

Appendix II

THE METHOD OF ESTIMATING GOVERNMENT SHARE OF INDIRECT TAXES

For the purpose of measuring the incidence of indirect taxation on households as discussed earlier, it has been decided that the share of the tax revenues attributable to general government consumption and capital formation should be excluded from the computation. The taxes paid by the Government on goods purchased for consumption or capital formation represent only accounting transfers and hence they need not be considered to result in a net burden on the private sector. It might be indicated that government consumption is measured by the current expenditure on goods and services and wages of only the government administrative departments including defence. Government capital formation is normally taken to include capital formation by the government administrative departments as well as by the departmental enterprises of the Government. For the purpose of the present study, however, we have excluded capital formation by the departmental enterprises.

Full details of commodity-wise information on purchases made by the Central government, State governments and the local authorities are not available. The Director General of Supplies and Disposal (DGS & D) publishes, annually, *Directory of Government Purchases*, giving commodity-wise values of purchases made by the Governments. The DGS & D data, however, suffer from three main limitations. Firstly, the coverage of the data is partial because there are no statutory requirements for all the Central and State government agencies to make purchases only through DGS & D. Secondly, government purchases of less than Rs. 20,000 in the case of defence and Rs. 5,000 in case of other ministries are made directly by government departments and other government agencies, a greater part of which is not reflected in the purchases shown in the Directory. Thirdly, separate information on purchases made by the administrative departments of the Central and State governments and those by departmental and non-departmental under-

takings of the Central and State governments is not available. The information contained in the Directory gives only a break-up into (a) purchases made through DGS & D, and (b) orders placed directly by the government departments, government undertakings, etc. On the basis of this break-up, it is not possible to segregate the share of purchases made by government administrative departments.

Information contained in the *Input-Output Table for India, 1963*, could not be used for the reason that the estimates relate to the year 1963 and since then the pattern of government consumption has undergone a great change.

Again, the estimates of fixed capital formation given in the *Input-Output Table for India* relate to the entire economy and separate information for the government administrative departments is not provided. For more or less the same reasons, we could not use also the information contained in the *Material and Financial Balances, 1966* for drawing estimates of purchases of different categories of commodities by the government sector.

In the absence of any other source of information for the present study, reliance has been placed on the information on public consumption contained in the *Technical Note* of the Planning Commission (See *A Technical Note on the Approaches to the Fifth Plan of India 1974-79*, published in 1973). The *Technical Note* gives information on the value of purchases made by the Government for consumption (public consumption) in 1973-74 at 1971-72 prices along with the value of total gross output in the economy and the total value of imports for a large number of commodities.

A list of goods purchased for public consumption along with the value of purchase in the year 1973-74 at 1971-72 prices for each item as contained in the Planning Commission's *Technical Note* is given below. It might be pointed out that the gross value of output includes the value of output used for intermediate consumption as well as for final uses. The value of intermediate consumption does not enter into the picture because such goods are purchased by entrepreneurial units of the economy (government and non-government) which are in a position to pass on the incidence to households and government administrative departments through the sale of their output.

TABLE A.5
Value of Public Consumption Goods in 1973-74
 (Valued at 1971-72 Prices)

(Rs. crore)

S. No.	Item	Public consumption	Gross output
1	2	3	4
1.	Animal husbandry	2.1	4065.0
2.	Forestry	16.4	686.3
3.	Coal	1.8	296.1
4.	Sugar and <i>gur</i>	0.6	762.1
5.	Vegetable oil	0.6	534.0
6.	Tea and coffee	1.2	391.5
7.	Other food products	25.4	2451.7
8.	Cotton textiles	27.4	2350.0
9.	Jute textiles	63.5	413.6
10.	Other textiles	38.9	588.6
11.	Miscellaneous textile products	14.5	688.5
12.	Wood products	45.9	381.2
13.	Paper and paper products	64.6	239.2
14.	Leather products	11.2	191.9
15.	Rubber products	25.7	354.0
16.	Plastics	1.8	152.4
17.	Cosmetics and drugs	2.5	492.5
18.	Other chemicals	4.4	720.8
19.	Petroleum products	27.6	297.9
20.	Other non-metal mineral products	1.3	725.0
21.	Bolts and nuts	0.9	53.4
22.	Metal containers	5.7	67.3
23.	Other metal products	29.9	916.0
24.	Office domestic equipment	4.7	56.7
25.	Electric wires	32.4	232.2
26.	Electronics	19.0	80.5
27.	Batteries	6.1	59.6
28.	Electrical household goods	8.0	98.6
29.	Telephone and Telegraphs equipment	1.4	53.6

