5. RATIONALISING THE SALES TAX STRUCTURE

Introduction

The sales tax system in Tamil Nadu, as in any other State, has to be viewed in a specific setting because the tax system of a State (of which sales tax is an important part) is a sub-set of the overall tax system of the country. The State's system is largely restricted to activities and transactions that take place within its boundaries. Besides, in the case of sales tax we have to always keep in view the possibilities of diversion of trade and investment. This may sometimes lead us to follow the average policy of the neighbouring States. In addition, we have to keep in view a number of principles such as the principle of equity and the criteria of economic rationality and administrative expediency that the State's tax system should satisfy along with the national system.

Objectives of Reform

Within the above framework, the following criteria are crucial to rationalising the sales tax structure of Tamil Nadu:

(i) Growth objective: The tax policy should be able to raise enough resources for the development of the State. Accordingly, it should be such as to promote the economic growth and industralisation of the State.

(ii) Equity consideration: The structure should fulfil the criterion of equity. It should be casting proportionately larger burdens on the better-off sections of the population and should not be taking more than a token contribution from the poorer sections of society;

(iii) Administrative expediency: It should be so administered as to cause the least harassment to the taxpayers and to result in low compliance costs; and

(iv) Co-ordination: It should be in consonance with the national objectives of overall tax policy and with the structures prevailing in the neighbouring States.

We would keep in mind the above objectives while recommending changes in the structure of sales taxes in Tamil Nadu. Accordingly, we would take into consideration not merely administrative convenience but also the criteria of economic efficiency and long-term benefits.

Point of Levy

Prior to 1959, Tamil Nadu had a multi-point tax. With the enactment of Tamil Nadu General Sales Tax Act, 1959, the State went in for a combination of both the single-point and the multi-point tax. But there has been a gradual movement towards the single-point levy and, as of now, there is a predominant reliance on the first-point tax. This has been the result of the changes in the tax structure made on the basis of the recommendations of various committees.

The first major switchover was attempted in 1957 when Dr. P.S. Lokanathan did the first review of the sales tax system in the State. At that time the business associations and the Chamber of Commerce almost unanimously pointed out that the system of multi-point taxation had led to a lot of difficulties and that a change over to the single-point taxation would avoid many of the problems and save them from various handicaps. The main arguments against the multi-point system were that it compelled a large number of small and petty dealers to maintain accounts, submit returns and generally comply with the provisions of a complicated law. Also, the dealers were seldom able to comply with the requirements of the law to the satisfaction of the assessing authorities, who, therefore, assessed them on the basis of their own discretion. This exposed them to harassment. Finally, according to the business community, the multi-point tax caused elimination of the middleman. All these arguments were examined by Dr. Lokanathan, who accepted some of them as well-founded and recommended switching over to the first-point tax in respect of many commodities (Lokanathan, P.S., 1957).

At the time of the second review by Dr. Lokanathan in 1965, the business community desired an almost complete reversion to the multi-point system. The main argument advanced by them was that in the single-point system, traders had to maintain separate accounts and vouchers for each group of commodities subject to different rates. Secondly, they put forward the complaint that notwithstanding the fact that the tax had already been collected, the taxing authorities still insisted upon the production

of vouchers and other evidence to prove that the commodities had already been taxed, with the result that in many cases where acceptable evidence could not be produced, additional tax had to be paid. Finally, it was argued that the rates under the single-point system were usually higher than those under the multi-point tax, and, therefore, there was a greater temptation to avoid taxes by the less scrupulous dealers. All these arguments were examined by Dr. Lokanathan. He appreciated them but recommended the continuation of the combination of the multi-point and single-point taxation (Lokanathan, P.S., 1965).

Like the Lokanathan Report, the other Reports also recommended the continuation of the combined system of tax at a single-point on some commodities and at multi-points on the others (Srinivasan, S.P., 1974; Government of Tamil Nadu, 1979). However, with the recommendation of each successive Report, the list of the goods taxable at the first-point went on increasing.

