todhunter), Vol. I, Government of India, New Delhi.

Tyagi Committee, 1959; *Report of the Direct Taxes Administration Enquiry Committee* (Chairman, Mahavir Tyagi), Ministry of Finance, Government of India, New Delhi.

Wanchoo Committee, 1971; *Final Report of the Direct Taxes Enquiry Committee* (Chairman, Justice K. N. Wanchoo), Ministry of Finance, Government of India, New Delhi.

APPENDIX I

INCOMES EXEMPT FROM TAX UNDER THE INCOME TAX ACT, 1961

Incomes Absolutely Exempt from Tax (Tax Free Incomes)

The important types of income altogether excluded from the scope of total income under various clauses of Section 10 are the following:

1. Agricultural income [Sec. 10(1)]
2. Receipts by a member from a Hindu Undivided Family [Sec. 10(2)].
3. Share of profit from a firm [Sec. 10 (2A)].
4. Casual and non-recurring receipts [Sec. 10 (3)].
5. Certain income from interest received by non-residents [Sec. 10 (4)].
6. Value of leave travel concession to an Indian citizen [Sec. 10 (5)].
7. Remuneration to a foreigner and non-resident individual in respect of shooting of a cinematograph film in India [Sec. 10 (5A)].
8. Certain incomes of non-citizens [Sec. 10 (6)].
9. Salaries of a foreign government employees under co-operative technical assistance programme [Sec. 10 (8)].
10. Income of a family member of a technical assistant/consultant/employer [Sec. 10 (9)].
11. Death-cum-retirement gratuity [Sec. 10 (10)].
12. Commutation of pension [Sec. 10 (10A)], and leave encashment [Sec. 10 (10AA)].
13. Any retrenchment compensation received by a workman [Sec. 10 (10B)].
14. Payment on voluntary retirement [Sec. 10 (10C)].
15. Payment/bonus under a Life Insurance Policy [Sec. 10 (10D)].

16. Payment from provident fund [Secs. 10 (11), (12)].
17. Payment from superannuation fund [Sec. 10 (13)].
18. House rent allowance [Sec. 10 (13A)].
19. Special allowance or benefit to employees [Sec. 10 (14)].
20. Interest on certain securities [Sec. 10 (15)].
21. Educational scholarship [Sec. 10 (16)].
22. Daily allowance of Members of Parliament [Sec. 10 (17)].
23. Any amount in connection with the award [Sec. 10 (17A)].
24. Income of a local authority [Sec. 10 (20); of a housing authority [Sec. 10 (20A)]; of a scientific research association [Sec. 10 (21)]; of a university [Sec. 10 (22)]; of a hospital [Sec. 10 (22A)]; of a sports association [Sec. 10 (23)]; of Khadi or Village Industries [Sec. 10 (23B)]; of certain national funds [Sec. 10 (23C)]; of mutual funds [Sec 10 (23D)]; of trade unions [Sec. 10 (24)]; of provident funds [Sec. 10 (25)]; of a member of scheduled tribe [Sec. 10 (26)]; of a body for promoting interest of scheduled castes/tribes, etc. [Sec. 10 (26B)]; of a co-operative society for promoting interest of scheduled castes/tribes [Sec. 10 (27];
25. Tax credit certificates [Sec. 10 (28)].
26. Subsidy received from the Tea Board [Sec. 10 (30)].
27. Subsidy received from Commodity Boards [Sec. 10 (31)].
28. Income of minor child upto a maximum of Rs 1,500 per minor child [Sec. 10 (32)].

APPENDIX II

DEDUCTIONS FROM GROSS TOTAL INCOME ALLOWED UNDER THE INCOME TAX ACT, 1961

A. *Deductions in Respect of Certain Payments*

Deductions under this category relate to certain kinds of payments made by an assessee. These payments are not made in connection with earning any income chargeable to tax. These are of the following type.

1. Deduction in respect of medical insurance premia (Sec. 80D).
2. Deduction in respect of medical treatment of handicapped dependents (Sec. 80DD).
3. Donations to Prime Minister's National Relief Fund and certain other funds (Sec. 80G).
4. Deduction in respect of rent paid (Sec. 80GG).
5. Donations for scientific research or rural development (Sec. 80 GGA).

B. *Deductions in Respect of Certain Incomes*

Deductions are allowed in respect of the following kinds of income of an assessee.

1. Income from newly established industrial undertakings or hotels in backward areas (Sec. 80 HH).
2. Income from newly established small-scale industrial undertakings in certain areas (Sec. 80HHA).
3. Profits from projects outside India (Sec. 80HHB).
4. Deduction in respect of exports (Sec. 80HHC).
5. Earnings of a tour operator, travel agent, etc. (Sec. 80HHD).
6. Deduction in respect of export of computer software (Sec. 80HHE).
7. Profits from an industrial undertaking, hotel, or ship which starts operating on or after 1. 4. 1991 but before 31. 3. 1995 (Sec. 80IA).
8. Profits from newly established industrial undertakings, ships, or hotels in certain cases (Sec. 80J).
9. Profits from business of poultry farming (Sec. 80JJ).
10. Interest income from bank deposits, and certain securities (Sec. 80L).
11. Deduction in respect of inter-corporate dividends (Sec. 80M).
12. Deduction in respect of royalties, etc., from certain foreign enterprises [Sec. 80(O)].
13. Deduction in respect of co-operative societies (Sec. 80P).
14. Profits from the business of publication of books (Sec. 80Q).
15. Professional income of authors of text books in Indian languages (Sec. 80QQA).
16. Deduction in respect of certain incomes from foreign sources (Sec. 80R).
17. Deduction in respect of blind, mentally retarded or physically handicapped persons (Sec. 80U).

APPENDIX III

Rate Schedule of Income Tax for Individuals, Firms, and Association of Persons: Assessment Year 1993-94

Slabs of Income (Rs)		Rate of Income Tax
From	To	
0	28,000	Nil
28,001	50,000	20 per cent of the amount exceeding Rs 28,000.
50,001	1,00,000	Rs 4400 plus 30 per cent of the amount exceeding Rs 50,000.
1,00,001	and above	Rs 19,400 plus 40 per cent of the amount exceeding Rs 1,00,000.

Surcharge: If taxable income exceeds Rs 1,00,000 then surcharge at the rate of 12 per cent of income-tax is also payable.

Rates of Income Tax for Companies: Assessment Year 1993-94

Type of Company	Rate of Tax
1. A domestic company in which the public are substantially interested (i.e., a widely held company).	45 per cent
2. A domestic company in which the public are not substantially interested (i.e. closely held company).	50 per cent
3. A Foreign Company	
3.1 On income consisting of royalties, fees for rendering technical services, etc.	50 per cent
3.2 On other incomes	65 per cent

Surcharge: 15 per cent of income-tax if total income of a domestic company exceeds Rs 75,000. No surcharge is payable in the case of a foreign company.

URBANISATION IN INDIA: USE OF A NEW INDEX

P.K. Chaubey

Urbanisation is traditionally measured by the proportion of population living in urban areas. However, this measure is not considered satisfactory as it ignores the distributional aspect. Therefore the measure is usually supplemented by some measure of concentration of population distribution over different sized urban units. In this paper, following Sen-Takayama's axiomatic framework developed in the context of poverty measurement, we construct a composite index which takes care of the both the aspects, viz., level and pattern of urbanisation. The composite index computed for fourteen major states of India shows that ranking of states according to this index is different from that according to the traditional index.

MEASURES OF URBANISATION

Urbanisation is often considered an important indicator of development and various indices have been suggested to measure the same. They may be put into two categories : those capturing positive or desirable features and those capturing negative or undesirable features. The former category includes degree, growth, and tempo indices while the latter, scale, concentration, rank-size rule, and primacy indices. Separate indices, though informative on different aspects, do not help in an overall assessment of the situation and comparison over time and space becomes difficult.

The traditional single index is the proportion of population living in the urban areas. It is simple but it measures only the degree (level) of urbanization and ignores the distributional aspect, namely, the distribution of the urban population within the urban area, that is, over urban units of different sizes. For example, the Office of the Registrar General of India observes: 'Degree of urbanisation .....reveals only one dimension of the urban process. It gives only the level of urbanisation but does not show how the urban population is distributed over urban units of various sizes. Regions having the same degree (level) of urbanisation in terms of percentages may have quite different size structure of urbanisation, implying that measuring the degree of urbanisation by way of calculating percentage of population needs to be supplemented with measures of size-structure as well' [Office of the Registrar General of India, 1984, p. 1]. Thus, regions (states) are considered more urbanised if they have higher proportions of their respective populations living in urban areas whatever be the distribution of their urban population over urban units of different sizes.

In the Census Atlas National Volume 1981, index of urbanisation is defined in altogether different manner, namely, as the unweighted average of reciprocals of population per town in each category defined by size of population.[1] If larger population is concentrated in smaller towns, the index is higher as the number of towns would be larger even when one considers only one category. Similarly, if larger population is concentrated in smaller size category of towns, the index is higher still.

This paper intends to develop a suitable composite index which takes into account both the degree (level) and the distribution aspects by using Sen-Takayama axiomatic framework developed in connection of poverty measurement [Sen, 1976; Takayama, 1979][2].

AXIOMATIC STRUCTURE

In India, a human settlement is defined as 'urban' if it has a population of 5,000 or above though some smaller settlements are also considered as 'urban' on grounds that they have certain 'urban' characteristics. We shall ignore these exceptions. In that case, let

P^* = threshold population size, such as 5,000
H = number of human settlements or habitations,
N = number of urban settlements or habitations,
T = total population of the country,
U = total population living in urban units,
A = average population size of the urban units, and
P_i = size of the i^{th} urban unit

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For a given population-size T, we may assign any arbitrary number 0, 1, N/H, or (NP*)/T to the urbanisation index, when all urban units have population equal to P*. In this case, it is obvious that the average population size of urban units A is equal to threshold population-size P*. When A rises above P* in a way that all urban units grow at the same rate there can hardly be any disagreement that urbanisation grows for a given T. However, when A rises above P* in such a way that growth of different units is not uniform, one is not sure whether urbanisation increases at all for a given T.

The axiomatic framework developed here has a growth axiom which purports an increase in urbanisation index when there is increase in average size of urban units and a distribution axiom which holds that urbanisation index decreases when relative distribution favours larger units. More formally, the two axioms are:

Growth Axiom (Axiom G): For a given population size T, an increase in average population size of urban units results in an increase in urbanisation index when other things, including distribution, remain the same.

Distribution Axiom (Axiom D): For a given population size T, change in the distribution relatively in favour of larger units results in reduction in urbanisation index implying that a more uneven distribution of the urban population is not desirable.

It may be noted that Axiom G relates to distribution-neutral growth while Axiom D relates to growth-neutral distribution. Both processes may take place simultaneously and may involve natural increase as well as migration. The index proposed here would also reflect the change of the status of a human settlement from rural to urban and vice-versa. It would also reflect the emergence of a new human settlement as well as the extinction of an old one as did the traditional measure.

A commonly used measure of inequality or concentration is the Gini coefficient of concentration which in the present case is given by:

$$G = 1 + (1/N) - (1/N^2A)\,\Sigma\,(N + 1 - i)\,P_i$$

Hence, to modify the traditional measure of urbanisation, namely, U/T in order to construct a composite index I, satisfying both axioms G and D, one may write it as

$$I = (U/T)\,(1 - G)$$

It will be useful to derive this index more formally in order to know its analytical properties.

DERIVATION OF INDEX

Let us arrange populations of urban units in an increasing (strictly speaking, non-decreasing) order:

$$P^* \leq P_2 \leq P_2 \leq P_3 \leq \ldots\ldots \leq P_i \leq \ldots\ldots\ldots \leq P_N \qquad (1)$$

and define what may be called excess population ratio E_i

$$E_i = (P_i - P^*)/P^* \qquad (2)$$

so that

$$0 < E_1 < E_2 < E_3 < \ldots\ldots < E_i < \ldots\ldots\ldots \leq E_N \qquad (3)$$

Keeping in view the distribution axiom, let us assign larger weights to smaller excesses, i.e.,

$$W_1 > W_2 > W_3 > \ldots\ldots > W_i > \ldots\ldots\ldots > W_N \qquad (4)$$

so that the contribution of unit i to the urbanisation index is proportional to $W_i\,E_i$.

Now if the urbanisation index is defined as the normalised linear aggregate of $W_i\,E_i$, we can write the index I in the following manner:

$$I = B\,\Sigma W_i E_i + D \qquad (5)$$

where B and D are normalisation parameters. A very simple way of accomplishing (4) is to define W_i in terms of ordinal ranks according to population size:

$$W = N + 1 - i \qquad (6)$$

Substituting (2) and (6) in (5) and making use of standard definition of Gini coefficient of concentration G, for large N, we find that

$$I = B\,(N^2/2)\,[(A/P^*)(1 - G) - 1] + D \qquad (7)$$

whose value crucially depends on B and D. For fixing the normalisation parameters B and D we provide following two normalisation axioms N1 and N2:

AXIOM N1: When all urban units have population equal to P^*, the urbanisation index I is equal to (NP^*/T).

AXIOM N2: When all urban units have population equal to A, the urbanisation index I is equal to (NA/T).

Invoking Axiom N1 which means $A = P^*$ and $G = 0$, we find from (7) the value of D:

$$D = (NP^*/T) \tag{8}$$

and therefore the relation (7) gets transformed into (9):

$$I = B\,(N^2/2)\,[(A/P^*)\,(1 - G) - 1] + (NP^*/T) \tag{9}$$

Further invoking Axiom N2 by substituting I by (NA/T) on the left hand side and putting $G = 0$ in the right hand side of (9) we get

$$B = (2/N)\,(P^*/T) \tag{10}$$

Substituting (10) into (9), we obtain

$$I = (NP^*/T)\,[(A/P^*)\,(1 - G) - 1] + (NP^*/T)$$

which can be simplified to show that

$$I = (U/T)\,(1 - G) \tag{11}$$

where U is obviously NA.

PROPERTIES OF THE NEW INDEX

The index I is simple and easy to compute as (U/T) and G are readily available. When there is no urban unit, I is zero. It is equal to unity when all habitation units are urban (i.e., $H = N$) and all have the same population, i.e.,

$$A = P_1 = P_2 = P_3 = \ldots\ldots\ldots\ldots = P_H$$

Therefore, I lies between 0 and 1.

Under linear aggregation scheme with rank weighting, the excess population ratios yield an urbanisation index: $I = (U/T)(1 - G)$ where U and T represent urban and total population respectively and G represents Gini coefficient of population concentration in the urban units. The new index is found to possess interval independence and scale independence properties as does the traditional urbanisation index as well as to possess other intuitively appealing properties.

It may be considered desirable that the level of urbanisation remains invariant if the population of every unit grows at the same rate and the threshold population is raised by the growth factor $\theta = 1 + r$ where r is the rate of growth of population. We find that this is satisfied by I. This property goes with the name 'scale independence' in the literature on measurement of inequality.

The measure I also satisfies the property called 'frequency independence' which may be stated as: if the number of habitations in each of the population-size categories were to increase in the same proportion, the measure of urbanisation would remain the same. These two requirements along with the one that the range of urbanisation index should lie between zero and unity are, of course, also satisfied by the traditional urbanisation measure Traditional measure fails to account for redistribution of population.

We may be interested in knowing the differential impacts of the arguments that enter the index I. For this we have to split total population T into urban population U and rural population R and write I as

$$I = [U/(U + R)][1 - G]$$

which can be differentiated with respect to U, R and G. The elasticities with respect to each of these arguments can very easily be obtained. They are presented in Table 1.

TABLE 1. DERIVATIVES AND ELASTICITIES OF URBANISATION INDEX

Argument	Derivative	Elasticity
U	$R(1 - G)/T^2$	R/T
R	$-U(1 - G)/T^2$	$-R/T$
G	$-U/T$	$-G/(1 - G)$

We may note that the changes in R and U are here taken as autonomous meaning thereby that they do not occur as a result of migration. It is easy to see that if a person migrates from a rural area to an urban area without causing change in G, the overall impact would be $(1-G)/T$. Thus, if M people migrate from rural areas to urban areas and get distributed proportionately, then the change in the index is equal to [m (1-G)] where m is the migration rate (defined as the ratio of migrants to total population).

URBANISATION IN MAJOR STATES OF INDIA

For computing the index for fourteen major states, we have taken the basic data from the census monograph '*Urban Growth in India, 1951-81*' for the Censuses 1951 to 1981. For the Census 1991, we made use of Paper 2 of 91 on Rural - Urban, Distribution. While Gini coefficients for earlier censuses were available in the cited monograph, those for Census 91 were calculated by the author. Different measures of urbanisation, namely, the traditional (U/T), Gini Coefficient (G), and the new index (I) are given in Table 2.

TABLE 2. URBANISATION IN MAJOR STATES AS MEASURED BY DIFFERENT INDICES

States	Index	1951	1961	1971	1981	1991
India	(U/T)	17.59	18.24	20.21	23.70	25.72
	G	55.40	60.00	62.80	63.60	67.81
	I	07.85	07.23	07.52	08.63	08.28
Andhra Pradesh	(U/T)	17.42	17.44	19.31	23.32	26.84
	G	48.60	53.90	57.40	57.90	60.07
	I	08.95	08.64	08.23	09.82	10.70
Bihar	(U/T)	06.77	08.43	10.00	12.47	13.17
	G	49.90	49.10	48.80	52.40	60.07
	I	03.39	04.29	05.12	05.94	05.22
Gujarat	(U/T)	27.23	25.77	28.08	31.10	34.40
	G	51.70	58.00	60.90	62.60	69.27
	I	13.15	10.82	10.98	11.63	10.57
Haryana	(U/T)	17.07	17.23	17.66	21.88	24.79
	G	42.90	46.10	47.60	53.60	63.93
	I	09.75	09.29	09.25	10.15	08.94
Karnataka	(U/T)	22.95	22.23	24.31	28.88	30.91
	G	48.30	54.10	57.50	58.50	72.25
	I	11.87	10.21	10.33	11.99	08.58
Kerala	(U/T)	13.47	15.11	16.24	18.74	26.44
	G	46.90	44.50	52.00	43.70	61.10
	I	07.15	08.39	07.99	10.55	10.29
Madhya Pradesh	(U/T)	12.02	14.29	16.29	20.29	23.21
	G	50.50	51.30	55.80	55.90	63.14
	I	05.95	06.96	07.20	08.95	08.56
Maharashtra	(U/T)	22.75	28.22	31.17	35.03	38.73
	G	61.80	70.30	73.00	74.70	75.70
	I	08.69	08.38	08.42	08.86	09.41
Orissa	(U/T)	04.06	06.32	08.41	11.79	13.43
	G	35.60	38.00	45.00	47.30	44.72
	I	02.62	03.92	04.63	06.21	07.42
Punjab	(U/T)	21.72	23.06	23.73	27.68	29.72
	G	51.60	54.90	57.10	60.80	64.45
	I	10.51	10.40	10.18	10.85	10.54
Rajasthan	(U/T)	18.50	16.28	17.63	21.04	22.88
	G	45.00	49.30	54.60	55.10	58.35
	I	10.18	08.25	08.00	09.45	09.53
Tamil Nadu	(U/T)	24.35	26.69	30.26	32.95	34.20
	G	53.70	56.30	61.60	64.90	68.67
	I	11.27	11.66	11.62	11.56	10.71
Uttar Pradesh	(U/T)	13.64	12.85	14.02	17.95	19.89
	G	56.70	61.60	62.80	60.30	66.59
	I	05.91	04.93	05.12	07.12	06.65
West Bengal	(U/T)	23.88	24.45	24.75	26.46	27.39
	G	68.30	67.10	67.20	65.00	73.61
	I	07.57	08.04	08.12	09.26	07.23
North eastern Region	(U/T)	04.97	08.59	11.17	16.75	22.87
	G	54.00	42.70	47.40	38.90	59.03
	I	02.29	04.92	05.87	10.23	09.37
Other Area not Calculated	(U/T)	25.50	33.36	38.93	44.93	N.A.
	G	64.80	83.10	86.00	83.30	N.A.
	I	08 95	05.64	05.45	07.50	N.A.

Note : All the three indices are given as percentages.
Data Sources: (1) *Urban Growth in India 1951-1981 (A Statistical Analysis)*, Census of India 1981, Monograph No. 1 of 1984, Office of the Registrar General of India.
(2) *Census of India 1991, Paper 2 of 1991: Rural-Urban Distribution*, Office of the Registrar General of India.

To begin with we may examine to what extent concentration of urban population as measured by Gini Coefficient (G) grows with greater urbanisation as measured by the traditional measure (U/T). For this purpose, we have worked out (Table 3) a linear regression of G on (U/T) (both expressed as percentages) for each of the fourteen states, and the North Eastern Region and Other Areas over the five decennial years 1951 to 1991. We have also worked out the same for All India. Besides, we have fitted the same regression for the pooled data for the 16 states/regions giving a total of 79 observations (for Other Areas, the figures for 1991 were not calculated).

TABLE 3. REGRESSION OF (G) ON (U/T) BOTH EXPRESSED AS PERCENTAGES

States	No. of Observations	Constant	R^2	Regression Coefficient	t
All India	5	36.66	0.83902	1.20	3.95
Andhra Pradesh	5	37.25	0.64986	0.88	2.36
Bihar	5	38.74	0.56140	1.31	1.96
Gujarat	5	14.15	0.71837	1.58	2.77
Haryana	5	4.70	0.95103	2.34	7.63
Karnataka	5	6.22	0.74062	2.01	2.93
Kerala	5	29.61	0.62318	1.11	2.23
Madhya Pradesh	5	37.43	0.87398	1.04	4.56
Maharashtra	5	44.51	0.88345	0.85	4.77
Orissa	5	32.08	0.76047	1.14	3.09
Punjab	5	21.02	0.96239	1.46	8.76
Rajasthan	5	26.94	0.44559	1.33	1.55
Tamil Nadu	5	17.57	0.98456	1.46	13.83
Uttar Pradesh	5	50.80	0.34524	0.69	1.26
West Bengal	5	42.27	0.21875	1.02	0.92
North Eastern Region	5	45.08	0.04940	0.26	0.89
Other Areas	4	44.94	0.66628	0.96	2.00
All States & Regions	79	36.27	0.64560	0.99	11.84

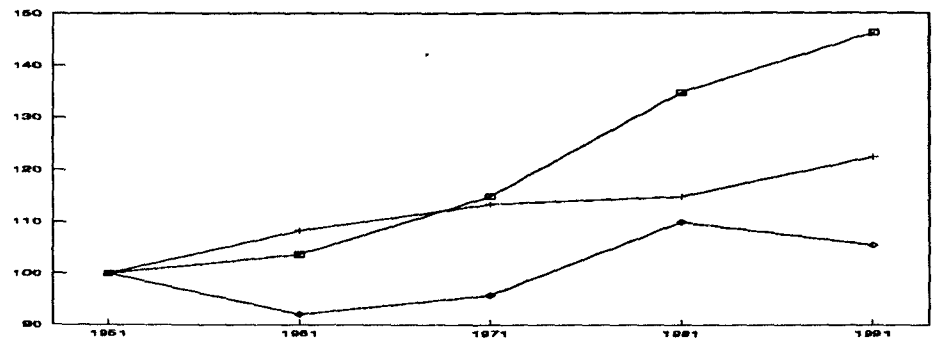
It will be noticed that, in all cases, there is a positive relation between urbanisation and concentration of urban population within the urban area and that, as judged by R^2, the relation is strong except in Bihar, Rajasthan, Uttar Pradesh, West Bengal, and North Eastern Region. The relation is particularly strong in Punjab, Haryana, and Tamil Nadu and, in these states, the regression coefficients are also large. For instance, in Haryana, for one percentage point in (U/T), there is an increase of 2.34 percentage points in G (both U/T and G expressed as percentages). The regression coefficient is greater than one in Haryana, Karnataka, Punjab, Tamil Nadu, Gujarat, Rajasthan, Bihar, in that order and only marginally so in Orissa, Kerala, Madhya Pradesh, and West Bengal. The regression coefficient is 1.20 for all India and 0.99 for all states/regions pooled together. This means that both at the all India level and in most states, increase in urbanisation as measured by I would be smaller than as measured by (U/T) and that, in fact, in some periods, while the former may show an increase, the latter may show an actual decline. This is confirmed by Table 2.

It will be seen that, between 1951 and 1991, urbanisation according to traditional measure (U/T) increased by 46.22 per cent in the country as a whole. According to our measure it increased only by 5.48 per cent. This is true of most states. Another noteworthy feature which the new index brings out is that while, according to the traditional index, urbanisation has ever been rising despite declassification of a large number of towns, according to the new index it actually declined by 4.41 per cent between 1981 and 1991. This is also evident in most sates; the exceptions are Andhra Pradesh, Maharashtra, and Rajasthan. It is only in these states that increase in the proportion of urban population was accompanied by its more even distribution. Both these features may be seen from Table 4 in which we give the percentage increase in urbanisation (1951 = 100) as shown by different measures. These are also shown in a series of graphs.

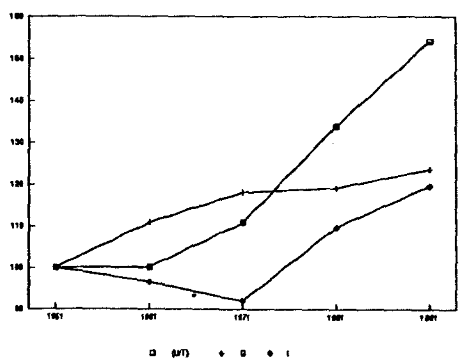
TABLE 4: INCREASE IN URBANISATION AS INDICATED BY DIFFERENT MEASURES
(1950 = 100)

STATES	INDEX	1951	1961	1971	1981	1991
India	(U/T)	100	103.70	114.89	134.74	146.22
	G	100	108.30	113.36	114.80	122.40
	I	100	92.10	95.80	109.94	105.48
Andhra Pradesh	(U/T)	100	100.11	110.85	133.87	154.08
	G	100	110.91	118.11	119.14	123.60
	I	100	96.54	91.96	109.72	119.55
Bihar	(U/T)	100	124.52	147.71	184.19	194.53
	G	100	98.40	97.80	105.01	120.38
	I	100	126.55	151.03	175.22	153.98
Gujarat	(U/T)	100	94.64	103.12	114.21	126.33
	G	100	112.19	117.79	121.08	133.98
	I	100	82.28	83.50	88.44	80.38
Haryana	(U/T)	100	100.94	103.46	128.18	145.23
	G	100	107.46	110.96	124.94	149.02
	I	100	95.28	94.87	104.10	91.69
Karnataka	(U/T)	100	96.86	105.93	125.84	134.68
	G	100	112.01	119.05	121.12	150.10
	I	100	86.02	87.03	101.01	72.28
Kerala	(U/T)	100	112.18	120.56	139.12	196.29
	G	100	94.88	110.87	93.18	130.28
	I	100	117.34	111.75	147.55	143.92
Madhya Pradesh	(U/T)	100	118.89	135.52	168.80	193.09
	G	100	101.58	110.50	110.69	125.03
	I	100	116.97	121.01	150.42	143.87
Maharashtra	(U/T)	100	124.04	137.01	153.98	170.24
	G	100	113.75	118.12	120.87	122.49
	I	100	96.43	96.89	101.96	108.29
Orissa	(U/T)	100	155.67	207.14	290.39	330.79
	G	100	106.74	126.40	132.87	125.62
	I	100	149.62	176.72	237.02	283.21
Punjab	(U/T)	100	106.17	109.25	127.44	136.83
	G	100	106.40	110.66	117.83	124.90
	I	100	98.95	96.86	103.24	100.29
Rajasthan	(U/T)	100	88.00	95.30	113.73	123.68
	G	100	109.56	121.33	122.44	129.67
	I	100	81.04	78.59	92.83	93.61
Tamilnadu	(U/T)	100	109.61	124.27	135.32	140.45
	G	100	104.84	114.71	120.86	127.88
	I	100	103.46	103.11	102.57	95.03
Uttar Pradesh	(U/T)	100	94.21	102.79	131.60	145.82
	G	100	108.64	110.76	106.35	117.44
	I	100	83.42	86.63	120.47	112.52
West Bengal	(U/T)	100	102.39	103.64	110.80	114.70
	G	100	98.24	98.39	95.17	107.77
	I	100	106.21	107.27	122.32	96.43
North Eastern Region	(U/T)	100	172.84	224.75	337.02	460.16
	G	100	79.07	87.78	72.04	109.31
	I	100	214.85	256.33	446.72	409.17
Other Areas	(U/T)	100	130.82	152.67	176.20	N.A.
	G	100	128.24	132.72	128.55	N.A.
	I	100	63.02	60.89	83.80	N.A.

ALL INDIA



ANDHRA PRADESH



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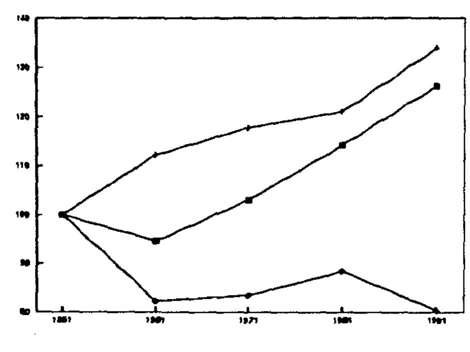

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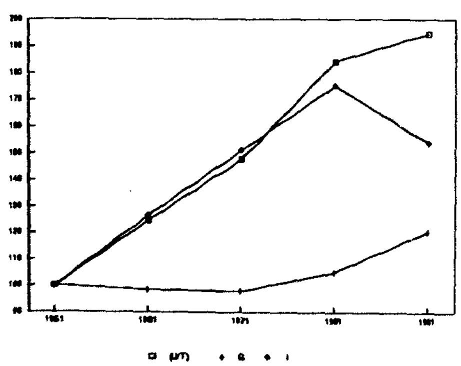

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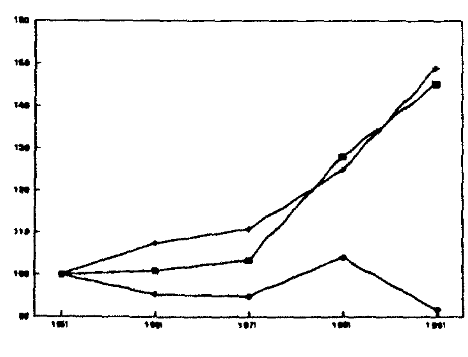

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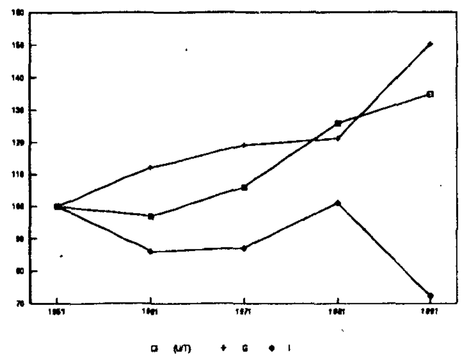

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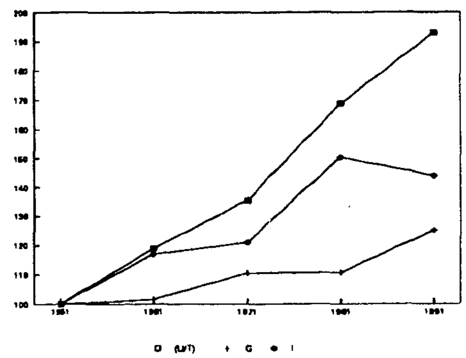

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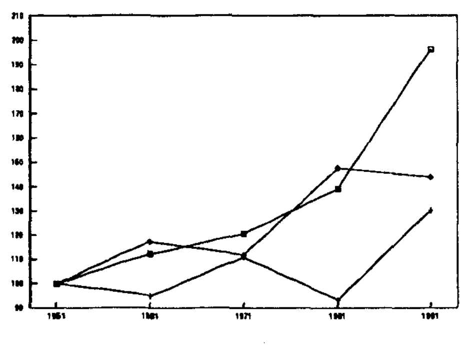

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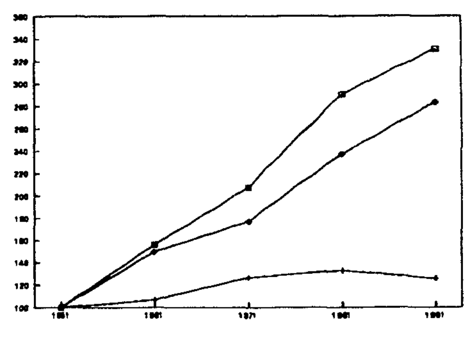

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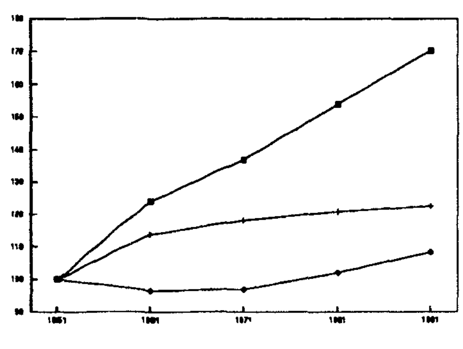

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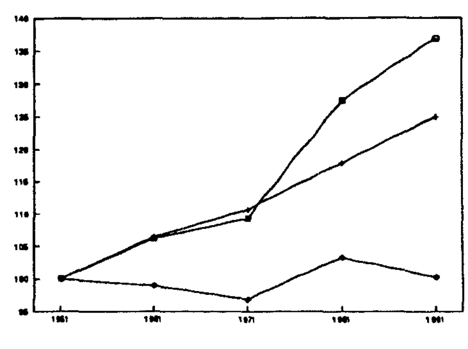

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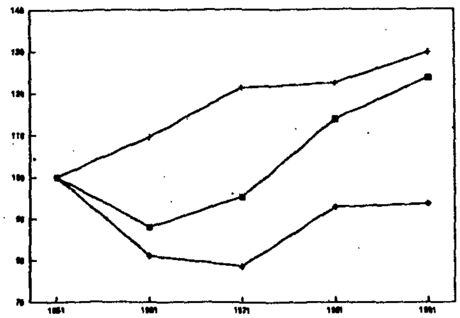

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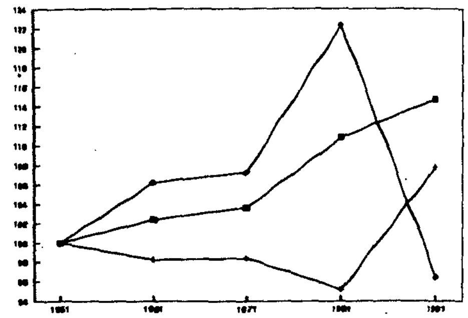

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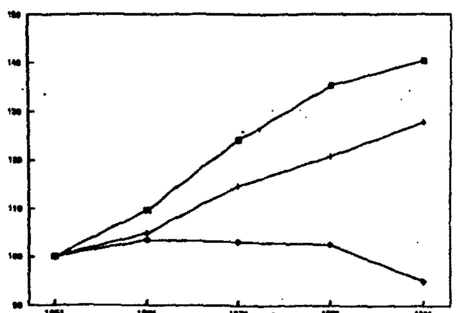

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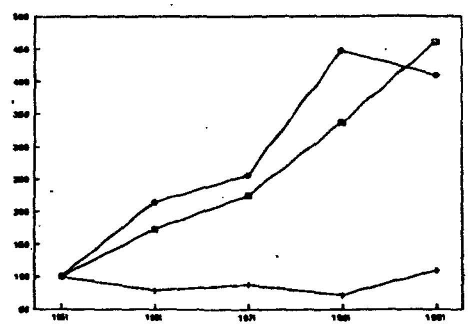

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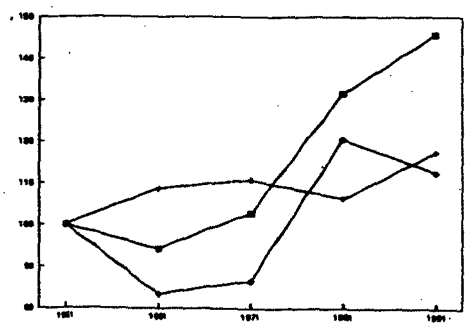
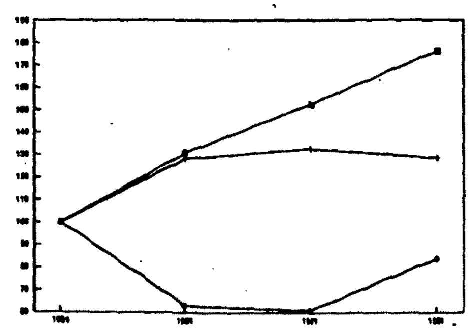


OTHER AREA



As already noted, the measure I, has a qualitative dimension, namely, the distribution of the urban population between the urban units and a decline in I signifies a more uneven distribution of the urban population. In this sense, if the highest value of (U/T) were to refer to the 'most' urbanised state, the state with highest value of I could be regarded as the 'most evenly' urbanised state. In this way, our ranking of states would be found to be different from the one obtained by the application of the traditional measure. In Tables 5 and 6, we give the ranking of the states by the traditional measure (U/T) and the new index (I) respectively. In Table 7 we give the highest and the lowest ranked states according to both the traditional measure (U/T) and the new index (I).

The movement of (U/T) over time would thus indicate whether urbanisation has risen/declined and that of I would show whether it has improved/deteriorated. We note from the Table 2 that only in the four states of Andhra Pradesh, Maharashtra, Orissa, and Rajasthan, could one say urbanisation to have improved in the last decade.

TABLE 5. STATES RANKED BY URBANISATION AS MEASURED BY TRADITIONAL INDEX (U/T)

1951	1961	1971	1981	1991
Gujarat	Maharashtra	Maharashtra	Maharashtra	Maharashtra
Tamilnadu	Tamilnadu	Tamilnadu	Tamilnadu	Gujarat
West Bengal	Gujarat	Gujarat	Gujarat	Tamilnadu
Karnataka	West Bengal	West Bengal	Karnataka	Karnataka
Maharasthra	Punjab	Karnataka	Punjab	Punjab
Punjab	Karnataka	Punjab	West Bengal	West Bengal
Rajasthan	Andhra Pradesh	Andhra Pradesh	Andhra Pradesh	Andhra Pradesh
Andhra Pradesh	Haryana	Haryana	Haryana	Kerala
Haryana	Rajasthan	Rajasthan	Rajasthan	Haryana
Uttar Pradesh	Kerala	Madhya Pradesh	Madhya Pradesh	Madhya Pradesh
Kerala	Madhya Pradesh	Kerala	Kerala	Rajasthan
Madhya Pradesh	Uttar Pradesh	Uttar Pradesh	Uttar Pradesh	Uttar Pradesh
Bihar	Bihar	Bihar	Bihar	Orissa
Orissa	Orissa	Orissa	Orissa	Bihar

TABLE 6. STATES RANKED BY URBANISATION AS MEASURED BY NEW INDEX (I)

1951	1961	1971	1981	1991
Gujarat	Tamil Nadu	Tamil Nadu	Karnataka	Tamil Nadu
Karnataka	Gujarat	Gujarat	Gujarat	Andhra Pradesh
Tamil Nadu	Punjab	Karnataka	Tamil Nadu	Gujarat
Punjab	Karnataka	Punjab	Punjab	Punjab
Rajasthan	Haryana	Haryana	Kerala	Kerala
Haryana	Andhra Pradesh	Maharashtra	Haryana	Rajasthan
Maharashtra	Kerala	Andhra Pradesh	Andhra Pradesh	Maharashtra
Andhra Pradesh	Maharashtra	West Bengal	Rajasthan	Haryana
West Bengal	Rajasthan	Rajasthan	West Bengal	Karnataka
Kerala	West Bengal	Kerala	Madhya Pradesh	Madhya Pradesh
Madhya Pradesh	Madhya Pradesh	Madhya Pradesh	Maharashtra	Orissa
Uttar Pradesh	Uttar Pradesh	Uttar Pradesh	Uttar Pradesh	West Bengal
Bihar	Bihar	Bihar	Orissa	Uttar Pradesh
Orissa	Orissa	Orissa	Bihar	Bihar

TABLE 7. HIGHEST AND LOWEST RANKED STATES ACCORDING TO TRADITIONAL AND NEW INDICES OF URBANISATION

Status	1951	1961	1971	1981	1991
Most	Gujarat	Maharashtra	Maharashtra	Maharashtra	Maharashtra
Least	Orissa	Orissa	Orissa	Orissa	Bihar
Best	Gujarat	Tamil Nadu	Tamil Nadu	Karnataka	Tamil Nadu
Worst	Orissa	Orissa	Orissa	Bihar	Bihar

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NOTES

1. Formally, this is to be given by $(1/N)\sum(N_g/P_g)$ where N_g and P_g, are the number of towns and the total population respectively in the category g.

2. There are couple of attempts making use of Sen's index of poverty in different contexts. One is by S.K. Sanyal in the field of distribution of agricultural holdings. See S.K. Sanyal (1988). The other is by Suneel Kapoor who adapted the poverty index for measuring urbanisation. See S.K.Kapoor (1991).

REFERENCES

Kapoor, S.K., 1991; *The Pattern of Migration in the Urbanisation of India*, Ph.D. Thesis submitted to Banaras Hindu University, Varanasi.

Office of the Registrar General of India, 1984; *Urban Growth in India 1951-1981*, Census of India 1981, Monograph No. 1 of 1984, New Delhi.

Office of the Registrar General of India, 1985; *Census Atlas* National Volume 1981, New Delhi.

Office of the Registrar General of India, 1988; *Census of India 1991, Paper 2 of 1991 on Rural-Urban Distribution*, New Delhi.

Sanyal, S.K., 1988; 'Trends in Landholding and Poverty in India' in T.N. Srinivasan and P.K. Bardhan (Eds), *Rural Poverty in South Asia*, Oxford University Press, Delhi.

Sen, A.K.; 1976, 'Poverty: An Ordinal Approach to Measurement', *Econometrica*, Vol. 44.

Takayana, N., 1979, 'Poverty, Income Inequality and their Measures: Professor Sen's Approach Reconsidered', *Econometrica*, Vol. 47.

United Nations, 1973; *The Determinants and Consequences of Population Trends*, Vol. 1, New York.

A STUDY OF THE BEHAVIOUR OF SOME MACRO VARIABLES - A SEARCH FOR A PARADIGM

Sukumar Nandi

There are several ruling hypotheses about the behaviour of major macro variables in Indian money market like bank deposits, money supply, price level, etc. There are theories which can give indications about the possible pattern of movement of these variables in response to exogeneous shocks. But a particular theoretical model has its alternative and that makes the analysis confusing. One way out of this is to quantify the patterns of movement of these variables and on the basis of this quantification alternative hypotheses can be tested. This approach has been pursued here. To make the analysis broad based, Indian experience has been placed along with other countries and this is to test one particular aspect of monetarism.

INTRODUCTION

Economic observations, when documented, reveal some part of the living drama that goes on in the economy, because some observations get lost and the rest are not put correctly most of the time. Keeping this limitation in mind we can approach the problem of an analysis of the economy broadly in two ways. First, we have some models in mind and we try to seek empirical verification of the model with a view to recording some prescriptions for the future economic policies which are supposed to be oriented either to preserve the *status quo* or to reform the existing system. We can call it the clinical method for the evaluation of an economy. Second, we can approach the problem with an open mind, observe the behaviour of the variables, analyse the courses of their movement and present the whole analysis before the policy makers who reach their own conclusions. This may be termed as empiricism, which entails some sort of a theoretical vacuum. But this becomes useful to the theoretician sometimes, as this helps him to have a fresh look towards the established orthodoxy so that he can modify the existing theories. The present paper starts from the second premise though an attempt has been made to test the existing theory towards the end of it.

The scope of the paper is very much limited. Basically it tries to throw some light on some aspects of Indian money market with an open mind. It starts with an econometric analysis of deposit growth in the money market using time-series models. This is covered in Section 1. Next, the growth of money supply in India has been analysed to reveal some peculiarities in this process. A change in money supply is expected to have some impact on the price level especially when the former creates disequilibrium in the money market. This monetary paradigm has been tested empirically in Section 3. Here the situation of India has been placed in a world perspective in the sense that the same standard model has been tested in case of ten other countries taken from four continents. Further, Section 4 empirically sets the relation between reserve money and the money stock of two definitions. This throws light on the effectiveness of monetary policy. The last section comes in the form of a conclusion.

The data used in this study are collected from various sources. The data on income, price level and money supply of eleven countries including India are taken from *International Financial Statistics* [IMF, 1990]. The data on money supply in India are taken from *Report on Currency and Finance* [RBI, 1991] and deposit figures are taken from *Banking Statistics* [RBI].

1. The Deposit Behaviour of Commercial Banks

Commercial banks do the adjustment between aggregate savings and investment through the financial intermediation process. Financial institutions other than banks can do the same thing partly through the capital market. To the extent they substitute the functions of the bank, the latter feel the impact of the dis-intermediation. Recently we find in the literature that commercial banks in India are suffering from dis-intermediation and this is evident by the sluggish growth of deposits in the banks. This section deals with this hypothesis. Obviously, one aspect of dis-intermediation is taken here. The full picture includes the operation of capital market and the shifting preference pattern of the households

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away from the banking system. This is outside the scope of this paper.

Our data on demand deposits and time deposits cover a period of 22 years, i.e., from 1970 to 1991. A diagrammatic exposition (Figure 5) shows exponential growth for both types of deposits. Accordingly, an exponential curve is fitted, the equation being

$$\log DD = a_o + a_1 \text{ time}$$

for demand deposits. A similar curve is fitted to the time deposits also. Both the results are reported in the following Table 1.

TABLE 1. REGRESSION RESULT: EQUATION LOG X = A + B TIME

Independent Variables	Dependent Variables	
	Demand Deposits	Time Deposits
Constant	7.80 (110.95)	7.786 (197.26)
Time	0.118 (22.05)	0.199 (66.36)
Other Statistics		
Adjusted R^2	0.958	0.99
D.W. Statistic	0.46	0.30
SEE	0.508	0.160

Figures in parenthesis are t-statistics.

From the results we find that both demand and time deposits have grown at an exponential growth rate of 11.8 and 19.9 per cent respectively.

Again from Table 6 we find that aggregate deposits as a percentage of national income increased form 13.97 per cent in 1970 to 26.90 per cent in 1980 and 36.71 per cent in 1991. The annual rate of growth of aggregate deposits has fluctuated over the years and compared to the middle of 1980s, the growth rates in 1990 and 1991 are lower. But since the base has been expanding consistently a slight lowering of growth rate is not unnatural.

Time series analysis has been applied to both types of deposits. The values of the auto-correlations in different lags show that both the series are stationary (Tables 3 and 4). Further, an ARIMA (3,0,3) is applied to both demand and time deposits and forecast values are obtained from 1984 onwards. Interestingly, for both types of deposits the forecast values are lower than the actual values in the relevant years (Figures 6 and 7). The position of the actual values of the deposits above the expected values confirms lack of support for the deceleration thesis in the aggregate deposit behaviour. By differentiating the series once, we have applied an ARIMA (3,1,3) and obtained the forecast values. Here also the actual values of the time deposits are higher than the forecast values for all the years since 1984 except the year 1990.

The above empirical analysis fail to prove the hypothesis that a significant financial disintermediation has occurred in the commercial banking sector so far as deposit growth is concerned. Since the scope of this study is restricted to deposit growth only, the relative comparison with the capital market is beyond this scope. To be precise, the story about the sluggish growth of aggregate deposits is not empirically supported.

2. *Money Supply : Different Aggregates*

In India four definitions of money supply are used. While the narrow definition of money includes the currency with the public and demand deposits with commercial banks (M1), we get M2 definition of money when we add savings accounts of postal system with M1 definition. Again, when time deposits of banks are added to the M1 definition, we get the M3 definition of money and the broadest possible definition of money (M4) is derived by adding other forms of savings available in the postal system with the M3 definition. The considerable amount of savings accounts in the commercial banks, is divided between demand deposits and time deposits in a proportionate manner. The proportion is subject to a revision from time to time.

FIGURE 1. GROWTH OF M1 & M2 OVER THE YEARS 1977-1990

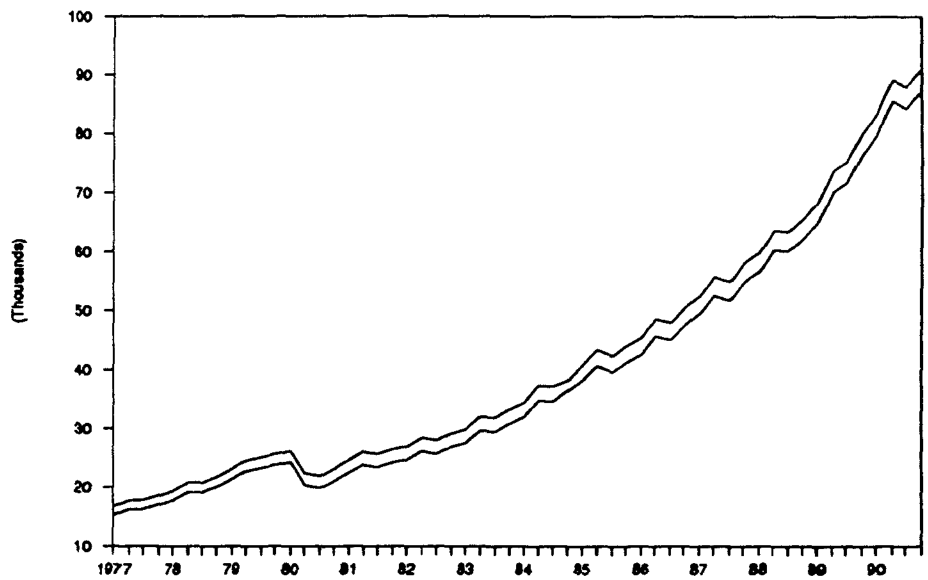

FIGURE 2. GROWTH OF M3 & M4 OVER THE YEARS 1977-1990

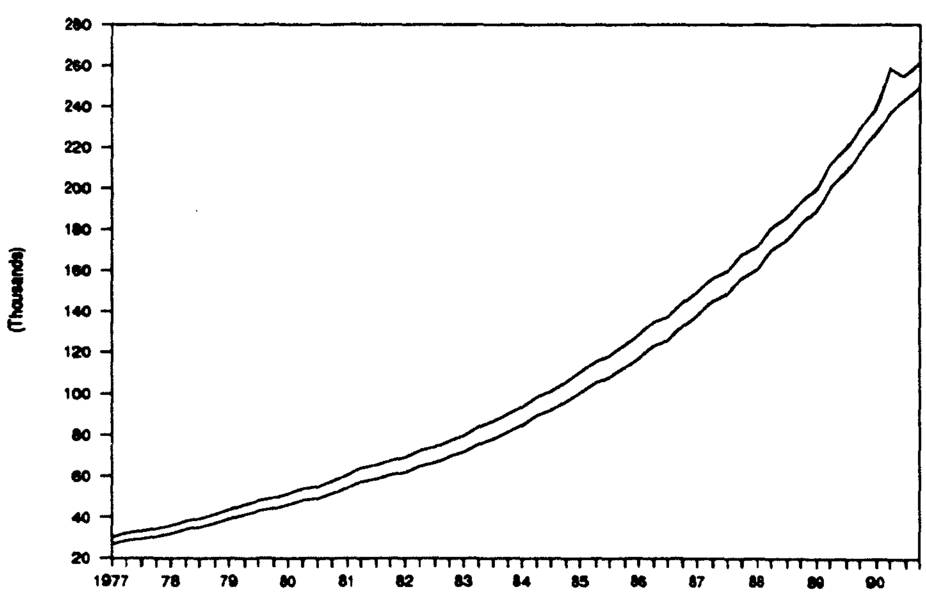

FIGURE 3. FLUCTUATIONS BETWEEN M2 & M1 OVER THE YEARS 1977-1990

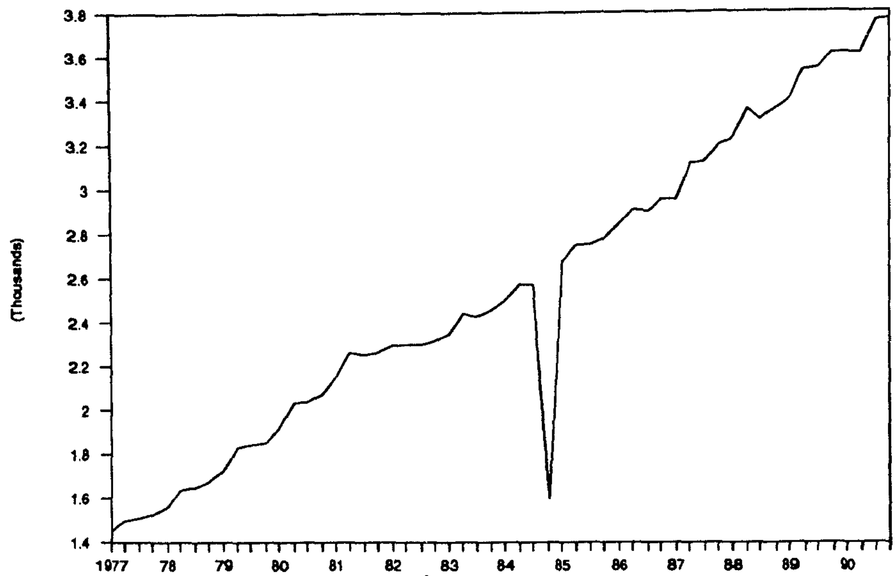

FIGURE 4. FLUCTUATIONS BETWEEN M4 & M3 OVER THE YEARS 1977-1990

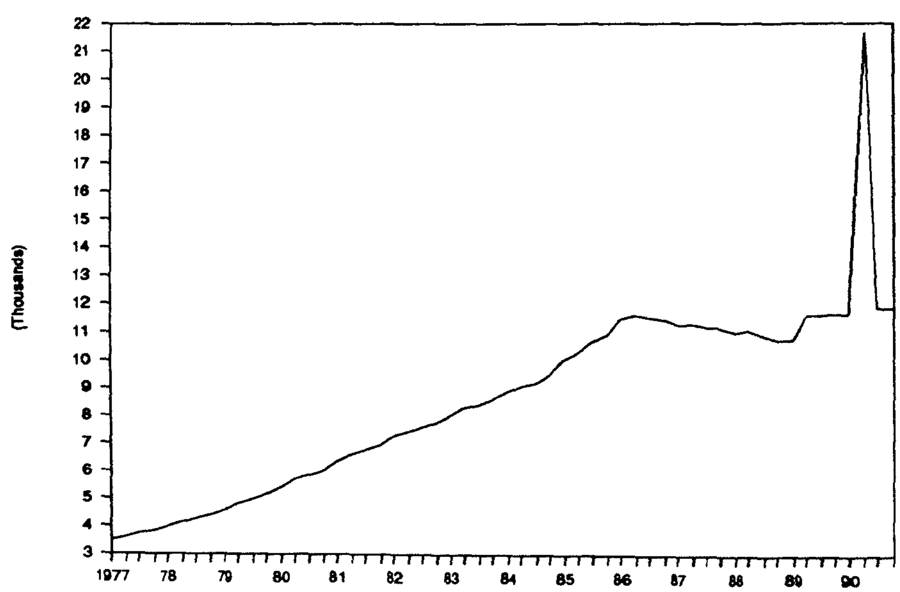

FIGURE 5. GROWTH OF DEMAND AND TIME DEPOSITS: 1970.1-91.4

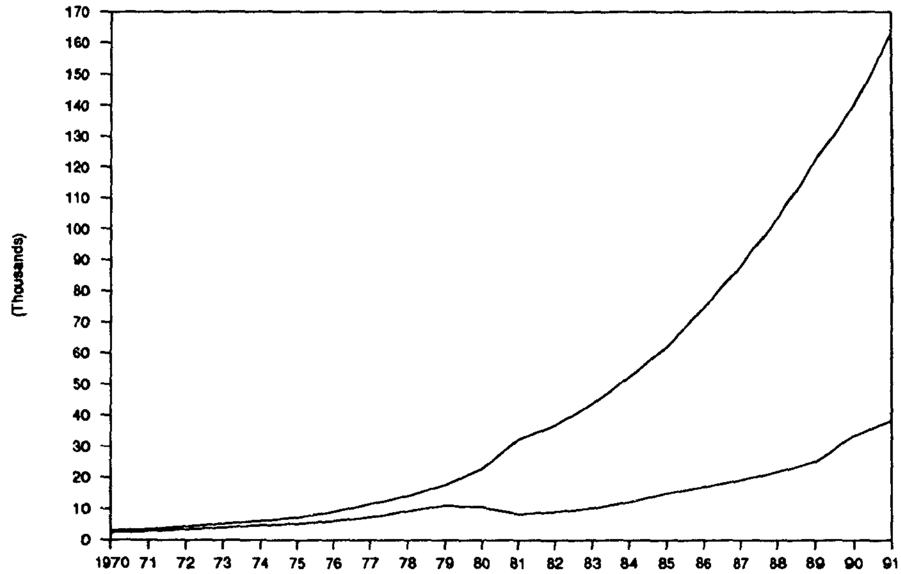

FIGURE 6. ACTUAL AND FORECAST VALUES OF DEMAND DEPOSITS: 1984 ONWARDS (BASED ON ARIMA (303))

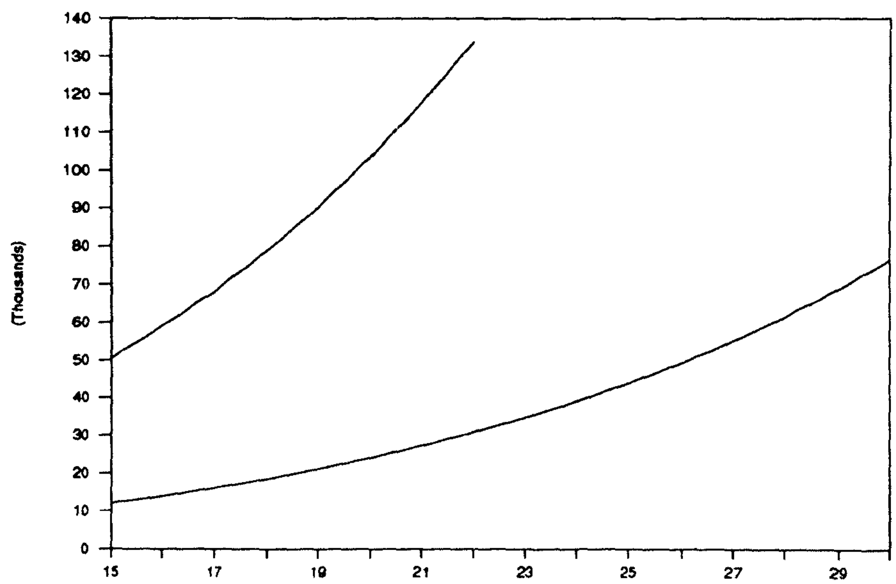

FIGURE 7. ACTUAL AND FORECAST VALUES OF TIME DEPOSITS: 1984 ONWARDS (BASED ON ARIMA (303))

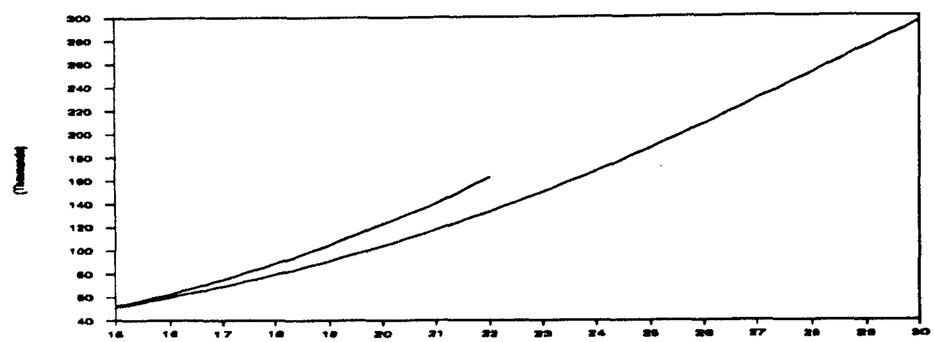

FIGURE 8. ACTUAL AND FORECAST VALUES OF TIME DEPOSITS: 1984 ONWARDS (BASED ON ARIMA (3,1,3))

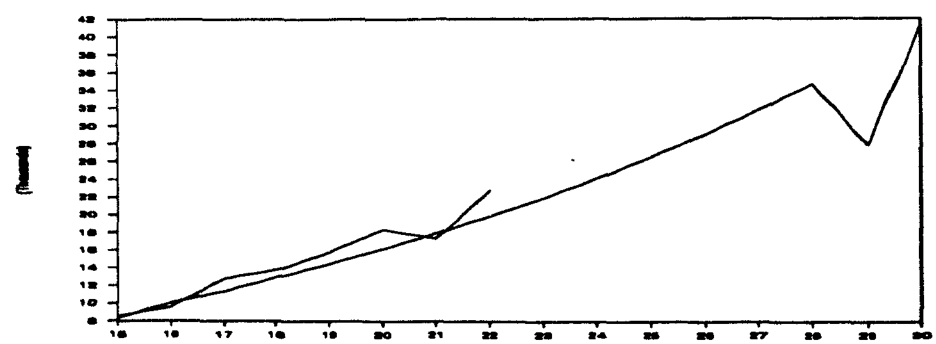

FIGURE 9. THE MOVEMENT OF M1/M3 OVER THE PERIOD 1960-1989

One interesting aspect of money supply in India is a comparison of two differences - the difference between M2 and M1 and the difference between M4 and M3. In both cases savings with the postal system make the difference, in the latter case all forms of savings are put together. While the growth of money supply in all the four definitions are steady over the years (Figures 1 and 2), the difference between M4 and M3 is much higher and volatile compared to the difference between M2 and M1 (Figures 3 and 4). This aspect of money supply is seldom studied and it requires some attention from the established orthodoxy. Is it due to the operation of black money in the economy? At this stage it is a wild conjecture.

Another important feature of the two differences - that is (M2-M1) and (M4-M3) - is the almost parallel growth of the two series in each case, though the difference (M4-M3) is much higher than the difference (M2-M1). Is it not surprising that the difference remains more or less same over the entire period? This requires further investigation.

3. Monetary Model:

In the standard monetarist paradigm inflation is completely a monetary phenomenon and there had been a time in the sixties when scores of papers had been written to test the monetary rule that an increase in money supply will lead to inflation, though with a lag. It all started with Cagan [1956] and the countries in the Latin American region had been the laboratory of the Chicago-based economists.

What is monetary rule? The monetarists start with the Quantity Theory of Money, which is taken as the long-term equilibrium condition implying that the demand for each balance will be made equal to the supply of it through the adjustment of price level. In mathematical form this is written as

$$G_p = Gm - b.Gy$$

where G_p = rate of inflation
G_m = rate of change in money supply
G_y = rate of growth of gross domestic product and
b = income elasticity of cash balance

The measure of money may be narrow (M1) or broad (M3). Though Friedman initially favoured the narrow definition of money.

One important assumption in the case of monetary rule is the exogeneity of money supply implying thereby that money supply can be controlled by the central bank of the country. Any expansion of money supply will impart an upward pressure on price level and this will be partly instigated by an expansion of real output through the operation of income elasticity of cash balance. To be specific, the price level becomes a joint outcome of the monetary forces determining nominal income and the real forces determining real income [Friedman, 1971, p 27]. It is a theoretical frame and so subject to empirical verification.

How to test the monetary model? The equation as derived above describes the long run equilibrium condition. If we add a constant to the equation and then use the stochastic term, we can write a stochastic relation of the form.

$$G_p = a_o + a_1 G_m + a_2 G_y + u$$

then this stochastic relation can be tested empirically. To test the monetary rule the null hypothesis will be

$$H_o : a_o = 0 \text{ and } a_2 < 0$$

Significantly, a_2 (estimated) is the income elasticity of cash balance.

Apart from India, the above equation has been estimated in case of ten countries from all continents and these are: Sri Lanka, Pakistan, Mexico, Venezuela, Italy, United Kingdom, Germany, France, the USA and Australia. The OLS estimates show high degree of autocorrelation in all cases and these are not reported here. The Cochrane Orcutt method of estimation has been applied and the results are reported in the table[1].

One interesting aspect of the results is that the constant term is positive and significant in all cases implying thereby the effects of other variables on the inflation rate apart from the two variables considered. Thus the first null hypothesis.

$$H_o : a_o = 0$$

is rejected in case of all ten countries.

TABLE 2. ESTIMATION OF THE MONETARY MODEL - TEN COUNTRIES

The model : $GP = a_0 + a_1 GM + a_2 G_y + u$
(Cochrane-Orentt method of estimation)

Country	Coefficients			Statistics	
	$\hat{a}_0$	$\hat{a}_1$	$\hat{a}_2$	$\bar{R}^2$	D.W.
Sri Lanka	0.073	-0.041	0.387	0.26	2.0
(1960-88)	(2.138)	(-0.348)	(1.08)		
Pakistan	0.125	-0.382	0.404	0.65	1.68
(1960-91)	(3.867)	(-4.095)	(1.88)		
Venezuela	0.342	-0.02	-2.03	0.73	1.96
(1960-91)	(1.411)	(-0.144)	(-6.07)		
Mexico	0.556	0.044	-3.315	0.86	2.37
(1960-86)	(2.136)	(0.628)	(-5.40)		
Italy	0.099	0.009	0.017	0.73	1.56
(1960-91)	(2.55)	(0.286)	(0.085)		
United Kingdom	0.106	0.003	-0.733	0.65	2.16
(1960-91)	(4.144)	(0.115)	(-3.058)		
Germany	0.040	-0.044	-0.003	0.65	1.10
(1960-91)	(3.55)	(-1.64)	(-0.76)		
France	0.08	0.015	-0.336	0.73	1.50
(1960-91)	(3.142)	(0.203)	(-1.244)		
USA	0.088	-0.271	-0.14	0.67	1.32
(1960-91)	(3.54)	(-2.64)	(-1.05)		
Australia	0.065	0.099	0.003	0.55	2.11
(1960-91	(3.575)	(1.56)	(0.74)		

Note : Figures in parenthesis are t-statistics.

Further, the sign of estimated a_2 is negative and significant in cases of Venezuela, Mexico and UK only. It is negative is case of France (22.5% level of significance) and the USA (30 % level of significance). Interestingly, the sign of estimated a_1 should be positive, but we find negative sign in cases of Sri Lanka, Pakistan, Venezuela, Germany and the USA. Also, in most of the cases the estimated a_1 is not significant.

The overall result of the empirical test of monetary rule is not good. Only in two cases (Mexico and United Kingdom) we get results which vindicate the monetary rule.

Thus the empirical support of monetarism is weak in the international field. We are to see the Indian case now. The study of India is done separately simply because it is done in some detail to derive maximum possible leverage of policy prescriptions.

The Indian Case

That monetary rule is the least probable to hold in India is easy to understand since the economy is under the control of planning for the last four decades. But since intention often betrays, the empirical testing of the monetary rule has been done in detail. That is lags have been used in case of the independent variable GM, that is, the growth rate of money supply. Here the broad definition of money (M3) has been used.

An examination of results in Table 6 reveals that both the hypotheses stated in the previous section are liable to be rejected in Indian case as the constant term in each case is significant (in case of one lag it is significant at 20 per cent level). Further, the estimated coefficient of GY is positive and not significant in all cases. Infact, the regression is a poor fit in each case which is revealed in the value of adjusted R^2.

The logarithmic forms of the model with and without lags in GM have been estimated, but the results are not significant and hence are not reported here.

In essence, the growth rate of money supply has no perceptible impact on inflation in India. This conclusion comes from the empirical result in the Table 7. If this sounds strange the econometrician is helpless. Perhaps the reasons behind inflation in India should be sought elsewhere i.e., other potential factors suggested by alternative paradigm in economic theory.

4. Reserve and Money Stock : Empirical Relation

The exogeneity of money supply in controllability sense is derived from the power of the Central Bank to change the amount of reserve money to influence the size of the money stock. In case of India the relative size of the reserve money is much higher thanks to high SLR ratio. This conventional wisdom is put to empirical test here and the results have been encouraging.

The time series of reserve money and both definitions of monetary stocks (M1 and M3) during the period 1960-89 have been utilised in this study. First differences of logarithms of all the values are taken to take care of the possibility of autocorrelation. The results are as under:

For M1 definition of money:
$\log M = 0.079 + 0.285 \log TR + e$
t-statistics (2.93) (1.393)
D.W. Statistic = 1.89 F = 1.94
Adjusted R2 = 0.03 n = 30

For M2 definition of money:
$\log M = 0.0693 + 0.559 \log TR + e$
t-statistics (5.747) (6.09)
D.W. Statistic = 1.33 F = 37.13
Adjusted R2 = 0.563 n = 30

The values of the coefficients of log TR are significant in both cases and these show the strength of the variation in reserve money regarding its effects on the variation in money stock in respective situations.

The regression of log M and log TR shows that there is a strong relationship between reserve money and the monetary stock (1). On the assumption that reserve money is exogenous (which is the basis of taking regression analysis), it shows the power of the controlling authority.

Another important aspect of the growth of money supply in India is the relative growth of M3 over the period. The relative growth of M3 over M1 is shown in Figure 9 which depicts the ratio M1/M3 over the entire range. It shows that any meaningful control of money supply should take care of M3 rather than M1 as the size of the former has increased at a much faster rate.

CONCLUSION

The objective of the paper has been to study the behaviour of some macro-variables relevant for the Indian money market. As a result, the behaviour of aggregate deposits of the commercial banks has been analysed. It is revealed that deposits have been increasing at an exponential rate. Further, one peculiar aspect of the growth of money supply has been pointed out.

Growth of money supply should have some impact on the price level. This has been largely rejected not only in case of India but many other countries in the world. Thus India is placed in the perspective of world situation and the empirical evidence shows that India's result follows the trend of the world. Even a somewhat detailed treatment of monetary rule in the case of India does not give any different result.

Our objective has been to initiate debate rather than to settle it. To be consistent with our approach we leave the policy prescriptions, which are derivatives of the empirical findings, to the reader, who will interpret these according to the prevailing circumstances.

TABLE 3. AUTO CORRELATION ANALYSIS OF TIME DEPOSITS, INDIA, 1970-91

	Autocorrelations	Partial Autocorrelations
1	0.825	0.825
2	0.666	-0.043
3	0.516	-0.068
4	0.380	-0.050
5	0.256	-0.054
6	0.147	-0.057
7	0.051	-0.050
8	-0.036	-0.062
9	-0.114	-0.064
10	-0.183	-0.069
11	-0.247	-0.079
12	-0.287	-0.026
13	-0.316	-0.050
14	-0.335	-0.052
15	-0.343	-0.047
	Q-Statistic (15 lags) 47.203	S.E. of Correlations 0.213

TABLE 4. AUTO CORRELATION ANALYSIS OF DEMAND DEPOSITS, INDIA, 1970-91

	Autocorrelations	Partial Autocorrelations
1	0.772	0.772
2	0.556	-0.102
3	0.417	0.057
4	0.297	-0.053
5	0.193	-0.032
6	0.098	-0.059
7	0.012	-0.059
8	-0.046	-0.015
9	-0.077	-0.004
10	-0.083	-0.018
11	-0.083	-0.010
12	-0.139	-0.152
13	-0.215	-0.118
14	-0.276	-0.092
15	-0.312	-0.054
	Q-Statistic (15 lags) 32.471	S.E. of Correlations 0.213

TABLE 5. MONETARY AGGREGATES OF INDIA: DIFFERENT DEFINITIONS: 1977.1 TO 1990.4

Year	M1	M2	M3	M4
1977	15,220.67	16,671.33	26,832.33	30,311.00
	16,212.33	17,709.00	28,667.00	32,280.33
	16,225.00	17,734.33	29,388.33	33,119.33
	16,,972.00	18,495.67	30,579.33	34,414.33
78	17,683.33	19,244.67	31,919.00	35,890.67
	19,073.33	20,708.67	34,171.33	38,312.33
	19,077.67	20,727.67	35,133.00	39,406.33
	19,996.00	21,669.67	37,125.67	41,528.33
79	21,336.33	23,055.67	39,116.33	43,698.00
	22,620.00	24,449.33	41,383.33	46,203.33
	23,208.33	25,049.67	43,083.00	48,083.00
	23,717.00	25,567.33	44,359.00	49,518.00
80	24,230.67	26,145.67	46,093.33	51,528.67
	20,309.33	22,343.33	48,351.67	54,078.33
	19,795.33	21,832.67	49,250.33	55,125.67
	20,966.00	23,036.00	51,613.33	57,650.00
81	22,396.33	24,551.33	54,293.67	60,646.33
	23,747.67	26,007.67	57,461.00	64,097.67
	23,353.00	25,605.33	58,772.00	65,541.67
	24,156.33	26,418.33	60,721.67	67,681.33
82	24,617.00	26,912.00	61,967.33	69,260.33
	26,105.00	28,402.33	64,991.00	72,445.00
	25,631.00	27,928.00	66,642.33	74,251.00
	26,835.00	29,149.33	69,516.33	77,282.00
83	27,482.33	29,825.33	71,662.33	79,707.00
	29,616.67	32,055.67	75,603.67	83,910.33
	29,440.33	31,863.67	78,179.67	86,615.33
	30,852.00	33,308.33	81,685.33	90,289.00
84	31,920.00	34,414.00	84,581.67	93,482.00
	34,796.67	37,368.67	89,468.67	98,556.67
	34,612.33	37,180.67	91,969.00	101,173.67
	36,514.67	38,109.67	96,418.00	105,918.33
85	38,201.00	40,873.00	100,535.00	110,554.33
	40,680.33	43,428.00	105,462.67	115,769.67
	39,622.33	42,374.67	107,966.67	118,629.67
	41,259.00	44,034.00	112,777.00	123,712.00
86	42,618.00	45,463.67	117,143.67	128,615.00
	45,727.33	48,635.00	123,446.00	135,067.33
	45,088.00	47,987.33	126,041.00	137,581.33
	47,500.67	50,454.67	132,962.67	144,422.67
87	49,592.67	52,544.33	138,568.33	149,841.00
	52,627.33	55,744.00	144,832.67	156,141.00
	51,737.33	54,856.33	148,787.67	159,983.00
	54,865.33	58,063.00	156,200.00	167,371.67
88	56,585.00	59,804.67	160,854.33	171,859.33
	60,310.67	63,668.33	169,356.67	180,443.67
	60,105.00	63,415.67	175,132.33	186,017.67
	62,305.67	65,663.67	182,290.00	193,037.00
89	64,864.67	68,266.67	188,873.00	199,614.00
	70,238.00	73,771.00	200,037.67	211,680.00
	71,701.00	75,246.00	207,563.33	219,197.00
	76,550.33	80,158.33	217,800.33	229,466.33
90	79,737.33	83,345.33	226,437.33	238,094.33
	85,481.33	89,089.33	237,105.00	258,762.00
	84,201.33	87,959.33	242,864.00	254,748.00
	87,251.33	91,015.33	249,823.67	261,707.67

TABLE 6. DEMAND AND TIME DEPOSITS OF COMMERCIAL BANKS IN INDIA: 1970-91

Year	Deposits time (Rs Crores)	Demand (Rs Crores)	NI at Current Prices (Rs Crores)	Aggr. Deposits (Rs Crores)	Annual Rate of Growth	Dep. as a percentage of NI
1970	2,946	2,329	37,760	5,275		13.97
1971	3,473	2,743	40,670	6,216	17.83%	15.28
1972	4,252	3,348	44,890	7,600	22.27%	16.93
1973	5,207	3,958	55,590	9,165	20.59%	13.93
1974	6,109	4,647	65,780	10,756	17.35%	16.35
1975	7,288	5,257	69,780	12,545	16.63%	17.98
1976	9,072	6,106	75,460	15,178	20.99%	20.11
1977	11,581	7,232	84,620	18,813	23.95%	22.23
1978	14,094	9,219	95,590	23,313	23.92%	24.39
1979	17,621	11,050	104,230	28,671	22.98%	27.51
1980	22,822	10,555	124,070	33,377	16.41%	26.90
1981	32,259	8,290	145,000	40,549	21.49%	27.96
1982	37,073	9,055	160,070	46,128	13.76%	28.81
1983	43,838	10,201	186,510	54,039	17.15%	28.97
1984	52,425	12,195	207,080	64,620	19.58%	31.21
1985	62,036	15,039	234,860	77,075	19.27%	32.82
1986	74,835	16,993	261,740	91,828	19.14%	35.08
1987	88,615	19,283	296,060	107,898	17.50%	36.44
1988	104,387	21,936	349,080	126,323	17.08%	36.19
1989	122,746	25,108	400,880	147,854	17.04%	36.88
1990	140,078	33,437	473,230	173,515	17.35%	36.67
1991	162,898	38,300	548,118	201,198	15.95%	36.71

Source: *Banking Statistics 1990*, Reserve Bank of India.

TABLE 7. INDIA: TESTING OF THE MONETARY RULE WITH LAG STRUCTURE

Independent variables	Original Equation	Equation with one lag in GM	Equation with two lags in GM
Constant	0.242	-0.11	-0.33
	(3.616)	(-1.309)	(-2.189)
GM	-1.0429		
	(-2.706)		
GM (-1)		1.159	1.74
		(2.44)	(3.927)
GM (-2)			0.747
			(1.62)
GY	0.120	0.260	0.179
	(0.477)	(1.048)	(0.751)
Other Statistics			
Adjusted R^2	0.15	0.13	0.16
D.W. Statistic	1.84	1.54	1.50

Note : Figures in the parenthesis are t-statistics.

NOTE

1. The use of time series of money and reserve aggregates raises the possibility of stationarity as such variables tend to grow over time at different growth rates. So the null hypothesis of non-stationarity is frequently not rejected when applied to such univariate time series. The null-hypothesis of non-stationarity may not be rejected even when first differences of such variables are used. But reserve requirements establish a link between reserves and checkable deposits. As a result, these variables should be cointegrated. Of course, this does not necessarily imply that there is a stationary linear relationship between reserve and other monetary aggregates.

Further, the first differences of logarithms of the variables growing over time are not necessarily stationary. But in the present case, considering the sample at hand, the issue of non-stationarity is not much important.

REFERENCES

Cagan, P., 1956; 'The Monetary Dynamics of Hyper Inflation' in *Studies in the Quantity Theory of Money* (M Friedman (Ed)), Chicago, Illinois, University of Chicago Press.

Friedman, M., 1971; *A Theoretical Framework for Monetary Analysis*, New York, NBER Occasional Paper No. 21.

International Monetary Fund, 1990; *International Financial Statistics*, year book.

RBI, 1990; *Banking Statistics*, 1990, Reserve Bank of India, Bombay.

RBI, 1991; *Report on Currency and Finance*, 1991, Reserve Bank of India, Bombay.

INTER-STATE AND INTRA-STATE VARIATIONS IN ECONOMIC DEVELOPMENT AND STANDARD OF LIVING

Uma Datta Roy Choudhury

The primary objective of the study is to analyse the growth pattern of the states and relate it to the standard of living of the people. The study for the first time constructs constant price comparable series of State Domestic Product and this makes the inter-state comparison of the results more meaningful. Ranking the states by per capita income and per capita household consumer expenditure shows that the states at the extreme ends continue to be so irrespective of the measure considered. However, consumer expenditure shows a lower inter-state disparity than per capita income and current price less than the constant price. Some of the states viz. Rajasthan, Jammu and Kashmir and Uttar Pradesh, however record a much higher rank in terms of level of living of the people than in terms of per capita income. Tamil Nadu and Karnataka on the other hand present just the reverse situation with higher ranking in terms of per capita income than in terms of per capita household consumption. Inter-temporal comparisons suggest the possibility of a reduction in inter-state disparity in the future as a result of current pattern of higher growth in lower income states as compared to the higher income states coupled with a marginal fall in urban-rural disparity in per capita household consumer expenditure. The results also suggest much higher urban-rural disparity in industrialised states like West Bengal and Maharashtra while agriculturally developed states like Punjab and Haryana have practically no perceptible disparity between urban and rural levels of living. Finally, there are definite indications that the country is moving towards industrialised base through higher growth of manufacturing and infra-structure and this phenomenon is widespread covering more of the lower income states than higher income ones.

INTRODUCTION AND SUMMARY RESULTS

1.1 Introduction

To understand the regional variations in levels of economic development and wide disparities in the standard of living of the people in different states one has to examine in detail the sources of growth and factors influencing growth and structure at the regional level. This analysis can be either in terms of related indicators of development covering different socio-economic aspects or it can be in terms of basic factor inputs of capital stock and labour employed and their contribution to growth of output. The approach is guided primarily by the type of information available at the state level, and such information in terms of factor inputs may not become available for some time to come. Therefore, before deciding on the apprach to be followed for study of sources of growth and development it is essential to assess the nature of both inter-regional and intra-regional disparity and analyse the pattern. This should be accompanied by a simultaneous study of the standard of living of the people in terms of current consumption expenditure and the extent to which the level of development and standard of living are directly related. This is important in view of the fact that unlike individual countries, the states within the country have open border with free trade between states. Thus, because of the possibility of free export/import of goods and services between states, a state with a high level of domestic product originating with pre-dominance of capital goods industries and/or high mineral deposits might not be a state with above average standard of living and may actually have a low per capita consumer expenditure, because of a large volume of exports from the state with no corresponding import of consumer goods to compensate and improve the standard of living. Both these aspects have therefore been covered in the present study.

Statewise data on domestic product and household consumption expenditure are not available from a single source though this question is not of primary importance so long as each of the two series i.e. SDP and household consumption expenditure is consistent within itself and can be analysed to draw meaningful conclusions.

Currently two sets of State Domestic Product (SDP) estimates are available - one (State series) prepared by each of the State Statistical Bureaus

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(SSBs) and the other the 'comparable series' prepared by the Central Statistical Organisation (CSO) for all the states simultaneously. While the former is available both at current and constant prices, the latter is prepared at current prices only. However, for a meaningful and valid study of inter-state disparity it is essential that such analysis is based on statistics which are mutually consistent and also comparable between states. The comparable series of SDP meet these conditions and these have been used for study of inter-state disparity and structural changes between states. Such analysis is not possible without the data at constant prices. The constant price comparable SDP series have been constructed using implicit price indices (at sectoral level) derived from the SDP series at current and constant prices available from the States.

The data on per capita household final consumption expenditure gives a measure of the level of living of the people who are the normal residents of the states and when compared over time, gives an indication of the change in standard of living. For meaningful inter-temporal comparison it is necessary to deflate and obtain measures at constant prices.

1.2 Ranking

The ranking of the states in terms of per capita SDP i.e. the levels of development and the disparity between the group with high per capita income and the group with the lowest levels in the rank have been examined both at current and constant prices besides their rates of growth and structural shifts in production pattern. The results as emerging from the analysis of the data both at current and constant prices are summarised below (Tables I & II) to highlight the levels of development of the states. A comparison is also made of ranking by per capita income and per capita household consumer expenditure levels to ascertain whether the two indicators could jointly be used to draw more meaningful conclusions and also whether states with high per capita income are necessarily high in terms of standard of living of the people.