30. Other electricals	57.1	260.7
31. Motor cycle	0.4	120.6
32. Motor vehicles	51.5	477.0
33. Ship and boats	7.6	43.7
34. Aircraft	4.5	40.5
35. Rail equipment	12.0	352.5
36. Other transport equipment	24.4	53.4
37. Miscellaneous scientific instrument	7.8	37.3
38. Other industries	6.2	433.8
39. Printing	4.1	176.1
40. Electricity	22.0	1025.3
41. Construction	350.4	4856.7
42. Railways	7.3	1203.0
43. Other transport	25.0	1476.9
44. Other services	3753.0	12454.3

Source : *A Technical Note on the Approaches to the Fifth Plan for India, 1974-79*, Planning Commission, April 1973.

We find three types of goods purchased for government consumption : (i) some goods mostly in the nature of consumption goods ; (ii) some in the nature of capital goods ; and (iii) the remaining in the nature of services. Items 1 to 25 and 27 are consumption goods ; item 26 and 28 to 38 and 41, are capital goods and items 39, 40, 42 and 44, services. In the case of those goods which are mostly in the nature of consumption goods, the procedure of estimating the Government share of indirect taxes is simple. We have the ratios of the value of government consumption to the total value of output plus import in respect of each item. This ratio has been applied to the total value of tax yield for each commodity (including sales tax) separately to work out the share of tax yield allocable to government consumption. In some cases, however, the break-up of government consumption in the necessary detail is not available. In all such cases, many taxable items have been clubbed together to make them comparable to government consumption items.

Expenditure on goods of a capital nature for defence purposes only is treated as expenditure on consumption. The goods of a capital nature indicated in the above table under public consumption represent goods meant for defence purposes. Most of these goods are free from excise duties. Those which are subject to duties have been dealt with in the same fashion as we have done in the case of goods mostly in the nature of consumption goods.

The main difficulty arises in the case of capital formation. The estimates of gross fixed investment given in the *Technical Note include* capital formation in the government administrative departments. Item-wise information on fixed investment by government administration, however, is not available. The methodology followed for estimating item-wise value of capital formation by the administrative departments is as follows.

In the case of construction, following the CSO practice, it is assumed that government construction falls into the category of those works which need material inputs. They are covered by the commodity flow approach of estimation of capital formation in India by the CSO. We could obtain from the CSO value of construction falling into the category of commodity-flow approach broken up into government administration and the rest. The amount of tax yield worked out for construction inputs can be broken up into government administration and the rest on the basis of the ratio of the value of government construction in 1973-74 under the commodity-flow approach to the total value of construction under the commodity-flow approach.

For items of the nature of fixed capital investment in machinery and equipment, we do not have separate item-wise break-up into government administration and the rest. In the case of motor cars and motor cycles, however, the Directorate General of Technical Development was in a position to give the percentage of total cars and motor cycles produced (4 per cent) going to government administrative departments of the Central and State governments. Therefore, 4 per cent of the tax yield from cars and motor cycles has been taken as attributable to government administrative departments. The remaining items of capital formation in government administration is taken to be negligible and hence ignored. Construction in the government sector and purchase of motor cars and motor cycles by the Government cover a very large part of the capital formation by government administration departments. According to the CSO, these two items cover about 95 per cent of gross fixed investment in government administration.