Here, it is relevant to note that the Committees which considered the sales tax system of the other States of the Southern Zone have also adopted a similar line of recommendations. In 1971, the National Council of Applied Economic Research conducted a review of the sales taxes in Andhra Pradesh. It examined the various systems prevalent in different States and suggested the continuation of the prevalent system of combination of multi-point and single-point taxation along with a double-point levy on paddy and rice (NCAER, 1971). The Mysore Taxation and Resource Enquiry Committee also examined

the different systems in the country in 1968 and expressed the opinion that the single-point system in West Bengal and the double-point system in Maharashtra had been introduced against the background of large urban trade and consumption and predominantly industrial and manufacturing interests. And it recommended that in a predominantly agricultural economy like Mysore, the total abolition of multi-point levy was not feasible as it would be difficult to locate an appropriate point of levy for the imposition of single-point tax on many of the commodities (Government of Mysore, 1969).

All the reports mentioned above have almost unanimously argued in favour of a combination of a multi-point and a single-point levy at the first stage with predominant emphasis on the latter. However, in reaching this decision, the overriding consideration seems to have been administrative expediency. We wish to stress that economic considerations are not less important and have to be given due weight. From the economic point of view, the first-point tax can be said to suffer from many disadvantages. For one thing, although it is called a first-point tax because it falls on the first sale of a good, which is legally treated as a separate commodity, in point of fact, it is a multi-point tax in so far as it falls on the same "good" as it passes through the different stages of production. Thus, a piece of steel gets taxed not only when it is sold but again when the component in which it is embodied is sold and also when the machine in which the component is embodied is sold. Tax cascading, therefore, takes place under the first-point tax, unless complete set-off is given in respect of inputs used in manufacture.

In the absence of such relief, there is tax on tax at successive stages of production. In addition, since the tax is collected at an early stage in the production process, the cost of holding inventories in the economy in general goes up, leading to higher interest payments and additional cascading. Secondly, taxes on inputs, if no input tax relief is granted, lead to changes in relative factor prices and can produce inefficiency in the techniques of production. Thirdly, since the proportion of value added at later stages and at earlier stages of production differ from commodity to commodity, the first-point tax may be said to be biased against those commodities in respect of which the proportion of value added is large at the earlier stages of production. In particular, there will be an unintended bias in favour of commodities such as durable consumer goods in whose case the proportion of value added is quite considerable at the retail stage. Fourthly, the first-point tax has a lower taxable base than the last-point tax (or a value-added tax) and hence it has to be levied at a higher rate for deriving the same amount of revenue. Correspondingly, there swould be a greater incentive for evasion. One further shortcoming of the first-point tax without set-off is that it tends to promote vertical integration because purchases of raw materials from outside units are subject to tax. Hence the tax militates against the objective of promoting ancillary industries.

One of the arguments usually given by tax administrators in favour of the first-point tax and against the last-point tax is that the former can be administered more easily because evasion could be checked more

successfully. In fact, however, it has been found that the dealers liable to pay the first-point tax have developed a method of tax evasion called "bill-trading" (Government of Tamil Nadu, 1977) or dealing through "hawala dealers" (Government of Maharashtra, 1978). The method consists in showing goods sold on which tax has not been paid as goods already subjected to tax, through obtaining bills from certain registered dealers who issue them without any corresponding transactions taking place. Another method of evasion is to underinvoice the sale price on the first sale and then for related dealers to raise the price at the subsequent stages. The tax department may contest the price given in the invoice and litigation may, and does quite often, ensue.

These serious shortcomings of the first-point tax cannot be brushed aside in the name of administrative expediency or convenience. Substantial modifications in the traditional form of the single-point tax would certainly be called for. Some observers have suggested that the major loopholes arising in the case of the first-point tax may be closed and the incentive to evade may be reduced by the adoption of a low rate, multi-point tax. It may be readily conceded that the multi-point sales tax would be the easiest to administer, but it is also the least desirable from the economic point of view. Many of the economic arguments against the first-point tax apply with greater force to the multi-point tax. For example, the cascading is greater and the tendency to vertical integration would be stronger. However, the multi-point tax could be considered as a small supplement to the basic tax, confined only to a few commodities and as an interim measure.