TABLE I. RANKING OF STATES BY PER CAPITA INCOME AT CURRENT AND CONSTANT PRICES FOR SELECTED YEARS

(Rs)

At Current Prices			At Constant (1980-81) Prices		
1967-68	1977-78	1985-86	1967-68	1977-78	1985-86
1 PNB(880)	1 PNB(2,317)	1 PNB(4,839)	1 PNB(2,147)	1 PNB(2,643)	1 PNB(3,422)
2 HRY(786)	2 HRY(2,021)	2 MAH(4,099)	2 HRY(1,979)	2 HRY(2,412)	2 MAH(2,926)
3 GUJ(675)	3 MAH(1,677)	3 HRY(3,662)	3 MAH(1,794)	3 MAH(2,272)	3 HRY(2,649)
4 MAH(664)	4GUJ(1,626)	4 GUJ(3,062)	4 GUJ(1,737)	4 GUJ(2,062)	4 GUJ(2,029)
5 WBL(659)		5 KAR(2,837)	5 TND(1,453)	5 TND(1,781)	5 TND(1,925)
	IND(1,262)	6 TND(2,802)		6 KAR(1,706)	6 KAR(1,903)
IND(593)		7 J&K(2,777)	**IND(1,432)**	7 HPR(1,684)	7 J&K(1,881)
	5 KAR(1,259)				
6 APR(531)	6 HPR(1,259)	**IND(2,745)**	6 KER(1,378)	**IND(1,640)**	**IND(1,858)**
7 TND(525)	7 WBL(1,252)		7 RAJ(1,314)		
8 KER(519)	8 TND(1,203)	8 WBL(2,630)	8 APR(1,289)	8 J&K(1,501)	8 WBL(1,721)
9 KAR(514)	9 RAJ(1,153)	9 KER(2,519)	9 MPR(1,195)	9 RAJ(1,493)	9 APR(1,646)
10 RAJ(502)	10 J&K(1,146)	10 APR(2,425)	10 KAR(1,124)	10 KER(1,464)	10 HPR(1,642)
11 UPR(490)	11 KER(1,141)	11 HPR(2,410)	11 ORS(1,086)	11 ORS(1,344)	11 MPR(1,628)
12 MPR(467)	12 APR(1,030)	12 ASM(2,386)	12 UPR(1,083)	12 APR(1,333)	12 KER(1,599)
13 ORS(458)	13 ASM (994)	13 MPR(2,304)	13 J&K(1,069)	13 WBL(1,298)	13 ASM(1,532)
14 BHR(419)	14 MPR (951)	14 ORS(2,182)	14 WBL(1,042)	14 ASM(1,226)	14 ORS(1,466)
15 J&K(414)	15 ORS (912)	15 RAJ(2,058)	15 BHR (892)	15 MPR(1,200)	15 UPR(1,420)
	16 UPR (896)	16 UPR(2,054)		16 UPR(1,198)	16 RAJ(1,391)
	17 BHR (759)	17 BHR(1,658)		17 BHR (963)	17 BHR(1,055)

Note: States are ranked in descending order of per capita income with the figures of per capita income within brackets.

Ranking of the states by per capita SDP at current and constant prices for selected years show that the disparity between the states with the highest and the lowest per capita SDP has increased over the period of study, though at current prices there are some signs of a little reduction in the eighties as compared to the seventies (Table III). It is also seen that the elimination of the effect of price rise (which is not uniform between the states) highlights the disparity and gives a higher disparity ratio at constant prices than at current prices. The ranking also shows that the position of individual states does not change over the period of study except in the case of two or three states. The static position is revealed particularly by the states at the two extreme ends. The two states which otherwise deserve special mention - having registered substantial growth - are Karnataka and Tamil Nadu. The complete picture of ranking of the states both at current and constant prices can be seen from the results in Table I.

TABLE II. COMPARISON OF RANKING OF STATES BY PER CAPITA INCOME/CONSUMPTION EXPENDITURE AT 1980-81 PRICES FOR SELECTED YEARS

(Rs)

1967-68		1977-78		1985-86	1986-87
Per Capita Income	Per Capita Consumption	Per Capita Income	Per Capita Consumption	Per Capita Income	Per Capita Consumption
1 PNB(2,147)	1 PNB(1,430.53)	1 PNB(2,643)	1 PNB(1,762.92)	1 PNB(3,422)	1 PNB(1,864.96)
2 MAH(1,794)	2 RAJ(1,174.77)	2 MAH(2,272)	2 RAJ(1,618.35)	2 MAH(2,926)	2 RAJ(1,435.10)
3 GUJ(1,737)	3 ASM(1,044.77)	3 GUJ(2,062)	3 MAH(1,293.20)	3 GUJ(2,029)	3 KER(1,392.58)
4 TND(1,453)	4 MAH (992.22)	4 TND(1,781)	4 GUJ(1,166.45)	4 TND(1,925)	4 J&K(1,342.95)
	5 J&K (966.32)	5 KAR(1,706)		5 KAR(1,903)	5 MAH(1,318.80)
IND(1,432)	6 UPR (958.97)		**IND(1,100.96)**	6 J&K(1,881)	6 GUJ(1,288.57)
		IND(1,640)			7 UPR(1,288.54)
5 KER(1,378)	**IND (913.45)**		5 UPR(1,100.89)	**IND(1,858)**	8 WBL(1,282.81)
6 RAJ(1,314)		6 J&K(1,501)	6 KER(1,078.07)		
7 APR(1,289)	7 GUJ (909.97)	7 RAJ(1,493)	7 J&K(1,044.17)	7 WBL(1,721)	**IND(1,281.11)**
8 MPR(1,195)	8 WBL (899.21)	8 KER(1,464)	8 APR(1,030.86)	8 APR(1,646)	
9 KAR(1,124)	9 MPR (850.24)	9 ORS(1,344)	9 KAR(1,030.03)	9 MPR(1,628)	9 APR(1,265.58)
10 ORS(1,086)	10 APR (835.96)	10 APR(1,333)	10 WBL (997.37)	10 KER(1,599)	10 TND(1,245.34)
11 UPR(1,083)	11 KAR (808.66)	11 WBL(1,298)	11 ASM (963.15)	11 ASM(1,532)	11 KAR(1,195.71)
12 J&K(1,069)	12 ORS (760.45)	12 ASM(1,226)	12 MPR (960.48)	12 ORS(1,466)	12 ASM(1,176.21)
13 WBL(1,042)	13 KER (756.27)	13 MPR(1,200)	13 TND (937.74)	13 UPR(1,420)	13 MPR(1,154.13)
14 BHR (892)	14 BHR (728.65)	14 UPR(1,198)	14 BHR (888.87)	14 RAJ(1,391)	14 ORS(1,064.58)
		15 BHR (963)	15 ORS (825.29)	15 BHR(1,055)	15 BHR(1,054.44)

Note: States are ranked in descending order of per capita income/consumption expenditure with figures of per capita income/expenditure within brackets. Due to non-availability of consumer price indices for Himachal Pradesh and Haryana, these two states do not appear in the above Table.

Table II compares the ranking of states by per capita income and per capita consumption expenditure for three different points of time. The comparison would have been much more meaningful if the income figures had referred to per capita personal disposable income or personal income rather than to per capita state domestic product which has a much wider coverage and refers to total net product originating within the states. In spite of this limitation, the comparison do give some idea of the levels of production within the states boundaries and the actual levels of consumption of the people within the same states.

The results are interesting to the extent that the states which figure either at the top or at the bottom do so both for per capita SDP and per capita consumption. This, for example, is true of Punjab, Maharashtra and Gujarat with high levels of production and household consumption and Orissa, Bihar and Assam with low levels. There are however, outstanding exceptions as well. Thus the states of Rajasthan, Uttar Pradesh and Jammu and Kashmir which are known to be comparatively underdeveloped states with low per capita income (below all India level in ranking except Jammu and Kashmir in 1985-86) have high (above all-India) levels of per capita consumption - Rajasthan ranking second from the top only next to Punjab in all the years. This would suggest that either there is substantial import of consumer goods into these states or that these states are primarily producers of consumer goods which are domestically consumed with very little or no exports. This situation may record a high level of consumption per capita in the case of these states in spite of the per capita SDP being low. Though for Jammu and Kashmir the situation of high imports of consumer goods is conceivable, this is not equally acceptable for Rajasthan or Uttar Pradesh. The patterns of production and consumption in these states need to be looked into more carefully before drawing definite conclusions.

High levels of per capita consumption with low levels of per capita income could also follow from very high prices of consumer goods. Besides the fact that the prices have to be substantially high for this factor to influence the levels, this cannot be ascertained till the prices are neutralised between states and consumer expenditure of all the states are valued at a set of all-India uniform average prices. Other special features of some of the states which can be mentioned in this context are those of Kerala, Tamil Nadu and Karnataka. Thus in the case of Kerala, though there is a comparatively lesser growth in SDP leading to lowering of its rank from six (6) in 1967-68 (first below all-India level) to ten (10) in 1977-78 and twelve (12) in 1985-86; in terms of per capita consumption, it goes up in rank from thirteen (13) in 1967-68 to six (6) in 1977-78 to three (3) in 1986-87 with nearly doubling of per capita consumption (from Rs 756 in 1967-68 to Rs 1,393 in 1986-87) at constant prices. In comparison per capita consumption at the all-India level increased from Rs 913 in 1967-68 to Rs 1,101 in 1977-78 and Rs 1,281 in 1986-87. For Tamil Nadu and Karnataka the ranking presents just the reverse picture with reasonably high levels of per capita income (even improving the rank over the period in the case of Karnataka) and low levels of per capita consumption. It is thus obvious that depending on the indicator or the measure used, the inter-state ranking position of the states might change - in some cases substantially - and any conclusion drawn regarding any particular state should be examined carefully before using it for policy purposes.

1.3 Inter-state Disparity

In terms of overall disparity, it is seen from the results that both for per capita SDP and per capita consumption expenditure the inter-state disparity is higher in constant prices than in current prices

TABLE III. INTER - STATE DISPARITY

	Per Capita Income					
	At Current Prices			At Constant (1980-81) Prices		
	1967-68	1977-78	1985-86*	1967-68	1977-78	1985-86*
Av: top 6 States(Rs)	699.10	1,693.31	3,550.29	1,747.98	2,145.98	2,475.78
Av: bottom 6 States(Rs)	458.33	923.66	2,107.17	1,049.49	1,203.01	1,410.48
Disparity Ratio	0.41	0.61	0.53	0.49	0.57	0.57
Gini Coefficient	0.1240	0.1653	0.1464	0.1449	0.1549	0.1587
Coefficient of Variation	23.26	31.77	28.22	26.51	28.33	31.17
	Per Capita Consumption					
Av: top 6 States(Rs)	482.42	1,042.8	2,278.84	870.12	1,336.64	1,440.49
Av: bottom 6 States(Rs)	85.65	766.03	1,750.82	780.78	928.81	1,148.40
Disparity Ratio	0.23	0.35	0.30	0.30	0.37	0.23
Gini Coefficient	0.0661	0.1071	0.0852	0.0880	0.1128	0.0704
Coefficient of Variation	12.29	20.21	15.49	16.28	22.67	14.35

Note: * Results for per capita consumption expenditure refer to 1986-87.

irrespective of the measure considered. Also, the inter-state disparity is higher for per capita income than for per capita household consumer expenditure. This would generally be true because of free movement of goods and services between states irrespective of the levels and patterns of production within the states. It will thus not be fair to draw conclusions regarding the economic status of the population and their inter-regional variations on the basis of the levels of per capita SDP alone just as the measure of per capita income at the national level does not give an indication of the actual standard of living of the people.

TABLE IV. PER-CAPITA INCOME/CONSUMPTION EXPENDITURE BY STATES AND ALL INDIA: RANKING BY ANNUAL AVERAGE RATE OF GROWTH (PER CENT) IN 1960S, 1970S AND 1980S

State	1960s	State	1970s	State	1980s
		Per Capita Income			
1 HRY	6.76	1 PNB	2.79	1 ASM	5.65
2 KAR	6.70	2 MAH	2.62	2 TND	5.05
3 ORS	5.89	3 WBL	2.62	3 BHR	3.67
4 UPR	4.14	4 GUJ	2.50	4 MAH	3.60
5 KER	3.21	5 KAR	1.81	5 PNB	3.52
6 J&K	2.30	6 TND	1.74	6 APR	3.23
		7 J&K	1.51	7 MPR	2.19
IND	**2.23**	8 APR	1.13	8 ORS	2.91
		9 HRY	0.94	9 HRY	2.78
7 WBL	2.23	10 HPR	0.48	10 RAJ	2.50
8 TND	1.39				
9 PNB	0.59	**IND**	**0.18**	**IND**	**2.46**
10 MAH	0.07				
11 APR	-2.55	11 KER	0.09	11 KAR	2.05
12 BHR	-2.68	12 ORS	-0.41	12 WBL	1.49
13 GUJ	-2.88	13 BHR	-0.44	13 J&K	1.27
14 MPR	-3.01	14 ASM	-0.98	14 UPR	1.04
15 RAJ	-8.56	15 RAJ	-1.12	15 KER	0.19
		16 MPR	-1.59	16 GUJ	0.10
		17 UPR	-1.79	17 HPR	0.04
		Per Capita Consumption Expenditure			
1 BHR	8.00	1 RAJ	4.99	1 J&K	7.71
2 J&K	5.55	2 KER	4.79	2 MPR	5.41
3 KAR	3.93	3 ORS	3.56	3 MAH	5.17
4 MAH	3.64	4 TND	3.34	4 APR	3.96
5 WBL	3.29	5 APR	2.87	5 BHR	3.94
6 MPR	2.29	6 WBL	2.07	6 ASM	3.82
IND	**1.92**	**IND**	**1.99**	**IND**	**3.60**
7 APR	1.91	7 BHR	1.79	7 KER	3.57
8 UPR	1.67	8 ASM	1.58	8 TND	3.32
9 GUJ	1.09	9 MAH	1.51	9 ORS	2.82
10 PNB	0.83	10 GUJ	1.10	10 KAR	2.49
11 KER	0.82	11 MPR	0.54	11 PNB	2.31
12 ASM	0.35	12 UPR	-0.08	12 WBL	2.30
13 ORS	0.14	13 PNB	-0.41	13 GUJ	1.61
14 RAJ	-2.11	14 KAR	-0.54	14 RAJ	1.36
		15 J&K	-4.33	15 UPR	1.25

1.4. Rate of Growth

Since both the series of per capita income and per capita consumption expenditure have been derived at constant prices and inter-temporal changes can be justifiably measured, it will be worthwhile comparing the rates of growth between states as well as between the two indicators for the individual states ranked either at the top or at the bottom. It will be seen from the results presented in Table IV that irrespective of the indicator used i.e. per capita income or expenditure, the rate of growth vary very widely between states and within states over time. In other words, no pattern emerges to enable establishment of a link between economic development or standard of living and rates of growth. However, it is possible that for meaningful results linking economic development with rates of growth it will be necessary to undertake the study covering a much longer period including the early stages of development of the more advanced states which already have reached a high level of per capita income. Thus, Gujarat which has a reasonably high rate of growth in the seventies registers fall in per capita income in the sixties and hardly any growth in the eighties. Bihar, a low per capita income state, on the other hand, improves its performance over the two decades and records nearly 4 per cent rate of growth in per capita income in the eighties. Comparatively higher rates of growth in low income states with lower rates in states ranked high would tend to reduce the inter-state disparity in levels of development. However, though the pattern in the eighties moves towards this direction, no definite conclusion can be drawn till this pattern persists for some time. In the case of consumer expenditure, the inter-state growth pattern is slightly more conducive to reduction in disparity though the trend needs to be sustained over some time before its impact can be felt in the form of reduction in disparity between states. Another aspect worth a mention is that consumer expenditure per capita generally registers a higher rate of increase than, per capita income though it is not without outstanding exceptions.

1.5 Intra-state Structural Changes

The structural changes within states and between states as revealed through the detailed results of industrial breakdown of State Domestic Product and urban-rural disparity of per capita consumption are studied (Table V & VI). SDP data shows a definite pattern of development of

TABLE V. SHARE OF DIFFERENT SECTORS IN TOTAL SDP (AT 1980-81 PRICES)

(per cent)

states	Agriculture			Manufacturing			Transportation		
	1967-68	1979-80	1985-86	1967-68	1979-80	1985-86	1967-68	1979-80	1985-86
Andhra Pradesh	50.14	43.26	40.42	14.07	18.75	20.25	24.36	22.84	20.94
Assam	62.18[1]	56.02	41.97	16.21[1]	17.74	23.55	12.24[1]	13.55	15.25
Bihar	59.05	45.88	47.41	22.19	26.22	22.02	11.95	16.98	12.63
Gujarat	40.73	31.64	26.32	27.83	28.35	33.87	19.81	25.82	18.85
Haryana	64.03	48.15	53.54	15.11	21.16	20.66	12.70	21.26	13.59
Himachal Pradesh	50.78[2]	47.77	45.44	26.32[2]	19.02	19.35	8.34[2]	14.45	9.62
Jammu & Kashmir	63.89	46.82	42.55	12.81	13.18	15.90	7.16	23.51	20.69
Karnataka	45.45	42.42	36.19	25.82	27.56	29.39	13.29	18.02	16.06
Kerala	52.08	39.36	35.06	15.77	23.05	22.44	20.13	22.87	21.19
Madhya Pradesh	58.94	41.76	45.39	19.59	27.17	21.64	11.71	17.80	15.79
Maharashtra	34.03	29.64	21.02	30.83	32.98	39.42	22.54	21.97	18.03
Orissa	64.24	53.02	53.92	16.81	21.28	15.02	9.48	13.84	14.68
Punjab	48.10	46.36	51.26	29.62	20.40	20.47	13.07	23.05	15.98
Rajasthan	53.14	45.44	46.68	17.47	23.13	20.17	19.32	18.31	16.27
Tamil Nadu	26.73	22.06	24.64	28.21	33.47	31.64	30.38	27.37	24.20
Uttar Pradesh	57.89	43.99	46.70	14.86	21.05	18.17	15.45	19.13	17.35
West Bengal	45.89	34.63	32.18	16.83	28.52	30.02	24.14	21.31	16.92
India	46.86	37.85	36.50	22.35	25.36	25.74	13.73	16.62	17.34

Note: 1 Refers to 1968-69, 2 Refers to 1970-71.

TABLE VI. PER CAPITA CONSUMPTION EXPENDITURE BY STATES AND ALL INDIA: RANKING BY AVERAGE LEVEL OF URBAN-RURAL DISPARITY

At Current Prices						At Constant (1980-81) Prices					
States	1960s	States	1970s	States	1980s	States	1960s	States	1970s	States	1980s
MAH	41.61	WBL	42.27	MAH	42.20	WBL	50.30	MAH	44.30	WBL	38.04
WBL	41.51	ORS	42.01	ORS	41.84	MAH	47.64	WBL	44.00	ORS	36.76
ORS	40.65	MAH	37.95	WBL	40.36	TND	45.75	ORS	43.26	MAH	34.85
ASM	34.72	ASM	33.69	MPR	36.94	ORS	44.32	TND	35.07	ASM	31.16
		MPR	31.52	ASM	35.39	ASM	40.25	MPR	34.35	TND	29.57
IND	**28.70**			TND	35.12			ASM	34.18		
		IND	**29.95**			**IND**	**37.13**			**IND**	**28.29**
TND	28.03			**IND**	**34.96**			**IND**	**33.37**		
BHR	27.81	TND	28.98			BHR	36.97			MPR	27.33
APR	25.87	BHR	28.81	KAR	33.05	APR	6.43	APR	33.23	KAR	26.74
MPR	25.85	APR	26.83	BHR	32.62	MPR	34.90	BHR	33.14	BHR	26.37
KAR	22.75	KAR	24.92	GUJ	30.75	KAR	33.92	KAR	32.01	GUJ	24.62
GUJ	21.73	GUJ	20.97	AP	28.87	KER	30.60	KER	29.06	KER	21.96
KER	21.05	KER	20.44	UPR	26.87	GUJ	27.59	GUJ	28.24	J&K	20.87
UPR	17.98	UPR	19.52	RAJ	25.77	UPR	22.53	J&K	17.63	APR	19.16
RAJ	10.73	RAJ	11.62	J&K	21.23	RAJ	14.97	UPR	15.14	RAJ	16.25
J&K	2.49	PNB	7.65	KER	18.18	J&K	13.77	RAJ	13.15	UPR	14.74
PNB	-0.56	J&K	7.10	PNB	11.97	PNB	-0.84	PNB	5.79	PNB	4.98

Note: Inter-state Urban-Rural Disparity has been defined as the absolute difference between Urban and Rural per capita consumption expenditure as percentage of Urban per capita consumption expenditure [{(Urban-Rural)/Urban} × 100].

industrial base along with growth of infrastructure except for the two states of Punjab and Haryana where agricultural activities still predominate with agricultural sector contributing more than 50 per cent of total SDP. Structurally, in states such as Jammu and Kashmir and Orissa, development of transportation has been a special feature. In terms of consumer expenditure, the intra-state urban-rural disparity at constant prices has registered a fall over the period of study though not to a large extent. Between states, the urban-rural disparity varies very widely being very high for example, in the case of West Bengal and Maharashtra - urban per capita consumer expenditure level almost double of rural while Punjab has per capita consumer expenditure in rural areas higher than in urban areas in the initial years with greater increase in urban over the period to outstrip rural (marginally) in the subsequent years.

Alternative way of looking at the intra-state structural shift is through the sectoral rates of growth. Considering the three sectors of Agriculture (agriculture, livestock, forestry, and fishery), Manufacturing (mining, manufacturing-registered and unregistered, electricity and water supply and construction) and Transportation (transport, trade, hotels and restaurants and storage), the rates of growth separately for the three periods of 1969-70 to 1973-74, 1974-75 to 1978-79, 1980-81 to 1985-86 have been examined along with those of the overall periods 1967-68 to 1979-80 vs 1980-81 to 1985-86 to see the extent to which the rates of growth have an increasing trend over the two decades. Agriculture though included, do not exactly fit in this pattern because of the fluctuations due to weather conditions which do not allow any meaningful generalisation. An examination of intra-state co-efficient of variation (CV) suggests wide variation in sectoral rates of growth both within states and between states --Transportation sector having the lowest figures of CV both within states and between states. Without going into details the states have been grouped into those showing increasing trend in sectoral rates of growth and vice versa.

TABLE VII. TRENDS IN SECTORAL RATES OF GROWTH

(per cent)

	Agri-culture	Manufac-turing	Trans-port	Per Capita SDP
Increasing Trend	APR	APR	APR	APR
	ASM	ASM	ASM	ASM
	BHR	BHR	BHR	BHR
	HRY	J&K	GUJ	HRY
	MPR	MPR	KER	HPR
	ORS	MAH	MPR	KER
	PNB	PNB	MAH	MAH
	RAJ	RAJ	RAJ	ORS
	TND	TND	TND	PNB
	WBL	UPR		TND
				WBL
Decreasing Trend	GUJ	GUJ	HRY	GUJ
	HPR	KAR	WBL	J&K
	J&K	KER	HPR	KAR
	KAR	ORS	KAR	
	MAH	WBL	ORS	
			PNB	
No Trend	KER	HRY	UPR	MPR
	UPR	HPR		RAJ
				UPR

This arrangement classifies the states clearly into those on the higher path of growth separated from those lower down. Thus Andhra Pradesh, Assam, Bihar, Punjab, Rajasthan, and Tamil Nadu can be categorised as growing states with West Bengal and Orissa high in Agriculture and Services and low in Manufacturing and Transport. Kerala shows growth of infrastructure while Maharashtra, as expected, has very little improvement in agricultural sector, Madhya Pradesh has increasing growth rate except in services while Uttar Pradesh registers no trend except in Manufacturing. Generally the results suggest substantial structural shifts between states like Assam, Bihar and Rajasthan showing increasing trend in growth, in spite of the fact that they are being ranked low in terms of levels of per capita income, suggesting a shift in inter-state ranking in the foreseeable future.

1.6 Final remarks

This summary covers most of the results in a nutshell and more of the details follow in the next two sections on SDP and household consumer expenditure with broad summary conclusions ending the study. A follow up study which is in progress proposes to go more deeply into the disaggregation of SDP from the expenditure point of view and link more closely the two aggregates of income and consumption to draw more definite conclusions. Attempt is also being made to link these results with several independent indicators of socio-economic development to draw more positive conclusions regarding inter-state development covering both the social and economic aspects.

STATE DOMESTIC PRODUCT

2.1 Data

Estimates of State Domestic Product (SDP) i.e. income originating within the boundaries of the states are prepared at current and constant prices by the State Statistical Bureaus (SSBs) on a regular basis. However, these estimates are not strictly comparable between states as the procedures adopted by them are dependent on the extent of data available at the time of preparation of the estimates; the extent of information system vary very widely between states. Besides, qualitative differences also exist between the estimates for different states and for some of the states in particular the results can not be accepted without further examination and possibly revisions (e.g. mining in the case of Assam or electricity in the case of Jammu and Kashmir). The revised estimates with 1980-81 as base are not available for all the states even for the more recent period i.e. from 1980-81 onwards and as a result, inter-state comparability cannot be assured if the state estimates are used for inter-state disparity study. In view of this, the Central Statistical Organisation (CSO), at the instance of the Planning Commission and successive Finance Commissions have been preparing comparable estimates of SDP for different periods at different points of time. The first set of such estimates covering the period 1962-63 to 1964-66 were prepared in October 1968. Subsequently such estimates have become available for the period 1967-68 to 1985-86 in groups of three to four years each time as and when the request has been made either by the Planning Commission or different Finance Commissions for estimates of SDP.

These estimates prepared by CSO follow uniform procedure for all states and adopt uniform concepts and definitions as well as classifications as followed at the national level. Comparability between states is ensured by using, to the extent possible, results of studies and surveys which are part of national scheme for purposes of deriving estimates for bench-mark years such as the National Sample Surveys. These SDP estimates are comparable among states as also with the national estimates in terms of concept. By and large, the methodology and source material used for preparation of these estimates at the state level as well as at the national level are the same. These state estimates are prepared at current prices only and do not include activities like Defence, Border Security Force, other paramilitary forces, Indian Embassies and High Commissions and other offices abroad because of their special characteristics. As a result, the totals of comparable estimates of SDP for different states either for any of the sectors or for all sectors do not aggregate to the corresponding national totals of net domestic product. This however, in no way affects the comparability of the rest of the estimates between states.

Using these comparable estimates of SDP for the period of nearly twenty years (1967-68 to 1985-86) an attempt has been made to study the differential patterns of growth and development between states and identify the states which have recorded substantial variations in economic behaviour as compared to the rest of the states or the overall economy. Analysis at individual state level is also attempted.

Before going into the details of the results, two aspects of the data need to be highlighted. Firstly, though the comparable series of SDP are available since 1962-63, the detailed industrywise data are not available for the first three years beginning 1962-63. The current analysis is therefore confined to the period 1967-68 to 1985-86. Even within this period, the estimates refer to New Series for the period 1980-81 to 1985-86 and therefore are not strictly comparable with the data for the earlier period (1967-68 to 1979-80). It is thus not possible to use the 19 years' data as a single series and undertake the analysis. The results of the analysis are therefore presented for two separate sub-periods (1967-68 to 1979-80 and 1980-81 to 1985-86). Secondly, comparable series of SDP are prepared at current prices only which are not suitable for study of growth rates of the states. It is therefore essential that the effect of changes in prices over time is eliminated from the series of SDP and volume measures are obtained prior to any time trend studies. Since inter-state behaviour of prices are likely to be different, it is essential that relevant price series for each individual state and for each economic activity are used to deflate the SDP series at industry level. In the absence of any other meaningful price data, the implicit price indices at the sectoral level separately for each of the states have been worked out from the state series of SDP at current and constant prices. These price indices are then used for deflating the comparable series of SDP at current prices and obtaining the corresponding constant price figures. However, for the state series of SDP prepared by the SSBs only the New Series beginning 1980-81 are at constant prices of 1980-81 while for the earlier period the old series have not been revised and are at 1970-71 prices only (except for West Bengal where the complete series beginning 1947-48[1] has been revised). The old series of SDP are generally available upto 1984-85 and it is possible to convert the implicit price indices derived there from to 1980-81 base (which will of course have 1970-71 weights). Such a price series has been used for deflating the comparable series of SDP for the period 1967-68 to 1979-80. Thus using this price series along with those derivable from the New Series of SDP at 1980-81 prices for the period 1980-81 to 1985-86, the comparable series of SDP at constant (1980-81 prices) at the industry level have been obtained. While Appendix A. 1 and A. 2 present the aggregate estimates at current and constant prices, Appendix B. 1 and B. 2 give the corresponding per capita figures and Appendix C, the population. The industry wise data for the complete period at current and constant prices along with percentage distribution are at Appendix D.

2.2 Inter-state Disparity

These estimates have been used to study the comparative performance and growth of different states for selected industry groups. The picture emerging at the overall level has also been examined. The ranking of the states in terms of per capita income, growth rates against the all-India rates gives the overall picture of the performance of individual states as well as their economic status while the industrial breakdown and the percentage distribution by economic activities present the variations in industrial structure between states. Over the period of nearly two decades, the details of structural change, within each state also become apparent from these results.

Tables 1 and 2 ranks the states by per capita income at current and constant prices. Considering the results at current prices first, it is seen very clearly that except for a set of three or four states, the inter-se position of the states in terms of their per capita income being higher/lower than the all-India level remains unchanged. Thus Punjab, Haryana, Gujarat and Maharashtra have per capita income higher than all-India over the complete period of study with Punjab remaining at the top all through. Similarly Uttar Pradesh, Madhya Pradesh, Orissa and Bihar have remained economically less developed with per capita incomes lower than all-India throughout the period, though their inter-se ranking amongst states has not remained unchanged over the period except for Bihar which has remained at the bottom. West Bengal and Assam changed for the worse over the period of study. Assam which was just below all-India level in 1968-69 (no estimate available for 1967-68) has come down substantially to be ranked seventeen in 1980-81 with marginal improvement to twelve in 1984-85 and thirteen in 1985-86. West Bengal changes from just above India at the beginning to just below in the last year of the study. Karnataka, Tamil Nadu and Jammu and Kashmir have gone up in ranking, the betterment in the case of Jammu and Kashmir being substantial, shifting from the bottom most (last but one) position in 1967-68 to just above all-India level taking the seventh position in 1985-86. The shift in these cases have been more or less gradual and therefore going up in rank can be assumed to be a result of steady development over the period. Kerala has also recorded improvement over the two decades though not enough to reach a very much better ranking by 1985-86. The ranking of Andhra Pradesh and Rajasthan remain unchanged holding about middle position amongst the states with per capita income below the all-India average throughout.

Considering the series at constant prices, it is possible to say more firmly that Karnataka and Tamil Nadu have registered substantial growth to be ranked above all-India in the late eighties. Because of substantial variation in price behaviour between states, the levels of per capita income of the states are affected some what more as a result of adjustment for price changes. More prominent of such states are West Bengal which not only has a much lower level of per capita income at 1980-81 prices through out the period but goes down in ranking. This shift is substantial and West Bengal has at constant prices a rank just above Bihar and below all other states. However, over the period West Bengal improves its position to some extent and is ranked just below all-India in 1985-86. The rest of the states have behaved more or less similarly both at current and constant prices suggesting no out of the ordinary price behaviour.

An examination of the overall price indices (Appendix E) shows that the growth of prices has not been uniform between states being of the order of 5 per cent per annum for West Bengal over the period 1967-68 to 1979-80 against a little over 8 per cent per annum for Kerala and Madhya Pradesh with Coefficient of Variation (CV) of nearly 30 per cent for these two states against 18.7 per cent for West Bengal. During the eighties the fluctuations in prices have been much wider with 1983-84 and 1984-85 as two years of high inflation. During 1985-86, on the other hand, the price change has been widely different between states, the inflation being as much as 20.77 per cent in the case of Jammu and Kashmir against less than 1 per cent for West Bengal.

Such differences in price behaviour suggest that the gap between the highest and the lowest per capita income or the relative range is likely to have changed over the period of study. The relative range in per capita income defined as the difference between the maximum and the minimum as a ratio of the all-India level shows that the ratio has increased continuously over the period. At current prices the change is from 0.41 in 1967-68 to 0.69 in 1979-80 and slight fall thereafter to reach 0.53 in 1985-86. At constant prices, the ratio behaves similarly with the distance in per capita income between the states in the higher per capita income groups and lower per capita income groups being wider with the ratio consistently carrying a higher value. In the above exercise, to avoid a comparison only between two states at the extreme ends (Punjab and Bihar) and to give the ratio a wider meaning, the maximum and the minimum (for purposes of measuring the range) have been defined as the average of top six per capita income states (generally above all-India) and vice-versa. An exercise with only the highest and the lowest gives similar results.

An alternative measure of inequality in state per capita income in terms of Gini Coefficient shows that the ratio does rise both at current and constant prices upto 1979-80 and declines somewhat thereafter though the absolute value of the coefficient in 1985-86 is higher than in 1967-68. The change in Gini Coefficient however is not as large as in the disparity ratio which suggests that the per capita incomes of middle level states are also rising, reducing the overall disparity in the levels of incomes between states. The summary statements (Tables 3 and 4) give the results for three points of time with the identification of the six top-most states and six bottom-most states and their per capita incomes at current and constant prices.

2.3 Growth rates

The growth rates of per capita income and of selected sectors viz., agriculture, manufacturing and transportation are studied next to establish a link, if possible, between their levels of per capita income and performance over the period of study (Tables 5 and 6). Similar to the levels of per capita income, the rates of growth also vary very widely between states and even within each state over time. The states with high levels of per capita income are not necessarily those recording above average rates of growth. Also, the growth rates differ very much between different periods even for the same state. In terms of the averages, the average rate of growth over the period 1968-69 to 1979-80, varies between 3.46 per cent in the case of Karnataka to (-) 1.57 per cent in the case of Madhya Pradesh with CV values as 191.38 for Karnataka and -4,382.92 for Bihar (Table 5). Over the subsequent six years ending 1985-86, the variation in growth rates is equally wide: 5.66 per cent for Assam to 0.04 for Himachal Pradesh. Within state variation is also large as is obvious from the values of CV and the range of growth rate (highest and lowest) presented at the bottom of the table. In summary thus, one may conclude that no overall pattern of growth emerges either at the inter-state level or at the level of the individual states to enable one to draw conclusions linking the growth rates with the levels of development. It is possible that one has to go back much further into the past to establish a link, if at all, between the present level of economic development and the rates of growth. Since the potentials of development and natural endowments vary widely between states it is possible that the factors of production viz., capital and labour to begin with, were at the source of high levels of production in some of the states. It is however, also necessary to study the influence of other social factors like population pressure, literacy rates, health standards and the like before drawing any definite conclusion. Nevertheless, an examination of the sectoral rates of growth makes it very clear that except for Tamil Nadu and West Bengal during 1980-81 to 1985-86, the rates of growth of Manufacturing and Transportation have always been higher than that of Agriculture. Over the whole period, Transportation has registered substantial growth in all the states - often much higher than that of Manufacturing. Table 6 gives the summary statement for six states at the top and six at the bottom while Appendix F and G give the details.

2.4 Structural Changes

Before concluding the analysis of the behaviour of SDP over time, it might be worthwhile to examine the extent to which (i) the high levels of per capita income in particular states can be linked with industrialisation and (ii) growth and development of individual states have led to structural shifts resulting in changes in the patterns of production. Broad examination of industrial breakdown of State Domestic Product indicates that states with per capita incomes above all-India are not necessarily the highly industrialised ones in the sense of the share of manufacturing being reasonably large. The results show that Punjab and Haryana -- the two topmost states in terms of per capita income -- are primarily agricultural with production from agricultural crops accounting for more than half of total SDP in each of these states. Also these two states along with Tamil Nadu (which records substantial growth in SDP over the period of study) show hardly any structural shifts in patterns of economic activity. In the case of other states there is a definite tendency of the economy moving away from Agriculture with much larger growth of Manufacturing and Transportation resulting in increase in share of these two sectors in total SDP. In the case of other developed states (Gujarat and Maharashtra) as well as West Bengal, the share of Manufacturing is not only high in the base year but rises consistently so that this sector accounts for 30 per cent of total production in 1985-86 for each of these states. This characteristic is apparent in the case of all other states as well (Tables 7 & 8). The details are at Appendix D. In other words, it can be concluded that over the last two decades, a strong tendency towards creation of an industrial base with simultaneous development of the infrastructure can be noticed in case of all the states. Thus going a step further one may conclude that the industrialisation of the country and development of infrastructure over the last two decades have not been limited to particular areas within the country but has been sufficiently wide spread to cover all the major states of the country.

HOUSEHOLD FINAL CONSUMPTION EXPENDITURE

3.1 Data

So far, the discussion of inter-state disparity has been limited to State Domestic Product i.e. the measure of income originating within the boundaries of the state. Conceptually this estimate gives an idea of the pattern and structure of production within each of the states but not any measure of the income earned by residents of the state i.e. no indication of the levels of living of the people of each of these states.

Conceptually the levels of Per-Capita Consumption Expenditure (PCCE) is one of the most satisfactory comprehensive measure of standard of living. In this section on the basis of data on PCCE, an attempt has been made to examine the disparity in standard of living of the people within the states - both inter-state and intra-state - and also the nature of changes which have occurred over the period 1966-88. The data refer to the results of the eleven National Sample Survey (NSS) Consumer Expenditure Survey rounds within this period. The data being based on all-India surveys are comparable between states and between rounds and create no problem. Per capita monthly consumption expenditure data available from various NSS rounds are at current prices and given separately for the Rural and Urban population for each of the states and also at the all-India level. These have been first converted to annual estimates and combined with population weights to obtain overall state/all India figures.

Since the data are available at current prices only, they need to be converted to constant price base of a given year for using them for determining the rates of growth of PCCE of individual states. The current price data directly available have therefore been converted to constant price (1980-81 as base) using independent cost of living indices separately for urban and rural areas (Appendix H. 2 and H. 3). For deflation of rural PCCE the consumer price indices for agricultural labourers (converted to base 1980-81 from given base of 1960-61) have been used with weighting diagram of 1960-61. The urban cost of living indices (base 1980-81 from given base of 1960-61 with weighting diagram (1960-61) unchanged) have been constructed as the simple average of Consumer Price Indices for Urban Non-Manual Employees (CPIUNME) and Industrial workers (CPIIW). The state average consumer price indices for both the urban Non-manual Employees and Industrial Workers had to be constructed first as weighted averages of CPIUNME/CPIIW of state centres for each state. The urban PCCE at current prices have been deflated by this urban cost of living indices (base 1980-81) to derive the corresponding constant price estimates. The overall state/all India constant price (base 1980-81) estimates of PCCE have been worked out as the weighted average of urban and rural constant price estimates of PCCE with Urban and Rural Population as weights (Appendix H. 1). The overall implicit cost of living indices have then been derived by using the combined PCCE estimates at current and constant prices. The data on cost of living indices are at Appendix I.

Substantial work has been undertaken by Minhas *et al* [1988, 1990, 1991] to construct rural and urban cost of living indices for different NSS periods between 1970-71 and 1987-88. These indices are available not only separately for rural and urban areas but also separately by states. These indices are based on the same retail price data which have gone into the construction of the official consumer price indices for different occupational groups referred to above i.e. for agricultural labour, industrial workers and non-manual employees. The primary departure is in terms of the weighting diagram, the authors having used the NSS-based consumer expenditure patterns which are more meaningful if the indices are to be applied to the consumption expenditure of total population in urban/rural areas. One could consider the question of using the indices specially constructed for the total population rather than the official indices for selected occupational groups. This has not been preferred in the present study for a number of practical reasons. Firstly, the analysis has been attempted in this study to cover more or less the same period under State Domestic Product and Household Consumption Expenditure which required using data from 1966-67 onwards and therefore obtaining comparable indices for period prior to 1970-71 i.e. beginning 1966-67. It is not possible to construct such indices for the earlier period. Secondly it has been the aim of the current study to construct all constant price series with 1980-81 as base while the specially constructed cost of living indices do not give the figures for 1980-81 and have the series constructed with weighting diagrams as 1970-71 and 1983. Using the cost of living indices for the more recent years with 1983 weighting diagram would create additional problems of comparability. Besides, the cost of living indices for more recent years have been constructed with agricultural (July-June) rather than financial (April-March) year as the reference period. Since the current analysis refers to not only household consumption expenditure but also State Domestic Product, it was considered desirable not to adopt this series with different reference period. Use of this data would also create problem in the future as and when the study is to be extended to cover more recent years. Finally, the broad conclusion which emerges from the analysis by Minhas and his associates is that the newly constructed general cost of living indices both for rural and urban population gives higher levels of indices. In other words, the official price indices of agricultural labour, industrial workers and non-manual employees under-estimate the extent of general price rise in the 1980s in comparison with the appropriately constructed consumer price indices for both the rural and urban areas. In the case of rural cost of living index numbers the price series has been substantially improved by replacing the fixed value price relatives of firewood by the actual data on prices which are independently available. However since the weightage of fuel and light group in the overall rural cost of living indices is not very high the extent of its influence on the overall trend is not known. Also, no such factor influences the urban cost of living indices. Moreover since the primary purpose of the current analysis is a study of inter-state differentials and not comparison of absolute levels of per capita expenditure (unlike for example, incidence of poverty) the use of readily available official price series was preferred and their use is not expected to affect the overall conclusions.

3.2 Inter-state Disparity in Standard of Living

The actual data on PCCE have been presented in Appendix (H. 1 - H. 3) while Tables (9.1-9.3, 10.1-10.3) either rank them in descending order or present the results as indices with all-India = 100.

A close look into the results highlights the fact that the gap in PCCE between states when compared to the state with highest PCCE has reduced significantly in case of a few states, e.g., Kerala and Andhra Pradesh. However, in majority of the cases the gap has remained more or less the same as in the initial year. Thus in case of states with highest and lowest PCCE i.e. Punjab and Bihar respectively, in the initial year (1966-67) Punjab has PCCE at constant prices 1.96 times that of Bihar and in 1987-88 the ratio has remained almost the same (1.8 times).

Ranking the states in descending order of levels of PCCE (rural urban combined) at constant prices gives the first five states in 1966-67 as Punjab, Rajasthan, Assam, Maharashtra and Jammu and Kashmir. Though their respective ranks have differed marginally over the period (1966-88), in 1987-88 the same states (except Assam) have had the first five positions with the fourth place being occupied by Kerala. Among the five states ranked lowest in 1966-67 (Andhra Pradesh, Karnataka, Orissa, Kerala and Bihar) there has been significant improvement in standard of living of Andhra Pradesh and Kerala while Assam has joined rank as one of the lowest five from the top position in the earliest period. The relative position of the rest remained unaltered in 1987-88. In other words there has been hardly any shift in the *inter-se* position of the states over the two decades under analysis except for one or two states moving to the top (Kerala and Andhra Pradesh) and Assam coming down.

To look at the problem from a different angle, the growth rates of PCCE of the states have been studied next (Appendix J). The fact that some under-developed states are growing as fast as or even faster than the developed states (see Tables 11 and 12 on growth rates) is not enough to reduce the gap between the top and the bottom, because arithmetically, reduction in gap depends not only on the difference in rates of growth of different states but also on the initial extent of the gap. Consider for example, the gap in PCCE at constant prices between the top-most state Punjab and the most backward state Bihar. In 1966-67 the gap was Rs 701.88 and in 1987-88 it goes up to Rs 833.23. Thus, inspite of Bihar having a higher rate of growth (on the average) the gap in PCCE between the well off state Punjab and backward state Bihar has widened. A little further investigation shows that the gap between Punjab and Kerala has however reduced from Rs 673.88 in 1966-67 to Rs 479.59 in 1987-88. This is due not only to the fact that Kerala's rate of growth of PCCE was substantially higher than that of Punjab but because the initial gap was not as much as in the case of Bihar. As a result, Kerala has improved its ranking. This is not true of Bihar.

Similar analysis can be undertaken with data at current prices. It should however be remembered that state wise levels of PCCE at current prices is only a rough measure of the standard of living of the people in different states since there exists a wide diversity not only in the absolute levels of prices between states but also in the nature of price behaviour over time. An attempt at comparing the states on the basis of PCCE at current prices is over simplified and does not depict the true picture of the gap. The variations in PCCE at constant prices should therefore be taken as a better measure of disparity across states over time.

In the results presented in Table 13, Coefficient of Variation (CV) of PCCE at constant prices have higher values and wider fluctuations than at current prices. However, inter-state comparison of levels of living even for a point of time implies comparison in terms of values of PCCE which have inherent within the measure, the effect of variations in absolute levels of prices between states. Such analysis cannot therefore be totally meaningful even if measures at constant prices are compared and inter-temporal differences in price behaviour i.e. effects of differential rates of inflation between states are eliminated. For a more meaningful inter-state comparison of absolute levels of PCCE it will be necessary to undertake an exercise similar to International Comparison Project (at the national level) and work out purchasing power parity between states. Using these purchasing power parities, values of PCCE at all-state average prices will need to be worked out before more realistic and meaningful measure of inter-state disparity can be attempted.

In the absence of such results, as a measure of disparity in standard of living among states the coefficient of variation (CV) in PCCE (Rural Urban Combined as well as Rural and Urban separately) at current/constant base (1980-81) prices have been worked out for each of the years and results presented (Table 13). The CVs show no definite trend though there is some tendency of reducing the disparity after 1977-78. The CV both at current and constant prices have shown fluctuations starting from 19.34 at constant prices (14.29 in current prices) in 1966-67 reaching a maximum of 22.67 in constant prices (20.81 in current prices) in 1977-78 and a minimum level of 14.10 (12.19) in 1973-74. It should however be mentioned that the year of minimum variation i.e. 1973-74 was an abnormal year to the extent that several of the states at the top (e.g. Punjab, the topmost) recorded fall in PCCE. Thus for Punjab PCCE at constant prices was reduced to a level of Rs 1,537.14 in 1973-74 from Rs 1,716.37 in 1972-73 implying a fall of 10.44per cent in 1973-74 over 1972-73. Similarly, Jammu and Kashmir ranked third in descending order of PCCE also experienced a fall in 1973-74 over 1972-73. However the states appearing at the bottom in inter-state ranking viz., Orissa, Andhra Pradesh and Kerala experienced positive rates of growth over the same period. This obviously reduced the gap in the level of PCCE between the states in this particular year. Thus the fall in CV to a minimum level in 1973-74 should not be interpreted as a genuine improvement in the levels of living of the people in the backward states in absolute term. Generally speaking, though there is no definite indication of trend, disparity measured in terms of CV, shows some rise at current prices - both for urban-rural combined and rural with a fall in urban. At constant prices on the other hand, there is a general indication of fall in disparity as measured through CVs. The absolute level of CV at current prices has consistently been lower than at constant prices in each of the years of study except the last two years. In the last two years the CV at current prices were higher than at constant prices. This suggests a variation in the behaviour of prices between states and a reduction in inter-state disparity when measured at current prices.

To understand the exact nature of the influence of differences in prices among states on the CV of PCCE of states a regression of CV of PCCE at current prices has been run on CV of prices (CVP). The results give a negative relationship between CV of PCCE (at current prices) and CVP, with regression coefficient significant at .05 level. The regression coefficient of CVP is -0.3861 and the intercept parameter is 12.0874. This implies that greater the degree of variation in prices among states lesser is the variation in levels of consumption at current prices. This can also be explained by a comparison of price behaviour between the better off states and the worse-off states. It is seen that the worse off states are associated with higher rates of inflation as compared to the better off states (Appendix I). The annual rates of growth of price indices for the top five and bottom five states have been worked out and the annual growth of price indices of bottom five states is seen to be significantly higher during 1967-68 and 1973-74 as compared to that of the top five states. Thus one may argue that the CV of PCCE in these years has fallen partly due to this nature of price changes which reduces the gap in PCCE between states.

The CVs of PCCE at both current and constant prices in rural areas show a pattern similar to the urban-rural combined though in rural areas the absolute values of the coefficients are somewhat higher. Also, for rural areas CVs at constant prices are higher than those at current prices but decreases over the period to reach a level lower than the current price value by the end of the period of study (in the last two years). In the case of urban areas the CV at current prices have shown a marginally higher level of disparity in standard of living than at constant prices. This is again due to the dis-similarity in price behaviour between states in the urban areas. However by 1987-88 inter-state disparity as measured through CVs came down both in urban and rural areas. The CV at constant prices in rural areas was the maximum (23.98) in the initial year falling to a minimum level of 16.11 in 1986-87 and 16.36 in 1973-74 where as the CV at constant prices in urban areas was generally of a lower order e.g., 14.85 in 1966-67 (the maximum level over the whole period) and a minimum of 9.27 in 1983 increasing slightly thereafter. Thus, inter-state disparity in standard of living in urban areas is not only lower than in rural areas but also of the same order in current and constant prices.

Inter-state disparity have been studied next in terms of the range in PCCE between the highest and the lowest (disparity ratio) as well as in terms of the Gini Coefficient (Table 13). As in the case of SDP, the highest and the lowest levels of PCCE is measured in terms of average of the top six and bottom six respectively. The results show that the inter-state disparity is generally higher in constant prices than in current prices irrespective of the measure considered. This same statement would hold good if one attempted to study the inter-state disparity separately for rural and urban areas i.e. inter-state rural disparity is higher than the corresponding urban measures. It is also seen that there is a tendency for inter-state urban disparity to decrease over the period of study both at current and constant prices. This is not equally true of rural disparity or the overall combined measures -- particularly at current prices.

In summing up, the conclusions that follow from this analysis are:

(i) The disparity level between states in the urban areas is significantly lower as compared to that in the rural areas (ii) The results obtained from the exercise taking the urban-rural combined data can be explained more by the results of the rural areas. This is obvious as nearly 80per cent of population in India is in rural areas (iii) The price variability in rural areas has been greater as compared to that of urban areas as is seen from the differences in the values of CV at constant and current prices as well as from the CV of prices in rural and urban areas. The values of CV of price indices in urban areas are not only lower than those of rural areas but also go down substantially over the period.

Finally, inter-state disparity of PCCE is lower than that of SDP which follows from inter-state movement of consumer goods according to demand. This is not pertinent to the measure of SDP which refers to income originating. In other words, inter-state disparity in level of living of the people, on an average, is not as widespread as the figures of per capita SDP would suggest and this is more true for urban areas than for rural areas. It therefore follows that it is necessary to go more deeply into the details of consumer expenditure - may be by size classes separately for rural and urban areas before more meaningful results of inter-state disparity of conditions of living of the people can be obtained.

3.3 Rural Urban Disparity

Urban-rural disparity in the levels of living of the people (measured through income accruing or consumer expenditure) assumes a special significance in the context of the study of inter-state/intra-state disparity in economic development. There has not been much work on the empirical verification of the extent and the trend of urban-rural disparity in per capita income in India or within state boundaries due to the absence of basic information on production originating in rural and urban areas or income accruing to the urban and rural population. However, utilising the population census data for 1970-71 and 1980-81 on workers and rural-urban estimates of value added/earnings/wages per worker, estimates of net domestic product in rural and urban areas at the all India level for the years 1970-71 and 1980-81 have been prepared by the National Accounts Division of the Central Statistical Organisation (earlier studies by private researchers are not being referred here). These estimates provide per capita NDP for rural and urban areas for the year 1970-71 at current prices to be Rs 499 and Rs 1,201 respectively as compared to Rs 638 for the country as a whole.

For the year 1980-81 the levels have been found to be Rs 1,242 and Rs 2,887 respectively in rural and urban areas in comparison to the all-India figure of Rs 1,622. If one tries to examine in terms of absolute difference, the gap between urban and rural per capita income has widened tremendously within the period. But in relative terms there is a sign of reduction in disparity - the ratio of urban to rural per capita income having dropped from 2.40 in 1970-71 to 2.32 in 1980-81. Result on the basis of per capita consumption expenditure (worked for the current study) also reveal the same trend but the degree of change is more in per capita expenditure than in income. However, drawing conclusions regarding pattern of urban rural disparity in the country on the basis of these two point estimates only may not be desirable. To derive meaningful conclusions regarding the nature and behaviour of disparity a time series analysis is obviously necessary. However no such analysis is possible due to lack of basic data. As an alternative, attempts have been made by Deepak Mohanthy and A George [1989] to construct annual series of total rural and urban NDP on the basis of the trend as emerging from the CSO's decennial estimate of rural and urban NDP. The year-wise estimates were prepared by interpolation of respective rural share of each industry and taking corresponding year-wise estimates of net value added in each industry from NAS. However drawing conclusion regarding urban-rural disparity on the basis of these estimates may be biased due to the assumptions implied in the construction of the annual series. In another article published in *Economic Times*, 11 August 1990, these authors argue on the basis of several indicators that the urban-rural disparity has decreased. NCAER Survey of 1987-88 also reveals significant shift in consumption pattern of rural population. The extent of rural consumption in respect of preferences for durables consumer desirable is rather revealing.

However, all these studies refer to all-India analysis only. In the current analysis, an attempt has first been made to understand the nature of inter-temporal disparities in standard of living within states for rural and urban areas separately. As a measure of intra-state disparity in standard of living therefore, urban-rural disparity indices have been constructed separately for each state and all India for each of the eleven points of time within the period 1966-88 (Appendix K). For the purpose, the disparity index has been defined as the absolute difference between the urban and rural PCCE at a point of time as percentage of urban PCCE. It is evident from the results that on an average the urban rural disparity in PCCE at current prices has increased over the period 1966-88 but for minor exceptions. For example, in Assam and Maharashtra the average urban-rural disparity records marginal fall in the seventies as compared to the sixties with again a rise in the eighties (Appendix K. 2). In the case of Orissa and West Bengal on the other hand, the average disparity index falls marginally in the eighties. The intra-state urban-rural disparity in PCCE at constant prices on the other hand has generally fallen though there have been ups and downs in some years for some of the states. The average all-India urban-rural disparity index at constant prices had also reduced to 33.37 in the seventies and 28.29 in the eighties as compared to 37.13 in the sixties. But for Punjab, Jammu and Kashmir and Rajasthan for which generally the ratio has been substantially low, the disparity has increased somewhat over the period of study though the rise is not uniform.

In absolute terms, the urban-rural disparity is generally higher at constant prices than at current prices though the trend has been a fall in the case of the former and rise in the case of the latter thus changing the pattern to some extent by the end of the period of study. In other words, there is a continuous differential behaviour in prices between states as well as between urban and rural areas within states which highlights the disparity in level of living between urban and rural areas. Elimination of the effect of prices brings out more prominently the disparity which obviously becomes larger when measured in terms of actual levels of per capita consumption in rural and urban areas. The results suggest that this absolute level of disparity is gradually getting reduced even though it still continues to be high at current prices.

In terms of the performance of individual states (Table 14), it is seen that West Bengal and Maharashtra have almost the highest disparity while Jammu and Kashmir and Punjab have the lowest though in the more recent years there is some tendency for this differential to increase in the case of both these two latter states. This is revealing to the extent that the states of Punjab, West Bengal and Maharashtra have high rank in terms of per capita SDP throughout the period. Interestingly these states structurally are however, not the same. In terms of per capita expenditure on the other hand, West Bengal records large fluctuations and goes down in ranking. The lower urban rural disparity of level of living of the people in Punjab has to be seen in the context of its being prominently an agricultural state against West Bengal and Maharashtra which are primarily industrialised. The other state with low urban-rural disparity is Rajasthan which records high per capita expenditure but low per capita income. The state which has recorded substantial lowering of urban-rural disparity over the period of study is Kerala which has reduced its ratio from 30.72 in 1966-67 to around 20.57 in 1987-88 at current prices and from 39.30 to 22.79 at constant prices.

To understand the inter-state variation the PCCE separately for rural and urban areas, the coefficient of variation, Gini Coefficient, Disparity Ratio between states have been worked out using the separate PCCE data for urban and rural areas at current and constant prices. These have already been discussed in the previous section suggesting lower overall disparity in urban areas than in rural areas. It is also to be considered as to the extent to which this could be more a reflection on the quality of NSS data missing the top expenditure groups more in urban areas than in rural areas. One thus comes back to the question of a more detailed study by income/expenditure size distribution for drawing more realistic conclusions regarding urban-rural disparity of levels of living of the people.

3.4 Growth Rates

Finally growth rates in PCCE at the state level have been examined to see whether differential growth rates between states have helped in reducing the disparity in the levels of living of people between states (Appendix J). Ranking the states in descending order on the basis of average rate of growth of PCCE during the period 1966-88 shows that Kerala, Bihar, Jammu and Kashmir which have low absolute levels of PCCE have high rates of growth while the states with high average real PCCE during the same period (i.e. Punjab, Rajasthan, and Gujarat) recorded substantially lower rates of growth of PCCE (Tables 11 and 12). This would suggest a possibility of reducing inter-state disparities in the near future since the most progressive states like Punjab, Rajasthan, Gujarat are lagging behind the backward states (Kerala, Bihar, Andhra Pradesh in the initial years) in terms of development and progress as measured through growth rates of either SDP or PCCE. There is wide variations in growth rates between states and also within states between rural and urban areas. This is very obvious from the results presented. Fall in per capita expenditure is not uncommon for most of the states though states like Kerala and Andhra Pradesh are exceptions with increase in per capita real expenditure all through the period of study. In spite of this pattern however, Punjab has maintained its first position in PCCE both at current and constant prices while Bihar has been one with lowest PCCE. Thus Punjab's absolute level of PCCE has remained nearly double that of Bihar even in the year 1987-88.

A comparison of growth pattern of PCCE at constant prices with changes in current prices reveals that in the year 1967-68 rate of change over previous year has been positive at current prices but negative at constant prices in case of nine states as well as in the case of all India average. This implies a sharp increase in prices in 1967-68 though all the states were not affected to the same extent. The main factors responsible for this pattern of price behaviour has been the sharp rise in the prices of foodgrains and food articles due to scarcity created by drought in the previous year, the recessionary trends in some sectors of the economy and policy induced rise in prices of some products like "liquor and tobacco", "fuel, power light and lubricants" (e.g. the rise in coal prices following from decontrol with effect from July 24, 1967). In the following year 1968-69, in Bihar, Uttar Pradesh and West Bengal change in PCCE over previous year at current prices have been negative but at constant prices positive implying a fall in prices in 1968-69. The all-India average price index (base 1980-81) also fell by 7.52 per cent . This is mainly due to improvement in food situation and the consequent fall in prices of foodgrains and food articles.

The intra-state behaviour of growth of PCCE at constant prices presented in Table 12 with details in Appendix J shows that except for Andhra Pradesh, the annual rate of change has fluctuated widely over time registering a fall quite often. In the case of Andhra Pradesh the fluctuations have been the least with no fall in real PCCE either for rural areas or for overall economy and only a small decrease in 1970-71 in the case of urban PCCE. Both for rural areas and for the economy as a whole over the period of study (1967-88), Kerala records the average highest rate of increase in PCCE (3.97 per cent in rural and 3.40 per cent for the overall) with Rajasthan at the bottom with as low as 0.36 per cent for rural and 0.39 per cent for the combined accompanied by very wide fluctuations over the period. Interestingly, Bihar records reasonably high average increase in PCCE (3.29 per cent for rural and 2.91 per cent overall) with not a very wide fluctuation (as measured through CV values). For urban areas, on the other hand, Bihar has the lowest recorded average annual increase of 0.50 per cent with very wide fluctuations ranging from a fall of 10.2 per cent in 1987-88 to an increase of as little as 0.01 per cent in 1967-68. Urban real per capita expenditure has generally increased less than in rural areas ranging between 0.50 per cent for Bihar and 2.69 per cent in Jammu and Kashmir. The corresponding range for rural areas has been 0.36 per cent in Rajasthan and 3.97 per cent in Kerala. This is an obvious indication of reduction in urban-rural disparity and is supported by the results presented in the earlier section.

Similar examination of the consumer price indices (Appendix I) used for the study shows much smaller fluctuation both between states as well as over the period of study. Thus for the Consumer Price Index for Agricultural Labour - except for West Bengal where the overall average change is least (3.91 per cent) with wide fluctuation over the period of study - the average ranges between 6.04 per cent in Assam (with fluctuations between -14.75 and 16.02 within a range of -17.22 to 29.84) to 8.30 per cent in Uttar Pradesh. In the case of urban CPI the highest average is 9.25 per cent for Kerala with wide fluctuations ranging from a rise of as much as 32.77 per cent in 1973-74 to a small rise of 1.13 per cent in 1969-70. In terms of annual changes whereas fall in prices were recorded for individual states, in the three years 1968-69, 1969-70, 1970-71, the subsequent period has recorded nothing but rise over the period, the inflation never reaching two figures except for the high inflation in 1973-74 both in rural and urban areas, the rise being generally more in rural areas than in urban areas. All this only supports the conclusion that for study of inter-state disparities in real levels of living it will be desirable to examine the results at constant prices though for conditions of living at a point of time, analysis of data at current prices will be more meaningful.

CONCLUSION

The final picture which emerges from the study is summarised next taking into account the conclusions following from the analysis of the series of both State Domestic Product and household final consumption expenditure. In other words, the conclusions are based on the inter-state variations in per capita levels of output within the geographical boundaries of the states and the levels of per capita expenditure out of the income actually received by the households (which would have the effect of exports and imports of consumer goods integrated within the measures). The picture which emerges is supported by both the measures to the extent that the levels and changes in output pattern go hand in hand with levels and changes in household consumption except for a few states like Rajasthan, Uttar Pradesh and Jammu and Kashmir. Thus, there are no indications of largescale inter-state exports and imports leading to improved consumption levels in states with low per capita SDP (income originating) except for the above three states which have relatively high PCCE but low per capita SDP. In the case of Jammu and Kashmir a reasonable growth in output is also recorded thus raising its rank in inter-state comparison over the period of study. This is not equally true in the case of Rajasthan and Uttar Pradesh which rank quite at the top in the case of PCCE with lower levels of per capita SDP. One of the remote possibility for such an economic situation could be that such consumer goods as are being imported into these states are priced much higher than not only the domestic products originating within these states but also compared to similar products in other states.

The inter-state ranking shows a definite improvement in the case of Kerala. In the case of Andhra Pradesh relative position in terms of conditions of living of the people has changed for the better over the period while for Karnataka and Tamil Nadu, the levels of output have comparatively increased more. Assam and West Bengal have faired in the reverse direction with the downward shift of Assam substantial while that of West Bengal marginal.

In terms of growth rates which determines the changes in relative positions over time, the economically developed states are not necessarily the ones with higher rates of growth. In the case of PCCE, states like Bihar with the lowest per capita consumption level have been recording substantial growth. However, in spite of higher growth the absolute gap between the highest (Punjab) and lowest (Bihar) has not reduced over the period because of the large gap at the initial stage. The annual rates of growth have varied very widely in case of most of the states and the averages range between very low negative to reasonably high positive figures. The values of CVs are direct proof of the wide fluctuations. Thus no conclusion can be drawn regarding the pattern of change over time of either SDP per capita or PCCE.

In spite of this disorderly pattern of change, the inter-state disparity gives some meaningful picture. The results indicate a lower level of inter-state disparity in levels of living than in actual output and lower in urban areas than in rural areas. Also, the inter-state disparity is more in constant prices than in current prices supporting the argument of large difference in levels of prices as well as in their behaviour over time. In this context it is also seen that often rate of inflation is higher for states with low ranking. The urban-rural disparity has increased in current prices and shown a tendency to be lower at constant prices because of the differential behaviour in prices between rural and urban areas. Highly industrialised states of West Bengal and Maharashtra have the highest urban-rural disparity while Punjab -- a predominantly agricultural state -- has the lowest. This is also true of Jammu and Kashmir though economically not similar. In the case of Kerala, over the period of study, urban-rural disparity has shown definite tendency to decrease.

Inter-state disparity have been worked out for per capita SDP and PCCE both at current and constant prices, of their rates of growth and of rural-urban disparity. Within-state variation in annual rates of growth of per capita SDP and PCCE have also been studied. These disparities in terms of Coefficient of Variation (CV) Gini Coefficient and Disparity Ratio (difference between value of six states at the top and six states at the bottom as the ratio of all India) present more or less the same picture. These measures make it obvious that the inter-state disparity shows no definite sign of decrease though a tendency towards reduction particularly in the eighties is suggested by the results. Disparity at constant prices is generally always higher than at current prices. There is wide disparity in rates of growth over states. Inter-state and intra-state price variations are evident. Finally, irrespective of inter-state variation, there is a definite indication of every state within the economy moving towards industrialisation with simultaneous development of transportation system except for Punjab and Haryana which continue to be primarily agricultural.

NOTES

1. However, the new Series of SDP issued by Directorate of Economics and Statistics, Government of West Bengal, suffers from serious limitations because of the price indices used for deriving the past series (from 1947-48 onwards) at 1980-81 prices. Not only are the prices shown to be much higher for periods prior to 1980-81 but the indices are shown to be constant. Thus for the period 1967-68 to 1979-80, Mining and Quarrying has a constant implicit price index of 104.17 (1980-81=100), Manufacturing (Registered) 124.84, Manufacturing (Unregistered) 100.37, Construction 92.35, Transportation between 103.11 and 130.51, Banking and Insurance 135.87 and Real Estate, Ownership of Dwellings 134.81.

2. In case of West Bengal, such a shift in inter-state ranking upto 1979-80 could be partly due to the limitations of the constant price estimates as already detailed.

REFERENCES

Central Statistical Organisation 1984; 'Comparable Estimates of State Domestic Product at Current Prices, 1979', *Monthly Abstract of Statistics*, April, Government of India.

Central Statistical Organisation, 1981; 'Net Domestic Product by Rural and Urban Areas, 1970-71', *Monthly Abstract of Statistics*, July, Government of India.

Central Statistical Organisation, 1989; 'Estimates of Rural and Urban Income, 1980-81', *Monthly Abstract of Statistics*, July, Government of India.

Choudhury U.D.R., 1991; 'Regional Pattern of Development in India', *Journal of Income and Wealth*.

Minhas B.S., L.R. Jain, S.M. Kansal and M.R. Saluja, 1990; 'Rural Cost of Living: 1970-71 to 1983 - States and All-India'. *Indian Economic Review*, VI, XXV, No. 1.

Minhas B.S., L.R. Jain and S.D. Tendulkar, 1991; 'Declining Incidence of Poverty in the 1980s - Evidence *versus* Artifacts', *Economic and Political Weekly*, Vol. XXVI, Nos. 27 & 28, July 6-13.

Minhas B.S., S.M. Kansal, L.R. Jain and M.R. Saluja, 1988; 'Measurement of General Cost of Living for Urban India-All India and Different States', *Sarvekshana*, Vol. XII, No. 1, July, Issue No. 36.

Minhas B.S., L.R. Jain and S.D. Tendulkar, 1991; 'Rural and Urban Cost of Living: 1983 to 1987-88, Statewise and All-India', *Journal of Indian School of Political Economy*, Vol. 3, No. 3, July-Sept.

Mohanty, Deepak and A. George, 1989; 'Rural-Urban Income Series: Some Estimates', *Reserve Bank of India Occasional Papers* Vol. 10, No. 4, December.

Sarma, R.K., 1991; 'Growth and Poverty in India: A Regional Analysis, 1961-1981', *Indian Journal of Regional Science*, Vol. XXII (2).

Seal K.C. and A.R. Rao, 1989; 'A Note on the Bias in the Gini Coefficient due to Choice of Size Classes', *Sarvekshana*, Vol. XII, No. 4, April-June.

Sen, A.K. 1975; *On Economic Inequality*, Oxford University Press, Delhi.

DATA SOURCE

I. 1 *Comparable Estimates of State Domestic Product*

1. Central Statistical Organisation, 1979; *National Accounts Statistics*, 1970-71 to 1975-76, January, Government of India.
2. Central Statistical Organisation, 1982; *Monthly Abstract of Statistics*, October, Government of India.
3. Central Statistical Organisation, 1983; *Monthly Abstract of Statistics*, July, Government of India.
4. Central Statistical Organisation, 1984; *Monthly Abstract of Statistics*, April, Government of India.
5. Central Statistical Organisation, 1989; 'Comparable Estimates of State Domestic Product at Current Prices: 1980-81 to 1985-86', (provided to 9th Finance Commission - unpublished), Government of India.

I. 2 *State Domestic Product* (as prepared by State Governments)

6. Central Statistical Organisation, 1985; *Estimates of State Domestic Product*, 1960-61 to 1983-84, November, Government of India.
7. Central Statistical Organisation, 1986; *Estimates of States Domestic Product, 1970-71 to 1984-85*, November, Government of India,
8. Central Statistical Organisation, 1987; *Estimates of State Domestic Product*, 1970-71 to 1985-86, June, Government of India.
9. Central Statistical Organisation, 1988; *Estimates of State Domestic Product*, 1970-71 to 1986-87, June, Government of India.
10. Central Statistical Organisation, 1989; *Estimates of State Domestic Product*, 1970-71 to 1987-88, July, Government of India.
11. Central Statistical Organisation, 1990; *Estimates of State Domestic Product and Capital Formation*, October, Government of India.
12. Central Statistical Organisation, 1991; *Estimates of State Domestic Product and Capital Formation*, October, Government of India.
13. Bureau of Applied Economics & Statistics, 1990; *Regional Accounts Statistics of West Bengal - Sources and Methods*, Government of West Bengal.

II. *National Income*

14. Central Statistical Organisation 1989; *National Accounts Statistics*, 1980-81 to 1986-87, March, Government of India.
15. Central Statistical Organisation 1991; *National Accounts Statistics*, February, Government of India.

III. *Consumer Expenditure*

16. National Sample Survey Organisation, 'Tables with Notes on Consumer Expenditure (Preliminary)': NSS 21st Round (July 1966-June 1967) Report No. 230.
17. National Sample Survey Organisation, 'Tables with Notes on Consumer Expenditure (Preliminary)': NSS 22nd Round (July 1967 - June 1968) Report No. 216.
18. National Sample Survey Organisation, 'Tables with Notes on Consumer Expenditure (Preliminary)': NSS 23rd Round (July 1968 - June 1969) Report No. 228.
19. National Sample Survey Organisation, 'Tables with Notes on Consumer Expenditure (Preliminary)': NSS 24th Round (July 1969 - June 1970) Report No. 235.
20. National Sample Survey Organisation, 'Tables with Notes on Consumer Expenditure (Preliminary)': NSS 25th Round (July 1970 - June 1971) Report No. 231.
21. National Sample Survey Organisation, 'Tables with Notes on Consumer Expenditure (Preliminary)': NSS 27th Round (Oct 1972 - Sept 1973) Draft Report No. 284.
22. 'Tables with Notes on Consumer Expenditure': NSS 28th Round (July 1973 - June 1974) Number 240.
23. National Sample Survey Organisation, 1986; 'Some results on the second quinquennial survey on consumer expenditure: NSS 32nd Round (July 1977 - June 1978)', *Sarvekshana* Vol. IX, No. 3, January.

24. National Sample Survey Organisation, 1986; 'A Report on the third quinquennial survey on consumer expenditure: NSS 38th Round (January - December 1983)', *Sarvekshana* Vol. IX, No. 4 April.
25. National Sample Survey Organisation, 1989; 'Results on consumer expenditure: NSS 42nd Round (July 1986 - June 1987)'. *Sarvekshana* Vol. XII, No. 4, Issue No. 39, April-June.
26. National Sample Survey Organisation, 1991; 'The Fourth quinquennial survey on consumer expenditure: NSS 43rd Round (July 1987 - June 1988)'. *Sarvekshana* Vol. XV, No. 1, July - Sept 1991 Issue No. 48.

4. *Consumer Price Indices*

Chandhok H.L. and the Policy Group; *India Data Base*, Vol. I.

(These data to begin with are published by Labour Bureau in different issues of Indian Labour Journals, Indian Labour Statistics and Pocket Book of Labour Statistics which have subsequently been extracted and compiled as a time series and published in the above. Since the data from the two sources are exactly the same Indian Data Base has been used to compile the series).

TABLE 1. COMPARABLE ESTIMATES OF NET NATIONAL \ STATE DOMESTIC PRODUCT: AT CURRENT PRICES RANKING BY PER CAPITA INCOME OF STATES: 1967-68 TO 1985-86

	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86
RANKING																			
	PNB	PNB	PNB	PNB	PNB	PNB	PNB	PNB	PNB	PNB	PNB	PNB	PNB	PNB	PNB	PNB	PNB	PNB	PNB
	HRY	HRY	HRY	HRY	HRY	HRY	HRY	MAH	HRY	HRY	HRY	HRY	MAH	MAH	MAH	MAH	MAH	MAH	MAH
	GUJ	MAH	MAH	GUJ	MAH	MAH	MAH	HRY	MAH	MAH	MAH	MAH	HRY	HRY	HRY	HRY	GUJ	HRY	HRY
	MAH	WBL	GUJ	MAH	GUJ	HPR	GUJ	KAR	GUJ	GUJ	GUJ	GUJ	GUJ	GUJ	GUJ	GUJ	HRY	GUJ	GUJ
	WBL	GUJ	WBL	WBL	WBL	WBL	KAR	HPR	HPR	WBL	INDIA	HPR	WBL	J&K	KAR	KAR	KAR	KAR	KAR
	INDIA	INDIA	INDIA	INDIA	HPR	GUJ	HPR	WBL	WBL	INDIA	KAR	INDIA	KAR	KAR	J&K	J&K	J&K	J&K	TND
	APR	ASM	KER	HPR	INDIA	INDIA	WBL	GUJ	INDIA	KER	HPR	WBL	INDIA	HPR	HPR	INDIA	INDIA	INDIA	J&K
	TND	TND	TND	KAR	KAR	KAR	INDIA	INDIA	KAR	KAR	WBL	KAR	TND	INDIA	INDIA	HPR	WBL	WBL	INDIA
	KER	KAR	KAR	KER	TND	TND	KER	APR	KER	HPR	TND	KER	J&K	WBL	TND	WBL	HPR	TND	WBL
	KAR	KER	ASM	RAJ	KER	KER	APR	KER	TND	TND	RAJ	TND	KER	KER	WBL	KER	APR	KER	KER
	RAJ	APR	APR	TND	APR	APR	TND	TND	APR	RAJ	J&K	J&K	HPR	TND	KER	TND	KER	APR	APR
	UPR	UPR	ORS	APR	RAJ	ASM	RAJ	J&K	RAJ	J&K	KER	RAJ	APR	APR	APR	APR	TND	ASM	HPR
	MPR	ORS	UPR	ASM	J&K	ORS	ORS	RAJ	ASM	APR	APR	APR	RAJ	MPR	ASM	MPR	RAJ	HPR	ASM
	ORS	MPR	MPR	J&K	ASM	UPR	J&K	ASM	ORS	ASM	ASM	ORS	ASM	UPR	MPR	RAJ	MPR	MPR	MPR
	BHR	J&K	RAJ	ORS	MPR	J&K	MPR	MPR	J&K	UPR	MPR	ASM	ORS	ORS	ORS	UPR	ORS	RAJ	ORS
	J&K	BHR	J&K	UPR	ORS	RAJ	UPR	ORS	MPR	MPR	ORS	MPR	UPR	RAJ	RAJ	ASM	ASM	ORS	RAJ
		RAJ	BHR	MPR	UPR	MPR	ASM	UPR	UPR	ORS	UPR	UPR	MPR	ASM	UPR	ORS	UPR	UPR	UPR
			HPR	BHR	BHR	BHR	BHR	BHR	BHR	BHR	BHR	BHR	BHR	BHR	BHR	BHR	BHR	BHR	BHR
INTER-STATE DISPARITY																			
AVERAGES																			
6 TOP	699.10	701.44	771.00	843.57	889.91	920.67	1,163.23	1,283.31	1,359.52	1,521.01	1,693.31	1,746.64	1,895.09	2,199.23	2,540.20	2,715.32	3,047.09	3,337.93	3,550.29
6 BOTTOM	458.33	442.85	468.84	511.49	522.14	590.36	684.92	793.47	782.10	822.49	923.66	955.68	941.83	1,227.55	1,402.84	1,508.15	1,772.99	1,870.47	2,107.17
DIS RATIO	0.41	0.42	0.46	0.49	0.52	0.44	0.53	0.47	0.54	0.62	0.61	0.60	0.69	0.59	0.61	0.60	0.55	0.58	0.53
GINI COEF	0.1240	0.1291	0.1387	0.1353	0.1423	0.1238	0.1398	0.1292	0.1480	0.1665	0.1653	0.1630	0.1829	0.1588	0.1615	0.1597	0.1469	0.1563	0.1464
CV	23.26	24.28	26.08	24.78	25.94	24.02	25.55	23.86	27.12	31.70	31.77	30.94	33.94	29.51	30.55	30.16	27.69	29.06	28.22

Note : The Disparity Ratio (DIS RATIO) is measured, using the average of 6 Topmost Level States minus the average of 6 Lowest Level States to the All India Per Capita Income Figure for each year separately.

TABLE 2. COMPARABLE ESTIMATES OF NET NATIONAL \ STATE DOMESTIC PRODUCT: AT CONSTANT (1980-81) PRICES RANKING BY PER CAPITA INCOME OF STATES: 1967-68 TO 1985-86

	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86
RANKING																			
	PNB	PNB	HRY	HRY	HRY	HRY	PNB	MAH	HRY	PNB	PNB	PNB	PNB	PNB	PNB	PNB	PNB	PNB	PNB
	HRY	MAH	PNB	PNB	PNB	PNB	MAH	PNB	PNB	HRY	HRY	HRY	MAH	MAH	MAH	MAH	MAH	MAH	MAH
	MAH	HRY	MAH	MAH	MAH	MAH	HRY	HRY	MAH	MAH	MAH	MAH	HRY	HRY	HRY	HRY	HRY	HRY	HRY
	GUJ	GUJ	GUJ	GUJ	GUJ	KER	GUJ	KAR	GUJ	GUJ	GUJ	GUJ	GUJ	GUJ	GUJ	GUJ	GUJ	GUJ	GUJ
	TND	TND	INDIA	INDIA	INDIA	HPR	KAR	INDIA	TND	TND	TND	TND	KAR	J&K	KAR	KAR	KAR	KAR	TND
	INDIA	INDIA	TND	RAJ	KER	INDIA	HPR	GUJ	HPR	INDIA	KAR	HPR	TND	KAR	HPR	J&K	INDIA	J&K	KAR
	KER	KER	KER	KER	TND	TND	TND	HPR	INDIA	HPR	HPR	INDIA	INDIA	HPR	J&K	INDIA	J&K	TND	J&K
	RAJ	KAR	KAR	HPR	KAR	GUJ	INDIA	KER	KAR	KAR	INDIA	KAR	KER	INDIA	TND	WBL	WBL	INDIA	INDIA
	APR	UPR	APR	KAR	HPR	KAR	KER	J&K	KER	KER	J&K	ORS	HPR	WBL	INDIA	HPR	TND	WBL	WBL
	MPR	ORS	ORS	TND	APR	ORS	ORS	TND	ORS	RAJ	RAJ	RAJ	J&K	KER	WBL	TND	APR	APR	APR
	KAR	APR	UPR	ORS	RAJ	ASM	APR	APR	RAJ	J&K	KER	KER	WBL	TND	KER	APR	HPR	KER	HPR
	ORS	WBL	MPR	J&K	ASM	UPR	J&K	ASM	APR	WBL	ORS	J&K	APR	APR	APR	KER	RAJ	HPR	MPR
	UPR	ASM	J&K	APR	J&K	J&K	ASM	WBL	ASM	ORS	APR	APR	RAJ	MPR	MPR	MPR	MPR	MPR	KER
	J&K	MPR	WBL	ASM	ORS	RAJ	RAJ	ORS	WBL	ASM	WBL	WBL	ORS	UPR	ASM	UPR	KER	ASM	ASM
	WBL	J&K	RAJ	UPR	MPR	APR	UPR	RAJ	J&K	APR	ASM	ASM	ASM	ORS	RAJ	RAJ	ORS	RAJ	ORS
	BHR	RAJ	ASM	MPR	UPR	MPR	MPR	UPR	UPR	UPR	MPR	UPR	UPR	RAJ	UPR	ASM	ASM	UPR	UPR
		BHR	BHR	WBL	WBL	WBL	WBL	MPR	MPR	MPR	UPR	MPR	MPR	ASM	ORS	ORS	UPR	ORS	RAJ
				BHR	BHR	BHR	BHR	BHR	BHR	BHR	BHR	BHR	BHR	BHR	BHR	BHR	BHR	BHR	BHR

INTER-STATE DISPARITY

	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86
AVERAGES																			
6 TOP	1,747.98	1,705.08	1,792.35	1,788.32	1,817.38	1,710.15	1,786.34	1,751.72	1,945.42	2,004.85	2,145.98	2,192.72	2,086.02	2,199.30	2,304.01	2,297.11	2,372.93	2,459.18	2,475.78
6 BOTTOM	1,049.49	1,029.56	1,050.35	1,141.88	1,129.08	1,102.35	1,092.75	1,080.32	1,168.96	1,143.93	1,203.01	1,205.70	1,059.86	1,227.52	1,284.23	1,264.20	1,378.20	1,353.06	1,410.48
DIS RATIO	0.49	0.47	0.50	0.42	0.46	0.41	0.46	0.45	0.49	0.55	0.57	0.58	0.66	0.59	0.60	0.61	0.55	0.61	0.57
GINI COEF	0.1449	0.1374	0.1489	0.1210	0.1287	0.1200	0.1318	0.1304	0.1359	0.1518	0.1549	0.1588	0.1771	0.1589	0.1592	0.1640	0.1505	0.1657	0.1587
CV	26.51	25.57	28.03	22.37	23.88	22.29	23.62	24.24	-24.89	28.26	28.33	28.93	32.30	29.51	30.34	31.32	29.06	31.60	31.17

Note : The Disparity Ratio (DIS RATIO) is measured, using the average of 6 Topmost Level States minus the average of 6 Lowest Level States to the All India Per Capita Income Figure for each year separately.

TABLE 3. RANKING OF TOP AND BOTTOM STATES BY PER CAPITA INCOME AND INTER STATE DISPARITIES: AT CURRENT PRICES 1967-68, 1980-81 AND 1985-86

	1967-68		1980-81		1985-86	
	State	Per Capita Income (Rs)	State	Per Capita Income (Rs)	State	Per Capita Income (Rs)
AT CURRENT PRICES						
A. SIX TOPMOST STATES						
	PNB	880	PUN	2,891	PUN	4,839
	HRY	785	MAH	2,453	MAH	4,099
	GUJ	675	HRY	2,314	HRY	3,662
	MAH	664	GUJ	2,042	GUJ	3,062
	WBL	659	J&K	1,771	KAR	2,837
	APR	531	KAR	1,725	TND	2,802
B. SIX BOTTOMMOST STATES						
	RAJ	502	MPR	1,395	ASM	2,386
	UPR	490	UPR	1,350	MPR	2,304
	MPR	467	ORS	1,309	ORS	2,182
	ORS	458	RAJ	1,253	RAJ	2,058
	BHR	419	ASM	1,175	UPR	2,054
	J&K	414	BHR	883	BHR	1,658
AVERAGE 17 STATES						
PER CAPITA INCOME(Rs)		567		1,667		2,747
DISPARITY RATIO		0.42		0.58		0.53
GINI COEFFICIENT		0.12		0.16		0.15
CV		23.26		29.51		28.22
STD		131.85		492.00		775.41

Note: (A) The average of 17 States excludes All India (B) The Disparity Ratio Obtained from the average of six Topmost States in the Rank Minus the average of six Bottommost States as a Ratio of the average of 17 States (C) Gini Coefficient is measured taking the 17 States and their average, CV and STD also use the data for 17 States only.

