

CHAPTER III
METHODOLOGY FOR ALLOCATION OF INDIRECT TAX
BURDEN

Having derived the size distribution of income in Chapter II, an attempt is made here to discuss the methodology for allocation of the tax burden among various income groups. In doing so, we have followed the familiar classification of ^{and indirect taxes.} direct taxes. Direct taxes are those taxes, which are imposed on the basis of economic status - income, property and wealth etc. Indirect taxes are those taxes which are demanded from one person in the expectation and intention that he shall indemnify himself at the expense of another, (such as the excise or customs)^{1/}. In this chapter, we shall explain the methodology adopted for allocating the indirect tax burden, while in the next chapter, we shall explain the methodology for allocating the tax burden of direct taxes.

1/ Mill, John Stuart 'Principles of Political Economy' (With some of their applications to Social Philosophy) Longmans, Green and Co Ltd, London, (Book V - Chapter III) 1940: p 823. The definition of a direct or indirect tax is not clear; and there is no unanimity among eminent economists. For a discussion on direct Versus indirect taxes, Please see Little, I.M.D.. "Direct Vs Indirect Taxes" Economic Journal September 1951, pp 577-584.

Also see National Bureau of Economic Research 'The role of Direct and Indirect Taxes in the Federal Revenue System' University Press, Princeton, 1964, p.25.

Section I of this Chapter delineates the association of income brackets with expenditure brackets, Section II explains the methodology for allocation of the burden of indirect taxes, Section III discusses the procedure for *apportionment* of the tax-burden among different uses of the commodity. And finally Section IV outlines the procedure followed in allocating the burden of different individual taxes among various income classes.

I

At the outset itself it must be noted that indirect taxes are imposed on goods and services, consumed by people. Therefore, for allocation of tax burden, data on consumer expenditure, spent on various items, must be known. ~~This~~ data are not adequately available to us. There are two important sources to provide this data - (i) The National Sample Survey (N.S.S.) on household consumer expenditure and (ii) the consumption proportions, furnished in the technical note on the approach to Fifth Plan 1974-79 (hereinafter referred to as the technical note) ^{2/}. ~~This~~ data are provided by monthly per capita

2/ Planning Commission "A Technical Note on the Approach to Fifth Plan 1974-79", Government of India, New Delhi, 1973, Annexure IV.6 and IV.7, pp 86-91.

expenditure classes. Therefore, unless we find out the corresponding expenditure brackets for the income brackets already derived in Chapter II, it is not possible to allocate the indirect tax burden, by income classes. Even the Indirect Taxation Enquiry Committee could not allocate the indirect taxes by income classes, due to lack of data on the association of income brackets with the expenditure brackets. In the words of the Indirect Taxation Enquiry Committee "unfortunately, we are not in a position to provide an answer as the distribution of income by expenditure groups - or vice versa - is unknown" ^{3/} But an attempt is made here to associate the income brackets with expenditure brackets, on the basis of estimates, already made in Chapter II. We have also made an attempt to explain the procedure followed by us in calculating the expenditure on different items using the N.S.S. data, or the Technical note's data or both, as the case may be.

In order to allocate the tax-burden by income classes, we must know the corresponding consumer expenditure brackets for all the income brackets. In Chapter II, we estimated the expenditure brackets for the lower income groups only ^{4/}

^{3/} Government of India, Report of the Indirect Taxation Enquiry Committee, Part I, New Delhi, 1977 p.12.

^{4/} Please see the method explained in Chapter II for associating the expenditure brackets with the income brackets upto the point of tangency of the Pareto line with the NSS based consumer expenditure.

(i.e. Case A, B and C) but we have not found out the corresponding expenditure brackets for the upper income groups (i.e., case D, E, F, G, H, I, J, K and L), although we have derived the bracket wise personal income and consumer expenditure for all the income brackets (see tables II.8 to II.16). The crucial data necessary in this context is the C/Y ratios for all the upper income brackets. Such a data are not available from any authenticated source. Therefore, the need arose to calculate the C/Y ratios, so that it would be possible for us to find out the corresponding expenditure brackets for all the income brackets. We have evolved a method of our own to calculate the C/Y ratios for the income brackets and the same is described below:

Based on the Personal income and the corresponding consumer expenditure data, for all the income brackets of Chapter II (See tables II.8 to II.16) the C/Y ratio has been worked out by dividing the consumer expenditure (C) with the personal income (Y) of that income bracket. Later, the C/Y ratios have been used for associating the income brackets with their corresponding expenditure brackets. To be more specific, it would be better if the calculation of C/Y ratios is shown by an example. For this purpose, we have chosen the income distribution by size relating to the rural area of 1964-65. Table III.1 shows the income brackets, Average

Household size (A.H.S.), Personal income (Y), Consumer expenditure (C); $\frac{C}{Y}$ ratio, the corresponding expenditure brackets and the per capita expenditure classes relating to the rural area of 1964-65.

In table III.1, the $\frac{C}{Y}$ ratios for all the income brackets have been found out (see column 6 of the table). For all the income brackets from A to K, the $\frac{C}{Y}$ ratios have been used to find out the corresponding expenditure brackets (see col 7). Later, the corresponding expenditure bracket for the upper most income class (i.e. L in table III.1) has been adjusted. We have, then, worked out the monthly per capita expenditure class(see column 8 of the table) by dividing column 7 with Average Household Size (AHS) and then by 12 ^{5/}. Thus we have associated the income brackets A to L with the corresponding monthly per capita expenditure classes.

As stated earlier, it may be noted that the entire procedure, explained to associate the income brackets with the expenditure brackets, relates to 1964-65 rural area only (Table III.1). The same procedure has been followed with respect to 1964-65 urban area, and also for the years 1968-69 and 1975-76 for associating the income brackets with the expenditure brackets.

^{5/} '12' refers to 12 months.

It can be seen that the monthly per capita expenditure classes so obtained are not, however, in consonance with the consumer expenditure data on various commodities furnished by the N.S.S. or by the Technical note of the fifth plan. The N.S.S. classification of monthly per capita expenditure classes is on the series Rs. 0-8, 8-11, 11-13 upto a maximum limit of Rs. 75. Similarly, the Technical note's classification of monthly per capita expenditure classes is on the series Rs. 0-10, 10-15, 15-20 upto a maximum limit of Rs. 200. Therefore, we have adjusted the monthly per capita expenditure classes obtained by us with the classification, given by the N.S.S. or with the classification given by the Technical note, as the case may be, in order to enable us to calculate the commodity-wise consumer expenditure as against each expenditure class (and hence for each income class). In doing so, we made the following assumptions.

- (a) In each expenditure class (or income class), the population as well as the consumer expenditure have been uniformly distributed.
- (b) The expenditure or income classes are continuous, in the sense, that there are no gaps in the distribution.

Now, a word about the commodity-wise consumer expenditure data furnished by the National Sample Surveys as well as the Technical note is necessary in this context, because we have adopted the data of both these sources to allocate the tax burden of indirect taxes in our study. The data furnished by the N.S.S. are very much inadequate in the sense, that it provided consumer expenditure data on nearly 15 to 20 commodities only of which many are non-taxed items. Further, it does not provide information on consumer expenditure beyond Rs.75 monthly per capita expenditure limit. (The only exception is that of N.S.S. 28th round which provides consumer expenditure data up to Rs.200 monthly per capita expenditure class). Therefore, in our study, to allocate the indirect tax burden, we have supplemented the N.S.S. data on consumer expenditure with the data furnished by the Technical note 6/.

The Technical note provides the data on sectoral "Proportions" of household consumer expenditure for 27 expenditure classes (such as in the series Rs.0-10, Rs.10-15, Rs.15-20..... upto Rs.200) both urban and rural, for 66 sectors. While the N.S.S. provide information on a very limited number of commodities, that too, upto a maximum per capita expenditure

6/ As a matter of fact, even the Technical Note prepared by the planning commission is based on the N.S.S. consumer expenditure data in the main but other sources of data also were made use of by the planning commission in preparing this note.

class of Rs.75/-, the Technical note provides information on a large number of commodities grouped into 66 sectors and that too, upto a maximum monthly per capita expenditure class of Rs.200/-. Obviously, the data furnished by the technical note are more useful to us than that of the N.S.S. consumer expenditure data.

But one objection to use the technical note's data for our purpose is that they are the projected consumer expenditure proportions on 66 sectors, expressed in 1971-72 prices for the terminal year of the Fifth Plan i.e., 1978-79 ^{7/}. But that objection may not be very serious in view of the fact that the behaviour of the consumer expenditure does not vary much in a short span of time ^{8/}.

One should also observe in this connection, that the technical note's data on consumer expenditure, are given in "Proportions" but not in "absolute" figures. Therefore, the commodity wise expenditures, calculated by using these 'Proportions' are not very much affected, despite the fact

^{7/} The terminal year of the Fifth plan Prematurely ended by 1977-78 due to the implementation of rolling plan.

^{8/} Friedman, Milton 'A Theory of the Consumption Function' National Bureau of Economic Research, Princeton. University Press, 1957 Ch IV. P.40

that our study pertains to a different period of time, other than 1978-79. Moreover, there is little possibility of getting more informed data on consumer expenditure on various commodities elsewhere. Therefore, we have adopted the 'Proportions' furnished by the Technical note for all the three years of study. However, we have taken enough caution in this matter. That is-where ever data on consumer expenditure is furnished by the N.S.S for a particular commodity, we have taken the N.S.S. data, upto the income class of Rs.4,000/- (which approximately corresponds to the monthly percapita expenditure limit of Rs.75/-) and beyond Rs.4,000/- income class limit, we have used the expenditure 'Proportions' given by the technical note. But the technical note 9/ does not provide us data on the consumer expenditure beyond Rs.200/- monthly per capita expenditure. Therefore we have assumed that the 'Proportions' given for the last expenditure class-i.e., "Above Rs.200/-" applies to such of those income brackets, whose monthly per capita expenditure limits exceed Rs.200/-. In this way, we made use of the data on consumer expenditure provided by the N.S.S., as well as the Technical note. But still we are left with another problem which needs some discussion.