Although the retail sales tax or the last-point tax is the most desirable from the economic point of view, it is often held that it is much more difficult to administer that tax than the first-point tax. The reason given is that in the case of the latter, the Tax Department would have to deal with a much smaller number of dealers who would be liable to tax. By contrast, it is argued, the last-point tax has to be collected from a very large number of dealers who need to be kept under surveillance and whose books of accounts have to be checked. It would be correct to say that the first-point tax has the advantage that the greater part of the tax due will be collected from a small number of large dealers, but it is not correct to asay that the task of checking and the workload of assessment will be much less in the case of the first-point tax than with the last-point tax. It is well known that under either tax, all dealers with turnover above the stipulated exemption level are required to submit returns which in turn will have to be checked. In fact, given the exemption limit, the number of dealers to be checked and kept under surveillance would be the same under both the systems. It may be true that since under the first-point tax, the larger part of the revenue is collected from the larger dealers who declare themselves to be first-point sellers, the returns submitted by the re-sellers, who claim that no tax is due from them, may be checked in practice only cursorily. But such cursory checking in course of time would open up a loophole for large-scale evasion. It is found that in the States where a turnover tax exists in addition to the first-point tax, the quality of assessment is definitely superior in respect of the re-sellers.

We are not suggesting that the last-point tax or the multi-point value-added tax, under which a set-off is given at every stage for the tax paid at the preceding stage, would not require more work than the first-point tax. The contention is only that the saving of work under the first-point tax is often smuch exaggerated.

In this context we may recall the recommendations of the Report of the NIPFP submitted to the Government of Bihar in 1979. It states: "What is required is a form of double or multi-point taxation which, while enabling the Government to capture value added in the course of trade would not suffer from the familiar demerits of cascading, promoting vertical integration, etc., that are associated with traditional multi-point tax. Such a system will have to embody the principle of value-added taxation. Ideally, the existing system could be transformed into a State value-added tax under which all registered dealers would be able to pay tax, each one's liability being computed as the tax payable on his sales minus the tax paid on the relevant purchases" (NIPFP, 1981, pp. 48-49)[1/].

The introduction of such a system of value-added tax would be an ideal solution. To begin with, however, we could attempt to levy this type of tax only on a few commodities. Once the State tax administrative machinery has gained experience in administering it, the tax could be gradually extended to other commodities. For the present, we could have a combination of a value-added tax on a few select commodities and a single-point tax at the first stage on the rest of the commodities. The commodities chosen for the introduction of the value-added tax could be those suffering large evasion of tax, or those commodities which have substantial value-added in the course of trade.

This in effect would mean that the tax would be levied at the first point on all commodities except for those which are subjected to a purchase tax for special reasons. But in respect of selected commodities the tax will fall also on subsequent sales by registered dealers. The Government has recently introduced the multi-point tax on groundnut oil, as on anti-evasion measure. Our recommendation is also partly intended to tackle evasion, but we advocate a multi-point tax with a set-off provision because we wish to avoid the well-known harmful effects of a simple multi-point or turnover tax. We have indicated that in respect of the rest of the commodities, the single-point tax should be levied at the first-point. But this recommendation is subject to the condition that gradually inputs bought by manufacturers would be made tax free so that the more objectionable features of the first-point tax would be eliminated. We deal with this question in a later section.

We may point out here that the gradual extension of the multi-point tax with set-off at every stage would provide the Government a method by which more resources can be raised without increasing the burden of tax at the first stage, because only part of the value added in subsequent stages would be captured. In our view, the introduction of this system of multi-point tax with set-off (i.e., value-added tax) in respect of selected commodities would represent the right type of reform in the circumstances prevailing in the State of Tamil Nadu. It would help in checking evasion of tax and contribute to the long-term rationalisation of the tax structure. We give below a list of commodities in respect of which the multi-point tax with set-off could be adopted:

(i) Stainless steel;
(ii) Brass and copper wares and vessels;
(iii) Iron and steel;
(iv) Aluminium;
(v) Wooden and bamboo products including furnitures;
(vi) Vegetable oil and products;
(vii) Polythene granules and products;
(viii) Rubber products;
(ix) Electronic products, and
(x) Household electrical appliances.