TABLE 4. RANKING OF TOP AND BOTTOM STATES BY PER CAPITA INCOME AND INTER-STATE DISPARITIES: AT CONSTANT (1980-81) PRICES 1967-68, 1980-81 AND 1985-86

	1967-68		1980-81		1985-86	
	State	Per Capita Income (Rs)	State	Per Capita Income (Rs)	State	Per Capita Income (Rs)
AT CONSTANT (1980-81) PRICES						
A. SIX TOPMOST STATES						
	PNB	2,147	PNB	2,891	PNB	3,422
	HRY	1,979	MAH	2,453	MAH	2,926
	MAH	1,794	HRY	2,314	HRY	2,649
	GUJ	1,737	GUJ	2,042	GUJ	2,029
	TND	1,453	J&K	1,771	TND	1,925
	KER	1,378	KAR	1,725	KAR	1,903
B. SIX BOTTOMMOST STATES						
	KAR	1,124	MPR	1,395	KER	1,599
	ORS	1,086	UPR	1,350	ASM	1,532
	UPR	1,083	ORS	1,309	ORS	1,466
	J&K	1,069	RAJ	1,253	UPR	1,420
	WBL	1,042	ASM	1,175	RAJ	1,391
	BHR	892	BHR	883	BHR	1,055
AVERAGE 17 STATES						
PER CAPITA INCOME(Rs)		1,372		1,667		1,873
DISPARITY RATIO		0.51		0.58		0.57
GINI COEFFICIENT		0.14		0.16		0.16
CV		26.51		29.51		31.17
STD		363.80		492.03		583.66

Note: (A) The average of 17 States excludes All India (B) The Disparity Ratio Obtained from the average of six Topmost States in the Rank Minus the average of six Bottommost States as a Ratio of the average of 17 States (C) Gini Coefficient is measured taking the 17 States and their average, CV and STD also use the data for 17 States only.

TABLE 5. COMAPARABLE ESTIMATES OF NET NATIONAL / STATE DOMESTIC PRODUCT: AT CONSTANT (1980-81) PRICES PER CAPITA: ANNUAL CHANGE OVER PREVIOUS YEAR: 1967-68 TO 1985-86

(per cent)

YEAR	APR	ASM	BHR	GUJ	HRY	HPR	J&K	KAR	KER	MAH	MPR	ORS	PNB	RAJ	TND	UPR	WBL	INDIA
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1968-69	-6.89		0.45	-9.81	-10.51		-2.41	9.73	0.50	0.93	-10.12	10.71	1.11	-23.15	5.05	13.42	3.33	0.00
1969-70	1.78	-1.23	-5.81	4.06	24.02		7.01	3.68	5.92	-0.78	4.10	1.07	0.07	6.03	-2.27	-5.14	1.12	4.46
1970-71	1.00	15.16	7.85	12.08	-5.05		15.79	11.77	-2.13	6.82	1.53	11.82	-7.05	34.78	-4.65	5.09	3.07	2.77
1971-72	1.24	0.88	1.84	1.92	-0.04	2.01	-6.74	2.09	3.30	3.24	4.64	-12.26	0.39	-13.88	3.06	-7.46	0.53	-1.69
1972-73	-8.54	2.84	-2.86	-23.64	-2.71	0.58	-0.15	-4.80	0.54	-9.26	-5.91	7.46	-0.14	-6.58	-0.96	6.67	-3.57	-3.10
1973-74	16.05	-0.80	-9.08	18.36	-5.47	3.18	6.13	9.74	-2.12	12.12	-3.85	4.51	1.91	6.93	3.40	-8.38	-3.15	2.19
1974-75	0.50	-3.09	7.65	-13.54	-1.06	-3.91	8.64	-1.04	-1.98	5.95	-0.25	-14.42	-0.19	-10.35	-8.97	-1.80	12.20	-1.38
1975-76	0.07	5.52	2.28	21.73	16.64	12.99	-12.96	2.43	1.39	2.08	9.13	19.01	6.79	19.94	21.94	8.51	7.04	6.86
1976-77	-9.46	-5.86	4.26	12.26	5.00	-6.75	12.08	-5.02	0.62	-1.00	-7.64	-8.66	10.75	7.86	-4.48	-0.23	-1.27	-1.28
1977-78	10.37	1.06	2.49	3.69	3.85	9.85	10.88	16.19	0.30	5.29	11.13	7.87	8.54	3.67	11.90	1.74	3.85	5.34
1978-79	4.29	-0.90	-1.63	0.91	2.86	3.96	-0.90	-1.20	2.09	3.15	-3.99	16.61	2.66	1.10	0.32	0.94	1.73	3.19
1979-80	-4.38	-8.46	-8.94	0.80	-10.58	-17.59	-3.38	-2.07	-3.30	2.02	-17.57	-23.77	-5.62	-18.78	-10.55	-16.13	6.20	-8.53
AVG	0.50	0.46	-0.12	2.40	1.41	0.48	2.83	3.46	0.43	2.54	-1.57	1.66	1.60	0.63	1.15	-0.23	2.59	0.74
STD	7.16	5.93	5.48	12.62	9.85	8.59	8.22	6.62	2.50	4.97	7.92	12.90	4.98	15.80	8.63	7.86	4.29	4.09
CV	1426.76	1274.46	-4382.92	525.31	697.47	1789.56	290.23	191.38	583.99	195.18	-505.01	775.56	310.77	2504.39	749.91	-3410.08	165.58	554.99
RANGE :H	16.05	15.16	7.85	21.73	24.02	12.99	15.79	16.19	5.92	12.12	11.13	19.01	10.75	34.78	21.94	13.42	12.20	6.86
:L	-9.46	-8.46	-9.08	-23.64	-10.58	-17.59	-12.96	-5.02	-3.30	-9.26	-17.57	-23.77	-7.05	-23.15	-10.55	-16.13	-3.57	-8.53
1981-82	11.46	15.06	5.62	5.78	1.63	5.88	-1.45	4.65	-0.44	4.76	3.15	-0.17	10.31	7.43	12.16	-1.57	2.81	2.46
1982-83	0.00	-3.25	-0.95	-4.49	1.79	-5.21	-2.46	1.54	-1.62	2.07	-0.21	-8.46	-0.67	-1.64	-7.60	5.14	0.88	0.58
1983-84	5.08	10.09	7.66	9.74	-1.55	-0.30	5.46	3.27	-7.08	6.11	7.10	20.40	-0.70	17.38	5.06	0.63	3.19	6.13
1984-85	-3.75	0.49	1.76	-1.50	4.29	-6.60	4.57	5.65	6.59	3.19	-0.46	-8.90	5.49	-8.96	11.47	-0.32	-3.48	1.45
1985-86	3.33	5.87	4.29	-9.01	7.77	6.42	0.21	-4.84	3.47	1.86	6.34	11.71	3.15	-1.68	4.18	1.29	4.04	1.68
AVG	3.22	5.65	3.67	0.10	2.79	0.04	1.27	2.05	0.19	3.60	3.18	2.91	3.52	2.50	5.05	1.04	1.49	2.46
STD	5.11	6.54	3.00	6.81	3.11	5.41	3.19	3.71	4.65	1.62	3.17	11.50	4.14	9.07	7.11	2.27	2.69	1.93
CV	158.35	115.79	81.70	6547.11	111.48	14248.37	251.98	180.75	2489.28	45.10	99.40	394.71	117.62	362.29	140.63	219.13	180.96	78.61
RANGE :H	11.46	15.06	7.66	9.74	7.77	6.42	5.46	5.65	6.59	6.11	7.10	20.40	10.31	17.38	12.16	5.14	4.04	6.13
:L	-3.75	-3.25	-0.95	-9.01	-1.55	-6.60	-2.46	-4.84	-7.08	1.86	-0.46	-8.90	-0.70	-8.96	-7.60	-1.57	-3.48	0.58

TABLE 6. STATES RANKED BY RATES OF GROWTH OF SELECTED SECTORS AND PER CAPITA INCOME 1967-68 TO 1985-86

	1967-68 TO 1979-80				1980-81 TO 1985-86			
	Six Topmost States in Terms of Growth Rates		Six Bottommost States in Terms of Growth Rates		Six Topmost States in Terms of Growth Rates		Six Bottommost States in Terms of Growth Rates	
	State	Growth Rate (%)	State	Growth Rate (%)	State	Growth Rate(%)	State	Growth Rate (%)
A. Per Capita Income	KAR	3.46	HPR	0.48*	ASM	5.65	WBL	1.49
	J&K	2.83	ASM	0.43**	TND	5.05	J&K	1.27
	WBL	2.59	KER	0.43	BHR	3.67	UPR	1.04
	MAH	2.54	BHR	-0.12	MAH	3.60	KER	0.19
	GUJ	2.40	UPR	-0.23	PNB	3.52	GUJ	0.10
	ORS	1.66	MPR	-1.57	APR	3.23	HPR	0.04
Average of 17 States								
Growth Rate(%)		1.19				2.49		
C.V.		106.77				64.22		
STD		1.27				1.60		
B. Agriculture	GUJ	7.56	APR	1.96	TND	9.42	MAH	1.76
	KAR	5.84	ASM	1.70**	PNB	6.51	J&K	1.45
	MAH	4.38	KER	19	WBL	5.50	UPR	0.96
	RAJ	4.11	BHR	12	RAJ	5.23	KER	0.19
	PNB	3.39	UPR	-0.01	BHR	5.01	HPR	0.14
	J&K	3.12	MPR	-1.39	ORS	4.68	GUJ	-2.77
Average of 17 States								
Growth Rate(%)		2.53				3.13		
C.V.		84.73				88.73		
STD		2.15				2.78		
C. Manufacturing	WBL	9.66	GUJ	4.47	ASM	27.57	KAR	4.64
	HRY	6.87	ASM	4.45	J&K	10.59	HPR	3.73
	J&K	6.83	BHR	3.34	APR	8.51	ORS	3.51
	KAR	6.34	MPR	3.34	BHR	8.51	GUJ	3.33
	KER	5.89	PNB	1.15	MAH	7.83	WBL	2.46
	MAH	5.52	HPR	-0.16*	MPR	7.03	KER	-0.03
Average of 17 States								
Growth Rate(%)		4.82				6.92		
C.V		44.64				82.99		
STD		2.15				5.74		
D. Transportation	J&K	18.39	UPR	4.26	ASM	11.46	HPR	5.26
	HRY	9.64	RAJ	4.11	MPR	8.79	KAR	5.24
	HPR	9.57*	KER	3.79	GUJ	8.54	KER	4.63
	PNB	9.39	ASM	3.53**	HRY	7.84	UPR	4.16
	KAR	8.62	TND	2.51	MAH	7.71	WBL	3.86
	ORS	8.50	APR	2.09	APR	7.55	PNB	2.69
Average of 17 States								
Growth Rate(%)		6.59				6.51		
C.V.		58.62				32.18		
STD		3.86				2.10		

Note : * Covers from 1970-71 to 1979-80; ** Covers from 1968-69 to 1979-80

TABLE 7. COMPARABLE ESTIMATES OF NET NATIONAL / STATE DOMESTIC PRODUCT, AT CURRENT PRICES SELECTED SECTORS: PERCENTAGE SHARE OVER SELECTED PERIODS: 1967-68 TO 1985-86

STATE	Agriculture				Manufacturing				Transportation				Others			
	1969-70 to 1973-74	1974-75 to 1978-79	1967-78 to 1979-80	1980-81 to 1985-86	1969-70 to 1973-74	1974-75 to 1978-79	1967-78 to 1979-80	1980-81 to 1985-86	1969-70 to 1973-74	1974-75 to 1978-79	1967-78 to 1979-80	1980-81 to 1985-86	1969-70 to 1973-74	1974-75 to 1978-79	1967-78 to 1979-80	1980-81 to 1985-86
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Andhra Pradesh	56.15	48.53	52.30	42.86	14.59	17.77	16.00	19.46	17.38	20.10	18.78	20.13	11.88	13.60	12.91	17.85
Assam	59.87	54.14	57.64c	46.07	15.73	20.49	17.60c	22.88	13.49	13.98	13.51c	12.92	10.91	11.39	11.25c	18.13
Bihar	55.95	51.69	53.33	44.65	20.07	23.27	22.04	23.27	14.04	15.74	14.80	14.01	9.95	9.31	9.83	17.84
Gujarat	43.60	33.73	38.67	33.30	26.63	32.07	28.74	32.97	16.94	20.15	19.29	15.95	12.83	14.04	13.30	17.78
Haryana	61.40	56.32	58.57	52.45	17.66	18.84	18.24	21.03	12.98	16.73	15.11	13.83	7.96	8.11	8.08	12.68
Himachal Pradesh	52.06a	51.14	51.23b	48.55	25.36a	21.75	22.95b	18.51	7.70a	10.88	9.98b	8.82	14.88a	16.23	15.83b	24.12
Jammu & Kashmir	59.18	52.86	56.61	46.32	13.89	15.52	14.06	11.22	12.74	17.16	14.61	19.45	14.19	14.45	14.72	23.01
Karnataka	53.89	45.28	50.01	37.55	21.76	26.42	23.26	30.42	13.27	16.11	14.91	16.13	11.07	12.19	11.82	15.90
Kerala	50.40	43.70	47.55	37.40	16.86	18.67	17.71	23.64	18.13	21.85	20.07	19.43	14.61	15.79	14.92	19.52
Madhya Pradesh	57.97	53.03	55.12	46.83	17.58	20.81	19.43	22.53	13.51	15.21	14.20	15.37	10.94	10.94	11.24	15.27
Maharastra	27.72	28.39	28.92	24.39	34.55	33.39	33.58	36.67	21.62	22.23	21.68	17.89	16.10	15.98	15.82	21.05
Orissa	65.97	59.08	61.74	54.71	14.14	17.52	15.99	15.43	8.00	11.70	9.96	14.22	11.89	11.70	12.31	15.64
Punjab	60.52	52.33	56.41	47.45	16.70	18.86	17.99	20.46	13.62	19.19	16.31	18.69	9.16	9.61	9.29	13.40
Rajasthan	60.04	56.04	57.03	48.11	15.89	18.01	17.14	19.81	12.67	14.92	14.24	16.58	11.40	11.03	11.59	15.51
Tamil Nadu	39.46	31.54	35.43	22.97	24.24	29.51	26.82	32.91	20.79	23.50	21.98	25.77	15.51	15.45	15.77	18.35
Uttar Pradesh	59.65	53.29	56.76	47.58	14.32	17.10	15.62	17.74	14.31	16.55	15.18	18.81	11.72	13.06	12.44	15.86
West Bengal	42.25	37.96	40.16	31.42	25.07	27.88	26.54	29.88	18.43	19.51	19.10	18.55	14.26	14.66	14.28	20.16
All India	46.78	41.87	44.57	37.49	20.86	23.05	21.78	25.54	12.77	15.28	13.99	17.80	19.59	19.81	19.66	19.18

TABLE 8. COMPARABLE ESTIMATES OF NET NATIONAL / STATE DOMESTIC PRODUCT, AT CONSTANT (1980-81) PRICES SELECTED SECTORS: PERCENTAGE SHARE OVER SELECTED PERIODS: 1967-68 TO 1985-86

STATE	Agriculture				Manufacturing				Transportation				Others			
	1969-70 to 1973-74	1974-75 to 1978-79	1967-78 to 1979-80	1980-81 to 1985-86	1969-70 to 1973-74	1974-75 to 1978-79	1967-78 to 1979-80	1980-81 to 1985-86	1969-70 to 1973-74	1974-75 to 1978-79	1967-78 to 1979-80	1980-81 to 1985-86	1969-70 to 1973-74	1974-75 to 1978-79	1967-78 to 1979-80	1980-81 to 1985-86
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Andhra Pradesh	51.30	48.59	49.28	45.12	15.50	16.94	16.18	18.28	20.65	20.35	21.29	19.67	12.55	14.12	13.25	16.93
Assam	57.15	55.41	56.75c	47.57	21.37	21.98	20.89c	19.46	12.08	12.28	12.30c	13.52	9.40	10.34	10.06c	19.44
Bihar	54.91	52.62	53.93	46.75	23.59	24.86	24.15	22.40	11.44	12.64	12.36	12.59	10.06	9.87	9.57	18.26
Gujarat	40.25	33.80	36.74	34.57	29.02	31.96	30.12	31.44	17.27	20.32	19.61	15.94	13.45	13.91	13.53	18.06
Haryana	60.28	55.91	58.01	54.34	18.23	19.42	18.70	19.91	12.80	16.33	14.69	13.56	8.69	8.30	8.60	12.19
Himachal Pradesh	49.69a	49.81	49.56b	48.67	25.89a	22.23	23.37b	18.40	8.22a	10.73	10.10b	9.09	16.20a	17.22	16.97b	23.84
Jammu & Kashmir	59.16	52.90	56.49	45.61	14.32	14.52	14.05	12.90	11.83	16.85	13.97	18.91	14.69	15.72	15.49	22.59
Karnataka	50.23	45.46	47.20	38.76	23.93	27.06	25.57	29.60	13.80	15.91	14.85	15.68	12.04	11.58	12.39	15.96
Kerala	51.16	44.53	47.92	37.03	17.91	19.94	18.73	23.38	18.77	21.42	20.30	19.71	12.17	14.11	13.05	19.89
Madhya Pradesh	56.90	52.37	54.16	49.72	20.66	23.04	21.95	21.09	13.05	14.89	13.94	15.24	9.39	9.71	9.94	16.18
Maharastra	28.93	30.03	30.07	24.44	33.68	32.70	32.85	36.56	21.89	21.94	22.08	17.83	15.50	15.32	14.99	21.17
Orissa	66.35	61.71	63.21	54.66	16.25	17.75	17.30	15.40	7.54	10.54	9.54	13.88	9.86	9.99	9.95	16.06
Punjab	53.42	48.93	50.34	50.02	21.68	21.18	22.52	20.50	14.98	20.10	17.34	16.52	9.92	9.79	9.80	12.96
Rajasthan	55.86	53.31	53.20	49.38	20.34	21.29	20.76	19.38	13.35	14.60	15.05	15.58	10.45	10.80	10.99	15.66
Tamil Nadu	29.31	25.47	26.80	24.23	25.31	26.59	26.92	32.44	29.51	31.56	30.29	25.50	15.87	16.39	15.99	17.84
Uttar Pradesh	52.83	51.96	52.57	49.86	14.93	17.10	16.27	17.10	19.44	18.29	18.33	17.02	12.80	12.66	12.83	16.01
West Bengal	44.33	39.43	42.01	29.93	18.52	25.62	21.82	31.38	22.75	20.29	21.78	18.17	14.40	14.65	14.39	20.52
All India	44.93	42.58	43.68	38.63	23.09	23.76	23.45	25.13	14.05	15.35	14.72	16.62	17.92	18.31	18.15	19.62

Note : (1) Agriculture includes Agriculture, Forestry & Logging and Fishing Sectors (2) Manufacturing includes Manufacturing (Organised and Unorganised) Mining & Quarrying, Electricity and Construction Sectors (3) Transportation includes *Transportation* (Railways, Transportation by other means and Communication) and Trade, Hotels, Restaurants and Storage Sectors (4) Others includes Banking, Insurance, Real Estate, Public Administration and other Services Sectors
(a) Covers 1970-71 To 1973-74; (b) Covers 1970-71 To 1979-80; (c) Covers 1968-69 To 1979-80.

TABLE 9.1. RANKING OF STATES IN DESCENDING ORDER ACCORDING TO PER CAPITA ANNUAL CONSUMPTION EXPENDITURE (RURAL-URBAN COMBINED)

1966-67	1967-68	1968-69	1969-70	1970-71	1972-73	1973-74	1977-78	1983	1986-87	1987-88
AT CURRENT PRICES										
PNB	PNB	PNB	PNB	PNB	PNB	PNB	PNB	PNB	PNB	PNB
ASM	ASM	RAJ	RAJ	J&K	RAJ	RAJ	RAJ	KER	KER	KER
RAJ	RAJ	ASM	MAH	MAH	GUJ	MAH	MAH	MAH	J&K	J&K
J&K	J&K	J&K	ASM	ASM	MAH	GUJ	GUJ	J&K	MAH	MAH
MAH	WBL	MAH	WBL	WBL	J&K	KER	J&K	RAJ	RAJ	RAJ
UPR	MAH	KER	J&K	GUJ	KAR	BHR	KER	KAR	GUJ	GUJ
WBL	UPR	GUJ	IND	KAR	IND	IND	IND	TND	WBL	TND
IND	IND	IND	GUJ	IND	WBL	KAR	APR	GUJ	TND	IND
GUJ	BHR	WBL	APR	RAJ	KER	WBL	KAR	IND	IND	APR
MPR	GUJ	TND	MPR	KER	MPR	ASM	TND	APR	APR	WBL
APR	KAR	UPR	TND	APR	UPR	APR	UPR	WBL	KAR	KAR
KAR	MPR	KAR	UPR	UPR	ASM	TND	WBL	ASM	UPR	ASM
TND	TND	APR	BHR	MPR	BHR	MPR	MPR	UPR	ASM	MPR
BHR	APR	MPR	KAR	BHR	APR	J&K	ASM	MPR	MPR	UPR
ORS	ORS	BHR	KER	TND	TND	UPR	BHR	ORS	ORS	BHR
KER	KER	ORS	ORS	ORS	ORS	ORS	ORS	BHR	BHR	ORS
AT CONSTANT (1980-81) PRICES										
PNB	PNB	PNB	PNB	PNB	PNB	PNB	PNB	PNB	PNB	PNB
RAJ	RAJ	RAJ	J&K	J&K	RAJ	RAJ	RAJ	RAJ	RAJ	J&K
ASM	J&K	J&K	MAH	MAH	J&K	MAH	MAH	MAH	KER	RAJ
MAH	ASM	MAH	RAJ	RAJ	MAH	TND	GUJ	KER	J&K	KER
J&K	MAH	TND	ASM	ASM	GUJ	ASM	IND	J&K	MAH	MAH
UPR	GUJ	UPR	WBL	UPR	KAR	WBL	UPR	GUJ	GUJ	APR
IND	IND	GUJ	UPR	KAR	UPR	IND	KER	APR	UPR	IND
GUJ	KAR	IND	IND	GUJ	IND	GUJ	J&K	KAR	WBL	GUJ
WBL	APR	ASM	GUJ	IND	WBL	J&K	APR	IND	IND	TND
MPR	WBL	MPR	KAR	WBL	TND	UPR	KAR	WBL	APR	WBL
APR	ORS	APR	TND	TND	ASM	KAR	WBL	TND	TND	UPR
KAR	UPR	KER	BHR	APR	MPR	KER	ASM	UPR	KAR	MPR
ORS	KER	KAR	MPR	MPR	BHR	APR	MPR	ASM	ASM	KAR
KER	MPR	WBL	APR	BHR	KER	MPR	TND	MPR	MPR	ASM
BHR	BHR	BHR	KER	KER	APR	BHR	BHR	ORS	ORS	BHR
		ORS	ORS	ORS	ORS	ORS	ORS	BHR	BHR	ORS

Note: TND at constant prices not shown for the years 1966-67 & 1967-68 due to non-availability of rural cost of living indices.

TABLE 9.2. RANKING OF STATES IN DESCENDING ORDER ACCORDING TO PER CAPITA ANNUAL CONSUMPTION EXPENDITURE (RURAL)

1966-67	1967-68	1968-69	1969-70	1970-71	1972-73	1973-74	1977-78	1983	1986-87	1987-88
AT CURRENT PRICES										
PNB	PNB	PNB	PNB	PNB	PNB	PNB	PNB	PNB	PNB	PNB
RAJ	ASM	RAJ	RAJ	J&K	RAJ	RAJ	RAJ	KER	KER	KER
ASM	RAJ	J&K	J&K	ASM	GUJ	BHR	MAH	J&K	J&K	J&K
J&K	J&K	ASM	ASM	GUJ	J&K	KER	KER	RAJ	RAJ	RAJ
UPR	UPR	KER	IND	MAH	KAR	GUJ	J&K	KAR	GUJ	GUJ
IND	IND	GUJ	APR	KER	IND	IND	GUJ	APR	APR	MAH
MPR	BHR	IND	GUJ	KAR	KER	KAR	APR	ASM	IND	APR
KAR	WBL	UPR	UPR	RAJ	UPR	MAH	IND	GUJ	TND	IND
APR	KAR	MAH	MPR	IND	ASM	J&K	UPR	IND	ASM	TND
BHR	MPR	APR	BHR	UPR	MAH	ASM	KAR	TND	WBL	ASM
GUJ	GUJ	KAR	MAH	APR	BHR	UPR	TND	MAH	UPR	WBL
WBL	MAH	MPR	WBL	WBL	MPR	APR	MPR	WBL	MAH	KAR
TND	APR	TND	TND	BHR	APR	MPR	WBL	UPR	KAR	UPR
MAH	ORS	WBL	KAR	MPR	WBL	TND	ASM	MPR	MPR	MPR
ORS	TND	BHR	KER	TND	TND	WBL	BHR	ORS	BHR	BHR
KER	KER	ORS	ORS	ORS	ORS	ORS	ORS	BHR	ORS	ORS
AT CONSTANT (1980-81) PRICES										
PNB	PNB	PNB	PNB	PNB	PNB	PNB	PNB	PNB	PNB	PNB
RAJ	RAJ	RAJ	J&K	J&K	RAJ	RAJ	RAJ	RAJ	RAJ	J&K
ASM	J&K	J&K	RAJ	UPR	J&K	ASM	MAH	KER	KER	RAJ
UPR	ASM	UPR	ASM	ASM	UPR	UPR	UPR	J&K	J&K	KER
J&K	GUJ	GUJ	UPR	RAJ	GUJ	TND	KER	APR	UPR	APR
GUJ	ORS	IND	BHR	MAH	KAR	J&K	GUJ	UPR	APR	IND
IND	MAH	KER	IND	IND	ASM	IND	IND	GUJ	GUJ	MAH
MPR	APR	ASM	MAH	GUJ	IND	KER	J&K	ASM	IND	UPR
APR	KAR	MAH	GUJ	KAR	BHR	GUJ	APR	IND	ASM	ASM
MAH	IND	MPR	MPR	MPR	MPR	BHR	KAR	KAR	TND	GUJ
KAR	UPR	APR	WBL	APR	TND	MAH	ASM	MAH	WBL	MPR
ORS	KER	TND	KAR	BHR	KER	WBL	MPR	MPR	MAH	KAR
WBL	MPR	BHR	APR	TND	WBL	APR	WBL	TND	KAR	TND
BHR	WBL	KAR	TND	WBL	APR	KAR	BHR	WBL	MPR	WBL
KER	BHR	ORS	ORS	KER	MAH	MPR	ORS	ORS	BHR	BHR
		WBL	KER	ORS	ORS	ORS	TND	BHR	ORS	ORS

Note: TND at constant prices not shown for the years 1966-67 & 1967-68 due to non-availability of rural cost of living indices.

TABLE 9.3. RANKING OF STATES IN DESCENDING ORDER ACCORDING TO PER CAPITA ANNUAL CONSUMPTION EXPENDITURE (URBAN)

AT CURRENT PRICES

1966-67	1967-68	1968-69	1969-70	1970-71	1972-73	1973-74	1977-78	1983	1986-87	1987-88
ASM	ASM	ASM	MAH	PNB	PNB	PNB	PNB	PNB	PNB	MAH
MAH	WBL	WBL	ASM	ASM	MAH	WBL	MAH	MAH	MAH	J&K
WBL	MAH	MAH	WBL	MAH	WBL	MAH	GUJ	KER	WBL	PNB
PNB	PNB	PNB	PNB	WBL	RAJ	ASM	WBL	WBL	KER	ASM
IND	ORS	TND	ORS	RAJ	IND	IND	IND	KAR	RAJ	KER
ORS	IND	ORS	IND	IND	ORS	ORS	RAJ	IND	J&K	IND
MPR	RAJ	RAJ	APR	ORS	MPR	KER	ASM	TND	IND	WBL
RAJ	BHR	IND	BHR	BHR	ASM	RAJ	APR	GUJ	ASM	TND
BHR	UPR	APR	RAJ	KAR	BHR	BHR	MPR	RAJ	TND	GUJ
UPR	GUJ	MPR	MPR	MPR	KER	GUJ	J&K	J&K	ORS	RAJ
GUJ	TND	BHR	KAR	APR	KAR	KAR	KAR	ASM	GUJ	MPR
APR	APR	KAR	GUJ	GUJ	GUJ	MPR	ORS	APR	APR	APR
KER	MPR	UPR	KER	KER	APR	APR	TND	ORS	MPR	ORS
J&K	J&K	GUJ	TND	J&K	TND	TND	BHR	MPR	KAR	KAR
TND	KAR	J&K	UPR	UPR	UPR	UPR	KER	BHR	BHR	
KAR	KER	KER	J&K	TND	J&K	J&K	UPR	UPR	UPR	BHR

AT CONSTANT (1980-81) PRICES

1966-67	1967-68	1968-69	1969-70	1970-71	1972-73	1973-74	1977-78	1983	1986-87	1987-88
ASM	ASM	TND	MAH	PNB	PNB	PNB	PNB	PNB	PNB	PNB
MAH	MAH	MAH	ASM	MAH	MAH	MAH	MAH	MAH	WBL	ASM
WBL	WBL	ASM	PNB	ASM	WBL	WBL	GUJ	WBL	RAJ	MAH
PNB	PNB	WBL	WBL	WBL	RAJ	ASM	IND	KER	MAH	J&K
IND	RAJ	RAJ	ORS	RAJ	IND	ORS	RAJ	RAJ	KER	KER
RAJ	TND	PNB	IND	IND	MPR	IND	WBL	IND	J&K	WBL
MPR	ORS	ORS	RAJ	KAR	ASM	TND	ASM	KAR	IND	IND
ORS	IND	IND	TND	ORS	ORS	RAJ	J&K	GUJ	ASM	RAJ
GUJ	J&K	APR	APR	MPR	KAR	KAR	APR	J&K	ORS	TND
UPR	APR	MPR	KAR	APR	BHR	BHR	MPR	TND	TND	MPR
APR	GUJ	BHR	BHR	J&K	KER	APR	KAR	ASM	GUJ	GUJ
J&K	UPR	J&K	MPR	BHR	GUJ	J&K	TND	APR	APR	APR
TND	BHR	KAR	J&K	GUJ	TND	MPR	ORS	MPR	MPR	ORS
KER	KAR	UPR	GUJ	TND	APR	GUJ	KER	ORS	KAR	KAR
BHR	MPR	GUJ	KER	KER	J&K	KER	BHR	UPR	BHR	UPR
KAR	KER	KER	UPR	UPR	UPR	UPR	UPR	BHR	UPR	BHR

TABLE 10.1. PER CAPITA CONSUMPTION EXPENDITURE BY STATES AND ALL INDIA: INDEX (ALL INDIA = 100) (RURAL-URBAN COMBINED)

STATE	1966-67	1967-68	1968-69	1969-70	1970-71	1972-73	1973-74	1977-78	1983	1986-87	1987-88
AT CURRENT PRICES											
APR	91.52	90.83	94.82	98.05	95.96	92.41	94.59	99.84	99.85	97.55	98.39
ASM	115.62	120.63	109.35	104.96	109.25	93.15	95.18	83.36	93.87	91.75	91.52
BHR	89.38	96.59	87.11	92.55	90.04	92.55	101.11	80.66	79.74	79.10	79.06
GUJ	94.10	96.55	100.91	98.24	103.26	114.54	102.38	106.15	103.16	106.48	103.05
J&K	107.07	106.29	106.91	103.45	116.14	103.81	93.34	101.47	107.92	113.99	121.83
KAR	91.11	93.95	95.05	91.50	101.61	102.68	98.61	94.89	105.51	94.51	95.30
KER	78.45	82.98	102.01	87.80	97.93	96.26	101.69	101.13	120.99	125.74	122.36
MAH	93.10	92.93	92.86	94.26	92.07	95.00	93.44	87.75	88.11	87.29	90.38
MPR	103.80	102.78	106.60	111.50	115.35	111.83	107.79	117.65	109.71	108.86	113.07
ORS	81.67	88.55	83.22	81.50	79.52	80.19	79.65	74.84	84.53	79.87	78.32
PNB	136.62	132.13	153.67	145.70	154.34	161.78	136.21	155.22	139.87	139.91	138.77
RAJ	112.04	110.93	117.44	111.74	99.74	116.14	114.44	141.68	107.44	107.63	105.66
TND	91.06	92.60	99.22	94.04	88.70	91.64	93.53	94.32	103.63	103.16	102.77
UPR	101.29	101.61	95.59	93.14	94.08	93.92	92.98	92.80	88.43	92.34	89.91
WBL	100.75	105.07	99.81	104.30	103.49	98.51	98.61	92.25	97.69	103.34	97.30
IND	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
RANGE	78.45 TO 136.62	82.98 TO 132.13	83.22 TO 153.67	81.50 TO 145.70	79.52 TO 154.34	80.19 TO 161.78	79.65 TO 136.21	74.84 TO 155.22	79.74 TO 139.87	79.10 TO 139.91	79.06 TO 138.77
AT CONSTANT (1980-81) PRICES											
APR	91.52	99.31	94.02	92.04	93.34	88.15	92.87	93.63	102.28	98.79	100.72
ASM	114.38	116.74	95.14	107.48	106.30	95.90	103.64	87.48	94.61	91.81	93.19
BHR	79.77	79.79	87.17	94.03	86.29	92.07	90.94	80.74	77.61	82.31	81.01
GUJ	99.62	104.16	103.25	97.48	100.93	105.06	97.67	105.95	103.05	100.58	97.57
J&K	105.79	117.66	121.84	117.78	125.90	109.44	97.18	94.84	104.05	104.83	112.92
KAR	88.53	99.35	93.51	94.43	101.68	103.77	95.36	93.56	102.06	93.33	94.24
KER	82.79	91.18	93.86	79.42	85.59	91.28	94.89	97.92	106.67	108.70	107.86
MAH	108.62	114.06	110.30	114.63	115.16	107.50	107.05	117.46	107.69	102.94	107.74
MPR	93.08	90.05	94.56	93.38	93.15	95.03	90.94	87.24	93.06	90.09	94.31
ORS	83.25	94.99	77.84	78.68	78.69	78.51	84.62	74.96	78.90	83.10	80.21
PNB	156.61	146.79	155.57	149.70	160.27	165.89	147.16	160.13	152.32	145.57	144.28
RAJ	128.61	130.58	125.65	114.26	108.26	121.12	115.72	147.00	121.61	112.02	110.38
TND	NA	NA	107.77	94.11	94.38	98.35	104.93	85.17	97.36	97.21	96.73
UPR	104.98	94.67	106.86	101.13	105.81	100.55	95.92	99.99	97.02	100.58	94.61
WBL	98.44	98.78	91.07	101.83	98.02	99.20	101.61	90.59	97.85	100.13	96.73
IND	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
RANGE	79.77 TO 156.61	79.79 TO 146.79	77.84 TO 155.57	78.68 TO 149.70	78.69 TO 160.27	78.51 TO 165.89	84.62 TO 147.16	74.96 TO 160.13	77.61 TO 152.32	82.31 TO 145.57	80.21 TO 144.28

TABLE 10.2. PER CAPITA CONSUMPTION EXPENDITURE BY STATES AND ALL INDIA: INDEX (ALL INDIA = 100)
(RURAL)

STATE	1966-67	1967-68	1968-69	1969-70	1970-71	1972-73	1973-74	1977-78	1983	1986-87	1987-88
					AT CURRENT PRICES						
APR	94.30	91.20	94.53	99.54	97.28	94.02	95.59	101.12	102.62	100.00	101.28
ASM	119.19	124.34	112.86	108.62	114.05	98.46	98.15	85.57	100.49	99.13	97.15
BHR	93.92	99.88	89.46	96.97	93.88	97.35	105.66	83.39	83.37	83.33	86.38
GUJ	93.82	93.86	103.72	99.08	103.77	122.16	102.79	102.05	100.24	108.36	101.96
J&K	116.38	112.19	114.51	111.64	127.07	113.75	98.55	105.76	114.96	122.47	131.16
KAR	94.79	95.60	93.75	89.57	101.39	105.22	98.70	94.27	103.90	91.66	94.33
KER	79.48	85.45	108.50	89.54	102.29	99.69	104.41	107.74	129.12	138.92	133.76
MPR	95.70	95.12	93.51	97.06	93.12	96.22	95.06	86.99	89.39	86.57	89.80
MAH	92.33	91.80	96.25	95.73	103.06	98.18	98.60	111.58	98.21	96.58	101.69
ORS	84.79	90.54	84.71	82.71	81.73	82.61	80.48	76.16	87.82	81.03	80.65
PNB	148.87	138.95	169.90	155.19	164.23	176.32	142.44	166.05	151.64	150.19	154.45
RAJ	120.19	115.03	123.34	118.90	100.23	122.83	120.75	157.85	112.94	111.57	112.49
TND	92.52	88.65	90.18	92.45	84.91	89.08	90.06	91.93	99.80	99.32	97.59
UPR	107.28	105.21	99.40	97.98	99.35	99.53	96.81	97.26	92.92	98.47	94.04
WBL	93.79	97.69	89.67	94.70	94.36	90.86	89.61	86.04	93.01	98.64	94.79
IND	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
RANGE	79.48 TO 148.87	85.45 TO 138.95	84.71 TO 169.90	82.71 TO 155.19	81.73 TO 164.23	82.61 TO 176.32	80.48 TO 142.44	76.16 TO 166.05	83.37 TO 151.64	81.03 TO 150.19	80.65 TO 154.45
					AT CONSTANT(1980-81)PRICES						
APR	93.95	101.15	92.53	91.68	93.67	88.81	93.25	93.48	105.88	101.67	104.93
ASM	121.00	125.03	98.73	113.25	111.73	102.80	109.19	90.79	100.66	96.10	96.18
BHR	85.25	83.51	90.81	100.02	90.44	98.01	95.33	83.69	80.38	85.23	86.57
GUJ	100.02	103.07	106.97	97.60	99.65	107.76	97.12	101.51	101.65	101.64	96.07
J&K	114.27	125.87	132.01	129.09	138.59	119.56	100.02	95.68	108.51	108.31	117.60
KAR	90.01	100.95	90.47	91.83	99.34	105.18	93.20	91.56	99.65	91.51	94.00
KER	84.83	97.40	99.49	79.25	86.35	93.31	99.16	102.59	110.72	113.72	112.13
MPR	96.43	93.08	95.84	96.12	94.60	96.53	92.95	87.12	95.05	90.47	95.19
MAH	93.67	101.17	98.04	97.98	100.97	88.66	93.82	109.20	98.64	93.81	99.71
ORS	89.69	101.43	79.84	80.68	81.75	81.73	87.10	76.59	80.92	83.34	81.37
PNB	179.22	160.37	176.29	162.76	174.07	183.74	157.33	174.58	166.88	152.82	158.35
RAJ	142.92	141.11	133.75	122.13	110.32	129.28	123.00	165.37	130.81	114.61	116.39
TND	NA	NA	92.33	85.71	88.69	96.33	101.85	75.81	92.74	94.36	93.09
UPR	114.28	99.19	114.17	108.99	114.64	108.86	102.21	107.33	103.65	107.31	98.64
WBL	89.34	87.59	78.72	92.27	88.41	92.56	93.52	84.22	91.26	94.04	92.59
IND	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
RANGE	84.83 TO 179.22	83.51 TO 160.37	78.72 TO 176.29	79.25 TO 162.76	81.75 TO 174.07	81.73 TO 183.74	87.10 TO 157.33	75.81 TO 174.58	80.38 TO 166.88	83.34 TO 152.82	81.37 TO 158.35

TABLE 10.3. PER CAPITA CONSUMPTION EXPENDITURE BY STATES AND ALL INDIA: INDEX (ALL INDIA = 100) (URBAN)

STATE	1966-67	1967-68	1968-69	1969-70	1970-71	1972-73	1973-74	1977-78	1983	1986-87	1987-88
AT CURRENT PRICES											
APR	83.83	90.48	96.52	94.62	93.23	88.93	92.27	96.95	93.57	92.17	92.14
ASM	135.70	131.17	121.48	120.10	121.55	95.93	102.80	98.21	93.89	98.70	108.00
BHR	87.45	98.84	95.87	93.57	96.54	94.60	96.59	86.47	84.45	86.15	74.61
GUJ	86.10	94.79	87.34	87.80	92.39	90.92	94.33	104.96	99.74	95.42	96.29
J&K	79.52	88.29	84.23	80.61	86.74	77.97	78.72	91.91	94.67	101.33	108.35
KAR	77.55	85.65	93.18	90.49	95.95	91.41	93.97	91.10	101.40	91.13	89.14
KER	79.59	77.79	83.38	87.54	90.12	92.01	97.40	86.04	107.52	105.05	106.52
MPR	89.99	89.83	96.33	90.83	95.31	97.71	92.55	94.55	88.32	91.90	94.42
MAH	111.05	112.49	113.08	123.44	119.77	118.17	112.73	114.75	112.39	109.20	111.84
ORS	94.25	105.50	104.82	108.47	99.81	98.45	99.04	90.47	92.31	97.44	90.11
PNB	100.90	109.52	108.04	116.83	124.67	122.97	116.56	126.53	112.91	116.57	108.01
RAJ	88.44	99.66	100.98	92.72	102.42	100.85	97.16	99.51	97.49	103.06	95.17
TND	79.28	92.11	105.73	86.72	84.56	85.30	91.54	89.59	99.82	98.11	99.54
UPR	87.27	95.35	89.23	84.44	85.47	84.56	85.93	85.80	82.59	84.62	86.72
WBL	108.46	116.07	116.25	117.72	115.21	107.74	114.12	101.02	103.61	108.97	99.81
IND	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
RANGE	77.55 TO 135.70	77.79 TO 131.17	83.38 TO 121.48	80.61 TO 123.44	84.56 TO 124.67	77.97 TO 122.97	78.72 TO 116.56	85.80 TO 126.53	82.59 TO 112.91	84.62 TO 116.57	74.61 TO 111.84
AT CONSTANT (1980-81) PRICES											
APR	86.25	95.55	99.25	94.05	93.49	87.37	92.58	94.39	94.08	91.92	91.20
ASM	132.37	120.11	110.97	117.96	118.46	96.43	106.08	98.35	95.32	99.74	111.53
BHR	81.81	89.76	94.37	92.88	93.29	92.68	92.60	86.60	84.20	87.20	75.45
GUJ	87.06	94.11	86.57	87.00	92.41	89.71	89.99	104.82	97.92	93.11	93.92
J&K	85.51	97.86	94.29	88.57	93.43	85.22	91.29	95.06	96.54	100.17	106.37
KAR	78.94	89.04	94.18	93.45	99.70	94.17	94.33	92.17	99.86	90.80	88.77
KER	83.26	78.28	80.95	86.29	89.99	92.55	87.10	89.61	102.94	102.15	104.30
MPR	91.09	88.10	97.34	91.83	95.88	97.85	90.22	92.24	91.34	91.29	94.30
MAH	113.72	116.57	115.58	123.71	120.30	118.83	114.44	116.91	108.48	105.33	107.70
ORS	88.42	103.08	101.00	104.78	96.49	95.67	101.37	90.05	89.58	98.32	90.88
PNB	100.58	109.25	101.65	113.49	122.41	121.07	118.53	124.13	119.78	126.93	114.66
RAJ	93.12	105.35	105.05	95.57	107.06	103.58	98.10	99.79	102.35	108.53	99.15
TND	85.25	104.17	120.29	95.34	91.21	89.03	98.80	91.25	95.78	94.59	94.99
UPR	86.84	92.03	91.12	85.04	86.99	84.89	83.07	84.19	84.73	87.09	88.77
WBL	105.93	111.37	109.55	112.87	109.68	104.91	112.43	99.36	107.78	110.55	103.50
IND	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
RANGE	78.94 TO 132.37	78.28 TO 120.11	80.95 TO 120.29	85.04 TO 123.71	86.99 TO 122.41	84.89 TO 121.07	83.07 TO 118.53	84.19 TO 124.13	84.20 TO 119.78	87.09 TO 126.93	75.45 TO 114.66

TABLE 11.1. PER CAPITA ANNUAL CONSUMPTION EXPENDITURE BY STATES AND ALL INDIA: RANKING BY AVERAGE ANNUAL RATES OF GROWTH (PER CENT) (RURAL-URBAN COMBINED)

1967-68	1968-69	1969-70	1970-71	1972-73	1973-74	1977-78	1983-84	1986-87	1987-88
ORS	UPR	ASM	KER	RAJ	ASM	RAJ	TND	BHR	J&K
KAR	BHR	WBL	KAR	BHR	ORS	MAH	J&K	ORS	MPR
J&K	PNB	BHR	PNB	KER	TND	PNB	APR	UPR	MAH
KER	MPR	MAH	J&K	TND	APR	GUJ	KAR	WBL	APR
APR	J&K	ORS	UPR	GUJ	KER	UPR	KER	KER	ASM
MAH	KER	KAR	GUJ	PNB	WBL	KER	ASM	J&K	KAR
GUJ	IND	IND	APR	KAR	IND	APR	WBL	IND	IND
ASM	GUJ	MPR	MAH	MPR	MAH	IND	MPR	TND	TND
RAJ	MAH	APR	TND	WBL	BHR	KAR	ORS	GUJ	KER
WBL	RAJ	J&K	ORS	IND	MPR	J&K	IND	ASM	PNB
BHR	APR	PNB	IND	ORS	RAJ	MPR	GUJ	MPR	RAJ
IND	KAR	UPR	MPR	UPR	UPR	WBL	UPR	APR	BHR
MPR	WBL	GUJ	ASM	APR	GUJ	BHR	BHR	MAH	GUJ
PNB	ORS	RAJ	WBL	MAH	KAR	ORS	PNB	PNB	WBL
UPR	ASM	TND	RAJ	ASM	J&K	ASM	MAH	RAJ	ORS
		KER	BHR	J&K	PNB	TND	RAJ	KAR	UPR

TABLE 11.2. PER CAPITA ANNUAL CONSUMPTION EXPENDITURE BY STATES AND ALL INDIA: RANKING BY AVERAGE ANNUAL RATES OF GROWTH (PER CENT) (RURAL)

1967-68	1968-69	1969-70	1970-71	1972-73	1973-74	1977-78	1983	1986-87	1987-88
KER	UPR	WBL	KER	RAJ	ORS	RAJ	TND	BHR	J&K
ORS	PNB	ASM	KAR	TND	KER	MAH	J&K	UPR	MAH
KAR	BHR	BHR	J&K	BHR	ASM	PNB	APR	WBL	MPR
J&K	J&K	KAR	PNB	GUJ	MAH	UPR	ASM	ORS	PNB
MAH	GUJ	ORS	UPR	KER	TND	GUJ	MPR	KER	APR
APR	MPR	MPR	TND	KAR	APR	KER	KAR	TND	KAR
ASM	KER	IND	MAH	PNB	WBL	APR	WBL	IND	BHR
GUJ	IND	MAH	APR	WBL	IND	IND	KER	GUJ	RAJ
IND	MAH	APR	GUJ	MPR	BHR	KAR	ORS	J&K	ASM
RAJ	RAJ	J&K	ORS	IND	MPR	J&K	GUJ	APR	IND
WBL	APR	UPR	IND	ORS	RAJ	MPR	IND	ASM	TND
BHR	WBL	TND	ASM	UPR	UPR	WBI	UPR	MPR	KER
MPR	KAR	PNB	MPR	APR	GUJ	ORS	BHR	MAH	WBL
PNB	ASM	RAJ	WBL	ASM	KAR	BHR	PNB	KAR	ORS
UPR	ORS	GUJ	BHR	MAH	PNB	ASM	MAH	PNB	GUJ
		KER	RAJ	J&K	J&K	TND	RAJ	RAJ	UPR

TABLE 11.3. PER CAPITA ANNUAL CONSUMPTION EXPENDITURE BY STATES AND ALL INDIA: RANKING BY AVERAGE ANNUAL RATES OF GROWTH (PER CENT) (URBAN)

1967-68	1968-69	1969-70	1970-71	1972-73	1973-74	1977-78	1983	1986-87	1987-88
TND	TND	PNB	RAJ	KER	TND	GUJ	KER	ORS	ASM
ORS	MPR	MAH	PNB	MPR	ASM	PNB	WBL	RAJ	J&K
J&K	KAR	KER	KAR	IND	WBL	J&K	KAR	PNB	MPR
RAJ	BHR	ASM	GUJ	BHR	J&K	KER	TND	ASM	MAH
KAR	APR	ORS	J&K	ORS	APR	MPR	RAJ	J&K	KER
APR	KER	WBL	MPR	PNB	ORS	MAH	J&K	BHR	UPR
BHR	IND	GUJ	KER	MAH	GUJ	APR	UPR	UPR	GUJ
PNB	RAJ	IND	UPR	TND	KAR	RAJ	IND	WBL	TND
GUJ	MAH	KAR	BHR	UPR	IND	UPR	APR	IND	IND
UPR	UPR	BHR	ASM	GUJ	BHR	IND	ORS	MPR	APR
WBL	WBL	APR	IND	RAJ	PNB	KAR	MPR	KER	KAR
MAH	ORS	MPR	APR	WBL	UPR	BHR	BHR	TND	WBL
IND	J&K	J&K	MAH	KAR	MAH	ASM	ASM	APR	ORS
MPR	PNB	UPR	WBL	APR	RAJ	TND	PNB	MAH	RAJ
KER	ASM	RAJ	TND	J&K	KER	ORS	GUJ	GUJ	PNB
ASM	GUJ	TND	ORS	ASM	MPR	WBL	MAH	KAR	BHR

TABLE 12. PER-CAPITA CONSUMPTION EXPENDITURE AT CONSTANT (1980-81) PRICES PATTERN OF ANNUAL AVERAGE RATES OF GROWTH AT STATE AND ALL INDIA LEVEL

States	Average (P.C)	Standard Deviation	Coefficient of Variation	Range (P.C)	Average (P.C)	Standard Deviation	Coefficient of Variation	Range (P.C)	Average (P.C)	Standard Deviation	Coefficient of Variation	Range (P.C)
	RURAL-URBAN COMBINED				RURAL				URBAN			
APR	2.60	1.67	64.30	[(6.36)-(0.67)]	2.81	2.28	80.99	[8.52)-(0.53)]	1.59	1.91	120.17	[(6.55)-(-0.38)]
ASM	1.45	7.46	514.61	[(17.22)-(-11.45)]	1.41	7.62	538.55	[(17.67)-(-12.45)]	0.92	9.12	990.37	[(16.06)-(-17.30)]
BHR	2.91	7.85	270.03	[(18.71)-(-7.95)]	3.29	8.71	265.04	[(20.56)-(-9.42)]	0.50	5.02	1,011.19	[(7.84)-(-10.20)]
GUJ	1.36	4.04	296.36	[(7.71)-(-6.15)]	1.26	6.42	509.71	[(15.56)-(-6.85)]	1.42	4.33	305.01	[(7.71)-(-5.64)]
J&K	2.84	6.35	223.61	[(12.52)-(-10.35)]	2.83	7.73	272.99	[(16.27)-(-13.54)]	2.69	3.34	124.17	[(10.21)-(-1.17)]
KAR	2.52	3.83	152.18	[(8.01)-(-7.23)]	2.44	4.47	183.29	[(8.37)-(-8.42)]	2.31	3.75	162.09	[(8.50)-(-5.18)]
KER	3.40	6.02	176.96	[(11.85)-(-12.20)]	3.97	8.33	209.76	[(13.24)-(-18.28)]	1.78	7.87	441.25	[(13.61)-(-14.30)]
MPR	2.10	6.00	285.83	[(14.09)-(-9.70)]	2.20	5.76	261.26	[(14.15)-(-9.20)]	1.10	7.62	690.85	[(13.33)-(-12.72)]
MAH	2.56	3.29	128.38	[(7.84)-(-1.99)]	3.65	3.91	106.94	[(9.37)-(-3.20)]	0.99	6.13	617.00	[(14.08)-(-8.83)]
ORS	1.84	5.38	291.64	[(8.81)-(-10.97)]	1.71	5.84	342.65	[(10.14)-(-12.73)]	1.44	5.19	361.69	[(10.57)-(-7.71)]
PNB	1.29	7.67	595.05	[(15.15)-(-12.51)]	1.36	10.07	740.58	[(21.87)-(-15.87)]	1.85	7.43	400.75	[(19.00)-(-7.32)]
RAJ	0.39	5.46	1,400.98	[(10.03)-(-5.64)]	0.36	7.05	1,933.33	[(12.46)-(-9.51)]	0.88	5.81	661.56	[(12.27)-(-10.34)]
TND	1.35	4.66	345.85	[(7.71)-(-9.38)]	2.59	5.06	195.42	[(9.28)-(-5.37)]	2.49	8.52	341.71	[(18.44)-(-15.52)]
UPR	1.22	9.17	753.96	[(22.64)-(-15.83)]	1.24	10.99	888.65	[(27.61)-(-18.36)]	0.71	3.61	508.56	[(5.79)-(-7.37)]
WBL	1.90	5.81	304.93	[(16.03)-(-6.34)]	2.50	7.18	287.33	[(20.25)-(-7.79)]	0.79	3.91	493.97	[(9.82)-(-4.18)]
IND	1.97	3.72	188.88	[(8.65)-(-6.66)]	2.27	3.98	175.67	[(10.86)-(-5.94)]	0.73	4.40	599.47	[(6.58)-(-8.85)]

TABLE 13. ALTERNATIVE MEASURES OF INTER-STATE DISPARITY IN PER CAPITA CONSUMPTION EXPENDITURE

	1966-67	1967-68	1968-69	1969-70	1970-71	1972-73	1973-74	1977-78	1983	1986-87	1987-88
AT CURRENT PRICES											
(RURAL -URBAN COMBINED)											
C.V	14.29	12.29	15.47	14.36	16.30	17.77	12.19	20.81	14.32	15.49	15.74
G.C	0.0765	0.0661	0.0738	0.0704	0.0805	0.0808	0.0597	0.1071	0.0772	0.0852	0.0870
D.R	0.26	0.23	0.25	0.24	0.27	0.28	0.19	0.35	0.27	0.30	0.30
(RURAL)											
C.V	16.81	14.20	19.64	16.40	18.45	20.61	13.79	24.00	16.32	18.10	18.56
G.C	0.0849	0.0743	0.0924	0.0768	0.0865	0.0947	0.0669	0.1181	0.0834	0.0950	0.0952
D.R	0.28	0.26	0.32	0.25	0.28	0.32	0.21	0.40	0.28	0.32	0.33
(URBAN)											
C.V	16.40	13.38	11.30	14.33	13.08	12.18	10.23	11.25	9.01	8.74	10.08
G.C	0.0833	0.0735	0.0644	0.0776	0.0716	0.0659	0.0556	0.0587	0.0511	0.0495	0.0561
D.R	0.26	0.25	0.23	0.27	0.25	0.21	0.18	0.19	0.17	0.17	0.19
AT CONSTANT (1980-81) PRICES											
(RURAL -URBAN COMBINED)											
C.V	19.34	16.28	17.79	16.59	18.42	18.64	14.10	22.67	16.53	14.35	14.64
G.C	0.1011	0.0880	0.0917	0.0859	0.0929	0.0868	0.0663	0.1128	0.0814	0.0704	0.0735
D.R	0.33	0.30	0.32	0.29	0.32	0.29	0.22	0.37	0.26	0.23	0.24
(RURAL)											
C.V	23.98	19.19	23.23	20.30	22.05	22.50	16.36	27.45	19.55	16.11	17.31
G.C	0.1176	0.0985	0.1155	0.1043	0.1070	0.1048	0.0718	0.1313	0.0944	0.0793	0.0834
D.R	0.40	0.33	0.40	0.36	0.37	0.36	0.23	0.44	0.31	0.27	0.28
(URBAN)											
C.V	14.85	11.32	10.39	12.21	11.34	11.00	10.40	10.86	9.27	10.31	10.27
G.C	0.0737	0.0643	0.0586	0.0662	0.0611	0.0583	0.0577	0.0563	0.0512	0.0550	0.0574
D.R	0.23	0.23	0.20	0.23	0.22	0.19	0.20	0.18	0.17	0.19	0.20
INTER STATE COEFFICIENT OF VARIATION IN PRICE INDICES (BASE-1980-81)											
COMBINED	6.30	9.70	7.45	5.30	6.21	4.51	5.95	4.50	6.45	6.01	5.25
RURAL	7.51	10.80	8.07	6.70	7.43	6.28	6.76	7.13	7.73	7.17	6.28
URBAN	4.15	6.02	5.71	3.88	3.63	2.96	5.59	1.99	3.26	3.14	2.97

Note: C.V = Coefficient of Variation.
G.C = Gini Coefficient.
D.R = Disparity Ratio defined as the Ratio of [Average of Top Six Minus Average of Bottom Six] and All-India.

TABLE 14. PER CAPITA CONSUMPTION EXPENDITURE BY STATES AND ALL INDIA: RANKING BY URBAN - RURAL DISPARITY IN DESCENDING ORDER

1966-67	1967-68	1968-69	1969-70	1970-71	1972-73	1973-74	1977-78	1983	1986-87	1987-88
AT CURRENT PRICES										
MAH	MAH	WBL	ORS	ORS	MAH	WBL	ORS	MAH	ORS	ORS
WBL	WBL	ORS	MAH	WBL	ORS	ORS	WBL	WBL	MAH	ASM
ASM	ORS	MAH	WBL	MAH	WBL	MAH	ASM	ORS	WBL	MAH
ORS	ASM	TND	ASM	ASM	MPR	ASM	MPR	BHR	MPR	WBL
KER	TND	ASM	KAR	BHR	IND	TND	BHR	TND	BHR	MPR
IND	GUJ	BHR	IND	MPR	ASM	IND	GUJ	IND	IND	TND
MPR	IND	MPR	KER	RAJ	BHR	MPR	MAH	GUJ	ASM	IND
BHR	APR	APR	BHR	IND	TND	APR	IND	MPR	KAR	KAR
GUJ	BHR	IND	APR	TND	APR	KAR	TND	KAR	TND	GUJ
APR	MPR	KAR	TND	APR	KER	KER	KAR	ASM	RAJ	UPR
TND	KER	UPR	MPR	KAR	KAR	GUJ	APR	APR	APR	APR
KAR	UPR	GUJ	GUJ	GUJ	UPR	BHR	UPR	UPR	GUJ	BHR
UPR	KAR	RAJ	UPR	KER	RAJ	UPR	J&K	RAJ	UPR	RAJ
RAJ	RAJ	KER	RAJ	UPR	GUJ	PNB	KER	KER	J&K	J&K
J&K	PNB	J&K	PNB	PNB	PNB	RAJ	PNB	J&K	PNB	KER
PNB	J&K	PNB	J&K	J&K	J&K	J&K	RAJ	PNB	KER	PNB
AT CONSTANT (1980-81) PRICES										
MAH	WBL	WBL	ORS	WBL	MAH	MAH	TND	WBL	ORS	ASM
WBL	MAH	TND	MAH	MAH	ORS	WBL	WBL	ORS	WBL	WBL
ASM	BHR	ORS	WBL	ORS	WBL	ORS	ORS	MAH	MAH	ORS
IND	ORS	MAH	TND	ASM	MPR	KAR	ASM	BHR	ASM	MAH
ORS	IND	ASM	KER	KER	IND	IND	MAH	TND	BHR	TND
KER	ASM	APR	ASM	BHR	KER	APR	MPR	KAR	MPR	IND
BHR	MPR	KAR	APR	TND	APR	ASM	BHR	IND	TND	MPR
MPR	APR	BHR	KAR	MPR	BHR	BHR	GUJ	GUJ	IND	GUJ
APR	UPR	MPR	IND	KAR	ASM	MPR	APR	MPR	KAR	KAR
KAR	GUJ	IND	MPR	IND	TND	TND	KAR	ASM	RAJ	KER
GUJ	KAR	KER	BHR	APR	KAR	GUJ	IND	KER	J&K	J&K
UPR	KER	GUJ	GUJ	RAJ	GUJ	J&K	J&K	J&K	GUJ	UPR
J&K	J&K	UPR	RAJ	GUJ	RAJ	KER	KER	APR	APR	BHR
RAJ	RAJ	RAJ	UPR	UPR	UPR	UPR	UPR	UPR	KER	APR
PNB	PNB	J&K	PNB	PNB	J&K	RAJ	PNB	RAJ	PNB	RAJ
		PNB	J&K	J&K	PNB	PNB	RAJ	PNB	UPR	PNB

Note: Urban-Rural Disparity for each state each year is measured as the absolute difference between the urban and rural per capita consumption expediture as percentage of urban per capita consumption expenditure. [{(Urban-Rural)/Urban}*100]

APPENDIX A. COMPARABLE ESTIMATES OF NET NATIONAL / STATE DOMESTIC PRODUCT: 1967-68 TO 1985-86

(Rs lakh)

State	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86
A.1 AT CURRENT PRICES																			
APR	215841	217792	233890	252494	276208	296930	394926	472460	422624	431016	501578	553008	610429	750111	909182	990706	1211448	1269209	1416709
ASM		86397	84526	82289	83175	97207	107262	139138	143515	156364	178948	182497	195986	230729	309827	327776	393060	465925	528076
BHR	220585	216298	221165	233564	248777	290455	331631	427219	412557	449860	486172	522513	531062	611424	734903	827324	969824	1142014	1277846
GUJ	164757	156434	180016	222837	231720	209380	314833	303211	364527	452564	500792	527230	618786	689105	850515	895750	1105388	1154468	1145584
HRY	71336	67432	88194	92464	102209	113043	135103	152471	167546	199374	233959	241541	252555	296068	343912	387616	416563	464903	536881
HPR				23183	25579	29071	34811	40472	44342	41613	49864	54889	53463	70087	83500	88550	97377	98061	112488
J&K	17458	17565	20371	25283	26518	28971	35573	45037	43004	50239	62947	68451	75112	104646	116991	128892	149375	175073	184291
KAR	139660	153123	167382	195728	206813	223589	306061	348215	333384	357840	420529	437765	515461	633860	737752	828745	978485	1101567	1162729
KER	101925	108391	124910	134240	136739	156747	197922	223568	235347	264210	278913	305295	322868	403210	436161	495316	573124	648615	696381
MAH	307276	319083	349528	403994	438150	455696	614537	777039	803227	863971	961393	1073443	1256097	1527575	1786727	1932505	2270745	2549625	2836068
MPR	178341	169251	191067	201254	227949	254935	319571	379272	372048	389467	469402	459712	456786	721823	803519	901116	1062298	1121461	1329020
ORS	92898	102270	109033	117477	117055	143292	177397	185034	202091	197392	230448	265058	249359	343132	390642	394916	519939	518687	625082
PNB	111007	121673	129882	143209	151025	167688	209515	227645	246617	304839	350686	376724	410722	480655	586817	636896	699319	799490	889876
RAJ	118688	96726	115442	160157	149772	161446	228308	244169	254649	311676	354410	376731	345073	423538	508281	574674	719680	717391	798063
TND	201288	211813	235957	250595	287004	300715	369868	418013	438567	475664	544173	575132	633333	733709	904479	914066	1071027	1265703	1463546
UPR	406538	334264	426195	431591	449657	565838	625830	697113	697132	799969	891298	933047	979049	1481050	1571774	1828520	2000192	2200054	2505435
WBL	269360	275051	293700	319584	348312	358208	435322	523941	546894	598659	651516	680508	766801	866653	983983	1100427	1280301	1470874	1571774
IND	3000300	3156600	3469200	3678700	3900800	4281200	5268700	6158100	6487800	6975600	7998200	8545400	9217100	11034000	12875700	14250900	16749400	18648600	20723900
A.2 AT CONSTANT (1980-81) PRICES																			
APR	524075	497070	515842	531418	548547	510959	603541	617111	628167	578354	648867	707332	690492	750111	853412	870286	931864	913840	961405
ASM		159554	162257	176673	183776	195312	200112	200203	218016	211743	220657	223921	211510	230729	273213	270861	305085	313393	339126
BHR	469729	481033	462125	508358	527899	523277	485446	533053	555979	590956	617365	626346	583937	611424	660398	668312	734827	763629	813354
GUJ	423946	392075	418595	481643	502549	392412	474962	419874	522448	599352	634923	668205	691360	689105	745748	727264	815020	818605	759135
HRY	179614	164960	210345	206877	211329	210088	203006	205379	244922	262948	279262	301201	277017	296068	308797	323094	327275	350944	388367
HPR				49019	51041	52451	55286	54244	62571	59527	66723	70785	59949	70087	75709	73157	74341	70767	76648
J&K	45093	45142	49555	58698	56455	57934	63170	70488	62993	72460	82444	83800	83140	104646	105446	105294	113738	121771	124811
KAR	305475	342202	362249	414278	431990	419801	470222	474848	496230	480702	569526	588436	591519	633860	679305	705385	744317	803029	779896
KER	270723	278612	301962	303093	320467	329670	329777	330064	341497	350402	358090	367069	360792	403210	407751	408352	386520	419720	442144
MAH	830153	858543	872189	955659	1009282	935213	1070174	1156566	1203729	1214409	1302432	1399908	1459072	1527575	1634097	1704557	1848660	1948464	2024222
MPR	456351	419820	448778	467041	502707	487066	481229	492535	550995	521217	592444	571803	481617	720823	760431	775449	848980	864390	939033
ORS	220238	249373	257729	294967	264647	290739	310655	271762	330491	308338	339655	397157	308339	343132	348151	324391	397780	369108	419875
PNB	270771	278868	284382	271029	276760	280913	291185	295703	321297	362064	399955	429130	416056	480655	542090	549942	557326	599396	629418
RAJ	310655	244780	265787	367461	324895	312164	343137	316086	389380	431138	458649	478343	401667	423538	468731	474020	571521	534166	539118
TND	556973	579296	595463	578851	608105	611341	641598	592735	733262	710317	805904	838541	761104	733709	834278	783447	837206	949366	1005502
UPR	898416	902284	1003075	1071634	1009929	1096947	1023597	1023875	1131523	1149696	1191165	1261177	1084113	1481050	1492828	1603892	1647670	1675849	1732340
WBL	426088	450938	467019	491924	507147	502219	498976	573813	629105	635726	675200	684907	743260	866653	909333	935904	985136	969686	1028593
IND	7245900	7418100	7913700	8317200	8373300	8304200	8680700	8752800	9574100	9653700	10398600	10966800	10279400	11034000	11710100	12032000	13039600	13502100	14026000

Note : Data for the period 1967-68 to 1979-80 are not strictly comparable with the series for the subsequent period.

APPENDIX B. COMAPARABLE ESTIMATES OF NET NATIONAL / STATE DOMESTIC PRODUCT: PER CAPITA 1967-68 TO 1985-86

(Rs)

State	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86
B.1 : AT CURRENT PRICES																			
APR	531	526	554	586	629	664	868	1020	897	900	1030	1087	1175	1413	1678	1793	2152	2213	2425
ASM		583	554	570	559	632	676	849	848	896	994	990	1031	1175	1534	1583	1855	2152	2386
BHR	419	403	404	418	437	500	559	706	669	716	759	791	785	883	1038	1144	1313	1513	1658
GUJ	675	625	701	845	859	759	1116	1051	1236	1502	1626	1642	1877	2042	2464	2541	3071	3145	3062
HRY	786	724	921	932	1008	1091	1276	1408	1514	1761	2021	1990	2023	2314	2619	2872	3000	3256	3662
HPR				676	731	813	953	1086	1165	1072	1259	1358	1287	1651	1928	2005	2163	2139	2410
J&K	414	406	459	557	566	602	720	887	825	939	1146	1215	1299	1771	1936	2083	2358	2699	2777
KAR	514	552	591	675	699	740	992	1106	1038	1093	1259	1254	1438	1725	1960	2153	2488	2743	2837
KER	519	539	607	636	633	709	876	969	1000	1101	1141	1243	1294	1593	1697	1893	2150	2388	2519
MAH	664	673	720	811	860	876	1157	1435	1455	1535	1677	1797	2058	2453	2810	2974	3419	3759	4099
MPR	467	433	476	489	539	585	714	825	790	807	951	927	901	1395	1521	1668	1924	1987	2304
ORS	458	493	514	541	527	631	765	780	834	797	912	1046	966	1309	1466	1456	1883	1844	2182
PNB	880	947	992	1067	1106	1208	1484	1585	1688	2050	2317	2382	2528	2891	3452	3668	3946	4425	4839
RAJ	502	399	465	629	573	600	826	860	873	1041	1153	1188	1053	1253	1459	1605	1956	1899	2058
TND	525	558	591	616	692	714	865	964	997	1066	1203	1225	1330	1523	1852	1841	2121	2464	2802
UPR	490	455	495	493	504	623	677	740	727	819	896	894	916	1350	1399	1593	1707	1840	2054
WBL	659	657	685	729	775	776	920	1080	1100	1177	1252	1312	1446	1602	1782	1953	2227	2509	2630
IND	593	609	656	680	704	755	908	1038	1069	1125	1262	1319	1388	1647	1855	2010	2313	2523	2745
APPENDIX B.2: AT CONSTANT (1980-81) PRICES																			
APR	1289	1201	1222	1234	1249	1143	1326	1333	1334	1207	1333	1390	1329	1413	1575	1575	1655	1593	1646
ASM		1077	1063	1225	1235	1271	1260	1221	1289	1213	1226	1215	1112	1175	1352	1308	1440	1447	1532
BHR	892	896	844	910	927	901	819	882	902	940	963	948	863	883	933	924	995	1012	1055
GUJ	1737	1566	1630	1827	1862	1422	1683	1455	1771	1989	2062	2081	2097	2042	2160	2063	2264	2230	2029
HRY	1979	1771	2197	2086	2085	2028	1917	1897	2212	2323	2412	2481	2219	2314	2352	2394	2357	2458	2649
HPR				1430	1459	1468	1514	1455	1644	1533	1684	1751	1443	1651	1748	1657	1652	1543	1642
J&K	1069	1044	1117	1293	1206	1204	1278	1388	1208	1354	1501	1488	1438	1771	1745	1702	1795	1877	1881
KAR	1124	1234	1279	1430	1459	1389	1525	1509	1546	1468	1706	1685	1650	1725	1805	1833	1893	2000	1903
KER	1378	1385	1467	1436	1484	1492	1460	1431	1451	1460	1464	1495	1446	1593	1586	1560	1450	1546	1599
MAH	1794	1811	1797	1919	1981	1798	2016	2136	2180	2158	2272	2344	2391	2453	2570	2623	2784	2873	2926
MPR	1195	1074	1118	1135	1188	1118	1074	1072	1170	1080	1200	1152	950	1395	1439	1436	1538	1531	1628
ORS	1086	1202	1215	1359	1192	1281	1339	1146	1364	1245	1344	1567	1194	1309	1307	1196	1440	1312	1466
PNB	2147	2171	2172	2019	2027	2024	2063	2059	2199	2435	2643	2713	2560	2891	3189	3167	3145	3318	3422
RAJ	1314	1010	1071	1443	1243	1161	1241	1113	1335	1440	1493	1509	1226	1253	1346	1324	1554	1414	1391
TND	1453	1526	1491	1422	1466	1452	1501	1366	1666	1591	1781	1787	1598	1523	1708	1578	1658	1848	1925
UPR	1083	1228	1165	1224	1133	1209	1107	1087	1180	1177	1198	1209	1014	1350	1329	1398	1406	1402	1420
WBL	1042	1077	1089	1123	1129	1088	1054	1183	1266	1250	1298	1320	1402	1602	1647	1661	1714	1654	1721
IND	1432	1432	1496	1537	1511	1465	1497	1476	1577	1557	1640	1692	1548	1647	1687	1697	1801	1827	1858

Note : See Footnote to Appendix A

APPENDIX C: POPULATION: INDIA AND STATES - 1968 TO 1986 (AS ON 1 OCTOBER)

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State	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
APR	40,648	41,405	42,218	43,063	43,908	44,716	45,514	46,308	47,103	4,7899	48,690	5,0895	51,960	5,3088	54,175	5,5241	56,297	5,7351	58,414
ASM		14,819	15,257	14,426	14,875	15,372	15,877	16,391	16,916	1,7452	17,996	1,8428	19,016	1,9634	20,203	2,0710	21,186	2,1651	22,130
BHR	52,646	53,672	54,744	55,837	56,935	58,101	59,281	60,471	61,668	6,2870	64,082	6,6089	67,660	6,9242	70,810	7,2346	73,889	7,5456	77,066
GUJ	24,408	25,029	25,680	26,362	26,988	27,596	28,219	28,854	29,494	3,0140	30,794	3,2115	32,965	3,3754	34,524	3,5248	35,993	3,6706	37,410
HRY	9,076	9,314	9,576	9,919	10,137	10,358	10,588	10,827	11,070	1,1319	11,576	1,2138	12,484	1,2793	13,129	1,3497	13,886	1,4279	14,661
HPR				3,427	3,498	3,574	3,651	3,728	3,806	3883	3,962	4043	4,155	4244	4,331	4416	4,501	4585	4,668
J&K	4,217	4,326	4,438	4,540	4,682	4,812	4,944	5,078	5,214	5351	5,491	5632	5,783	5910	6,044	6188	6,336	6486	6,636
KAR	27,171	27,740	28,322	28,978	29,599	30,214	30,838	31,470	32,106	3,2745	33,390	3,4919	35,844	3,6750	37,635	3,8486	39,325	4,0157	40,984
KER	19,639	20,110	20,578	21,105	21,602	22,103	22,589	23,065	23,536	2,4000	24,453	2,4554	24,958	2,5312	25,709	2,6170	26,658	2,7157	27,648
MAH	46,269	47,412	48,546	49,796	50,941	52,020	53,092	54,158	55,218	5,6272	57,318	5,9727	61,021	6,2263	63,577	6,4973	66,411	6,7831	69,181
MPR	38,189	39,088	40,140	41,145	42,324	43,585	44,789	45,957	47,112	4,8251	49,354	4,9616	50,698	5,1742	52,844	5,4012	55,218	5,6443	57,672
ORS	20,283	20,744	21,212	21,710	22,200	22,695	23,204	23,719	24,237	2,4757	25,281	2,5350	25,819	2,6210	26,638	2,7115	27,615	2,8129	28,645
PNB	12,614	12,848	13,093	13,424	13,654	13,878	14,116	14,363	14,614	1,4870	15,134	1,5818	16,250	1,6628	17,000	1,7363	17,720	1,8066	18,391
RAJ	23,643	24,242	24,826	25,466	26,144	26,888	27,640	28,400	29,168	2,9944	30,728	3,1700	32,772	3,3814	34,834	3,5814	36,788	3,7769	38,771
TND	38,341	37,959	39,925	40,704	41,490	42,116	42,748	43,382	44,010	4,4632	45,253	4,6935	47,623	4,8184	48,848	4,9644	50,497	5,1370	52,225
UPR	82,967	73,465	86,100	87,528	89,134	90,762	92,441	94,159	95,901	9,7665	99,458	10,4319	106,917	10,9677	112,314	11,4768	117,161	11,9546	121,999
WBL	40,874	41,865	42,876	43,818	44,936	46,146	47,340	48,522	49,699	5,0870	52,027	5,1880	53,015	5,4115	55,228	5,6347	57,479	5,8618	59,763
IND	506,000	518,000	529,000	541,000	554,000	567,000	580,000	593,000	607,000	620,000	634,000	648,000	664,000	670,000	694,000	709,000	724,000	739,000	755,000

APPENDIX D.1: COMPARABLE ESTIMATES OF NET NATIONAL \ STATE DOMESTIC PRODUCT, SECTOR-WISE: 1967-68 TO 1985-86
AT CURRENT PRICES

(Rs lakh)

State By Sector	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86
Andhra Pradesh																			
Agriculture	122960	120072	127004	142843	153909	164619	231896	268417	205960	195388	233217	250513	270847	350597	424391	421166	536300	509941	521025
Manufacture	27498	30479	35062	35376	41828	44712	54255	68733	75388	81324	93641	104640	119267	129539	156754	192552	231786	265731	322261
Transportation	38682	38984	41057	44048	47637	52095	67655	89218	86351	87125	99531	116736	127890	140950	173019	202012	242155	264262	307911
Others	26701	28285	30767	30227	32834	35504	41120	46092	54925	67179	75189	81119	92425	129025	155018	174976	201207	229275	265512
Net SDP	215841	217792	233890	252494	276208	296930	394926	472460	422624	431016	501578	553008	610429	750111	909182	990706	1211448	1269209	1416709
Assam																			
Agriculture		57946	53518	48849	47860	57445	64374	80203	76709	85074	94255	95905	106919	124598	138118	147055	176992	209975	226526
Manufacture		10154	12079	13313	13686	15460	16966	25671	29232	32513	38202	39245	35869	27489	81337	81351	94685	116090	133573
Transportation		9181	8759	11398	12096	14160	15174	20600	22784	21192	23596	22751	27592	30291	35927	39000	50087	62907	77245
Others		9056	10170	8729	9533	10142	10748	12664	14790	17585	22895	24596	25606	48351	54445	60370	71296	76953	90732
Net SDP		86337	84526	82289	83175	97207	107262	139138	143515	156364	178948	182497	195986	230729	309827	327776	393060	465925	528076
Bihar																			
Agriculture	125732	113530	112885	128979	135512	169660	200962	247205	197648	230615	253902	256911	242200	304786	325507	363549	422458	502105	563618
Manufacture	46914	50228	53933	48027	51446	52218	55461	83029	110064	109413	107729	124039	134671	122274	183881	197117	228768	275558	294384
Transportation	25870	29024	28795	34464	37178	41015	44223	62920	67380	68889	76114	87051	97751	72443	95673	111303	146375	172767	197958
Others	22069	23516	25552	22094	24641	27562	30985	34035	37465	40943	48427	54512	56440	111921	129842	158355	172223	191584	221886
Net SDP	220585	216298	221165	233564	248777	290455	331631	427219	412557	449860	486172	522513	531062	611424	734903	827324	969824	1142014	1277846
Gujarat																			
Agriculture	73776	61825	77528	107268	106259	71374	147575	94412	135908	154929	160783	178806	195863	251311	322015	298561	375027	387508	282446
Manufacture	41049	41162	44293	55748	58649	68020	80977	108519	114346	133473	159016	168512	178723	221256	270364	293395	368452	373159	406748
Transportation	30843	32818	35733	33615	37508	37912	48735	57551	65455	101032	110537	102306	158811	95239	119382	142427	180573	192846	216450
Others	19089	20639	22462	26206	29304	32074	37546	42729	48818	63130	70384	77606	85389	121299	138754	161367	181336	200955	239940
Net SDP	164757	156434	180016	222837	231720	209380	314833	303211	364527	452564	500792	527230	618786	689105	850515	895750	1105388	1154468	1145584
Haryana																			
Agriculture	46551	39553	56229	57491	61120	67387	83280	90034	95304	113297	123425	129770	123473	168437	186165	203022	215004	229966	269709
Manufacture	10238	12698	14501	15915	20002	20921	22387	27362	33139	34911	41974	48830	54226	57647	73742	82104	84445	101106	118582
Transportation	9368	9469	11102	11499	12796	15262	18705	22552	24873	35539	40928	43302	52245	36380	44018	54294	60585	69896	76935
Others	5129	5712	6362	7559	8291	9473	10731	12523	14230	15627	17632	19639	22611	33604	39987	48196	56529	63935	71655
Net SDP	71286	67432	88194	92464	102209	113043	135103	152471	167546	199374	223959	241541	252555	296068	343912	387616	416563	464903	536881
Himachal Pradesh																			
Agriculture				12159	12982	14710	18956	23059	23077	20347	24122	27122	25858	35985	44395	42019	49287	43588	49802
Manufacture				5878	6768	7759	7983	8231	11148	8751	11149	10905	10343	12913	14187	18189	15979	18218	22623
Transportation				1858	1937	2152	2716	3328	3384	5156	6262	7460	7827	5722	6960	7562	8685	9401	10531
Others				3288	3892	4450	5156	5854	6733	7359	8331	9402	9435	15467	17958	20780	23426	26854	29523
Net SDP				23183	25579	29071	34811	40472	44342	41613	49864	54889	53463	70087	83500	88550	97377	98061	112488

(Contd.)

APPENDIX D.1: (CONTD.)