9/ Technical note op cit PP.86-91

That is - the N.S.S. consumer expenditure data do not provide information with respect to the consumption of certain commodities by the various expenditure classes. For example, no data on consumer expenditure are furnished on, say, chemical products, Rubber products, etc., by the N.S.S. in any of its rounds. To calculate the consumer expenditure on such items, we have depended completely on the Technical note's 'Proportions', for all income brackets. Thus, every precaution has been taken to calculate as accurately as possible the commodity wise consumer expenditure expenditure as against each and every income bracket.

Now, before we explain the procedure followed to allocate the tax burden of the individual taxes, it is necessary to discuss about the home grown consumption by various expenditure brackets (and hence the income brackets). As taxes on commodities are associated with purchases made by cash, it was necessary for us to calculate the value of home grown consumption of each income bracket 10/. But data on home grown consumption are not available for all the income brackets and for all years

10/ In several studies, tax has been distributed in proportion to cash expenditure of the consumers. For example: See Government of India 'Report of the Indirect Taxation Enquiry Committee' Part II, New Delhi, 1978 p 112.

of our study. However, the N.S.S. 19th round ^{11/} provided data on home grown consumption by various per capita expenditure brackets for rural as well as urban areas. We have calculated the value of home grown consumption for each income class and subtracted the same, to arrive at cash expenditure of each income class. In our study, the usage of the word "consumer expenditure", therefore, means consumer cash expenditure for the purpose of allocating tax burden among different income classes.

II

Methodology for Allocating the Burden of Indirect Taxes Among the Various Income Classes

In allocating the burden of indirect taxes, we have assumed that all indirect taxes are completely shifted on to the consumers in the same financial year itself (by way of higher prices) except a certain portion which is taken to be borne by the Government itself and also the tax imposed on the goods which have been used for gross fixed investment (GFI) in the current year itself. The reasons for doing so have been explained in the succeeding paragraphs. The answer to the question whether a particular indirect tax is shiftable

^{11/} National Sample Survey "19th round: Tables with notes on Household Consumer Expenditure and Enterprise for Rural and Urban areas of India" (Integrated household Survey) Schedule 17, Government of India, New Delhi, 1971 p 61 and p 128.

or not depends upon many factors, such as the elasticities of demand and supply; time element (i.e., longrun or short-run), the inclusion of a Personal element (i.e., whether the tax includes a personal element or not) etc.,^{12/}. Our assumption that indirect taxes are shifted on to the consumers is in conformity with many studies on the incidence of indirect taxes ^{13/}.

It is known Pretty well that they are imposed on different commodities and services. And the commodities and services, thus taxed, are meant for different uses - Private final consumption, Public final consumption, inter industry consumption and for capital formation. Now, in order to allocate a tax levied on a commodity, it is very

^{12/} The European Productivity Agency of the organisation for European Economic Cooperation. The Influence of Sales tax on Productivity Project No 315 2 Bue Andre - Paeal Paris XVI e, 1958, pp 41-42.

Also see Ghosh, A.B. 'Sales Tax in India' Monograph 2, Delhi School of Economics, 1954, pp 9-16.

^{13/} Musgrave R.A. et al 'Distribution of Tax Payments by Income Groups : A case study for 1948' National Tax Journal, March, 1951, p 20.

Also see Goffman, Irving J 'The Burden of Canadian Taxation' Canadian Tax Foundation Publications, Toronto, 1962, pp 41-45.

essential for us to know that part of the tax on the commodity which enters into private final consumption, that part of tax which enters into inter-industry use, and that part of the tax which associates with capital formation. In India, so far little work is done on these lines and therefore, our task has become very labourious. The tax burden, could be more rationally allocated, if the above analysis is made with respect to an indirect tax imposed on^a commodity or service. Because of the merit involved in this approach, we have attempted to find out the incidence of an indirect tax, on this basis to the extent possible. The burden of a tax is bound to vary, depending upon the nature of the commodity entering into consumption. It is our task, here, to apportion the various components of tax levied by the Government - be it excise duty, customs duty or sales tax - on different commodities among the above mentioned uses.

An analysis of the tax burden on these lines needs adequate data on the input-output co-efficients for various commodities in the economy. But we do not have adequate data on the input-output co-efficients in the Indian economy. The Indirect Taxation Enquiry Committee on indirect taxation also agrees with our point of view that data on input-output co-efficients are very much inadequate to

adopt a study of tax burden on the above analysis ^{14/}. However, we made an attempt to study the indirect tax burden on the above analysis, on the basis of the limited data, provided by the technical note of the planning commission on the input-output co-efficients ^{15/}. This data has been provided by the technical note in two categories, namely - one set of input-output co-efficient matrix for the final use domestic transactions for the year 1973-74; and another set of input-out co-efficient matrix for the final use of import transactions for the year 1973-74 ^{16/}. We made use of the former for allocating the tax burden of all indirect taxes, other than the import duty, for which we made use of the input output co-efficients of the latter. We have assumed that this data is applicable for all the three years of our study ^{17/}. In doing so, we have confined our study to the first round of input use of commodities only. An example would make this point more clear, as to how we have done. Let us suppose that there is a commodity 'X', on which a tax has been imposed. Let us also suppose that 'X' commodity enters into the manufacturing of four other commodities - A, B, C and D. The tax that is imposed on commodity 'X',

^{14/} Report of the Indirect Taxation Enquiry Committee op cit p 112.

^{15/} Technical Note op cit pp 35-48.

^{16/} Ibid

^{17/} Such an assumption is realistic in the sense that the input-output co-efficient matrix depends upon the production techniques employed in manufacturing the various commodities. As production techniques are not likely to change always, one can assume that the input-output co-efficients do hold good for a reasonably sufficient period.

obviously, is passed on to the commodities A, B, C and D.

On the basis of the input use of 'X'. Again A, may be used into the making of some other commodities - P, Q and R. In our present study, we have confined our analysis of allocating tax burden only to the first round of input use of the commodities. In the above example, we have studied the apportionment of the tax, imposed on 'X' commodity, among the various other commodities A, B, C and D only. We could not proceed further to find out the tax incidence beyond the first round of input use due to lack of adequate data on the consumer expenditure. Also, such an analysis is, beyond the scope of our study, because we have dealt with the tax burden by income classes with respect to all taxes - direct and indirect-and that too for three years. However, we suggest that it is worth of any researcher to attempt a complete analysis of over all tax-incidence, by choosing one of the indirect taxes and also by applying the technique of a sophisticated input-output analysis.

III

Procedure for Apportionment of the Tax Burden Among Different Uses of the Commodity:

As has been said earlier, the technical note provides information on the value of - (a) Private final Consumption

(b) Public final consumption: (c) Inter industry use and
(d) Gross fixed investment (GFI) of the 66 commodity
groups, put to use in respect of domestic transactions
and import transactions for the year 1973-74 18/

We have worked out the proportion of value
for the 66 commodity groups among the above four uses in
percentage terms based on the data furnished by the technical
note 19/. (See Table III.2)

18/ Technical Note of cit pp 35-36

19/ Ibid

TABLE III.2

(Final Use) Percentage Value of Domestic Transactions of
66 Broad Commodity Groups (Sectors) Among Different Uses
for the year 1973-74.

(In percentage)

S e c t o r	Inter indus- try use (%)	Private final consum- ption (%)	Public final consum- ption (%)	Gross fixed invest- ment (%)	Total (%)
(1)	(2)	(3)	(4)	(5)	(6)
1. Food grains	13.39	86.61	0.0	0.0	100.0
2. Other Agriculture	47.60	52.40	0.0	0.0	100.0
3. Animal Husbandary	10.49	89.45	0.06	0.0	100.0
4. Plantation	100.00	0.0	0.0	0.0	100.0
5. Forestry	49.98	47.51	2.51	0.0	100.0
6. Coal	39.32	60.08	0.60	0.0	100.0
7. Misc.Coal, Pet ^{roleum} , Products	100.00	0.0	0.0	0.0	100.0
8. Iron Ore	100.00	0.0	0.0	0.0	100.0
9. Crude Oil	100.00	0.0	0.0	0.0	100.0
10. Other minerals	100.00	0.0	0.0	0.0	100.0
11. Sugar & Gur	4.18	95.74	0.08	0.0	100.0
12. Vegetable oil	35.28	64.59	0.13	0.0	100.0
13. Tea & Coffee	0.99	98.46	0.55	0.0	100.0
14. other Food Products	9.57	89.36	1.07	0.0	100.0