(Rs lakh)

State by Sector	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86
Jammu & Kashmir																			
Agriculture	11417	11238	13495	14875	14923	16227	20821	26582	23045	25883	32550	33166	34830	49720	56179	59951	71174	77557	80900
Manufacture	1905	1941	2105	3575	4127	4442	5010	6926	7490	7033	9386	10897	10284	12196	12027	13327	15163	21527	23245
Transportation	1404	1414	1594	3535	3738	4060	4910	5888	5964	9678	11883	14187	18280	18834	21870	25194	29694	35584	37327
Others	2732	2972	3177	3298	3730	4242	4832	5641	6505	7645	9128	10201	11718	23896	26915	30420	33344	40405	42819
Net SDP	17458	17565	20371	25283	26518	28971	35573	45037	43004	50239	62947	68451	75112	104646	116991	128892	149375	175073	184291
Karnataka																			
Agriculture	78704	87769	94210	107327	107011	112240	172630	188343	155345	155449	185486	167120	209390	254009	287347	308841	373098	402587	399254
Manufacture	23642	23827	28580	43475	49979	54817	63782	77112	87704	98202	112878	128477	149294	185017	218316	250504	297305	341943	373263
Transportation	19908	22556	24106	24900	26837	30097	39163	47456	48872	59119	70461	83156	92209	97416	117794	135684	160458	178892	190938
Others	17306	18971	20486	20026	22986	26435	30486	35304	41463	45070	51704	59012	64568	97418	114295	133716	147624	178145	199274
Net SDP	139660	153123	167382	195728	206813	223589	306061	348215	333384	357840	420529	437765	515461	633860	737752	828745	978485	1101567	1162729
Kerala																			
Agriculture	54866	57195	68067	67352	63835	76288	102866	106541	106939	118499	114445	120588	132462	154723	157545	187866	231645	247425	232542
Manufacture	15004	16465	17594	22738	26092	28101	32237	39442	42793	46879	53937	62341	73041	100187	106698	117795	124556	150012	166520
Transportation	18457	20179	23296	23993	24586	28544	35517	45166	48980	54764	63738	75304	78310	75974	85800	95449	107823	123921	145584
Others	13598	14552	15953	20157	22226	23814	27302	32419	36635	44068	46793	47062	49055	72326	86118	94206	109100	127257	151735
Net SDP	101925	108391	124910	134240	136739	156747	197922	223568	235347	264210	278913	305295	322868	403210	436161	495316	573124	648615	696381
Madhya Pradesh																			
Agriculture	108447	96683	110784	115278	131875	145840	190159	218785	196019	194577	254664	232555	199042	372654	392496	424936	507102	476599	573352
Manufacture	30011	30640	34308	34761	38845	46276	55814	71809	81198	86485	92618	98235	117709	146441	173806	200114	228910	278966	326976
Transportation	19790	20544	22480	28649	32615	35949	41961	52530	54310	64424	70749	73587	81317	97531	118832	140922	167997	180700	217220
Others	20093	21384	23495	22566	24614	26870	31419	36148	40521	43981	51371	55335	58718	105197	118385	135144	158289	185196	211472
Net SDP	178341	169251	191067	201254	227949	254935	319571	379272	372048	389467	469402	459712	456786	721823	803519	901116	1062298	1121461	1329020
Maharastra																			
Agriculture	108101	102771	113730	110347	110401	104200	188714	242477	225489	242553	274183	279760	351142	393878	455808	468337	574626	604386	618966
Manufacture	94606	102399	113811	140415	157668	168589	199541	249494	259832	289715	322201	380685	426107	549469	634760	682727	814489	967917	1115682
Transportation	60628	66385	68410	87296	96928	103569	135638	177481	190216	186248	209106	229078	277475	252733	313932	361192	414777	456651	520879
Others	43941	47528	53577	65936	73153	79338	90644	107587	127640	145455	155903	183920	201373	331495	382227	420249	466853	520671	580541
Net SDP	307276	319083	349528	403994	438150	455696	614537	777039	803227	863971	961393	1073443	1256097	1527575	1786727	1932505	2270745	2549625	2836068
Orissa																			
Agriculture	59785	64507	68589	78056	75598	96151	122059	120584	127887	101993	132796	152754	124535	193344	219678	208555	293358	273157	336326
Manufacture	12338	14550	15706	16509	16994	20247	24119	29200	33149	40247	40505	46262	54891	53309	55719	64736	77882	83288	96020
Transportation	7263	8782	9292	9218	9704	11396	13080	15047	16775	29615	30870	36276	36442	45048	56440	56174	73261	75412	92962
Others	13512	14431	15446	13694	14759	15498	18139	20203	24280	25537	26277	29766	33491	51431	58805	65451	75438	86830	99774
Net SDP	92898	102270	109033	117477	117055	143292	177397	185034	202091	197392	230448	265058	249359	343132	390642	394916	519939	518687	625082

(Contd.)

APPENDIX D.1: (CONCLD.)

(Rs lakh)

State by Sector	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86
Punjab																			
Agriculture	66920	73535	79484	87375	91123	99210	127603	130622	132852	157435	179575	179146	237630	286685	308127	325885	365710	406607	198326
Manufacture	20505	21666	21573	23164	25083	29115	35054	41349	51841	53978	63431	72861	94992	118637	127400	147840	165857	185823	81497
Transportation	14032	15849	17299	19388	20418	23345	28884	34485	37173	64468	74677	87737	82939	108627	117887	129219	157103	175473	91697
Others	9550	10623	11526	13282	14401	16018	17974	21189	24751	28959	33003	36980	65094	72868	83482	96375	110820	121973	39207
Net SDP	111007	121673	129882	143209	151025	167688	209515	227645	246617	304839	350686	376724	480655	586817	636896	699319	799490	889876	410722
Rajastan																			
Agriculture	72015	52028	65017	101653	87545	92589	147551	144273	143811	175216	195925	200244	204375	247905	280232	362419	341295	358480	160459
Manufacture	16407	16360	18182	23858	25835	28233	32132	43010	48579	54290	60390	71202	85268	98758	110599	143048	139920	164869	77978
Transportation	17380	14507	17201	18752	18784	20534	26199	30798	32879	48540	59462	62973	65629	81894	94376	116372	124450	142956	60452
Others	12886	13831	15042	15894	17608	20090	22426	26088	29380	33630	38633	42312	68266	79724	89467	97841	111726	131758	46184
Net SDP	118688	96726	115442	160157	149772	161446	228308	244169	254649	311676	354410	376731	423538	508281	574674	719680	717391	798063	345073
Tamil Nadu																			
Agriculture	78900	79693	91245	96447	115817	113739	155242	147620	144563	144216	171355	158811	174210	228130	173131	252099	289076	344698	182409
Manufacture	47872	51288	56303	63223	68905	75393	85101	111565	117411	147019	167053	186958	243987	280347	314659	350796	426321	473585	202142
Transportation	39641	43264	47946	52826	58878	64538	76180	98373	109546	107678	123277	136196	188439	239553	249762	276766	313249	358866	153009
thers	34875	37568	40463	38099	43404	47045	53345	60455	67047	76751	82488	93167	127073	156449	176514	191366	237057	286397	95773
Net SDP	201288	211813	235957	250595	287004	300715	369868	418013	438567	475664	544173	575132	733709	904479	914066	1071027	1265703	1463546	633333
Uttar Pradesh																			
Agriculture	270930	236967	268149	251828	255868	340450	374886	401093	368766	422654	468625	472258	772192	776962	868522	940993	992122	1109083	439407
Manufacture	48027	52875	58085	64534	67236	79017	88163	102872	118593	140210	156357	174209	240529	260145	325824	365095	410772	473859	199250
Transportation	45170	49280	51065	63852	69848	82962	91325	109475	117464	133104	152887	152878	246170	292134	350879	375943	434850	499372	186791
Others	42411	45142	48896	51377	56708	63409	71456	83673	92309	104001	113429	133682	222159	242533	283295	318161	362310	423121	153601
Net SDP	406538	384264	426195	431591	449657	565838	625830	697113	697132	799969	891298	933047	1481050	1571774	1828520	2000192	2200054	2505435	979049
West Bengal																			
Agriculture	118450	117867	128575	135062	147631	141416	188602	212725	203127	224756	245224	250849	260593	288217	317201	429606	500270	514767	262634
Manufacture	68617	71678	75009	78674	84504	94009	107409	140996	156134	167047	178426	194881	275664	294662	343990	363684	423667	456652	221050
Transportation	49346	49889	50366	59721	65183	68414	80502	103597	112200	116684	129328	121913	148172	194206	206408	236803	271464	294622	160945
Others	32947	35617	39750	46127	50994	54369	58809	66623	75433	90172	98538	112865	182224	206898	232828	250208	275473	305733	122172
Net SDP	269360	275051	293700	319584	348312	358208	435322	523941	546894	598659	651516	680508	866653	983983	1100427	1280301	1470874	1571774	766801
India																			
Agriculture	1492500	1534600	1676300	1725000	1756500	1930500	2558500	2791700	2750100	2800500	3329300	3404300	4409100	4973500	5278000	6372500	6776300	7234400	3491600
Manufacture	566000	614400	704600	759700	838900	921800	1070400	1330900	1435300	1644600	1871200	2095300	2685500	3235000	3656600	4286900	4879600	5459100	2324500
Transportation	372900	397000	429400	470500	506900	556100	668500	884000	1000600	1089500	1227600	1338500	1804600	2221400	2527600	2963500	3435900	4006100	1528100
Others	568900	610600	658900	723500	798500	872800	971300	1151500	1301800	1441000	1570100	1707300	2134800	2445800	2788700	3126500	3556800	4024300	1872900
NDP	3000300	3156600	3469200	3678700	3900800	4281200	5268700	6158100	6487800	6975600	7998200	8545400	11034000	12875700	14250900	16749400	18648600	20723900	9217100

Note: See Footnotes to Appendix A : 1. Agriculture includes Agriculture, Forestry & Logging and Fishing; 2. Manufacturing includes Manufacturing (organised and unorganised), Mining & Quarrying, Electricity and Construction; 3. Transportation includes Transportation (Railways, Transportation by other means and Communication) and Trade, Hotels, Restaurants and Storage; 4. Others includes Banking & Insurance, Real Estate, Public Administration and Other Services.

APPENDIX D.1.1: COMPARABLE ESTIMATES OF NET NATIONAL\ STATE DOMESTIC PRODUCT: SECTOR-WISE PERCENTAGE DISTRIBUTION: 1967-68 TO 1985-86
AT CURRENT PRICES

(per cent)

State by Sector	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86
Andhra Pradesh																			
Agriculture	56.97	55.13	54.30	56.57	55.72	55.44	58.72	56.81	48.73	45.33	46.50	45.30	44.37	46.74	46.68	42.51	44.27	40.18	36.78
Manufacture	12.74	13.99	14.99	14.01	15.14	15.06	13.74	14.55	17.84	18.87	18.67	18.92	19.54	17.27	17.24	19.44	19.13	20.94	22.75
Transportation	17.92	17.90	17.55	17.45	17.25	17.54	17.13	18.88	20.43	20.21	19.84	21.11	20.95	18.79	19.03	20.39	19.99	20.82	21.73
Others	12.37	12.99	13.15	11.97	11.89	11.96	10.41	9.76	13.00	15.59	14.99	14.67	15.14	17.20	17.05	17.66	16.61	18.06	18.74
Net SDP	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Assam																			
Agriculture		67.12	63.32	59.36	57.54	59.10	60.02	57.64	53.45	54.41	52.67	52.55	54.55	54.00	44.58	44.86	45.03	45.07	42.90
Manufacture		11.76	14.29	16.18	16.45	15.90	15.82	18.45	20.37	20.79	21.35	21.50	18.30	11.91	26.25	24.82	24.09	24.92	25.29
Transportation		10.63	10.36	13.85	14.54	14.57	14.15	14.81	15.88	13.55	13.19	12.47	14.08	13.13	11.60	11.90	12.74	13.50	14.63
Others		10.49	12.03	10.61	11.46	10.43	10.02	9.10	10.31	11.25	12.79	13.48	13.07	20.96	17.57	18.42	18.14	16.52	17.18
Net SDP		100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Bihar																			
Agriculture	57.00	52.49	51.04	55.22	54.47	58.41	60.60	57.86	47.91	51.26	52.22	49.17	45.61	49.85	44.29	43.94	43.56	43.97	44.11
Manufacture	21.27	23.22	24.39	20.56	20.68	17.98	16.72	19.43	26.68	24.32	22.16	23.74	25.36	20.00	25.02	23.83	23.59	24.13	23.04
Transportation	11.73	13.42	13.02	14.76	14.94	14.12	13.34	14.73	16.33	15.31	15.66	16.66	18.41	11.85	13.02	13.45	15.09	15.13	15.49
Others	10.00	10.87	11.55	9.46	9.90	9.49	9.34	7.97	9.08	9.10	9.96	10.43	10.63	18.30	17.67	19.14	17.76	16.78	17.36
Net SDP	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Gujarat																			
Agriculture	44.78	39.52	43.07	48.14	45.86	34.09	46.87	31.14	37.28	34.23	32.11	33.91	31.65	36.47	37.86	33.33	33.93	33.57	24.66
Manufacture	24.91	26.31	24.61	25.02	25.31	32.49	25.72	35.79	31.37	29.49	31.75	31.96	28.88	32.11	31.79	32.75	33.33	32.32	35.51
Transportation	18.72	20.98	19.85	15.09	16.19	18.11	15.48	18.98	17.96	22.32	22.07	19.40	25.66	13.82	14.04	15.90	16.34	16.70	18.89
Others	11.59	13.19	12.48	11.76	12.65	15.32	11.93	14.09	13.39	13.95	14.05	14.72	13.80	17.60	16.31	18.01	16.40	17.41	20.94
Net SDP	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Haryana																			
Agriculture	65.30	58.66	63.76	62.18	59.80	59.61	61.64	59.05	56.88	56.83	55.11	53.73	48.89	56.89	54.13	52.38	51.61	49.47	50.24
Manufacture	14.36	18.83	16.44	17.21	19.57	18.51	16.57	17.95	19.78	17.51	18.74	20.22	21.47	19.47	21.44	21.18	20.27	21.75	22.09
Transportation	13.14	14.04	12.59	12.44	12.52	13.50	13.84	14.79	14.85	17.83	18.27	17.93	20.69	12.29	12.80	14.01	14.54	15.03	14.33
Others	7.19	8.47	7.21	8.18	8.11	8.38	7.94	8.21	8.49	7.84	7.87	8.13	8.95	11.35	11.63	12.43	13.57	13.75	13.35
Net SDP	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Himachal Pradesh																			
Agriculture				52.45	50.75	50.60	54.45	56.98	52.04	48.90	48.38	49.41	48.37	51.34	53.17	47.45	50.61	44.45	44.27
Manufacture				25.35	26.46	26.69	22.93	20.34	25.14	21.03	22.36	19.87	19.35	18.42	16.99	20.54	16.41	18.58	20.11
Transportation				8.01	7.57	7.40	7.80	8.22	7.63	12.39	12.56	13.59	14.64	8.16	8.34	8.54	8.92	9.59	9.36
Others				14.18	15.22	15.31	14.81	14.46	15.18	17.68	16.71	17.13	17.65	22.07	21.51	23.47	24.06	27.38	26.25
Net SDP				100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

(Contd.)

APPENDIX D.1.1: (CONTD.)

(per cent)

State by Sector	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86
Jammu & Kashmir																			
Agriculture	65.40	63.98	66.25	58.83	56.27	56.01	58.53	59.02	53.59	51.52	51.71	48.45	46.37	47.51	48.02	46.51	47.65	44.30	43.90
Manufacture	10.91	11.05	10.33	14.14	15.56	15.33	14.08	15.38	17.42	14.00	14.91	15.92	13.69	11.65	10.28	10.34	10.15	12.30	12.61
Transportation	8.04	8.05	7.82	13.98	14.10	14.01	13.80	13.07	13.87	19.26	18.88	20.73	24.34	18.00	18.69	19.55	19.88	20.33	20.25
Others	15.65	16.92	15.60	13.04	14.07	14.64	13.58	12.53	15.13	15.22	14.50	14.90	15.60	22.84	23.01	23.60	22.32	23.08	23.23
Net SDP	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Karnataka																			
Agriculture	56.35	57.32	56.28	54.83	51.74	50.20	56.40	54.09	46.60	43.44	44.11	38.18	40.62	40.07	38.95	37.27	38.13	36.55	34.34
Manufacture	16.93	15.56	17.07	22.21	24.17	24.52	20.84	22.14	26.31	27.44	26.84	29.35	28.96	29.19	29.59	30.23	30.38	31.04	32.10
Transportation	14.25	14.73	14.40	12.72	12.98	13.46	12.80	13.63	14.66	16.52	16.76	19.00	17.89	15.37	15.97	16.37	16.40	16.24	16.42
Others	12.39	12.39	12.24	10.23	11.11	11.82	9.96	10.14	12.44	12.60	12.29	13.48	12.53	15.37	15.49	16.13	15.09	16.17	17.14
Net SDP	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Kerala																			
Agriculture	53.83	52.77	54.49	50.17	46.68	48.67	51.97	47.65	45.44	44.85	41.03	39.50	41.03	38.37	36.12	37.93	40.42	38.15	33.39
Manufacture	14.72	15.19	14.09	16.94	19.08	17.93	16.29	17.64	18.18	17.74	19.34	20.42	22.62	24.85	24.46	23.78	21.73	23.13	23.91
Transportation	18.11	18.62	18.65	17.87	17.98	18.21	17.94	20.20	20.81	20.73	22.85	24.67	24.25	18.84	19.67	19.27	18.81	19.11	20.91
Others	13.34	13.43	12.77	15.02	16.25	15.19	13.79	14.50	15.57	16.68	16.78	15.42	15.19	17.94	19.74	19.02	19.04	19.62	21.79
Net SDP	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Madhya Pradesh																			
Agriculture	60.81	57.12	57.98	57.28	57.85	57.21	59.50	57.69	52.69	49.96	54.25	50.59	43.57	51.63	48.85	47.16	47.74	42.50	43.14
Manufacture	16.83	18.10	17.96	17.27	17.04	18.15	17.47	18.93	21.82	22.21	19.73	21.37	25.77	20.29	21.63	22.21	21.55	24.88	24.60
Transportation	11.10	12.14	11.77	14.24	14.31	14.10	13.13	13.85	14.60	16.54	15.07	16.01	17.80	13.51	14.79	15.64	15.81	16.11	16.34
Others	11.27	12.63	12.30	11.21	10.80	10.54	9.83	9.53	10.89	11.29	10.94	12.04	12.85	14.57	14.73	15.00	14.90	16.51	15.91
Net SDP	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Maharashtra																			
Agriculture	35.18	32.21	32.54	27.31	25.20	22.87	30.71	31.21	28.07	28.07	28.52	26.06	27.96	25.78	25.51	24.23	25.31	23.70	21.82
Manufacture	30.79	32.09	32.56	34.76	35.98	37.00	32.47	32.11	32.35	33.53	33.51	35.46	33.92	35.97	35.53	35.33	35.87	37.96	39.34
Transportation	19.73	20.80	19.57	21.61	22.12	22.73	22.07	22.84	23.68	21.56	21.75	21.34	22.09	16.54	17.57	18.69	18.27	17.91	18.37
Others	14.30	14.90	15.33	16.32	16.70	17.41	14.75	13.85	15.89	16.84	16.22	17.13	16.03	21.70	21.39	21.75	20.56	20.42	20.47
Net SDP	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Orissa																			
Agriculture	64.36	63.08	62.91	66.44	64.58	67.10	68.81	65.17	63.28	51.67	57.63	57.63	49.94	56.35	56.24	52.81	56.42	52.66	53.81
Manufacture	13.28	14.23	14.40	14.05	14.52	14.13	13.60	15.78	16.40	20.39	17.58	17.45	22.01	15.54	14.26	16.39	14.98	16.06	15.36
Transportation	7.82	8.59	8.52	7.85	8.29	7.95	7.37	8.13	8.30	15.00	13.40	13.69	14.61	13.13	14.45	14.22	14.09	14.54	14.87
Others	14.54	14.11	14.17	11.66	12.61	10.82	10.23	10.92	12.01	12.94	11.40	11.23	13.43	14.99	15.05	16.57	14.51	16.74	15.96
Net SDP	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

(Contd.)

APPENDIX D.1.1: (CONCLD.)

(per cent)

State by Sector	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86
Punjab																			
Agriculture	60.28	60.44	61.20	61.01	60.34	59.16	60.90	57.38	53.87	51.65	51.21	47.55	48.29	49.44	48.85	48.38	46.60	45.74	45.69
Manufacture	18.47	17.81	16.61	16.17	16.61	17.36	16.73	18.16	21.02	17.71	18.09	19.34	19.84	19.76	20.22	20.00	21.14	20.75	20.88
Transportation	12.64	13.03	13.32	13.54	13.52	13.92	13.79	15.15	15.07	21.15	21.29	23.29	22.33	17.26	18.51	18.51	18.48	19.65	19.72
Others	8.60	8.73	8.87	9.27	9.54	9.55	8.58	9.31	10.04	9.50	9.41	9.82	9.55	13.54	12.42	13.11	13.78	13.86	13.71
Net SDP	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Rajasthan																			
Agriculture	60.68	53.79	56.32	63.47	58.45	57.35	64.63	59.09	56.47	56.22	55.28	53.15	46.50	48.25	48.77	48.76	50.36	47.57	44.92
Manufacture	13.82	16.91	15.75	14.90	17.25	17.49	14.07	17.61	19.08	17.42	17.04	18.90	22.60	20.13	19.43	19.25	19.88	19.50	20.66
Transportation	14.64	15.00	14.90	11.71	12.54	12.72	11.48	12.61	12.91	15.57	16.78	16.72	17.52	15.50	16.11	16.42	16.17	17.35	17.91
Others	10.86	14.30	13.03	9.92	11.76	12.44	9.82	10.68	11.54	10.79	10.90	11.23	13.38	16.12	15.69	15.57	13.60	15.57	16.51
Net SDP	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Tamil Nadu																			
Agriculture	39.20	37.62	38.67	38.49	40.35	37.82	41.97	35.31	32.96	30.32	31.49	27.61	28.80	23.74	25.22	18.94	23.54	22.84	23.55
Manufacture	23.78	24.21	23.86	25.23	24.01	25.07	23.01	26.69	26.77	30.91	30.70	32.51	31.92	33.25	31.00	34.42	32.75	33.68	32.36
Transportation	19.69	20.43	20.32	21.08	20.51	21.46	20.60	23.53	24.98	22.64	22.65	23.68	24.16	25.68	26.49	27.32	25.84	24.75	24.52
Others	17.33	17.74	17.15	15.20	15.12	15.64	14.42	14.46	15.29	16.14	15.16	16.20	15.12	17.32	17.30	19.31	17.87	18.73	19.57
Net SDP	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Uttar Pradesh																			
Agriculture	66.64	61.67	62.92	58.35	56.90	60.17	59.90	57.54	52.90	52.83	52.58	50.61	44.88	52.14	49.43	47.50	47.05	45.10	44.27
Manufacture	11.81	13.76	13.63	14.95	14.95	13.96	14.09	14.76	17.01	17.53	17.54	18.67	20.35	16.24	16.55	17.82	18.25	18.67	18.91
Transportation	11.11	12.82	11.98	14.79	15.53	14.66	14.59	15.70	16.85	16.64	17.15	16.38	19.08	16.62	18.59	19.19	18.80	19.77	19.93
Others	10.43	11.75	11.47	11.90	12.61	11.21	11.42	12.00	13.24	13.00	12.73	14.33	15.69	15.00	15.43	15.49	15.91	16.47	16.89
Net SDP	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
West Bengal																			
Agriculture	43.97	42.85	43.78	42.26	42.38	39.48	43.32	40.60	37.14	37.54	37.64	36.86	34.25	30.07	29.29	28.83	33.56	34.01	32.75
Manufacture	25.47	26.06	25.54	24.62	24.26	26.24	24.67	26.91	28.55	27.90	27.39	28.64	28.83	31.81	29.95	31.26	28.41	28.80	29.05
Transportation	18.32	18.14	17.15	18.69	18.71	19.10	18.49	19.77	20.52	19.49	19.85	17.91	20.99	17.10	19.74	18.76	18.50	18.46	18.74
Others	12.23	12.95	13.53	14.43	14.64	15.18	13.51	12.72	13.79	15.06	15.12	16.59	15.93	21.03	21.03	21.16	19.54	18.73	19.45
Net SDP	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
India																			
Agriculture	49.75	48.62	48.32	46.89	45.03	45.09	48.56	45.33	42.39	40.15	41.63	39.84	37.88	39.96	38.63	37.04	38.05	36.34	34.91
Manufacture	18.86	19.46	20.31	20.65	21.51	21.53	20.32	21.61	22.12	23.58	23.40	24.52	25.22	24.34	25.12	25.66	25.59	26.17	26.34
Transportation	12.43	12.58	12.38	12.79	12.99	12.99	12.69	14.36	15.42	15.62	15.35	15.66	16.58	16.35	17.25	17.74	17.69	18.42	19.33
Others	18.96	19.34	18.99	19.67	20.47	20.39	18.44	18.70	20.07	20.66	19.63	19.98	20.32	19.35	19.00	19.57	18.67	19.07	19.42
NDP	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Note: See Footnotes to Appendix A : 1. Agriculture includes Agriculture, Forestry & Logging and Fishing; 2. Manufacturing includes Manufacturing (organised and unorganised), Mining & Quarrying, Electricity and Construction; 3. Transportation includes Transportation (Railways, Transportation by other means and Communication) and Trade, Hotels, Restaurants and Storage; 4. Others includes Banking & Insurance, Real Estate, Public Administration and Other Services.

APPENDIX D.2. COMPARABLE ESTIMATES OF NET NATIONAL \ STATE DOMESTIC PRODUCT SECTOR WISE: 1967-68 TO 1985-86
AT CONSTANT (1980-81) PRICES

(Rs lakh)

State by Sector	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86
Andhra Pradesh																			
Agriculture	262776	237898	246358	280982	287871	252696	325564	324761	317559	258943	302111	342514	298684	350597	412461	401443	434539	388140	388618
Manufacture	73762	76158	83937	79632	83167	85321	86801	93895	101350	106015	115948	121395	129498	129539	143679	151168	166316	183539	194651
Transportation	127669	121779	121441	105963	109151	102992	119056	124431	127601	119871	130219	144961	157696	140950	163339	176974	178285	180089	201292
Others	59869	61235	64105	64841	68358	69950	72120	74024	81657	93525	100589	98461	104614	129025	133934	140702	152725	162071	176844
Net SDP	524075	497070	515842	531418	548547	510959	603541	617111	628167	578354	648867	707332	690492	750111	853412	870286	931864	913840	961405
Assam																			
Agriculture		99212	97794	99304	103402	109703	112977	110206	123766	117705	122445	119309	118040	124598	133782	131824	148428	135316	142348
Manufacture		25868	28369	39772	41043	43745	43950	45557	48586	45240	45600	50351	37379	27489	52770	50606	59639	74482	79880
Transportation		19535	20452	21326	21892	23486	23444	23905	25478	26652	27554	28015	28540	30291	34955	34843	38800	45004	51700
Others		14938	15642	16056	17146	17969	19313	20067	19641	21405	24299	25446	26734	48351	51705	53588	58218	58589	65198
Net SDP		159554	162257	176459	183484	194903	199684	199736	217471	211003	219897	223122	210692	230729	273213	270860	305085	313391	339126
Bihar																			
Agriculture	277386	281458	263219	284232	296071	285206	248034	281375	283994	316305	333487	323688	267890	304786	302323	294100	338606	361723	385582
Manufacture	104212	111805	118434	113182	116321	119065	122627	127066	141663	147696	151911	158900	153097	122274	159224	155302	168277	169182	179133
Transportation	56111	54378	39587	60474	62968	64323	60835	68753	72596	70327	75725	82055	99133	72443	84123	83610	95982	97311	102725
Others	32021	33393	40885	50470	52539	54683	53950	55860	57526	56628	56242	61703	63817	111921	114728	135300	131961	135414	145914
Net SDP	469729	481033	462125	508358	527899	523277	485446	533053	555979	590956	617365	626346	583937	611424	660398	668312	734827	763629	813354
Gujarat																			
Agriculture	172683	137076	163458	222555	234963	118194	185836	120362	203323	202041	202824	239065	218717	251311	297609	253964	284107	285968	199767
Manufacture	117977	119546	115088	127489	126433	138655	145583	157529	159817	178624	200389	202766	196026	221256	218981	222658	262306	249490	257156
Transportation	83991	83423	84640	73715	79400	71988	79329	79809	93382	135198	144319	129959	178532	95239	106948	115670	130829	136451	143094
Others	49295	52030	55409	57884	61753	63574	64213	62174	65926	83490	87391	96415	98085	121299	122211	134972	137778	146696	159118
Net SDP	423946	392075	418595	481643	502549	392412	474962	419874	522448	599352	634923	668205	691360	689105	745748	727264	815020	818605	759135
Haryana																			
Agriculture	115011	100567	135991	131680	126083	121388	112988	116641	139858	147276	153060	165208	133374	168437	169711	174637	176901	184445	207942
Manufacture	27138	30639	33319	34285	40763	40948	40511	43548	50659	47015	52543	55814	58620	57647	62846	62729	62197	72103	80224
Transportation	22816	18787	25920	23748	25761	28052	29768	25802	34947	47273	51554	55353	58893	36380	40179	46164	46016	49521	52763
Others	14649	14968	15115	17163	18723	19700	19738	19388	19458	21384	22105	24825	26129	33604	36061	39564	42161	44875	47438
Net SDP	179614	164960	210345	206877	211329	210088	203006	205379	244922	262948	279262	301201	277017	296068	308797	323094	327275	350944	388367
Himachal Pradesh																			
Agriculture				24892	25178	25322	27842	27453	31725	29438	32391	35219	28640	35985	40083	34161	37582	31875	34826
Manufacture				12900	13385	14320	13114	12398	15835	12410	15035	13888	11403	12913	13071	15222	12136	12891	14828
Transportation				4089	4159	4247	4584	4705	4855	6996	7998	9538	8663	5722	6379	6614	6960	7023	7373
Others				7138	8319	8561	9746	9687	10156	10684	11299	12140	11243	15467	16176	17160	17664	18978	19621
Net SDP				49019	51041	52451	55286	54244	62571	59527	66723	70785	59949	70087	75709	73157	74341	70767	76648

(Contd.)

APPENDIX D.2. (CONTD.)

(Rs lakh)

State by Sector	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86
Jammu & Kashmir																			
Agriculture	28811	28599	32301	35301	32040	32276	36663	39716	32889	38869	44335	40656	38930	49720	50437	47745	52056	54399	53110
Manufacture	5777	5623	5622	8547	9009	8980	8987	11186	10473	8871	11152	12031	10957	12196	11410	12698	14714	17049	19842
Transportation	3227	3394	3791	7090	7209	7838	8288	9445	8736	13230	14163	18072	19544	18834	19714	19638	21373	22654	25829
Others	7278	7526	7841	7761	8197	8841	9233	10141	10895	11491	12794	13042	13709	23896	23885	25213	25595	27669	26030
Net SDP	45093	45142	49555	58698	56455	57934	63170	70488	62993	72460	82444	83800	83140	104646	105446	105294	113738	121771	124811
Karnataka																			
Agriculture	138848	161583	178665	218105	222329	196228	239747	234529	240638	205654	257397	243896	250922	254009	276713	273089	285301	309352	282220
Manufacture	78881	82492	84052	94187	101765	112649	109605	118038	130762	140334	152803	165053	163030	185017	192380	209208	229312	241242	230783
Transportation	40607	45105	48487	55372	58707	59631	67922	68845	70084	75775	94773	108867	106608	97416	107749	115600	113235	121924	125216
Others	47139	53023	51045	46614	49189	51293	52948	53436	54746	58939	64552	70619	70959	97418	102462	107489	116468	130510	141677
Net SDP	305475	342202	362249	414278	431990	419801	470222	474848	496230	480702	569526	588436	591519	633860	679305	705385	744317	803029	779896
Kerala																			
Agriculture	140998	147897	165017	155194	161817	164949	162957	156275	163983	159752	151050	144986	142002	154723	155554	154256	140679	152775	155018
Manufacture	42701	43005	44368	55001	61227	61949	61991	64450	64744	68186	73577	77856	83158	100187	95335	95345	88850	97661	99219
Transportation	54498	55670	60940	55263	57574	61830	61637	66405	68323	70366	78606	91554	82510	75974	81794	80276	73738	81483	93709
Others	32526	32041	31637	37634	39849	40942	43193	42934	44447	52098	54856	52674	53122	72326	75068	78474	83253	87800	94198
Net SDP	270723	278612	301962	303093	320467	329670	329777	330064	341497	350402	358090	367069	360792	403210	407751	408352	386520	419720	442144
Madhya Pradesh																			
Agriculture	268982	239493	257949	272838	297548	270572	259291	261657	295849	260469	321090	290691	201117	372654	383231	378834	421747	394239	426237
Manufacture	89417	84603	91954	89521	93878	104871	112740	116640	125295	125213	129904	130497	130858	146441	154435	160075	164425	186298	203241
Transportation	53420	50722	53047	62599	67432	65301	63430	68479	80696	83295	84505	89482	85735	97531	111248	116626	127096	134277	148267
Others	44532	45002	45829	42083	43850	46322	45768	45759	49155	52239	55944	61133	63907	105197	111336	119913	135712	149576	161288
Net SDP	456351	419820	448778	467041	502707	487066	481229	492535	550995	521217	592444	571803	481617	721823	670431	775449	848980	864390	939033
Maharashtra																			
Agriculture	282504	278980	282572	279872	291526	230949	314559	364573	357844	369382	398924	389991	432433	393878	434440	425871	462991	452354	425526
Manufacture	255906	269057	280331	322844	346213	333130	348131	353522	381757	407462	430622	484659	481255	549469	574050	588150	666464	745637	797908
Transportation	187081	200598	190374	204024	215097	209269	241896	270631	283159	251710	273299	295216	320609	252733	287524	321932	336166	346303	364875
Others	104662	109909	118912	148918	156446	161865	165587	167840	180968	185855	199587	230042	224775	331495	338083	368605	383040	404170	435913
Net SDP	830153	858543	872189	955659	1009282	935213	1070174	1156566	1203729	1214409	1302432	1399908	1459072	1527575	1634097	1704557	1848660	1948464	2024222
Orissa																			
Agriculture	141481	160007	165061	200245	173093	194186	210034	172835	220216	172484	206443	244684	163489	193344	193862	170308	226299	194191	226416
Manufacture	37019	41872	43246	46996	43206	47669	49172	49567	53094	60968	60286	67283	65625	53309	51177	54048	57682	58969	63085
Transportation	20878	25644	26862	19603	19263	19883	20261	19674	24151	41616	40979	50083	42664	45048	49089	43691	54323	52668	61617
Others	20861	21850	22560	28122	29085	29001	31188	29687	33030	33270	31947	35107	36561	51431	54024	56344	59475	63279	68757
Net SDP	220238	249373	257729	294967	264647	290739	310655	271762	330491	308338	339655	397157	308339	343132	348151	324391	397780	369108	419875

(Contd.)

APPENDIX D.2. (CONCLD.)

(Rs lakh)

State by Sector	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86
Punjab																			
Agriculture	130248	134367	144345	149368	151851	151932	152178	155092	165095	170426	191541	196823	192899	237630	275414	277271	270594	297548	322659
Manufacture	80208	79400	74400	54740	55727	58028	61918	59094	72032	76748	84405	90852	84860	94992	110889	111145	118798	124702	128857
Transportation	35381	38842	38889	39326	40464	42538	49340	52061	52448	78636	86345	99806	95883	82939	90583	92125	94448	98638	94275
Others	24935	26259	26748	27596	28718	28415	27749	29456	31721	36254	37663	41649	42413	65094	65204	69401	73485	78508	83627
Net SDP	270771	278868	284382	271029	276760	280913	291185	295703	321297	362064	399955	429130	416056	480655	542090	549942	557326	599396	629418
Rajasthan																			
Agriculture	165090	115386	128591	231144	186917	168845	193538	169294	215342	233219	240504	244753	182503	204375	233565	234297	301353	263778	251648
Manufacture	54282	51763	53976	64289	68185	69598	70691	77182	85316	86299	89644	98267	92916	85268	88784	89498	108560	102299	108736
Transportation	60020	44677	49512	40997	38523	39305	42922	32047	49041	67093	79265	83329	73556	65629	74286	74160	83626	83170	87739
Others	31264	32954	33708	31031	31271	34416	35987	37563	39680	44527	49235	51994	52692	68266	72096	76065	77982	84920	90995
Net SDP	310655	244780	265787	367461	324895	312164	343137	316086	389380	431138	458649	478343	401667	423538	468731	474020	571521	534166	539118
Tamil Nadu																			
Agriculture	148887	149409	162413	167940	184012	174590	201672	158106	203563	168859	211377	191966	167913	174210	225787	164524	201186	236372	247796
Manufacture	157147	166627	170606	146226	150251	152800	147137	134303	172064	209668	228062	243155	254771	243987	253081	260673	274831	316030	318104
Transportation	169221	177894	175041	172576	176961	184746	186230	191124	244243	212273	241426	271567	208310	188439	218733	211236	213870	231294	243355
Others	81719	85366	87403	92109	96881	99205	106559	109203	113392	119517	125039	131852	130110	127073	136677	147013	147320	165670	196247
Net SDP	556973	579296	595463	578851	608105	611341	641598	592735	733262	710317	805904	838541	761104	733709	834278	783447	837206	949366	1005502
Uttar Pradesh																			
Agriculture	520109	519562	604266	570768	516247	555605	500437	523533	598699	588967	626548	654653	476880	772192	772205	799095	827363	814317	808929
Manufacture	133492	138889	144048	156759	153541	161400	161315	156426	179714	204523	216371	231745	228248	240529	237176	274365	289590	295099	314837
Transportation	138845	136558	142974	210844	201999	236667	221991	203492	215788	215008	205902	208255	207354	246170	257379	280570	271046	284579	300619
Others	105970	107275	111787	133262	138142	143276	139854	140424	137322	141198	142345	166525	171631	222159	226068	249862	259672	281854	307955
Net SDP	898416	902284	1003075	1071634	1009929	1096947	1023597	1023875	1131523	1149696	1191165	1261177	1084113	1481050	1492828	1603892	1647670	1675849	1732340
West Bengal																			
Agriculture	195527	210947	223266	224962	234083	203447	206766	228835	253527	243617	272537	262374	257358	260593	247859	244064	311871	313492	331030
Manufacture	71722	79182	82925	84485	86968	95838	107014	138957	154533	164358	173462	190314	212007	275664	295198	315868	301911	286908	308748
Transportation	102842	101406	95929	112577	113024	129834	110711	127591	136673	131407	129912	120538	158379	148172	185779	182506	177816	165230	174068
Others	55997	59402	64898	69900	73072	73099	74485	78430	84371	96345	99290	111681	115517	182224	180497	193466	193538	204056	214747
Net SDP	426088	450938	467019	491924	507147	502219	498976	573813	629105	635726	675200	684907	743260	866653	909333	935904	985136	969686	1028593
India																			
Agriculture	3395100	3382500	3606800	3871100	3786700	3578200	3840000	3772000	4275300	4006400	4418600	4511500	3890800	4409100	4674700	4602400	5120300	5112400	5119000
Manufacture	1619800	1698100	1844900	1862800	1911000	1977700	2007000	2035700	2142000	2340200	2500500	2728300	2606900	2685500	2899300	3020500	3285400	3466200	3610400
Transportation	995100	1040000	1097600	1150200	1171000	1189600	1236800	1310100	1435100	1497600	1602300	1740300	1708800	1804600	1917800	2016100	2126300	2240400	2431700
Others	1235900	1297500	1364400	1433100	1504600	1558700	1596900	1635000	1721700	1809500	1877200	1986700	2072900	2134800	2218300	2393000	2507600	2683100	2864900
NDP	7245900	7418100	7913700	8317200	8373300	8304200	8680700	8752800	9574100	9653700	10398600	10966800	10279400	11034000	11710100	12032000	13039600	13502100	14026000

Note: Notes from Appendix A & D.1

APPENDIX D.2.1: COMPARABLE ESTIMATES OF NET NATIONAL \ STATE DOMESTIC PRODUCT: SECTOR WISE PERCENTAGE DISTRIBUTION: 1967-68 TO 1985-86 AT CONSTANT (1980-81) PRICES

(per cent)

State by Sector	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86
Andhra Pradesh																			
Agriculture	50.14	47.86	47.76	52.87	52.48	49.46	53.94	52.63	50.55	44.77	46.56	48.42	43.26	46.74	48.33	46.13	46.63	42.47	40.42
Manufacture	14.07	15.32	16.27	14.98	15.16	16.70	14.38	15.22	16.13	18.33	17.87	17.16	18.75	17.27	16.84	17.37	17.85	20.08	20.25
Transportation	24.36	24.50	23.54	19.94	19.90	20.16	19.73	20.16	20.31	20.73	20.07	20.49	22.84	18.79	19.14	20.34	19.13	19.71	20.94
Others	11.42	12.32	12.43	12.20	12.46	13.69	11.95	12.00	13.00	16.17	15.50	13.92	15.15	17.20	15.69	16.17	16.39	17.74	18.39
Net SDP	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Assam																			
Agriculture		62.18	60.27	56.28	56.36	56.29	56.58	55.18	56.91	55.78	55.68	53.47	56.02	54.00	48.97	48.67	48.65	43.18	41.97
Manufacture		16.21	17.48	22.54	22.37	22.44	22.01	22.81	22.34	21.44	20.74	22.57	17.74	11.91	19.31	18.68	19.55	23.77	23.55
Transportation		12.24	12.60	12.09	11.93	12.05	11.74	11.97	11.72	12.63	12.53	12.56	13.55	13.13	12.79	12.86	12.72	14.36	15.25
Others		9.36	9.64	9.10	9.34	9.22	9.67	10.05	9.03	10.14	11.05	11.40	12.69	20.96	18.92	19.78	19.08	18.70	19.23
Net SDP		100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Bihar																			
Agriculture	59.05	58.51	56.96	55.91	56.08	54.50	51.09	52.79	51.08	53.52	54.02	51.66	45.88	49.85	45.78	44.01	46.08	47.37	47.41
Manufacture	22.19	23.24	25.63	22.26	22.03	22.75	25.26	23.84	25.52	24.99	24.61	25.37	26.22	20.00	24.11	23.24	22.90	22.15	22.02
Transportation	11.95	11.30	8.57	11.90	11.93	12.29	12.53	12.90	13.06	11.90	12.27	13.10	16.98	11.85	12.74	12.51	13.06	12.74	12.63
Others	6.82	6.94	8.85	9.93	9.95	10.45	11.11	10.48	10.35	9.58	9.11	9.85	10.93	18.30	17.37	20.24	17.96	17.73	17.94
Net SDP	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Gujarat																			
Agriculture	40.73	34.96	39.05	46.21	46.75	30.12	39.13	28.67	38.92	33.71	31.94	35.78	31.64	36.47	39.91	34.92	34.86	34.93	26.32
Manufacture	27.83	30.49	27.49	26.47	25.16	35.33	30.65	37.52	30.59	29.80	31.56	30.34	28.35	32.11	29.36	30.62	32.18	30.48	33.87
Transportation	19.81	21.28	20.22	15.30	15.80	18.35	16.70	19.01	17.87	22.56	22.73	19.45	25.82	13.82	14.34	15.90	16.05	16.67	18.85
Others	11.63	13.27	13.24	12.02	12.29	16.20	13.52	14.81	12.62	13.93	13.76	14.43	14.19	17.60	16.39	18.56	16.90	17.92	20.96
Net SDP	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Haryana																			
Agriculture	64.03	60.96	64.65	63.65	59.66	57.78	55.66	56.79	57.10	56.01	54.81	54.85	48.15	56.89	54.96	54.05	54.05	52.56	53.54
Manufacture	15.11	18.57	15.84	16.57	19.29	19.49	19.96	21.20	20.68	17.88	18.81	18.53	21.16	19.47	20.35	19.42	19.00	20.55	20.66
Transportation	12.70	11.39	12.32	11.48	12.19	13.35	14.66	12.56	14.27	17.98	18.46	18.38	21.26	12.29	13.01	14.29	14.06	14.11	13.59
Others	8.16	9.07	7.19	8.30	8.86	9.38	9.72	9.44	7.94	8.13	7.92	8.24	9.43	11.35	11.68	12.25	12.88	12.79	12.21
Net SDP	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Himachal Pradesh																			
Agriculture				50.78	49.33	48.28	50.36	50.61	50.70	49.45	48.55	49.76	47.77	51.34	52.94	46.70	50.55	45.04	45.44
Manufacture				26.32	26.22	27.30	23.72	22.86	25.31	20.85	22.53	19.62	19.02	18.42	17.26	20.81	16.32	18.22	19.35
Transportation				8.34	8.15	8.10	8.29	8.67	7.76	11.75	11.99	13.47	14.45	8.16	8.43	9.04	9.36	9.92	9.62
Others				14.56	16.30	16.32	17.63	17.86	16.23	17.95	16.93	17.15	18.75	22.07	21.37	23.46	23.76	26.82	25.60
Net SDP				100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

(Contd.)

APPENDIX D.2.1: (CONTD.)

(per cent)

State by Sector	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86
Jammu & Kashmir																			
Agriculture	63.89	63.35	65.18	60.14	56.75	55.71	58.04	56.34	52.21	53.64	53.78	48.52	46.82	47.51	47.83	45.34	45.77	44.67	42.55
Manufacture	12.81	12.46	11.34	14.56	15.96	15.50	14.23	15.87	16.63	12.24	13.53	14.36	13.18	11.65	10.82	12.06	12.94	14.00	15.90
Transportation	7.16	7.52	7.65	12.08	12.77	13.53	13.12	13.40	13.87	18.26	17.18	21.57	23.51	18.00	18.70	18.65	18.79	18.60	20.69
Others	16.14	16.67	15.82	13.22	14.52	15.26	14.62	14.39	17.30	15.86	15.52	15.56	16.49	22.84	22.65	23.95	22.50	22.72	20.86
Net SDP	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Karnataka																			
Agriculture	45.45	47.22	49.32	52.65	51.47	46.74	50.99	49.39	48.49	42.78	45.20	41.45	42.42	40.07	40.73	38.71	38.33	38.52	36.19
Manufacture	25.82	24.11	23.20	22.74	23.56	26.83	23.31	24.86	26.35	29.19	26.83	28.05	27.56	29.19	28.32	29.66	30.81	30.04	29.59
Transportation	13.29	13.18	13.39	13.37	13.59	14.20	14.44	14.50	14.12	15.76	16.64	18.50	18.02	15.37	15.86	16.39	15.21	15.18	16.06
Others	15.43	15.49	14.09	11.25	11.39	12.22	11.26	11.25	11.03	12.26	11.33	12.00	12.00	15.37	15.08	15.24	15.65	16.25	18.17
Net SDP	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Kerala																			
Agriculture	52.08	53.08	54.65	51.20	50.49	50.03	49.41	47.35	48.02	45.59	42.18	39.50	39.36	38.37	38.15	37.78	36.40	36.40	35.06
Manufacture	15.77	15.44	14.69	18.15	19.11	18.79	18.80	19.53	18.96	19.46	20.55	21.21	23.05	24.85	23.38	23.35	22.99	23.27	22.44
Transportation	20.13	19.98	20.18	18.23	17.97	18.76	18.69	20.12	20.01	20.08	21.95	24.94	22.87	18.84	20.06	19.66	19.08	19.41	21.19
Others	12.01	11.50	10.48	12.42	12.43	12.42	13.10	13.01	13.02	14.87	15.32	14.35	14.72	17.94	18.41	19.22	21.54	20.92	21.30
Net SDP	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Madhya Pradesh																			
Agriculture	58.94	57.05	57.48	58.42	59.19	55.55	53.88	53.12	53.69	49.97	54.20	50.84	41.76	51.63	57.16	48.85	49.68	45.61	45.39
Manufacture	19.59	20.15	20.49	19.17	18.67	21.53	23.43	23.68	22.74	24.02	21.93	22.82	27.17	20.29	23.04	20.64	19.37	21.55	21.64
Transportation	11.71	12.08	11.82	13.40	13.41	13.41	13.18	13.90	14.65	15.98	14.26	15.65	17.80	13.51	16.59	15.04	14.97	15.53	15.79
Others	9.76	10.72	10.21	9.01	8.72	9.51	9.51	9.29	8.92	10.02	9.61	10.69	13.27	14.57	16.61	15.46	15.99	17.30	17.18
Net SDP	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Maharashtra																			
Agriculture	34.03	32.49	32.40	29.29	28.88	24.69	29.39	31.52	29.73	30.42	30.63	27.86	29.64	25.78	26.59	24.98	25.04	23.22	21.02
Manufacture	30.83	31.34	32.14	33.78	34.30	35.62	32.53	30.57	31.71	33.55	33.06	34.62	32.98	35.97	35.13	34.50	36.05	38.27	39.42
Transportation	22.54	23.36	21.83	21.35	21.31	22.38	22.60	23.40	23.52	20.73	20.98	21.09	21.97	16.54	17.60	18.89	18.18	17.77	18.03
Others	12.61	12.80	13.63	15.58	15.50	17.31	15.47	14.51	15.03	15.30	15.32	16.43	15.41	21.70	20.69	21.62	20.72	20.74	21.53
Net SDP	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Orissa																			
Agriculture	64.24	64.16	64.04	67.89	65.41	66.79	67.61	63.60	66.63	55.94	60.78	61.61	53.02	56.35	55.68	52.50	56.89	52.61	53.92
Manufacture	16.81	16.79	16.78	15.93	16.33	16.40	15.83	18.24	16.07	19.77	17.75	16.94	21.28	15.54	14.70	16.66	14.50	15.98	15.02
Transportation	9.48	10.28	10.42	6.65	7.28	6.84	6.52	7.24	7.31	13.50	12.07	12.61	13.84	13.13	14.10	13.47	13.66	14.27	14.68
Others	9.47	8.76	8.75	9.53	10.99	9.97	10.04	10.92	9.99	10.79	9.41	8.84	11.86	14.99	15.52	17.37	14.95	17.14	16.38
Net SDP	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

(Contd.)

APPENDIX D.2.1: (CONCLD.)

(per cent)

State by Sector	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86
Punjab																			
Agriculture	48.10	48.18	50.76	55.11	54.87	54.09	52.26	52.45	51.38	47.07	47.89	45.87	46.36	49.44	50.81	50.42	48.55	49.64	51.26
Manufacture	29.62	28.47	26.16	20.20	20.14	20.66	21.26	19.98	22.42	21.20	21.10	21.17	20.40	19.76	20.46	20.21	21.32	20.80	20.47
Transportation	13.07	13.93	13.67	14.51	14.62	15.14	16.94	17.61	16.32	21.72	21.59	23.26	23.05	17.26	16.71	16.75	16.95	16.46	14.98
Others	9.21	9.42	9.41	10.18	10.38	10.12	9.53	9.96	9.87	10.01	9.42	9.71	10.19	13.54	12.03	12.62	13.19	13.10	13.29
Net SDP	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Rajasthan																			
Agriculture	53.14	47.14	48.38	62.90	57.53	54.09	56.40	53.56	55.30	54.09	52.44	51.17	45.44	48.25	49.83	49.43	52.73	49.38	46.68
Manufacture	17.47	21.15	20.31	17.50	20.99	22.30	20.60	24.42	21.91	20.02	19.55	20.54	23.13	20.13	18.94	18.88	18.99	19.15	20.17
Transportation	19.32	18.25	18.63	11.16	11.86	12.59	12.51	10.14	12.59	15.56	17.28	17.42	18.31	15.50	15.85	15.64	14.63	15.57	16.27
Others	10.06	13.46	12.68	8.44	9.62	11.02	10.49	11.88	10.19	10.33	10.73	10.87	13.12	16.12	15.38	16.05	13.64	15.90	16.88
Net SDP	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Tamil Nadu																			
Agriculture	26.73	25.79	27.28	29.01	30.26	28.56	31.43	26.67	27.76	23.77	26.23	22.89	22.06	23.74	27.06	21.00	24.03	24.90	24.64
Manufacture	28.21	28.76	28.65	25.26	24.71	24.99	22.93	22.66	23.47	29.52	28.30	29.00	33.47	33.25	30.34	33.27	32.83	33.29	31.64
Transportation	30.38	30.71	29.40	29.81	29.10	30.22	29.03	32.24	33.31	29.88	29.96	32.39	27.37	25.68	26.22	26.96	25.55	24.36	24.20
Others	14.67	14.74	14.68	15.91	15.93	16.23	16.61	18.42	15.46	16.83	15.52	15.72	17.09	17.32	16.38	18.76	17.60	17.45	19.52
Net SDP	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Uttar Pradesh																			
Agriculture	57.89	57.58	60.24	53.26	51.12	50.65	48.89	51.13	52.91	51.23	52.60	51.91	43.99	52.14	51.73	49.82	50.21	48.59	46.70
Manufacture	14.86	15.39	14.36	14.63	15.20	14.71	15.76	15.28	15.88	17.79	18.16	18.38	21.05	16.24	15.89	17.11	17.58	17.61	18.17
Transportation	15.45	15.13	14.25	19.67	20.00	21.58	21.69	19.87	19.07	18.70	17.29	16.51	19.13	16.62	17.24	17.49	16.45	16.98	17.35
Others	11.80	11.89	11.14	12.44	13.68	13.06	13.66	13.71	12.14	12.28	11.95	13.20	15.83	15.00	15.14	15.58	15.76	16.82	17.78
Net SDP	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
West Bengal																			
Agriculture	45.89	46.78	47.81	45.73	46.16	40.51	41.44	39.88	40.30	38.32	40.36	38.31	34.63	30.07	27.26	26.08	31.66	32.33	32.18
Manufacture	16.83	17.56	17.76	17.17	17.15	19.08	21.45	24.22	24.56	25.85	25.69	27.79	28.52	31.81	32.46	33.75	30.65	29.59	30.02
Transportation	24.14	22.49	20.54	22.89	22.29	25.85	22.19	22.24	21.73	20.67	19.24	17.60	21.31	17.10	20.43	19.50	18.05	17.04	16.92
Others	13.14	13.17	13.90	14.21	14.41	14.56	14.93	13.67	13.41	15.16	14.71	16.31	15.54	21.03	19.85	20.67	19.65	21.04	20.88
Net SDP	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
India																			
Agriculture	46.86	45.60	45.58	46.54	45.22	43.09	44.24	43.09	44.65	41.50	42.49	41.14	37.85	39.96	39.92	38.25	39.27	37.86	36.50
Manufacture	22.35	22.89	23.31	22.40	22.82	23.82	23.12	23.26	22.37	24.24	24.05	24.88	25.36	24.34	24.76	25.10	25.20	25.67	25.74
Transportation	13.73	14.02	13.87	13.83	13.98	14.33	14.25	14.97	14.99	15.51	15.41	15.87	16.62	16.35	16.38	16.76	16.31	16.59	17.34
Others	17.06	17.49	17.24	17.23	17.97	18.77	18.40	18.68	17.98	18.74	18.05	18.12	20.17	19.35	18.94	19.89	19.23	19.87	20.43
NDP	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Note: Notes from Appendix A & D.1

APPENDIX E: COMPARABLE ESTIMATES OF NET NATIONAL / STATE DOMESTIC PRODUCT: IMPLICIT PRICE INDICES (1980-81 = 100): 1967-68 TO 1985-86

YEAR	APR 1	ASM 2	BHR 3	GUJ 4	HRY 5	HPR 6	J&K 7	KAR 8	KER 9	MAH 10	MPR 11	ORS 12	PNB 13	RAJ 14	TND 15	UPR 16	WBL 17	INDIA 18
1967-68	41.19		46.96	38.86	39.72		38.72	45.72	37.65	37.01	39.08	42.18	41.00	38.21	36.14	45.25	63.22	41.41
1968-69	43.82	54.15	44.97	39.90	40.88		38.91	44.75	38.90	37.17	40.32	41.01	43.63	39.52	36.56	37.05	61.00	42.55
1969-70	45.34	52.09	47.86	43.00	41.93		41.11	46.21	41.37	40.07	42.57	42.31	45.67	43.43	39.63	42.49	62.89	43.84
1970-71	47.51	46.58	45.94	46.27	44.70	47.29	43.07	47.25	44.29	42.27	43.09	39.83	52.84	43.58	43.29	40.27	64.97	44.23
1971-72	50.35	45.26	47.13	46.11	48.36	50.11	46.97	47.87	42.67	43.41	45.34	44.23	54.57	46.10	47.20	44.52	68.68	46.59
1972-73	58.11	49.77	55.51	53.36	53.81	55.43	50.01	53.26	47.55	48.73	52.34	49.29	59.69	51.72	49.19	51.58	71.33	51.55
1973-74	65.43	53.60	68.31	66.29	66.55	62.96	56.31	65.09	60.02	57.42	66.41	57.10	71.95	66.54	57.65	61.14	87.24	60.69
1974-75	76.56	69.50	80.15	72.21	74.24	74.61	63.89	73.33	67.73	67.18	77.00	68.09	76.98	77.25	70.52	68.09	91.31	70.36
1975-76	67.28	65.83	74.20	69.77	68.41	70.87	68.27	67.18	68.92	66.73	67.52	61.15	76.76	65.40	59.81	61.61	86.93	67.76
1976-77	74.52	73.85	76.12	75.51	75.82	69.91	69.33	74.44	75.40	71.14	74.72	64.02	84.19	72.29	66.97	69.58	94.17	72.26
1977-78	77.30	81.10	78.75	78.87	83.78	74.73	76.35	73.84	77.89	73.82	79.23	67.85	87.68	77.27	67.52	74.83	96.49	76.92
1978-79	78.18	81.50	83.42	78.90	80.19	77.54	81.68	74.39	83.17	76.68	80.40	66.74	87.79	78.76	68.59	73.98	99.36	77.92
1979-80	88.40	92.66	90.95	89.50	91.17	89.18	90.34	87.14	89.49	86.09	94.84	80.87	98.72	85.91	83.21	90.31	103.17	89.67
STD	15.19	15.15	16.27	16.75	17.44	12.52	16.72	14.00	17.75	16.32	18.08	12.89	18.52	16.50	14.43	15.73	15.11	15.72
CV	24.26	23.74	25.17	27.27	28.01	18.61	28.42	22.74	29.77	28.37	29.28	23.12	27.31	27.29	25.82	26.88	18.70	26.02
AVG	62.62	63.82	64.64	61.43	62.27	67.26	58.84	61.57	59.62	57.52	61.76	55.74	67.81	60.46	55.87	58.52	80.83	60.44
1980-81	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
1981-82	106.53	113.40	111.28	114.05	112.03	110.29	112.49	108.60	106.97	109.34	105.67	112.20	108.25	108.44	108.41	105.29	108.21	109.95
1982-83	113.84	121.01	123.79	123.17	120.45	121.04	127.08	117.49	121.30	113.37	116.21	121.74	115.81	121.23	116.67	114.01	117.58	118.44
1983-84	130.00	128.84	131.98	135.63	127.52	130.99	144.44	131.46	148.28	122.83	125.13	130.71	125.48	125.92	127.93	121.40	129.96	128.45
1984-85	138.89	148.67	149.55	141.03	132.78	138.57	153.75	137.18	154.54	130.85	129.74	140.52	133.38	134.30	133.32	131.28	151.69	138.12
1985-86	147.36	155.72	157.11	150.91	138.10	146.76	186.81	149.09	157.50	140.11	141.53	148.87	141.38	148.03	145.55	144.63	152.81	147.75
STD	17.22	19.33	20.01	17.09	12.86	16.07	28.53	16.90	23.04	14.13	13.45	16.53	14.25	15.85	15.36	15.20	20.23	16.26
CV	14.02	15.11	15.52	13.41	10.55	12.90	29.76	13.63	17.53	11.80	11.26	13.16	11.81	12.89	12.59	12.73	15.96	13.14
AVG	122.77	127.94	128.95	127.46	121.81	124.61	137.43	123.97	131.43	119.73	119.42	125.68	129.72	122.99	121.98	119.43	126.71	123.79

APPENDIX E.1. COMPARABLE ESTIMATES OF NET NATIONAL / STATE DOMESTIC PRODUCT: IMPLICIT PRICE INDICES (1980-81 = 100): ANNUAL AVERAGE GROWTH RATES 1967-68 TO 1979-80 AND 1980-81 TO 1985-86

(per cent)

YEAR	APR	ASM	BHR	GUJ	HRY	HPR	J&K	KAR	KER	MAH	MPR	ORS	PNB	RAJ	TND	UPR	WBL	INDIA
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1968-69	6.39		-4.25	2.67	2.92		0.50	-2.13	3.33	0.41	3.16	-2.77	6.43	3.43	1.17	-18.13	-3.51	2.77
1969-70	3.48	-3.80	6.43	7.78	2.57		5.65	3.26	6.33	7.83	5.61	3.16	4.68	9.92	8.37	14.69	3.10	3.02
1970-71	4.79	-10.59	-4.00	7.58	6.60		4.78	2.25	7.07	5.49	1.21	-5.86	15.69	0.35	9.25	-5.21	3.30	0.89
1971-72	5.98	-2.83	2.57	-0.34	8.21	5.96	9.05	1.33	-3.66	2.69	5.23	11.06	3.27	5.77	9.02	10.55	5.72	5.33
1972-73	15.41	9.97	17.78	15.72	11.25	10.60	6.46	11.25	11.43	12.24	15.43	11.43	9.39	12.19	4.22	15.86	3.85	10.67
1973-74	12.60	7.70	23.07	24.23	23.68	13.60	12.61	22.21	26.23	17.85	26.87	15.86	20.54	28.65	17.20	18.53	22.32	17.73
1974-75	17.00	29.66	17.32	8.94	11.55	18.50	13.46	12.66	12.86	17.00	15.96	19.23	6.99	16.10	22.33	11.36	4.66	15.92
1975-76	-12.12	-5.28	-7.41	-3.38	-7.85	-5.02	6.85	-8.38	1.74	-0.68	-12.31	-10.19	-0.30	-15.34	-15.19	-9.51	-4.79	-3.68
1976-77	10.77	12.18	2.59	8.22	10.84	-1.36	1.56	10.80	9.41	6.62	10.66	4.69	9.69	10.54	11.96	12.94	8.33	6.63
1977-78	3.72	9.82	3.45	4.46	10.49	6.91	10.12	-0.81	3.30	3.76	6.03	5.98	4.14	6.89	0.83	7.54	2.47	6.45
1978-79	1.14	0.50	5.93	0.04	-4.28	3.76	6.98	0.75	6.78	3.88	1.47	-1.63	0.12	1.92	1.58	-1.13	2.97	1.31
1979-80	13.08	13.69	9.02	13.43	13.69	15.01	10.60	17.13	7.60	12.27	17.97	21.18	12.45	9.08	21.32	22.07	3.83	15.07
STD	7.54	10.85	9.05	7.38	8.02	7.27	3.84	8.52	7.03	5.88	9.67	9.60	5.94	9.94	9.90	11.84	6.42	6.41
CV	110.04	195.59	149.76	99.11	107.32	96.31	52.03	145.41	91.27	78.97	119.32	159.68	76.52	133.23	129.01	178.62	147.48	93.77
AVG	6.85	5.55	6.04	7.45	7.47	7.55	7.39	5.86	7.70	7.45	8.11	6.01	7.76	7.46	7.67	6.63	4.35	6.84
1981-82	6.53	13.40	11.28	14.05	12.03	10.29	12.49	8.60	6.97	5.52	5.67	12.20	8.25	8.44	8.41	5.29	8.21	9.95
1982-83	6.85	6.71	11.24	8.00	7.52	9.75	12.97	8.18	13.40	9.97	9.97	8.50	6.98	11.80	7.62	8.28	8.66	7.72
1983-84	14.20	6.46	6.61	10.12	5.87	8.22	13.66	11.89	22.24	7.68	7.68	7.37	8.35	3.87	9.65	6.48	10.53	8.45
1984-85	6.83	15.40	13.31	3.98	4.13	5.79	6.45	4.35	4.22	3.69	3.69	7.51	6.30	6.65	4.21	8.14	16.72	7.53
1985-86	6.10	4.74	5.05	7.00	4.00	5.91	21.50	8.68	1.92	9.09	9.09	5.94	6.00	10.22	9.18	10.17	0.74	6.98
STD	3.06	4.23	3.13	3.35	2.95	1.88	4.80	2.40	7.34	2.31	2.29	2.11	0.97	2.77	1.93	1.67	5.12	1.03
CV	37.76	45.29	32.90	38.86	44.02	23.48	35.75	28.76	75.24	32.11	31.67	25.46	13.54	33.76	24.66	21.74	57.02	12.66
AVG	8.10	9.34	9.50	8.63	6.71	7.99	13.41	8.34	9.75	7.19	7.22	8.30	7.18	8.20	7.81	7.67	8.97	8.13

APPENDIX-E.2. COMPARABLE ESTIMATES OF NET NATIONAL / STATES DOMESTIC PRODUCT: IMPLICIT PRICE INDICES (1980-81 = 100): RANKING OF STATES BY ANNUAL AVERAGE GROWTH RATES: 1967-68 TO 1985-86

(per cent)

Ranking of States by Annual Average Growth Rates			
1967-68 to 1979-80		1980-81 to 1985-86	
State	Price Index (1980-81=100)	State	Price Index (1980-81=100)
1	2	3	4
KER	8.25	J&K	11.98
MPR	8.05	KER	9.62
MAH	7.92	ASM	9.84
HRY	7.83	BHR	9.27
PNB	7.83	WBL	8.97
J&K	7.81	GUJ	8.89
GUJ	7.67	KAR	8.35
RAJ	7.54	ORS	8.30
INDIA	**7.08**	RAJ	8.20
UPR	7.07	**INDIA**	**8.13**
TND	7.06	APR	8.10
BHR	6.72	HPR	8.10
APR	6.71	TND	8.02
HPR	6.58a	UPR	7.69
ASM	6.26b	PNB	7.32
KAR	6.03	MPR	7.22
ORS	6.01	MAH	6.95
WBL	5.02	HRY	0.71

Note: a: 1970-71 onwards; b: 1968-69 onwards

APPENDIX-F.1: COMPARABLE ESTIMATES OF TOTAL NET NATIONAL / STATE DOMESTIC PRODUCT: AT CONSTANT 1980-81 PRICES, RANKING OF STATES BY ANNUAL AVERAGE GROWTH RATES: SELECTED PERIODS 1967-68 TO 1985-86

(per cent)

Ranking By Annual Average Growth Rates							
State	1967-68 to 1979-80	State	1980-81 to 1985-86	State	1969-70 to 1973-74	State	1974-75 to 1978-79
1	2	3	4	5	6	7	8
KAR	5.87	ASM	8.22	RAJ	8.25	HRY	8.37
J&K	5.57	TND	6.76	J&K	7.21	PNB	8.13
GUJ	5.00	BHR	5.92	KAR	6.74	GUJ	7.75
MAH	4.94	MAH	5.81	APR	5.22	RAJ	7.34
WBL	4.84	PNB	5.63	GUJ	5.06	WBL	6.67
HRY	4.16	HRY	5.62	ORS	4.85	J&K	6.28
PNB	3.76	MPR	5.48	HRY	4.81	TND	6.09
ORS	3.71	RAJ	5.35	MAH	4.77	ORS	5.89
RAJ	3.39	APR	5.22	ASM	4.67	MAH	5.55
INDIA	**3.04**	**INDIA**	**4.94**	HPR	4.10b	HPR	5.36
TND	2.98	ORS	4.76	KER	3.40	BHR	5.26
HPR	2.64a	KAR	4.31	**INDIA**	**3.23**	**INDIA**	4.85
APR	2.59	J&K	3.64	MPR	2.86	KAR	4.83
KER	2.45	WBL	3.52	UPR	2.84	UPR	4.33
ASM	2.69c	UPR	3.21	TND	2.11	MPR	3.80
BHR	1.98	GUJ	2.20	WBL	2.08	APR	3.46
UPR	1.85	KER	1.97	PNB	0.91	ASM	2.35
MPR	0.79	HPR	1.95	BIH	0.36	KER	2.17

Note: a: Covers from 1970-71 to 1979-80; b: Covers from 1970-71 to 1973-74; c: Covers from 1968-69 to 1979-80

APPENDIX-F.2: COMPARABLE ESTIMATES OF PER CAPITA NET NATIONAL / STATE DOMESTIC PRODUCT: AT CONSTANT 1980-81 PRICES, RANKING OF STATES BY ANNUAL AVERAGE GROWTH RATES: SELECTED PERIODS 1967-68 TO 1985-86

(per cent)

Ranking by Annual Average Growth Rates							
State	1967-68 to 1979-80	State	1980-81 to 1985-86	State	1969-70 to 1973-74	State	1974-75 to 1978-79
1	2	3	4	5	6	7	8
KAR	3.46	ASM	5.65	RAJ	5.46	PNB	5.71
J&K	2.83	TND	5.05	KAR	4.50	HRY	5.46
WBL	2.59	BHR	3.67	J&K	4.41	GUJ	5.01
MAH	2.54	MAH	3.60	ASM	3.37	WBL	4.71
GUJ	2.40	PNB	3.52	GUJ	2.56	RAJ	4.44
ORS	1.66	APR	3.23	ORS	2.52	TND	4.14
PNB	1.60	MPR	3.19	MAH	2.43	ORS	4.08
HRY	1.41	ORS	2.91	APR	2.31	J&K	3.55
TND	1.15	HRY	2.78	HRY	2.15	HPR	3.23
INDIA	**0.74**	RAJ	2.50	HPR	1.92c	MAH	3.09
RAJ	0.63	**INDIA**	**2.46**	KER	1.10	BHR	3.01
APR	0.50	KAR	2.05	**INDIA**	**0.93**	**INDIA**	**2.54**
HPR	0.48a	WBL	1.49	MPR	0.10	KAR	2.27
ASM	0.46c	J&K	1.27	TND	-0.28	UPR	1.83
KER	0.43	UPR	1.04	WBL	-0.40	MPR	1.67
BHR	-0.12	KER	0.19	PNB	-0.96	APR	1.15
UPR	-0.23	GUJ	0.10	BHR	-1.61	KER	0.49
MPR	-1.57	HPR	0.04	UPR	1.84	ASM	-0.65

APPENDIX F.3: COMPARABLE ESTIMATES OF NET NATIONAL / STATE DOMESTIC PRODUCT: AT CONSTANT 1980-81 PRICES: RANKING OF STATES BY ANNUAL AVERAGE GROWTH RATES, IN AGRICULTURE SECTOR SELECTED PERIODS: 1967-68 TO 1985-86

(per cent)

Ranking by Annual Average Growth Rates							
State	1967-68 to 1979-80	State	1980-81 to 1985-86	State	1969-70 to 1973-74	State	1974-75 to 1978-79
1	2	3	4	5	6	7	8
GUJ	7.56	TND	9.42	RAJ	15.40	GUJ	10.26
KAR	5.84	PNB	6.51	GUJ	13.70	HRY	8.06
MAH	4.38	WBL	5.50	KAR	9.00	BHR	5.65
RAJ	4.11	RAJ	5.23	APR	7.34	UPR	5.64
PNB	3.39	BHR	5.01	TND	6.41	RAJ	5.57
J&K	3.12	ORS	4.68	ORS	6.25	PNB	5.35
ORS	3.12	HRY	4.39	J&K	5.46	ORS	5.25
WBL	2.57	**INDIA**	**3.14**	MAH	3.98	HPR	5.14
TND	2.17	ASM	2.97	HPR	3.89b	WBL	5.14
HRY	2.14	MPR	2.92	HRY	3.43	MAH	4.61
HPR	2.08a	APR	2.52	**INDIA**	**2.72**	**INDIA**	**3.53**
APR	2.96	KAR	2.35	ASM	2.66	MPR	3.17
ASM	1.70c	MAH	1.76	PNB	2.56	J&K	3.02
INDIA	**1.43**	J&K	1.45	KER	2.12	APR	1.82
KER	0.19	UPR	0.96	MPR	1.86b	ASM	1.28
BHR	0.12	KER	0.19	WBL	-0.16	TND	1.22
UPR	-0.01	HPR	0.14	UPR	-0.22	KAR	1.16
MPR	-1.39	GUJ	-2.77	BHR	-2.21	KER	-2.24

Note : a: Covers from 1970-71 to 1979-80; b: Covers from 1970-71 to 1973-74; c: Covers from 1968-69 to 1979-80

APPENDIX F.4: COMPARABLE ESTIMATES OF NET NATIONAL / STATE DOMESTIC PRODUCT: AT CONSTANT 1980-81 PRICES: RANKING OF STATES BY ANNUAL AVERAGE GROWTH RATES, IN MANUFACTURING SECTOR SELECTED PERIODS : 1967-68 TO 1985-86

(Per cent)

Ranking by Annual Average Growth Rates							
State	1967-68 to 1979-80	State	1980-81 to 1985-86	State	1969-70 to 1973-74	State	1974-75 to 1978-79
1	2	3	4	5	6	7	8
WBL	9.66	ASM	27.57	ASM	12.02c	WBL	12.53
HRY	6.87	J&K	10.59	J&K	11.43	TND	11.33
J&K	6.83	APR	8.51	KER	7.94	KAR	8.54
KAR	6.34	BHR	8.51	RAJ	6.62	PNB	8.30
KER	5.89	MAH	7.83	WBL	6.28	UPR	7.71
MAH	5.52	HRY	7.03	MPR	6.02	J&K	7.28
ORS	5.10	MPR	6.85	KAR	6.00	GUJ	6.96
APR	4.88	PNB	6.43	HRY	5.99	APR	6.96
RAJ	4.78	**INDIA**	**6.11**	MAH	5.46	HRY	6.92
UPR	4.72	UPR	5.69	GUJ	4.18	MAH	6.90
TND	4.69	TND	5.56	ORS	3.47	RAJ	6.87
GUJ	4.47	RAJ	5.35	**INDIA**	**3.43**	ORS	6.65
ASM	4.45c	KAR	4.64	UPR	3.11	**INDIA**	**6.37**
INDIA	**4.12**	HPR	3.73	APR	2.77	BHR	5.37
BHR	3.34	ORS	3.51	BHR	1.92	KER	4.69
MPR	3.34	GUJ	3.33	HPR	0.77	MPR	3.00
PNB	1.15	WBL	2.46	TND	-2.23	ASM	2.93
HPR	-0.16a	KER	-0.03	PNB	-4.02	HPR	2.83

NOTE: a: Covers from 1970-71 to 1979-80; b: Covers from 1970-71 to 1973-74; c: Covers from 1968-69 to 1979-80; d: Includes Manufacturing and Mining & Quarrying Sectors

APPENDIX F.5: COMPARABLE ESTIMATES OF NET NATIONAL / STATE DOMESTIC PRODUCT: AT CONSTANT 1980-81 PRICES: RANKING OF STATES BY ANNUAL AVERAGE GROWTH RATES, IN TRANSPORTATION SECTOR SELECTED PRIODS : 1967-68 TO 1985-86

(per cent)

Ranking by Annual Average Growth Rates							
State	1967-68 to 1979-80	State	1980-81 to 1985-86	State	1969-70 to 1973-74	State	1974-75 to 1978-79
1	2	3	4	5	6	7	8
J&K	18.39c	ASM	11.46	J&K	22.97	ORS	22.57
HRY	9.64	MPR	8.79	UPR	11.79	J&K	18.51
HPR	9.57	GUJ	8.54	HRY	10.62	RAJ	17.55
PNB	9.39	HRY	7.84	KAR	8.64	HPR	16.70
KAR	8.62	MAH	7.71	BHR	5.28	PNB	16.32
ORS	8.50	APR	7.55	PNB	5.05	HRY	14.76
GUJ	7.75	BHR	7.45	MPR	4.86	GUJ	11.84
BHR	6.30	ORS	7.25	MAH	4.08	KAR	10.24
MAH	4.85	J&K	6.63	HPR	3.92	TND	8.71
INDIA	**4.65**	**INDIA**	**6.15**	ASM	3.74	KER	8.36
WBL	4.39	RAJ	6.15	**INDIA**	**3.54**	MPR	7.27
MPR	4.28	TND	5.45	WBL	2.50	**INDIA**	**7.09**
UPR	4.26	HPR	5.26	KER	2.28	BHR	6.30
RAJ	4.11	KAR	5.24	TND	0.95	MAH	4.40
KER	3.79	KER	4.63	APR	-0.01	APR	4.19
ASM	3.53	UPR	4.16	RAJ	-0.24	ASM	3.64
TND	2.51	WBL	3.86	GUJ	-0.57	WBL	2.03
APR	2.09	PNB	2.69	ORS	-3.78	UPR	-1.15

NOTE: a: Covers from 1970-71 to 1979-80; b: Covers from 1970-71 to 1973-74; c: Covers from 1968-69 to 1979-80; d: Includes Manufacturing and Mining & Quarrying Sectors

APPENDIX G.1: COMPARABLE ESTIMATES OF TOTAL NET NATIONAL / STATE DOMESTIC PRODUCT: AT CONSTANT 1980-81 PRICES
AVERAGE GROWTH RATES AND DISPARITY MEASURE: SELECTED PERIODS: 1967-68 TO 1985-86

STATES	Total Period of Study						Fourth Plan			Fifth Plan		
	1967-68 to 1979-80			1980-81 to 1985-86			1969-70 TO 1973-74			1974-75 TO 1978-79		
	AVG(%)	STD	CV	AVG(%)	STD	CV	AVG(%)	STD	CV	AVG(%)	STD	CV
	1	2	3	4	5	6	7	8	9	10	11	12
Andhra Pradesh	2.59	7.43	286.87	5.22	5.26	100.76	4.26	7.98	187.45	3.46	6.94	200.52
Assam	2.65c	4.28c	161.53c	8.22	6.87	83.55	4.62	2.58	55.86	2.32	4.02	172.90
Bihar	1.98	5.51	278.13	5.92	3.07	51.96	0.36	6.04	1667.51	5.26	2.75	52.20
Gujarat	5.00	12.89	257.96	2.20	7.04	320.72	5.06	14.74	291.46	7.75	11.92	153.93
Haryana	4.14	10.11	244.14	5.62	3.15	55.93	4.81	11.49	238.83	8.37	5.94	70.95
Himachal Pradesh	2.64a	8.64a	327.17a	1.95	5.50	281.55	4.10b	1.08b	26.33b	5.36	7.78	145.27
Jammu & Kashmir	5.57	8.34	149.76	3.64	3.31	90.95	7.21	7.47	103.57	6.28	9.68	154.11
Karnataka	5.87	6.62	112.93	4.31	3.86	89.54	6.74	6.07	90.08	4.83	7.30	151.20
Kerala	2.45	2.59	105.52	1.97	4.75	240.83	3.48	3.19	91.81	2.17	1.12	51.76
Madhya Pradesh	0.79	8.23	1,038.58	5.48	3.22	58.67	2.86	4.31	150.62	3.80	7.78	204.68
Maharashtra	4.94	5.13	103.81	5.81	1.70	29.29	4.77	7.40	155.06	5.55	2.72	48.91
Orissa	3.71	13.03	350.87	4.76	11.73	246.41	4.85	8.39	173.23	5.89	13.30	225.66
Punjab	3.76	4.96	131.87	5.63	4.27	75.86	0.91	2.89	317.88	8.13	3.75	46.17
Rajasthan	3.39	16.14	475.69	5.35	9.37	175.00	8.25	17.00	206.00	7.34	10.05	136.85
Tamil Nadu	2.98	8.60	288.50	6.76	7.19	106.35	2.11	2.96	140.28	6.09	11.33	185.90
Uttar Pradesh	1.85	7.31	394.92	3.21	2.29	71.37	2.84	7.53	265.53	4.33	3.66	84.67
West Bengal	4.84	4.45	91.91	3.52	2.75	78.03	2.08	2.47	119.13	6.67	5.24	78.60
India	3.04	4.13	135.92	4.94	2.05	41.59	3.23	2.83	87.58	4.85	3.51	72.35

APPENDIX G.2: COMPARABLE ESTIMATES OF PER CAPITA NET NATIONAL / STATE DOMESTIC PRODUCT: AT CONSTANT 1980-81 PRICES
ANNUAL AVERAGE GROWTH RATES AND DISPARITY MEASURE: SELECTED PERIODS: 1967-68 TO 1985-86

States	Total Period of Study						Fourth Plan			Fifth Plan		
	1967-68 to 1979-80			1980-81 to 1985-86			1969-70 TO 1973-74			1974-75 TO 1978-79		
	AVG(%)	STD	CV	AVG(%)	STD	CV	AVG(%)	STD	CV	AVG(%)	STD	CV
	1	2	3	4	5	6	7	8	9	10	11	12
Andhra Pradesh	0.50	7.16	1,426.75	3.33	3.23	5.11	2.31	7.87	341.32	1.15	6.47	560.66
Assam	0.43c	5.91c	1,377.63c	5.87	5.65	6.55	3.32	6.02	181.00	-0.68	3.87	-567.62
Bihar	-0.12	5.48	-4,383.31	4.29	3.67	3.00	-1.61	5.94	-368.44	3.01	3.01	100.07
Gujarat	2.40	12.62	525.31	-9.01	0.10	6.81	2.56	14.35	560.87	5.01	11.79	235.36
Haryana	1.41	9.85	697.46	7.77	2.78	3.10	2.15	11.11	516.54	5.46	5.95	109.07
Himachal Pradesh	0.48a	8.59a	789.77a	6.42	0.04	5.41	1.92b	1.07b	55.38b	3.23	7.62	236.02
Jammu & Kashmir	2.83	8.22	290.22	0.21	1.27	3.19	4.41	7.54	171.13	3.55	9.43	265.92
Karnataka	3.46	6.62	191.38	-4.84	2.05	3.71	4.50	5.89	130.92	2.27	7.35	323.57
Kerala	0.43	2.50	584.01	3.47	0.19	4.65	1.10	3.14	284.84	0.49	1.38	284.30
Madhya Pradesh	-1.57	7.92	-505.01	1.86	3.60	1.62	0.10	4.25	4,313.16	1.67	7.31	436.91
Maharashtra	2.54	4.97	195.18	6.34	3.19	3.16	2.43	7.22	297.64	3.09	2.48	80.22
Orissa	1.66	12.90	775.55	11.71	2.91	11.50	2.52	8.19	324.94	4.08	13.41	328.41
Punjab	1.60	4.98	310.77	3.15	3.52	4.14	-0.96	3.13	-324.81	5.71	3.97	69.54
Rajasthan	0.63	15.80	2504.33	-1.68	2.50	9.07	5.46	16.62	304.54	4.44	9.82	221.12
Tamil Nadu	1.15	8.63	749.91	4.18	5.05	7.11	-0.28	3.11	-1,092.18	4.14	11.29	272.56
Uttar Pradesh	-0.23	7.86	-3,410.10	1.29	1.04	2.27	-1.84	6.41	-347.77	1.83	3.54	193.35
West Bengal	2.59	4.29	165.58	4.04	1.49	2.69	-0.40	2.56	-641.22	4.71	4.62	98.25
India	0.74	4.09	554.99	1.68	2.46	1.93	0.93	2.85	307.20	2.54	3.37	132.58

Note: a: Covers from 1970-71 to 1979-80; b: Covers from 1970-71 to 1973-74; c: Covers from 1968-69 to 1979-80

APPENDIX G.3: COMPARABLE ESTIMATES OF NET NATIONAL/STATE DOMESTIC PRODUCT IN AGRICULTURE SECTOR AT CONSTANT 1980-81 PRICES
ANNUAL AVERAGE GROWTH RATES AND DISPARITY MEASURE: SELECTED PERIODS :1967-68 TO 1985-86

States	Total Period of Study						Fourth Plan			Fifth Plan		
	1967-68 to 1979-80			1980-81 to 1985-86			1969-70 TO 1973-74			1974-75 TO 1978-79		
	AVG(%)	STD	CV	AVG(%)	STD	CV	AVG(%)	STD	CV	AVG(%)	STD	CV
	1	2	3	4	5	6	7	8	9	10	11	12
Andhra Pradesh	1.96	13.56	691.36	2.53	9.68	382.15	7.34	13.62	185.70	1.82	12.54	687.17
Assam	1.70c	4.68c	275.74c	2.97	7.43	249.88	2.66	2.53	94.99	1.28	6.26	487.50
Bihar	0.12	8.92	7,438.94	5.01	6.35	126.95	-2.21	7.51	-340.31	5.65	6.16	109.01
Gujarat	7.56	33.64	445.05	-2.77	17.70	-638.33	13.70	36.10	263.45	10.26	34.02	331.41
Haryana	2.14	13.90	650.53	4.39	4.35	99.10	3.43	15.95	464.69	8.06	6.14	76.12
Himachal Pradesh	2.08a	9.91a	476.65a	0.14	12.37	8,815.16	3.89b	4.29b	110.31b	5.14	8.25	160.48
Jammu & Kashmir	3.12	10.76	344.87	1.45	5.05	347.42	5.46	8.66	158.51	3.02	13.54	448.78
Karnataka	5.84	12.86	220.12	2.35	6.66	283.27	9.00	12.86	142.84	1.16	13.24	1,140.46
Kerala	0.19	5.12	2,737.35	0.19	5.56	2871.84	2.12	5.84	274.81	-2.24	3.70	-165.04
Madhya Pradesh	-1.39	13.74	-990.55	2.92	6.38	218.24	1.86	7.17	385.47	3.17	13.39	422.84
Maharashtra	4.38	12.87	293.64	1.76	6.49	368.37	3.98	18.35	460.51	4.61	6.77	147.03
Orissa	3.12	18.90	606.10	4.68	17.86	381.71	6.25	11.56	184.84	5.25	20.63	393.11
Punjab	3.39	3.68	108.63	6.51	6.59	101.24	2.56	2.73	106.92	5.35	3.84	71.83
Rajasthan	4.11	28.13	684.06	5.23	14.58	278.81	15.40	34.58	224.48	5.57	12.83	230.24
Tamil Nadu	2.17	15.41	711.53	9.42	19.98	212.16	6.41	6.93	108.04	1.22	21.42	1,756.96
Uttar Pradesh	-0.01	11.45	-94,627.45	0.96	2.14	224.15	-0.22	10.43	-4749.50	5.64	5.13	90.96
West Bengal	2.57	7.14	277.61	5.50	11.65	211.98	-0.16	6.71	-4179.88	5.14	7.33	142.56
India	1.43	7.54	528.10	3.14	4.82	153.36	2.72	5.47	201.08	3.53	7.33	207.33

APPENDIX G.4: COMPARABLE ESTIMATES OF NET NATIONAL/STATE DOMESTIC PRODUCT: IN MANUFACTURING SECTOR AT CONSTANT 1980-81 PRICES
ANNUAL AVERAGE GROWTH RATES AND DISPARITY MEASURE: SELECTED PERIODS: 1967-68 TO 1985-86

States	Total Period of Study						Fourth Plan			Fifth Plan		
	1967-68 to 1979-80			1980-81 to 1985-86			1969-70 TO 1973-74			1974-75 TO 1978-79		
	AVG(%)	STD	CV	AVG(%)	STD	CV	AVG(%)	STD	CV	AVG(%)	STD	CV
	1	2	3	4	5	6	7	8	9	10	11	12
Andhra Pradesh	4.88	3.98	81.61	8.51	2.38	27.99	2.77	4.93	178.12	6.96	1.94	27.96
Assam	4.45c	14.84c	333.29c	27.57	33.66	122.09	12.02	14.42	119.98	2.93	5.85	200.04
Bihar	3.34	4.13	123.58	8.51	11.51	135.29	1.92	3.42	177.84	5.37	3.19	59.48
Gujarat	4.47	5.62	125.72	3.33	7.73	232.25	4.18	5.69	136.26	6.96	4.81	69.10
Haryana	6.87	7.19	104.57	7.03	6.56	93.25	5.99	7.27	121.43	6.92	7.90	114.09
Himachal Pradesh	-0.16a	15.73a	-10,014.13a	3.73	13.25	355.26	0.77b	6.63b	856.71b	2.83	18.61	657.30
Jammu & Kashmir	6.83	17.93	262.54	10.59	8.72	82.29	11.43	20.41	178.48	7.28	16.32	224.22
Karnataka	6.34	4.55	71.78	4.64	4.96	106.83	6.00	5.58	93.00	8.54	1.23	14.45
Kerala	5.89	6.36	107.93	-0.03	5.84	-22030.32	7.94	8.93	112.46	4.69	2.47	52.60
Madhya Pradesh	3.34	4.80	143.86	6.85	3.90	56.92	6.02	4.86	80.68	3.00	2.69	89.56
Maharashtra	5.52	4.97	90.09	7.83	4.18	53.39	5.46	6.09	111.40	6.90	3.56	51.54
Orissa	5.10	6.71	131.43	3.51	4.12	117.36	3.47	6.44	185.33	6.65	6.10	91.81
Punjab	1.15	11.30	982.29	6.43	5.60	87.02	-4.02	12.02	-299.22	8.30	8.44	101.75
Rajasthan	4.78	6.51	136.10	5.35	8.96	167.39	6.62	6.45	97.45	6.87	3.69	53.66
Tamil Nadu	4.69	11.16	237.89	5.56	4.96	89.16	-2.23	6.47	-289.82	11.33	12.83	113.28
Uttar Pradesh	4.72	5.62	119.01	5.69	5.75	101.15	3.11	3.84	123.44	7.71	6.45	83.65
West Bengal	9.66	6.93	71.73	2.46	5.85	237.55	6.28	3.93	62.57	12.53	8.91	71.06
India	4.12	3.89	94.35	6.11	1.92	31.37	3.43	2.75	80.00	6.37	2.89	45.35

Note: a: Covers from 1970-71 to 1979-80; b: Covers from 1970-71 to 1973-74; c: Covers from 1968-69 to 1979-80

APPENDIX G.5: COMPARABLE ESTIMATES OF NET NATIONAL/STATE DOMESTIC PRODUCT IN TRANSPORTATION SECTOR AT CONSTANT 1980-81 PRICES ANNUAL AVERAGE GROWTH RATES AND DISPARITY MEASURE: SELECTED PERIODS: 1967-68 TO 1985-86

States	Total Period of Study						Fourth Plan			Fifth Plan		
	1967-68 to 1979-80			1980-81 to 1985-86			1969-70 to 1973-74			1974-75 to 1978-79		
	AVG(%)	STD	CV	AVG(%)	STD	CV	AVG(%)	STD	CV	AVG(%)	STD	CV
	1	2	3	4	5	6	7	8	9	10	11	12
Andhra Pradesh	2.09	7.95	380.69	7.55	5.95	78.80	-0.01	9.45	-79357.55	4.19	5.97	142.51
Assam	3.53c	2.12c	60.20c	11.46	6.11	53.29	3.74	2.46	65.71	3.64	1.81	49.60
Bihar	6.30	17.98	285.21	7.45	6.85	91.91	5.28	26.21	496.14	6.30	5.30	84.13
Gujarat	7.75	17.16	221.44	8.54	3.65	42.71	-0.57	9.14	-1590.04	11.84	18.65	157.53
Haryana	9.64	17.68	183.53	7.84	5.00	63.77	10.62	15.08	142.04	14.76	18.57	125.79
Himachal Pradesh	9.57a	14.41a	150.63a	5.26	3.47	65.93	3.92b	2.84b	72.51b	16.70	15.12	90.54
Jammu & Kashmir	18.39	25.11	136.49	6.63	4.75	71.70	22.97	32.20	140.15	18.51	19.98	107.94
Karnataka	8.62	7.34	85.15	5.24	4.44	84.61	8.64	4.83	55.92	10.24	8.90	86.88
Kerala	3.79	7.44	196.27	4.63	8.44	182.25	2.28	6.67	292.31	8.36	5.22	62.43
Madhya Pradesh	4.28	7.50	175.01	8.79	3.35	38.08	4.86	7.81	160.83	7.27	5.73	78.83
Maharashtra	4.85	7.22	148.77	7.71	4.32	56.01	4.08	7.41	181.66	4.40	8.09	183.81
Orissa	8.50	23.97	282.05	7.25	12.87	177.56	-3.78	11.82	-312.87	22.57	27.22	120.58
Punjab	9.39	13.56	144.44	2.69	4.41	163.91	5.05	5.73	113.41	16.32	17.50	107.28
Rajasthan	4.11	22.90	557.30	6.15	5.98	97.22	-0.24	10.37	-4402.23	17.55	26.92	153.36
Tamil Nadu	2.51	12.31	490.69	5.45	6.58	120.77	0.95	2.30	243.44	8.71	13.53	155.39
Uttar Pradesh	4.26	14.54	341.36	4.16	4.09	98.32	11.79	19.65	166.74	-1.15	4.87	-424.13
West Bengal	4.39	12.50	285.01	3.86	11.47	296.88	2.50	12.14	485.98	2.03	8.13	400.28
India	4.65	2.99	64.28	6.15	1.25	20.36	3.54	1.58	44.77	7.09	1.85	26.15

Note: a: Covers from 1970-71 to 1979-80; b: Covers from 1970-71 to 1973-74; c: Covers from 1968-69 to 1979-80

APPENDIX H.1: PER CAPITA ANNUAL CONSUMPTION EXPENDITURE BY STATES AND ALL INDIA: (RURAL - URBAN COMBINED)

(Rs)

State	1966-67	1967-68	1968-69	1969-70	1970-71	1972-73	1973-74	1977-78	1983	1986-87	1987-88
AT CURRENT PRICES											
APR	367.74	387.87	406.89	444.44	446.61	516.65	643.09	896.83	1,498.91	1,898.40	2,154.40
ASM	464.62	515.13	469.24	475.75	508.49	520.76	647.14	748.86	1,409.14	1,785.55	2,004.01
BHR	359.16	412.49	373.79	419.53	419.06	517.45	687.42	724.57	1,197.13	1,539.26	1,731.17
GUJ	378.13	412.31	433.00	445.31	480.58	640.36	696.06	953.54	1,548.64	2,072.17	2,256.33
J&K	430.24	453.89	458.77	468.94	540.57	580.36	634.65	911.49	1,620.10	2,218.22	2,667.65
KAR	366.14	401.20	407.85	414.76	472.92	574.03	670.45	852.36	1,583.99	1,839.17	2,086.69
KER	315.24	354.36	437.75	397.97	455.79	538.19	691.39	908.43	1,816.41	2,446.90	2,679.31
MPR	374.10	396.87	398.49	427.28	428.54	531.12	635.32	788.26	1,322.72	1,698.64	1,978.91
MAH	417.10	438.89	457.43	505.41	536.87	625.20	732.87	1,056.88	1,646.98	2,118.49	2,475.69
ORS	328.19	378.15	357.09	369.42	370.10	448.34	541.52	672.25	1,269.00	1,554.40	1,714.85
PNB	549.00	564.24	659.42	660.43	718.35	904.47	926.10	1,394.32	2,099.78	2,722.66	3,038.60
RAJ	450.20	473.70	503.93	506.50	464.19	649.33	778.10	1,272.73	1,612.94	2,094.63	2,313.57
TND	365.90	395.45	425.76	426.26	412.84	512.36	635.94	847.28	1,555.74	2,007.64	2,250.25
UPR	407.00	433.92	410.20	422.18	437.87	525.06	632.19	833.63	1,327.50	1,796.93	1,968.65
WBL	404.86	448.67	428.29	472.77	481.68	550.74	670.42	828.64	1,466.63	2,011.01	2,130.57
IND	401.84	427.04	429.11	453.29	465.43	559.08	679.90	898.30	1,501.24	1,946.06	2,189.61
AT CONSTANT (1980-81) PRICES											
APR	835.96	846.70	870.96	884.77	899.97	912.07	970.10	1,030.86	1,157.34	1,265.58	1,326.45
ASM	1,044.77	995.35	881.35	1,033.14	1,024.92	992.30	1082.56	963.15	1,070.55	1,176.21	1,227.36
BHR	728.65	680.26	807.54	903.91	832.01	952.59	949.90	888.87	878.19	1,054.44	1,066.92
GUJ	909.97	888.04	956.49	937.01	973.08	1,087.04	1,020.19	1,166.45	1,166.08	1,288.57	1,284.99
J&K	966.32	1,003.16	1,128.75	1,132.21	1,213.92	1,132.38	1,015.12	1,044.17	1,177.32	1,342.95	1,487.17
KAR	808.66	847.03	866.23	907.68	980.37	1,073.72	996.07	1,030.03	1,154.79	1,195.71	1,241.07
KER	756.27	777.38	869.51	763.45	825.23	944.49	991.13	1,078.07	1,207.04	1,392.58	1,420.56
MPR	850.24	767.79	875.95	897.62	898.12	983.20	949.94	960.48	1,052.94	1,154.13	1,242.06
MAH	992.22	972.45	1,021.82	1,101.88	1,110.28	1,112.30	1,118.23	1,293.20	1,218.53	1,318.80	1,418.99
ORS	760.45	809.90	721.09	756.30	758.73	,812.32	883.92	825.29	892.77	1,064.58	1,056.36
PNB	1,430.53	1,251.57	1,441.15	1,439.00	1,545.29	1,716.37	1,537.14	1,762.92	1,723.49	1,864.96	1,900.15
RAJ	1,174.77	1,113.35	1,163.98	1,098.39	1,043.76	1,253.24	1,208.77	1,618.35	1,376.05	1,435.10	1,453.66
TND	NA	NA	998.33	904.70	909.95	1,017.59	1,096.07	937.74	1,101.59	1,245.34	1,273.90
UPR	958.97	807.17	989.90	972.17	1,020.13	1,040.39	1,001.90	1,100.89	1,097.74	1,288.54	1,246.06
WBL	899.21	842.18	843.65	978.86	945.06	1,026.40	1,061.41	997.37	1,107.15	1,282.81	1,273.88
IND	913.45	852.61	926.39	961.27	964.16	1,034.67	1,044.56	1,100.96	1,131.51	1,281.11	1,317.00

APPENDIX H.2: PER CAPITA ANNUAL CONSUMPTION EXPENDITURE BY STATES AND ALL INDIA: (RURAL)

(Rs)

States	1966-67	1967-68	1968-69	1969-70	1970-71	1972-73	1973-74	1977-78	1983	1986-87	1987-88
AT CURRENT PRICES											
APR	349.68	365.52	377.64	414.48	412.20	477.48	608.04	835.92	1,384.80	1,691.16	1,921.56
ASM	441.96	498.36	450.84	452.28	483.24	500.04	624.36	707.40	1,356.00	1,676.40	1,843.20
BHR	348.24	400.32	357.36	403.80	397.80	494.40	672.12	689.40	1,125.00	1,409.28	1,638.84
GUJ	347.88	376.20	414.36	412.56	439.68	620.40	653.88	843.60	1,352.64	1,832.52	1,934.40
J&K	431.52	449.64	457.44	464.88	538.44	577.68	626.88	874.32	1,551.24	2,071.08	2,488.32
KAR	351.48	383.16	374.52	372.96	429.60	534.36	627.84	779.28	1,402.08	1,550.04	1,789.56
KER	294.72	342.48	433.44	372.84	433.44	506.28	664.20	890.64	1,742.40	2,349.36	2,537.64
MPR	354.84	381.24	373.56	404.16	394.56	488.64	604.68	719.16	1,206.24	1,464.00	1,703.76
MAH	342.36	367.92	384.48	398.64	436.68	498.60	627.24	922.44	1,325.28	1,633.32	1,929.24
ORS	314.40	362.88	338.40	344.40	346.32	419.52	511.92	629.64	1,185.00	1,370.28	1,530.12
PNB	552.00	556.92	678.72	646.20	695.88	895.44	906.12	1,372.68	2,046.24	2,539.92	2,930.28
RAJ	445.68	461.04	492.72	495.12	424.68	623.76	768.12	1,304.88	1,524.00	1,886.88	2,134.08
TND	343.08	355.32	360.24	384.96	359.76	452.40	572.88	759.96	1,346.76	1,679.64	1,851.48
UPR	397.80	421.68	397.08	408.00	420.96	505.44	615.84	804.00	1,253.88	1,665.24	1,784.04
WBL	347.76	391.56	358.20	394.32	399.84	461.40	570.00	711.24	1,255.08	1,668.24	1,798.44
IND	370.80	400.80	399.48	416.40	423.72	507.84	636.12	826.68	1,349.40	1,691.16	1,897.20
AT CONSTANT (1980-81)PRICES											
APR	760.27	769.88	780.76	793.64	812.35	820.97	890.91	942.16	1,085.30	1,187.34	1,250.13
ASM	979.15	951.63	833.12	980.35	968.90	950.31	1,043.20	915.06	1,031.80	1,122.26	1,145.93
BHR	689.85	635.62	766.30	865.88	784.29	906.04	910.76	843.50	823.94	995.35	1,031.40
GUJ	809.35	784.51	902.62	844.88	864.20	996.14	927.91	1,023.09	1,041.90	1,186.97	1,144.58
J&K	924.69	958.04	1,113.90	1,117.50	1,201.88	1,105.26	955.61	964.32	1,112.27	1,264.91	1,401.08
KAR	728.34	768.38	763.37	794.94	861.51	972.27	890.43	922.77	1,021.44	1,068.70	1,119.98
KER	686.44	741.37	839.50	686.03	748.85	862.55	947.39	1,033.93	1,134.87	1,328.06	1,335.98
MPR	780.28	708.50	808.74	832.09	820.37	892.30	887.99	878.04	974.27	1,056.49	1,134.04
MAH	757.94	770.02	827.28	848.22	875.65	819.59	896.39	1,100.61	1,011.12	1,095.55	1,187.94
ORS	725.80	772.01	673.70	698.46	708.98	755.48	832.11	771.93	829.50	973.32	969.45
PNB	1,450.29	1,220.61	1,487.56	1,408.98	1,509.52	1,698.53	1,503.09	1,759.53	1,710.59	1,784.69	1,886.62
RAJ	1,156.51	1,074.01	1,128.58	1,057.29	956.70	1,195.05	1,175.11	1,666.67	1,340.86	1,338.44	1,386.64
TND	NA	NA	779.12	742.00	769.14	890.44	973.11	764.07	950.65	1,101.99	1,109.10
UPR	924.73	754.94	963.41	943.50	994.18	1,006.35	976.55	1,081.75	1,062.45	1,253.16	1,175.24
WBL	722.97	666.66	664.27	798.75	766.68	855.65	893.45	848.76	935.39	1,098.26	1,103.08
IND	809.20	761.13	843.82	865.67	867.20	924.41	955.39	1,007.84	1,025.03	1,167.85	1,191.41

APPENDIX H.3: PER CAPITA ANNUAL CONSUMPTION EXPENDITURE BY STATES AND ALL INDIA: (URBAN)

(Rs)

STATES	1966-67	1967-68	1968-69	1969-70	1970-71	1972-73	1973-74	1977-78	1983	1986-87	1987-88
AT CURRENT PRICES											
APR	448.08	485.88	533.28	572.16	591.24	675.84	783.60	1,118.64	1,841.76	2,462.52	2,763.36
ASM	725.28	704.40	671.16	726.24	770.88	729.00	873.00	1,133.16	1,848.12	2,637.12	3,239.16
BHR	467.40	530.76	529.68	565.80	612.24	718.92	820.32	997.68	1,662.36	2,301.84	2,237.76
GUJ	460.20	509.04	482.52	530.88	585.96	690.96	801.12	1,211.04	1,963.32	2,549.40	2,887.80
J&K	425.04	474.12	465.36	487.44	550.08	592.56	668.52	1,060.44	1,863.48	2,707.44	3,249.72
KAR	414.48	459.96	514.80	547.20	608.52	694.68	798.00	1,051.08	1,995.84	2,434.92	2,673.36
KER	425.40	417.72	460.68	529.32	571.56	699.24	827.16	992.76	2,116.32	2,806.80	3,194.64
MPR	480.96	482.40	532.20	549.24	604.44	742.56	786.00	1,090.92	1,738.44	2,455.32	2,831.76
MAH	593.52	604.08	624.72	746.40	759.60	898.08	957.36	1,323.96	2,212.20	2,917.68	3,354.36
ORS	503.76	566.52	579.12	655.92	633.00	748.20	841.08	1,043.88	1,817.04	2,603.28	2,702.40
PNB	539.28	588.12	596.88	706.44	790.68	934.56	989.88	1,459.92	2,222.40	3,114.60	3,239.40
RAJ	472.68	535.20	557.88	560.64	649.56	766.44	825.12	1,148.16	1,919.04	2,753.52	2,854.44
TND	423.72	494.64	584.16	524.40	536.28	648.24	777.36	1,033.68	1,964.88	2,621.40	2,985.48
UPR	466.44	512.04	492.96	510.60	542.04	642.60	729.72	990.00	1,625.76	2,260.92	2,600.76
WBL	579.72	623.28	642.24	711.84	730.68	818.76	969.12	1,165.56	2,039.40	2,911.44	2,993.40
IND	534.48	537.00	552.48	604.68	634.20	759.96	849.24	1,153.80	1,968.36	2,671.80	2,999.16
AT CONSTANT (1980-81)PRICES											
APR	1,171.42	1,182.84	1,260.32	1,272.97	1,268.15	1,281.34	1,285.40	1,352.52	1,372.41	1,469.28	1,513.07
ASM	1,797.96	1,486.90	1,409.24	1,596.57	1,606.96	1,414.16	1,472.70	1,409.24	1,390.50	1,594.30	1,850.34
BHR	1,111.12	1,111.27	1,198.37	1,257.18	1,265.51	1,359.19	1,285.56	1,240.97	1,228.23	1,393.90	1,251.68
GUJ	1,182.53	1,165.07	1,099.32	1,177.51	1,253.53	1,315.71	1,249.34	1,502.08	1,428.38	1,488.45	1,558.18
J&K	1,161.42	1,211.56	1,197.41	1,198.81	1,267.31	1,249.78	1,267.43	1,362.14	1,408.27	1,601.15	1,764.66
KAR	1,072.24	1,102.27	1,195.97	1,264.82	1,352.36	1,381.11	1,309.60	1,320.73	1,456.72	1,451.47	1,472.76
KER	1,130.90	969.16	1,028.02	1,167.97	1,220.68	1,357.31	1,209.28	1,284.11	1,501.60	1,632.83	1,730.38
MPR	1,237.26	1,090.67	1,236.05	1,242.86	1,300.59	1,435.04	1,252.54	1,321.69	1,332.35	1,459.28	1,564.45
MAH	1,544.66	1,443.15	1,467.68	1,674.36	1,631.88	1,742.73	1,588.82	1,675.28	1,582.46	1,683.78	1,786.80
ORS	1,200.94	1,276.14	1,282.63	1,418.20	1,308.86	1,403.04	1,407.40	1,290.40	1,306.68	1,571.74	1,507.72
PNB	1,366.18	1,352.51	1,290.81	1,536.07	1,660.43	1,775.66	1,645.68	1,778.65	1,747.27	2,028.94	1,902.16
RAJ	1,264.86	1,304.18	1,334.05	1,293.50	1,452.20	1,519.10	1,361.96	1,429.89	1,492.97	1,734.90	1,644.85
TND	1,157.85	1,289.62	1,527.49	1,290.36	1,237.30	1,305.71	1,371.67	1,307.60	1,397.13	1,512.01	1,575.91
UPR	1,179.50	1,139.37	1,157.09	1,150.98	1,180.05	1,245.01	1,153.28	1,206.37	1,236.00	1,392.14	1,472.74
WBL	1,438.84	1,378.75	1,391.16	1,527.73	1,487.77	1,538.62	1,560.93	1,423.81	1,572.27	1,767.11	1,717.03
IND	1,358.25	1,237.99	1,269.88	1,353.50	1,356.48	1,466.59	1,388.35	1,432.95	1,458.75	1,598.51	1,659.02

APPENDIX H.4: PER CAPITA ANNUAL AVERAGE CONSUMPTION EXPENDITURE OVER THE PERIOD 1966-67 TO 1987-88 BY STATES:

(Rs)

Ranking in Descending Order											
Rural-Urban Combined				Rural				Urban			
State	Current Prices	State	Constant (1980-81) Prices	State	Current Prices	State	Constant (1980-81) Prices	State	Current Prices	State	Constant (1980-81) Prices
PNB	1,294.31	PNB	1,601.14	PNB	1,256.40	PNB	1,583.64	PNB	1,380.20	PNB	1,644.03
RAJ	1,010.89	RAJ	1,267.22	KER	960.68	RAJ	1,225.08	MAH	1,362.91	MAH	1,620.14
KER	1,031.79	MAH	1,152.61	RAJ	960.09	J&K	1,101.77	WBL	1,289.59	ASM	1,548.08
MAH	1,001.07	J&K	1,149.41	J&K	957.40	UPR	1,012.39	ASM	1,277.96	WBL	1,527.64
J&K	998.62	GUJ	1,061.63	GUJ	838.92	ASM	992.88	RAJ	1,185.70	RAJ	1,439.31
GUJ	937.86	TND	1,053.91	ASM	821.28	GUJ	956.92	KER	1,185.60	ORS	1,361.25
WBL	899.48	UPR	1,047.63	MAH	806.02	KER	940.45	ORS	1,154.54	TND	1,361.15
TND	894.13	ASM	1,044.70	APR	803.50	MAH	926.39	GUJ	1,152.02	J&K	1,335.45
KAR	879.05	WBL	1,023.45	UPR	788.54	APR	917.61	TND	1,144.93	MPR	1,315.71
APR	878.35	KAR	1,009.22	KAR	781.35	KAR	901.10	J&K	1,140.38	APR	1,311.79
ASM	868.06	KER	1,002.34	TND	769.68	TND	897.74	MPR	1,117.66	GUJ	1,310.92
UPR	835.92	APR	1,000.07	WBL	759.64	MPR	888.47	APR	1,116.03	KAR	1,307.28
MPR	816.39	MPR	966.59	MPR	735.89	WBL	850.36	KAR	1,108.44	KER	1,293.84
BHR	761.91	BHR	885.75	BHR	721.51	BHR	841.17	BHR	1,040.43	BHR	1,245.73
ORS	727.57	ORS	849.25	ORS	668.44	ORS	791.88	UPR	1,033.99	UPR	1,228.41
C.V	14.18		16.01		16.54		19.21		8.57		9.28
G.C	0.0733		0.0775		0.0820		0.0901		0.0468		0.0501
D.R	0.25		0.24		0.27		0.29		0.16		0.17

Note: C.V =Coefficient of variation; G.C = Gini Coefficient; D.R = Disparity Ratio

APPENDIX I.1. COST OF LIVING INDICES (BASE -1980-81 = 100)
(RURAL URBAN - COMBINED)

State	1966-67	1967-68	1968-69	1969-70	1970-71	1972-73	1973-74	1977-78	1983	1986-87	1987-88
APR	43.99	45.81	46.72	50.23	49.63	56.65	66.29	87.00	129.51	150.00	162.42
ASM	44.47	51.75	53.24	46.05	49.61	52.48	59.78	77.75	131.63	151.81	163.28
BHR	49.29	60.64	46.29	46.41	50.37	54.32	72.37	81.52	136.32	145.98	162.26
GUJ	41.55	46.43	45.27	47.52	49.39	58.91	68.23	81.75	132.81	160.81	175.59
J&K	44.52	45.25	40.64	41.42	44.53	51.25	62.52	87.29	137.61	165.18	179.38
KAR	45.28	47.37	47.08	45.69	48.24	53.46	67.31	82.75	137.17	153.81	168.14
KER	41.68	45.58	50.34	52.13	55.23	56.98	69.76	84.26	150.48	175.71	188.61
MPR	44.00	51.69	45.49	47.60	47.72	54.02	66.88	82.07	125.62	147.18	159.32
MAH	42.04	45.13	44.77	45.87	48.35	56.21	65.54	81.73	135.16	160.64	174.47
ORS	43.16	46.69	49.52	48.85	48.78	55.19	61.26	81.46	142.14	146.01	162.34
PNB	38.38	45.08	45.76	45.89	46.49	52.70	60.25	79.09	121.83	145.99	159.91
RAJ	38.32	42.55	43.29	46.11	44.47	51.81	64.37	78.64	117.21	145.96	159.16
TND	NA	NA	42.65	47.12	45.37	50.35	58.02	90.35	141.23	161.21	176.64
UPR	42.44	53.76	41.44	43.43	42.92	50.47	63.10	75.72	120.93	139.45	157.99
WBL	45.02	53.28	50.77	48.30	50.97	53.66	63.16	83.08	132.47	156.77	167.25
IND	43.99	50.09	46.32	47.15	48.27	54.03	65.09	81.59	132.68	151.90	166.26
AVGT5 *	41.55	45.95	43.42	45.07	46.69	54.18	61.59	79.39	132.46	158.69	172.30
AVGB5 **	44.68	51.67	48.80	49.04	50.34	55.43	67.31	82.63	131.33	148.96	163.07

APPENDIX I.1.1. ANNUAL AVERAGE GROWTH (PER CENT) OVER PREVIOUS PERIOD

State	1967-68	1968-69	1969-70	1970-71	1972-73	1973-74	1977-78	1983	1986-87	1987-88	AVG	STD	CV
APR	4.14	1.98	7.52	-1.21	7.07	17.03	7.81	8.14	5.27	8.28	6.60	4.55	68.83
ASM	16.38	2.87	-13.51	7.74	2.89	13.91	7.52	11.55	5.11	7.56	6.20	7.80	125.86
BHR	23.02	-23.66	0.27	8.52	3.92	33.22	3.16	11.21	2.36	11.15	7.32	14.18	193.84
GUJ	11.73	-2.50	4.98	3.92	9.64	15.82	4.95	10.41	7.03	9.19	7.52	4.78	63.63
J&K	1.62	-10.17	1.91	7.52	7.55	21.99	9.91	9.61	6.68	8.60	6.52	7.68	117.87
KAR	4.61	-0.60	-2.95	5.57	5.41	25.90	5.74	10.96	4.05	9.31	6.80	7.45	109.57
KER	9.36	10.44	3.54	5.96	1.58	22.42	5.20	13.10	5.59	7.34	8.45	5.65	66.82
MPR	17.48	-11.99	4.64	0.24	6.61	23.81	5.68	8.84	5.72	8.25	6.93	9.02	130.14
MAH	7.36	-0.81	2.46	5.42	8.12	16.60	6.17	10.90	6.28	8.61	7.11	4.43	62.33
ORS	8.19	6.06	-1.36	-0.14	6.57	11.00	8.24	12.42	0.91	11.18	6.31	4.69	74.38
PNB	17.47	1.49	0.30	1.29	6.68	14.33	7.82	9.01	6.61	9.54	7.45	5.30	71.05
RAJ	11.02	1.76	6.51	-3.56	8.25	24.24	5.54	8.17	8.17	9.04	7.92	6.74	85.19
TND	NA	NA	10.48	-3.71	5.49	15.23	13.93	9.38	4.72	9.57	8.14	5.61	68.97
UPR	26.66	-22.92	4.80	-1.16	8.79	25.03	5.00	9.95	5.11	13.29	7.46	13.17	176.69
WBL	18.33	-4.71	-4.86	5.53	2.64	17.72	7.88	9.91	6.11	6.69	6.52	7.42	113.69
IND	13.85	-7.52	1.80	2.37	5.97	20.46	8.34	10.43	4.83	9.45	6.80	7.15	105.14
AVGT5*	-	10.61	-5.51	3.79	3.60	8.02	13.69	7.22	11.14	6.60	8.58		
AVGB5@	-	15.65	-5.56	0.50	2.65	5.06	21.43	5.69	9.82	4.47	9.47		

Notes: * Average price index of the top 5 States arranged in descending order of PCCE at constant (1980-81) prices.
** Average price index of the bottom 5 States arranged in descending order of PCCE at constant (1980-81) prices.
$ Annual Growth in average price index over previous period, of the top 5 States arranged in descending order of PCCE at constant (1980-81) prices.
@ Annual Growth in average price index over previous period, of the bottom 5 States arranged in descending order of PCCE at constant (1980-81) prices.

APPENDIX 1.2. COST OF LIVING INDICES (BASE -1980-81 = 100)
(RURAL)

States	1966-67	1967-68	1968-69	1969-70	1970-71	1972-73	1973-74	1977-78	1983-84	1986-87	1987-88
APR	45.99	47.48	48.37	52.23	50.74	58.16	68.25	88.72	127.60	142.43	153.71
ASM	45.14	52.37	54.11	46.13	49.88	52.62	59.85	77.31	131.42	149.38	160.85
BHR	50.48	62.98	46.63	46.63	50.72	54.57	73.80	81.73	136.54	141.59	158.89
GUJ	42.98	47.95	45.91	48.83	50.88	62.28	70.47	82.46	129.82	154.39	169.01
J&K	46.67	46.93	41.07	41.60	44.80	52.27	65.60	90.67	139.47	163.73	177.60
KAR	48.26	49.87	49.06	46.92	49.87	54.96	70.51	84.45	137.27	145.04	159.79
KER	42.93	46.20	51.63	54.35	57.88	58.70	70.11	86.14	153.53	176.90	189.95
MPR	45.48	53.81	46.19	48.57	48.10	54.76	68.10	81.90	123.81	138.57	150.24
MAH	45.17	47.78	46.48	47.00	49.87	60.84	69.97	83.81	131.07	149.09	162.40
ORS	43.32	47.00	50.23	49.31	48.85	55.53	61.52	81.57	142.86	140.78	157.83
PNB	38.06	45.63	45.63	45.86	46.10	52.72	60.28	78.01	119.62	142.32	155.32
RAJ	38.54	42.93	43.66	46.83	44.39	52.20	65.37	78.29	113.66	140.98	153.90
TND	NA	NA	46.24	51.88	46.77	50.81	58.87	99.46	141.67	152.42	166.94
UPR	43.02	55.86	41.22	43.24	42.34	50.23	63.06	74.32	118.02	132.88	151.80
WBL	48.10	58.73	53.92	49.37	52.15	53.92	63.80	83.80	134.18	151.90	163.04
IND	45.82	52.66	47.34	48.10	48.86	54.94	66.58	82.03	131.65	144.81	159.24

APPENDIX 1.2.1. ANNUAL AVERAGE GROWTH (PER CENT) OVER PREVIOUS PERIOD

States	1967-68	1968-69	1969-70	1970-71	1972-73	1973-74	1977-78	1983-84	1986-87	1987-88	AVG	STD	CV
APR	3.23	1.88	7.98	-2.84	7.31	17.35	7.50	7.30	3.88	7.92	6.15	4.99	81.18
ASM	16.02	3.33	-14.75	8.11	2.75	13.74	7.29	11.67	4.55	7.68	6.04	8.07	133.64
BHR	24.76	-25.95	0.00	8.76	3.79	35.24	2.69	11.18	1.23	12.22	7.39	15.35	207.66
GUJ	11.56	-4.27	6.37	4.19	11.21	13.15	4.25	9.57	6.31	9.47	7.18	4.82	67.07
J&K	0.57	-12.50	1.30	7.69	8.33	25.51	9.55	8.97	5.80	8.47	6.37	8.99	141.20
KAR	3.33	-1.61	-4.37	6.29	5.11	28.29•	4.94	10.42	1.89	10.17	6.45	8.51	131.96
KER	7.59	11.76	5.26	6.50	0.70	19.44	5.72	13.04	5.07	7.37	8.25	4.97	60.29
MPR	18.32	-14.16	5.15	-0.98	6.93	24.35	5.07	8.53	3.97	8.42	6.56	9.79	149.29
MAH	5.78	-2.73	1.12	6.11	10.99	15.02	4.94	9.40	4.58	8.93	6.42	4.77	74.42
ORS	8.51	6.86	-1.83	-0.93	6.84	10.79	8.15	12.52	-0.48	12.11	6.25	5.16	82.49
PNB	19.88	0.00	0.52	0.52	7.18	14.35	7.35	8.89	6.32	9.14	7.41	6.00	80.92
RAJ	11.39	1.70	7.26	-5.21	8.79	25.23	4.94	7.53	8.01	9.17	7.88	7.31	92.75
TND	NA	NA	12.21	-9.84	4.31	15.87	17.24	7.07	2.53	9.52	7.36	8.12	110.21
UPR	29.84	-26.21	4.92	-2.08	9.31	25.56	4.46	9.80	4.20	14.24	7.40	14.61	197.32
WBL	22.11	-8.19	-8.45	5.64	1.70	18.31	7.84	10.02	4.40	7.33	6.07	9.29	153.07
IND	14.92	-10.10	1.60	1.58	6.22	21.20	5.80	10.08	3.33	9.97	6.46	8.04	124.41

Note :The State of Assam includes Manipur Meghalaya and Tripura.
The State of Punjab includes Haryana, Delhi and Himachal Pradesh.

APPENDIX I.3. COST OF LIVING INDICES (BASE -1980-81 = 100)
(URBAN)

States	1966-67	1967-68	1968-69	1969-70	1970-71	1972-73	1973-74	1977-78	1983-84	1986-87	1987-88
APR	38.25	41.08	42.31	44.95	46.62	52.74	60.96	82.71	134.20	167.60	182.63
ASM	40.34	47.37	47.63	45.49	47.97	51.55	59.28	80.41	132.91	165.41	175.06
BHR	42.07	47.76	44.20	45.01	48.38	52.89	63.81	80.40	135.35	165.14	178.78
GUJ	38.92	43.69	43.89	45.09	46.74	52.52	64.12	80.62	137.45	171.28	185.33
J&K	36.60	39.13	38.86	40.66	43.41	47.41	52.75	77.85	132.32	169.09	184.16
KAR	38.66	41.73	43.04	43.26	45.00	50.30	60.93	79.58	137.01	167.76	181.52
KER	37.62	43.10	44.81	45.32	46.82	51.52	68.40	77.31	140.94	171.90	184.62
MPR	38.87	44.23	43.06	44.19	46.47	51.74	62.75	82.54	130.48	168.26	181.01
MAH	38.42	41.86	42.57	44.58	46.55	51.53	60.26	79.03	139.79	173.28	187.73
ORS	41.95	44.39	45.15	46.25	48.36	53.33	59.76	80.90	139.06	165.63	179.24
PNB	39.47	43.48	46.24	45.99	47.62	52.63	60.15	82.08	127.19	153.51	170.30
RAJ	37.37	41.04	41.82	43.34	44.73	50.45	60.58	80.30	128.54	158.71	173.54
TND	36.60	38.36	38.24	40.64	43.34	49.65	56.67	79.05	140.64	173.37	189.44
UPR	39.55	44.94	42.60	44.36	45.93	51.61	63.27	82.06	131.53	162.41	176.59
WBL	40.29	45.21	46.17	46.59	49.11	53.21	62.09	81.86	129.71	164.76	174.34
All India	39.35	43.38	43.51	44.68	46.75	51.82	61.17	80.52	134.94	167.14	180.78

APPENDIX I3.1. ANNUAL AVERAGE GROWTH (PER CENT) OVER PREVIOUS PERIOD

States	1967-68	1968-69	1969-70	1970-71	1972-73	1973-74	1977-78	1983-84	1986-87	1987-88	AVG	STD	CV
APR	7.39	3.01	6.22	3.73	13.13	15.58	35.67	62.26	24.89	8.97	18.08	17.63	97.50
ASM	17.44	0.53	-4.49	5.46	7.46	14.99	35.65	65.29	24.45	5.83	17.26	19.55	113.24
BHR	13.54	-7.46	1.82	7.50	9.33	20.64	25.99	68.35	22.01	8.26	17.00	19.55	115.01
GUJ	12.27	0.46	2.72	3.68	12.35	22.10	25.73	70.48	24.61	8.20	18.26	19.45	106.49
J&K	6.93	-0.69	4.62	6.75	9.23	11.25	47.60	69.97	27.79	8.91	19.24	21.54	111.98
KAR	7.95	3.15	0.51	4.01	11.78	21.14	30.60	72.16	22.44	8.21	18.20	20.20	111.00
KER	14.58	3.97	1.13	3.32	10.02	32.77	13.03	82.30	21.97	7.40	19.05	22.95	120.47
MPR	13.78	-2.65	2.64	5.17	11.34	21.27	31.53	58.08	28.95	7.58	17.77	17.08	96.13
MAH	8.94	1.69	4.73	4.42	10.71	16.93	31.16	76.89	23.95	8.34	18.77	21.28	113.32
ORS	5.83	1.71	2.43	4.57	10.26	12.07	35.37	71.90	19.11	8.22	17.15	20.56	119.92
PNB	10.16	6.34	-0.54	3.54	10.53	14.29	36.46	54.96	20.69	10.94	16.74	16.02	95.75
RAJ	9.81	1.90	3.64	3.20	12.80	20.08	32.54	60.08	23.48	9.34	17.69	16.94	95.76
TND	4.81	-0.29	6.27	6.65	14.54	14.15	39.49	77.91	23.28	9.27	19.61	22.20	113.25
UPR	13.64	-5.20	4.13	3.54	12.37	22.59	29.70	60.28	23.47	8.74	17.33	17.46	100.76
WBL	12.20	2.12	0.93	5.40	8.35	16.67	31.85	58.45	27.02	5.81	16.88	16.96	100.46
All India	10.23	0.30	2.69	4.65	10.83	18.05	31.63	67.58	23.87	8.16	17.80	19.01	106.79

Note: Urban consumer price indices have been obtained as simple average of CPI-IW and CPI-UNME.

APPENDIX J.1: PER-CAPITA CONSUMPTION EXPENDITURE BY STATES AND ALL INDIA: ANNUAL AVERAGE RATE OF GROWTH (PERCENT) OVER PREVIOUS PERIOD (RURAL-URBAN COMBINED)

States	1967-68	1968-69	1969-70	1970-71	1972-73	1973-74	1977-78	1983	1986-87	1987-88
APR	1.28	2.87	1.59	1.72	0.67	6.36	1.57	2.04	3.12	4.81
ASM	-4.73	-11.45	17.22	-0.80	-1.59	9.10	-2.76	1.86	3.29	4.35
BHR	-6.64	18.71	11.93	-7.95	7.25	-0.28	-1.61	-0.20	6.69	1.18
GUJ	-2.41	7.71	-2.04	3.85	5.86	-6.15	3.58	-0.01	3.50	-0.28
J&K	3.81	12.52	0.31	7.22	-3.36	-10.35	0.72	2.13	4.69	10.74
KAR	4.74	2.27	4.79	8.01	4.76	-7.23	0.85	2.02	1.18	3.79
KER	2.79	11.85	-12.20	8.09	7.23	4.94	2.19	1.99	5.12	2.01
MPR	-9.70	14.09	2.47	0.06	4.74	-3.38	0.28	1.60	3.20	7.62
MAH	-1.99	5.08	7.84	0.76	0.09	0.53	3.91	-0.96	2.74	7.60
ORS	6.50	-10.97	4.88	0.32	3.53	8.81	-1.66	1.36	6.41	-0.77
PNB	-12.51	15.15	-0.15	7.39	5.54	-10.44	3.67	-0.37	2.74	1.89
RAJ	-5.23	4.55	-5.64	-4.97	10.03	-3.55	8.47	-2.50	1.43	1.29
TND	NA	NA	-9.38	0.58	5.91	7.71	-3.61	2.91	4.35	2.29
UPR	-15.83	22.64	-1.79	4.93	0.99	-3.70	2.47	-0.05	5.79	-3.30
WBL	-6.34	0.17	16.03	-3.45	4.30	3.41	-1.51	1.83	5.29	-0.70
IND	-6.66	8.65	3.77	0.30	3.66	0.96	1.35	0.46	4.41	2.80

APPENDIX J.2: PER-CAPITA CONSUMPTION EXPENDITURE BY STATES AND ALL INDIA: ANNUAL AVERAGE RATE OF GROWTH (PERCENT) OVER PREVIOUS PERIOD (RURAL)

State	1967-68	1968-69	1969-70	1970-71	1972-73	1973-74	1977-78	1983	1986-87	1987-88
APR	1.26	1.41	1.65	2.36	0.53	8.52	1.44	2.53	3.13	5.29
ASM	-2.81	-12.45	17.67	-1.17	-0.96	9.77	-3.07	2.13	2.92	2.11
BHR	-7.86	20.56	13.00	-9.42	7.76	0.52	-1.85	-0.39	6.93	3.62
GUJ	-3.07	15.05	-6.40	2.29	7.63	-6.85	2.56	0.31	4.64	-3.57
J&K	3.61	16.27	0.32	7.55	-4.02	-13.54	0.23	2.56	4.57	10.77
KAR	5.50	-0.65	4.14	8.37	6.43	-8.42	0.91	1.78	1.54	4.80
KER	8.00	13.24	-18.28	9.16	7.59	9.84	2.28	1.63	5.67	0.60
MPR	-9.20	14.15	2.89	-1.41	4.38	-0.48	-0.28	1.83	2.81	7.34
MAH	1.59	7.44	2.53	3.23	-3.20	9.37	5.70	-1.36	2.78	8.43
ORS	6.37	-12.73	3.68	1.51	3.28	10.14	-1.81	1.24	5.78	-0.40
PNB	-15.84	21.87	-5.28	7.14	6.26	-11.51	4.27	-0.46	1.44	5.71
RAJ	-7.13	5.08	-6.32	-9.51	12.46	-1.67	10.46	-3.26	-0.06	3.60
TND	NA	NA	-4.77	3.66	7.89	9.28	-5.37	4.07	5.31	0.65
UPR	-18.36	27.61	-2.07	5.37	0.61	-2.96	2.69	-0.30	5.98	-6.22
WBL	-7.79	-0.36	20.25	-4.01	5.80	4.42	-1.25	1.70	5.80	0.44
IND	-5.94	10.86	2.59	0.18	3.30	3.35	1.37	0.28	4.64	2.02

APPENDIX J.3: PER-CAPITA CONSUMPTION EXPENDITURE BY STATES AND ALL INDIA: ANNUAL AVERAGE RATE OF GROWTH (PERCENT) OVER PREVIOUS PERIOD (URBAN)

State	1967-68	1968-69	1969-70	1970-71	1972-73	1973-74	1977-78	1983	1986-87	1987-88
APR	0.97	6.55	1.00	-0.38	0.52	0.32	1.31	0.25	2.35	2.98
ASM	-17.30	-5.22	13.29	0.65	-6.00	4.14	-1.08	-0.22	4.89	16.06
BHR	0.01	7.84	4.91	0.66	3.70	-5.42	-0.87	-0.17	4.50	-10.20
GUJ	-1.48	-5.64	7.11	6.46	2.48	-5.04	5.06	-0.82	1.40	4.68
J&K	4.32	-1.17	0.12	5.71	-0.69	1.41	1.87	0.56	4.57	10.21
KAR	2.80	8.50	5.76	6.92	1.06	-5.18	0.21	1.72	-0.12	1.47
KER	-14.30	6.07	13.61	4.51	5.60	-10.91	1.55	2.82	2.91	5.97
MPR	-11.85	13.33	0.55	4.64	5.17	-12.72	1.38	0.13	3.18	7.21
MAH	-6.57	1.70	14.08	-2.54	3.40	-8.83	1.36	-0.92	2.13	6.12
ORS	6.26	0.51	10.57	-7.71	3.60	0.31	-2.08	0.21	6.76	-4.07
PNB	-1.00	-4.56	19.00	8.10	3.47	-7.32	2.02	-0.29	5.37	-6.25
RAJ	3.11	2.29	-3.04	12.27	2.30	-10.34	1.25	0.74	5.40	-5.19
TND	11.38	18.44	-15.52	-4.11	2.76	5.05	-1.17	1.14	2.74	4.23
UPR	-3.40	1.56	-0.53	2.53	2.75	-7.37	1.15	0.41	4.21	5.79
WBL	-4.18	0.90	9.82	-2.62	1.71	1.45	-2.20	1.74	4.13	-2.83
IND	-8.85	2.58	6.58	0.22	4.06	-5.33	0.80	0.30	3.19	3.79

APPENENDIX K.1: PER CAPITA CONSUMPTION EXPENDITURE BY STATES AND ALL INDIA: URBAN - RURAL DISPARITY INDICES

States	1966-67	1967-68	1968-69	1969-70	1970-71	1972-73	1973-74	1977-78	1983	1986-87	1987-88
					AT CURRENT PRICES						
APR	21.96	24.77	29.19	27.56	30.28	29.35	22.40	25.27	24.81	31.32	30.46
ASM	39.06	29.25	32.83	37.72	37.31	31.41	28.48	37.57	26.63	36.43	43.10
BHR	25.49	24.58	32.53	28.63	35.03	31.23	18.07	30.90	32.33	38.78	26.76
GUJ	24.41	26.10	14.13	22.29	24.96	10.21	18.38	30.34	31.10	28.12	33.01
J&K	-1.52	5.16	1.70	4.63	2.12	2.51	6.23	17.55	16.76	23.50	23.43
KAR	15.20	16.70	27.25	31.84	29.40	23.08	21.32	25.86	29.75	36.34	33.06
KER	30.72	18.01	5.91	29.56	24.17	27.60	19.70	10.29	17.67	16.30	20.57
MPR	26.22	20.97	29.81	26.41	34.72	34.20	23.07	34.08	30.61	40.37	39.83
MAH	42.32	39.09	38.46	46.59	42.51	44.48	34.48	30.33	40.09	44.02	42.49
ORS	37.59	35.95	41.57	47.49	45.29	43.93	39.14	39.68	34.78	47.36	43.38
PNB	-2.36	5.31	-13.71	8.53	11.99	4.19	8.46	5.98	7.93	18.45	9.54
RAJ	5.71	13.86	11.68	11.69	34.62	18.62	6.91	-13.65	20.59	31.47	25.24
TND	19.03	28.17	38.33	26.59	32.92	30.21	26.30	26.48	31.46	35.93	37.98
UPR	14.72	17.65	19.45	20.09	22.34	21.34	15.61	18.79	22.87	26.35	31.40
WBL	40.01	37.18	44.23	44.61	45.28	43.65	41.18	38.98	38.46	42.70	39.92
All India	30.62	25.36	27.69	31.14	33.19	33.18	25.10	28.35	31.45	36.70	36.74
					AT CONSTANT (1980-81) PRICES						
APR	35.10	34.91	38.05	37.66	35.94	35.93	30.69	30.34	20.92	19.19	17.38
ASM	45.54	36.00	40.88	38.60	39.71	32.80	29.16	35.07	25.80	29.61	38.07
BHR	37.91	42.80	36.05	31.13	38.03	33.34	29.16	32.03	32.92	28.59	17.60
GUJ	31.56	32.66	17.89	28.25	31.06	24.29	25.73	31.89	27.06	20.25	26.54
J&K	20.38	20.93	6.97	6.78	5.16	11.56	24.60	29.21	21.02	21.00	20.60
KAR	32.07	30.29	36.17	37.15	36.30	29.60	32.01	30.13	29.88	26.37	23.95
KER	39.30	23.50	18.34	41.26	38.65	36.45	21.66	19.48	24.42	18.67	22.79
MPR	36.94	35.04	34.57	33.05	36.92	37.82	29.10	33.57	26.88	27.60	27.51
MAH	50.93	46.64	43.63	49.34	46.34	52.97	43.58	34.30	36.10	34.93	33.52
ORS	39.56	39.50	47.48	50.75	45.83	46.15	40.88	40.18	36.52	38.07	35.70
PNB	-6.16	9.75	-15.24	8.27	9.09	4.34	8.66	1.08	2.10	12.04	0.82
RAJ	8.57	17.65	15.40	18.26	34.12	21.33	13.72	-16.56	10.19	22.85	15.70
TND	-	-	48.99	42.50	37.84	31.80	29.06	41.57	31.96	27.12	29.62
UPR	21.60	33.74	16.74	18.03	15.75	19.17	15.32	10.33	14.04	9.98	20.20
WBL	49.75	51.65	52.25	47.72	48.47	44.39	42.76	40.39	40.51	37.85	35.76
All India	40.42	38.52	33.55	36.04	36.07	36.97	31.19	29.67	29.73	26.94	28.19

APPENDIX K.2: PER CAPITA CONSUMPTION EXPENDITURE BY STATES AND ALL INDIA: RANKING BY AVERAGE LEVEL OF URBAN-RURAL DISPARITY

States	1960s	States	1970s	States	1980s	States	1960s	States	1970s	States	1980s
AT CURRENT PRICES						AT CONSTANT (1980-81) PRICES					
MAH	41.61	WBL	42.27	MAH	42.20	WBL	50.30	MAH	44.30	WBL	38.04
WBL	41.51	ORS	42.01	ORS	41.84	MAH	47.64	WBL	44.00	ORS	36.76
ORS	40.65	MAH	37.95	WBL	40.36	TND	45.75	ORS	43.26	MAH	34.85
ASM	34.72	ASM	33.69	MPR	36.94	ORS	44.32	TND	35.07	ASM	31.16
IND	**28.70**	MPR	31.52	ASM	35.39	ASM	40.25	MPR	34.35	TND	29.57
TND	28.03	**IND**	**29.95**	TND	35.12	**IND**	**37.13**	ASM	34.18	**IND**	**28.29**
BHR	27.81	TND	28.98	**IND**	**34.96**	BHR	36.97	**IND**	**33.37**	MPR	27.33
APR	25.87	BHR	28.81	KAR	33.05	APR	36.43	APR	33.23	KAR	26.74
MPR	25.85	APR	26.83	BHR	32.62	MPR	34.90	BHR	33.14	BHR	26.37
KAR	22.75	KAR	24.92	GUJ	30.75	KAR	33.92	KAR	32.01	GUJ	24.62
GUJ	21.73	GUJ	20.97	APR	28.87	KER	30.60	KER	29.06	KER	21.96
KER	21.05	KER	20.44	UPR	26.87	GUJ	27.59	GUJ	28.24	J&K	20.87
UPR	17.98	UPR	19.52	RAJ	25.77	UPR	22.53	J&K	17.63	APR	19.16
RAJ	10.73	RAJ	11.62	J&K	21.23	RAJ	14.97	UPR	15.14	RAJ	16.25
J&K	2.49	PNB	7.65	KER	18.18	J&K	13.77	RAJ	13.15	UPR	14.74
PNB	-0.56	J&K	7.10	PNB	11.97	PNB	-0.84	PNB	5.79	PNB	4.98

Note: Intra-State Urban-Rural disparity has been defined as the absolute difference between urban and rural per capita consumption expenditure as percentage of urban per capita consumption expenditure [{(Urban - Rural)/Urban}*100]

DOCUMENTATION

The purpose of this section is to make available to the readers official documents such as reports of committees, commissions, working groups, task forces, etc., appointed by various ministries, departments, and agencies of central and state governments which are not readily accessible either because they are old, or because of the usual problems of acquiring governmental publications, or because they were printed but not published, or because they were not printed and remained in mimeographed form. It will be difficult and probably not worthwhile to publish the documents entirely. We shall publish only such parts of them as we think will interest our readers. The readers are requested to send their suggestions regarding official documents or parts thereof for inclusion in this section.

In the present section we publish:

1. Chapters 1 to 9 from *Indian Tax Reform, Report of A Survey, 1956* by Nicholas Kaldor (Reader in Economics, University of Cambridge), Ministry of Finance, Government of India.

INDIAN TAX REFORMS

Report of a Survey by Nicholas Kaldor (Ministry of Finance, Government of India, 1956)

CHAPTER 1

THE CASE FOR A COMPREHENSIVE REFORM OF PERSONAL TAXATION

I. INTRODUCTION

1. The purpose of personal (or 'direct') taxation is to provide equity and fairness in the distribution of the tax burden in the community. Looking at the problem from the revenue aspect alone, it might be administratively simpler to collect any given total of revenue by taxes on transactions such as sales taxes, excise duties, etc. - or *ad rem* taxes of various kinds - rather than by taxes levied on persons assessed according to some overall criterion (or criteria) of 'ability to pay', on a graduated scale. But in a developing economy, where privately owned wealth grows rapidly and unevenly, a situation in which the burden imposed on the broad masses of population is not complemented by an efficient system of progressive taxation on the minority of wealth-owners would become socially intolerable. The question of the necessity of reforms in the scope, comprehensiveness, and efficiency of administration of personal taxation should not be judged, therefore, from a narrow revenue point of view alone. Certain reforms may be essential even if the immediate revenue prospect is small, if they can be shown to be a necessary pre-condition for imposing higher burdens on the community at large, in a manner consistent with the prevailing sense of justice and equity of the community.

2. This problem is a particularly important one for India which is on the threshold of a period of accelerated economic development, and whose people desire to strike a 'middle road' between Western Capitalism and Eastern Socialism. In India the great bulk of the national wealth is, and will continue to be, privately owned_industries or landed property that may be taken over by the State will not fundamentally alter this state of affairs if due compensation is paid to the owners, so that the growth in public property will be offset by the growth in public indebtedness[1] - it appears inevitable, therefore, that both the amount of privately owned wealth, and (in the absence of effective tax measures) the skewness of the distribution of ownership of that wealth should increase *pari passu* with economic growth. Owing to the fact that the savings of the community are more unevenly distributed than income, there is an inevitable tendency, unless effectively counteracted by the tax system or other instruments of public policy, for the wealth of the largest property owners to grow at a faster rate than wealth in general. The more income and wealth grow, therefore, the more the inequality of wealth between individuals increases.

3. All politically "advanced" democracies possess some form of progressive personal taxation, generally based on "income". But with the possible exception of Sweden, none have succeeded in bringing about the degree of redistribution of wealth and income, the attainment of which has been the avowed objective of their taxation policies. Thus in the United Kingdom, though the combined income and surtax rates for the last 15 years have exceeded 90% in the top brackets, and estate duties reached a minimum of 80%, vast new fortunes are still being made, and the degree of concentration in the ownership of wealth - as measured, e.g., by the percentage of persons owning one-third of the national wealth, etc. - has not been reduced. The same is true, I believe, of the United States and other Western countries. The reasons are to be sought in the fact that owing to the numerous loopholes of one sort or another that are tolerated (and in some cases deliberately nurtured) by the legislatures, as well as the failure of the tax administration to force a full disclosure of income or wealth, the true burden of taxation on the owners of property is far below that indicated by the nominal rates of taxation on "income". On incomes derived from office, employment, or pension on the other hand, i.e. on salaries and wages, the comprehensive reporting systems introduced during and after the war ensure practically 100% coverage; nor does the definition of "taxable income" permit the same kind of manipulation here as with the profits of business or of income derived from the ownership of capital. The only important loopholes in the case of salary-incomes are expense allowances and benefits in kind provided by the employer; and these can be, and are being,

plugged by means of special legislative provisions such as those recently introduced in the United Kingdom, India, and some other countries. Public employees, like judges or high civil servants, who do not receive such "perks" from their employer, and have no tax loopholes to fall back on, are exposed to the full blast of punitive rates that are only nominally applicable to the other sectors of the community.

4. So far from attaining the avowed objectives of mitigating economic and social inequality, progressive taxation in most Western countries has thus served to create new inequities by imposing an altogether disproportionate burden on the professional classes, on intellectuals and administrators, and in particular, on leading public servants of all kinds. The strongest disincentive effects have been on the quality of entrants in the public service, and on the level of ability of the administrative personnel of public enterprises of all kinds. There is no need to stress the disadvantages and dangers of this in a society which will be increasingly dependent on the quality and initiative of its public service.

5. In my view, the main factors responsible for the failure of progressive taxation to attain its objectives are the following (the relative importance of these factors varies, of course, for different countries):

(a) Absence of a clear and comprehensive notion of what constitutes "income" for tax purposes; and the consequent exclusion of numerous kinds of beneficial receipts (of which capital gains and capital profits of all kinds are the most important); and the consequent impossibility of preventing manipulations of innumerable kinds which aim at making the accrual of benefits from the ownership of property or business activity appear as non-taxable capital profits or gains, rather than as taxable receipts.

(b) Failure to recognise that the ownership of disposable assets confers a benefit on the owner over and above the income which the property yields; and the failure to supplement taxes on income with taxes on net worth.

(c) The elastic definition of expenses as permissible deductions to be set against receipts in the calculation of trading profits, together with over-generous recognition of the notion of, and over-generous provision for the relief of, "losses", which bring it about that a trader can manufacture "losses" for tax purposes and thereby build up assets at the cost of the revenue, without his consequent gains being brought into charge.

(d) Failure to secure the true aggregation of a man's (or a family's) total property or income for tax purposes, due (in part) to defective provisions concerning the compulsory aggregation of family income, and to provisions concerning the transfer of income or property into trusts and settlements, etc. (quite apart from any illegal concealment of income).

(e) Failure to secure the full reporting of income, or of property, due i) to the absence of any automatic reporting system for property income and property transactions, analogous to that existing for incomes from employment; (ii) to the failure to make the return required of the tax payer comprehensive enough to ensure that it is self-checking the character; (iii) to the facilities afforded in common law for the concealment of income and property through the registration of property in bogus names (benami holdings) or through anonymous holdings (like bearer bonds, or the system of black transfers in the case of shares).

6. Points (a) to (d) above provide the sources of (legal) tax avoidance, while (e) the facilities for (illegal) tax evasion. The difference between the situation in India and majority of Western countries is only that in the case of India (e) is probably more prominent, and in consequence (a) to (d) relatively less important, than for the countries of the West.

7. I am convinced that it would be technically feasible so to reform the tax system as to eliminate altogether, or at least greatly to diminish, both the legal avenues for tax avoidance and the scope for large-scale tax evasion. For reasons explained below, the administrative feasibility of doing so is far more promising in the case of a comprehensive reform than in the case of the adoption of partial or piecemeal remedial measures. Neither

in the case of countries like the United Kingdom or the United States of America, nor in the case of India, is large-scale tax avoidance and evasion an ineluctable consequence of human or administrative imperfections or folly, or of the private enterprise system, or any other ineradicable feature of society. The factor which has so far prevented the establishment of an effective system of taxation profits and capital in the Western democracies or in India is the opposition of vested interests, not the 'technical' impossibility of devising an equitable and foolproof system.

II. THE THREE MAJOR CONSIDERATIONS

8. The three prime considerations that should be taken into account in framing an effective tax system are equity, economic effects, and administrative efficiency.

9. From the point of view of equity, the most important consideration is that the tax system should not contain a systematic bias in favour of particular groups of tax-payers and against others. For reasons which I analysed in some detail in my book[2] and which it is unnecessary to repeat here, equity in taxation between income from work and income from property cannot be secured unless (i) the concept of "income" is made sufficiently comprehensive to embrace all beneficial receipts which increase the tax-payers' spending power, and not merely the conventional forms of income; (ii) the tax on income is supplemented by an annual tax on capital wealth in recognition of the fact that taxable capacity cannot be adequately measured either by income alone, or by capital wealth alone, but can be approximated through a mixture of both; (iii) in the calculations of taxable income, profit or gain, permissible deductions should proceed on uniform and non-discriminatory principles as between different kinds and forms of income. This means, in effect, that only such expenses should be chargeable against the receipts as can be shown to have been necessarily involved in producing the receipts of the year in question.

10. From the point of view of the economic effects of taxation the major consideration is to prevent the tax system from becoming too much of a disincentive on effort, initiative or enterprise. Taxes on income make it less attractive to undertake work or to risk capital in productive enterprise; and through the factor of "double taxation" of savings, penalise savings and put a premium on spending. The importance of all these effects depends on the marginal rates of taxation. I am strongly of the view that the developments of the last 15-20 years which imposed (nominally) fantastically high marginal rates of tax, while permitting the continuance of wide loopholes for tax avoidance, are highly pernicious in character. As Henry Simons said before the War[3] the whole procedure smacks of a "subtle kind of moral and intellectual dishonesty." "One senses here a grand scheme of deception whereby enormous surtaxes are voted in exchange for promise that they will not be made effective. Thus the politicians may point with pride to the rates, while quietly reminding their wealthy constituents of the loopholes."

11. These high marginal rates, amounting to 80 to 90% (in the U.K. At one stage they amounted to 97.5%) could never have been imposed had they really been what they pretended to be, a tax on the genuine accrual of wealth. As it is, these confiscatory tax rates truly apply only to a small minority of people who cannot avoid their incidence, and their long-run effect is bound to be wholly pernicious, both in penalising the prospects of certain careers which are vital from the national point of view, and in undermining public morality[4].

12. Assuming a comprehensive tax-base, the marginal rate of income tax ought to exceed, in my view, something of the order of 40-50% for income that is both earned and saved. (For spent income, the effective rate could, of course, be made considerably higher, if income tax were supplemented by a progressive spendings tax, in replacement of the higher brackets of super tax.) For unearned income (income from business or property) a differential tax should be imposed in the form of an annual tax on wealth (in addition to the tax on income) which has not the same disincentive effects on the productive employment of capital (i.e. on the assumption of risks) as a tax on income. This tax, however, has a similarly discouraging effect on savings as income tax, and for that reason, an annual tax on

wealth, conceived as a progressive tax, ought not to exceed a top marginal rate of 1-1.1/2% per annum.

13. From the point of view of administrative efficiency the main requirements are:

(i) *Simplicity.* The taxes should be based on simple definitions, avoiding, as far as possible, exemptions of various kinds or the special treatment of special categories, since all such complications lend themselves to manipulations (e.g., the existing difference in tax treatment between different kinds of companies, or as between companies and individuals, or as between the "profits" of business and "capital profits").

(ii) *Comprehensiveness.* Taxes on income should embrace all forms of beneficial receipts, taxes on capital wealth all forms of property. Exceptions to this should only be made on strictly administrative grounds (e.g., exemption limits for the sake of limiting the number of cases to be dealt with).

(iii) *A single, comprehensive return; a self-checking system of taxation; and an automatic reporting system.* These, I consider, are the most important requirements from the point of view of administrative efficiency:

(a) A Comprehensive Return

At the moment the tax-payer is only asked to return his income; and since the question whether a particular receipt falls into the category of "income" or not, is often a highly doubtful matter, the tax-payer is left, in effect, to decide for himself whether particular receipts are returnable or not. The Revenue authorities have power to ask for a return of capital assets and other details, but these powers are sparingly used - as it is indeed not possible to compel tax-payers to supply information on matters that are not directly relevant to the assessment of their tax liabilities. If a complete set of accounts is to be furnished i.e., a statement of total wealth at the beginning of the year, all accruals during the year - by way of gifts, bequests, winnings, etc., as well as all forms of taxable income and gains; the application of these to personal expenses and investments - as well as the resulting, asset-position at the end of the year, the concealment of particular items of income or property, or the falsification of accounts, would obviously become far more difficult. (This is not to suggest that it is impossible to keep a complete duplicate set of books or to make out a "phoney" set of comprehensive accounts. But it is obviously a more difficult thing to do than to conceal receipts when only a partial return is called for.)

(b) A Self-checking System of Taxation

The present system of taxation already contains, of course, some self-checking elements. But owing to gaps in the legislation, the vagueness of the distinction between taxable and non-taxable receipts, and other factors, the efficiency of this is limited and it only works in certain directions. Assuming, however, that in addition to the present taxes on income, all realized capital gains are brought into charge (the transfer of assets by way of gifts, bequest and legacy counting as 'realization' in the same way as transfer by way of scale), a gift tax is imposed along side of (and ultimately in replacement of) estate duties, and finally a personal expenditure tax is introduced, the system becomes completely self-checking in the sense that A's attempt to ensure that he is not over-assessed with regard to his own tax liabilities automatically brings to light the receipts and gains made by B, and so on. If the present taxes on income were extended to capital gains and other receipt of a capital nature, and were supplemented by an annual tax on wealth and a gift tax, if a super tax were levied on an expenditure-base, (see below), and if all these taxes were assessed at the same time, by the same authority, and on the basis of a single comprehensive account submitted by the tax-payer (containing all receipts in the year, all tax-exempt outlays, a record of all capital transactions, and a full statement of all property owned) evasion and concealment would become more difficult, not only on account of the difficulty of the individual tax-payer to conceal consistently particular receipts or items of property but owing to the fact that the evidence furnished by one tax-payer (in the interests of minimising his own liability) directly serves as a check on the return furnished by others. Thus in computing

A's liability for a personal expenditure tax all "exempt outlays" must be returned, and such exempt outlays represent taxable receipts of one kind or another (i.e., profit, capital gain, gift, etc.) to B. Similarly, since under this system all gains or losses on capital transactions are brought into the account, there is an automatic check on all new purchases of capital assets through the record of sales, and it is in the interest of the purchaser not to allow an under-statement of the price at which an asset was acquired since this enhances his future liability for a capital gains tax, as well as his liability to the personal expenditure tax.

(c) An Automatic Reporting System Extending to All Property

A system extending to all property transactions and all cash payments over a certain sum is outlined in Chapter 6. As indicated there, by means of a system of code numbers and tax vouchers, it would be relatively simple (administratively) to introduce an automatic reporting system for all property transactions requiring registration and attracting stamp duty. As suggested, the system can be extended to various other types of transactions if taxes were levied on personal expenditure, as well as on income.

III. OUTLINE OF MAIN PROPOSALS

14. An effective system on the above lines requires taxes on (a) income; (b) capital gains; (c) net wealth; (d) personal expenditure; and (e) gifts. All these can be assessed as a single operation, and on the basis of a single comprehensive return provided by the tax-payer.

(a) Income Tax

In place of the present income tax and super tax there shouid be a single income tax which, for individuals and partnerships, etc., is progressive up to an annual income of Rs 25,000 and at a flat rate of 7 annas in the rupee for all income above that level. The top marginal rate on income, therefore, becomes 43.1/2% (or, say, 45%) including the sur-charge) above that level. Companies should not be required to pay income tax but should pay a non-refundable tax of 7 annas in the rupee on their whole income (in place of the present income and corporation taxes). Income tax should be deducted at the maximum of 7 annas in the case of all interest and dividend payments as a matter of collection at source and credited to the recipients' income tax account.

(b) Capital Gains Tax

All capital gains on realization and all casual gains and capital receipts not chargeable at present (such as the sale of terminable rights, premium on leases, etc.) should be charged to income tax which means a flat rate charge of 7 annas in the rupee once the combined income (including capital gains) exceeds Rs 25,000. Capital gains of companies should be chargeable to tax in the same way as trading profits.

This means that all beneficial receipts (whether trading or capital profits, other kinds of income, individual or company income, or the income of public or of private companies), except that individuals are charged at reduced rates when their aggregate beneficial receipts are less than Rs 25,000. The tremendous advantage of this, both as regards administrative simplicity and the prevention of evasion and manipulation of all kinds, cannot be over-emphasized

(c) Annual Tax on Wealth

Payable by individuals, HUF's, partnerships, etc. Suggested scale 1/2% p.a. on personal net worth of, say, Rs 1,00,000-4,00,000; 1/2% p.a. on Rs 4,00,001-7,00,000; 3/4% p.a. on 7,00,001-10,00,000; 1% on capital value of Rs 10,00,001-15,00,000 and 1.1/2% in excess of Rs 15 lakh (tax liability to be calculated on the slab system).

(d) Personal Expenditure Tax

Payable on a per head basis, on personal outlay in excess of RS 10,000 p.a. per adult (infants counting as one half adult for the purpose) on a progressive scale, calculated on the slab system, rising from 25%, for expenditure between Rs 10,000-12,000 to 300% on expenditure in excess of Rs 50,000 p.a. per adult (Example, A family of four, father, mother, 2 children, incurs an expenditure of RS 40,000 a year. As the family consists of 3 adult units, the expenditure is Rs 13,333 per adult, and the tax liability is three times the tax on the first Rs 3,333 of taxable expenditure.)[5]

(e) General Gift Tax

Payable on gifts in excess of Rs 10,000 for any single recipient of gifts (the donee) and taxed at a rate depending on the total net worth of the recipient (as ascertained for annual wealth tax) at the rate of 10% if the net worth is below Rs 1,00,000 and at double the current corresponding estate duty rates for correspondingly higher amounts of net worth, i.e. at the rate of 15 to 80%, depending on the net worth of the recipient. (Example: (i) A receives a gift of Rs 50,000 from his parent; possesses no property; his tax liability is Rs 4,000, (ii) B receives a bequest of Rs 50,000 and possesses net worth (before the bequest) valued at Rs 2,50,000; B's liability is 25% on 40,000 i.e., Rs 10,000; (iii) C inherits from his father Rs 2,00,000; has no other property; his liability is Rs 26,500; (iv) D owns property valued at Rs 5,00,000; receives a gift of Rs 50,000; his liability is 40% of Rs 40,000 i.e., Rs 16,000.) It is suggested that once the annual wealth tax is in operation, and adequate returns are obtained on annual net worth, the above gift tax should replace the present estate duty altogether. The latter is based on an antiquated conception. The true incidence of inheritance taxes falls on the recipients of the inheritance, and not on the deceased. Also, there is no justification in equity for a difference in treatment as between gifts *inter vivos* and the receipt of legacies or bequests. Hence a single progressive tax on gifts should take the place of the estate duty, as well as serving as a tax on all other gratuitous or quasi-gratuitous property transfers.[6] (The exemption of Rs 10,000 should apply, of course, only to the initial gift received by a particular donee.)

IV. PROBABLE EFFECTS ON REVENUE

Income Tax

15. The elimination of super-tax above 3 annas will mean, on the basis of 1953-54 assessments, a loss of revenue of Rs 18.3 crore, of which Rs 14.2 crore represent the loss of super-tax on individuals, Rs 2.3 crore on the HUF's and Rs 1.8 crore on unregistered firms. A uniform tax of 7 annas in the rupee (plus surcharge) levied on companies would bring in the same yield as the income and corporation taxes do at present.

Capital Gains Tax

16. A tax on realized capital gains has a long gestation period (of, say 5-15 years) but ultimately the average annual assessment of realized gains should correspond to the average annual accrual of gains. Capital gains mainly arise on ordinary shares, on the sale of individual business (as goodwill), on urban property, and on jewellery and valuables. The value of ordinary share capital in India may be put at the order of Rs 800-1000 crore[7], and the total value of property of the "appreciating" kind, including shares, at say Rs 1,800-2,000 crore. The long run rate of appreciation in value may be put of 3-5% per annum corresponding to rate of growth of the national income. This would give a long-run annual rate of accrual of the order of Rs 60-100 crore[8], on which the tax revenue might be of the order of Rs 25-40 crore. (These are of course meant as "long-run" average figures; the yield of any particular year would show wide variations.)

Annual Wealth Tax

17. A computation based on current income tax assessments, reproduced in Chapter 2, indicates that the yield of this, on the scales suggested above, would be of the order of Rs 15-25 crore.

Personal Expenditure Tax

18. Assuming that the personal expenditure of the upper classes (those with taxable incomes above Rs 40,000) corresponds, for the group as a whole, to their net income after tax, the yield of this tax would roughly offset the loss on super tax. In fact, however the upper income groups save considerable amounts, but whether they do so in relation

to their taxed incomes or only out of capital gains, it is impossible to say. It might be safe to assume that spendings are less than the net incomes after tax (to the exclusion of capital gains) and hence the revenue from this tax, on the scale suggested above, might be less than the equivalent or, say, Rs 10-15 crore.

General Gift Tax

19. The yield of this can only be estimated on present data, on broad lines. Assuming the total value of non-agricultural property in the hands of owners possessing Rs 1 lakh or over Rs 4,000 crore (a figure derived from the calculations in Chapter 2 and based on income tax assessments), 1/25th of this may be assumed to be transferred (by way of gifts, dowry, legacy, etc.) annually[9]. Assuming the average rate of duty to be 20%, the yield of this tax should come to Rs 30 crore.

20. Hence the "long run" yield of the above suggestions - i.e., allowing for the time necessary for the smooth and efficient administrative operation of the proposed system, and for the "gestation period" in the case of the capital gains tax, but on the basis of the present level of the National Income - should come to a net additional revenue of Rs 60-100 crore per annum.

21. These estimates do not take into account the additional yield of income tax that would follow from the checking of evasion or avoidance or the additional yield of the property tax on such property the income from which is concealed at present.

22. In the following chapters the proposals outlined above are discussed in detail and specific problems relating to the suggested new taxes and system of comprehensive reporting and compulsory registration of property transfers examined.

CHAPTER 2

AN ANNUAL TAX ON NET WEALTH

I. INTRODUCTION

23. The purpose of this chapter is to examine the case for an annual tax on net wealth owned by individual tax-payers alongside of, or in partial substitution of, the present tax on income. Though annual taxes on property form part of the tax legislation of over a dozen countries, only a few of them (chiefly the Scandinavian countries) possess a tax on the lines recommended here.

24. An annual tax on wealth, though it is levied on the value of the principal, is really a tax on accrual and not a tax on the principal itself - as for example, estate duties or a capital levy are. If all property yielded the same percentage of income, an income tax and a wealth tax would amount to the same thing. The two differ precisely because some property yields a large money income, other property a small income (or no money income at all) in relation to its current market value.

25. The tax, similarly to income tax, should be conceived as a progressive one, and levied at rates (i) which are well within the total accrual from property - whether in the form of money income, expected appreciation, or payable income; and (ii) which take into account the other taxes on accruals, in particular, the income tax. In the light of this, it would seem reasonable to levy a tax at the rate of 0.3% per annum on the lowest slab (i.e., from Rs 1,00,000 to Rs 4,00,000) rising to 1.5% per annum on the highest slab (i.e., on the value of property in excess of Rs 15,00,000). The exemption limit of Rs 1,00,000 is recommended solely for administrative considerations - i.e., until more experience is gained with the administration of the tax. For ultimately there is something to be said for a rather low exemption limit regarding this particular tax - an exemption limit low enough for encompassing those sections of the community which are not touched by the existing tax on income. In a country like India, a tax based on capital ownership should prove administratively easier to assess and collect in the lower reaches of the income scales than a tax based on current earnings.

26. For the sake of equity, as well as administrative efficiency, it is essential that the tax should be comprehensive -= i.e., extending to all forms of property. The inclusion of agricultural property in this connection may require a constitutional amendment, unless the procedure adopted in the case of estate duties of the State delegating

the powers to the Centre could be repeated here[10]. Property in the form of bank balances, jewels and valuables above a certain exemption limit of say, Rs 5,000, as well as real estate of all kinds, assignable rights with a market value, the ownership of stocks and shares, etc., should all be comprised in it. Personal effects like household furniture and clothing should be exempted up to a certain limit per family member. (In Sweden, motor cars and motor boats are exempted as well as personal effects, works of art and art collections; ornaments only if their total value is below Rs 1,000.)

II. THE GENERAL CASE FOR AN ANNUAL TAX ON WEALTH

27. The arguments can be grouped under three heads, equity, economic effects, and administrative efficiency.

(a) The main argument in equity for the tax is that income taken by itself is an inadequate yardstick of taxable capacity as between incomes from work and incomes from property, and also as between the different property owners. The basic reason for this is that the ownership of property in the form of disposable assets endows the property owner with a taxable capacity as such, quite apart from the money income which that property yields. This is best shown if you compare the position of a beggar who has neither income nor property with a position of a man who keeps the whole of his wealth of, say, Rs 10,00,000 in the form of jewellery and gold. Judging their capacities by the test of income alone, the taxable capacity of both is nil. Quite apart from such an "extreme" case, it should be evident that as between people who possess property and income in different proportions, income alone is not an adequate test of capacity to pay; nor can that capacity be adequately assessed by a tax based on property alone. Suppose two individuals, A and B, have the same income of, say, Rs 50,000, but one of them derives it from the property worth Rs 2,00,000 and the other derives it from the property worth Rs 5,00,000. It would clearly be wrong to suggest that the taxable capacities of the two men are identical and they should be called upon to pay the same amount of tax (which is what happens if only income is used as the tax base). It would be equally wrong to regard the taxable capacity of B as being 2.1/2 times as great as that of A, which would be the case if they were assessed on the basis of property alone. A man who derives Rs 50,000 a year from property of Rs 5,00,000 is clearly better off than a man who derives Rs 50,000 a year from property of only Rs 2,00,000, but he is evidently not as well off as a third man who possesses the same capital of Rs 5,00,000 and has an income of Rs 1,25,000. Hence, only a combination of income and property taxes can give an approximation to taxation in accordance with ability to pay. (The existing earned income relief is intended to give some recognition to the higher taxable capacity of incomes derived from property as against similar incomes derived from work, but precisely because the relation between income and property value varies so much as between one individual and another the problem could never be adequately dealt with by the technique of earned income relief, even if that relief were extended to all income ranges and made far more substantial than at present.)

(b) From the point of view of economic effects, the great advantage of taxes assessed on property value as against taxes assessed on income is that a property tax does not discriminate against the risky employments of capital in the same way as an income tax. If a man can get a "safe" return by putting his money in Government bonds yielding 3%, whereas he could expect 10% of his money if he employed it in productive business, the difference of 7% may be taken to measure the investor's subjective estimate of the risks associated with the productive employment of capital. An income tax by taxing the additional income obtained through risk bearing in the same way as if it were "safe" income discriminates against risk bearing. Under the property tax, the same property value would bear the same tax, whether it is invested in Government bonds yielding 3%, in productive employments yielding 10% or hold in cash or in jewellery, etc., yielding no money income at all.

> It is true that under the present system of income tax which exempts capital gains or capital profits from taxation altogether a great part of the additional reward of risk bearing does not, in effect, bear any tax, since it takes the form of capital gains rather than of taxable income. A property tax on the other hand, would automatically bring into charge the increase in value resulting from capital appreciation. Even so, an annual capital tax provides a smaller disincentive on the productive employment of capital than even the present restricted income tax, for while the latter exempts capital gains it also provides complete tax exemption for the socially unproductive hoarding of wealth in the form of gold and jewellery, etc., whereas the property tax would make these a less attractive form of holding wealth.

(c) From the point of view of administrative efficiency, it must be borne in mind that while property value is something distinct from annual profit or income, the two in fact, are closely related in the sense that profits and property incomes of all kinds (other than the profits associated with professional and vocational activities) have always some tangible assets behind it; and similarly, most forms of property, though not all, yield money income or profit of some kind. Hence if taxes were assessed both on income and on property, by the same taxing authority, the administrative efficiency of the system is bound to be improved in consequence. For the examination of man's property ownership is bound to lead to the discovery of his concealed income, and similarly the examination of his income receipts is bound to lead to the discovery of concealed property. A tax on both, therefore, should provide a better check on evasion and concealment than a tax on either.

III. ARGUMENTS AGAINST AN ANNUAL TAX ON WEALTH

28. Despite its great advantages, a progressive annual tax on wealth has so far only been adopted in a few countries. Its exclusion from the scope of taxation in others has been defended on numerous grounds, few of which stand up to serious examination. The arguments against the tax can again be grouped under the heads of equity, economic effects and administrative efficiency.

29. It has been suggested (occasionally by no less an economist than Prof. Pigou) that an annual tax on property is inequitable, because not all property yields an income, and a tax on property may force a man to make payments "even if he has no income to pay it with". These arguments wholly beg the question of what is meant by "income". All property which has a positive market value (which can be bought and sold currently or exchanged for other forms of property) must yield a benefit to the owner at least comparable to the benefit obtained from other forms of property which he could buy - otherwise he would sell it and exchange it for something else (the only exception to this is the case of entailed property which the owner cannot alienate). If a property does not yield money income, it must either yield an equivalent psychic income to the owner or it must be held in the expectation of a certain appreciation in value which makes it at least as attractive to the holder as other property on which a current money return is obtained[11]. So far, therefore, from this constituting an argument against the property tax, it shows the inherent defect of income tax which concentrates on one particular form of accrual from property, namely money income, to the exclusion of other forms.

30. The economic arguments against the wealth tax sometimes refer to the alleged discouraging effect of the tax on productive enterprise and sometimes to the possibility of its incidence being shifted from the tax-payer to the ultimate consumer.

(a) As far as the discouraging effects on enterprise are concerned, it is true of course, that a tax on wealth has a discouraging effect as compared with no taxation at all. But as we have shown, it has a lesser discouraging effect than an equivalent amount of tax collected from the tax-payer in the form of an income tax. (The argument that capitalists can now evade income tax through the conversion of income into capital gains, while there are no equivalent evasion possibilities in the case of property tax, could hardly be construed as a respectable reason against the property tax and in favour of the income tax.)