(1)	(2)	(3)	(4)	(5)	(6)
15. Cotton textiles	4.19	94.54	1.27	0.0	100.0
16. Jute textiles	68.63	0.0	31.37	0.0	100.0
17. Other textiles	41.46	51.51	7.03	0.0	100.0
18. Misc. textile products	25.87	71.72	2.41	0.0	100.0
19. Wood Products	38.19	49.23	12.58	0.0	100.0
20. Paper, Paper Products	37.80	33.26	28.94	0.0	100.0
21. Leather products	4.66	82.65	12.69	0.0	100.0
22. Rubber Products	77.21	15.34	7.45	0.0	100.0
23. Fertiliser	100.0	0.0	0.0	0.0	100.0
24. Inorganic Heavy Chemicals	100.0	0.0	0.0	0.0	100.0
25. Org. Heavy Chemicals	100.0	0.0	0.0	0.0	100.0
26. Plastics	48.36	50.35	1.29	0.0	100.0
27. Cosmetics & Drugs	27.92	71.59	0.50	0.0	100.0
28. Man-made fibre	100.0	0.0	0.0	0.0	100.0
29. Other Chemicals	89.16	10.19	0.65	0.0	100.0
30. Petroleum Products	54.38	31.64	13.98	0.0	100.0
31. Cement	100.00	0.0	0.0	0.0	100.0
32. Refractory	100.00	0.0	0.0	0.0	100.0
33. Other non-metallic Mineral Products	81.06	18.76	0.18	0.0	100.0
34. Iron & steel	100.00	0.0	0.0	0.0	100.0
35. Non-ferrous Metals	100.00	0.0	0.0	0.0	100.0
36. Bolts and Nuts	98.20	0.0	1.80	0.0	100.0
37. Metal Containers	91.48	0.0	8.52	0.0	100.0

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(1)	(2)	(3)	(4)	(5)	(6)
38. Other Metal Products	22.57	13.86	3.53	60.04	100.0
39. Ball bearings	9.14	0.0	0.0	90.86	100.0
40. Office, Domestic equipment	6.62	35.09	8.80	49.49	100.0
41. Agrl. Implements	23.16	0.0	0.0	76.84	100.0
42. Machine tools	1.34	0.0	0.0	93.66	100.0
43. Other Machinery	11.96	0.0	0.0	88.04	100.0
44. Electric Motors	26.04	0.0	0.0	73.96	100.0
45. Electronics	11.35	0.0	24.60	64.05	100.0
46. Electric Wing	85.72	0.0	14.28	0.0	100.0
47. Batteries	13.82	50.79	10.32	25.07	100.0
48. Ele. Household Goods	6.35	58.06	8.20	27.39	100.0
49. Radio	29.28	70.72	0.0	0.0	100.0
50. Telephone & Telegraph equipment	8.49	0.0	2.62	88.89	100.0
51. Other Electricals	21.83	0.0	25.71	52.46	100.0
52. Motor Cycles	28.21	34.74	0.35	36.70	100.0
53. Motor Vehicles	59.13	5.00	11.26	24.61	100.0
54. Ships and Boats	31.11	0.0	17.69	51.20	100.0
55. Air Craft	8.73	0.0	11.61	79.66	100.0
56. Rail equipment	20.28	0.0	3.91	75.81	100.0
57. other transport equip- ment	10.18	0.0	46.76	43.06	100.0
58. Watches and Clocks	5.05	84.77	2.48	7.70	100.0
59. Misc. Scientific instruments	9.07	0.0	25.03	65.90	100.0

(1)	(2)	(3)	(4)	(5)	(6)
60. Other Industries	6.97	91.21	1.82	0.0	100.0
61. Printing	51.04	46.52	2.44	0.0	100.0
62. Electricity	80.39	17.46	2.15	0.0	100.0
63. Construction	13.82	16.22	7.21	62.75	100.0
64. Other Transport	41.27	56.89	1.84	0.0	100.0
65. Railways	37.33	62.07	0.60	0.0	100.0
66. Other Services	34.00	32.00	30.40	3.60	100.0

(NOTE: Calculated on the basis of data available in the technical note)

SOURCE: Government of India, Planning Commission " A technical note on the approach to the Fifth Plan of India 74-79, New Delhi ,
1973, P 35

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This information is not available for any other years and hence, we have adopted the same proportions for apportioning the tax burden attributable to each commodity among its above uses. Thus, we have assumed (as said earlier) that this information relating to the year 1973-74 holds good for all the years of our study.

Of the above four categories mentioned, we have taken into account the tax part attributable to Private final consumption of the commodity and the tax part attributable to the inter-industry use of the commodity. The remaining other two categories (i.e. b and d) have been ignored for the purposes of allocating tax burden among various income classes. The tax part, attributable to the Public final consumption (i.e. final consumption of goods by the government) is ignored on the ground that little justification is there to pass it on to the household sector. In the words of the Report of the Indirect Taxation Enquiry Committee "mention may be made in particular of the allowance that has been made in the present study for the fact that taxes falling on goods used by the Government should not be allocated to the household sector" 20/

20/ Report of the Indirect Taxation Enquiry Committee, Part II, 1978, op cit P 10

In order to find out the incidence of tax on capital formation, it is necessary to examine the nature of the capital asset, its life time, its inter industry use with time lags etc. Sufficient data on these aspects are not available. Also, we are unaware of the duration of time, necessary to build up a capital asset, before it actually starts producing commodities. Moreover, most of the goods, produced during the current period, are attributable to the capital stock, made up in the preceeding years, but not to the capital stock, actually formed during the current year itself. In addition we are very little informed of the inter industry use of the capital goods with time lags etc.

Thus these difficulties necessitated us to ignore the tax part on those goods which are used for capital formation, during the current year itself. Finding out the incidence of goods which enter into capital formation is a major issue of taxation, worthy of a good research work and it involves using sophisticated econometric models.

Tax Part relating to Private final Consumption of a
Commodity

We explain below the method followed by us to allocate the tax part relating to private final consumption

and the tax part relating to the inter industry use of a commodity or service. First, we shall explain the former and then the latter has been discussed.

The tax-part relating to Private final consumption of a commodity (or service) has been allocated among the various income classes in proportion to the consumer cash expenditure incurred by those classes on that commodity (or service) or its broad category ^{21/}. For example: let us suppose that the tax part relating to private final consumption of a commodity 'X' is Rs. 300/-. This amount of tax is distributed among the various income classes in proportion to the cash expenditure incurred by them on that commodity.

^{21/} If the actual consumer expenditure on the commodity cannot be calculated, due to paucity of data, the tax burden has been distributed among various income classes in proportion to the consumer cash expenditure on the broad category of the item or commodity. For example tax on liquor has been distributed in proportion to consumer expenditure on its broad category, which includes tobacco, Pan, alcoholic drinks etc. In many studies, calculation of tax burden is on the basis of consumer expenditure on the broad category of the item or commodity. For example: Please see Goffman, Irving J 'Burden of Canadian Taxation' Canadian Tax Foundation, Toronto, 1962, p 45

The following is a hypothetical table to allocate the tax part of Rs. 300/-

Table III.3

Household Income class (Rs.)	Percentage of consumer cash expenditure on the commodity	Tax paid Rs.
0 - 1000	10%	30
1001 - 2000	20%	60
2001 - 3000	10%	30
3001 - 4000	5%	15
4001 - 5000	10%	30
5001 - 7000	5%	15
7001 - 10000	25%	75
10001 - 15000	5%	15
15001 - 20000	5%	15
20001 - 30000	1%	5
Above 30000	4%	20
	100	Rs. 300

As already said, the consumer expenditure has been calculated in respect of important commodities, by using either the data furnished by the N.S.S. or the data provided by the technical note.

Tax Part Relating to Inter Industry Use of a Commodity:

Now, we discuss the procedure adopted for the tax part relating to the inter industry use of a commodity (or service). As has been said earlier, we have considered, only the first round of the input use of the taxed commodity (or service) for the purpose of dividing the inter industry tax part among its several uses. Therefore, inter industry tax part of a commodity (or service) has been further sub-divided into 'small components' in proportion to its input use among several uses. An example, will make this point more clear. Let us suppose that the inter industry tax part of a commodity 'X' is Rs. 200/-. Let us also suppose that commodity 'X' enters as an input for the manufacturing of commodities P, Q and R, the input proportions of 'X' expressed in percentage terms being 20%, 30% and 50% respectively. Therefore, the inter industry tax part of Rs. 200/- should be sub-divided into Rs. 40/-. Rs. 60/- and Rs. 100/- and attributed to the commodities P, Q and R respectively. Like this, the inter industry tax part of a commodity has been attributed to those commodities, for the manufacturing of which, the taxed commodity has entered as an input. Later, the 'small component' of the inter industry tax part, attributed to a commodity has been distributed among the various income classes in proportion to the consumer expenditure on that commodity by those classes.

In the above example, the tax part of Rs. 40/- (attributable to commodity P) has been allocated among the various income classes in proportion to the consumer expenditure on commodity 'P' by those classes. In this connection, we have observed that in addition to the major input-use of the taxed commodity in some of the predominantly observed sectors, it also enters into a large number of other sectors, where its percentage input use, is deplorably small. For example, "Chemicals" as a commodity has predominant input use in major sectors like agriculture, cotton textiles, construction, cosmetics and drugs. But its input use is deplorably small in many other sectors. We have ignored such small percentage of input use of the taxed commodity in such sectors. Therefore, after setting apart the tax part for the major sectors of inter industry use of the taxed commodity, the remaining inter industry tax part has been treated under the heading "Miscellaneous" or "Others" and it has been distributed among the income classes in proportion to the total cash consumer expenditure of those classes.

Now, a word about the distribution of the tax burden between rural and urban areas.

One can expect that the tax burden among various income classes would be different in urban and rural areas. It is obvious that the consumption pattern in both rural and urban areas is different. We have derived the income

distribution for rural as well as urban areas separately in Chapter II. In India nearly 80% of the total population live in villages, and therefore, there is every need to consider the tax burden separately for the rural area. But data on tax collections are not, available separately for rural and urban area. However, we have divided the tax-part, ascribed for private final consumption of a commodity, into two- namely the tax part pertaining to urban area and the tax part pertaining to rural area. Such an apportionment of tax between rural and urban areas is made in proportion to the total consumer expenditure on a commodity (or its broad category) in the rural and urban areas respectively. As said in the preceeding paragraphs, we have allocated the tax part relating to private final consumption (whether it belongs to urban or rural) among various income classes in proportion to the consumer expenditure on taxed commodity (or service) by those classes.