(b) The idea that the incidence of a property tax can be shifted in an analogous manner to commodity taxes is mistaken. Precisely because the tax is on the value of capital irrespective of the use to which the capital is put, the tax lacks the discriminatory effect by which alone a shifting of the incidence could take place. In fact, the possibility of shifting the incidence of an annual tax on property is far smaller than that of an equivalent tax on income.

31. From the administrative point of view, it is often suggested that an annual property tax presents special problems of assessment on account of (a) the difficulties of "discovering" the true owners of property; and (b) the difficulties of valuation. I propose to deal with each of these aspects at some length.

The Problem of "Discovery"

32. As regards the problem of under-statement and concealment, it should, of course, be borne in mind that the "discovery" of a man's property is intimately linked with the "discovery" of his income. If property is concealed so is the income; if the income is known the property behind income can be traced. Introducing an annual property tax does not, therefore, really raise formidable additional problems, from the point of view of discovery, to those that already have to be faced on account of the income tax. On the contrary, the obligation on a tax-payer to return annually his total net wealth as well as his income should help considerably in checking the evasion of income-tax, just as the existence of income tax should help in checking the evasion of an annual property tax. As set out in Chapter 1, if the individual tax-payer is asked to supply a comprehensive account of his personal affairs - his asset position at the beginning and at the end of the year; his total accruals and their application as between personal expenses and investments - concealment of any one item becomes far more difficult, since it requires a consistent falsification of the accounts. The essential requirement is that the assessment and administration of the two taxes should be closely linked with one another, the work of assessment being done on the basis of a single comprehensive return, and by the same tax officials.

33. This is not meant to suggest that an annual wealth tax (any more than the income tax) could be administered efficiently (i.e., with only a limited amount of fraudulent evasion) without a considerable tightening up in the present methods of registration and control over the ownership of property. The most important reforms in this connection may be described as follows:

(a) As the present municipal records of urban property are admittedly defective and incomplete it would be advisable to set up a Central Records Office for the listing and valuation of urban property on an all-India basis as recommended by the Local Finance Enquiry Committee.

(b) Ultimately something analogous would also be advisable in the case of rural and agricultural property. This, however, will undoubtedly take far more time and in the mean time reliance must be placed on village records which I understand, are fairly detailed, at least, in the non-zamindari areas and make a distinction between land used for cultivation and land used for building. (It should also be remembered that the great bulk of rural property is probably held by owners whose total property is well under the exemption limits possibly suggested for the tax.)

(c) With regard to investments in stocks and shares of companies there is a strong case for the abolition of the existing Indian practice of buying and selling shares by means of "blank transfer" certificates. This system does not exist either in the U.K., or the U.S.A., and it would be difficult to maintain that its preservation in India is an important prerequisite of economic development. As is suggested later on in Chapter 6, if the system of taxation code numbers were introduced, the share registers of companies could be made to include the code numbers of beneficial owners as well as nominal holders in whose names the shares are registered.

(d) In the case of Government securities it would be advisable to adopt the same system as in the U.K., by which the owners of all Government securities are registered at the Reserve Bank, and changes in ownership have to be registered in the same way as changes in other property. In India interest on Government securities is payable by means of coupons and transfers take place by mere endorsement on the back of securities. It would be perfectly simple to exchange the present securities against securities of a registered type when the coupons are presented for encashment[12].

(e) With regard to stock-in-trade, machinery and plant the problems involved are not different from those already faced in the administration of income tax.

(f) For property of all types, as I suggest in Chapter 6, the compulsory disclosure of beneficial ownership in the case of benami holdings or holdings in the names of trustees or nominees is essential for the efficient administration of both income tax and wealth tax. This could best be ensured by the nominal holder being asked to sign a declaration to the effect that he is the beneficial owner, or only a benamidar, etc., such declaration having full legal force from the point of view of any subsequent civil action concerning the property.

The Problem of Valuation

34. I think that the best method or procedure is to follow ordinary accounting rules and to value each particular item of property at its "book value" until it is sold. This means, in effect, that when an account is initially set-up, all items of property are valued at current value which forms the cost at which they are entered into the accounts and they will continue to be valued at that cost (apart from cases in which the Revenue Department allows depreciation and they are valued at cost less accrued depreciation) until such time as the property passes out of the account through a sale, gift, or bequest. Property therefore only has to be valued (a) initially when the tax is introduced and the personal accounts are set up; and (b) subsequently when the property is transferred to a different owner otherwise than by sale.

35. The responsibility for the initial valuation of property would rest on the tax-payer who would be asked to value all items at current market value. If the Revenue Department disputes a particular item of valuation, it should have the right to ask the tax-payer to name his own reserve price for the disputed item of property and to substitute that reserve price for the market value, for purposes of the tax. If the Revenue Department is of the opinion that the reserve price as stated by the tax-payer is still below the true current market value of the property, it can so advise the Central P.W.D.[13] who can then acquire the property at the tax-payer's own reserve price. Thus tax-payers who purposely under-value properties in their returns would run the risk of having to substitute their own reserve price for the market value and thereby incur the penalty of being taxed on a higher value than the current market value; and if their reserve price is also an under-statement of the true market value they run the risk of having the property "bought out" at that price by the State.[14]

36. The establishment of a Central Valuation Department under the C.B.R., with regional and sub-regional valuation offices will be necessary in order to be able to check the valuations of properties given by the tax-payers. (This does not present a problem with stocks and shares quoted in the stock exchange but mainly with immovable property.) This will be necessary mainly to check the initial valuation of properties and the valuation in case of a gratuitous or quasi-gratuitous transfer (gift, inheritence, etc.) where the valuation will be necessary both for the purposes of the gift tax and the capital gains tax, as well as for the revision of the value of the property for the annual wealth tax[15] in the hands of the new owners. Under the system here proposed, a capital gains tax is charged every time property passes hands, and in addition a gift tax is charged in the hands of the recipient in case of all gratuitous transfers. For the purposes of the annual tax on property the capital value will be the same as the valuation accepted for the purpose of capital

gains tax and the gift tax in case of gratuitous transfers, and the actual proceeds of sale and purchase cost in case of other transactions[16].

IV. PROBABLE YIELD OF THE TAX

37. In the absence of any direct statistics bearing on the value of various forms of property in India, and its distribution according to size-groups, any estimate of the yield of the wealth tax can only be undertaken by the rough method of "working backwards" from income. By capitalising the profits of firms, partnerships and individual business and the dividend income of companies, a rough estimate of the total value of wealth and its size distribution (excluding agricultural property) can be obtained. Assuming an average yield of 5% from shares and 10% from other property, the total of privately owned wealth in estates over one lakh works out at Rs 3,330 crore, while assuming an average of 4% on shares and 8% on other property, the total is Rs 4,200 crore. A minimum addition of 10% may be made to those figures for cash, bank balances and all other forms of property which do not yield a money income. On the scale of the tax rates suggested, the estimated yield of the tax comes out at Rs 17.45 crore. The details are shown in Table I.

TABLE I. ESTIMATED YIELD OF AN ANNUAL TAX ON WEALTH BASED ON INCOME TAX ASSESSMENT FOR 1954-55

(Rs lakh)

	Size of estate	Assessed income	Number of assessees	Alternative I[1]			Alternative II[2]		
				Capital value	Tax[3] rate%	Tax yield	Capital value	Tax[3] rate%	Tax yield
1	2	3	4	5	6	7	8	9	10
1. Company	1-4,00,000	11,95		2,39,00	$\frac{1}{3}$	80	2,98,75	$\frac{1}{3}$	1,00
share capital	4-7,00,000	5,75		1,15,02	$\frac{1}{2}$	58	1,43,77	$\frac{1}{2}$	72
	7-10,00,000	3,60		71,98	$\frac{3}{4}$	54	89,98	$\frac{3}{4}$	67
	10-15,00,000	3,52		70,44	1	70	88,06	1	88
	above 15,00,000	10,62		2,12,36	$1\frac{1}{2}$	3,19	2,65,45	$1\frac{1}{2}$	3,98
	Total	35,44		7,08,80		5,81	8,86,01		7,25
2. Other capital	1-4,00,000	1,57,03	1,02,224	15,70,30	$\frac{1}{3}$	1,83	19,62,88	$\frac{1}{3}$	3,14
	4-7,00,000	34,31	7,874	3,43,10	$\frac{1}{2}$	93	4,28,88	$\frac{1}{2}$	1,36
	7-10,00,000	15,96	2,173	1,59,60	$\frac{3}{4}$	60	1,99,50	$\frac{3}{4}$	90
	10-15,00,000	14,03	1,295	1,40,30	1	73	1,75,38	1	1,08
	above 15,00,000	43,67	1,354	4,36,70	$1\frac{1}{2}$	4,82	5,45,87	$1\frac{1}{2}$	6,46
	Total	2,65,00	1,14,920	26,50,00		8,91	33,12,31		12,94
3. Addition of 10% for non-income yielding capital				3,35,88	$\frac{4}{5}$[4]	2,69	4,19,83	$\frac{4}{5}$[4]	3,36
Total			1,14,920	36,94,68		17,41	46,18,15		23,55

1. Dividend income is capitalised at 5% and other profits at 10%
2. Dividend income is capitalised at 4% and other profits at 8%.
3. Tax rates are assumed to apply on a slab system and yield is calculated accordingly.
4. Stands for the effective rate of tax on the total chargeable capital value.

38. Sweden possesses very detailed statistics relating to both income and property and it is possible to make estimates of the relationship for different property groups and make inferences from these as to the likely value of these ratios in India and the consequent yield of the annual tax. These estimates are given in Appendix C. The net result is that under the proposed schedule of rates the estimate of initial revenue from the wealth tax can be placed at Rs 20 crore a year.

39. Since the above estimates are based on disclosed income, they are almost certainly too low, both as a measure of the true value of non-agricultural property and of the probable yield of the tax, once the administration is made more water-tight through the system of comprehensive returns and the institution of an automatic reporting system.

V. CONCLUDING REMARKS

40. An annual tax on wealth is recommended both on account of its merits taken by itself and because it is an essential element in the institution of a comprehensive and evasion-proof system of taxation. Although its operation cannot be expected to become fully efficient until the existing rules concerning the registration of property are tightened up, and an efficient staff of valuers is evolved within the Revenue Department, these are not to be regarded as adequate reasons for postponing the introduction of the tax. There is no reason why the obligation to submit comprehensive income and capital returns, on the lines outlined in Chapter 1, should not be introduced immediately. As has been suggested in para 35 above, the Revenue could initially assess the tax on the basis of the tax-payers' own declared values.

CHAPTER 3

THE TAXATION OF CAPITAL GAINS

I. GENERAL CONSIDERATIONS[17]

41. The exclusion of capital gains from the scope of income taxation is quite indefensible on grounds of equity (since it involves the privileged treatment of a particular class of tax-payers as against others), or of administrative efficiency (since it enables tax-payers to camouflage income as tax-exempt gains and to conceal gains). It can only be supported on grounds of economic expediency, in that it reduces the ill-effects of the taxation of income on savings and on risk bearing i.e., on accumulation and enterprise. It does this precisely because it exempts certain kinds of income from taxation; any other device which enables people to avoid taxation to a similar extent (as e.g., a rule that every third taxpayer chosen at random should be immune from income tax altogether) could have an equally desirable economic effect.

42. If capital gains were treated in the same way as other forms of income, which means (since the gains are concentrated in the top income and capital brackets) taxing them at the rate of 90%, the economic effects would undoubtedly be serious. But the moral of this is that it is useless to push the marginal rates of income taxation to levels at which the tax can only be endured because it can be so largely evaded or avoided. The disincentive effects of taxation depend on the marginal rates of taxation; and if these are kept down to reasonable levels, there is no need to resort to inequity and dishonesty in order to keep the system going. It is far better to forego the appearance of high progressiveness in the schedule of taxation than to choose a definition of "income" for the tax base which is neither consistent, nor impartial, nor unambiguous in its application to different tax-payers.

43. The preferential treatment of capital gains (if not their complete exemption from tax) is sometimes defended on the ground that the taxable capacity inherent in any given amount of capital gain is less than that of other kinds of income of an identical amount, either because the gains may be "illusory", if they merely represented money appreciation, and not real appreciation, or they reflected a fall in interest rates and not a rise in the expected income of assets, or because they are casual or isolated rather than regularly recurrent. None of these arguments really provide any justification for the preferential or privileged treatment of capital gains as such. For not only capital gains, but any kind of savings may be "illusory" in varying degree and for much the same reasons; (rather than consumption, or net worth) as the base of taxation, but not against

the inclusion of capital profits in the concept of income. Similarly while it is true that non-recurrent or casual gains do not give rise to the same taxable capacity (in a given period) as recurrent gains of the same magnitude, it is certainly not true to suggest that all non-recurrent or casual gains are capital gains, or even that capital gains are necessarily more irregular in their occurrence than some other forms of profit which are not immune from taxation. So long as, and to the extent that, taxation is based on "income" the only impartial concept of income is that which treats all realised gains equally.

44. The present concept of taxable profits (which is taken over in Indian law from the British law) leaves the distinction between taxable and non-taxable receipts extremely vague and ambiguous. This constitutes a further source of inequity as between different tax-payers, since identical (or substantially identical) circumstances may involve widely differing tax treatment according to the whims or energy of particular revenue officers, the attitude of the courts, or the extent to which the Revenue is apprised of the existence of receipts of disputable character. For the very approach which treats the taxability of particular forms of receipts as a matter to be decided "on the facts of the case" (without specifying what particular "facts" are relevant to the matter) naturally opens the door to the widest possible differences of interpretation as between taxable and non-taxable profits; and tax-payers can hardly be blamed for preferring the interpretation most favourable to themselves and making their returns accordingly.

45. It may be that the Indian Revenue authorities have been more successful that the British in "roping in" profits of a speculative or casual character into the tax net, but I doubt it. The fact that the Revenue in both countries has succeeded in obtaining favourable decisions in the courts in a few spectacular cases must not be taken to mean that the range of cases covered by these decisions are now effectively within the tax net. In England, Court decisions since 1920 established that casual profits in transactions of an unusual character (like the purchase and sale of farms by a motor engineer, or the sale of bonded whisky by a wood-cutter, etc.) are within the range of taxable profits. But no more than a minute fraction of such speculative transactions are effectively taxed partly because each case is to some extent distinct from every other, and hence legal precedents are inadequate for establishing it as a transaction "in the nature of trade"; partly also because gains with an adumbra[te] of doubt are not brought to the knowledge of the Revenue. Despite Reynold's Executors V. Bennet (25 T.C. 401, 1943)[18] land speculation goes on unhindered by the tax officer. As regards Stock Exchange transactions, the taxability of speculative profits by people other than registered professional dealers or by professional dealers operating on their "personal" rather than their "business" account has never been tested in the courts in Britain and it is generally admitted that none of these, in practice, come within the tax net. Equally, I understand, in India the factors distinguishing a speculative profit from mere realization of investment are so vague as to make it impossible in practice to bring gains by other than professional speculators within the tax net.

46. The fact moreover that some tax-payers (the professional dealers in securities, finance houses, etc.) are taxed on their capital gains and correspondingly relieved of capital losses, whilst other tax-payers are not, makes it possible to extract money from the Treasury by fictitious transactions of all kinds, the common feature of which is that the party which is exempt from capital gains taxation exchanges a taxable object (e.g., a dividend) for tax-free gain, whilst the other party off-sets its taxable income against the manufactured loss on capital transactions. In this way the tax-exemption of capital gains to some sections of the community reduces the yield of ordinary income tax below the amount it would have had if everybody's gains had been uniformly taxed or uniformly exempted from taxation.[19]

47. The taxation of capital gains is sometimes opposed by the curious argument that its introduction would actually stimulate tax avoidance instead of reducing it. Thus the Taxation Enquiry Commission in their report say,[20] "If a capital gains tax were to be introduced now - and is bound to be levied at rates lower than the ordinary income and super-tax on account of its casual or irregular character - there is a danger of tax

avoidance being stimulated by attempts to pass off as capital gains what may otherwise have been treated as part of taxable income". This view overlooks the fact that the complete exemption of capital gains must necessarily afford a much stronger stimulus to tax avoidance than the reduction of liability arising out of differential treatment. In fact, as we have argued above, under the present system the Revenue has the worst of both worlds. It can neither prevent income masquerading as tax-exempt capital gains, nor capital losses being offset against current income, either of a special or an ordinary kind, for tax purposes.

II. THE PRESENT POSITION IN INDIA

48. The legal position in India differs from that of Britain in that provisions relating to the taxation of capital gains are actually on the Statute Book (Section 12 B of the Income Tax Act.) As far as I understand the position, while the operation of this Section is suspended at present, it could at any time be re-activated by a simple clause in the Finance Act.

49. I have not been able to discover whether any detailed consideration of the problem preceded the abolition of the tax, after only two years of its operation, in the Finance Act of 1949. The reasons given by the Finance Minister in the Budget speech were:-

(i) the yield was expected to be comparatively small, about Rs one crore;

(ii) the psychological effect of the tax on investment was bad; and

(iii) the tax operated to hinder the free movement of securities in the capital market, which was a necessary pre-requisite of industrial development.

None of these reasons appear to me adequate to justify the abandonment of the experiment after only two years of operation. The actual yield of the tax for these two years amounted to over Rs 6 crore; and since the yield in the initial years could obviously have only represented a fraction of the ultimate yield it is not clear how the surprisingly low estimate of Rs one crore was arrived at. It is well know that no complicated new tax can be expected to work satisfactorily or to show its full yield in the first few years of its operation; the Rs 6 crore collected in the years 1947/48 to 1952/53, in respect of the financial years 1947/48 and 1948/49, were based on a total of 1,814 assessments only. Nor is it clear how the Government could have had the information or experience at its disposal to be able to conclude that the tax had important adverse effects on investment, or hindered the free inter-change of securities.[21] There is also a logical contradiction involved in arguing both that the tax has only a negligible yield, and at the same time has important adverse repercussions on the economy.[22]

50. The Central Board of Revenue, in their evidence submitted before the Taxation Enquiry Commission came down unhesitatingly in favour of the tax, but they felt doubtful "whether its reintroduction at the present time (December 1953) is likely to lead to any considerable revenue." According to the Board's statement, "the general tendency seems to be for profits and prices falling rather than rising; transactions in capital assets are also much less frequent than they were a few years ago." The Taxation Enquiry Commission in their Report took up a more ambiguous position and gave only a very cursory treatment (half a page) to the whole problem.

51. In my opinion it would be great mistake to treat the question of the taxation of capital gains mainly on short term revenue considerations, and to put the tax off and on according as the immediate revenue expected in the light of the prospective economic situation was small or large. Quite apart from the fact that the basic and most important reason for the tax lies in the field of equity, and not just revenue, the revenue potential of a capital gains tax can only be gauged on a long term basis. It is common knowledge that in general, realised capital gains reflect accrued capital gains with a time-lag of a number of years. This time-lag, moreover, is by no means uniform so that it is more correct to regard the average yield of the tax over a period of, say, five years as reflecting the average rate of accrual of capital gains of a five year period which elapsed 10-15 years previously. Hence the full yield potential of the tax should only become apparent after it

had been in operation for 10-20 years.

52. It seems to me, therefore, that the tax ought to be reintroduced as soon as possible, and quite irrespective of the immediate prospects of rising or falling prices, or of the immediate expectation of the yield. But apart from this, in view of the greatly accelerated rate of capital expenditure under the Second Five Year Plan, I do not think that the Board's view expressed in December 1953 that "the general tendency seems to be for profits and prices falling rather than rising" could be supported in the present circumstances.

III. SUGGESTED CHANGES IN EXISTING LEGISLATION

53. Assuming the re-introduction of the tax, the provisions laid down in Section 12B seem to me to be on the right lines. In fact the scheme propounded last year by the Minority of the British Royal Commission on the Taxation of Profits and Income, subject to one important difference, is essentially similar - though the Minority of the Royal Commission were quite oblivious of the Indian law on the subject. The important difference relates to the exemptions from the scope of the tax introduced in the third proviso of sub-section (1) of Section 12B. This proviso exempts such transfers of capital assets as result from compulsory acquisition by public authorities, or from a scheme of partition of H.U.F.'s, the liquidation of a firm or a company, or transfers under a deed of gift or will, or to an irrevocable trust. These exemptions are in accord with the existing American law on the subject, but do not, in the opinion of many, conform to the correct principles of taxation.[23] While a tax on realised gains is the only feasible method of taxing capital gains, it must be borne in mind, of course, that the realisation criterion serves mainly administrative considerations and there should be no basic difference of principle between the concepts of "realised" and "accrued" gains. The tax should, therefore, be so framed that all capital gains should come under the tax net sooner or later - i.e., that over a long period, the tax charged on realised gains should come to the same as the charge on accrued gains. This will be the case if transfers of assets of all kinds (by way of gift or inheritance, as well as by sale, etc.) are treated as realisation for tax purposes. On this conception the accumulated total of realised capital gains over a tax-payer's whole life necessarily comes to the same as the accumulated total of accrued capital gains. If on the other hand, transfers by way of gifts, bequests, etc., are exempted, not only will a considerable part of capital gains escape from taxation, but the tax-payer will be given an unhealthy incentive so to manipulate his asset holdings as to make net unrealised gains as large as possible, since all unrealised gains are wiped out for tax purposes when the property passes hands on decease. These exemptions may easily cut the potential long term yield of the tax by two-thirds or three-quarters and they do not seem to be justified on any principle of equity.

54. Nor does it seem to me that the compulsory acquisition of property by public authorities forms any genuine ground for exemption from the tax. If the exemption is to be justified on the ground that the compensation paid by public authorities does not correspond to the full economic value of the property, the tax-payer is automatically relieved from the capital gains tax to a corresponding extent. There is no case, therefore, for complete exemption.

55. If the tax were re-introduced now there would be a case, also, for amending the provision in Section 12B concerning the determination of the cost of the capital assets to the assessee. As it is, the Section provides for the fair value on the 1st of January 1939, to be substituted for the actual cost, at the taxpayer's option, if the assets were held prior to that date. I think there is something to be said in equity, as well as on administrative considerations, for choosing a post-war date, such as the 1st of January 1948, for such an option in place of the pre-war date mentioned in the Section.

56. The provisions of Section 12B exempt agricultural land, personal effects including jewellery, as well as the stock in trade, etc., of a business, profession, or vocation. The last exemption is certainly correct since the capital gains in stock-in-trade get automatically taxed as ordinary profits as and when the stock is realised. Exemption of agricultural land will perhaps be retained so long as the existing constitutional provisions concerning agricultural income remain unmodified. The exemption of jewellery,

however, was presumably introduced mainly on administrative considerations. Jewellery, etc., above a certain value represent a form of investment, and ought certainly to be brought within the scope of the tax. If a personal expenditure tax and an annual tax on net wealth were introduced as suggested in this Report, coupled with an automatic reporting system suggested in Chapter 6, the Revenue would be capable of checking transactions in jewellery in almost the same way as transactions in other forms of property.

57. The schedule of rates in operation in the years 1947-49 reflected the right principle also in putting a relatively low ceiling rate of 5 annas in the rupee though the schedule was unduly lenient in the scale of progression leading up to that rate. If the suggestions made in Chapter 1 concerning income tax were accepted and the present income tax and super tax were replaced by a single income tax with a ceiling rate of 7 annas in the rupee, I do not believe that the separate tax treatment of capital gains would continue to be justified. A ceiling rate of 7 annas, or say 45%, does not appear to me unduly high from the point of view of economic expediency, nor is the difference between a ceiling rate of 5 annas and 7 annas of sufficient importance to offset the great advantages of having the same rates of taxation applicable both to capital gains and ordinary income. For administrative reasons, a higher exemption limit (such as the Rs 15,000 under the 1947 Act) may be justified for capital gains than in the case of ordinary income, but I do not see why the rise in rates through the successive slabs should proceed at such a leisurely pace once the exemption limit is passed. Under the 1947 Act the tax began at a rate of one anna in the rupee up to Rs 50,000 and the top rate of 5 annas in the rupee was only reached when the gains exceeded Rs 10 lakh, whereas in the case of ordinary income, the rate of 7 annas in the rupee is reached for income over Rs 25,000. These differences provide a strong incentive for tax avoidance and it cannot be emphasised too strongly that they lack any justification in equity.

58. The recommendation in Chapter 1 that income tax should be subject to a ceiling rate of 7 annas in the rupee was, of course, part of the wider reform which envisaged the replacement of the present super tax by a progressive personal expenditure tax and the introduction of an annual tax on net wealth. Assuming, however, that the introduction of an annual tax on net wealth or a personal expenditure tax are not considered for immediate adoption, it would be well worth to consider whether the present relationship between income tax and the super tax should not be so altered as to raise the ceiling rate on income tax from 4 to 7 annas in the rupee and to make super tax begin at an income of Rs 40,000 per annum i.e., starting from the present third super tax slab. In that case, capital gains could be made liable to income tax but not to super tax, with the result that the rate of tax deducted at source from interest and dividend payments, etc., would become identical with the rate of taxation on capital gains, thus obviating the possibility of gaining from manipulations of all kinds by converting income into capital gains.[24]

IV. THE LONG-TERM YIELD OF THE TAX

59. As indicated above, if the suggestions made in paragraphs 53 and 54 were accepted, the assessment of realised capital gains should correspond in the long run to the average rate of accrual of capital gains. The question is, therefore, what long run rate of capital appreciation should be taken as the basis for the purpose of calculating the tax yield,. It can safely be assumed that the value of privately owned property increases at least as fast as the national income measured at current prices. This means that if the rate of progress envisaged in the Second Plan is attained, the total value of property should rise by at least 3-5 per cent per annum. The total privately owned property in India (in estates of over Rs 1 lakh and excluding agricultural land) can be put at a minimum of Rs 3,500-4,500 crore. Of this about Rs 1,000 crore takes the form of ordinary share capital while another Rs 1,000 crore may be assumed to represent the value of urban property and of other property with an inherent tendency to capital appreciation (such as business good-will).[25] Hence the average annual accrual of capital gains can be put at Rs 60-100 crore, and the effective rate of tax, on the schedule of rates suggested above, may be as high as 40 per cent[26]. The long term yield of the tax, on these

assumption, would come to Rs 25-40 crore.

60. These figures may appear surprisingly high in the light of the two years' experience with the tax, and an attempt ought certainly to be made to reconcile them with the actual yield for the years 1947-49 (which averaged just over Rs 3 crore a year). (a) A part of the difference can be accounted for by the difference in the schedule of assumed tax rates. The effective rate in the case of the assessments for 1947-49 was 23 per cent, or somewhat under 4 annas in the rupee. With an effective rate of 40 per cent the corresponding yield would have been Rs 5 crore a year. (b) The major difference, however, is due to the fact that the total gains assessed for the years 1947-49 averaged only Rs 13 crore a year, as against the Rs 60-100 crore suggested above. This difference is partly to be accounted for by the exemptions, under Section 12B, to transfers by way of gifts, inheritance, etc., and partly by the incomplete coverage of the assessments. Although no figures are available, American data tend to suggest that the exemption of transfers through inheritance, etc., also causes two-thirds or more of all capital gains to be relieved. Hence, the inclusion of the exempt categories might have raised the total gains assessed from the actual figure of Rs 13 crore to Rs 40-50 crore. (c) Finally, the assessments by no means covered the full extent of the cases liable. During the six years upto 1952-53, only 1,814 assessments were made in respect of capital gains for both years together. Since the number of major share-holders (with shareholdings of Rs one lakh and over) is over 40,000, and the number of property owners (with estates over Rs 1 lakh) more than 1,00,000, the figure of 1,814 is not likely to represent more than a fraction of the cases (though probably a somewhat larger fraction of large cases than of smaller cases).

61. The greater part of capital gains over a longer period probably arises on ordinary shares.[27]. I personally do not think it excessive to put the long run rate of appreciation of share capital in India of the order of 10 per cent per year, rather than 3-5 per cent. My reasons for this are that the expansion in production in the organised private sector of the economy can be assumed to proceed at a rate of 10 per cent per annum for many years to come. This was the rate of growth attained for the last five or six years, and there is no reason why it should not be maintained for the next 10-20 years. It is true that the expansion of industrial production has not carried with it during the last five years an equivalent percentage increase in company profits. I think, however, that this was due to special circumstances. It is much more likely that in the future, over longer periods, the rise in company profits will be fully proportionate to the rise in production; the rise in dividends to the rise in profits; and the rise in share values to the rise in dividends. During the last five years, according to the figures given by the Taxation Enquiry Commission,[28] the rise in industrial production of over 40 per cent coincided with a fall in profit margins (on gross sales) from around 17 to around 10 per cent. If these figures are correct, they can only be interpreted in terms of a changeover from 'inflationary' to 'normal' conditions, which coincided with the expansion in production since the war. There is no reason to suppose however, that this tendency will continue. Profit margins are unlikely to fall below 10 per cent over longer periods; while the rise in expenditures under the Second Five Year Plan should, if anything, cause a revival of inflationary tendencies and a renewed rise of profit margins. If profit margins were maintained (let alone increased), the rise in profits will be as great as, or greater than, the rise in production[29]. It should also be borne in mind that the net ploughed back profits of companies (after taxation and depreciation) amount to Rs 70 crore per year (on the evidence of the income tax assessments), and this would normally be regarded as the minimum amount by which the market valuation of companies should increase annually over a run of years.

CHAPTER 4

A PERSONAL EXPENDITURE TAX

62. In Chapter 1 it was proposed that a progressive tax on personal expenditure (with a relatively high exemption limit) should be imposed along with other suggested reforms, and the maximum rate of income tax should, at the same time, be lowered to 7 annas in the rupee (or 45% including sur-charge). The effect of these

proposals would thus be the replacement of the higher ranges of super tax on personal income with a super tax on personal expenditure. The purpose of this chapter is to explain these proposals in more detail, and at the same time deal with some of the objections that have been raised against the introduction of a personal expenditure tax in India.

I. GENERAL CONSIDERATIONS

63. In my book[30], I agreed the case in favour of a personal expenditure tax on grounds of both equity and economic expediency in some detail and, therefore, do not wish to repeat the general arguments here. The main arguments which have been put forward against the proposals made in my book, in the particular context of India, may be listed as follows:

(a) It would not be practicable to impose an expenditure tax on top of the present taxes on income, since this would make taxation altogether too severe.

(b) Taxation of expenditure in replacement of taxation of income means the exemption of savings, this would greatly stimulate accumulation by the wealthier classes and would lead to an even greater concentration of property ownership. If property taxes were imposed to counter the tendency to concentration of property, this, in turn, would cancel the advantages of the expenditure tax in regard to the incentive to save.

(c) The expenditure tax would be administratively more difficult to handle than the income tax.

(d) As expenditure met out of agricultural income would have to be exempted from taxation, it would encourage people to debit the maximum part of their expenditure against their agricultural income.

64. I think it ought to be made clear that while an expenditure tax is superior to income tax, both because 'expenditure' is a better index of taxable capacity than 'income', as the basis of taxation and because 'expenditure' is a better index of taxable capacity than 'income', there is nothing inherently wrong in having both a tax on expenditure and a tax on income side by side. Even if it could be argued that the present taxation income at the high rates of income and super taxes is being applied effectively, one could still justify the introduction of an expenditure tax if economic considerations require a restriction of personal spending and if that restriction could not be attained by a further increase in income and property taxes. If income and property are taxed too severely, while expenditure out of accumulated wealth is not taxed or restricted, the effect would merely be to encourage the capitalists to dissipate their wealth rather than to reduce their living standards.[31] I argued in earlier chapters that the present high marginal rates of taxation on income would have far more deleterious effects on the behaviour of wealth-owners (i.e., on their incentives to save or to invest) if these taxes were applied effectively. The fact that these effects are largely avoided because the tax system contains large enough loop-holes to permit the owners of risk capital to make tax-free gains and to accumulate capital out of tax-free savings, is an argument against the present system of taxation, and not against the expenditure tax. For if these loop-holes were closed (i.e. all capital gains, etc., were brought into charge in the same way as other income) it would soon become evident that these high marginal rates on income could not be maintained. Hence progressive taxation, if it is to be both effective and impartial, cannot be levied beyond a certain point on an income-base, but only on an expenditure base.

65. It would also be incorrect to say that imposition of taxes on property (whether in the form of an annual tax on wealth, estate duties, or the general gift tax) would cancel the advantages of an expenditure tax in restricting spending. On the contrary, the imposition of a personal expenditure tax would counter the disincentive effects of these property taxes on the spending and saving habits of the rich. A progressive expenditure tax taken by itself would effectively reduce the standard of living of the upper classes, though it might augment the rate of accumulation of large fortunes. Property taxes cut down the rate of accumulation but encourage spending. A combination of the two types of taxes, therefore, far from cancelling the good effects of either, makes it possible to restrict effectively the living standards of the rich without sacrificing the

long-run egalitarian objective of a more even distribution of property.

66. While an expenditure tax would be administratively more difficult to handle than the present income tax, it is not more difficult to handle than a comprehensive and effective system of income taxation. On the contrary, the incorporation of an expenditure tax in a system of personal taxation which includes both taxes on income (including capital gains) and on property would ease considerably the prevention of evasion - partly because it would introduce an opposition of interests between the different parties as regards the concealment of particular transactions (whereas under the present system both parties to a transaction may have an identical interest in concealing altogether or in understating the value of a particular transaction), and partly also because the necessity to account for the amounts spent on personal purposes over a particular period together with the obligation to produce a balance-sheet of personal net wealth at the beginning and at the end of the period forces the taxpayer into a full disclosure of receipts; just as the need to make a full return of current receipts and expenditure forces the taxpayer into a full disclosure of capital assets.

67. It should also be remembered that the problem of personal expenses being met out of business expenditure accounts or benefits given in kind rather than in cash already arises under an income tax. The obligation of a taxpayer to return his personal expenditure as well as his income would make it easier to detect such cases of income tax evasion since they would automatically be reflected in an unduly low figure being returned for personal expenditure. The plain fact is that the incorporation of an expenditure tax would make the administration of the income tax a great deal more effective as well. It is possible for a man to conceal some part of his receipts, or by getting some part of his own expenses paid by someone else (his business employer or some friend or relation in a lower tax bracket), but the important point is that such concealments could not be carried to the point at which taxpayer's own returned figure for his expenditure becomes apparently inconsistent with his mode of living. I think the experience of income tax officers would confirm that while it is not possible to estimate from external criteria a man's expenditure with any great precision, it is certainly possible to do so with a fair margin of approximation[32]. A man who keeps several houses, a large number of servants, and several cars and entertains frequently, might well manage to understate his true expenditure by a few thousand rupees a year, but he could not possibly return a figure of, say, Rs 10,000 when in fact he spent Rs 50,000 or Rs 1,00,000. Yet under the present system, there is no limit to the extent to which he could understate his income through fraudulent concealments or the extent to which he can economise on having a taxable income by converting income into capital gains or economise on super tax by transferring property into trusts and settlements.

68. With regard to the point concerning agricultural income, the constitutional position seems to be rather in favour of the expenditure tax. The Constitution does not assign specifically a tax on expenditure either to the Centre or to the States, nor does it state anywhere that expenditure out of agricultural income (as distinct from the agricultural income itself) should not be taxable by the Centre. I believe, therefore, that a tax on personal expenditure would be constitutional irrespective of the sources from which the expenditure was drawn; and the revenue from it could be taken as belonging exclusively to the Centre under item 97 of List I of the 7th Schedule to the Constitution.

69. The one contention which no one has called into question is that a progressive personal tax on expenditure is a most potent weapon for inducing economies in personal spending among the well-to-do classes. It is also beyond dispute that an accelerated rate of economic growth requires a higher proportion (and not merely a higher amount) of investment expenditure to total expenditure - i.e., a higher proportion of savings in the national income. Resources for such additional savings can only come from a reduction in consumption in relation to current income. As the consumption standards of the masses of the population in India are so near to the bare minimum level, the reduction in the propensity to consume of the well-to-do classes appears to me

as an indispensable requirement for sustaining a higher rate of economic growth. Luxury consumption is in fact the only part of the national expenditure that could be compressed for the sake of releasing resources for a higher rate of capital accumulation; and a graduated progressive tax on personal consumption is undoubtedly the ideal instrument for attaining this end.

II. DEFINITION OF EXPENDITURE AND MODE OF ASSESSMENT AND GRADUATION

The Real Basis of the Charge

70. Although, as explained further below, the taxpayer would not normally be required to give any detailed account of his outlays on consumption (but only a statement of his total outlay as part of a comprehensive return showing all his receipts, investments, etc., and all the items for which he claims exemption) the legal basis of the charge ought to be a reasonable every day conception of personal consumption (or expenditure), including not only items met by expenditures out of the taxpayer's own spending but also consumption out of benefits and gifts received in kind, expenses met by the employer, friend or relation, subject to an annual exemption limit of, say, Rs 2,000 a year per head for such gifts or benefits received. If the charge is based on personal consumption thus defined, attempts to avoid tax by making gifts to persons of low spending power, etc., (in return for such persons meeting part of the taxpayer's expenses) or by getting employers or businesses to meet one's personal bills would all be unavailable. The taxpayers would, in fact, be chargeable on the value of all goods and services received for personal consumption irrespective of how and by whom these were financed.

Definition of Personal Consumption

71. Personal consumption excludes outlays on the following items:

(a) Business expenses in the strictest sense; the question of adequacy of the present legal definition of such expenses as expenses "wholly or exclusively incurred for the purposes of a trade or business" will be further discussed in Chapter 7.

(b) All investment outlays i.e., sums devoted to the purchase of income yielding property (like land, stocks and shares, securities of all kinds) or non-income yielding 'stores of wealth' (like bank deposits, bar gold, current deposits, bank notes and coins)[33]; loans of all kind and sums devoted to the repayment of past indebtedness.

(c) Capital expenditures for personal use, only the annual benefits from which, and not the outlay itself, enters into "consumption". The purchase of a dwelling house for owner-occupation, works of art, jewellery and ornaments above a certain value (say, Rs 10,000) fall into this category.

(d) Gifts made to other persons above a certain amount (say, Rs 2,000) including settlements made on children, dowries[34], etc.

Claims for exemption under items (a) to (d) would have to be supported by duly certified tax vouchers as described in Chapter 6 but whilst outlays under items (a), (b) and (d) carry complete exemption, outlays under (c) would carry a notional addition to personal consumption in the year of purchase and subsequent years (until the items are sold), based on, say, 5% of the purchase price[35].

Chargeable and Exempt Consumption Expenditure

72. Outlays not falling within categories (a) to (d) above may be defined as personal expenditure but not all such expenditure would be charged to tax. Certain categories of necessitous items should be exempted and the range of such items would vary with the particular customs and modes of living. Items which I would regard as falling reasonably within the 'necessitous' categories and deserving exemption in addition to all personal taxes paid are: (i) funeral and birth expenses; (ii) medical expenses upon a certain amount per head; (iii) any additional expenses incurred as a result of severe physical disabilities upto a certain amount per year; (iv) fines, etc. imposed by courts; and (v) expenses incurred as a result of fire, burglary, theft, flood, damage, etc. (Since all such outlays represent insurable risks, it would be administratively convenient to restrict

such exemptions to payments received under the insurance policies rather than to the outlays themselves.)

Treatment of Chargeable Consumption Expenditure

73. The residual left after deduction of exempted items constitutes chargeable consumption expenditure; not all of which, however, is fully chargeable in the year of purchase. Expenditure on durable goods of all kinds like furniture, motor-cars, house repairs, etc., or on unusual outlays like weddings, can be spread at the taxpayer's option over, say, a five-year or possibly a ten-year period. Since under a progressive system any tax relief obtained on account of such unusual expenditure would automatically swell the taxpayer's chargeable expenditure in the following and subsequent years, spreading would be against the taxpayer's interest except in so far as it genuinely assisted to even out his rate of expenditure over time. There would be no need, therefore, in these categories to require the same kind of proof to be furnished as would be necessary for claiming exemption under categories (a) to (d) in para 71 above.[36]

Mode of Assessment and Graduation

74. Since the purpose of the tax is to discourage high level spending by steeply rising marginal rates on expenditure, it is far more necessary in the case of this tax than in the case of income tax to take into account differences in needs arising out of differences in the size of the family which the taxpayer has to support. Hence unlike the income tax (where only a very small difference is introduced in the tax liability through a variation of the amount of initial exemption), the rates of taxation in the case of expenditure tax ought to vary with the scale of expenditure per head rather than the total expenditure of the whole family unit. This means the adoption of the so-called quotient system, which is already applied in France for income tax purposes, according to which the income (or expenditure) of all members of the family is first aggregated and then divided into a number of parts, depending on the number of persons in each family, and the tax is charged separately on each part. Children may count as one-half unit each (though the fraction could be varied with their age and number)[37]. Apart from wife and children it may be permitted to add other family members living in a joint household to the conception of the "family", provided only that their receipts, income and property, are effectively aggregated with the family for tax purposes. It would be reasonable, however, to count such additional members in the same way as children as a fractional rather than full unit each. This is because the aggregate family expenditure, assuming a given living standard, rises less than in proportion to the increase in the numbers in the household. I would therefore suggest that additional family members should be converted to adult units on a tapering-off scale so that a family of say 4 members would count as three adult units, a family of 7 members as four adult units and that five should be the maximum number of adult units for a family. That means that the minimum liability to tax in case of a large family is as on the total family expenditure divided by five, this liability being manipulated five times.

75. The pre-condition of this method of charging, as already stated, is the effective aggregation of all receipts, income and property of the family members. Although, in principle, such aggregation could be adopted for purposes of the expenditure tax only without being applied for income and property taxes, from an administrative point of view, it would clearly be far more convenient if the rules of aggregation applied equally to all types of personal taxation. In India, unlike in England, the income of husband and wife is not automatically aggregated for tax purposes, though there are special anti-avoidance provisions which enforce aggregation in case of partnership shares, etc., and cause income and property transfers between family members to be ignored for tax purposes. It would, however, be far more equitable as between different taxpayers if a general rule of aggregation were adopted for purposes of income and property taxes as well as for purposes of expenditure tax as between husband and wife and minor children (excepting in the case of a legal separation). In the case of other family members aggregation for income and

property tax purposes would be optional but a necessary pre-condition for aggregation for expenditure tax purposes.

IV. SUGGESTED SCHEDULE OF RATES

76. In Chapter 1, it was suggested that there should be an exemption limit of Rs 10,000 per adult and expenditure in excess of this amount should be charged according to the slab system of graduation, starting from 25% on the lowest slab (i.e., on expenditure between Rs 10,000 and Rs 12,500) and rising gradually up to a maximum of 300% on expenditure in excess of Rs 50,000 per head. An exemption limit and schedule of rates of this character seem to me appropriate for replacing the present super tax on personal incomes on the slabs above -/7/- annas in the rupee - i.e., in excess of gross income of Rs 40,000 and a net family income, after income tax, of Rs 30,000. Since the typical family may be assumed to comprise at least three adult units, a net expenditure of Rs 10,000 per head corresponds to a net family expenditure of Rs 30,000. Assuming that personal expenditure corresponds to net income after tax, the substitution of an expenditure tax on this scale for the higher brackets of super tax would not change appreciably the total burden of taxation. There would, of course, be a considerable shift in the tax burden as between relatively high spending and relatively high saving tax-payers.

77. It could be argued, however, that in the present conditions of India a stronger deterrent to spending and a stronger stimulus to personal saving would be justified, and therefore, the exemption limits ought to be put lower and the scale of graduation made stiffer than the scale which is the nearest equivalent to the present super tax. If the exemption limit were put at Rs 6,000 per head and the maximum slab of 300% were imposed on expenditures in excess of Rs 30,000 per head the liability to tax would have a more powerful effect in restraining spending. It might, therefore, be more appropriate in the present situation of India even though it would probably imply considerable increase of the present tax burden of a typical family in the higher income groups.

78. There are unfortunately no statistics available in India, even on a sample survey basis, of the consumption expenditure of the top income groups. Some of the cases investigated by the Taxation Investigation Commission, I understand, suggest that personal expenditure might be rather low in relation to true income. In these particular cases, however, the amount of concealed income was probably very large in relation to declared income and it is quite possible that such concealed income is served to a far greater extent than declared income precisely because the spending of concealed income would cause suspicion and might lead to detection. There might be a large number of cases where the level of expenditure is greatly in excess of the taxable income and where the difference is financed not out of concealed income, but out of capital gains that are exempted from taxation or simply out of accumulated wealth. Some observers put the expenditure of the upper classes in India at over Rs 500 crore a year - an amount which is considerably in excess of the total of net incomes after tax of all income recipients with incomes of over RS 10,000. It is possible, therefore, that total yield of the tax would prove to be very much greater than the present yield of that part of the present super tax which it replaces. It is, however, impossible in this case to make even a rough guess of the magnitude of the probable yield.

V. ADMINISTRATION

79. The tax would be administered in much the same way as the present super tax on the basis of individual assessments relating to the previous year and paid around 18 months in arrear. The mode of administration of the tax could perhaps best be illustrated by showing in a simplified form the type of comprehensive return which, it has been suggested should replace the present tax return and which would provide the material for assessment for the other proposed taxes, the annual wealth tax, the capital gains tax and the gift tax, as well as the expenditure tax.

80. It will be evident from the sample comprehensive return reproduced in Appendix 'A' to this Report that the tax-payer would not be asked to give a direct account of his personal expenses, the amount chargeable for the expenditure tax

being arrived at as a residual after deduction of various items from the receipts. The need to make the various items and parts of this return consistent with one another, together with the requirement that a duly certified voucher should be submitted in support of each particular claim for exemption, provides the check on the accuracy of the computed figure of expenditure. The taxpayer would, however, also be required to make a formal declaration that to the best of his knowledge and belief the computed expenditure tallied with his true personal expenditure for a period in question. The Revenue would, of course, have the power to ask for details concerning particular items of expenditure (such as the amount paid for electricity or other public utility services, the rents paid for the year, the amounts spent on the children's education, etc.), as well as details concerning his mode of living (e.g., the number of servants kept, the number of rooms, furniture and fittings, motor-cars and travels made during the year) which would enable the tax officer to check the accuracy of the computed figure and the consistency of the whole return.

CHAPTER 5

A GENERAL GIFT TAX

81. The purpose of this chapter is to put forth a proposal for a single integrated tax on gifts of all kinds (including under this term accession to property through bequest and inheritance) which should replace the present estate duty, as well as bring into charge other gratuitous transfers of property which are not now taxable. The case is argued on grounds of equity, expediency and administrative efficiency.

I. GENERAL CONSIDERATIONS

82. Property is passed on from generation to generation either through inheritance or bequest or through *inter viros* gifts and settlements. The basic justification for taxes on inheritance is that the community has the right to limit each individual's freedom to pass on his property intact to his successors just as it has the right to circumscribe the power of control and disposition exercised through the legal institution of ownership in numerous other ways. Progressive taxes on estates can in fact only be justified as a graduated limitation of the right to pass on differentiating between the right to pass on property through gifts and the right to pass on property by bequest. There is, therefore, a *prima facie* case for supplementing estate duties with taxes on gifts made *inter vivos*; and as far as possible, the incidence of taxes on gratuitous transfers of property should be made independent of the mode in which, or the form through which, property is transferred.

83. An additional reason for the taxation of *inter vivos* gifts is that the imposition of estate duty itself stimulates the *inter vivos* transfer of property to heirs and successors so as to avoid tax; even though the motive of tax avoidance is not the sole or even the main reason for a general tax on gifts. *Inter vivos* gifts are made on many occasions, as for example on the marriage of children or grand-children, or when children reach maturity and set up a separate household or business. Again there is no *a priori* reason why such gifts should be differently treated for tax purposes than gifts received through inheritance.

84. An attempt is usually made to limit the scope of tax avoidance through *inter-vivos* settlements by providing that gifts made within a limited period prior to death should be aggregated with the estate for estate duty purposes. In India the period is six months for gifts made to charity and two years for other gifts. These provisions are questionable devices from an equity point of view (a) since they carry the presumption that all gifts made within the prescribed period prior to death were made within the dominant motive of tax avoidance (which certainly cannot be true of all cases), and (b) because they make the taxability of gifts entirely dependent on the fortuitous circumstance of the donor surviving or not surviving the prescribed period.[38]

85. The attempt to give away a part of one's estate with a view to reducing the liability to estate duty is particularly strong when taxes are levied on progressive scale, since in that case tax is saved not only through a portion of the estate being passed on *inter-vivos*, but also through a lower rate of duty becoming applicable to the remainder. The more the State attempts to limit the scope for such tax avoidance by extending the period prior

to death during which gifts are made taxable, the more arbitrary the incidence of the duty becomes, and the greater the element of luck or illfortune in determining the liability to the tax.

86. Some countries such as the U.S.A., Sweden, Canada, Australia and others have introduced separate taxes on *inter-vivos* gifts to supplement the death duties. Since, however, in most cases the two taxes are not properly integrated with one another, loop-holes for tax avoidance remain. Thus in the United States, the gift tax is charged at three fourths of the normal estate duty rates, and successive gifts by a donor are aggregated for tax purposes. There is, however, an annual exemption of $3,000 (in addition to an initial exemption of $30,000) so that if gifts are made in regular annual instalments of $ 3,000 or less, the gifts still escape the tax. It is usual, moreover, in the tax laws relating to gifts to regard the gift tax as a liability payable by the donor, with the result that whereas estate duties are levied gross, (i.e., the tax is paid out of the assessed estate) gift taxes are levied net (i.e., on the net amount transferred). This reduces the tax liability in two ways; partly because the tax is levied on a smaller base, and partly because the rate of tax (and not only the amount payable) applicable to the smaller base may be smaller.

87. There is also the question whether the whole conception of an estate duty which taxes the property of the deceased on a progressive scale depending only on the size of the estate, and irrespective of whether it is passed on to one person or a number of different hands is correct from an equity point of view or not. The presumption of an estate duty is that the incidence of the tax falls on the deceased person. In fact, the true incidence falls on the heir or legatee and not on the deceased. The fact that a man's property will be reduced through death duties after his decease does not reduce his economic power but only of the people who inherit the property. It seems to me therefore, that from the point of view of equity, the rate of progression should vary with the amount *received* by a particular-person, (the principle underlying the so-called legacy or succession duties) and not with the total amount of property *left* by a man. Apart from reasons of equity, considerations of economic expendiency also argue in favour of the principle of the legacy duty as against the principle of the estate duty. For the main justification for levying a steeply progressive tax whenever property passes from one generation to the next is to counter the tendency towards the increasing concentration of wealth which is an inevitable consequence of economic progress in society. If a rich man leaves his estate, not to a single heir, but to a large number of beneficiaries, he is, thereby, doing something himself to counteract that tendency by spreading his property among several persons. Moreover, when the rates of estate duty are very stiff (and they have to be very stiff in the higher brackets to provide an effective antidote to the tendency of increasing concentration of wealth) the temptation on the rich to dissipate their capital during their lifetime - a temptation held in check at present by the loop-hole of tax-exempt transfers *inter vivos* - must be pretty strong. This temptation would undoubtedly be less if a man of property could reduce the extent to which his estate will be taxed at death by spreading it among a large number of potential beneficiaries.

II PROPOSAL FOR A GENERAL TAX ON GIFTS

88. The above considerations argue in favour of a uniform tax on all gratuitous transfers, irrespective of whether the transfers were made *inter vivos* or by way of legacy or bequest. The legal liability for this tax should be placed squarely on the donee (and not on the donor) on whom the ultimate incidence of tax must in any case fall. It is necessary moreover that the rate of progression of the tax should not be dependent on the size of any particular gift or legacy - otherwise the taxation could be defeated by a fragmentation of gifts. It is for this reason that existing legal provisions generally aggregate successive gifts by a donor for rate purposes. I do not believe that this method of aggregation (by donors) is the ideal solution. The ideal method appears to be to make the rate of taxation dependent neither on the size of the gift nor on the wealth of the donor but on the total wealth of the recipient i.e., his net worth including the gift. A man who own Rs 10 lakh and receives another Rs 1,00,000 as a gift ought surely to be more heavily taxed on that than another man who receives an identical gift but

owns nothing else. The most reasonable principle, therefore, seems, to be to apply a slab system of graduation to a man's total estate, and to tax the gifts received in any one year according to the additions they make to his net wealth and at the rate applicable in the relevant zone (or zones). Assuming that an annual tax on wealth is introduced so that the property of an individual, above the exemption limit, is in any case returned annually for the purpose of the annual tax, the introduction of a general gift tax on these lines would not cause any additional administrative problem.

89. In chapter I, I suggested that there should be an exemption limit of Rs 10,000 for any single receipient and that gifts over and above this should be taxed at the rate of 10% if the net wealth of the recipient is below Rs 1 lakh, and at double the present estate duty rates applicable in the case of individuals - i.e., 15% between Rs 1,00,000 and Rs 1,50,000, 20% between Rs 1,50,000 and Rs 2,00,000, 25% between Rs 2,00,000 and Rs 3,00,000, and so on, rate becoming 80% if the total estate of the donee exceeds Rs 20 lakh. I think this should be subject to the proviso - in order to prevent small and regular allowances from becoming subject to an excessive duty - that the tax-payer should have the option to have the gifts of any one year treated as ordinary income for tax purposes (i.e. aggregated with his other income).

90. The suggestion that the existing estate duty rates should be doubled when the tax is levied on the above lines may be thought as harsh. It should, however, be borne in mind that (a) the rates of estate duty in India are rather low at present in comparison to other countries,[39] and (b) since the typical estate is inherited by several heirs and not a single heir, the changeover from the estate duty principle to the legacy duty principle would mean a considerable reduction in the effective burden of taxation unless the rates are made considerably higher. Suppose a man dies possessing Rs 10,00,000. Under the existing estate duty law he would be subject to a tax of Rs 1,51,250. If he left his estate in equal parts to three of his surviving children, the liability to gift tax according to the estate duty rate schedule would be three times Rs 26,250, or Rs 78,750 altogether, meaning a reduction of nearly 50%. But under the Schedule of rates suggested here (assuming the children possess no other property) the liability of each heir would amount to Rs 61,500 or a total of Rs 1,84,500 which exceeds the liability under the present estate duty by just under 22% - an increase which certainly cannot be regarded as excessive when compared with the rates obtaining elsewhere in the world.

91. A further considerable advantage of these proposals is that it makes tax evasion far more difficult than the existing system of estate duty. The experience with the latter in India so far tends to suggest that under Indian conditions, it is difficult to discover what a man's property is after his decease. The new system relies on the *recipient* of gifts and bequests as well as on information supplied by the donor or legator, and assumes that the system of comprehensive returns recommended in Chapter 4 is adopted in which case the transfer of property through gifts or inheritance is bound to be revealed.

III. PROBABLE YIELD OF THE TAX

92. Assuming that the system of comprehensive returns on all receipts and property and the comprehensive reporting system on all property transactions, etc., are adopted (and are functioning satisfactorily) the net yield from this tax would be considerable. Private property in India in estate of say, Rs 25,000 or over is not likely to be below Rs 4,000 crore, whilst the annual transfer of property through death or *inter vivos* gifts cannot be much less than one-twenty-fifth of the total.[40] This makes the amount annually assessable to the gift tax something of the order of Rs 150 crore. On the rate schedule suggested above, the average rate of duty could not be put at less than 20% which makes the yield of the tax of the order of Rs 30 crore a year. The consequential loss from estate duty is estimated at present at only Rs 2 crore a year.

CHAPTER 6

A COMPREHENSIVE REPORTING SYSTEM

I. THE PROPOSAL

93. The existing evasion of income tax, super tax, and estate duty, as well as the administrative difficulties in connection with the taxation of capital gains, an annual tax on wealth and a personal expenditure tax, could be overcome through the institution of an automatic reporting system of all capital transactions, etc., with the aid of a simple system of code numbers. The idea can be briefly described as follows:-

(a) Every income tax payer is supplied with a code number by the Income Tax Officer who handles his case. Any other person who so desires, can register his name in the Income Tax Department of his home district and can get a code number even if he is not so far assessed or liable. The code number should indicate the State/District/Income Tax Circle No. And can be of the form 1/2/5/348 indicating West Bengal/Calcutta/I.T. Distt. Ward No. V-2/ and GIR No. 348.

(b) It should be obligatory in the case of all property transfers registrable under the Transfer of Properties Act to disclose the code numbers of the transferor and the transferee. The transferee at the same time must sign a declaration stating whether he is the beneficial owner or merely a trustee, nominee or benamidar. In the latter case there is an obligation on him to disclose the code number of the beneficial owner. Failing such declaration, the transferee is deemed to be the beneficial owner in law and any claim of benami on property purchased after the "appointed day" would fail, even though the transfers may not be in possession of the transfer deed. This would stop evasion through benami holdings.

(c) It should be obligatory to produce these declarations when transfer deeds are handed in to the Registration Offices for purposes of registration. The most convenient form is a duplicate perforated voucher, consisting of two copies, A and B. The suggested forms of this tax voucher are reproduced in Appendix B. The recipient of cash (or the seller of property) should have an obligation to fill out the part of these vouchers relevant to him and hand it to the buyer (transferee). The transferee having completed the rest of the form hands it over to the Registration Office together with the transfer deed. The Registration Office transmits it to the Revenue Department who route the two slips to the tax officers of the transferor and the beneficial owner (or transferee, if the transferee is himself the beneficial owner), respectively.

(d) In case the system of taxation comprises an expenditure tax (as one of the taxes) it would be administratively convenient to make the voucher in triplicate, one of which (copy C) is retained by the transferee who hands it to his I.T.O. as a supporting voucher for tax-exempt outlays. Under an expenditure tax, the tax-payer's interest is to under-state his receipts and to overstate his tax-exempt outlays; the latter should therefore be required to be supported with vouchers, furnished by the tax-payer himself; whereas the under-statement of receipts can be checked by the vouchers produced by the other parties and accumulating in his file with the tax office.

(e) In this manner, the Revenue Department would be able without any cumbrous investigation of individual cases, to obtain a full record of the capital transactions of tax-payers during the year. There is no need to stress the importance of this for efficient administration, not only of an expenditure tax but of income tax, a capital gains tax, an annual tax on wealth, and of a general gift tax as well. Concealments of gains for income tax purposes are revealed through the investment of such gains, if such investments are automatically notified to the tax authorities. At present large scale concealments can only be unearthed through the detailed investigation of capital transactions. The adoption of the above system would ensure that the I.T.O.'s have immediate information on all capital transactions whereas at present any such information can only be obtained subsequent to the filing of the annual return and in some cases only some years after that.

(f) Moreover, if the system of taxation includes an expenditure tax as well as taxes on income and capital the economic interest of tax-payers would ensure the completion and surrender of these vouchers even in the case of such transactions which do not involve compulsory registration. Thus in the case of Stock Exchange transactions where no actual delivery of shares takes place, but where only the balance of a large number of transactions gives rise to cash receipts or payments (differences), the payer can be asked to surrender a voucher, filled out by the payee, in support of his claim. In this case, the departure from the already existing practice will mainly consist in the disclosure of the code number of the recipient on the voucher.

(g) Further, in the case of all payments above a certain sum (say, Rs 10,000) which are not payments for goods and services rendered of non-exempt categories, the completion of a receipt in the form of voucher described above, and its surrender by the payer could be made a statutory requirement. Given an expenditure tax, there is a strong incentive on the payer to insist on the proper completion of such a voucher since otherwise he might involve himself in added tax liabilities. Thus the lender in the case of a loan, the debtor in the case of a repayment of a debt, the depositor in the case of a bank deposit, donor (or his executors_ in the case of gift, bequest, the purchaser of such jewellery or other valuables as are treated as exempt categories of expenditures, could all be relied on to produce the appropriate voucher in connection with their tax returns.

(h) Equally, the code number of the beneficial owners, if included in the companies' share registers along with the names of the nominal holders would produce an automatic check on interest and dividend income (as well as on secret holdings out of concealed profits of the past). Copies of dividend vouchers issued by companies to shareholders would also be routed to the tax officers through the code number system.

(i) The amount of clerical work involved in the routing and filing of vouchers for the whole of India would be no larger than the clerical work which was involved in the administration of the rationing system during the war in a single large city. At the moment, the number of assessees on the General Index Register is of the order of one million and the code numbers that may have to be allotted may be of the order of two millions or so for the whole of India. In other words, it will mean that each of the 1,000 I.T.O's will have on their Registers on an average about two thousand names each, and this is obviously not a very difficult problem to manage. In fact the Sales Tax authorities are working on the system of Sales Tax Registration Nos. which is essentially similar. The routing of the tax vouchers to the local tax offices can be done on a continuing basis without undue additional expenditure. Each Registration Office would post every evening the vouchers accumulated during the day to the Central Collating Agency at Madras who would send them on to the local offices. The collection, filing and utilization of vouchers by the Income Tax Officers could be most conveniently done through a card index filing system.

II. THE SWEDISH PRECEDENT

94. I obtained from Sweden copies of some of the tax vouchers in connection with the comprehensive reporting system in that country which in some ways is essentially similar to the one I have outlined. Rough translations of Form 18A and 17 are given in Appendix 'B' to this Report. These forms relate to the receipt of interest and dividend payments. I understand, however, that analogous forms have to be completed in connection with the receipt of each resulting from the sale of capital assets and perhaps other types of transactions as well.

95. The Swedish tax vouchers are analogous to the system suggested by me in the two important respects. First, the obligation to fill up the

vouchers rests always on the person who receives money (the payee) whereas the obligation to ensure that the form is duly completed and surrendered to the appropriate tax authorities rests on the payor. Secondly, the declaration by the payee contains, in addition to the sum received, the nature of the dividend, the amount of the payment, etc., a declaration by the recipient whether he is the beneficial owner or not; and in case he is not the beneficial owner (or if the beneficial owner is not a Swedish resident), another form, Form 18B must be completed. The forms, while they ask for details concerning the name and address of the payee and of the payer, do not contain any reference to code numbers.

96. The system proposed here would be a great deal simpler to operate, for several reasons. The universal use of code numbers must greatly facilitate the routing of the tax vouchers to the appropriate tax officers. The completion of such vouchers would not be required in connection with the dividend and interest payable in so far as payments are rendered to registered holders and not to holders of 'bearer' securities in exchange for the surrender of a coupon. Instead the company or corporation which pays the dividend or interest and deducts income tax at the source at the maximum rate would be asked to supply duplicate copies of the income tax vouchers now issued in connection with such payments to the Revenue Department. The only change involved would be that in addition to the name and address of nominal holder, the code number of the beneficial owner would also figure on the tax vouchers. There would be no obligation however, on recipients of dividend and interest payments to complete a voucher every time they receive a payment (as is the case in Sweden). On the other hand, our proposal is to extend the system to all kinds of transactions whereas the Swedish Law (as far as I am aware of it) does not require the completion of tax vouchers in connection with payments representing lending or the repayment of a past loan, the sale of jewellery, gold or valuables above a certain value and other kinds of payments with respect to which the payer (in the system proposed) would claim exemption from the personal expenditure tax.

97. Nevertheless, the operation of the Swedish system does, I believe, afford strong evidence that the adoption of the kind of system I propose for India would not create difficult administrative problems. It is true that Sweden is a small country; on the other hand the number of taxpayers of all kinds is 3.3/4 million, e.g., eight times the number of Indian income tax payers and almost four times the number of names in the GIR. The number of assessments for the Annual Property Tax in Sweden amounts to 1,80,000 which again is a somewhat larger number (certainly not a smaller number) than the number of cases likely to be involved in India. I am quite certain also that this system would be perfectly feasible for large income tax paying countries, such as the U.K. or the U.S.A. The absence of any automatic reporting system on dividend and interest income or on capital transactions in these countries cannot be explained either by technical difficulties (the introduction of P.A.Y.E. in case of salary and wage incomes raised far more complex technical problems), or by the lack of need for it, but mainly on account of the opposition of vested interests which its introduction would encounter.

III. POSSIBLE OBJECTIONS

98. It may be convenient in this connection to deal with some of the objections that have been mentioned against the proposal outlined above.

99. One type of objection is that property transfers notified to the Registrars are already transmitted to the relevant Income Tax Officer on a routine basis; in the same way the companies notify the Department of the interest and dividend payments made by them. The answer to this objection is twofold. First, I am not of course aware how regularly and efficiently the existing practice of collecting data from the Registrars is working. Even if the existing practice worked to the satisfaction of the authorities, it could still be said that not only would considerable time and labour be saved by having an automatic system of reporting whereby the Registrars forward duly completed vouchers to the tax authorities simultaneously with registration, but ITO's by receiving information promptly of all important transactions of the assessees could take prompt action concerning them. It is well known that

prompt action considerably facilitates investigations. In any case the information extracted from the Registrars relates to transactions in immovable property only. On the other hand, my system aims at (a) the extension of this to transactions in stocks and shares, and to transactions of a capital nature of all kinds, such as lending and borrowing, etc; and (b) the disclosure of the beneficial owner on the supporting tax voucher in a manner that protects his anonymity *vis-a-vis* third parties. Secondly, I am not aware either, how efficiently and promptly the existing system of companies sending copies of the list of interest and dividend payments to the Central Collating Agency at Madras is working. It certainly cannot help in tracing the beneficial owner in case of properties registered in the name of the trustees or nominees or benami holders.

100. Nothing illustrates more the need for a comprehensive reporting system than the fact that with respect to the capital gains tax in operation in the years 1947-48 and 1948-49, only 199 assessments were raised in 1947-48, 469 in 1948-49, 440 in 1949-50, 245 in 1950-51, 329 in 1951-52 and 149 in 1952-53, or 1814 altogether. There can be little doubt that even the six years' total only covered a fraction of the liable cases for those two years.

101. Another objection to the system proposed is that capital accounts are already submitted by assessees as a matter of routine; and these necessarily disclose capital transactions during the previous years. I understand, however, that full details of wealth and of capital transactions are only given with respect to business accounts. As the law stands today, a statement of net personal wealth can only be obtained with the prior approval of the Commissioner of Income Tax; and this is only made use of in rare cases, and even then not successively year by year.

102. It cannot, of course, be claimed that a system of the type suggested above would stop all evasion in all conceivable circumstances. When both the vendor and the vendee stand to gain from an under-statement of the value of the property the system will not prevent such under-statement (which could only be detected, in such cases, as a result of the detailed investigation of the individual cases). However, if the tax system included taxes on income and capital), the interests of the vendor and the vendee would no longer be necessarily the same. Their interests may be opposed - the vendor might wish to over-state, and the vendee to under-state, the purchase price. It is not evident in these circumstances that a particular tax-payer gains from an under-statement of the value of transactions or from an over-statement of them. Given an expenditure tax as well as taxes on income and capital, the tax-payer still gains from an under-statement of receipts but he also gains from an over-statement of his tax-free outlays, and it may thus pay him to pretend to have more assets than he possessed if he thereby saves more in expenditure tax and in future capital gains tax than he loses in the annual tax on property (or possibly in income tax). Hence the proportion of assets (including gold, jewellery and cash) which could be kept under the cover and dealt with stability would undoubtedly be considerably reduced.

103. It should also be borne in mind that there is a very great difference between people's readiness to conceal transactions by furnishing an incomplete return (thus avoiding any declaration concerning some items altogether) and their willingness to make a false declaration in a public document. There is much to be said, therefore, for having a system which forces people into a position where they have to make a false statement "knowingly and wilfully" as against one when they need only commit the sin of omission and not of commission.[41]

104. As regards benami transactions my suggestion is that the benami holder should be asked to disclose the name of the beneficial owner at the time of the registration and in the event of his failing to do so (and declaring that he is not the beneficial owner himself) he should be treated as the beneficial owner in law. This provision is clearly intended to deter a person from entering into a benami transaction just for the purposes of tax evasion. While it may be true that a certain amount of personal trust is involved between the benami and the real owners in all such cases, I seriously doubt whether the system could continue to exist but for the recognition of benami in common law. Even retention of the title deed would not protect the true owner in case the

benami holder formally declared that he was the beneficial owner of the property; and in case the true owner protected himself further through I.O.U's, mortgage deals, etc., this would call for (as indicated in para 93(g) above) the same kind of disclosure.

105. It has been argued that the proposal would make it more difficult to defeat *mala-fide* transfers of property undertaken to prevent attachment of property in view of outstanding demands. I should be interested to know the number of cases in which the Revenue succeeded in breaking the benami through court action. My feeling is that the Revenue would gain far more from screening all benami transactions at the very outset than it would lose from any added difficulty in breaking the benami in the case of such fraudulent transactions.

106. With regard to jewellery, dealers should be compelled to complete and produce the requisite vouchers (together with the code numbers) for purchases and sales above Rs 10,000. I would agree that such reporting system may not be completely fool-proof, but it will certainly deter assessees from introducing "block money" into their business by pretending that they have obtained it through the sale of jewellery; and dealers will not be in a position to abet such transactions so freely since they will be forced to disclose the name and identity of the corresponding buyer.

107. The great indirect advantage of this system would be that the Revenue would be informed of all purchases of jewellery, and this would (in time) put them in a position to check the hoarding of jewellery, etc., for purposes of an annual tax on capital or a capital gains tax. Here again the introduction of an expenditure tax (which would exempt purchases of works of arts, jewellery and ornaments from this tax - only taxing the 'psychic income' derived from their possession - but only if the claim is properly supported by tax vouchers) would do a great deal in helping the disclosure of such transactions generally, since dealers in jewellery would take additional risks in unrecorded purchases if they knew that prospective buyers might demand from them the surrender of a voucher for the purposes of supporting their own claim for tax exemption. They would, no doubt, still be able to find buyers who would be willing to buy without request for a voucher, but such "black sales" of jewellery might well stand at a discount, and dealers may be reluctant to rely on them in making the purchases.

108. With regard to the hoarding of gold my own feeling is that the best way of dealing with this problem is to permit the sale and purchase of gold through officially registered dealers and making it illegal to buy or sell gold through other dealers. Considering the widespread propensity to hoard gold in India, it is best to allow a "free market" for internally held gold (the price in this internal free market being permitted to vary so as to equalise supply and demand). The purchase of bar gold being purely a form of investment, it would not of course be subject to the personal expenditure tax (either as regards the initial purchase, or as regards any 'psychic income' derived from its possession), though the value of hoarded gold would be subject to the annual wealth tax. Purchase and sale through registered dealers would of course have to be undertaken with duly completed tax vouchers which the dealers hand over to the seller in the case of sales, and to the buyer in the case of purchases. This would not prevent completely the existence of a 'black market' for gold illegally bought and sold through non-authorised dealers. But it is probable that this black market would not be able to compete with the 'white market' in the matter of prices and margins, so that the authorities would come to know about, and would be able to control, at any rate the greater part of the bar gold transactions.[42]

109. Apart from the hoarding of gold there may also be hoarding of bank notes as a means of concealing profits or (in connection with the initial introduction of an expenditure tax)[43] in order to be able to spend money without attracting expenditure tax. If the hoarding of bank notes is at all serious, the matter could be simply dealt with by calling in the existing note issue and replacing it with a new issue.

110. Finally, it has been suggested that in case of a large number of small property transfers in small towns and villages, where illiterate persons are involved, it would be impossible to enforce the proper completion of the tax vouchers and the use of code numbers. However, I have suggested

an exemption limit of RS 10,000, which I think would automatically exclude most transfers of small property in small towns and villages. My proposals involve the issue of code numbers to not more than two million persons. The probable number may be perhaps much smaller. There are, according to CBR statistics, 60,500 holders of ordinary shares in the whole of India, 21,340 owners of interest-bearing securities, and around, say, 1,00,000 individuals owning property of Rs 50,000 or more. The number of individuals involved in transactions of Rs 10,000 or more cannot therefore be very large. Since a code number could be obtained on request from a local Income Tax Officer without any trouble (who would issue a duplicate code card in case the original one is lost) the use of code numbers should not raise any difficulty even if some people were only to make use of them once or twice in their lifetime. If people lose the code cards issued to them, they could always obtain duplicates. Since the purpose of presenting a code card issued by an Income Tax Officer is merely to ensure that the code number given in the documents agree with the name and address of the person who claims it as his own, there is no risk (as far as I can see) in the fraudulent use of lost code cards by other people (as is the case, for example, with lost ration cards) and, therefore, I do not think any restrictions are required for safeguarding and circumscribing the issue of duplicate code cards.[44]

CHAPTER 7

THE TAX TREATMENT OF BUSINESS PROFITS

I. THE NATURE OF THE PROBLEM

111. According to both British and Indian laws, taxable income is arrived at by allowing certain expenses to be set off against a person's receipts during a period, but the expenses that are allowed as a deduction are defined differently for different kinds of income. Whereas in the case of (a) an office, employment or pension, the deductible expenses are defined as those which are "wholly, exclusively and necessarily incurred in the performance of the duties of" the office or employment, in the case of (b) a business, profession or vocation, the expenses deductible are defined as those which are "wholly or exclusively laid out or expended for the purpose of" the business, etc.[45]

112. The difference in wording denotes an important difference in treatment - a difference caused not solely, or even mainly, by the word "necessarily" which figures in the one case and not in the other, but by the fact that in the case of category (a) incomes the expenses must be incurred "in the performance of the duties of" and not simply "for the purpose of" the office or employment. The basic principle governing the deductibility of expenses is thus quite different. Indeed, it would be no exaggeration to say that whereas in the case of profits the expenses allowed comprise everything which has been "laid out or expended" for the purpose of maintaining or improving the earnings prospect of a business, and therefore of the person or persons owning that business, in the case of an office or employment, the individual *quo* individual gets no expenses allowed at all for any form of expenditure incurred for maintaining or improving his own status or earning capacity as a person. Any allowance for expenses proceeds from the explicit or implied obligations assumed in a particular contract, not from the need or desire to maintain the earning capacity of the individual who enters into the contract. If the definition adopted for (a) were applied to (b), a business could only claim such expenses as could be shown to have been demonstrably and inevitably involved in the fulfilment of a particular contract, and not those which arise from the desire to maintain or improve upon the general profitability of the business as a continuing entity.

113. This sharp difference in conception is the cause of a serious injustice in tax treatment as between those who make their living as employees and those who work on their own account or live on property. The inequity of treatment takes the form of (i) the allowance for capital wastage which is recognised in the one case and entirely ignored in the other, and (ii) the allowance for a whole range of miscellaneous expenditure which, while not expenditure of a capital nature (i.e., which does not result in the acquisition of a physical asset), relates to the general improvement or maintenance of the earning capacity of a business, rather than to the fulfilment of a particular contract. Thus, in the

case of persons who are taxed on the salary, etc., received, no allowance is made for the wastage of earning capacity due to the limited span of working life, or for the capital expenditure incurred in acquiring the skill, knowledge or the qualifications required for a particular employment. No allowance is made for expenses incurred wholly and exclusively for either the maintenance or the improvement of the status of a particular employee (as distinct from the expenses necessarily incurred in fulfilling his particular contract) - e.g., advertisement in a paper for a job, entertainments to present or to prospective employers or persons with professional connections; expenditure on clothing in order to make oneself more acceptable to present or prospective employers, etc.

114. In Britain (and I have little doubt that the situation is the same in India), the inequality of treatment only becomes fully apparent in those particular cases where a man pursuing some peculiar trade or vocation may be alternatively assessed as a salary recipient or treated as a person who makes a profit from a profession. Thus a Medical Officer of Health employed by a public authority is denied any allowance for his subscription to medical journals or his membership fee to the Medical Association, though an ordinary doctor would be allowed these things without question. An actor on a permanent contract and paid at a regular monthly rate would get no allowance for make-up, clothing, entertainment, etc., while an actor who contracts for individual shows separately would get all such expenses allowed quite irrespective of their amount, even if his services are habitually employed by the same firm. But perhaps the most important difference arises out of the fact that an depreciation allowance is given for the outlay incurred in acquiring personal qualifications, as distinct from the outlay on material assets, though both represent capital expenditure of an essentially identical character.

115. In some countries (particularly, I believe, in some of the Scandinavian countries), and attempt has been made to widen the range of expenses allowed for an employee so as to embrace expenses incurred for the general maintenance of earning capacity[46]. The Majority of the British Royal Commission on the Taxation of Profits and Income, in an attempt to narrow the difference in treatment between the two types of income, recommended that the expenses rule of employees should be relaxed so as to cover "all expenses *reasonably* incurred for the *appropriate* performance of the duties", instead of "wholly, exclusively and *necessarily* incurred in the performance of the duties."[47] This relaxation does not really meet the problem of the inequality caused by the basic difference in principle between expenses incurred "in the performance of the duties" - i.e., in the fulfilment of a particular contract, and expenses incurred "for the purpose of" i.e., for the general maintenance or improvement of earning capacity. The Minority strongly opposed this recommendation on the grounds that it would make it difficult to draw a clear line of distinction between business expenses and personal expenses; that the standard of "reasonably incurred" expenses would be steadily raised in the course of years; ,and finally, that all the difficulties and ambiguities which now beset the assessment of profits would be reproduced in the case of wages and salaries, with little, if any, compensating gain in equity as between one employee and another.

116. In the remainder of this chapter we shall consider this problem from three particular aspects:- the general question of allowable expenses, the problem of capital allowance and finally, the treatment of losses.

II. THE GENERAL RULE OF EXPENSES

The Proposed Rule

117. It seems to me beyond dispute that, whether we consider the problem from the point of view of administrative efficiency or of equity between the tax-payers,[48] the appropriate principle for arriving at chargeable "income" for tax purposes is the principle underlying the expenses rule for category (a) incomes rather than that for category (b). It is true, of course, that the actual wording of the former rule could only be applied to contractual employments, and not to profits derived from trading. However, it would not be impossible or even very difficult to invent a form of words which applied substantially the same

basic conception to profits as is actually applied to contractual incomes. A simple definition that immediately suggests itself is that of "*expenses that are wholly, exclusively and unavoidably incurred in earning the profits of the year.*" The insertion of the term "unavoidably" would fulfil the same functions for (b) as the word "necessarily" fulfils in the case of (a), whilst the restriction of expenses to those incurred in "earning the profits of the year" would be a proper equivalent in the case of (b) of the restriction "in the performance of the duties" applied to (a).

118. There can be little doubt that the original notion of "income" for tax purposes - the conception which underlay the original income tax legislation in the time of the Napoleonic wars - was intended to confine deductible expenses to direct and unavoidable outlays of this character. The extent to which the present conception of "income" departs from it is a measure of the erosion caused by over a 100 years of relentless pressure exerted by vested interests.

119. The introduction of a more strictly defined expenses rule for the purpose of calculating the amount of taxable profits would have important advantages not only from the point of view of equity as between tax-payers, but also because of its repercussions on the efficiency with which the resources of the community are allocated between different uses. The kind of definition suggested above minimises the extent to which the amount of the taxable gain is dependent on the free choice of the tax-payer. The generous and elastic provisions for deductible expenses currently given in the case of profits put a trader in a privileged position in comparison with other tax-payers not only because he is taxed on a narrower conception of "income" than the others, but also because he is put in a favourable position to benefit from opportunities to evade taxation by dressing up personal expenses as business expenses.

120. The second of the two considerations, the need to avoid distortions in normal economic behaviour, is equally important as the first, the need to secure impartial treatment to different sections of the community. If expenses are allowed which are not a necessary or an inevitable concomitant of producing the receipts against which they are set off, the Government, in effect, is subsidizing such expenditures through the instrument of taxation. In the case of outlays on unavoidable items no such subsidy is involved precisely because the trading receipts are directly dependent on them. The outlay on wages, fuel, materials, etc., per unit of production, is virtually unaffected by the tax provisions. But if general expenses of all kinds - the scale of which is variable within wide limits relative to the scale of activity of a business - are made deductible, the very exemption is the equivalent of a direct subsidy from the Treasury, the rate of subsidy being the same as the marginal rate of taxation. When the marginal rate is as high as 90%, the deductibility of avoidable or unnecessary expenses implies that 9/10th of such expenses is financed by the Government and only 1/10th by the tax-payer himself.

121. There is, of course, no general reason why private outlay should not be subsidised by the Government; nor is income tax the only instrument through which such subsidies are habitually given. It is important to recognise, however, that the tax exemption to such categories is but a variant of granting subsidies, and it, therefore, requires to be justified not on the principles of equity, but by the criteria of social utility. The available and voluntary expenses which are outside the narrow definition suggested above comprise such varied categories as the acquisition of capital assets of all kinds, expenditure on research whether of a recurring or non-recurring nature, payments made to research and other scientific institutions, advertising and sales promotional expenses of all kinds, entertainments, and travelling expenses. (This list is not intended to be exhaustive.) Clearly, not all such expenses are equally deserving of a subsidy by the test of social utility. The important point is to recognise that the tax-exemptions accorded to all such outlays find their ultimate justification not in equity, but in economic and social expediency.

122. The ideal solution, therefore, appears to me to adopt a strict definition of expenses on the lines suggested in paragraph 117 and to allow any other kind of expenses only to the extent to which this appears justified in the social interest. Expenditure on scientific research, whether of a recurring or a non-recurring character, clearly deserves to

be subsidised. But it is open to the Government to examine whether all research expenses should automatically be treated as deductible, or whether certain kinds of expenditure should be disallowed or only partially allowed. Equally, it is a matter for individual examination whether expenditure on such items as advertising, entertaining, etc., should be disallowed altogether, or whether it should qualify as a deductible expense only up to a certain proportion of the turnover or up to a certain fraction of the expenses actually incurred.[49] (The relevance of these considerations to the question of allowances for capital expenditure generally will be discussed below.)

123. I realise that this approach runs counter to the prevailing trend, which shows a constant widening in the range of deductible expenses in most countries. Thus the recent Committees of Inquiry both in Britain and India appear to have conceded the claim that profits for purposes of taxation should be assimilated to profits computed on 'sound accountancy principles', however incongruous such an assimilation may be in the light of its consequences on equity. The Committee on the Taxation of Trading Profits in the U.K., acknowledged the claim of businessmen that "the income tax system should give relief in respect of the wastage of all assets that are used up or consumed in the course of carrying on a business", without any recognition of the fact that assets are built up and not only consumed, in the course of a business (in the form of goodwill, for example), and to allow capital wastage to be deducted without bringing capital accretion into charge is completely at variance with the basic principles of equality of treatment. The assimilation of the concept of profit for tax purposes with the accounting concept is neither justifiable on grounds of equity, nor is it supportable from the point of view of administrative efficiency or economic expediency. In fact, almost all authorities on public finance who examined this question during the past 50 years or so have come to the conclusion that the concept of "income" that is most appropriate for tax purposes need have no particular relationship to the concept of income appropriate for accounting, or to the economist's concept of "income" as the individual counterpart of the "national income".

124. The Minority of the British Royal Commission following the above reasoning concluded that a tax on trading receipts less unavoidable expenses only (which comes broadly to the same thing as a tax on the "value added" as defined for the Census of Manufactures less outlay on wages, salaries, interest, and rent) would be fairer and less arbitrary in its incidence than the present type of tax on profits; and that it would be a far simpler tax to administer; also since the tax base would be so much broader, it would make it possible to effect a reduction in the rates of taxation. Nevertheless, they felt that it would be futile to advocate for immediate adoption such a radical departure from existing practice so long as the taxation of profits in other countries remained on the present basis. For the traders engaged in overseas trade might be put at a competitive disadvantage if they were not allowed to treat as deductible expenses, selling and promotional outlays of various kinds which qualify for tax deduction in the case of their overseas trade competitors. They accordingly recommended that the U.K. should press through the United Nations or other international bodies for the adoption of binding international conventions concerning the principles to be followed in the taxation of trading profits which would make it possible to proceed towards a more rational, effective, and equitable system of profits taxation than any one country would be able to adopt acting in isolation. In the meantime as a second best they recommended that the difference in the treatment between the two categories of income should be compensated for in a broad manner through a differentiation in the rates of taxation applicable to each. This, they thought, could be most conveniently done through a change in the rules governing earned income relief.

Role of Earned Income Relief

125. The original purpose of earned income relief was to introduce a differentiation in favour of incomes from work as against incomes from property. The Select Committee of the British Parliament appointed to examine this question in 1906 was troubled by the problem of how to treat the profits which were in the nature of a joint

return of the work of the trader and of the capital which he employed in the business. They concluded that the only practicable solution was to treat profits below a certain amount as if they were predominantly the reward of work and profits above that amount as if they were predominantly the return on capital. On this reasoning, they thought that rough justice would be done if the earned income relief were extended to all "earned" incomes (including the trading profits of individuals and partnerships) when incomes were below £ 2,000, but not if they were above that figure[50]. There was never any justification for imposing such a limitation on income derived entirely or predominantly from work i.e., salaries and the earnings of a profession or vocation. In the circumstances of 1906 this inconsistency did not trouble the legislators, since neither salaries nor professional earnings were met with in the over £ 2,000 range, except in a few very exceptional cases.

126. The Minority of the recent British Royal Commission came to the conclusion that the earned income relief could be made to serve the purpose of compensating for the difference in the expenses rule for salary incomes and profits if (a) the relief were extended in the case of salaries to all incomes, without any upper limit; (b) in the case of professional or vocational earnings, it is equally so extended, but only given to those tax-payers who at their own option are willing to be assessed under the strict expenses rule applicable to incomes from offices and employment; and (c) in the case of business profits, the relief should be subject to an upper limit as it is at present, but only extended to those traders who at their own option are willing to be assessed under the strict expenses rule.

127. I described the current position in the U.K. and its historical origin in some detail because the Indian rules concerning earned income relief have obviously been taken over from the U.K. rules, and it is important therefore that Indians should be aware on what justification (or lack of justification) the existing delineation of that relief to certain categories of income, and its limitation to a certain maximum of income rests. The Indian provisions concerning earned income relief until recently corresponded exactly with the U.K. provisions; recently, however, on the recommendation of the Taxation Enquiry Commission, a further provision was introduced in India whereby the relief, limited to the first Rs 20,000 of taxable income, is progressively withdrawn when incomes exceeded Rs 25,000, so that for incomes of Rs 45,000 or above, no relief is given at all.[51] (I confess, I cannot understand how the Taxation Enquiry Commission have arrived at this particular recommendation. If one considers the variety of ways in which incomes from work are discriminated against by the present tax system through the more generous expenses rule applicable to profits, through the tax-exemption to capital gains, through the fact that the taxable capacity inherent in the ownership of wealth as such is unrecognised and that spending out of capital is tax-free, not to speak of all the evasion possibilities inherent in the one and absent in the other, this additional whittling-down of an already inadequate concession, appears singularly inappropriate[52]. The Taxation Enquiry Commission concede that of all the arguments in favour of the earned income relief the one which suggested that "the taxable capacity of those who receive unearned income is greater since they have also a fund of capital in addition to the income which arise from it" appears to them to be the most important. In the light of this remark their recommendation introduced immediately afterwards, and not supported by any argument, that "there should be a limit in terms of income beyond which the allowance should not be available"[53] is rather difficult to reconcile.)

128. If India were to adopt an annual tax on wealth and would re-introduce the taxation of capital gains, the arguments in favour of earned income relief would come to rest entirely on the difference in the treatment of expenses as between salary incomes and profit incomes. This is not meant to suggest that the case for the relief would no longer be a strong one - for the discrimination caused by the two different rules for expenses is a very powerful one indeed. But it would clearly imply that the relief should be confined to those who suffer from this discrimination i.e., to the early recipient; and it should be given to them without any upper limit - i.e., what comes to the same thing, a surcharge be imposed on all

incomes from a business, profession or vocation, excepting only those of the professional and vocational category who at their own option are willing to be assessed under the strict expenses rule outlined in para 117 above. The extension of the relief to all salaries without an upper limit coupled with its withdrawal in the case of income from other sources would (on the basis of the assessments in 1954-55) yield a small net gain in revenue.

The Case for a Strict Rule

129. I should like to emphasise, however, that a solution along the above lines is definitely a second best and is neither so satisfactory from an equity point of view nor does it secure the other important advantages that would follow from the adoption of a more strict expenses rule for profits. While the Minority of the British Royal Commission shied away from recommending such a radical change in the face of the opposition that its introduction would have encountered, I feel that the situation in India is a rather different one from that of the U.K. The argument of export promotion through entertainment and advertising is relatively far less important; the need of Indian industry for identity of tax treatment with foreign industry is far smaller, since Indian industry can be, and is, protected by tariffs from foreign competition (quite apart from the fact that the whole argument is a spurious one, since differences in the breadth of the tax base can be compensated for by differences in the rates of taxation), whilst the advantages from the point of view of administrative effectiveness of an income definition which is less ambiguous and less capable of manipulation by the tax-payers are considerably greater. By simplifying the concept of profit which is subjected to taxation - by reducing the range of items which qualify for deduction - the task of checking the accuracy of the remaining items by the tax officers is greatly simplified. The standards of administration are bound to be all the lower the more complicated are the taxes which the tax officers are asked to administer.

130. For all these reasons, I would strongly urge the re-definition of deductible expenses on the lines recommended in paragraph 117 above in preference to all other solutions. This would mean, in effect, that only the outlays on wages, material, fuel, as well as the outlays specifically mentioned in clauses (i), (iii), (iv), (v) and (x) of Section 10 of the Income Tax Act would be automatically covered. With regard to the other items (including capital expenditure discussed below), the case for deduction would depend on considerations of economic expediency, and would thus be capable of adjustment and variation from time to time and from case to case.

131. There are no statistics in India to show the effects on tax revenue of either the allowance for indirect expenses or of the allowances for capital expenditure. I made an attempt, however, to estimate the possible magnitude of the items on the assumption that the relationship of the cost of materials and fuel on the one hand, and of "other costs" on the other hand, is the same in India as in the U.K. On that assumption (in the sector of manufacturing industry covered in Table 2), "other costs" (column 9) amounted to 5% of the material and fuel costs, to three times the amount of depreciation, to about 11% of "value added" and to about 26% the net profit. If this relationship held for India, not only in manufacturing industry but in trade, etc., as well, the additional amount of profits assessable as a result of disallowing all other but "direct" expenses and personnel costs (apart from allowances for capital expenditure) would come to about Rs 150 crore. Not all of this would become taxable under the definition offered in para 117; some items (those mentioned in para 130) would continue to be allowed. Hence, the excluded expenditure may be put at the order of one-half of this sum, or Rs 80 crore. This is not offered as an "estimate" but merely as an indication of the possible order of magnitude involved.

132. The suggestion for widening the concept of taxable profits by disallowing all but direct and unavoidable expenses is bound to arouse fierce opposition. The antagonists of this suggestion will employ every specious argument they can think of, to show that the proposed reform would have fatal economic effects. This opposition would lose a great deal of its force, however, if the proposal were combined with a simultaneous

reduction of the rates of taxation; the advantage of charging tax at a lower rate on a broader base as against a high rate on a narrow and uncertain base, should be apparent to everybody.

TABLE 2. ESTIMATES OF INDIRECT COSTS IN INDIAN INDUSTRIES ON THE BASIS OF THE UNITED KINGDOM RELATIONSHIP BETWEEN THE MATERIAL COSTS AND INDIRECT COSTS AND OF NET PROFIT FOR THE YEAR 1948

Industry	United Kingdom			India							
	Cost of materials (In percentages of turn-over)	Other costs (In percentages of turn-over)	Ratio of other costs to cost of materials (percentage)	Gross value of output (Rs crore)	Cost of materials (Rs crore)	Estimated other costs (Rs crore) (4×6)	Work done for factory (Rs crore)	Depreciation allowances (Rs crore)	Estimated net value added (Rs crore) (5 - 6 to 9)	Salaries & Wages (Rs crore)	Net profit (Rs crore) (10-11)
1	2	3	4	5	6	7	8	9	10	11	12
1. Iron and Steel	61.7	3.4	5.50	42.45	20.63	1.13	0.14	2.13	18.42	10.93	7.49
2. Non-Ferrous Metals	77.4	2.5	3.21	18.87	13.45	0.43	0.18	0.44	4.37	2.65	1.72
3. El. Eng. & El. Goods	62.2	4.8	7.75	48.31	24.17	1.87	0.54	1.65	20.08	14.46	5.62
4. Leather goods	68.7	3.2	4.65	6.25	5.00	0.23	0.01	0.06	0.95	0.68	0.27
5. Cotton	71.9	3.5	4.85	354.12	186.58	9.05	2.05	3.01	153.43	83.41	70.02
6. Wool	72.2	2.5	3.45	8.41	4.14	0.14	0.03	0.08	4.02	1.78	2.24
7. Other Textiles	67.2	3.3	4.90	160.40	117.57	5.76	0.04	1.38	35.71	25.98	9.73
8. Food	78.4	3.4	4.32	237.79	203.40	8.79	0.15	2.94	22.51	12.98	9.53
9. Chemicals	71.8	5.4	7.51	20.65	11.69	0.88	0.03	0.73	7.32	3.25	4.07
10. Wood & Cork Manufacture	65.1	3.7	5.68	1.66	0.96	0.05	0.00	0.05	0.60	0.24	0.36
11. Paper	54.7	5.2	9.52	9.92	5.78	0.55	0.02	0.43	3.14	2.00	1.14
12. Other Manufacturing Industries	63.4	5.4	9.27	42.17	24.36	2.82	0.09	0.97	13.93	6.99	6.94
Total (12 Industries)	90.8	4.01	4.41	951.00	617.67	31.70	3.28	13.87	284.48	165.35	119.13

Sources:- (1) 94th Report of the U.K. Board of Inland Revenue (1952). (figures are for the year 1948 in Tables 54 to 67.) (2) Cf., 7th Report of the Census of Manufacturing Industries for India (1952). (Figures are for the year 1948 in Tables B4, B5, B6; item 6; 'Distilleries & Breweries' is excluded.)

III. ALLOWANCE FOR CAPITAL EXPENDITURE

133. On the original conception of the income tax, the money invested in a fixed asset was regarded as capital and the depreciation of fixed assets a form of wastage of capital. The exclusion of any allowances for capital wastage was the logical counterpart of the exclusion of capital gains or capital appreciation from the scope of taxable income. This explains why for more than a generation after the re-imposition of income tax in England in 1843, no relief of any kind was given for the depreciation or wear-and-tear of fixed assets of any kind; and even after they were introduced during the economic depression of the 1880's, their scope was severely restricted to particular types of assets until 1944. In accordance with the findings of the Royal Commission of 1920, no allowance was given for the depreciation of any asset (1) which "was not created by the expenditure of capital" (mineral depletion is an example of this); and (2) whose useful life was 35 years or longer (hence all buildings were excluded).[54]

134. Looking at the matter from the point of view of equity alone, it is clear that an allowance for capital wastage without a corresponding charge being imposed on capital appreciation is quite indefensible. Even with a system of taxation on realised capital gains, capital wastage ought only to be taken into account in the form of a corresponding allowance for capital losses, which means that the allowance should be given as and when the capital loss resulting from wear-and-tear and wastage is actually realized. To hold the balance evenly between the charge on capital gains and the allowances for capital losses, wear-and-tear, etc., should only be allowed for tax purposes at the end of the useful life of an asset, when it is sold for scrap or otherwise

disposed of. The current methods of allowing the write-off of capital expenditure by means of annual depreciation allowances are far more favourable than this, even if one ignored the various forms of accelerated depreciation allowances (or the straight-forward subsidy to capital expenditure given in the form of the development rebate) now in vogue.

135. It follows that the depreciation allowances given for capital expenditure cannot be justified on grounds of equity, irrespective of whether capital gains are taxed or whether they are exempt from taxation. If capital gains are exempt, no allowance for capital expenditure can be so justified; if capital gains were taxed, the corresponding allowances should be given as and when capital losses are realized, and not earlier.[55]

136. The real justification for capital allowances is, therefore, not one of equity but expediency. It is in the social interest that capital expenditure should be encouraged; a system of income taxation, through the double taxation of savings and through its discriminatory effect on risk bearing, does the opposite - it tends severely to discourage it. Hence, the allowances given to capital expenditure are necessary to neutralise some of the worst disincentive effects of income taxation on the economy.

137. Once this is recognised it should be immediately apparent that the present form of these allowances are both unnecessarily complicated and unnecessarily costly in terms of revenue to the State. If neatly calculated annual wear-and-tear allowances (based on the probable lifetime of assets) are not part and parcel of an equitable definition of "income" for tax purpose, it is open to the State to select a form of allowances which is simplest to administer, and which is most effective for attaining the objectives aimed at per unit of cost to the State.

138. At the present time allowances are given at varying annual rates for different assets, the system generally followed being that of the so-called "reducing-balance" method, which implies the writing-off of an equal percentage of the outstanding amount of capital expenditure in each successive year. Table 3 exhibits the effects of this method in the case of various types of capital expenditure. Thus in the most common case of plant and machinery of various kinds, where the annual allowance is 10 per cent, the method implies that 90% of the original cost is only written off in 22 years. In the case of first class buildings, where 2.1/2% is allowed, 90% of the original cost is only written off in a period of 91 years, and so on. From the point of view of a tax-payer who can freely borrow at the ruling interest rate, these allowances are thus the equivalent of the immediate remission of tax on an amount equal to the discounted value of the annual allowances. Thus, assuming a rate of interest of 5%, an annual allowance of 2% on the whole capital expenditure is equivalent (as shown in column 2 of Table 3) to an immediate remission of tax on 35% of the total cost. In the case of machinery and plant where the annual allowance is 10% the annual depreciation allowance granted on the whole cost is the equivalent of an immediate remission on 67% of the cost; and so on.

139. Most businesses do not, however, have an unlimited borrowing power or an unlimited command over liquid resources; and to them a system which allows the discounted value of the depreciation allowances immediately is far more valuable then one which allows them to write off 100% of the cost, spread over a large number of years. For a man who builds up a successful business, the possible rate of expansion of the business is normally limited by its accumulated savings and borrowing power, and in these circumstances the immediate remission of taxation on capital expenditure is far more attractive, since it is the equivalent of an enlargement of his borrowing power. The latter therefore, is necessarily a more powerful lever for increasing capital expenditure than the former.

TABLE 3. PRESENT VALUE OF CAPITAL ALLOWANCES IN INDIA

Type of asset	Basic annual rate percent	Case I		Case IIa		Case IIb	
		Period in years	Present discounted value Rs lakh	Period in years	Present discounted value Rs lakh	Period in years	Present discounted value Rs lakh
1	2	3	4	5	6	7	8
First class buildings & hydro-electric installations	2.5	91	34.97	86	38.50	58	46.53
Second class buildings, overhead cables, steamers & vessels	5.0	45	51.87	40	55.69	26	62.12
Machinery and plant (general rate)	7.0	32	59.90	27	88.39	18	96.47
Furniture and mills, etc.	9.0	25	65.31	19	93.91	13	102.77
Machinery and plant (normal rate)	10.0	22	67.22	179	95.31	11	105.78
Salt works, excavators, etc.	15.0	15	74.64	5	101.31	5	106.01
Batteries, X-ray, photographic recording & projecting equipment	20.0	11	78.46	4	108.36	4	115.55
Aerial photographic apparatus, and portable underground machinery	25.0	9	81.52		115.55	3	120.63

Notes: 1. It is assumed that the reducing balance method is followed for 90 per cent of the original cost and that the residual 10 per cent is allowed in the year following the year when the written down value is reduced to 10 per cent or under. The "period" of depreciation is calculated under this assumption. 2. Present value is calculated by discounting the allowances given subsequent to the year of installation at a rate of 5 per cent interest.
3. Case I - Normal depreciation alone at the basic annual rates shown in column 2 is allowed. Case IIa - Normal depreciation and an equal amount of additional depreciation for the first five years only are allowed; 25% of the original cost is given at the beginning of the first year as development rebate for all types of assets except the first two types of assets. Case IIb - Normal depreciation, an equal amount of additional depreciation for the first five years only, and half the normal allowances for double shift are given throughout; also 25 percent of the original cost is given as development rebate for all but the first two types of assets.
Source: Appendix (iii) to C.B.R.'s 'Income Tax for the Layman', 1955, for basic annual rates.

140. It follows that the ideal method of making allowances for capital expenditure is to allow the expenditure at the time when it is incurred in the same way as in the case of current expenditure; but unlike the latter, to allow only a proportion of the cost, a proportion that should vary with the probable life of the capital asset, as well as other factors such as the need to encourage the use of particular kinds of equipment, or to subsidise investment in certain industries.[56] Thus, for instance, if instead of an annual allowance of 10 per cent an immediate allowance of 66.1/2% is given on expenditure on machinery and plant; instead of an annual allowance of 2.1/2% an immediate allowance of 33.1/2% on first-class buildings; and instead of an annual allowance of 5% an immediate allowance of 50% on the cost of second-class buildings, the value of the allowance to the trader is at least as great or greater, whilst the cost to the State (in the long run, at any rate) is appreciably less.[57] At the same time, on account of the fact that the allowances are given simultaneously with the expenditure and not afterwards, there can be no complaints on account of the difference between historical and replacement cost of the assets in times of rising prices; the allowance is always given in terms of currency of the same purchasing power as the one in which the expenditure is incurred.

141. The only objection that can be brought against this proposal is that the benefit to the trader is dependent on his ability to absorb the allowances (i.e. to set them off against current profits) in the year in which the expenditure is incurred. To the extent that there are not sufficient profits to absorb the allowance in the same business[58], the benefit of making the allowances immediately available is correspondingly reduced. However, this difficulty can be perfectly adequately dealt with by a further provision, according to which any *unabsorbed* capital allowance carried forward to a future year earns a corresponding rate of interest. Thus, assuming a 5 per cent rate of interest, if a trader incurs an expenditure of one lakh in a particular year, two-thirds of which are allowed, and there are only Rs 20,000 of taxable profits to set off against the expenditure, the amount carried forward to the following year

would be the unabsorbed allowance of RS 46,668 plus 5% interest, i.e., Rs 49,000 altogether, and so on.

142. In India at the present time in addition to the "normal" depreciation allowance, additional depreciation allowances are given which double or more than double the normal rate for the first five years after installation, and then a development rebate of 25 percent is given on the whole amount of the capital expenditure which is additional to the depreciation allowances.[59] As Table 3 shows, the effect of these various concessions is that in many cases the discounted value of the various allowances exceeds the total expenditure. This is the case for plant and machinery, etc., with double shift working, when the basic annual allowance is 9 per cent or more and double shift allowance is given; with single shift working, when the basic allowance is 15 per cent or more. The result of these extra concessions is that for businesses which do not suffer from a shortage of cash and/or a limitation of borrowing power the incentives for tax evasion are reversed - instead of there being a temptation to dress up capital expenditure as current expenditure, there exists the opposite temptation of dressing up current expenditure as capital expenditure.

143. It is matter for consideration whether the current extent of these allowances are not unduly generous (even within the present framework of the tax system), and whether some of the extra concessions ought not to be dispensed with. (The case for this would, of course, become much stronger if the marginal rate of taxation on profits were reduced in accordance with the suggestions made earlier.) It is unfortunately not possible to find out how much these concessions cost in terms of revenue, as the amount of capital allowances granted against chargeable income are not computed for statistical purpose.

144. I am quite certain, however, that these allowances are greatly excessive in relation to the alternative system proposed. If depreciation allowances were altogether scrapped, and the whole of the capital allowance were given in the form of an initial allowance or development rebate (whichever term is preferred), with an accelerator clause for unabsorbed allowances, the actual amount of the allowances out to be considerably reduced. Subject to an annual addition of 5 per cent for unabsorbed allowances, the amount should not exceed, say, 90% of the cost of equipment carrying a basic annual rate of 20% or more; 66.66% of the cost where the present basic annual rate is between 10 and 20%; 50% of the cost when it is between 5 and 10%; and 33.3% of the cost where the annual rate is 2%. These figures are not intended to be precise and are put forward mainly for illustrative purposes. The change-over to the new system may cause a temporary loss of revenue which, however, will be more than made good in future years through the saving in depreciation allowances[60]. Since on account of the present development rebate and the doubling or more of the normal depreciation for the first five years, a large part of these allowance are in any case given immediately (amounting at present to 45% of the total expenditure for equipment carrying a 10% basic annual rate and operated at a single shift, and to 50% of such expenditure in the case of double-shift operation), this temporary revenue loss is not likely to be appreciable.

145. The question still to be dealt with is how balancing charges and allowances are to be reckoned under the new system. If the taxation of capital gains were re-introduced, the amount of the balancing charge would in any case not be limited to the original cost, but would extend to the whole of the difference between the price at which an asset is sold and its written down value. Under the system I am recommending here, the written down value would be equal to the original cost less the allowances granted (including any additional allowance representing interest on unabsorbed allowances), and the balancing charges and allowances would be calculated on the difference between the sales-proceeds of an asset and the written down value.

IV. THE TREATMENT OF LOSSES

General Considerations

146. The original conception of the income tax as a tax on the recurrent yield from particular sources was no more consistent with the idea of granting relief for business losses than with the

granting of allowances for capital expenditure. As the Majority of the British Royal Commission stated,[61] "if the idea of a loss of income involves that more money has been spent than has been received on income account during the period, the balance has in some sense been found out of capital and to set the loss against taxable income, current or future, is to allow the depletion of capital to be made good at the expense of taxable income." Indeed, the very notion that the net yield from a positive source of income can be a negative one is questionable. No one is forced to carry on a business, and so long as the net worth of the business is positive the owner is always free to cut his losses (either by selling the business as a going concern or by liquidating it and selling the tangible assets separately) when the sale-proceeds from the realisation would put him in a position to earn a positive income corresponding to the interest on the value realised. Hence no one can really be said to derive a negative income from the ownership of any asset or a group of assets with a positive value (as distinct from a negative income from a negative source, such as interest paid on a debt), and if a man elects to keep on owning assets or to maintain a trading activity even though it brings him continued losses, there is no reason why the tax system should treat that as charge on his general income.[62] At the same time, as the Majority of the Royal Commission pointed out, "the ascertainment of business profits at fixed intervals of 12 months is so arbitrary a process, considering the continuous nature of business operations, that [to allow] the carry-forward of losses is an obvious concession to common sense."[63]

147. However, the Majority of the British Royal Commission did not, in my view, draw the right conclusion from this reasoning, in that they supported the existing provisions which permit a loss from any one source to be set off against any other income in the same year or in the following year as well as to be carried forward indefinitely against future income from the same source. They even recommended that unabsorbed capital allowances should qualify for a set-off against future income of any kind (and not only against future income from the same source.)[64]

148. The question of the proper tax treatment of losses ought to be examined, like other questions, from the aspects of equity, economic effects, and administrative efficiency. From the point of view of equity, if capital gains are not brought into charge there is no case for recognising losses for tax purposes in any manner except perhaps as a means of averaging income over time; the latter consideration would only justify a carry-forward of losses against future income from the same source, and not as a set-off against from other businesses or against non-business income.[65] If capital gains were taxed, the notion of allowing losses as a deduction from taxable income would no longer be anomalous. But the present definition of a trading loss by no means corresponds with the definition of a capital loss which should be adopted for the purposes of a capital gains tax; nor is it consistent with the notion of income as a person's "increment of economic power". A trading loss is a loss on current (not capital) account. But since expenditures of a capital nature have come to be treated as deductions from current receipts, a trading loss on current account may result when certain capital outlays in a period exceed net current receipts, or even when certain capital outlays of a past period exceed net current receipts.[66]

149. The correct procedure from the point of view of equity - assuming that capital gains are brought into charge on the lines recommended in Chapter 3 - would be to allow only current losses in the strict sense (i.e. the excess of current unavoidable outlays over current receipts) as an offset against other income and to permit "losses" which represent unabsorbed capital allowances, etc., only to be carried forward against future income from the same source. If there is insufficient future income to absorb the allowances, the difference would be automatically allowed for when the assets are disposed of, either individually or upon the liquidation of the business, when the resultant capital loss can be off-set against any current or subsequent capital gain.[67]

150. From the point of view of economic effects, to allow a loss from one source to be set off against income from other source has the effect of encouraging the continuance of moribund will be able to absorb its own losses incurred in a bad trading year against the profits of future years.

Hence, even under the conditions described in paragraph 149, where strict equity considerations would justify an off-set against other income, considerations of expediency suggest that it is better to limit the allowance to future income from the same source.

151. From the point of view of administrative efficiency, the main consideration is to prevent the abuse of the provisions through the creation of manufactured losses of various kinds, which take the form either of fictitious transactions between different taxpayers who are differently situated with regard to their overall tax position; or of the acquisition of concerns with accumulated past losses or current losses (in the sense of an excess of tax-free allowances over net receipts) for the purpose of tax avoidance. A general provision whereby a loss from any source can only be carried forward against future income from the same source, while it does not eliminate completely the possibilities of such manipulation - it would still be possible for a man to purchase a business with an accumulated loss and transfer to it profitable business which he would otherwise have carried on through another business - reduces its scope considerably.[68]

152. For all the above reasons, therefore, it appears that the ideal method is to treat income from each source as part of a separate 'running account' between the tax-payer and the Revenue, and in consequence to allow a loss from any particular business to be carried forward against future income from the same business but not to allow it to be set-off against income from other sources, either in the same year or in subsequent years. The one respect in which some relaxation of this general rule may be permitted is in allowing a strict trading loss (i.e., an excess of unavoidable current outlays against current receipts) to be off-set against other business income in the same year.

The Current Position in India

153. Under the existing Indian provisions (a) a loss from any source may be off-set against any other income of the taxpayer in the same year: (b) in the case of a business (but not in the case of other kinds of income) a loss which is not absorbed in the first year can be carried forward indefinitely against future business income from any source, provided the business to which the loss originally related has not changed hands, or identity or has not ceased to exist in the interval: (c) the so-called "speculative losses" cannot be off-set against other income and can only be carried forward against future speculative gains.[69]

154. It seems to me that the most urgent requirement would be to make the recently introduced proviso[70] concerning the business remaining in the same hands quite general in its application. The Taxation Enquiry Commission recommended that an analogous provision should be introduced in the case of companies, as well as in the case of individuals by providing that a carry-forward should only be allowed if the shareholders in the year of off-set are substantially the same as those in which the loss had occurred[71]. In addition, the restriction should be applied to unabsorbed capital allowances as well as to trading losses in the narrower sense. At present the income tax law treats unabsorbed capital losses more liberally than unabsorbed trading losses. The off-set of unabsorbed capital allowances is permissible against any income in any future year, whereas unabsorbed trading losses can be set off only against business income. For reasons explained in paragraphs 148 and 149 above, unabsorbed capital allowances ought to be treated more strictly than trading losses and not more liberally. Even if capital gains are charged to income tax and realized capital losses can be carried forward indefinitely against future capital gains,[72] the allowances for capital expenditure - the normal wear-and-tear allowances or the additional allowance in the form of extra depreciation or development rebate - should only be allowed to be carried forward against future income from the business to which these allowances relate, with the further proviso that off-set will be admissible only if the business in question continued to remain in the same ownership. If a business changes hands unabsorbed capital allowances would automatically be taken into account either in the direct form of balancing charges or allowances on the individual assets or indirectly in the resulting capital loss or gain on the sale-proceeds of the business as a whole. There is a strong case for limiting the off-set or losses from any one source against income from any other source (whether in the same year or in the following year) to a trading loss in the restricted sense representing an excess of unavoidable current outlays over current receipts,

and to disallow the recognition of a loss for the purpose of any such off-set in all those cases where a profit and not a loss would have been shown, if development expenditures of all kinds had been excluded in the calculation of the trading profit.

CHAPTER 8

COMPANY TAXATION

I. THE PRESENT SITUATION IN INDIA

155. The company taxation provisions of India (perhaps even more than that of other countries) are apt to strike a detached observer as a perfect maze of unnecessary complications, the accretion of years of futile endeavour to reconcile fundamentally contradictory objectives. In support of this statement it is sufficient to draw attention to the following characteristics of this legislation:-

(i) Companies are charged to two different taxes, a refundable tax (income tax) levied at a uniform rate of 4 annas in the rupee, and a non-refundable tax (named super tax or corporation tax)[73] levied at different rates according to varying criteria, such as the nature of the company; the source from which the income is drawn (whether it represents profits of the assessee company, or dividends paid by another; if the latter, according to the kind of activity pursued by it); and according to whether the profits are distributed or retained.[74]

(ii) Companies other than public companies (the so-called Section 23A companies) pay an extra non-refundable tax on undistributed profits (in addition to the basic rate of 2.3/4 annas on total profits) of 4 annas for trading companies and 8 annas in the rupee for investment companies (i) if they distribute less than 60% of their current disposable income; or (ii) if they distribute less than 100% of such income, and (a) they are investment companies, or (b) they are trading companies whose accumulated reserves exceed their subscribed capital[75] plus loans, or the total cost of fixed assets, whichever is the greater. By a further clause introduced in the 1955 Finance Act,[76] all these provisions can be waived at the discretion of the Commissioner of Income Tax, if he is satisfied that "having regard to the current requirements of the company's business or such other requirements as may be necessary or advisable for the maintenance and development of that business" the declaration of a smaller dividend is called for. This legislation applies to all companies less than 50% of whose share capital (or less than 40% in the case of industrial companies) had been continuously held by the public in the previous year.

(iii) By the provisions of the 1956 Finance Bill, all companies, public or private, pay an extra tax on distributed profits equal to 2 annas in the rupee on that part of the distributed profit which represents more than 6 and less than 10% of the paid up capital, and at 3 annas in the rupee on distribution in excess of 10%. To prevent avoidance of these provisions through the future capitalisation of reserves, a tax of 12.5% is imposed on bonus issues.

(iv) Dividends received by companies from other companies are exempt from corporation tax, if the paying company is engaged in the pursuit of specific activities laid down in the Industries (Development and Regulation) Act, 1951 (mostly mining, heavy industries, chemicals, and paper). Dividends received by public companies from Indian subsidiary companies are allowed a rebate of 1.1/2 annas from corporation tax[77].

(v) The profits of newly established industrial undertakings, subject to certain safeguards and certain minimum requirements as to size, are exempt from all taxation up to 6% of the capital employed for the first five assessment years, if they commenced the manufacture of goods in India after April 1st, 1948 and before March 31st, 1961.

156. The most notable features of the legislation on company taxation are the complex provisions designed to ensure first, that incorporation is not used as a means of super tax avoidance by the individual tax-payer, and second, that companies retain as much of their profits as possible. Public companies are exempt from the first kind of

provisions (though public companies retaining a large proportion of their profits can be equally suitable as vehicles of super tax avoidance as private companies), but private companies will be subject to both kinds of provisions at the same time, so that, in particular cases they may attract penal rates of taxation simultaneously both on account of the distribution and the non-distribution of their profits.

Penalties on Non-Distribution

157. The penal provisions concerning non-distribution by private companies impose, on the face of it, the most undesirable handicaps on industrial growth. To put a virtual limit of 40 per cent on the amount of current profits that companies can plough back[78] is not only severely discriminatory as between private and public companies (with all the attendant evils of an enhanced concentration of industry in the hands of a few large concerns) but is an extremely severe limitation in itself on the growth of enterprise. It is well-known from the history of all capitalist countries that industrialisation depends on the rapid growth and multiplication of undertakings which almost invariably, start as private businesses and can only become public companies with quotation on the Stock Exchange, after they attained considerable size[79]. If British or American experience is any guide, successful companies plough back, during the critical period of their expansion not 40, but 90 to 95 per cent of their disposable profits or even more[80]. It is not always appreciated that the ploughing back of profits is an essential requirement for steady expansion in the case of a private business. It cannot grow through an increase in the share capital through public subscription; and its borrowing power is strictly limited to a proportion of the share capital employed in the business.

158. Even the permission to plough back 40 per cent of current profit without penalty is withdrawn once accumulated reserves exceed the subscribed capital, unless the total amount expended by the company on the purchase of fixed assets is greater than the amount of the accumulated reserves[81]. Thus the provisions of Section 23A discriminate against private companies in relation to public companies, both by limiting the maximum rate at which they can grow to a percentage indicated by the formula:'-

$$\frac{\text{rate of profit earned on capital employed}}{2.5}$$

and also by limiting the ultimate size to some multiple of the capital originally subscribed[82]. It is no answer to this to say that, in practice the effect will not be so serious, either because under another provision new industrial undertakings enjoy a five-year-tax holiday on profits up to 6 per cent on the capital employed (the critical period of growth may well extend to more than 5 years after the original commencement of the undertaking, and the rate of profit earned may well exceed 6 per cent), or because under a recent amendment of the law, all these provisions can be waived at the discretion of the Income Tax Commissioner, if he is satisfied that the reasonable needs of expansion require a higher rate of retention of profits. The point is that Revenue officials should not, in fairness, be entrusted with such wide discretionary powers. There is presumption that a Commissioner of Income Tax will be better able to separate the sheep from the goats than the legislature itself. If the law is unable to circumscribe the cases which ought reasonably to come under penal provisions with sufficient precision, there is no reason to suppose that a Commissioner would be in a position to do so.[83] And even if the provisions of the new section 23A(3) could be perfectly reasonably administered, the requirements that a company must apply to the Commissioner for the determination of the minimum distribution in each individual case must be productive of considerable uncertainty in the planning of business expansion as well as being unnecessarily vexatious to the taxpayers.

Penalties on Distribution

159. The new provisions imposing penalties on distributions in excess of 6% of the paid-up capital are wholly incongruous with the Section 23A provisions prescribing minimum distributions. I

presume it will be possible to avoid gross inequities by an administrative order which would prescribe that companies liable to the penal rate on their dividend distribution should not at the same time be subjected to an order under Section 23A (or perhaps the other way round). This does not, however, make the incongruity between these two pieces of legislation any the less glaring. The philosophy which on general economic grounds, or in order to limit Stock Exchange gains, wishes to encourage companies to plough back as much of their profits as possible, is not compatible with the philosophy of anti-avoidance provisions which require them to distribute all, or at least the greater part of their profits.[84]

160. The provisions introduced in the new budget for a discriminatory tax on dividend distributions are an adaption of the existing U.K. rules which levy an additional profits of 25% on distributed profits. The Majority of the British Royal Commission recommended that these discriminatory provisions should be abolished forthwith. The Minority pointed out that the important function of a discriminatory tax on dividend distributions is to keep down Stock Exchange values (on account of the consequential modesty in dividend distributions in relation to earnings) and thereby to reduce the rate at which capital gains are being made in the economy.[85] The Minority stated[86] that they "do not disagree with the Majority's view that the artificial encouragement of the retention of profits by companies is not necessarily an economic advantage. Beyond a certain point it does not in itself stimulate the rate of capital formation - as is shown by the fact that in the last few years the net amounts retained by companies have greatly exceeded their financial requirements, both on account of capital expenditure and of investment in working capital. It can be argued also that the system of financing capital expenditure so largely out of the undistributed profits of companies does not ensure the best use of the community's savings. It makes it more difficult for fast-expanding firms to raise funds in the capital market; it strengthens the monopolistic tendencies in the economy; and it encourages wasteful expenditure on behalf of those firms who have more money than they can use and who are yet prevented (by custom and tradition as well as by the investments of public control) from channelling these funds to their most profitable potential use". But they were opposed to the Majority's recommendation to abolish the differential tax independently of whether capital gains are taxed or not; instead they favoured the abolition as part of the wider reform which included the taxation of capital gains.

161. If it is correct to suggest, as the Minority of the British Royal Commission suggested, that the main function of a discriminatory tax on dividends is to serve as a crude and indirect method of taxing capital gains, the question may well be raised whether it would not have been better to re-activate the capital gains provisions which are still on the Statute Book in India rather than to introduce a further highly complicated set of provisions in the field of company taxation.

162. But granting the fact that a discriminatory tax on dividend distributions was preferred, on general grounds, to a re-activation of the capital gains tax, it still requires an explanation why these provisions should be introduced in a form that makes them both complicated and difficult to administer, and highly arbitrary in their incidence. The discriminatory tax in the United Kingdom is payable at a flat rate on the dividends declared and is not made dependent on the ratio of the dividend to the amount of capital. The new Indian provisions operate so as to penalise the company which earns a high rate of profit and in consequence distributes a relatively high rate of dividend. Such provisions are not called for by any principle of equity (if a man makes a lot of money because he is successful in business, this should be reflected in his higher liability on account of personal taxation; it does not call for some variant of an excess profits tax) and are very ill-advised from the point of view of their general economic effects.

163. There is finally, a further criticism to be made in connection with these particular provisions. Assuming that the Government on general grounds preferred a discriminatory tax on dividends to a straightforward tax on capital gains and that they preferred a graduated tax which varied with the percentage of the capital paid (and presumably earned) to one which depended solely on the amount of the dividend payment, there is

still the question which is the most reasonable measure of capital that should serve as a standard for the exemption and graduation of the dividend tax. There are, in principle, three such measures to choose from:-

(i) subscribed capital;
(ii) paid-up capital (subscribed capital plus capitalised reserves); and
(iii) capital employed (paid-up capital plus reserves).

Of these three, the real choice is between (i) and (iii). There are reasons for preferring (i), since this measures the amount of capital which the owners have originally put into the business. Equally there are reasons for preferring (iii), since this measures the amount of the shareholders' capital which is effectively employed in the business; and if the current shareholders are not by and large the same persons as the original shareholders, the capital employed is a less discriminatory measure as between different shareholders than subscribed capital. The choice of paid-up capital as the standard (together with the new tax imposed on future bonus issues) discriminates against companies which (for the sake of good personnel relations or on other grounds) refrained from making bonus issues in the past, and in favour of companies which have capitalised a considerable part of their accumulated reserves. The choice of this standard is all the more incongruous within the framework of the Indian tax system since the standard for some of the penalty provisions of Section 23-A is not paid-up capital, but subscribed capital.

164. The 12.5% tax on bonus issues is another consequence of the choice of paid-up capital (rather than capital employed, or subscribed capital) as the standard; and it was introduced in the current budget more as a measure to prevent avoidance of the new dividend tax than as a new tax justified on its own grounds. A tax on bonus issues has been urged from time to time (generally from trade union quarters), on the ground that a bonus issue is the method by which shareholders obtain profits on their holdings without paying tax on it. On closer examination, however, this claim is shown to be unfounded. It is true that shareholders may, and to some extent normally do, enjoy an appreciation in the value of their holdings resulting from bonus issues. The extent of this appreciation depends, however, on the consequential increase in aggregate dividend payments, and not on the amount of the bonus issue itself. There is no necessary connection between bonus issues and the increase in total dividend disbursements, though it is often suggested that companies prefer to keep the nominal rate of the dividend low; so as to give the appearance that the dividends paid to the shareholders are not excessive, and for that reason the bonus issue is a means of increasing dividend payments. This may or may not be true of the majority of cases; but whether it is true or not, it should be evident that (a) the taxable capacity created by a bonus issue depends on the consequential appreciation in the market valuation of the company, and is not measured by the bonus issue itself; (b) this consequential appreciation cannot, in practice, be separated off from other factors affecting the market valuation of shares, and (c) there is no reason for treating capital appreciation resulting from bonus issues any differently than capital appreciation which is not due to this cause. Hence, the only equitable solution of the problem is a general tax on capital gains which automatically sweeps up gains created by bonus issues, along with all other gains. There is no case in equity for a special tax on bonus issues.[87]

165. Taking into account the number of different provisions affecting the rate of company taxation and the numerous qualifications attaching to each, it is quite impossible to assess the effect of the whole body of provisions on the incentives to invest, and on the growth of efficiency and output in the private sector. There can be little doubt, however, that the very multiplicity and complexity of these provisions is bound to act as a serious drag on the general efficiency of tax administration. When a very heavy burden is laid on Income Tax Officers merely in the interpretation of Statutes, the time and energy which they can devote to the task of checking the accuracy of returns must be seriously curtailed. In addition, the manner in which a succession of new provisions concerning company taxation have been introduced in the budgets of recent

years must be productive of considerable uncertainty among investors and businessmen as to the true future return they can expect from the launching of new ventures. I feel sure that the real disadvantages of the present system lie as much in the general uncertainty which they create as in the inequities and burdens imposed.

II. SUGGESTIONS FOR REFORM

166. If our suggestions concerning the reform of personal taxation were adopted, the whole system of company taxation could be drastically simplified.

(i) In the first place, the taxation of capital gains and the substitution of an expenditure tax for the higher ranges of super tax makes the whole body of legislation under Section 23A superfluous. The justification for this legislation is that individuals can use incorporation as a means of avoiding the tax which ought in justice be levied on them. However, if the maximum rate of income tax on personal incomes were limited to 7 annas, the maximum amount of tax that can be avoided through an undue accumulation of reserves will be the difference between 7 annas and the effective marginal rate of company taxation. If the rate of company taxation is also 7 annas in the rupee (as is broadly the case at present) no income-tax can be avoided in this manner. Nor can undue with-holding of distribution be used as a means of expenditure tax avoidance, provided only that the owner of the company is debited with any expenditure which the company incurs on his behalf or for his benefit as was suggested in paragraph 70 (Chapter 4) above. But even if the tax levied on companies were to be at a lower rate than the marginal rate of income tax levied on individuals, the difference no longer gives scope for tax avoidance once capital gains are charged to tax. All it means is that when a taxpayer uses incorporation for the purpose of reducing his personal income, a part of his immediate tax liability is postponed at a cost of incurring an additional liability later - either on account of the capital gain realised on the sale of the shares of the company or on account of the additional income tax that becomes payable on any future distribution of reserves.

(ii) In the second place, owing to the taxation of capital gains and the introduction of an expenditure tax, the case for a discriminatory differential tax on dividend distributions also disappears. If the original justification of the tax was that it operated as a crude indirect tax on capital gains (by reducing the rate at which capital gains are being made), the direct taxation of capital gains on the shareholders obviates the need for an indirect method of taxing the same thing. If the justification of the tax is sought as a means of reducing personal spending through keeping down dividends, the progressive expenditure tax is an infinitely more effective tool for the purpose. It is true that this tax will only affect the upper spending classes, but much the greatest part of the ordinary share capital of public companies (and it is only the dividends paid by public companies which come into question here) is owned (apart from institutional investors, like insurance companies) by the top income and property groups. Finally, if the justification is to be sought in a stimulation of capital investment brought about through higher company savings, the higher dividend distribution will not reduce the funds available for company investment, if the individual owners of the shares are effectively discouraged by the spendings tax from increasing their personal spending as a result of higher dividend distributions. Indeed, it can be argued that to allow companies to distribute their surplus funds to their shareholders will lead to a more efficient use of these funds (through reinvestment in different companies) than if they were retained by the companies earning them.

167. Assuming that these arguments are correct, we must still consider the question which is the most appropriate form of company taxation and, indeed on what principles this question is to be decided. The three principal questions that we need to discuss in this connection are as follows:-

(1) Should there be any inherent relation between personal taxation and company taxation, or is it better to regard the taxes levied on companies as something entirely distinct from the taxation of individuals?

(2) Assuming that the answer to the latter part of the question is in the affirmative, what is the appropriate level of company taxation corresponding to any given level of personal taxation, having regard to the fact that company savings - or rather the capital appreciation resulting from company savings - are taxed also in the hands of the individual shareholders through a tax on realised capital gains?

(3) Is there a case for differentiation or graduation in the rates of company taxation at all, or should all company profits be charged at the uniform rate; and if so, should that rate be levied on the whole profit or only on the undistributed part of the profits?

168. In order to be able to answer these questions we must first of all discuss the role of company taxation within the original framework of the income tax system as developed in England (and adopted in India), and how far this role has been modified through the introduction of progressive income taxation and the proposed taxation of capital gains.

169. The original conception of income tax (a) ignored capital gains and losses; and (b) charged all income at a uniform rate. Under these two conditions, it was natural to tax the company on the whole of the profits at the same rate as the tax on individual income and to credit the tax paid by the company against the shareholder's individual liability on his dividend. When income tax became a progressive tax after 1911, the simple conception (which regarded company profits as part of the individual shareholders' income and deemed it to be taxed at the same rate as if it had been the personal income of the owners) was no longer appropriate. Whereas the shareholders' dividend income was taxed at varying rates depending on their total income (including dividend received), the pool of the undistributed profits of companies could only be taxed at a uniform rate. Hence, a distinction was introduced between income tax and personal super tax; companies as such were charged to income tax at the maximum rate and individuals became liable to super tax on that part of their company income only which was distributed as dividend.[88] The profits tax introduced in the U.K. and the corresponding corporation tax in India after the last War are often regarded as a collective substitute for the individual super tax which the company's undistributed income would have borne in the hands of the owners had it been distributed as dividend.

170. However, under a system of progressive taxation it is not really possible to maintain that charging the pool of undistributed profits at a uniform rate comes to the same thing as taxing it individually in the hands of the particular shareholders, even if the effective rate on the one were the same as the average rate on the other. For this reason the idea is sometimes put forward that instead of taxing company profits it would be better to compel companies to issue bonus shares to the full equivalent value of the amount of profits retained each year and to treat these bonus shares as part of the current income of the shareholders for tax purpose. This view, however, ignores the fact that a bonus share does not yield the same benefit to the shareholder as a cash dividend. As was argued in para 164 above, the benefit of a bonus issue to the shareholders depends upon the resulting capital gain and this will be a variable fraction (varying between 0 and 100%) of the nominal amount of the bonus issue. An individual shareholder in the case of a public company has very little say in determining how much of the profits should be distributed or retained. No doubt all undistributed profits benefit the shareholder in the long run but the benefit accrues in the form of an appreciation in the value of shares which occurs as and when, in consequence of the enhanced earning power, dividend distributions increase. If each shareholder were solemnly wedded to his shares, the contention that the undistributed profit is just another part of the income of the shareholders might be justified. But shareholders in public companies come and go, and the capital gain or loss which they realise on

any particular holding need has no relation whatever to the accumulation of company reserves during the period of any particular share-ownership.

171. The benefit which shareholders derive from the accumulation of company reserves can only be equitably taxed by taxing the capital gains of individual shareholders, and not by taxing the company savings as such. It follows, therefore, that under a system of progressive taxation and assuming that individuals are taxed on their capital gains as well as on their dividend income, the old conception which regarded the tax levied on companies as part of the same income tax which is levied on individuals can no longer be applied. It is better to recognise this openly and to abolish the existing remnants of the old system by virtue of which companies are now charged to a refundable income tax as well as to a non-refundable corporation tax.

172. There is, therefore, everything to be said for a formal separation of personal and company taxation, which would at once simplify considerably the whole tax structure and make it possible to vary personal taxes and company taxes entirely independently of each other. This is already the case in a large number of countries (such as the U.S.A., the Scandinavian countries, etc.) and is indeed partly the case also in the U.K., and in India, but the old conception still lingers on. I feel the time has come both in Britain and in India for abandoning the idea altogether that companies should be charged to the same income tax as individuals. Companies as such ought not to be charged to income tax at all (though they may be asked to deduct income tax at the maximum rate on all dividends, interest, etc., paid out as part of the normal system of collection at source) but should be charged to a single company tax, drawn up on principles which are appropriate to company taxation and which need not be identical either in structure or in weight with the personal income tax levied on individuals[89]. This is undoubtedly the right procedure; though in considering what is the right amount of taxation which companies should be asked to carry, the fact that income tax is imposed on any particularised benefit derived by a shareholder from his company must of course be borne in mind.

173. Indeed, the first question that requires to be answered is whether if all realised capital gains are charged to income tax in the hands of the individuals, there is any justification left for levying a tax on the undistributed income of companies at all, in view of the fact that the distributed income is also taxed to income tax in the hands of the shareholder. Does the taxation both of company savings and of the appreciation resulting from company savings not imply taxing the same thing twice?

174. There are two answers to this argument. One is that whereas a tax on income taxes the savings made out of that income simultaneously with the emergence of the savings, a tax on capital appreciation is an indirect tax on company savings paid with considerable delay - a delay caused partly by the time-lag between an increase in company reserves and the consequential increase in earnings and the capital appreciation resulting from it, and partly by the fact that realised capital gains lag behind by a fair number of years the rate of accrual of capital gains.[90] Hence if company savings were only taxed in the form of a tax on realised capital gains, whereas other savings were taxed simultaneously with income, the effective rate on company savings would be considerably less than that on non-company savings.[91]

175. Another argument for a tax on the undistributed income of companies, which is additional to the one just mentioned, lies in the fact that company savings which are actually invested in fixed assets do get a partial exemption in the form of the allowances for capital expenditure[92]. The extent of this exemption is measured by the difference in the discounted value of the depreciation allowances granted on the capital expenditures of the year and the discounted value of the total capital loss realised (relative to the initial cost) when the assets are sold for scrap at the end of their useful life.[93] If the taxes on company savings were abolished the allowances for capital expenditure would of course have to be abolished too; and the relief to the individual shareholder

would be confined to the capital losses (or the lower capital gains) realised when either the business as a whole is sold, or when individual shares are sold. From the general economic point of view it is preferable to tax company savings and relieve this tax by subsidies on capital expenditure than to abstain from doing either. For the tax-cum-subsidy effectively re-distributes the income from companies whose savings are large relatively to their investments to companies whose investments are large relatively to their savings, and must, on balance increase the propensity to invest in the economy.[94]

176. It follows, therefore, that while in the absence of capital allowances and judging the matter on equity consideration alone the effective rate of taxation on the undistributed profits of companies ought to be distinctly lower than the (average) marginal rate of income taxation on individuals, this is no longer necessarily the case when for reasons of economic expediency it is thought desirable to grant capital allowances - whether they are confined to annual allowances corresponding to the normal working lives of the various assets, or whether they comprise also accelerated allowances and straightforward subsidies in the form of development rebates. The higher the discounted value of the capital allowances granted in any or all these forms, the greater is the effective rate of taxation on company savings that is justified. Thus if the maximum rate of tax on individual income were to be put at 7 annas in the rupee (or, with surcharge, around 45%) the appropriate effective rate of taxation on the undistributed profits of companies works out at 7.1/2 annas in the rupee (or 46.5 per cent) on the assumption that the present level of capital allowances is maintained; and to 36% or 5.1/4 annas in the rupee if the capital allowances were reduced in accordance with the suggestions made in para 144 (Chapter 7) above[95]; and at appropriately lower rates (mentioned below) if the tax is expressed as a percentage of the whole profit.

177. There can be little doubt that whether the company tax is levied by reference to the whole profit of companies or only the undistributed part of the profit, it ought to be charged at a uniform rate independently of the total amount of profit assessed of a company.[96] The considerations which require a rich individual to be taxed at a higher rate than an individual of more moderate means do not apply to comparisons between large and small corporations.

178. This still leaves the question open, however whether the tax should be levied on the whole of profits or on the undistributed part of the profits. Looking at the matter again from an equity point of view alone, there can be no doubt that the ideal system is one which treats dividend distributions in the same manner as interest charges and other expenses for the purpose of assessing profits to company tax, i.e., one which levies the tax on company savings rather than on the whole company income. Since distributed profits are charged to income tax, it is only the savings of companies which justify a tax levied on corporations as such[97].

179. From an administrative point of view it may not be more difficult to levy a tax on undistributed profits (on profits less dividend distributions) than a tax on the whole profit[98]. But here again, the problem is not one that ought to be considered on equity considerations alone and without regard to economic expediency. It is perfectly possible, of course, to collect the same total revenue from companies irrespective of whether the tax is levied on the whole income or only on the undistributed part of the income. Thus at present (on the basis of assessments in the year 1954-55) the average effective rate of tax on company profits is 42.7%, or almost 7 annas in the rupee[99]. Since 32% of the consolidated disposable profit after tax was paid out to individuals as dividends, the same revenue levied on undistributed profits only would mean an effective tax of 52.34% or 8.1/3 annas in the rupee.

180. Since the proposed company tax is a non-refundable tax, the whole of the tax would, of course, have been paid out of company savings quite irrespective of whether it was levied on the whole profit or on the undistributed part of the profit[100]. But the marginal rate of taxation (as

distinct from the average or effective rate) and the distribution of the burden of the tax as between different companies would have been quite different in the two cases. Under a system which levies the tax on the whole profit, companies which distribute a small proportion of their earnings are deprived of a smaller part of their savings through taxation than companies which distribute a large proportion of their profits. Since the expanding companies are likely to plough back a larger part of their earnings than companies which are not expanding, the system which levies taxes on the whole profit treats expanding companies relatively more leniently and stagnant companies relatively more severely than a system which charges tax on the undistributed profit only. Since as explained in para 157 above, the rate of increase of reserves is a critical factor in the rate of expansion of growing companies, the alternative of imposing the charge on the whole profit is undoubtedly preferable from the point of view of the social interest, even though it may be regarded as inferior when judged on strict equity considerations alone[101].

181. As was explained above, the appropriate rate of tax on the present level of capital allowance is 7.1/2 annas in the rupee on the undistributed income of companies[102]. In terms of a tax levied on the whole profit of companies, the equivalent rate (as shown by the computations in the Annexure) works out at 38% or 6 annas in the rupee. This seems to me the rate of company taxation that is ultimately appropriate in relation to the rates of income-tax and capital gains tax proposed earlier in this Report. Its immediate adoption, however, would involve a loss of Rs 8.5 crore of revenue as compared with the taxation in force in 1955-56, (and rather more in relation to the taxation proposed for 1956-57) and since the revenue from the newly imposed capital gains tax will have a fairly long gestation period. I do not feel that it would be either inequitable or particularly inexpedient to maintain the level of company taxation at the rate of 7 annas in the rupee until such time as the revenue collected from the tax on capital gains becomes substantial[103].

182. It means to me, therefore, that in place of all the present taxes on company income a single uniform tax of 7 annas in the rupee should be levied on the whole income of companies assuming the continuance of the current depreciation allowances and the development rebates; or 6 annas in the rupee if capital allowances were rationalised on the lines recommended in Chapter 7. Capital gains made by companies should be subject to this tax. The whole of this tax should be non-refundable; but income tax at the rate of 7 annas in the rupee should be deducted from all dividends, etc., paid out and credited to the account of the recipient. Dividends received by companies should not be treated as part of a company's income for purposes of company tax.

ANNEXURE

ESTIMATE OF THE YIELD OF COMPANY TAXATION

1. In 1954-55 the total assessed income of companies in India amounted to Rs 197.3 crore. Of this sum, Rs 58 crore were paid out in dividends; and of the dividend payments Rs 26.75 crore were paid to other companies and Rs 31.26 crore to individuals.[104]

2. The consolidated income of all companies (total assessed income less dividends received from other companies) thus amounted to Rs 170.8 crore. The tax rates in force in that year were 3 annas in the rupee of income tax on the undistributed income of companies and a super tax (calculated at a normal rate) of 2.3/4 annas in the rupee on the whole income of the company. Had these rates represented the average effective rates, the yield of company taxation would have amounted to Rs 26.2 crore in income tax (i.e. 3 annas in the rupee on the total undistributed income of Rs 139.5 crore), a surcharge of Rs 1.3 crore and a super tax of Rs 29.3 crore (2.3/4 annas in the rupee on the total consolidated income of Rs 170.8 crore). In addition, it may be assumed that inter-company dividends bore, on the average, 1.1.2 annas super tax charge which yields another Rs 2.1/2 crore, giving a total computed revenue of Rs 59.3 crore.

3. As against that the actual yield of company taxation, according to C.B.R. statistics was Rs

73.0 crore, made up of Rs 32.6 crore income tax,[105] Rs 2.2 crore surcharge, and Rs 37.8 crore super tax.

4. The discrepancy of Rs 6.5 crore with regard to income tax implies that the effective charge was 3.3/4 annas in the rupee and not 3 annas. This might be explained by the fact that a great deal of the assessments of the year 1954-55 related to earlier years when the rate of income tax payable was 5 annas in the rupee and not 3 annas. The discrepancy of Rs 6 crore with regard to super tax is not so easily explained however; and it can only reflect the combined result of the various penalty provisions imposed by the legislation.

5. Thus the actual yield of the taxes payable by companies in the year 1954-55 being Rs 73 crore, the effective rate of company taxation works out to 7 annas in the rupee (as against the nominal rate of 5.3/4 annas), and this has been taken as the basis of the calculations given in the text.

CHAPTER 9

THE PROBLEM OF TAX EVASION

I. THE SCOPE OF THE PROBLEM

183. Everyone is agreed that apart from manipulations of various kinds which are broadly classed under the term "tax avoidance" there is considerable amount of evasion in India due to fraudulent concealment of income secured through false entries in the account books and the accounts. It is fairly generally agreed also that such practices have become more widespread since the last War. The important question is how much income is concealed in this manner in relation to the income which is assessed to tax. Conversations with individual business men, accountants, and revenue officials reveal guesses which range from 10-20% of assessed income at the minimum to 200-300% at the maximum.

184. We have made an estimate of the possible order of magnitude of evasion through a comparison of national income estimates with income tax assessments. The method involved first, an estimate of the distribution of the national income between wages and salaries, income of the self-employed and income derived from property in the form of profits, interest and rent according to each sector,[106] and second, making certain assumptions concerning the total of incomes excluding salaries which accrues to persons above the exemption limit. The figures shown in Table 4 are very tentative and must be interpreted with great caution. The percentages assessed in column 7 in particular are based on very slender foundations. Nevertheless, I think an analysis of the resulting differences in the various sectors between the computed figures of assessable incomes and the actual figures of assessed income provides some indication of the order of magnitude of evasion. A defect of the method is that the national income estimates are not always derived from sources that are independent of income tax assessments. Thus in the sector of banks and insurance, for example, the national income estimates are based entirely on the published balance-sheets of companies, and since these are also the basis of income tax assessments, the correspondence between two figures is without significance. In the case of mining and factory establishments, the national income estimates are based on Census of Manufactures and National Sample Survey data which again are not wholly independent sources, since businesses which conceal profits in the accounts which they submit to the income tax officers (and in the books which are open to inspection by ITO's) will make the same adjustments (through an under-statement of receipts or an over-statement of outlays) in the forms which they fill up for purpose of the Census or the National Sample Survey. I understand, however, that the national income estimates make a certain allowance for this, in that a correction has been made for the over-statement of input prices in the National Sample Survey data.[107] On this evidence the disclosed income of factory establishments and mining is of the order of 50 per cent of the total assessable income.

TABLE 4. ESTIMATED DISTRIBUTION OF INCOMES & TAX ASSESSMENTS IN THE INDIAN UNION FOR 1953-54

(Rs crore)

Sectors	Countribution to net domestic product at factor cost	Wages and salaries	Income of self-employed persons	Profit, interest, rent, etc.	Total non-salary income (4 plus 5)	Assumed proportion of non-salary income above exemption limit	Estimated non-salary income above the exemption limit (6×7)	Non-salary income assessed to tax
1	2	3	4	5	6	7	8	9
I. 1. Mining	100	30	-	70	70	95	66	26
2. Factory establishments	690	335	-	355	355	100	355	190
3. Small enterprises	950	270	525	155	680	0	-	-
Sub-Total	1,740	635	525	580	1,105		421	216
II. 4. Railways & Communications	240	195	-	45	45	-	-	-
5. Banks & Insurance	75	55	-	20	20	100	20	20
6. Retail tade	1,025	100	800	125	925	20	185	87
7. Other trade	345	45	125	175	300	80	240	179
8. Transport	155	100	45	10	55	60	33	19
Sub-Total	1,840	495	970	375	1,345		478	305
III. 9. Professions	515	300	175	40	215	50	107	24
10. Government Service	490	490	-	-	-	-	-	-
11. Domestic Service	135	135	-	-	-	-	-	-
12. House Property:-								
(i) Money	180	-	-	180	180	50	90	27
(ii) Imputed	260	-	-	260	260	20	52	-
Sub-Total	1,580	925	175	480	655		249	51
Total	5,160	2,055	1,670	1,435	3,105		1,148	572
IV. Agriculture and allied pursuits	5,305	835	2,885	1,585	4,470	7.5	335	(50*)
Grand Total	10,465	2,890	4,555	3,020	7,575		1,376	(622)

* Estimated.
Source: As indicated in the text.

185. In comparison with factory establishments and mining (the so-called "organised sector" of the economy), the degree of under-assessment in commerce and distribution appears to be relatively moderate; assessed incomes appear to be over 60% of assessable incomes. This may merely reflect, however, the inadequacy of the national income estimates which are based on very slender material and the consequential under-estimation of the contributions of retail and other trade[108]. In professions and income from house property, on the other hand, the ratio of the assessable to assessed incomes appears as much as 4.1. This may not seem unreasonable in the case of profession; but the assumed proportion of assessable income is based on such broad guesses that not much significance attaches to this result.

186. The total of assessable incomes in all sectors outside agriculture comes out at almost exactly twice the assessed income. No significance attaches to this precise figure, but it receives some confirmation from the fact that in the only sector in which the figures of income distribution are based on relatively solid material - in mining and factory industry, and where almost the whole of the activity is carried on by companies and hence income is not subject to an exemption limit - the ratio is also 2:1. If these figures are anywhere near the truth, the amount of income tax lost through tax evasion is more of the order of Rs 200-300 crore[109] than the Rs 20-30 crore which is sometimes quoted in this connection.[110]

187. As regards agriculture, the First Report on Land Holdings of the National Sample Survey suggests that 13% of the cultivable land is owned by persons whose individual holding is over 30 acres in area; and on the average the ownership of 30 acres or more should yield an income to the owner which is in excess of the agricultural-income-tax exemption limit of Rs 3,000. However, only 12 of the States levy an agricultural income tax and as these States account for over

one-half of the total output, it is reasonable to assume that assessable agricultural incomes come to around 7.1/2% of non-wage incomes in agriculture. The total of agricultural incomes actually assessed by the 12 States is not known. It can be estimated, however, from the aggregate tax yield of Rs 3.3 crore. On the experience of Uttar Pradesh, the average rate of tax on assessed agricultural incomes amounted to 6.7 per cent. On this basis the total amount of income assessed to agricultural income tax may be put at Rs 50 crore, whilst the amount of assessable incomes, on the assumption made, is around six times this sum. So ,little is known, however, of agricultural income and property distribution of India, that no quantitative "estimate" can be any thing but the wildest guess. But it certainly is not reasonable that the total yield of agricultural income tax - with an exemption limit of only Rs 3,000 - should amount to somewhat over RS 3 crore in an area accounting for over one half of the agricultural output of the country, valued at Rs 5,000 crore.[111]

II. POSSIBLE REMEDIES

188. Our proposals concerning personal taxation should by themselves tend to reduce the extent of the evasion of business profits for two separate reasons: (1) smaller incentives; (2) greater obstacles.

189. As regards (1), the replacement of a single personal tax charged at steeply progressive rates and mounting to over 90% of marginal income with a number of different taxes with lower top marginal rates is bound to reduce the incentive to evade considerably. The extent to which people are willing to go - on keeping double sets of books, engaging the services of straw men and dummies, etc. - in order to evade tax is much less when 45% of the gains made from any particular transaction can be saved by evasion than where 9/10th of the amount can be so saved. The maximum rate proposed for the annual tax on net wealth is 1.1/2 per cent per annum on estates of over Rs 15 lakh; the temptation to conceal property in order to save 1.1/2 per cent per annum of the amount concealed must be very small. It is often forgotten that all such concealments involve a cost. Given an effective system for registering property - and which ensures the disclosure of the beneficial owner - as outlined in Chapter 6, the only possible method of concealing property is by hoarding cash, or gold, or jewellery. (In fact, to a considerable extent this is the case already - a man cannot be sure of 'not being found out' unless he conceals his gains in hoards of cash or precious metals.)

Hoarding and the Wealth Tax

190. The cost of such hoarding is the annual income sacrificed - i.e., the income that would have been obtained if the capital had been invested productively. This should include the expected capital appreciation as well as the money return on capital productivity employed and can therefore, hardly be put at less than 5-6 per cent; or, say, 3 per cent, after taking into consideration the consequential income tax payable on the income. There can be no incentive to conceal property in order to save at the maximum 1.1/2 per cent per annum (in the bulk of cases only at 1/2 to 1% per annum) at the cost of sacrificing an annual return of 3 per cent[112]. The case is different when the motive of hoarding is to evade income tax, since in that case a very large part of the hoarded money (amounting to 9/10th of the total under the present system and to 45% under my proposed system) might be "saved" as a result of the hoarding which, of course, makes it profitable to sacrifice the annual income for the sake of concealing the property for a long number of years.[113]

Hoarding and the Expenditure Tax

191. There is no reason to assume, therefore, that an annual tax on property would provide an added incentive to the accumulation of secret hoards of cash and precious metals, whilst the reduction in the marginal rate of income tax would undoubtedly diminish existing incentives. It is different with the expenditure tax where the yield to the tax-payer of concealing particular items of expenditure might be very substantial. An expenditure tax might thus provide an incentive for hoarding out of secret gains in order to enable the taxpayer to spend these gains on a later occasion without revealing the consequential depletion of assets in the accounts. But the

fundamental difference between an income tax and an expenditure tax is that *expenditure as such cannot be concealed* and if a man spends far more than he reveals in his declaration, whether on ordinary living expenses, or on extraordinary expenses, such as a wedding, he is bound to attract suspicion. Indeed, this is one of the reasons why concealed gains tend to be so largely saved and hoarded in cash, gold, or jewellery and not spent. The man who wishes to defraud the revenue by concealing his true income simply cannot afford the risk of spending his gains. No doubt, some expenditure can safely be incurred without attracting suspicion. A man can spend more on liquor or on expensive foods provided he does not entertain on a large scale. Such additions to his consumption are not likely to attract notice but the amounts that can be spent in such ways can hardly exceed a certain proportion of his total living expenses.

192. The difference between the concealment of income and the concealment of expenditure lies precisely in this limitation. Provided that the proceeds are hoarded in cash and gold, there is no limit to the extent to which a man can evade income tax - he may conceal 9/10th of his income, if only he can cover up the traces of the transactions which produced them. But he cannot evade 9/10th of his liability to an expenditure tax (or anything like it), for the simple reason that whatever his pattern of consumption, his standard and mode of living cannot be kept a secret.

Hoarding and the Gift Tax

193. It may be that an added stimulus to the concealment of business profits will be provided through the gift tax - that tax-payers will wish to conceal profits, not in order to save in income tax or in expenditure tax, or in the annual wealth tax, but in order to be able to pass money to their children or grand-children without attracting gift tax. Here again, I doubt whether the incentives will be anywhere near as strong as the present incentives due to the very high rates of super tax. In order to save substantial amounts in gift tax (at an uncertain date in the future) the amount of profits which must be so concealed and hoarded in cash and gold must be very substantial, since otherwise the tax saving involved is proportionately much too ,small to make it attractive. A man will not conceal income, in order that his son should save 10 or 20% in gift tax - particularly when it is not a question of an immediate gift, but something that is expected to be given at some future date. The case is different when the property to be passed on to a single heir is very large - say Rs 10-15 lakh - when the tax saving is of the order of 50% or more. But in that case the income loss due to the hoarding of such large sums (by the heir, as well as the testator, since the heir will have to continue to conceal his undisclosed wealth obtained through gift or inheritance) is equally very substantial. I believe also that the very fact that the gift tax is a charge on the recipient, and will have to be paid out of the gifts received by the recipient, will lessen the incentive on the donor to conceal income and property in order to save liability to a tax which is not a charge on him, but a charge on someone else, even if he (or she) is a near relation.

Evasion and the Comprehensive Return

194. As regard the second aspect mentioned above (obstacles), the proposal of requiring the submission of a comprehensive a return concerning the personal accounts of each taxpayer, and the introduction of a reporting system on all capital transactions by means of tax vouchers, will tend to reduce the scope for evasion through the falsification of business accounts. The concealed income whether of a company, an individual business, or a partnership must invariably reflect itself in the personal wealth or expenditure of the owners or the managers of the business. If profits are concealed for income tax purposes the resulting savings must also be concealed in the annual statement - more than it is the case at present. It may be argued, therefore, that while the obligation to make an annual return of wealth, and of all the casual receipts and property transactions of the taxpayers will make the concealment of income more difficult, it would for that very reason increase the need to conceal the savings made out of concealed income by hoarding them. The enhanced attraction arises, not on account of the tax on wealth as such, but

on account of the stricter control over the savings made in the year out of the income concealed for income tax purposes. But the very fact that the savings made out of concealed income cannot later be re-introduced into the business, or invested profitably elsewhere will, together with the reduction of income tax to a maximum rate of 45%, make the concealment of income itself far less attractive. There is also the additional factor that the hoarding of gold and jewellery can only be concealed in so far as gold and jewellery can be bought without the seller demanding the surrender of a voucher for the purpose of his own claim.[114] No doubt a provision of this kind cannot be made fully effective, and it will not be possible to prevent completely transactions in gold and jewellery without surrendering a voucher. But transactions of this sort are bound to command a premium from the buyer and a discount to the seller, and thus create further uncertainty as to the opportunities and ease with which such hoards can be realised in the future; and this must act as a further discouragement to the concealment of profits for tax purposes.[115]

195. Provided, therefore, that the maximum charge on income is reduced to the 45% suggested in my proposals - and this appears in the light of the above discussion an essential requirement in connection with the whole set of proposals put forth for the reform of personal taxation - I feel fairly certain that the extent of income tax evasion will be substantially reduced in consequence of the reform. But it would be sanguine to believe that it would solve the problem of the evasion of business profits through false book entries, etc., by itself or even that it will reduce its probable extent to dimensions at which its continuance could be tolerated without causing major damage to public morality or the community's sense of justice.

Other Methods of Attack

196. While there is no single magic formula that would render the evasion of business income impossible, I feel that the problem could be tackled on a number of fronts and that substantial results could be gained from reforms in a number of directions. These relate to (i) the question of the compulsory auditing of the accounts of taxpayers whose income exceeds a certain minimum; (ii) the status, and the obligations imposed on the auditors; (iii) extension of the use of prescribed vouchers (with taxation registration numbers) to business transactions; (iv) increased powers of inspection and seizure of business books, etc., and (v) increased penalties and public exposure in the case of detection of fraud. I should like to discuss each of these questions in turn.

Compulsory Audit

197. Mal-practices which consist in the presentation of false and misleading accounts should, of course, be sharply distinguished from the falsification of books from which the accounts are compiled. The compulsory auditing of accounts can only check the former and not the latter. Nevertheless, I think a great deal might be gained if it were made compulsory on taxpayers to present audited accounts in all cases in which income or property exceeds certain minimum limits. Owing to the shortage of auditors, this limit will have to be put rather high in the beginning but could be gradually lowered later. To start with, it may be prescribed that anyone whose income exceeds Rs 1 lakh and/or whose capital exceeds Rs 10 lakh must produce audited accounts both as regards his personal affairs and his business affairs. In the case of business accounts, the limit may be put at an annual profit of Rs 50,000.

Status of Auditors

198. Even more important is to change the statutory regulations concerning the professional auditors. At the moment the obligation of a Chartered Accountant auditing company accounts is to ensure that the accounts are drawn up in a way which is not misleading from the point of view of the shareholders. Their duties, therefore, are satisfactorily discharged if they make sure that the shareholder is not given an inflated picture of the profits or the assets of the company (accounting conventions approve of turning a blind eye to the opposite kind of "cheating" - i.e., of giving a shareholder a less favourable

impression of the affairs of the company than corresponds to reality). It is one of the main tenets of the ethics of the accountancy profession that it is much better to err on the conservative side, and to under-state results rather than to over-state them. Provided, therefore, that the accounts are formally correct - i.e., that the totals shown under the various heads agree with the individual items recorded in the books and are properly supported by vouchers - the accountant as a watch-dog of the shareholders is not unduly worried if deductions from the receipts are treated as provisions made against definite liabilities which ought more properly to be regarded as in the nature of reserves created against unknown and general contingencies; or when outlays are shown as a charge against current profits when, in fact, they represent capital expenditure; or when assets are written down in an immoderate manner, which business ethics approves as sound conservative practice. From the point of view of the State, all these, however, reduce the apparent income chargeable to tax, and make the task of the tax officers of discovering what is the true income legally liable to tax (which items are true charges on the profits, and which items should be disallowed as non-business expenses or capital expenditure) far more difficult. There is a great deal to be said, therefore, for the suggestion that professional auditors (at any rate, the Chartered Accountants) should be charged with a statutory obligation to examine whether the accounts presented by companies and other firms for income tax purposes are drawn up in an appropriate manner so as to show the true chargeable income for tax purposes; and that they should be obliged to supply a certificate to this effect.

199. In this way auditors would become the watch-dogs of the other "silent partner" of businesses, the State , as well as being the watch-dogs of the shareholders and of the non-active partners of a firm. There is no reason why professional auditors should not be asked to carry out such a double obligation, but so long as the auditors are remunerated entirely by the owners of the firms their loyalties must primarily be towards their employers, and it would be wrong to impose upon them obligations which would set up a conflict of loyalties. For this reason a necessary complement to this proposal is either (a) that the whole of the auditing profession should be nationalised and professional auditors become full-time Civil Servants; or (b) that there should be a corps of Government auditors, distinct from the private auditors, and it should be made compulsory on firms above a certain size to have the accounts audited by a Government auditor as well as by private auditors; or (c) that a general scale of fees for auditors should be laid down by public regulation - the scale depending on the amount of work involved as well as the size of the business, etc., and that 50 per cent of the total fee should be paid by the Government and only 50 per cent by the owners of the business; the formal approval of a Controller of Public Accounts being required for the appointment of any particular firm of auditors in any particular case. Each of these three proposals has its merits and each might provide a solution to the problem. Alternative (a) was discussed by the Taxation Enquiry Commission and rejected on the ground that the insufficiency of auditors makes the nationalisation of the auditing profession impracticable at the present time. Much the same kind of objection would be raised against proposal (b), in that it would take a number of years before a provision of this kind could be properly implemented. It seems to me however that suggestion (c) does not suffer from these defects, and offers the most practicable short-run solution of the problem.

200. It is not suggested that a reform on these lines would make it unnecessary for tax officers to subject the accounts submitted to a detailed scrutiny in particular cases. But it would greatly ease the task of this scrutiny; and it would tend to prevent many irregularities in the accounts, and a misleading form of presentation which might otherwise escape the watchfulness of the tax authorities.

Scrutiny of Accounts

201. Another lines of attack lies in a more thorough check-up of the entries in the account books of the individual tax-payers. If the computation of the tax base were simplified in accordance with the suggestions made in Chapter 7, there will be a smaller number of entries to

check up and the Department's ability to cope with this task would be automatically enhanced. It is also a matter for consideration whether the suggestion for the introduction of taxation code numbers should not be extended to business transactions, as well as capital transactions and whether an obligation to include the code number of the vendor on every voucher should not be generally imposed. It would certainly make it easier to route information obtained from the examination of A's return to B's file; and even if this were not done regularly or in any routine fashion, the very fact of the taxation code numbers being supplied with the vouchers would act as a deterrent to fraudulent over-statement of outlays and under-statement of receipts.

Prevention through Deterrents

202. There is finally the question whether a great deal might not be achieved through more powerful deterrents to fraudulent practices. In India, as in Britain, tax-evaders are treated very leniently. Very few cases of fraudulent evasion are prosecuted before the courts[116], and the tax-payer is generally promised immunity both from prosecution and publicity, if he makes a full disclosure and is willing to pay the relatively modest penalty imposed. I suppose that, just as in Britain, this policy is based on the supposition that the Revenue will fare better and collect more if it allows the careless and sinful to come forward and confess their sins than if it threatens dire punishments.[117] In fact, in India there was a Voluntary Disclosure Scheme in operation for some years which promised complete immunity from pecuniary penalties as well as from prosecution and publicity if the tax-payer came forward and owned up voluntarily his concealed gains.

203. I very much doubt whether the policy of "softness" is of much avail, or whether, on the contrary, it tends to increase the scope of evasion. Fot it leads to a "heads I win, tails I do not lose" attitude, which must have the most destructive effect on tax morality. Indeed, even if a tax-payer knows that he cannot avoid penalties in case of detection it may still pay him to evade so long as the chances of detection are considered by him to be less than the proportion which the tax evaded bears to the total liability (i.e., penalty plus original tax charge) he would incur in the event of being detected. Thus, if the penalty imposed is equal to 100% of the tax evaded, it pays to evade so long as the chances of detection are less than 50%. The maximum penalty that can be levied under the Income Tax Act in India is 150% and this deterrent is quite ineffective so long as the evader rates the chances of his detection at less than 1:2.5, or 40%. I do not suppose that the likelihood of detection in India is above 1 in 10 in the average, so that to be a real deterrent the penalty imposed should be more than 9 times the sum risked and not 1.1/2 times.[118]

204. Very different is the situation in the U.S.A. where the tax-payer is left to assess himself to tax but if he is discovered having concealed income, he can be charged to an enormous penalty (amounting to between 10 to 20 times the tax escaped) and is frequently dragged before the courts in a trial attracting a great deal of publicity and ending in long terms of imprisonment. Before the last War, no lesser personalities than the Vice-President of one of the biggest New York banks (The National City Bank) and the Chairman of the New York Stock Exchange were prosecuted for income tax evasion in trials attracting newspaper headlines for weeks on end; and only a few months ago the Head Porter of the Waldorf Astoria Hotel in New York was dragged before the court for having declared tips amounting to $33,000 in his income tax returns over a five year period, whereas his bank account disclosed that he made over $60,000 in tips. No case of this type has ever been brought before the criminal courts either in Britain or in India. I feel quite certain that very heavy penalties and prosecution with a great deal of publicity is an infinitely more effective method of dealing with tax evasion than the policy of deliberate leniency and avoidance of public disclosure followed in Britain and India.

III. STANDARDS OF ADMINISTRATION

205. Finally, the prevention of evasion is greatly dependent on the standard of administration in the Revenue Department - on the zeal, ability, efficiency, and the adequacy of numbers of tax officers. An efficient administration requires the ability of the Department to attract the best talent

and to attract them in adequate numbers. This in turn is very greatly a matter of the conditions of pay and prospects in the service. In this respect I feel that there is too much of false and misguided economy in India. So long as the situation continues in which the local Income Tax Officer starts with a salary of Rs 350 (including extra allowances), and even after a number of years of service an officer occupying a position of considerable responsibility earns Rs 500-600 a month, it is idle to expect that the highest standards of efficiency can be attained. Apart from the question of the ability and adequacy of qualified officers, I have a feeling that it is fundamentally wrong to pay officers, on whose attitude and conduct very large sums of money may depend, at such extremely meagre rates. Without in any way wishing to cast aspersions on the general standard of integrity in the Department - which I am sure is very high - it seems clear that an Income Tax Officer living on a very modest scale cannot have the self-confidence and sense of social equality necessary to stand up to "great men" earning many lakh of rupees, with whom he may have to deal. I feel that if an extra crore of rupees were spent on raising the standard of salaries in the Revenue Department - the cost of raising the salary of Income Tax Officers to, say, Rs 1,000 after a preliminary trial period of 5 years and rising to Rs 2,000 a month in the normal course could hardly exceed that amount - the return to the State in terms of additional revenue collected is bound to be many times the additional cost.

IV. GOLD HOARDING AND TAXATION

206. It has been suggested in connection with the whole set of proposals put forward in this Report that their adoption would very greatly increase the tendency to hoard gold and other valuables, and will thus have highly undesirable effects on the employment of capital for productive uses and on the development of the economy. I should like to analyse this argument in some detail and to examine in particular (a) whether there is any genuine basis for the complaint that the tax reforms outlined here would lead to greatly enhanced hoarding of gold and jewellery; (b) the precise reasons why this should occur; (c) the economic effects of enhanced hoarding if it did occur; and (d) how far the danger of additional hoarding presents a valid argument against the proposals.

207. As we have already argued in para 190 above, it is a mistake to suppose that the introduction of an annual tax on wealth would as such tend to enhance the hoarding of gold and valuables. Indeed the contrary is likely to be the case. Wealth held in the form of cash, gold, ornaments, jewellery, etc., would all be subject to taxation even though it yields no money income. In so far as these hoards are disclosed and included in the statement of net wealth on which tax is levied, the tax affords a stimulus in the opposite direction - it encourages investment of property in forms which yield a relatively high return, and discourages the holding of wealth in sterile forms which yield no return.

208. If the gold and valuables are concealed and the taxing authorities are unable to discover their existence, no tax will, of course, be levied on such hoards. But it is a mistake to suppose that the very imposition of an annual tax on wealth will lead people to hoard wealth which they would otherwise have invested productively merely in order to escape the tax. That could only be the case if the net yield of evasion were positive, i.e., if the tax-saving resulting from the concealment of assets is greater than the cost of doing so. The cost of concealing wealth in the form of hoards is the loss of the income which the same capital would have yielded otherwise. As we have shown above, with an annual tax on wealth the net return from evasion through concealment in hoards is bound to be negative, not positive. The maximum annual rate of tax is 1.1/2 per cent, whereas the minimum loss due to hoarding (even after taking into account the consequential saving in income tax due to having a smaller income) cannot be put at less than 3% and this is without taking into account the risks assumed and the specific costs associated with holding wealth in this form, which we have described in the note to paragraph 190 above. The argument, therefore, that an annual tax on wealth will serve as a stimulus to gold hoarding rests on a confusion - it applies considerations that are pertinent to an income tax, or a once-and-for-all capital levy (which levies

tax at a high percentage of the total) to an annual tax on a capital to which the argument is not applicable. People are willing to go to a great deal of dishonesty for the sake of escaping taxation when the net profit from successful avoidance is 900 per cent - as is the case with income tax where the marginal rate is 90 per cent. They may even go to considerable trouble to escape tax when the net profit from tax evasion is 100 per cent, or even when it is only 20 per cent. But we cannot assume that apart from a few eccentrics, who would do it for sport - for the sheer love of the thing - people are willing to conceal their property fraudulently if there is net loss, and not a net profit in doing so.

209. Any increased tendency to the hoarding of gold cannot therefore result from the desire to escape the annual tax on wealth but only from the desire to escape other taxes, particularly the income tax. In order to dodge income tax liability successfully the tax dodger must conceal not only the income, but the accretion of wealth resulting from that income. This problem arises even now, in that a man who fraudulently conceals income for tax purposes must take care to ensure that the Income Tax Officer does not discover about it through circumstantial evidence - either because he spends noticeably more than he could out of his declared income, or because his capital assets have increased more than they could have out of savings made from his disclosed income. Indeed, an examination of a man's capital position over a period is probably the most effective method employed for the discovery of concealed income by the Special Investigations Branch of the C.B.R. or the Taxation Investigation Commission.