As regards the inter industry tax part also, we have adopted the same procedure to calculate the tax burden between rural and urban area as that followed for the allocation of the tax part pertaining to private final consumption.

Thus, we observe that the total tax, that is set against an income class for a commodity (or service)

comprises mainly of two subdivisions, namely (a) the tax part attributed to private final consumption (i.e, direct consumption of the commodity) and (b) the tax part attributed to the inter industry use of the commodity (i.e., indirect consumption of the commodity). The latter has further small subdivisions, showing those sectors into which the commodity must have entered in, for input use.

IV

Having thus discussed the procedure in general adopted to allocate an indirect tax imposed on a commodity, we now take up some of the important commodity taxes.

UNION EXCISE:

The Collections from union excise are given in the explanatory memoranda of the union budgets, statistical abstracts etc. For some years, the items have been broadly classified, whereas for some other years, the individual item wise collections are given. In our present study, we have followed the broad classification of the various items as given in the Explanatory Memoranda of the union budget 1970-71 in which we get the "Accounts" figures for the year 1968-69. For the year 1964-65, individual item wise collections are available but these have not been regrouped into certain broad categories, as was done for 1968-69. So, for the year 1964-65 also, we have rearranged the individual

items in such a way, that they are listed out under the broad classification which we have followed. For 1975-76, the latest year of our study, the memoranda itself gave the broad classification of the items and so, there is no problem. The broad classification, we have followed for central excise duty is as follows.

1. Food, Beverages and tobacco:
2. Vegetable oils and Fats:
3. Petroleum Products:
4. Manufacturing goods:
5. Metals (including Ferrous and non-ferrous):
6. Chemicals:
7. Machinery and transport equipment.

(1) Food, Beverages and Tobacco: The items under this head include tea, coffee, milk products, meat, fish, egg, fruits, refreshments, sugar, pan, tobacco, alcoholic drinks, bidi, cigarettes etc., The National sample survey (N.S.S.)

provides information on consumer expenditure on these items upto a monthly per capita expenditure class of Rs.75/-. We have added up the figures under each of the above items and calculated the consumer expenditure upto an income bracket of Rs.4,000/- yearly household income (which approximately corresponds to Rs.75/-monthly per capita expenditure class).

For the brackets beyond Rs. 4,000/- income limit, we have used the sectoral proportions of consumption for these relevant items and found out the consumer expenditure. We have followed the same procedure for calculating the consumer expenditure on this broad category of items by various income classes for urban as well as rural distributions. We have taken the total gross revenue collections from the union excise for this broad group of commodity and first, allocated the same between (a) private final consumption; (b) public final consumption; (c) inter industry-use and (d) Gross fixed investment, based on the data relating to domestic final use transactions, furnished by the technical note 22/. We have observed that there is no use of this commodity group for gross fixed investment (G.F.I). We have, as said earlier, ignored that part of the tax, set apart for public final consumption. The Private final consumption part of the tax as well as the inter industry part of it have been allocated across the income brackets, in proportion to the cash consumer expenditure, on the lines already discussed in the preceeding paragraphs.

(2) Vegetable Oils and Fats: The items for which consumer expenditure data are provided under this head by the N.S.S are vegetable oils, edible oils and vasaspathi. The sectoral consumption proportions are also available in the technical note. We have calculated the consumer expenditure upto an income class of Rs. 4,000/- yearly household income, by using the N.S.S. data. For the classes (or brackets) beyond Rs. 4,000/- income limit, we have used the

sectoral proportions of consumption furnished by the technical note under this head. We have observed that the inter industry use of vegetable oils and fats is mostly in cosmetics and drugs. The tax has been apportioned on the basis of proportions of inter-industry use of the broad commodity and has been allocated according to the general principles discussed earlier.

(3) Petroleum Products: The National Sample Survey (N.S.S.)

does not provide information on petroleum products except on kerosene which occupies a minor proportion of the total components of petroleum products. Petroleum Products include motor spirit, low speed diesel, high speed diesel oil, lubricating oils etc. Therefore, the consumer expenditure on the use of Petroleum Products have been calculated for all the income classes - rural and urban - on the basis of the data available in the technical note. We have observed that there is no use of petroleum products for gross fixed investment. That part of tax, ascribed to the Private final consumption of Petroleum Products has been allocated across the income brackets in proportion to the consumer expenditure on them. The Inter industry tax part has been calculated on the basis of sectoral consumption data of petroleum Products, furnished by the National Council of Applied Economic Research (NCAER) studies ^{23/}. The inter industry use of Petroleum Products is very significant in certain sectors like transport,

^{23/} National Council of Applied Economic Research
Consumption Pattern of Selected Petroleum Products
 New Delhi, 1971, p 118.

~~steel~~, but there is some final consumption of 'other metal Products' - such as razor blades, hurricane lanterns, sanitary metal fittings etc. As iron and steel is also required for manufacturing of various types of other metal products, we have assumed that this commodity-group be treated under the title "other metal products" for the purpose of allocation of the tax. As explained in the general principles, outlined for allocation of an indirect tax, in the earlier paragraphs, the tax part can be ascribed for the commodity's use under G.F.I. and Public final consumption has been ignored. We have observed that the inter-industry use of "other metal products" is predominant in (i) construction; (ii) Iron and Steel Industry; (iii) other machinery products; (iv) other metal products and (v) miscellaneous sectors. The inter industry tax part has been distributed across the income brackets in proportion to the consumer expenditure on these items. Where, however, information on consumer expenditure proportions is not available for some of the items even in the technical note, such an item (or items) is treated as a 'general' item and the corresponding tax part has been allocated among the income classes in proportion to the total consumer expenditures of those classes.

(6) Chemicals: The N.S.S. does not provide any information on the use of 'Chemicals' by various expenditure classes. The technical note provides information on the private final consumption of chemicals under the heading "other Chemicals". The reason is obvious, because 'Chemicals' as they are, cannot be

consumed but chemical products can be consumed by the people. The chemical products are listed out by the technical note under the heading 'Other chemicals'. For the purpose of allocation of tax on 'chemicals', we have treated this group under the heading 'other chemicals'. Now, the tax part relating to the private final consumption has been allocated in proportion to the consumer expenditure on 'other chemicals' by the various income classes. We have also found out that chemicals enter into inter-industry use in many sectors of the economy but their use is very significant in agriculture, cotton textiles, cosmetics and drugs, construction etc. The inter industry tax part has been allocated in proportion to the consumer expenditure on these items.

(7) Machinery and Transport equipment: This broad group includes a wide variety of commodities, some of them are closely associated with motor vehicles. Therefore, we have treated this broad category under 'transport' item for the purpose of allocating the taxes imposed on them. The inter industry use of this broad commodity-group is explicitly pronounced in cotton textiles, railways, construction and other miscellaneous industries. We have allocated the inter industry tax part among the various income brackets in proportion to the consumer expenditure on these items. The tax part relating to private final consumption has been allocated in proportion to the consumer expenditure on 'transport' by the various income

classes. As said earlier in the general principles, we have ignored the tax part attributable to G.F.I. and public final consumption (i.e. final consumption of the goods by Government).

Thus we have explained the treatment meted out in allocation of Central excise duty among the various income brackets for urban as well as rural distributions. The individual statements, showing the allocation of union excise duties on these seven broad commodity-groups (both urban and rural), as well as the pooled-up statements for All-India, are shown in Appendix Tables A III.1 to A III.9.

Imports:

The technical note provides data on the value of (a) Private final consumption; (b) public final consumption; (c) inter industry use and (d) Gross fixed investment (GFI) of the import transactions for the year 1973-74, with respect to the imported goods. Based on this data, we have calculated the proportion of value for the imported goods by broad category of the items among the above four uses, in percentage terms for the year 1973-74 (see III 4). Table III 4 is similar to table III 2 which shows the same information for domestic transactions. We assume that the same percentages hold good for all years of our study. Just like the union excise, we have ignored the tax part relating to Public final consumption (i.e Govt. Consumption) as well as the tax part relating to Gross

TABLE III.4

**Percentage Value of Import Transactions of Certain Broad
Commodity Groups Among Different Uses for the Year
1973-74**

Broad Commodity Group	Inter Industry use	Private final consum- ption	Public Final Consum- ption	Gross Fixed Invest- ment	Total
	(%)	(%)	(%)	(%)	(%)
1	2	3	4	5	6
1. Petroleum goods	32.05	67.95	-	-	100
2. Tobacco products	-	100.00	-	-	100
3. Motor vehicles, scooters, cars, parts thereof	-	-	-	100	100
4. Railway equipment and rolling stock	-	-	-	100	100
5. Machinery	1.73	-	-	98.17	100
6. Iron and Steel	100.00	-	-	-	100
7. Cotton textiles	100.00	-	-	-	100
8. Other textiles	100.00	-	-	-	100
9. Heavy chemicals	100.00	-	-	-	100
10. Other chemicals (including Drugs)	100.00	-	-	-	100
11. Miscellaneous	48.84	14.96	14.39	21.81	100

Source:- Government of India, Planning Commission
'A technical note on the approach to the
Fifth plan of India 1974-79' New Delhi,
1973, p 36.