210. It can be argued also that the obligation to make an annual return of wealth, and the measures taken to ensure that property is not concealed through registration in bogus names, etc., will make it far more difficult than at present for a man to conceal income for tax purposes; and for that reason, he will tend to hoard his concealed gains to a far greater extent than now, this being the only safe method left to him of evading income tax with a prospect of success. (It may be agreed that even with the present degree of vigilance of the tax officers, a large proportion of the concealed gains tend to get hoarded already, since no other method of concealing the money is considered really safe.)

211. No doubt, there is some validity in the argument that if you make income tax evasion so much more difficult than before, you stimulate those particular forms of concealment which you cannot control completely. If most loop-holes are plugged, the pressure on any remaining loop-hole is bound to increase. But as a basic criticism against our proposals it is really a most disreputable argument, since carried to its logical conclusion it simply says that anything that makes tax evasion more difficult will increase the economic ill-consequences of evasion and that it is preferable, therefore, to refrain from measures which make it more difficult to circumvent the laws. It would be impossible for a modern democratic Government to accept any such thesis as a guiding principle of conduct.

212. At the same time, in the particular context of my proposals, all such fears, I am convinced, are greatly exaggerated. The incentive to evade income tax is directly proportional to the marginal rate of taxation; it becomes powerful only when the marginal rate of tax amounts to considerable part of the total amount. At a marginal rate of 90% the return from tax evasion is 900% on any particular amount concealed. At a marginal rate of 45% the return from successful concealment is only 82%. Thus, while the successful concealment of income is rendered more difficult, the incentive to conceal income is also very greatly reduced. Moreover, if the proceeds of evaded income have to be kept in sterile forms, and cannot be invested in forms which yield a return, the attraction of saving the tax by evasion is still further reduced. It would be rash to predict, therefore, that my recommendations of tax reform would on balance enhance the propensity to hoard gold in any substantial degree. This is certainly not the case to far as the recommendations relating to the annual tax on capital and the income tax are concerned; and for reasons analysed in paragraphs 191 to 193 above, I am equally sceptical of any substantial tendency to hoard emerging as a result of the imposition of the expenditure tax or the gift tax.

213. But even if this were not so, it certainly ought not to be regarded as an argument of any weight against the case for a comprehensive tax reform. For exactly the same objection can be raised not only against the particular proposals put forward here but against any proposals designed to make the avoidance and evasion of progressive taxation less easy or less virulent, and which, therefore, would make a genuine contribution to the attainment of a greater degree of economic and social equality. I am prepared to believe that the proposal for a general income-ceiling may be less open to an objection of this sort, but if this is the case, it can only be so in so far as the proposed ceiling is only effective in relation to incomes from work and not in relation to the true incomes from property. If the idea of an income-ceiling were to be effectively applied to incomes derived from property as well as to incomes derived from work, it would have to take the form of a 100 per cent capital levy imposed on the owners of wealth above a certain maximum - since this is the only way in which the income of the property-owners could be effectively limited. (A ceiling on 'income' alone, leaving property untouched, would be perfectly meaningless.) But there cannot be any more powerful incentive to the hoarding of gold for the purpose of concealing wealth than a capital levy with a marginal rate of 100%.

214. I mention this not mainly or necessarily as an argument against income or property ceilings, but chiefly in order to show that the argument about the danger of the hoarding of gold has nothing whatever to do with the particular methods of taxation and particular methods of control against evasion outlined in this Report. I do not believe that the risk of gold hoarding ought to be regarded as a valid objection to any of these recommendations. The case for a real advance towards a greater degree of economic and social equality cannot be effectively countered by suggesting that anything which genuinely affects the position of the privileged classes will create evils, since it will mean that the wealth of these classes will go underground instead of being used for the good of the community. As an argument it is exactly on all fours with the one used against the New Deal Policy of Roosevelt in the 1930's (or against the policy of the Welfare State of the British Labour Government after the War), which asserted (in effect) that it is dangerous to do anything which impairs the confidence of the investing classes.

215. In fact, as the history of Western countries since the 1930's has shown, these fears were very greatly exaggerated. Just as lack of confidence in a Government will not prevent the investment of capital in ventures where the prospects of yield are favourable, so also the measures taken for the prevention of tax evasion will not make the capitalists cut their noses off to spite their faces. Faced with the choice, it is far more likely that the property-owning classes will stop evading tax rather than refrain from employing their capital profitably - especially when the rates of taxation, as suggested in these papers, are made moderate at the same time as the tax system is made more stringent.

216. Finally, there is the question regarding the economic effects of an increased desire to hoard gold on the part of the community. If there is a free internal market for gold, an increased propensity to hold gold will, of course, raise the price of gold in relation to other commodities. At any given time, the community as a whole cannot, of course, hoard more gold - ignoring any additional inflow of gold from abroad or of new production inside the country - than the quantity already available, however, strong the desire to do so. All that happens is that the increased desire causes the price of gold to rise relatively to other prices; and since every rise in gold price will diminish the desire to hoard gold - as the risk of a subsequent fall in the price of gold becomes greater - ultimately the price of gold will settle at the point at which these opposing fears and desires hold each other in balance.

217. The question, therefore, is simply this: Are there any ill-effects resulting from a rise in the (internal) price of gold in terms of currency? It is often argued that a rise in the price of gold can itself be a cause of a general inflation. But this view is without foundation; it confuses the symptoms with the causes of inflation. It is true that if a major inflation is going on (on account of excessive deficit financing or other similar causes) and the rate of increase in prices reaches

a level at which the tendency to hoard commodities of all kinds is enhanced, the inflation will begin to feed on itself; the very rise in the prices of commodities (the price of corn, rice, etc., as well as the price of gold and other things) will enhance the desire to hoard such commodities which in turn will give rise to a further rise of prices. In this situation, the main force governing the rate of increase in prices is no longer the excess demand which originally gave rise to it, but the price expectations which have been generated as a result of the inflation itself. This is the symptom of hyper-inflation, when the rate of inflation itself becomes entirely dependent on psychological factors. In a state of hyper-inflation, it is quite possible that any extraneous factor which causes an increased demand for some particular commodity will in itself strengthen the desire to hoard other commodities. In such circumstances, it may be quite true that an enhanced rate of increase in the price of gold will cause an enhanced rate of increase in the price of wheat or rice, or other staple foods.[119]

218. But barring a situation of hyper-inflation - a situation which is hardly likely to come about as a result of more stringent tax measures - it is certainly not true to say that the rise in price of gold can in itself cause a rise in other prices. In India, the danger of inflation comes, not from a rise in the price of gold, but from a rise in the prices of basic foodstuffs (i.e., wheat and rice). A significant increase in the prices of these commodities can only arise from excessive consumption in relation to production and not from any sudden desire to hoard commodities as an anti-inflation hedge. There is no evidence that there is any increased desire to hoard basic commodities on account of a rise in the price of gold - and particularly when the cause of the price-rise is the desire for tax evasion and not the fear of inflation. And even the fear of inflation cannot be powerful enough to cause an actual inflation in the prices of basic commodities, if the balance of production and consumption is favourable. Apart from this, the Government of India has pursued (and is likely to go on pursuing) a deliberate policy of stabilising the prices of basic commodities through "counter-speculation" (i.e. through selling in the face of rising prices and buying in the face of falling prices) and this policy in itself would effectively prevent any link between gold prices and the prices of basic commodities.

219. Apart from inflation, the only other argument put forward in this connection is that as a result of higher internal prices, there is additional smuggling of gold into the country from abroad. A certain amount of smuggling is always going on, but how greatly the smuggling would increase in response to any given rise in gold prices is quite unknown. I would myself doubt whether the elasticity of supply of smuggling can be at all large. At the moment, the annual inflow of smuggled gold into India may be of the order of Rs 10-20 crore a year. If the price of gold were 50% higher than now, smuggling may increase to RS 20-30 crore a year. But if it were to increase by more than this the Government's awareness of the need for counter-action would be greater, and the task itself would become easier. It is well known that it is very difficult to prevent a trickle of illegal inflow of any commodity but the efficiency of preventive measures increases considerable as soon as an inflow assumes large dimensions.

220. It is possible that the Government may have to take more extensive counter measures to prevent the annual cost of smuggling to the community from becoming very large. But it seems to me that, quite irrespective of whether these counter measures would be effective or ineffective, promising or unpromising, it would be carrying caution to an extreme if the risk of increased gold smuggling were made the reason for sticking to the present.

NOTES

1. Deficit financing or public loan-expenditure equally imply, of course, a corresponding increase in privately owned wealth.

2. *An Expenditure Tax*, Ch. I, pp. 25-42.

3. *Personal Income Taxation* (Chicago), pp. 219.

4. I feel bound to say that I regard the current proposals in India for a "ceiling" on income as carrying these trends to their ultimate logical absurdity. The authors behind these proposals never stop to inquire just what is the meaning and definition of the term "income" which they so light-heartedly wish to be subject to an absolute upper limit; and how such proposals could serve to reduce social inequality so long as wealth continues to be privately owned. In the sense in which, (in the U.K.) for instance, the marginal tax on income had already

reached 97.5% in 1946-51, this marginal tax could clearly be raised to 100% without making any radical difference. But can anyone seriously believe that this instrument could be made to serve the elimination of anything but desirable social incentives? The extremes of wealth and poverty will not be eliminated thereby - for the simple reason that as far as capitalists are concerned, the benefits accruing from capital will not be lost, merely that they will take on some other form than "income". (As it is said in England, heavy taxation makes taxable income into a luxury which "the rich can no longer afford to have".)

This is not meant to suggest that the current agitation for a "ceiling on income" proceeds from any but the highest moral and social motives; and I am sure that their authors meant them to apply to the true benefits derived from the ownership of property just as much as to incomes derived from work. They were wrong however, in thinking that a ceiling on "income" was an appropriate instrument for giving effect to these aspirations - unless the notion of "income" were broadened considerably in relation to the current legal definition of this term and the 'ceiling' were meant to comprise a ceiling on the ownership of wealth, and not only on annual accruals. Interpreted in this comprehensive sense, however, the proposal is not one which a country like India could adopt, without seriously compromising her prospects of growth and improvement or even the maintenance of existing standards. Soviet Russia discovered to her cost that economic incentives cannot be eliminated without perilous consequences - except perhaps at a stage of economic well-being which is far above that of even the richest nation (like the U.S.A.), let alone India.

There is, no doubt, a strong case in India for reducing the prevailing degree of economic inequality. But the way to do this is by making the tax system comprehensive and administratively effective, not but introducing absolute "ceilings". (There may be a case for a ceiling on land holdings, but in my view this provides no analogy for ceilings on income and capital. Since the effective size of farms in India is relatively small, land ownership above a certain amount serves no economic purpose and is merely a method of exploiting the peasantry, and often a positive impediment to improvements in productivity on the land. This is certainly not true of the high incomes earned through a successful business or professional career, or of the accumulation of fortunes through successful enterprise.)

I am fairly confident that the proposals for an "income ceiling" will not eventuate either in the introduction of 100% marginal tax rates or in any legal prohibition for the payment of income above a certain maximum. Yet the agitation will have done considerable harm if it led to low top-salary scales being paid to the top executive personnel in the newly established State enterprises. I think it is essential to the success of India's current approach to her future development - 'the Socialist pattern of society' - that the important enterprises in the public sector should be able to attract the best available talent; and this means that they should be able to pay remuneration on a scale that is fully competitive with that offered by private industry. I do feel, therefore, that it would serve important national interests if public pronouncements on this subject could, as early as possible, be veered round towards, the objective of a reduction in the inequalities of wealth through comprehensive and effective taxes on wealth, instead of the spectacular but meaningless (and indirectly harmful) notion of an "income-ceiling".

5. These suggested scales for the expenditure tax were so chosen as to cause the tax to come into operation only when the net expenditure of a typical family unit exceeds the net income remaining on a taxable income of Rs 40,000 a year - the level at which the present combined income and super tax rate begins to exceed the marginal rate of 7 annas in the rupee at present - so that the tax becomes a substitute for the loss of the present super tax on slabs above 3 annas in the rupee. It would be possible, of course, to fix lower exemption limits that would be more consonant with the standards of living and the expenditure scales of the top income groups of India.

6. The level of rates and the degree of progression needs, of course, to be higher than with the estate duty, since the rates vary with the size of the individual gift or bequest, and not the size of the total estate of the donor; hence the suggestion that the rates should be double the current estate duty rates.

7. Reached by capitalising annual dividend payments to individuals, etc., of Rs 40 crore.

8. Another method of calculation based on the net ploughed-back profits of companies yields even higher estimates. Net company savings after tax amount to around Rs 70 crore a year; and since in the long run the market values of shares must be at least equal to the accumulated share capital and reserves (otherwise companies would go into liquidation sooner or later) the long run appreciation of share values should alone amount to some Rs 70 crore a year, giving a total appreciation of, say, Rs 120-150 crore.

9. The figure of 1/25th is derived from the assumption that the average length of a generation of property owners in India is 25 years.

10. In the meanwhile, the tax could be made chargeable only on non-agricultural property with a provision that agricultural property would be aggregable with the rest of the property for determining the rate at which the tax would become payable.

11. If a man holds shares in, say, a developing gold mine, and the shares are expected to, and do, appreciate in value year by year, can we really distinguish between this benefit (which takes the form of a capital profit) and the benefit which takes the form of a dividend paid on them?

12. In the U.K., transfers of stocks and shares of companies and of Government securities require a transfer deed in much the same way as transfers of real property. In the case of share-transfers, this also serves the purpose of ensuring payment of stamp duty. I understand that in India only the transfer of immovable property requires completion of a transfer deed. I cannot see any fundamental reason why this system should not be extended to stocks and shares, and to Government securities generally, in the same way as in the U.K.

13. Or any other department which may be entrusted with the job of looking after government properties.

14. I do not think whether there is any country where this system is actually in force; but it has often been suggested (e.g., in connection with the discussion of a capital levy in U.K., after the First World War) that the problem of valuation of properties for the purpose of taxation could be effectively solved if the responsibility of valuing the property at the tax-payer, with the Government retaining the right of acquiring the property at the tax-payers' own valuation in cases of dispute.

15. In the U.K., the Central Valuation Office under the

Board of Inland Revenue evaluates properties for both estate duty and stamp duty purposes, and has now also been entrusted with the listing and valuation of all land and buildings for the purposes of local rates.

16. Valuing all property by 'book values' instead of by current market values will mean that the valuation of property for the purposes of the annual tax will lag 8 to 10 years behind the current market valuation of property. Assuming that property appreciated in the long run at the average compound rate of 3% it will mean that the tax will be levied on a basis which in the average of cases, and over a run of years, will correspond to about 2/3rds of the current market value. This should, of course, be taken into account in fixing the appropriate schedule of rates. (The gap of 8-10 years is estimated in the following manner. If no property were to change hands except through decease the average book value of properties at any one time would be equal to the current values of half a generation earlier; since a generation is 25 years, this means an average lag of 12.5 years. This needs to be further reduced on account of transfers of properties of all kinds through purchases and sales and through *inter-vivos* gifts.)

17. Only a cursory statement of the case can be given here. My own views on the concept of "income" appropriate to income taxation, and on the taxation of capital gains, are set out in detail in the Memorandum of Dissent to the Final Report of the Royal Commission on the Taxation Profits and Income (Cmd. 9474). paras 2-18, and 34-72.

18. In this case the High Court in the U.K., held that the profits made on the sale of two farms by a motor engineer were liable to be taxed despite the fact that evidence was produced (and accepted by the Crown) that *(a)* the motor engineer bought the farms for the purpose of farming them and not for the purpose of resale, and *(b)* he was only persuaded to sell them with great reluctance when a man came and offered him a good price for them.

19. Existing anti-avoidance provisions prevent such transactions in case the sale and subsequent re-purchase was undertaken "by the same or any collateral agreement" But there is nothing illegal in buying and selling securities through two separate and unrelated transactions, and it would indeed be impossible to frame anti-avoidance provisions, which prevented a man from selling one day and buying the next day, especially since he need not even buy back the identical security to accomplish his object. Nor is it at all easy for the Revenue to establish that a set of transactions was the result of a single or collateral agreement.

20. Volume 1, Chapter VIII, para 56 (p. 163).

21. Various studies in the United States (such as Seltzer's) concluded that in the U.S.A. the tax had no significant effect on the volume of stock exchange transactions.

22. Opponents of the taxation of capital gains in England also frequently argue both that the tax would be ruinous on industry and that it would yield practically nothing without realising that the two assertions are not compatible with one another.

23. This is shown by the extent of criticism in the U.S.A. Concerning these exemptions in the writings of American authorities on public finance, etc. These exemptions were also opposed by the Board of Inland Revenue of the U.K. in discussing a scheme for the taxation of capital gains in their evidence to the Royal Commission on Taxation. (Cf., U.S. Treasury Study on the Taxation of Capital Gains, and Memorandum by the Board of Inland Revenue, reprinted in the Final Report of the Royal Commission on Taxation, pp. 425-470).

24. Quite apart from the question of the taxation of capital gains, the rise in ceiling rate of income tax from 4 to 7 annas and a corresponding increase in the exemption limit of, and the rates of, super tax, would have considerable other advantages. Just because the ceiling rate of income tax evasion will be far less on super tax (as is, fact, the case in the U.K., where the ceiling rate of income tax is $42^{1/2}$ per cent), the scope for tax evasion would automatically be narrowed down.

25. In the case of individual businesses and partnerships, normally only the good-will of the business (i.e., the excess of the value of business when sold as a going concern over the written down value of the tangible assets) gives rise to capital gains.

26. The figure of 40% is based on the schedule of rates suggested above and size-distribution according to capital gains assessments in the years 1947-53 and it assumes that the present 5 per cent surcharge will continue to be added to the standard rate of 7 annas.

27. American experience suggests that more than two thirds of net reported capital gains arise on transactions in ordinary shares. This corresponds also with the limited Indian experience where during the two years that the tax was in operation some 70 per cent of the total assessed gains were in transactions other than immovable property, machinery and plant, and which, therefore, largely reflected transactions in ordinary shares.

28. Vol. I, Table 15.

29. It is impossible to say how far the fall in margin, over the last five years was a genuine phenomenon, or merely a consequence of increasing concealment of profits by companies (through under-valuation of stock-in-trade, the masquerading of capital expenditure under current expenditure, etc.)

30. *An Expenditure Tax* (London, Allen & Unwin, 1955).

31. Moreover, such dissipatory spending, by increasing profits, would offset the effect of high taxation in reducing the income and the savings of the capitalist classes; if the community's investment expenditure is given, the true incidence of taxes on income and property can only fall on the capitalist classes to the extent that their propensity to spend is reduced in consequence. By encouraging spending. the tax system, thus unwittingly causes the burden of taxes to be *shifted from the profit-earning classes* (taken as a whole) to other sections of the community.

32. In fact, obvious inconsistencies between a man's disclosure of income and his mode of living are already being used in India and in other countries as a means of detecting income tax evasion.

33. The latter require to be deposited with the banks or other institutions to qualify for exemption.

34. These gifts may be subject to gift tax in the hands of the recipient.

35. It is thus proposed that the purchase of works of art, jewellery and ornaments should be treated as capital expenditure and thus exempted from the personal expenditure tax but an annual charge should be imposed in all cases where the taxpayers claim exemption under this head. It is not proposed, however, that such a notional charge should be made with

respect to any existing possessions of jewellery, ornaments or works of art.

36. An alternative method would be to permit the spreading of all expenditure for tax purposes and to calculate the tax on a moving average of the expenditure of the last five years rather than the actual expenditure in a particular year.

37. This means that two adults comprising a family would pay twice the tax of a single person with half that expenditure, a married couple with two children would pay three times the tax payable by a single person with one-third of the joint family expenditure and so on.

38. If the principle that gifts made in contemplation of death (and/or with a view of avoiding death duties) should be brought within the tax net, while other gifts should be exempt, were correct, the proper method to give effect to it would be to compound the potential death duty liability in respect of chargeable gifts on an actuarial basis, rather than rely on some purely arbitrary rule by which gifts made at a particular date prior to death or earlier are entirely exempt and gifts made after that date are fully taxable.

39. Compared with the United Kingdom, the Indian rates appear remarkably low in medium ranges as well as the top brackets. An estate of Rs 10 lakh bears 40% in the U.K. but only 15% in India, at Rs 20 lakh the ratios are 50% and 20%, and at Rs 1 crore 70% and 34%, respectively.

40. Since the average period of a "generation" in India (which is equal to the average age of the father when the children are born) cannot be put at more than 25 years.

41. These latter remarks apply, of course, to the proposal for a comprehensive return required for the annual tax on capital and taxes on capital gains and personal expenditure and not only to the comprehensive reporting system discussed here.

42. I think that people would not want to conceal gold, if such concealment is contrary to law, if all that they save as a result of such a concealment is the one half to one per cent per annum in property tax, though they would have a stronger incentive if the motive for hoarding gold is to prevent the discovery of 'secret savings' made out of undeclared gains which thus escape income tax. The question of the impact of taxation on gold hoarding is further discussed in Chapter 9.

43. In connection with the expenditure tax, the hoarding of bank notes would only present a problem at the beginning - i.e., in connection with the initial introduction of the tax. In subsequent years there will only be a tendency to hoard in note form whatever was successfully concealed as a receipt in the income tax return - here the problem will be no different than exists at present.

44. There may be a risk of a person having more than one code number issued to him (by making a request for a card to different tax offices) but this is no different from the case of a tax-payer dealing with several I.T.O.'s at the same time.

45. In the British Income Tax Act these words appear as a qualification to the enumeration of a list of items, the deduction of which is prohibited. The first item of the list mentions "any disbursement or expenses *not* being money wholly or exclusively laid out or expended for the purposes of the trade," etc. The Indian Income Tax Act proceeds exactly the other way round. It mentions the list of items which are allowed as deductions from the receipts, and ends up (in clause (XV) of sub-section 2 of Section 10) with a general sweeping up clause which asserts positively that "any expenditure.... laid out or expended wholly or exclusively for the purposes of such business", etc., qualifies as a permissible deduction. The difference in the manner in which the definition is introduced in the British and Indian Acts is revealing. It shows that the definition was originally intended to strengthen the hands of Revenue in disallowing deductions. By the time the law was applied in India, it has come to serve the opposite purpose of ensuring that no type of expenditure which comes within the scope of this definition should fail to qualify.

46. Recent Indian legislation also tended in this direction i.e., in the provision to allow the cost of books upto a certain amount, and for the cost of maintenance of conveyances (cars, etc.).

47. Cf., para 140, page 47 of the Final Report (Cmd. 9474). The Indian Taxation Enquiry Commission ignored this problem altogether.

48. These two aspect are not of course independent of one another. Provisions which cannot be effectively administered are themselves the cause of inequities.

49. In the autumn budget of 1947, Dr. Dalton as Chancellor of the Exchequer proposed that only 50% of the expenditure on advertising and entertainment should qualify as deductible expense for tax purposes. As Dr. Dalton resigned from the Chancellorship immediately afterwards, and his successor did not press the proposals, they never got on the Statute Book.

50. This rule was later amended, on the recommendation of the Royal Commission on Income Tax of 1920, so that the relief was made available to *all* earned incomes, whatever their amount, but only on the first £ 2,000 of taxable income.

51. This means, in effect, a return to the system originally in force in the U.K. prior to the recommendation of the 1920 Royal Commission.

52. It also has the incidental consequence that in the income range of Rs 25,000 - 45,000, the progressive withdrawal of the relief is tantamount to a further increase in the marginal rate of taxation, which in these ranges is thus appreciably higher than for unearned incomes.

53. Cf. T.E.C. Report, Vol. II, Ch. IX, para 23. As indicated earlier in this chapter the Commission makes no mention of the inequities caused by the difference in the expenses rule applicable to salaries and profits.

54. These principles were abandoned piecemeal in the U.K. after 1944, when the original reasoning behind the restrictions was long forgotten. The Report of the 1920 Royal Commission made it clear that the claim for capital allowances rests on expediency rather than equity.

55. The tax system contains several "asymmetrical" provisions of this kind which put the man who is taxed on the profits of business in an anomalous position *vis-a-vis* other taxpayers. One of these consists in the permission given to traders to bring anticipated losses into account through the writing down of stocks below cost if market value is less than cost-without a corresponding obligation to bring into account unrealized gains (i.e., to write up stocks when market value is above cost).

56. If the Government wished, in accordance with the general aims of its economic plan, to encourage investment in particular industries and not in others, the ideal instrument is to vary the rate of these allowances accordingly; though from an administrative point of view the differentiation should not be based on the industrial classification of the user, but on the type of equipment purchased (e.g., engineering equipment,

machine tools, power looms, etc.).

57. The State (unlike private business) does not suffer from limited borrowing power.

58. The question of allowances for losses will be examined below.

59. The development rebates are also ignored for the purpose of calculating the balancing charges or allowances.

60. It would, of course, be necessary to continue to allow depreciation in regard to capital expenditure incurred prior to the introduction of the new system, so that the depreciation allowances would taper off gradually.

61. Para 486, page 147 of the Final Report.

62. This is the reason why the United Kingdom law has never recognised the possibility of a negative loss being incurred in connection with the ownership of property. If the maintenance and repair expenditure on property exceeds the income, the difference is not recognised for tax purposes except that for the purpose of calculating the income from property the taxpayer is permitted to substitute the average of the maintenance and repair expenditure of the last five years against the actual expenditure of the previous year, and to deduct such expenditure from the receipts of the year up to the limit of such receipts. Income from property therefore can be zero but cannot be negative. Under the Indian law, on the other hand, a loss on property is recognised for tax purposes in much the same way as a loss incurred from business activity.

63. They added that "theoretically, a carry back against the taxed profits of past years would be equally reasonable, but the practical arguments against refunds of tax paid are sufficient to lead us to reject any extension on these lines".

64. A concession which is already in force in India as a result of the wording of clause (b) of sub-section (vi) of Section 10(2).

65. Though of the two methods of allowing an off-set of losses-against other income in the same year or against income from the same source in any future year - only the latter can be made consistent with the English conception of taxable income, historically it was the former, not the latter, which was the first to be introduced. The right to off-set was introduced in England in 1890 whereas the right to carry-forward a loss (originally for 6 years, now indefinitely) against any subsequent profits of the same business was only introduced in 1926. This explains why the justification of the right to set off is rarely questioned, and the carry-forward is commonly treated as a marginal provision to be made use of only when, and to the extent to which, there is insufficient "other income" to absorb the losses in the same year.

66. Whenever developmental expenditure - either capital expenditure or expenditure on research, advertising, etc. - enters into the calculation of a current trading 'loss', the effect of allowing such a loss to be off-set against income from other sources is that a taxpayer is able to build up a business at the direct expense of the revenue. In other words, capital for the development of a man's business 'B' is provided by the tax abatement on his income from source 'A'. Part of the current tax bill is transformed into capital. Such an arrangement goes beyond the notion of subsidising certain types of investment to the extent of allowing expenditure upon them to be deducted from the receipts of business concerned. In the latter case, if the developmental expenditure exceeds net current receipts the business must find the whole of the capital out of which to make the excess expenditure. In the former case the excess expenditure may be largely paid for by the Revenue. The situation in which a man is risking not his own capital but part of his tax bill in respect of income from other sources, in investing in a business a sum greater than his current receipts from that business, provides an incentive to take uneconomic risks together with wide opportunities for deliberate tax avoidance.

67. From a strict equity point of view, net realised capital losses should qualify as an off-set against other income in so far as they cannot be off-set against realized capital gains-though the case for this is much less strong when income and capital gains (above a certain limit) are charged at a proportionate rate than when they are charged at a progressive rate. However, for reasons analysed in the Minority Report of the British Royal Commission (paragraph 65-67, pages 375-376) and duly recognized in the tax codes of all the countries which tax capital gains, it would be very unwise to allow this since it might lead to wide abuse. If capital losses qualify as an off-set only against future capital gains, it is possible that the taxpayer will not have sufficient capital gains during his life-time to absorb them; and I think that in such cases it would be equitable to allow the tax claim on an unabsorbed capital loss to be credited against the liability to estate duty (or gift tax) at death.

68. This loop-hole could be completely closed if, as suggested below, the provision recently introduced in India on the recommendation of the T.E.C. that the recognition of past losses should be disallowed when a business changes hands, would be made perfectly general (i.e., made applicable to companies as well as to accumulated trading losses in the strict sense).

69. A speculative transaction is defined by Statute as one in which "a contract for purchase and sale of any commodity including stocks and shares is periodically or ultimately settled otherwise than by the actual delivery or transfer of the commodity or scrips", provided that it is not a hedging transaction or one incurred by a dealer or jobber in the ordinary course of his business. The effect of the restriction on speculative losses must obviously be very limited.

70. Clause (ii) of sub-section (2) of Section 24 of Income Tax Act.

71. I presume that this recommendation can only be made effective in the case of private companies and not public companies - at least the interpretation of the meaning of "shareholders remaining substantially the same" would be very difficult in the case of any company which has a large number of shareholders none of whom exercises any direct control over the business.

72. With a proviso also for unabsorbed capital losses mentioned in the footnote to paragraph 149 above.

73. The terms 'refundable' or non-refundable' refer to the question whether the individual shareholder is credited or not with the taxes deemed to have been paid out of his dividend.

74. I am ignoring complicated penalty provisions which are presumably of minor significance, such as the extra tax payable by companies who do not comply with prescribed requirements concerning dividend declarations, etc.

75. Subscribed capital means paid up capital less the amount of capitalised reserves.

76. Sub-section (3) Section 23A of Income Tax Act.

77. Thus apart from the cases covered in the Industries (Development and Regulation) Act, 1951, inter-company

dividends are double taxed for corporation tax in India except that in the case of subsidiaries, the second tax is levied at a reduced rate.

78. I think it is correct to speak of a "virtual limit" in this case, in that the profits in excess of this amount pay a tax of 11 annas in the rupee, or almost 70% as against the 7 annas (43%) payable on ploughed-back profits generally.

79. The Ford Motor-car Company in the U.S.A. has only become a public company a few months ago and even today it would not satisfy the criterion of a "public company" according to the Indian legislation.

80. In India, taking all companies (public and private) together, the ratio of ploughed-back profits to net disposable profits after tax was 68% (i.e., Rs 66.5 out of Rs 98 crore) which makes the 40% limit applicable to all private companies the more absurd.

81. Proviso (b) of sub-section (1) of Section 23A of the Income Tax Act where these qualifications are introduced, is a peculiarly badly drafted piece of legislation. The intention of the law is clearly to exempt from harsh treatment the ploughed-back profits (though only up to the critical limit of 40 per cent of disposable profits) needed for internal expansion, even though the company has accumulated reserves beyond the amount of capital subscribed. But the actual test applied is the relationship between the accumulated reserves and the total amount invested on fixed assets, and whether this enables a company to accumulate more than twice its subscribed capital or not (and if so, how much more) becomes dependent on a purely irrelevant consideration - i.e., on the ratio of fixed capital to circulating capital (or fixed assets to current assets) used in the business. If the required proportion of current assets is twice that of fixed assets, the alternative condition cannot be satisfied irrespective of whether the ploughed-back profits are used for, internal expansion or not. If current assets are only one-half of the original cost of fixed asset, the alternative condition will permit the accumulation of reserves up to twice the amount of the original subscribed capital and no more. If the proportion is only one-fifth, the critical limit is five times the capital originally subscribed, and so on. The above examples ignore the possibility of stock-in-trade, etc., being partly financed out of borrowed capital, but unless the company can borrow more than the whole of its current assets (so that its net liquid assets are negative) an allowance for this would merely alter the numerical limits and will not affect the principal conclusion - that under the proviso of this sub-section literally interpreted, the ultimate growth of private companies is limited to some multiple of their subscribed capital, the actual multiple depending on the technical relationship between fixed and circulating capital.

82. The whole idea that there must be some ultimate limit beyond which a private company ought not to be allowed to grow through the accumulation of reserves seems to be thoroughly misguided. If the provisions of Section 23A had been in force in America in the early part of this century - and if they had been really enforced, which is probably not the case in India - Henry Ford might have been effectively prevented from growing beyond the stage at which he manufactured a 100 cars a year or so.

83. It would be wrong to suppose that an analysis of a company's balance-sheet enables a Commissioner to determine whether there has been an undue with-holding of distribution or not. Assuming that a company satisfied the formal criteria of Section 23A(a)(b) requiring 100% distribution, all that the Commissioner can do to determine whether the application of Section 23A(3) is justified or not is to examine whether the balance-sheet discloses an improvement or a deterioration in liquidity (through the growth or reduction of net indebtedness, or an improvement or otherwise in the holdings of each and other financial assets). It is well-known, however, that the growth in fixed assets and in stock-in-trade is not a steadily continuing process, and large fluctuations in the net liquid position are inevitable. It is impossible to separate out an increase in liquidity which is incidental to the normal activities of a business from one which is the consequence of an undue withholding of distributions prompted by the motive of super tax avoidance. (Not to mention the fact that if the holdings of cash and other liquid assets are to made the test for the application of penal provisions, such holdings - and the profits which gave rise to them - are the more likely to be concealed from the accounts.)

84. In the U.K., the provisions of the Income Tax Act concerning "closed corporations" (which are similar in intent, though not nearly so rigid or extensive as the Indian provisions) have been in abeyance since the war (except for investment companies), and in 1947 the Chancellor of the Exchequer (Sir Stafford Cripps) gave an assurance to Parliament that the provisions will not be applied so long as the policy of dividend restraint is in force.

85. Since the Stock Exchange normally values shares according to the dividend paid and not according to earnings.

86. Para 103, page 387, of the Final Report (Cmd. 9474).

87. The Taxation Enquiry Commission in India and the Majority and Minority of the British Royal Commission have all rejected the idea of a tax on bonus issues.

88. In pre-1914 days, when the exemption limit to super tax was very high in real terms, the charging of company income at the maximum income tax rate (or 'standard' rate) on the whole of the income was probably not so different from the rate at which the profits would have tax in the aggregate, had they been distributed as dividends.

89. In India the adoption of this reform may require some consequential adjustment in the share-out of joint taxes between the Centre and States to compensate for the loss of revenue to the States due to the abolition of income tax on undistributed company profits.

90. Cf., para 66, (Chapter 3) above.

91. Assuming a rate of discount of 5% per annum, the present value of Rs 100 paid in tax ten years hence will be Rs 63 while the present value of Rs 100 paid 20 years hence will be Rs 38. Assuming that personal income and capital gains are charged at the marginal rate of 45% and assuming that realised capital gains show an average time lag of 20 years as compared with the company savings which give rise to them, it would require a tax of 28% on company savings to equalise the burden of taxation on company savings and non-company savings.

92. It is true, of course, that capital allowances are given on all expenditure on certain kinds of assets, irrespective of whether that expenditure is undertaken by companies or individuals. However, the amount of such capital expenditure is very much greater in relation to company income than in relation to non-company income.

93. Thus, as shown in Table 3 (Chapter 7) above, the discounted value of basic depreciation allowances for

machinery and plant carrying an annual rate of 10 per cent, and at 5 per cent interest, is 67%. The discounted value of the capital loss-assuming its scrap value at the end of 22 years to be 10% - is 34 per cent. This implies that if the capital expenditure for the year equals the company savings for the year, 22% of these savings are in effect exempted from tax. With the present additional allowances, as shown in Table 3, the discounted value (assuming single shift operation) comes to 95%; and the extent of effective tax remission therefore to 59% of capital expenditure. Assuming that the annual capital expenditure of companies amounts to two-thirds of company savings, the effective tax remission for a year amounts at present to around 40% of company savings. This justifies a further addition to the rate of company taxation by $66\frac{2}{3}\%$ (i.e., by $\frac{100}{100-40}-1$).

94. It is sometimes argued that equity considerations justify an additional tax on company profits on account of the benefits which the owners of the company derive from the limited liability conferred on them through incorporation. On this view there is a case for a separate company tax as a kind of "franchise tax" over and above the income tax to which the owners would have been liable had the same profits been earned as individual income.

95. These estimates are based on the assumptions made and the methods of calculation employed in the notes to paragraphs 174 and 175 above.

96. This is in fact the case today except that public companies earning Rs 25,000 or less are exempted from the corporation tax. In case the present system of tax on companies is replaced by a single uniform company tax, I do not feel that there is any justification for maintaining this element of graduation in the case of public companies.

97. Unless the equity argument for company taxation is to be based on the benefits derived from limited liability i.e., on the 'franchise tax' view referred to in a note to paragraph 175 above.

98. If in any particular year the dividends distributed exceed the amount earned in that year, the difference can be treated as a "loss" which can be carried forward against future liability to company tax. But all such loss claims lapse on liquidation of the company.

99. Cf., Annexure to this Chapter for an explanation of these and the following estimates.

100. Thus the average effective rate of tax on company savings in 1954-55 appears to have been 52.34% whilst the marginal rate was only 42.76% the difference between the marginal and the average rate being accounted for by the fact that the company pays corporation tax on that part of the profit which is distributed as dividend; and which thus increases the average or effective rate on the remainder of its income.

101. I think there is no case, however, for the existing practice of the double-taxation of inter-company dividends to corporation tax (i.e., for including dividends received from resident companies in the assessable income of other resident companies). The income tax deducted on all dividends paid out is, of course, refundable to a company in the same way as to any other non-liable person.

102. On the capital allowances recommended in para 144 (Chapter 7) above, it is $5\frac{1}{4}$ annas in the rupee.

103. As shown in the Annexure to this Chapter, the effective taxation falling on companies as shown by the assessments of 1954-55, works out at 7 annas in the rupee on the whole income of companies. This is an appreciably higher rate than what could be expected on the basis of the nominal rates in force, and must (presumably) be due to the application of higher rates under various penalty clauses and the partial double-taxation of inter-company dividends for corporation tax. (Our method of calculation of the yield of the proposed rates assumes that dividends received by companies from other companies are not charged to company tax is the hands of the recipient company.)

104. The dividend figures are based on individual assessments and may not provide a true comparison as they relate to an earlier year.

105. This figure was reached by deducting from the gross income tax assessment of Rs 46.8 crore a sum of Rs 14.2 crore with respect to the income tax deducted at source on dividends.

106. I am indebted for the estimates on the distribution of the national income to Shri Mani Mukerji of the National Income Unit of the Central Statistical Organisation.

107. The broad effect of these corrections in the case of factory establishments is to raise both the value of the output and the share of non-wage and salary incomes by about Rs 100 crore.

108. As was mentioned earlier, this appears to be the case also in banking and insurance.

109. Since the average rate of tax on the additional incomes is at least 40%, and much higher than the average rate on non-evaded income.

110. Cf. speeches of the Minister of Finance in the 1956-57 budget debate.

111. The land revenue is not an income tax, nor is the payment of land revenue credited against agricultural income tax liability. The land revenue is the expense to be set off against agricultural income, but since it only accounts at present for just 1 per cent (on the average) of net agricultural income per acre, it has no significant effect on the amount of agricultural incomes liable to income tax.

112. In addition, the concealment of property by hoarding cash, gold or ornaments, is always associated with some risk which increases the cost beyond the amount of income sacrificed:-

(i) In the case of cash, the risk is that the Government might call in the existing note issue and replace it with a new issue (as happened in 1946), in which case the cash hoarding will have to be disclosed; or failing disclosure, it will become valueless, or else can only be sold to other persons for purposes of encashment with difficulty or at a considerable discount.

(ii) In the case of gold, assuming there is a free gold market, the risk is a fall in the price of gold which should check the temptation to hoard as soon as the price of gold rises sufficiently to get out of line with the purchasing power of currency. (This happened in France in the post-war years, when as the result of hoarding of gold, the price of gold sovereigns, etc., had risen to a level at which they were quite out of line with the value of the currency. Subsequently, there was a steady fall in the price of gold over a period of years so that those who hoarded gold as an inflation hedge or in order to conceal wealth, lost considerably in value as well as in income foregone.)

(iii) In the case of jewellery or ornaments, there is an additional cost in the form of a margin between buying and selling prices, since these objects cannot normally be obtained at the same price at which they can be sold.

113. When concealed gains are hoarded the expectation is, I presume, that after a certain number of years the money thus concealed can safely be invested in income-yielding property without attracting the suspicion of the Income Tax Officers. As mentioned in Chapter 6, paragraph 106, in the absence of an annual wealth statement, it must often be difficult for an I.T.O. to rebut the plea that the new money introduced into the business comes from legitimate sources (such as the jewellery or dowry of the wife, etc.,) and not out of hoardings of concealed gains made in an earlier year.

114. It was suggested in Chapter 6 (paragraphs 106 to 108) that such vouchers should be made obligatory on all authorised dealers in gold and jewellery who should be required to obtain duly completed vouchers in connection with selling and buying transactions.

115. The question of the hoarding of gold in relation to taxation will be discussed further below.

116. In Britain, only a dozen or so cases a year on account of fraudulent accounts are prosecuted; whilst penalties imposed by the Department were collected in 18,114 cases in 1954 in addition to 133,757 small cases dealt with by the District Inspectors (Cf. 97th Report of the Commissioners of Inland Revenue. Cmd. 9351).

117. This is the declared policy of the Board of Inland Revenue in the U.K. as stated by the Chancellor of the Exchequer (Sir John Anderson) in the House of Commons in 1944.

118. Even the maximum penalty of 150% is not enforced except in rare cases. In the U.K., in seven years 1948-54, £ 47 million were collected in additional assessments as a result of the un-covering of under-assessments, in some 45,000 cases. (Cf. 97th Report of the Inland Revenue, Cmd. 9351, p. 20). The total penalty raised amounted to £ 18 million which is 38% of the additional tax imposed. I do not suppose that the Indian data, if available, would show any different picture.

119. Thus when China experienced such an hyper-inflation in the final years of the last War, the economic advisers of the Chungking Government thought that the effective antidote to the famine conditions caused by the catastrophic rise in food prices was the importation of gold which would cause gold prices in terms of local currency to fall and thus indirectly cause the dishoarding of wheat and other commodities. Aircraft-loads of gold were imported as a means of fighting famine conditions, though, I gather, with doubtful effect. A similar remedy was applied in Greece during the great inflation in 1946.

BOOK REVIEWS

Sandesara, J.C., *Industrial Policy and Planning 1947-91 Tendencies, Interpretations and Issues*, Sage Publications, New Delhi, 1992, Pp. 211, Price Rs 200/-.

This is a comprehensive review of India's industrial policy since Independence till 1991, when major changes were introduced in the policy framework. As explained by the author in the Preface itself, 'The principal purpose of this book is to highlight the tendencies at work in relation to the major objectives of India's industrial policy and planning since Independence' (p. 9). The objectives considered are rapid growth, fast diversification, promotion of small industry, reduction in regional imbalances and the prevention of the concentration of economic power in private hands.

Basically, Sandesara raises and answers two specific questions: Have these tendencies been in the directions expected on each objective? And what is the overall assessment? Based on these, some current and near-future issues are considered. The initial portion of the book (mainly Chapters 2-6) presents considerable statistical material and the later portions (particularly Chapter 7) try to interpret the same and give an overall assessment of the achievements and gaps in performance so far.

So much has been written on the subject of India's industrialisation and so much more can be written on its various facets, that the writer has thought it fit to limit his analysis only to specific issues mentioned earlier and to omit some, or treat some only cursorily, however important they may otherwise be. This was inevitable, taking the constraint of space into account.

The author explains that ensuring uniformity of information has presented some difficulty and statistics have had to be collected and presented on different bases and using different sources. But irrespective of the variety of sources, the broad conclusions that emerge seem to agree. Based on the information so available, different periods showing different growth rates are identified, which briefly shows that 1951-65 was a period of high rate of growth, 1966-89 was a period of low growth (of which 1966-74 showed a very low rate, and 1973-89, a better performance). Breaking down of this information, Plan-wise, also corroborates the same pattern. The relevant chapters do contain a voluminous wealth of information, not easily available otherwise in one place.

The book also looks at diversification of industries from the point of view of basic, capital, intermediate and consumer goods - durable and non-durable - industries, because diversification is also a sub-objective of industrial growth. The three most striking features which the author finds in this connection are: (a) substantial increases in the weights of basic and capital goods industries; (b) a substantial decline in the weight of consumer goods industries; and (c) a small decline in the weight of intermediate goods industries, between 1956 and 1980-81. Other aspects like Value added, Factory employment, Sector-wise changes, Small industry, Regional distribution, and Concentration, etc., are also covered fairly exhaustively.

The author finds that 'The conclusion of this study on the overall assessment of the performance of India's industrial economy on economic and social objectives during the period of planned economic development is that it has been, in general, satisfactory. The last forty years have seen a rate of industrial growth, in terms of the index of industrial production, of about 6 per cent per annum. And the performance on other, social, objectives, during this period has, in general, been in the directions expected of the objectives. Industrial production has been greatly diversified, modern small industry has emerged as a major sector to reckon with, inter-state disparities, as also intra-state disparities, in the industrially developed states have narrowed, and the concentration of economic power has not only not increased but has declined over the period' (p. 121).

Because of their favourable impact, the study 'advocates continuing and strengthening in future the policies and measures that accounted for high growth in the recent past: to increase investment in the infrastructure, to improve the allocative efficiency of that and the manufacturing sectors, and to go ahead with the liberalisation policies, tempered with greater State support to the new branches of manufacture coupled with diminishing support to the old branches' (p. 10).

In this context, the author's emphasis is on improvement of capacity utilisation which he considers to be of prime importance in increasing industrial production. According to him, this seems to be possible because of the vast unutilised capacity in industry already existing. To quote him, 'It would thus seem that for stepping up the rate of growth of industry, we have to depend substantially on getting additional production out of the capacity already installed. Fortunately, the reservoir here is plentiful' (p. 139).

The author recognises that constraints to full utilisation of capacity arise on account of internal as well as external factors. But he comments that '...it is widely acknowledged that external factors are responsible for a good deal of the low utilisation of capacity in Indian industry' (p. 140). One of the factors that he identifies as crucial is the lack of infrastructure.

The Government, naturally, has to help in solving the external problems of transport bottlenecks, power cuts, delays of various sorts, etc., which are acknowledgedly responsible for a good deal of low utilisation of capacity. The units which try solving these problems at their level and at their cost find such solutions costly and often not workable. He therefore suggests that requisite investment therein must be made on a high priority basis at the government level. The author finds that the increased industrial growth during the mid-seventies is intimately linked to the improvement in infrastructure during the relevant period.

Thus, 'We have to address ourselves squarely to the basic problem of increasing the supply of infrastructural facilities and improving their dependability and efficiency so that industry is able to utilise its capacity fully, and to resort to multi-shift operations where this is not the case' (p. 140). The author also makes a few comments about the extent of sickness, as also the steps taken by the Government including the setting up of Board of Industrial and Financial Reconstruction (BIFR). The book briefly reviews the work done by BIFR so far, but feels that it is too early to pass any judgement on its working and its effectiveness. A new suggestion which the author makes deserves specific mention and serious consideration, viz., evolution of a 'sick industry policy' instead of what appears to be a 'sick company policy'. Under the former, the problems of sickness will be seen from the angle of industry as a whole, and not merely from the angle of a company which is the case today. It is true that with the present approach, problems of individual units get attended to and perhaps sorted out, but it does not have any impact on the problems of the industry as a whole. The implications of the author's point are worth noting, viz., that in the current system, only piecemeal solutions will be found and attempted, which is not in the interest of the economy as such, basically because of the sheer size of the problem. The Government must make a note of this suggestion carefully.

Apart from the usual problems created by the sick units, the author has another angle of looking at the same. For example, he mentions how, while sanctioning new capacities, the licensing authorities also take into account the capacities of such units although in effect they are non-operative. As a result, the capacities existing in the industry are rated on the higher side, implying less scope for the entry of new units or the expansion of other units. Of course, with the recent licensing policy changes, this will not apply to most of the sectors which have been kept out of licensing requirements. But in the areas in which license is still required, the point must be taken note of.

After explaining the main features of the New Industrial Policy (NIP) of July 1991, the author goes on to explore how these changes seek to serve the objective of raising efficiency and accelerating the production of industry. He then observes: 'Thus, the logic of the NIP, the response of the stock markets to it and the experience of liberalisation all lead us to believe that the NIP, along with liberalisation in other areas, has paved the way for increased efficiency and higher rates of growth in a substantial way, to the order of, say, 10 per cent per annum during the medium term. However, in the very short run, as economic agents will be busy making adjustments to these changes, growth may slow down' (p. 153). In other words, he cautions that during the period of change and adjustment which is also a period of turbulence, some adverse effects are to be expected, including slowing down of production. Once this phase is over, he expects that industrial growth may accelerate in a sustained manner exceeding the figure of 8 per cent of the eighties. As is common knowledge, unfortunately, these predictions have, in fact, come true and government has also conceded that there has been some deceleration in industrial production, although it has naturally advanced many other factors as well, as being responsible for it.

Sandesara also rightly emphasises that if we wish to capitalise further on the gains from flexibility emerging from other areas, some serious thought needs to be given to flexibility in the field of employment and industrial relations, which, unfortunately, is absent to-day. He also points out that as it is, employment growth has slackened and will further slacken because NIP has made many jobs in government departments/ corporations redundant. He, therefore, stresses that special care will have to be taken of such workers. This could be achieved by various ways including reasonable compensation to those who lose their jobs, or their rehabilitation in new jobs in the enterprises, industries and locations that are growing.

Having touched on the new policy for industry, the author goes on to consider the social objectives arising out of the same, viz., primarily small industry promotion, regional dispersal and the prevention of concentration.

On the small industry front, he considers the advantages and handicaps that they enjoy and suffer *vis-a-vis* the large units and comes to the conclusion that in practice, their handicaps outweigh their advantages in most branches of manufacture. As a result, the small unit is badly placed in the market and in fact, in many branches of manufacture, small-scale production has disappeared, or exists on the fringe, or is being kept alive by supporting measures.

As far as regional distribution is concerned, the author picks up two major findings, viz., that inter-state disparities have narrowed, and that inter-district disparities in industrially developed states have narrowed, but inter-district disparities in other states have widened.

On concentration, the author notes that the faster expansion of the public sector has reduced the relative importance of the private sector in industry, though even the private sector has expanded massively since the Second Plan. Here also, while the assets of companies of all sizes have increased in absolute terms, the large-sized groups have grown at a slower rate than the other groups. There has also been some reshuffling among such groups and some new groups have entered in place of some of the old ones. Simultaneously, while some houses have expanded, some others have actually split. And finally, there is competition of two types: among large companies themselves for control over one another and also among the individual members of the same groups to gain control over each other.

As for industrial growth, the author's findings are as follows: The first decade-and-a-half and the last decade-and-a-half of planning have experienced very high rates of growth, viz., 8 per cent per annum. One of the main factors explaining this is the heavy investment in industry in the earlier plans, which in subsequent plans was not possible and is unlikely even in the Eighth Plan. The rate of growth can, therefore, as suggested earlier, be stepped up only through better capacity utilisation. To achieve this, he advocates linking monetary, fiscal and physical incentives with capacity utilisation so that better utilisation is properly rewarded through measures like issue of licenses on priority, funds at concessional rates and rebates in taxation, etc. This, in turn, would lead to lesser demand on scarce capital and human managerial resources.

Among other issues, the author refers to the drawbacks of the public sector and the measures necessary to remove them. Although he does not make any specific suggestions for its improved performance, he seems to hint that privatisation of one sort or another is going to be inevitable.

The author also adds that inspite of the better performance of the private sector in many respects, it too suffers from some weaknesses, mainly arising out of government policies. He expects that recent changes in economic policies may improve the performance of this sector also. In fact, he suggests that appropriate changes in economic policies which liberate the industry from many unnecessary controls will really go a long way in promoting growth. He ends up on a note of confidence that the new approach adopted by the new Government as part of the Eighth Plan augurs well for the economic objective of growth and also for other social objectives.

Both because of its vast coverage of data and a careful analysis of the same, the book should prove a useful addition to the literature on the subject.

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Andersen, Walter K. and Shridhar D. Damle, *The Brotherhood in Saffron: The Rashtriya Swayamsevak Sangh and Hindu Revivalism*, Vistar Publications, New Delhi, 1987, Pp. XIV + 317, Price Rs 175/-.

This is a scholarly study of the Rashtriya Swayamsevak Sangh (RSS) and some of its affiliates, based on official correspondence, literary sources and interviews. Among affiliates most attention and space has been accorded to the political arm of the RSS - the Bharatiya Janata Party and its earlier incarnation, the Bharatiya Jana Sangh. There, too, the focus is more on the relationship between the political limb and the parent body. The book does not concern itself with larger issues like implication of the RSS and its family (*parivar*) for secularism, nationalism, the social and political order, etc. - issues that have been attracting wide attention for the last several years. However, to the questions which it does deal with, it brings a good measure of sociological sophistication.

One important contention of the book is that the RSS distrusts politics and this is why its relationship with the BJS and the BJP has been uneasy through all these years. When RSS decided to set up its own political establishment it did so reluctantly and at the time when the book was being prepared the authors found that the BJP had, on the whole, a 'diminished significance' (p. 4) in the eyes of the RSS. This story with all its tensions and ding-dong movements has been well told.

The RSS, according to the authors, was conceived as an 'educational body' (p. 2) to inculcate among the Hindu youth certain attitudes and values for the regeneration of the Hindu society. It, therefore, values 'absolute' ethical standards and tends to look down upon party or electoral politics because of the 'relativist' ethics which circumstances force upon them. Whenever, therefore, the BJS or the BJP was seen to deviate from the ideological and behavioural norms favoured by the RSS, the latter tended to withdraw its support and encourage other affiliates whose work was more in conformity with its character-forming mission.

The RSS exercises control over the affiliates (including the BJP) through full-timers (*pracharaks*) posted at critical points. The *pracharaks* are the 'gate-keepers' for recruitment and promotion. However, the affiliates also have members from non-RSS backgrounds. The result is tension and friction. The affiliates depend on the RSS for supply of committed cadre and for beginning work in new areas and new groups; on the other hand, the RSS element within the affiliate tries to enforce its norms and thus places a limit on expansion. '....the dilemma facing all the affiliates is that organisational cohesiveness', as insisted upon by the RSS, 'may get in the way of mobilisation objectives.' (p. 253). This analysis provides a useful insight into reciprocal relationships. In any case this is certainly one way to understand the obvious hesitancy of the RSS, noticed and documented by the authors, in entirely adopting the BJP as its own.

Events over the last five years since the publication of the book must make the reader wonder, however, whether now the tail has begun to wag the dog! Is the RSS getting more political?

Another useful part of the book is its description of the mechanics of RSS organisation, training and processes of attitude formation. In this context an interesting point is that it is the friendships and personal relations among comrades brought up, perhaps from childhood, under a common socialisation process which holds the RSS family together. Ideological commitments certainly exist but the authors' impression seems to be that they play a secondary role (p. 7).

One would have liked to know more about the control mechanisms which RSS uses to lend a certain broad direction to the members of the *parivar*. As things stand, the knitting together of a very large number of constituents, small and big, here and abroad, of the sprawling RSS empire is a (largely unnoticed) management miracle. The clue provided by the authors, i.e., community feeling, is certainly important and yet it falls short of an adequate explanation.

In defending the RSS against charges of Fascism the book makes some valuable comments. It warns: '...there are significant differences with the European expression of Fascism that should caution one to handle the comparison carefully' (p. 82). In the Western manifestation of Fascism the 'National Will' is embodied in a 'leader'; to a certain extent this is true of the RSS also and yet it is necessary to remember that the RSS type leader is supposed to be austere and detached, untainted by worldly temptations. 'European Fascism', the authors say, 'like other forms of totalitarianisms, sought to destroy or seize control of all existing centres of socio-political and economic power' (p. 83). The RSS, by contrast, has neither a totalitarian nor a revolutionary objective. Finally, 'while fascist doctrine traces all power to the political leader, the belief systems of the RSS displays a marked distrust of political leadership. ... In its blueprint of the ideal society, political power is held to be illegitimately exercised unless restrained by 'constitutional' sages who interpret *Dharma*' (p. 83).

This reviewer found the authors' treatment of the RSS ideology somewhat unsatisfactory for several reasons. In the first place (as witness the subtitle also) the authors describe the RSS as a 'revivalist' organisation. What precisely they mean by revivalism is not clear. Again, among revivalists two types are distinguished and the RSS is placed in the 'reformist' category. This, in the absence of any explanation, is quite confusing.

Whatever the connotation in the mind of the authors the characterization of the RSS as 'revivalist' appears one-sided. True, the authors do bring in the urge for freedom from foreign rule and the necessity, felt by the RSS, of meeting the Muslim threat, but these factors do not get sufficient stress. The same criticism applies to the description of Tilak as a 'Maharashtrian revivalist leader' (p. 12) or a 'leading Maharashtrian publicist of revivalism'(p. 14).

A pervasive habit of the authors is to trace almost every feature of the philosophy and practice of the RSS to some ancient religious or metaphysical doctrine, especially *advaita vedanta* (philosophical monism of Shankara). '*Advaita Vedanta*, a school of classical Indian philosophy, provided the founders of the RSS with the core concepts around which the solutions for revitalising society were constructed'(p. 75). They do say that RSS is a 'lay order' (p. 77) and that it has 'no metaphysical concerns' (p. 76); yet statements like 'Hedgewar, like all other revivalists, believed that the Hindu past possessed the conceptual tools with which to reconstruct society' (p. 71) and similar references elsewhere confirm the impression that the RSS, in the eyes of the authors, has a somewhat antediluvian approach. The mistake here, frequently, is to confuse metaphor with substance. Words like Samskar, Sadhana, Karmayogi, although of ancient origin have changed their meanings in linguistic evolution. Linguistic continuity is inevitable when you have to make do with the language you have inherited; to take it literally can be misleading. Similarly, language many times serves an evocative function and it may be put to that use to accomplish tasks that are essentially modern.

A central weakness of the book is the attribution of philosophical continuity to the RSS - an organisation which was sixty-two years old when the authors wrote the book. They say that the 'founders' of the RSS were 'inspired by Vivekananda's message' (P. 17). N. H. Palkar's authoritative biography of Hedgewar - the real founder - does not contain even a single reference to Vivekanand in the index, nor does the book show any evidence of Hedgewar being influenced by his thoughts. It is well-known that Hedgewar and the next chief, Golwalkar were figures cast in entirely different moulds. The former did not have much intellectual sophistication; he pronounced certain commonsense propositions about Hindu unity. He was a plain and earthy man, fired with the passion of liberating the country from foreign rule and of uniting the Hindus so that they are enabled to withstand Muslim assaults. Golwalkar, on the other hand, had a marked spiritualistic bent and lacked revolutionary fervour. The latter, it seems patent, had far more conservative and orthodox views on most issues, compared to the former. The book mentions Golwalkar's 'saintly style' (p. 43) but matters, in fact, go much beyond mere styles. The authors should have taken a cue from two of their own observations. When his new vision was taking shape, the 'major influence' on Hedgewar was the manuscript of V. D. Savarkar's seminal book *Hindutva* (1923) (p. 33). On the other hand, what impressed Golwalkar was another book, *Rashtramimamsa*, by another Savarkar (G. D.), elder brother of V. D. and a revolutionary in his own right. Golwalkar's *We, or Our Nationhood Defined* is, by and large, a translation of *Rashtramimamsa* (p. 43). If the authors were to delve deeper into the originals they would have found a striking contrast. V. D. Savarkar's *Hindutva*, for the first time, makes a distinction between 'Hindutva' and 'Hinduism' (or 'Hindu Dharma') and the former, a cultural-territorial concept, is the foundation of his Hindu Nationalism (Hindu Rashtra). In consequence his 'Hindutva' is non-theological and his Hindu Rashtra completely secular. By contrast, G. D. Savarkar's book bases his Hindu Rashtra solidly on religion. In other words, V. D. Savarkar (considering also his social reformistic writings) was a thoroughgoing modernist, whereas G. D. Savarkar was a hard-core conservative and revivalist in the true sense of the term. This difference between the two Savarkars is indicative of the difference between Hedgewar and Golwalkar. As is clear from Palkar's book (with which the authors are familiar) Hedgewar was essentially practical, with feet firmly planted on the ground and one who had borne the rough and tumble of politics, whereas Golwalkar showed a spiritual kinship with a *sanyasi* of old fallen into the mundane world. One does not know whether Hedgewar was equally impressed by Savarkar's social thought; perhaps he was not. He did talk of preserving Hindu religion and culture in a general way. But he never seems to have taken openly reactionary positions on social issues as Golwalkar did. The authors refer to the 'activist stirrings' within the RSS (p. 145). These were directed *against* Golwalkar by rebellious youth who thought he had shorn the organisation of its vitality and dynamism. Thus, to put Hedgewar and Golwalkar on par in respect of ideological approaches is a - historical and misleading.

There was another break in continuity with the coming in of third chief, Deoras, who is more reminiscent of Hedgewar (who brought him up as a swayamsevak from childhood) than Golwalkar. There is a certain freshness and modernity to his outlook. True, he has no glamour or charisma of his predecessors but, in his quiet way he has been able to change the tenor of his organisation. For example, participation of the RSS in the struggle launched by Jayaprakash Narain would have been unthinkable if Golwalkar were the head.

The book talks of the RSS opposition to *jati* (the caste system) (p. 76). This is questionable in the Golwalkarian context. Golwalkar and RSS publicists brought up in his shadow extol the *Varna* system; they disapprove of *jati* but half-heartedly. There are no clear signals that they would go in for a caste-less society as unhesitatingly as Savarkar did. RSS literature is short on pronouncements concerning economic equality. The authors talk of the 'equalitarian undercurrent to RSS thinking and practice' and cite as an example the small range of income differences postulated by the Jana Sangh in one of its resolutions (p. 81). But this can hardly be taken as representing the RSS view.

The gnawing impression remains that in spite of evident scholarship and labour, apart from providing certain interesting approaches and insights, the authors have not been able to make a complete success of their venture in its theoretical parts.

There are quite a few errors of spelling/printing. Kharpade (for Khaparde), Markandrao (for Martandrao), *Aryaveda* (for *Ayurveda*), Khaskar (for Khaksar), etc. At least the Indian (and Maharashtrian) member of the duo should have been careful to check that it was S.D. (and not B.N.) Javadekar who wrote *Adhunik Bharat* (p. 21). Worst of all, he cannot be forgiven for attributing to Ramdas a commentary on the *Bhagwadgeeta!* (p. 9).

Yet I would recommend the book to students of political and social affairs for the attempt it makes to discover the indigenous roots and native of an important organisational phenomenon in the recent history of India.

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Beteille, Andre, *Society and Politics in India: Essays in a Comparative Perspective*, Oxford University Press, 1992, Pp. 317, Price Rs 275/-.

This is a collection of essays written over a period of 25 years by Andre Beteille, Professor of Sociology at the University of Delhi and a corresponding fellow of the British Academy. It is a book by an eminent Sociologist for other eminent Sociologists, almost every paragraph of it takes note of the work done and views expressed by other sociologists of international repute. In fact many of the essays are the material prepared for and presented at international fora.

Every science has to percolate to the men of action who make it their business to change human life, whether from the motive of private profit or public good. The present book is extremely valuable for such men also for it presents to them a clear picture of the Indian society, drawn after careful study, in words which have been polished and re-polished to give them precise meanings. The material studied includes, on the one hand, texts which give an already preconceived historical view of the society and, on the other hand, the lived-in experiences of. today's society. The concepts which are developed are also checked out by applying them to other societies so that the language of sociology may become universal. When from time to time it becomes apparent that a particular word can mean more than one thing it is substituted by some other expression. All this gives us a rich and precise language for expressing our own ideas.

While drawing up a picture of today's society, the author has discussed the merits and demerits of the book-view as opposed to the lived-in view of the society. He also discusses the merits and demerits of heightening the differences between two societies as against looking also to the similarities.

One of the basic realities of the Indian society is that of castes and tribes and backward classes. These realities have been politically recognised and a lot of politics revolves round them. The first few essays in the book analyse the nature of caste, tribe and the backward classes. This nature is made clearer by looking to other countries where societies are divided on the basis of colour or race or kinship. These divisions are not brought about by somebody's benign design but are the products of various historical and human factors involving antagonism rather than harmony. Just as these divisions were not brought about by somebody's design, they are not going to vanish by a mere ideological onslaught. Yet, they were never unchanging phenomena. They have been changing and will continue to change and finally merge in new structures. Taking the case of tribes, those living in the interior regions of India became Hinduised through a contact with the Hindu civilization, some became castes within the Hindu society, some became kingdoms after the Hindu model and so on. In modern times, all tribes and castes and backward classes have come under the influence of modern education, professional employment, urban living and the growth of representative government and political parties. The present book maps these changes and makes projections about the future of all these backward classes. It shows how the new culture is absorbing the castes just as the old culture absorbed the tribes. It shows how the State is supplanting the primacy of traditional culture. Thus a small non-state society (a tribe) gets absorbed in a bigger non-state structure (a civilization) and later the whole mass of civilization takes the form of a modern state. The author sees the future of the backward classes in the same way as most others do. It is that while the forces of change are working towards an integration of these classes into the general community, mostly through interpersonal links cutting across group barriers, some of the conscious steps taken by the state for quickening the pace of integration are re-inforcing the separate identities of these classes and increasing the tensions within the society; that therefore the completion of the process of integration will take quite some time.

The book is mainly about backward classes. A new conflict which is taking shape in the society does not seem to have caught the attention of sociologists. It is the conflict between whole civilizations. Political parties are not now satisfied with a retail support of local castes. They are out to garner the wholesale support of entire civilizations, either the Hindu civilization or the Muslim civilization. Muslim parties tried this and got Pakistan. The Muslims now left in India are a scattered minority and have lost the capacity to mount such a big operation. But many of their leaders are trying to maintain a Muslim solidarity for protecting their interests. It is the Hindu leaders that are now pursuing the grand design of *Hindutwa* reigning supreme in India. Castes and tribes have to submerge in this design. So, if one is thinking only of castes and tribes, here is another force which is trying to demolish these barriers, albeit on grounds quite different from those of 'secular' people. This new conflict needs to be studied by sociologists, both, as a topic of study and as a problem crying for solution. The main aspects to be studied would be: the motivated typification of the civilizations in conflict, much in the same way as Indian and western societies are presented as reversals of types; how far does the living experience of individuals go along with such typification and with the picture of conflict; how far have alternate pictures been presented to them, what are the networks through which these ideas are propagated, what are the strengths and weaknesses of these networks, etc. All these seem to be legitimate topics for sociological studies.

The most interesting part of the present book is its investigation into the ideas of equality, individualism, personality and self, the last mentioned concept being the special concern of Hindu philosophy. The modern state looks upon each individual as a separate entity and does not deal with him through any group to which he may belong. The author has pointed out how Tagore did not like the submergence of an individual even in a 'nation'. But the concept of individuality is closely linked with that of equality. The author has investigated how far and in what sense these values have been accepted by the Indian society and by the Indian state. He has brought out the difference between a formal equality granted to an individual by law, enforceable by law courts, and on the other hand an equality of opportunity and material benefits brought about by state policy. For purposes of state policy, group identities have to be recognised and a curb placed on the individual's legal equality. There is also an argument that since individuals vary in their intelligence and skills, equality of opportunity is bound to result in inequality of achievement. The Indian State which reserves a share of the educational and employment opportunities for backward classes has to take a stand on these contradictions. The sociologist in Andre Beteille refrains from offering any prescriptions.

To complete the author's presentation of the subject, it may perhaps be pertinent to point out that Mahatma Gandhi introduced a third value to resolve the conflict between individualism and substantive equality. That value he termed as trusteeship and he derived it from, *inter alia*, the Christian ideal of the service of humanity and the Hindu ideal of *Aparigraha* (i.e. not amassing wealth; rather, not being a slave to one's own wealth).

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ANNOTATED INDEX OF BOOKS AND ARTICLES IN INDIA

EDITOR'S NOTE

These abstracts are prepared by the author of each book/article sent to us voluntarily in response to our invitation through the Economic and Political Weekly. These cover publications after 1st January 1986. Only abstracts of books/articles so received are published. The index therefore is not exhaustive and complete.
The limit of 250 words and 100 words for abstracts of books and articles respectively is strictly enforced. Only a minimum amount of copy editing is done in order to bring the abstracts within the prescribed limits. The readers should approach the author of the abstract, not this Journal, for any clarifications.

BOOKS

1993

B.D. Dhawan, *Trends and New Tendencies in Indian Irrigated Agriculture.* Commonwealth Publishers, New Delhi, 1993.

This book is the author's sixth one on Indian irrigation, all published in the Institute of Economic Growth's series, *Studies in Economic Development and Planning*. Consisting of fourteen chapters, this highly empirical work is primarily an analytical investigation based wholly on secondary sources of data. It has a wide coverage of topics in Indian irrigated agriculture. Some of its noteworthy research findings are as follows:

The downtrend in the rate of irrigation capacity utilisation is not well founded in facts; it arises mainly because of procedural changes in measurement. In contrast to almost stagnation and high instability in rainfed farming in five selected states, steady uptrend in yield is discernible in irrigated agriculture. Likewise, there is no long-run weakening of the beneficial role of irrigation expansion on intensity of cropping. Though the realised yields are well below the potential irrigated yields, the elasticity of foodgrains production with reference to irrigated area is about one at the national level. All in all, the case for persisting with the past policy of enlarging the size of irrigated segment *vis-a-vis* dryland segment remains strong in our Five Year Plans.

Employment-output elasticity in irrigated farming appears to weaken over time. Strengthening the electricity supply system is a better policy for facilitating ground water markets than the policy of highly subsidised, flat power tariff for pumps. Though ground water markets are expanding, fear about emergence of 'water lords' is misplaced. Diffusion of drip/ sprinkler mode of irrigation cannot gather momentum so long as irrigation remains a low priced input for the Indian farmer.

Chaubey, P.K., *Plan Modelling in India: A Critique*, Sehyog Prakashan, New Delhi, 1992.

This is an attempt to study the official and non-official efforts at modelling the Indian economy for planning development. It has chapters on formulation process as well as on approaches to plan formulation besides those on plan models attempted in a host of contributions. The last two chapters are devoted to technical and policy evaluations of the plan models particularly since the fifth plan. Weaknesses such as those related to translation of investment profile according to development heads are brought to the fore in the chapter on Technical Evaluation and those related to myopic conception of planning process, in the chapter on Policy Evaluation. This is done keeping in view the polity changes at home and elsewhere. Exhaustive notes to various chapters are provided at the end of the book.

The Journal will publish in each issue Annotated Bibliography of Books and Articles on Indian Economy, Polity and Society, published after January 1, 1986. Authors are requested to send their entries with full details of publication and annotation not exceeding 250 words for books and not exceeding 100 words for articles. Use separate sheet for each entry.

BOOKS RECEIVED

Currently, a large number of books are being published on Indian economic, political and social problems and developments. We give below a list of books we have received with a request for a review. For want of editorial resources, it is not possible to review all of them though many deserve a critical review. Interested readers are requested to write to the editor indicating which of the following books he would like to review or write a full review article on. We shall be glad to do the needful. Readers are also welcome to review books recently published, but not appearing in the following list. As the contributors to this Journal are aware, all contributions published here are adequately remunerated.

Giriappa, S.; *Rural Development in Action*, Daya Publishing House, Delhi, 110 035, 1993. Pp. xx+218. Price Rs 250/-.

This study takes up the case of a coastal region in Karnataka as to its different aspects of development process and prospects. Agricultural development with reference to growth pattern of different crops, nature of operational holdings and forestry is analysed along with sectoral developments like sericulture and fisheries indicating the available development initiatives. In rural industrialisation, labour augmentation is an essential input and an evaluation of the self-employment programme in achieving the desired goals is analysed; also the efficacy of a cooperative sugar factory is being attempted. Finally, considering the case of a micro-region, various elements of rural development (including IRDP) are studied as to the performance of the 'Project'. The main emphasis of IRD programme is on productive asset creation through subsidy. Subsidy should be only a short run phenomenon so that the technique of rural development is imbibed into the beneficiaries on a permanent footing. On the whole, the micro approach has to be specific and sustainable within the macro approach.

The intensity and problems of rural development, though different from those of urban development have not been adequately conceptualised. A system of rural development has to include both micro (target-oriented short term objectives) and macro (long term oriented sector and area development) dimensions. It should shred the view of mere project-orientation in different agro-economic systems and objective regimes.

Gumaste, V.M.; *Technological Self-Reliance in the Automobile and Ancillary Industries in India,* Institute for Financial Management and Research, Madras, 1988.

The achievement of Technological Self Reliance (TSR) has been one of the major objectives of Indian planning. The study attempts to find out how far and how much TSR has been achieved. It focusses on the Indian automobile and ancillary industries.

The study indicates that although TSR may not have been achieved in the absolute sense, the balance sheet is not wholly disappointing given the appropriate milieu, TSR appears to be well within the reach of the Indian automobile and ancillary industries.

Isaac T.M. Thomas, P.A. Van Stuijvenberg, and K.N. Nair; *Modernisation and Employment - the Coir Industry in Kerala,* Indo-Dutch Studies on Development alternatives, Sage Publications India Pvt. Ltd., New Delhi 110 048, 1992, Pp. 249, Price Rs 250/-.

The relatively slow development of the modern industrial sector in developing countries has meant that growth in employment has not, by and large, kept pace with the increase in the labour force. As a result, the traditional sector has had to continue its vital role of absorbing the growing surplus labour force. The need for modernising traditional, 'labour intensive' industries assumes significance in this context.

This important study takes up the specific case of the coir industry in Kerala which is suffering from reduced output and stagnant employment even though it is considered to be among the most important sources for labour absorption in the state. Keeping in mind that modernisation and technological change may result in the displacement of labour, the authors argue for combinning the technological upgradation of such small-scale industries with an employment policy aimed at minimising the displacement of labour. Such a compromise between technological and employment objectives would result in the selection of what is called 'appropriate technologies'.

The authors document in detail the alternative technologies that are available for the coir industry and consider their implications in terms of wages, employment and production costs. Findings point to a set of intermediate technologies that are cost effective, will improve quality and result in minimal displacement of labour which, the authors argue, are likely to be neutralised by the attendant increase in production capacity.

With its original data and fresh theoretical perspective this book will interest industrialists, economists, policy makers and those concerned with labour and employment policies.

Kapila, Uma (Editor); *Indian Economy Since Independence, Vol. 4 and 5, Recent Developments in Indian Economy with Special reference to Structural Reforms, Parts I & II,* Academic Foundation, Delhi, 1992, Pp. 352 (Part I), 248 (Part II), Price Rs 575/-.

The two volumes contain contributions by evinment economists and experts, providing an exhaustive and critical account of various aspects of structural reforms introduced in the Indian Economy after June 1991. The issues covered, among others, are the constraints on growth; the need for economic reforms and change in development strategy: the new industrial policy; trade policy and industrialisation; productivity and growth in Indian manufacturing; maximising foreign investment; devaluation; reform of industrial and trade policies; balance of payments; five year export - import policy (1992-97); reforms in the banking and financial systems; monetary policy and interest rates; tax reforms; economic policies for 1991-92-93; public finances; savings; prices and public distribution; output and employment effects of recent changes in policy; poverty in 1980's and employment policy for the 1990s; eighth five year plan; 1991 census reflections; urbanisation; and the latest account 'After One Year of Structural Reforms' by Dr Man Mohan Singh, the Union Finance Minister.

Mathur, B.P.- *Foreign Money in India,* Macmillan India Ltd, New Delhi, 1989.

Economic development through foreign aid and foreign investment has dominated the international economic scenario for the last three decades. Economic theorists generally consider 'aid' as bestowing an unquestioned advantage to the aid recipient and highlight the sacrifice aspect on the part of the donors. The author questions this conventional wisdom on the subject and points out the unique benefit it confers on the donors and its economic cost to the aid recipient. Foreign aid is now being used by rich countries as a powerful instrument of export promotion at prices controlled by them, enabling them to maintain a high level of effective demand for their technostructure, while at the same time, landing the developed countries into a debt trap. Making a case study of the U.S. PL480 Law, the author establishes how this outlet bailed out the farm economy from chronic overproduction in the nineteen fifties and sixties and gave the USA a dominating share in the global wheat market. Foreign private investment, considered an alternative to aid has its own drawbacks. Apart from some of the questionable methods of multinationals, the study observes the existence of heavy pressure on balance of payment which foreign controlled investment exercises. The study highlights the need to move away from aid led growth strategy towards a policy of self-reliance.

The book is divided into four parts. Part 1 deals with the cost and benefit of foreign aid to the donor and recipient; in Part 2 a case study of the PL480 aid given and its effects on India's food economy has been undertaken; Part 3 discusses the foreign controlled investment in India with special reference to its effect on the balance of payment. The conclusion (Part 4) raises the question of who is the gainer in utilising foreign aid.

NABARD; *Tractors in Western Uttar Pradesh*, National Bank for Agriculture and Rural Development, Evaluation Study Series No. 2, Regional Office, Lucknow 1992.

The Study evaluates financing of tractors by Uttar Pradesh Rajya Sahakari Krishi Evam Gramin Vikas Bank Ltd. and Syndicate Bank in Meerut and Ghaziabad districts which constitute the developed part of the State. The study showed that the introduction of tractors on irrigated farms had enabled the beneficiaries to adopt improved technology, to go for cultivation of remunerative crops and also to improve the cropping intensity and crop yields. Tractorisation had resulted in increased incomes and satisfactory return on investment in tractors. The financial rate of return (FRR) had worked out at 31 per cent. Loan repayment was satisfactory. Tractorisation did not have any adverse effect on the on-farm labour employment in the two districts.

Thakur, D.S., H.R. Sharma and T.V. Moorti; *Tribal Development in Himachal Pradesh*, Himachal Pradesh Krishi Vishvavidyalaya, Palampur, July 1988.

The Study pertains to the evaluation of the Integrated Teribal Development Project (ITDP) being implemented in Kinnaur District in Himachal Pradesh. The study found that the pace of development under ITDP had been fairly satisfactory in the district; all the villages in the district had been electrified which had resulted in enhancing the potential for modernisation of the handloom and handicrafts industry as also other village and small industries. There had been a marked increase in the productivity of agricultural and horticultural crops. Improvement in transport and communication had brought the district closer to the rest of the State.

Thakur, D.S., T.V. Moorti, A.S. Saini and R.C. Oberoi; *Dairying for Socio-Economic Change in Hills*, Department of Agricultural Economics, Himachal Pradesh Krishi Vishvavidyalaya, Palampur, 1990.

The Study was undertaken in six districts of the State during 1986-87 through 1988-89, with the objective of studying the growth, structure and organisation of dairying and its impact on the socio-economic conditions of the farmers in the operation Flood II areas of Himachal Pradesh.

Rizwanul Islam (Editor); *Transfer, Adoption and Diffusion of Technology for Small and Cottage Industries*, ILO Asian Regional Team for Employment Promotion & World Employment Programme, International Labour Office, Geneva, Switzerland.

The developing economics of Asia have, for the last three decades, laid emphasis on the expansion of employment through promotion of small and cottage industries (SCIs). The need for upgrading technology and exchange of information on innovative and successful experiments in the field of SCIs is also being increasingly realised as these developing economies make their bid for a more skill - and knowledge - intensive phase of industrialisation. A result of this awareness is that a large number of organisations in these countries are engaging themselves in the work of developing/identifying improved technologies for SCIs and transferring them to actual users. The present volume focusses on the question of providing new/improved technologies for SCIs through international transfer and indigenous development.

The first part of the volume presents case studies on the experience and potentials of technology transfer for SCIs with a particular focus on transfer amongst developing countries. The second part focusses on the problem of adoption and diffusion of new technology in cottage industries. An overview chapter puts in perspective the important issues that emerge from the rest of the volume where case studies from Bangla Desh, Sri Lanka, India and Thailand are discussed.

The Annex at the end of the volume presents the proceedings of the International Seminar on Transfer of Technology for SCIs Amongst Developing Countries that was organised by ARTEP in May 1990 in New Delhi. The objective of the seminar was to serve as a forum in which African participants and donor agencies could learn from the experiences of technology transfer in SCIs within the Asian region and assess the possibility of donor - supported technology transfer schemes between selected Asian and African countries.

COMMENTS

Adjustment and Human Development in India, by Martin Ravallion and K. Subbarao in Journal of Indian School of Political Economy, Vol. IV, No. 1, Jan-March, 1992:

Comments on the FGT Index of Poverty,

Foster, Greer and Thorbecke (1984) have proposed a generalised index of poverty. Ravallion and Subbarao [1992] have written it out as

$$P_\alpha = \sum_{y_i < z} [(z - y_i)z]^\alpha / n \tag{1}$$

where y is the consumption of ith person (estimated by the consumption per capita of that person <s household), z is poverty line, n is population size and is non-negative parameter. The fact is that the index should have been written as

$$P_\alpha = \sum_{y < z} [(z - y_i)/z]^\alpha / n \tag{2}$$

Well, this may be a slip or a printing mistake.

Ravallion and Subbarao [1992, p. 76] have further suggested that head-count index is obtained when $\alpha = 0$.

Ravallion and Subbarao [1992, p. 57] emphasise that the head-count index, the poverty-gap index and the FGT index for $\alpha = 2$ are all members of the class of measures proposed by Foster, Greer and Thorbecke (1984). Instead of making use of widespread practice that considers these three measures as alternatives, they 'prefer to interpret them as measures of three different things: the head-count index is a measure of the *incidence* of poverty, the poverty-gap index is a measure of the *depth* of poverty, while the FGT measures the severity of poverty' for which Ravallion [1992] has been quoted.[1]

We can see that specification of α as 0, 1 and 2 yields

$$P_0 = H \tag{3}$$

$$P_1 = H.I \tag{4}$$

$$P_2 = H [I^2 + (1 - I)^2 C] \tag{5}$$

where H, I and C denote head-count index, poverty-gap index and coefficient of variation within the poverty group. It is clear that the above claim of Ravallion and Subbarao (1992) is not correct. Poverty-gap index is not at all a member of FGT class of poverty measures.

We can further see that the measure P_2 includes P_1 and a little more in the sense that it is distribution-sensitive which P_1 is not. Similarly, P_1 includes P_0 and is a little more in the sense that it considers intensity or depth alongwith incidence. Thus, we infer that the three measures do not measure three different aspects as claimed by Ravallion and Subbarao.

Finally, in the literature on measurement of poverty, the word used for depth is intensity. The dictionaries do not so distinguish severity from intensity that the former can be taken to do something with distribution.

NOTES

1. Ravallion [1992] is missing in the REFERENCES.

2. See Foster, Greer and Thorbecke [1984] or Chaubey [1993].

REFERENCES

Chaubey, P.K., 1993; *Measurement of Poverty: Issues, Approaches and Indices,* Wishwa Prakashan (Division of Wiley Eastern Limited), New Delhi. Forthcoming.

Foster, J., J. Greer, and E. Thorbecke, 1984; 'A Class of Decomposable Poverty Measures' *Econometrica,* Vol. 52.

Ravallion, M. and K. Subbarao, 1992; 'Adjustment and Human Development in India', *Journal of Indian School of Political Economy,* Vol. IV, No. 1, Jan-March 1992.

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FORM IV

(See rule 8)

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