Note:- Calculated on the basis of data available
in the technical note.

fixed investment. The consumer expenditure on the various items imported is not provided either by the National sample surveys or by the technical note. Therefore, for the purpose of calculating ~~the~~ consumer expenditure on an imported goods, we have followed the procedure similar to finding the consumer expenditure on a domestic good. In other words, we have assumed that the consumer expenditure distribution on an imported good, across the various income classes, follows the same distribution as that of the distribution of consumer expenditure of similar domestic good. The assumption has become necessary, because we do not have adequate data on class-wise distribution of consumer expenditure on imported goods.

Regarding the allocation of inter industry tax-part, we made use of the input-out co-efficients pertaining to the import transactions, provided in the technical note. The rest of the procedure to allocate import duties is on the same lines as that followed for union excise duties.

First of all, we assume that import duties are fully shifted on to the consumers and that export duties are shifted on to the foreign buyers of our exports. The explanatory memoranda, as well as the All-India Statistical Abstracts, do provide data on the commodity-wise collections of import duties. We have taken the gross revenue collections akin to that of the union excise, and ignored

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'refunds and draw backs' 24/. For the purposes of our present study, we have rearranged the commodities under 'imports' into Broadly eleven categories. The same classification has been followed for all the three years. They are:-

1. Petroleum Products including Kerosene Oil, Motor Spirit, lubricating oils, industrial fuel oil, high speed diesel oil etc.
2. Tobacco Products;
3. Motor Vehicles including motor cars, scooters, vans etc.,
4. Railway equipment like Railway plant and rolling stock etc.
5. Machinery:
6. Iron & Steel:
7. Cotton textiles:
8. Other textiles (which include rayon, silk fabrics etc.)
9. Heavy Chemicals:
10. Other Chemicals, Cosmetics, Drugs etc.,
11. All other items - "Miscellaneous".

(1) Petroleum Group:

There is no public final consumption or gross fixed investment out of the imported commodities belonging to Petroleum group. The inter industry use of the imported

24/Detailed information on 'refunds and drawbacks' is not available in the budgetary memoranda or statistical Abstracts. So, only gross revenue collections are taken from the various sources.

have been ignored, assuming that they are not shifted on to the consumers in the current year of imports.

(4) Railway equipment and rolling stock:

For these items, the explanation is roughly similar to item (3) above. These goods are imported only for purpose of investment only.

(5) Machinery:

The items included under this head are textile machinery, sugar machinery, Internal Combustion Engines etc. Imported machinery has two uses, namely (a) Inter industry use ^{and} (b) Use in gross fixed investment (G.F.I). We have not taken into account the taxpart relating to the imported machinery used for gross fixed investment for the reasons, already explained in the preceeding paragraphs. The inter industry use of the imported machinery is in many sectors, as can be seen from the data furnished by the technical note. It is not possible to find out consumer expenditure of all those sectors, due to data constraints. Therefore, we have allocated, the inter-industry tax part of the imported machinery, in proportion to the total consumer expenditure across the various income classes.

(6) Iron and Steel:

Imported iron and steel has only one use, namely

the 'inter-industry use'. The inter-industry use of iron and steel, is in (a) Iron & Steel sector itself, (b) Construction sector; (c) machine tools sector; (d) Motor Vehicles sector and (e) others-(Miscellaneous). The tax components relating to construction and motor vehicles have been distributed across the income classes in proportion to the consumer expenditure on 'construction' and 'transport' respectively. The remaining tax components, pertaining to (a), (c) and (e) sectors, have been distributed, in proportion to the total consumer expenditure, among the various income classes.

(7) Cotton Textiles:

As seen from the data on import transactions, furnished by the technical note 26/. Cotton textiles are imported from other countries for 'inter industry use' only. The import input co-efficients reveal that cotton textiles imported do find inter industry use only in 'cotton textiles' sector. Therefore, the import duties on cotton textiles, have been allocated in proportion to the consumer expenditure on cotton textiles.

26/ *Technical Note* OP ct P.P. 35-48

'agriculture' and 'other chemicals' has been distributed in proportion to the consumer expenditure on 'agriculture' and 'other chemicals' respectively. The tax part, apportioned towards the category 'others' (i.e miscellaneous items) has been allocated in pro-

(8) Other textiles:

The Procedure followed here is that of Cotton textiles. The import duty on 'other textiles' has been distributed in proportion to the Consumer expenditure on 'other textiles'.

(9) Heavy Chemicals:

'Heavy Chemicals' are imported only for inter industry use. Their inter-industry use is very significant in 'Fertilisers' 'Cosmetics and drugs' sectors. We have calculated the proportion of tax component going in for these sectors due to inter industry use of imported "Heavy Chemicals". The tax-part on these sectors has been allocated in proportion to consumer expenditure on 'agriculture' and 'Cosmetics and drugs' respectively.

(10) Other Chemicals:

The other chemicals include dye stuffs, turpentine, photographic chemicals etc. These are imported for inter-industry use only. According to the import input co-efficients, we found out that the inter industry use of 'other chemicals' are in (a) agriculture, (b) Other chemicals (i.e the same sector) and (c) others (i.e

The individual commodity group-wise allocations of import duties for rural, urban and All India are shown in the statements appended to this chapter (see Appendix tables A III.10 to A III.18).

So far we have explained in detail our method for allocating the union excise duties and import duties among various income classes. Now we explain the method followed by us for allocating the Sales Tax.

Sales Tax:

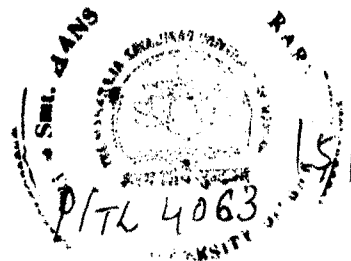
To begin with, we have assumed that sales tax has been shifted forward to the consumers by way of higher prices. One of the important problems of the sales tax is that commodity-wise tax collections are not available just like the union excise or the import duties. Allocations of sales tax burden across the income classes without data on commodity-wise collections is really a

very difficult problem 28/. We explain below the procedure followed in respect of sales tax allocations:

The rates of sales-tax-on different commodities differ from state to state and often are subjected to changes from time to time. Some commodities are taxed at single point, some are at multi point and some others are at double point. There is no uniformity, among the several states in India for sales taxation. As far as our study is concerned, we need commodity-wise sales tax collections for 1964-65, 1968-69 and 1975-76 so that we can allocate the tax across the various income classes, by relating the commodity-wise collections to the consumer expenditures as we have done for union excise duties. But information is ~~very~~ scanty in this respect. We have, however, been able to estimate the possible yield of the commodity-wise sales tax revenues for the three years of our study, on the basis of a study, "Commodity taxation in India" by D .T.Lakdawala and K.V.Nambiar 29/.

28/ Even the Indirect Taxation Enquiry Committee (1977) could not estimate the burden of Sales tax accurately. Commodity-wise collections of Sales tax have been obtained only in respect of 13 States, and on that basis, possible yields have been estimated for All India. The Committee itself felt that some of these 13 States which have furnished Commodity-wise collections, have in fact estimated the possible yields only. Moreover, even the so-called commodity-wise collections furnished by 13 States, are not available anywhere in the Committee's report.
See Indirect Taxation Enquiry Committee OP Ct P.116

29/ Lakdawala D.T. and Nambiar, K.U. Commodity Taxation in India. Sardar Patel Institute of Economic and Social Research, Ahmedabad, 1972 p 147.



The data of this study relates to Gujarat, Maharashtra, Tamil Nadu and Kerala, based on the material furnished by the State governments for twenty broad groups of commodities. Similar data for other states are not available. However, we have made use of this limited data to estimate the possible group-wise yield under sales tax for all the 20 broad groups of commodities. In doing so, We have taken the average of the collections of all the four States for the 20 broad groups and calculated their percentages to the total sales tax revenue (See Table III.5) On calculating like this, we found that revenue from food items accounted for significant proportion of sales tax revenue in these States.

We have assumed that whatever differences are there among different states in India, due to change in the rates of sales tax of some commodities, and also due to factors affecting the sales tax revenues (such as - the consumption pattern, income distributions etc.,) are concerned, are cancelled out each other, so that the overall position of the commodity-wise percentages of revenue, out of the total sales tax, for these twenty broad groups remain the same. In other words, the commodity-wise importance in 'Percentage' terms which holds good for all these four States is assumed to remain the same for an All-India Position, for all the years of our study. (i.e. the percentages shown in table III.5 hold good for all the years of our study).

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We found that revenue from food items accounted for significant proportion of sales tax revenue in these states.

TABLE III . 5

Commodity-Group wise Importance in Total Sales Tax Revenue for Certain Selected Groups:

(In Percentage)

Sl. No:	Name of the broad Category of the group	Sales tax yield (Percentage to Total) (%)
1	2	3
1.	Food items	21.69
2.	Textiles yarn etc.	8.96
3.	Machinery(Manufactured goods etc.,)	5.13
4.	Building Materials	3.33
5.	Metals(including Ferrous & non ferrous varieties)	5.57
6.	Medicine	6.95
7.	Furniture	3.44
8.	Transport	11.55
9.	Petroleum Products	5.97
10.	Other manufactured goods	2.62
11.	Paper and Stationary	2.97
12.	Electrical goods	4.11
13.	Cosmetics, Soaps etc.,	2.29
14.	Radio	1.98
15.	Pan, Tobacco, Liquor	0.74
16.	Leather goods	0.82
17.	Spice	0.58
18.	Arecanut Pepper	1.00
19.	Crocery Provisions	9.46
20.	Miscellaneous	0.84
		<u>100.0</u>

Source: Calculated on the basis of data available in Lakdawala D.T. & Nambiar K.V. 'Commodity taxation in India'. Sardar Patel Institute of Economic and Social Research, Ahmedabad 1972 p.147

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TABLE III.6Estimated 'Possible Yield' of Sales Tax During the Years1964-65, 1968-69 and 1975-76 for 20 Broad Commodity Groups:

(In lakhs of Rupees)

Sl. No.	Name of the Broad Commodity Group	Yield from Sales Tax		
		(1964-65)	(1968-69)	(1975-76)
1	2	3	4	5
1.	Food items	6644.14	9984.21	43831.93
2.	Textiles yarn etc	2744.65	4124.42	18106.69
3.	Machinery & Manufacturing Goods	1571.42	2361.41	7866.89
4.	Building materials	1020.05	1532.85	6729.38
5.	Metals	1706.22	2563.95	11256.05
6.	Medicine	2128.94	3199.18	14044.81
7.	Furniture	1053.75	1583.48	6951.67
8.	Transport	3538.02	5316.63	23340.65
9.	Petroleum products	1828.75	2748.08	12064.39
10.	Other manufactured goods	802.56	1206.02	5204.59
11.	Paper and stationery	909.78	1367.13	6001.88
12.	Electrical goods	1258.99	1891.89	8305.63
13.	Cosmetics, soaps etc.	701.48	1054.12	4627.71
14.	Radio	606.52	911.42	4001.25
15.	Fan, tobacco, liquor	226.68	340.63	1495.42
16.	Leather goods	251.18	377.46	1657.09
17.	Spices	177.67	266.98	1172.08
18.	Arecanut, pepper etc	306.32	460.31	2020.84
19.	Crockery Provisions	2897.81	4354.57	27617.12
20.	Miscellaneous	257.31	386.66	1697.50
		30632.25	46031.42	202083.57

As we know the total collections of sales tax, (all-India), the commodity wise 'Possible Collections' have been estimated on the basis of the percentages of the above 20 broad groups. Such an estimation of the 'possible collections' of sales tax for 20 broad groups has to be made, because of data constraints on the commodity-wise break up of sales tax revenue.

Therefore, on the basis of the Commodity-group wise importance in 'percentage' terms (see Table III.5) we have estimated the 'Possible Collections' of sales tax revenues for the 20 broad groups for the years covered by our study. (See Table III.6)

Having found out the possible yield for these broad groups, we have again rearranged them into 15 categories. Items 17, 18 and 19 are mixed up with item 1, i.e., Food items. Similarly item 13 has been mixed up with item 6; and item 10 with item 3, for the purposes of tax allocations.

We have followed the same procedure as that of the union excise, for allocating the sales tax among various income brackets. We have ignored the tax part, relating to public final consumption and gross fixed investment, just like in the case of union excise. We have distributed the tax-part relating to the inter-industry use of the commodity group as well as the tax part relating to private final consumption among the various income brackets, in proportion to

the consumer expenditure on the commodity/commodity group. The rural and urban components of the sales tax have been separated and allocated across the income classes, on the same lines of the union excise. The Statements showing the allocations of sales tax by broad category of the items (i.e., by broad commodity groups) for rural, urban and All-India for all the three years of our study are appended to ^{this chapter.} (see Appendix tables A III.19 to A.III.27).

Other Indirect Taxes:

There are many other indirect taxes, of which the following are important (a) tax on Motor spirit; (b) Motor vehicles tax; (c) tax on goods and passengers (d) electricity duties; (e) State excise; (f) Entertainment tax; (g) Taxes on Betting, Prize competitions etc. and (h) Profession tax. The commodity wise collections are available for all these items in the explanatory memoranda to the budgets/statistical Abstracts/Reserve Bank of India Bulletins. For these taxes also, we have first found out, the tax components relating to (i) Private final consumption; (ii) Public final consumption; (iii) inter industry use and (iv) gross fixed investment (GFI) of the commodity or service, based on the proportions provided by the technical note for the domestic transactions (see table III.2). Just like, the union excise, we have ignored the tax components, relating to public final consumption and gross fixed investment. We

have, therefore, taken into account the inter industry tax part and the tax part relating to private final consumption for the purposes of allocating these taxes across the various income classes. In doing so, we followed the same procedure as that of the union excise.

(a) Tax on Motor Spirit

The Consumer expenditure data on motor spirit are not available in the N.S.S. rounds or in the planning commission's technical note. The NCAER conducted certain surveys on the consumption pattern of Petroleum products ^{30/} and estimated the inter-sectoral consumption of them. It has been observed from the NCAER estimates that in 1967-68, a very large percentage i.e., 90.35% of motor spirit, entered into the consumption of the 'road transport' sector, while a very small percentage of it i.e. 9.65% entered into 'all other industries', put together. We have adopted the consumption proportions given by the NCAER study ^{31/} to allocate the tax on motor spirit. There is no private final consumption of motor spirit. This commodity has been used completely for inter industry use only. The inter industry tax-part relating to 'road transport' has been distributed across the income brackets in proportion to consumer expenditure on 'road transport'. The remaining tax-part which is attributable to 'all other industries' has been distributed across the income

^{30/} National Council of Applied Economic Research op cit p 118.

^{31/} Ibid

classes in proportion to total consumer expenditure .

(b) Motor Vehicles Tax:

Motor Vehicles tax is a tax imposed on motor vehicles, based on their laden weight, passenger or goods carrying capacity etc., We have assumed that the tax on motor vehicles applies uniformly to all categories of vehicles. Motor vehicles may find their use in (a) private final consumption; (b) Public final consumption; (c) Inter industry use and (d) gross fixed investment. The tax components for the above four uses have been calculated, based on the data furnished by the technical Note 32/. Just like the other indirect taxes, we have considered only the tax components relating to private consumption and inter industry use of motor vehicles, for purpose of allocating tax on them to the household sector. The tax-part relating to the private final consumption of motor vehicles, has been distributed in proportion to the consumer expenditure on 'motor vehicles' while the tax-part relating to inter industry use, has been distributed across the income classes in proportion to the 'transport' expenditures.

(c) Tax on Passengers and Goods:

We have distributed this item across the various income classes in proportion to the total consumer expenditures, because we do not have adequate data on the items as well as

32/ Technical Note op cit, pp 86-91.

the quantities that are put to different uses. Some of them may be direct consumption goods, while some others may be inter industry goods. It is difficult to isolate them and find out specifically into which sector/sectors, the tax is passing on.

(d) Electricity Duties:

The inter industry use of electricity as also the Private final consumption part of it have been estimated on the basis of data, furnished by the technical note 33/. The tax part relating to the private final consumption of electricity has been distributed in proportions to the consumer expenditure on electricity. The inter industry use of electricity, is very wide and varied in number, in the sense that in modern days almost all industries depend on electricity. However, we have taken those sectors where the inter industry use of it is predominantly high, compared to the other sectors in the economy. It is noticed that electricity enters into Agriculture, Railways, and Electricity (i.e., same sector) in large proportions. We have also observed that electricity is used more in urban than in rural areas. A major component of inter industry tax part has been allocated in proportion to consumer expenditure on Agriculture, Railways and Electricity. The remaining component of inter industry tax-part has been distributed in proportion to total consumer expenditures across the various income classes.

33/ Ibid.

(e) State Excise Duties: These are taxes imposed by the State governments mostly on the use of liquor. There are some States where there is prohibition and some where there is Partial/no Prohibition. We assumed away these differences and allocated the same in proportion to the consumer expenditure on Tobacco, Pan and intoxicants. The consumer expenditure on this item, has been calculated on the basis of data on tobacco, pan and intoxicants, given by the N.S.S.

(f) Entertainment Tax: This is tax on entertainments, of which the major expenditure is possibly on the 'Cinema'. We do not have separate data on consumer expenditure on this item. The N.S.S. provides data under a single heading "Miscellaneous goods and services" which includes, inter-alia, the expenditure on entertainments. We have assumed that the expenditure given by the N.S.S. under the heading "Miscellaneous goods and services" could be treated as the expenditure on cinema and other entertainments. However, the expenditure on entertainment, would be obviously more in urban than in rural areas. Many villages do not possess cinema halls. The NSS 18th round observed that "Cinema halls within the village were reported by less than 1% of the total number of villages. 67.4% of the villages, accounting 55.8% of the rural population, had cinema halls at a distance of 15 Kms. and beyond" ^{34/}.

34/ N.S.S. "18th Round : 1963-64 Tables with Notes on Indian Villages: Some Important Results", New Delhi 1970, p 3.

There is also another problem, associated with the entertainment tax, namely - poor people having low incomes, cannot visit the movies by taking tickets of higher denominations. Keeping all these factors in mind, we have chosen a truncated distribution of the tax.

We have assumed that

(a) $\frac{1}{4}$ th of the total entertainment tax is derived from the people having incomes below Rs. 4,000/- yearly household income.

(b) $\frac{3}{4}$ th of the tax (i.e. the remaining Part of the tax) is from the rest of the people, having incomes more than Rs. 4,000/- yearly household income.

(c) $\frac{1}{4}$ th of the total tax is attributed to rural areas while $\frac{3}{4}$ th of it, to the urban areas. This is meant for distributing tax revenue between rural and urban areas.

On the basis of these assumptions, we have distributed the entertainment tax, in proportion to the consumer expenditure on the item "Miscellaneous goods and services" given in N.S.S. reports, by following a truncated distribution. As the technical note, does not furnish consumer expenditure 'Proportions' on entertainment, we had to rely completely on the N.S.S. data on consumer expenditure for this item.

(g) Taxes on Betting, Prize Competitions etc.:

These are taxes which are shown under the head "Other duties" in the budgetary memoranda. We have treated these taxes under the head "Other duties" similar to the entertain-

ment tax. Therefore,, the tax collections under this item, are grouped with the collections of entertainment tax for purpose of allocation of it among the various income classes.

(h) Profession Tax:

It is controversial whether Profession tax should be treated as a direct tax or an indirect tax. The Indirect Taxation Enquiry Committee has treated this tax as an indirect tax and made some recommendations in its report 35/. In our study too we have treated this tax as an indirect tax. It is a tax, imposed on professions in order to supplement the revenues of local bodies. The N.S.S. provides data under the head "Consumer taxes etc" which pertain to the municipal taxes, paid by the consumers. We have assumed that the consumer expenditure proportions under the head "Consumer taxes" would hold good for allocating the burden of Profession tax among various income classes. In other words the burden of profession tax has been distributed in proportion to the consumer expenditure on the item "Consumer taxes".

The statements showing the allocation of tax among the various income brackets for the items (a) to (h) for rural, urban and All-India are appended this Chapter. (See Appendix Tables A III.1 to A III.36)

35/ Report of the Indirect Taxation Enquiry Committee, Part II, 1978, op cit p 247.

Thus, we have explained the methodology for the allocation of indirect taxes (levied by Central as well as State governments). As said earlier, the methodology followed by us is the same for all the three years of our study.

APPENDIX TABLE A.III.1

Allocation of Excise Duties by Broad Category of item and by Income Class

Rural (1964-65)

Sl. No.	Broad category of item	Rs.0-1000	Rs.1001-2000	Rs.2001-2200	Rs.2201-3000	Rs.3001-4000	Rs.4001-5000	Rs.5001-7000	Rs.7001-10000	Rs.10001-15000	Rs.15001-20000
1	2	3	4	5	6	7	8	9	10	11	12
1.	Food Bever- ages & tobacco	2220.14 (0.57)	2144.48 (1.04)	378.36 (1.23)	4326.78 (1.19)	1597.13 (1.15)	159.59 (0.28)	115.85 (0.22)	139.50 (0.28)	82.75 (0.30)	56.74 (0.33)
2.	Vegetable oils & fats	229.01 (0.06)	183.20 (0.08)	66.60 (0.09)	282.51 (0.08)	93.14 (0.07)	9.59 (0.02)	6.52 (0.01)	6.24 (0.01)	3.46 (0.01)	2.39 (0.01)
3.	Petroleum Products	2422.73 (0.62)	1668.61 (0.81)	616.61 (0.86)	2807.13 (0.77)	1163.79 (0.84)	450.89 (0.80)	327.32 (0.60)	384.93 (0.78)	252.42 (0.93)	175.38 (1.02)
4.	Manufactured goods	3039.24 (0.78)	1485.20 (0.72)	548.42 (0.77)	2508.20 (0.69)	986.83 (0.70)	405.03 (0.71)	299.76 (0.56)	326.04 (0.66)	182.56 (0.67)	124.15 (0.72)
5.	Metals	189.60 (0.05)	112.56 (0.05)	41.23 (0.06)	271.98 (0.07)	115.06 (0.08)	54.17 (0.09)	38.16 (0.07)	36.20 (0.08)	23.77 (0.08)	16.40 (0.09)
6.	Chemicals	613.66 (0.16)	340.56 (0.17)	130.65 (0.18)	657.59 (0.18)	229.09 (0.16)	72.43 (0.12)	50.28 (0.09)	49.73 (0.10)	27.88 (0.10)	18.80 (0.10)
7.	Machinery & transport equipment	456.06 (0.12)	348.79 (0.16)	135.22 (0.19)	666.12 (0.18)	280.75 (0.20)	94.90 (0.16)	67.57 (0.13)	92.97 (0.18)	44.81 (0.17)	30.94 (0.18)
Total		9170.44 (2.36)	6283.40 (3.05)	2417.09 (3.38)	11520.31 (3.18)	4465.70 (3.21)	1246.60 (2.21)	905.46 (1.68)	1035.61 (2.11)	617.35 (2.28)	424.80 (2.47)

ANNEX TABLE A.III.9

Allocation of Excise Duties by broad Category of item and by income All India (1975-76)

Sl. No.	Broad Category of Item	Rs. 1000	Rs. 2000	Rs. 3000	Rs. 4000	Rs. 5000	Rs. 7000	Rs. 10000	Rs. 15000	Rs. 20000
1.	Food and Beverages	524.19 (1.23)	3432.83 (1.39)	14752.71 (1.86)	23983.70 (2.21)	13286.18 (1.14)	15767.77 (1.40)	3178.62 (1.33)	2098.32 (1.39)	655.02 (1.15)
2.	Vegetables oils	20.09 (0.05)	128.54 (0.05)	566.54 (0.07)	844.85 (0.08)	276.63 (0.02)	233.40 (0.02)	47.95 (0.02)	30.42 (0.02)	9.55 (0.02)
3.	Petroleum Products	1013.63 (2.38)	4530.11 (1.84)	12689.00 (1.60)	17323.38 (1.60)	21928.43 (1.88)	24605.34 (2.19)	5422.16 (2.27)	3567.80 (2.37)	1100.81 (1.93)
4.	Manufactured Goods	529.15 (1.24)	2533.32 (1.03)	8832.12 (1.11)	13535.15 (1.25)	18269.40 (1.57)	18361.62 (1.64)	3755.31 (1.57)	2476.68 (1.65)	763.64 (1.34)
5.	Metals	118.73 (0.28)	331.48 (0.13)	1619.38 (0.20)	3111.62 (0.29)	4036.50 (0.35)	3629.62 (0.32)	675.66 (0.28)	452.89 (0.30)	138.73 (0.24)
6.	Chemicals	288.27 (0.68)	1236.06 (0.50)	4278.64 (0.54)	6564.20 (0.61)	7827.50 (0.67)	6788.59 (0.60)	1319.28 (0.55)	879.85 (0.58)	270.13 (0.47)
7.	Machinery and Transport equipment	206.44 (0.49)	964.69 (0.39)	2663.13 (0.34)	3358.35 (0.31)	4139.94 (0.36)	4308.39 (0.38)	805.02 (0.34)	535.80 (0.36)	164.63 (0.29)
Total :		2700.50 (6.35)	13157.03 (5.34)	45401.52 (5.72)	68721.26 (6.35)	69764.58 (5.99)	73695.73 (6.56)	15204.00 (6.36)	10041.76 (6.68)	3102.51 (5.45)

ocation

Urban (1975-76)

Sl. Broad Category No. of Item	Rs.0- 1000	Rs1001- 2000	Rs.2001- 3000	Rs.3001- 4000	Rs.4001- 5000	Rs.5001- 6000	Rs.6001- 7000	Rs.7001- 8000	Rs.8001- 9000	Rs.9001- 10000
1 Food items	321.83 (0.99)	455.92 (1.81)	1853.76 (1.78)	5497.11 (2.39)	89.83 (1.29)	635.40 (1.64)	5107.97 (1.50)	1512.17 (1.65)		
2 Textiles, Yarn etc.	10.63 (0.03)	26.93 (0.11)	100.22 (0.10)	440.68 (0.19)	38.82 (0.40)	160.06 (0.41)	698.99 (0.21)	185.63 (0.20)		
3 Machinery, Engineering Pro- ducts	57.78 (0.17)	50.64 (0.20)	212.89 (0.20)	472.74 (0.21)	778.46 (0.25)	107.69 (0.25)	864.34 (0.25)	264.40 (0.29)		
4 Building Materials	23.11 (0.07)	22.07 (0.09)	89.47 (0.09)	146.32 (0.06)	198.03 (0.06)	26.73 (0.07)	307.91 (0.09)	97.10 (0.10)		
5 Metals	31.21 (0.10)	25.99 (0.10)	175.03 (0.17)	422.36 (0.19)	609.43 (0.16)	64.60 (0.17)	388.35 (0.11)	93.67 (0.10)		
6 Cosmetics and drugs	186.82 (0.58)	163.40 (0.65)	555.92 (0.53)	1245.16 (0.55)	1609.33 (0.52)	205.77 (0.53)	1448.67 (0.43)	450.27 (0.49)		
7 Wooden Products	47.50 (0.15)	52.27 (0.21)	211.80 (0.20)	319.43 (0.14)	399.52 (0.12)	54.16 (0.14)	614.80 (0.18)	184.98 (0.20)		
8 Transport Vehicles	136.72 (0.42)	122.00 (0.48)	440.38 (0.42)	848.85 (0.37)	1231.13 (0.40)	157.82 (0.41)	1385.29 (0.41)	421.99 (0.46)		
9 Fuel and Lubricants	102.29 (0.32)	105.19 (0.42)	307.51 (0.30)	593.41 (0.26)	892.49 (0.29)	112.29 (0.29)	939.72 (0.28)	309.20 (0.34)		
10 Paper and Stationary	24.79 (0.08)	19.39 (0.08)	70.52 (0.07)	197.25 (0.09)	463.61 (0.15)	69.70 (0.18)	527.71 (0.16)	172.32 (0.19)		
11 Electrical goods	83.32 (0.26)	81.36 (0.32)	278.03 (0.27)	574.52 (0.25)	807.58 (0.26)	105.24 (0.27)	955.34 (0.28)	316.95 (0.35)		
12 Radio, Television etc.	5.20 (0.02)	71.14 (0.03)	40.86 (0.04)	111.04 (0.05)	251.29 (0.08)	67.00 (0.17)	825.85 (0.24)	201.60 (0.22)		
13 Pan, Tobacco, Liquor	8.49 (0.03)	7.23 (0.03)	24.86 (0.02)	66.08 (0.03)	130.79 (0.04)	20.75 (0.05)	182.64 (0.06)	57.92 (0.06)		
14 Leather goods	1.76 (0.01)	3.77 (0.01)	14.97 (0.01)	50.32 (0.02)	112.32 (0.04)	22.47 (0.06)	186.34 (0.05)	69.69 (0.08)		
15 Miscellaneous	13.19 (0.04)	10.18 (0.04)	35.13 (0.04)	76.90 (0.03)	105.10 (0.03)	13.19 (0.03)	101.31 (0.03)	31.13 (0.03)		
Total	1054.64 .26	1153.48 4.57	4416.35 (4.24)	10972.17 (4.85)	12717.73 (4.12)	1822.87 (4.70)	14535.23 (4.28)	4369.02 (4.79)		

APPENDIX TABLE A.III. 33

Allocation of Indirect taxes by income class in India (1968-69)

Sl No	Indirect Tax	In Rs									
		Rs. 0-1000	Rs. 1001-2000	Rs. 2001-3000	Rs. 3001-4000	Rs. 4001-5000	Rs. 5001-7000	Rs. 7001-10000	Rs. 10000-15000	Rs. 15000-20000	
1.	Union Excise only	2032.29 (2.79)	19830.47 (3.65)	26115.66 (4.49)	26355.96 (5.32)	10940.50 (3.86)	6724.38 (4.48)	5499.85 (4.24)	3509.82 (3.81)	1650.74 (3.70)	
2.	Import Duties	410.54 (0.56)	3224.52 (0.59)	4270.14 (0.73)	4687.20 (0.44)	2696.27 (0.95)	1563.73 (1.04)	1157.85 (0.89)	730.65 (0.79)	341888 (0.77)	
3.	State Excise Duties	332.27 (0.46)	2838.40 (0.52)	3351.75 (0.58)	2190.54 (0.44)	2673.06 (0.94)	1772.39 (1.18)	1284.28 (0.99)	792.40 (0.86)	375.12 (0.84)	
4.	*Generally Sales Tax	706.44 (0.97)	8426.72 (1.55)	12717.14 (2.19)	11649.81 (2.35)	3702.80 (1.31)	2510.45 (1.68)	1777.08 (1.37)	1105.24 (1.20)	516.31 (1.16)	
5.	Tax on Passengers and goods	155.53 (0.21)	1090.80 (0.20)	1085.31 (0.19)	965.04 (0.19)	525.23 (0.19)	296.72 (0.20)	206.97 (0.16)	128.19 (0.14)	59.93 (0.13)	
6.	Motor Vehicle Tax	78.31 (0.11)	797.53 (0.15)	1119.97 (0.19)	1366.42 (0.28)	681.98 (0.24)	390.68 (0.26)	539.63 (0.42)	358.73 (0.39)	169.89 (0.38)	
7.	Electricity Duties	134.67 (0.19)	1024.58 (0.19)	1066.74 (0.18)	1103.04 (0.22)	666.82 (0.24)	473.99 (0.32)	354.84 (0.27)	225.06 (0.24)	105.87 (0.24)	
8.	**Entertainment Tax (including 'Other duties and Taxes')	341.58 (0.47)	220.54 (0.04)	441.08 (0.08)	896.34 (0.18)	2274.01 (0.80)	1269.50 (0.85)	828.42 (0.64)	529.26 (0.57)	246.46 (0.55)	
9.	Profession Tax	-	14.39 (0.00)	29.32 (0.00)	65.97 (0.01)	47.78 (0.02)	32.02 (0.02)	21.38 (0.02)	12.82 (0.01)	5.37 (0.01)	
10.	Sales Tax and Motor Spirit	24.46 (0.03)	399.59 (0.07)	695.73 (0.12)	960.22 (0.19)	465.99 (0.16)	268.20 (0.18)	279.47 (0.22)	182.68 (0.20)	62.48 (0.19)	
Total		4216.69 (5.80)	37867.54 (6.96)	50892.85 (8.75)	52240.54 (10.13)	24674.45 (8.71)	15302.06 (10.21)	11949.77 (9.21)	75748.22 (8.21)	3558.46 (8.00)	

APPENDIX TABLE A.III. 34

Allocation of Indirect Taxes by Income Class Rural (1975-76)

Sl. No.	Indirect Tax	Rs. 0-1000	Rs. 1001-2000	Rs. 2001-3000	Rs. 3001-4000	Rs. 4001-5000	Rs. 5001-7000	Rs. 7001-10000	Rs. 10001-15000
1.	Union Excise duties	433.62 (4.22)	10800.62 (4.88)	36895.75 (5.35)	49281.32 (5.76)	45722.75 (5.34)	44908.68 (6.03)	7854.81 (4.97)	6120.47 (5.91)
2.	Import Duties	110.10 (1.08)	2486.33 (1.12)	9377.94 (1.36)	14588.47 (1.70)	15700.37 (1.83)	12519.16 (1.68)	2030.41 (1.37)	1686.37 (1.63)
3.	State Excise Duties	71.51 (0.70)	1290.11 (0.58)	4073.44 (0.59)	5635.31 (0.66)	6699.44 (0.78)	7926.62 (1.06)	1241.48 (0.84)	1038.38 (1.00)
4.*	General Sales Tax	222.82 (2.17)	5382.64 (2.43)	20828.28 (3.02)	28747.29 (3.36)	25831.82 (3.02)	25884.69 (3.48)	4095.26 (2.77)	3416.19 (3.29)
5.	Tax on passengers and goods	35.89 (0.35)	724.28 (0.33)	2283.10 (0.33)	2895.85 (0.34)	3107.37 (0.36)	2762.53 (0.37)	432.01 (0.29)	358.94 (0.35)
6.	Motor Vehicles Tax	11.51 (0.11)	588.69 (0.27)	1571.06 (0.23)	1815.90 (0.21)	1972.15 (0.23)	2207.82 (0.30)	361.67 (0.24)	302.02 (0.29)
7.	Electricity Duties	17.18 (0.17)	324.33 (0.15)	977.35 (0.14)	1182.74 (0.14)	1639.00 (0.19)	1553.15 (0.21)	249.09 (0.17)	206.97 (0.20)
8.	Entertainment Tax (including other duties and Taxes)	4.33 (0.04)	110.48 (0.05)	444.38 (0.06)	676.57 (0.08)	1674.56 (0.20)	1488.83 (0.20)	233.19 (0.16)	193.89 (0.19)
9.	Profession Tax	-	-	-	-	1542.43 (0.02)	378.78 (0.05)	19.55 (0.01)	40.32 (0.03)
10.	Sales Tax and Motor Spirit	-	-	-	-	-	-	-	-
T total		907.96 (8.84)	21707.48 (9.80)	76451.30 (11.09)	104823.45 (12.24)	102499.89 (11.97)	99630.26 (13.88)	16017.47 (12.83)	13363.55 (12.86)

APPENDIX TABLE A.III. 36
ALLOCATION OF INDIRECT TAXES BY INCOME CLASS
ALL INDIA (1975-76)

Sl. No.	Indirect Tax	Rs. 0-1000	Rs. 1001-2000	Rs. 2001-3000	Rs. 3001-4000	Rs. 4001-5000	Rs. 5001-7000	Rs. 7001-10000	Rs. 10001-15000
1.	Union Excise duties	2700.50 (6.35)	13157.03 (5.33)	45401.52 (5.72)	68721.26 (6.34)	69764.58 (5.98)	73695.73 (6.56)	15204.00 (6.36)	10041.76 (6.67)
2	Import duties	763.24 (1.79)	3100.43 (1.26)	11927.10 (1.50)	21196.77 (1.95)	25197.84 (2.16)	21465.08 (1.91)	4348.72 (1.83)	2831.85 (1.88)
3	State excise duties	327.58 (0.77)	1508.18 (0.61)	4823.48 (0.61)	7629.37 (0.70)	10646.25 (0.91)	14064.09 (1.25)	2989.37 (1.25)	1900.76 (1.26)
4 *	General sales tax	1277.06 (3.00)	6536.12 (2.65)	25244.63 (3.18)	39719.46 (3.66)	38549.55 (3.30)	42242.79 (3.76)	8464.28 (3.54)	5612.75 (3.73)
5	Tax on Passengers and goods	194.79 (0.46)	846.93 (0.34)	2706.16 (0.34)	3821.91 (0.35)	4373.07 (0.37)	4148.44 (0.37)	806.90 (0.34)	544.15 (0.36)
6	Motor vehicles tax	151.70 (0.36)	742.19 (0.30)	1984.07 (0.25)	2447.80 (0.23)	2937.92 (0.25)	3440.28 (0.30)	764.73 (0.32)	501.08 (0.33)
7	Electricity duties	129.40 (0.30)	433.90 (0.18)	1351.80 (0.17)	1956.58 (0.18)	2626.78 (0.22)	29810.61 (0.27)	675.96 (0.28)	417.62 (0.28)
8 **	Entertainment tax (Including 'Other duties and taxes')	338.35 (0.79)	289.54 (0.12)	1203.63 (0.15)	3111.50 (0.28)	5896.38 (0.51)	6087.68 (0.54)	1483.28 (0.62)	811.15 (0.54)
9	Profession tax	-	-	-	51.24 (-----)	347.96 (0.03)	881.30 (0.08)	245.47 (0.10)	119.62 (0.0)
10 ***	Sales tax on Motor spirit	-	-	-	-	-	-	-	-
	Total	5884.02 (13.82)	26614.32 (10.79)	94642.39 (11.93)	148655.89 (13.73)	160440.33 (13.77)	169000.00 (15.05)	34982.71 (14.63)	22780.7 (15.15)