To begin with, only the above commodities may be brought under the scheme. A review should be made after a period of two years to see if some other commodities could be brought under this system. As this State has already gained experience in administering the multi-point tax, it would not be difficult to administer the same tax with a set-off provision.

Multiplicity of Rates

As in most other States, in Tamil Nadu too, there are very fine gradations of sales tax rates for different commodities. At present, there are fifteen rates. These range from one to 50 per cent. This multiplicity of rates not only blunts the intended progressive effects but creates the need for additional calculation by the dealers causing an increase in the cost of compliance while not really benefiting revenue. More importantly, it creates many disputes relating to classification of commodities for the application of the appropriate rates.

Although it is true that progression should be introduced through some gradation in rates, there is certainly no justification for having as many as 15 different rate categories. There is a clear need to reduce the number of rates. With a view to doing so and to adjust the rates to be more in harmony with those prevailing in the neighbouring States, we have worked out a rate structure for TNGST. This is given in Annexure V.1. It could be seen from the Annexure that the rate of tax has been reduced on commodities such as electric storage batteries, spark plugs, cotton yarn waste, cement, lubricating oils, mineral oils, tractors and caustic soda. Similarly, the rate of tax has been enhanced in some of the cases such as dictaphone, tape recorder, jari, chemical fertilisers, precious stones, chicory, coffee, tea, soaps, bicycles, foam rubber, electrical goods, electrical instruments, raw wool and so on.

Treatment of Inputs

We pointed out in chapter 4, that under the existing provisions the concessional treatment of inputs was quite restricted. However, grant on an ad hoc basis of concessions under section 3(a) to a few select industries shows that the Government have, of late, recognized the danger that a high rate of tax on raw materials might adversely affect the development of industry in the State. Indeed, there is recognition of the fact that any rate of tax higher than the CST rate would cause diversion of trade, and cause a shift in the location coefficients. To promote industralisation and to keep the industries of Tamil Nadu competitive, it is necessary for the State to adopt a rational tax treatment of components and raw materials. In any case, it has to bear in mind the practices of the other States, especially the neighbouring States.

An examination of the treatment of raw materials in the other States shows that several of them grant exemption or concessional treatment. Raw materials bought by manufacturers are exempt in Delhi, Punjab, Haryana, Himachal Pradesh and Jammu and Kashmir. In Gujarat, the manufacturer has the option either to buy raw materials without payment of tax or to claim a set-off for tax paid on raw materials against that payable on manufactured goods. These concessions are, however, available only for the goods that are not "prohibited items" under section 2(12) of the Sales Tax Act of the

State.[2] In Haryana, Himachal Pradesh and Punjab, exemption is granted only for the raw materials used in the manufacture of taxable goods sold within the State. In Delhi, exemption is granted to raw materials even when final goods are exempt or sent out of the State. A number of other States provide for concessional treatment. The nature of the concessions varies from State to State. Maharashtra[3] and Orissa[4] tax raw materials at the concessional rate of 4 per cent, Madhya Pradesh at 2 per cent, and Rajasthan at 1 per cent. Bihar also grants concessional treatment and taxes raw materials at the rate of 3 per cent. The concession is available even if the raw material is used to manufacture exempted goods. In the States of Tamil Nadu, Karnataka and Andhra Pradesh, the concessional rate of four per cent is levied but in Kerala the rate is one per cent only. However, the concessional treatment in all these States is restricted to the use of components; the other raw materials are taxable at the normal rate. In addition, the concession

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2/ Generally speaking, the "prohibited" items are those taxable at the maximum rate of 4 per cent, like declared goods.

3/ Manufacturers having turnover below Rs 10 lakh can buy raw materials without paying any tax. They, however, pay purohase tax at a later date while filing returns.

4/ With a view to helping new industries, no tax is levied on raw materials, machinery and spare parts thereof, and packing materials bought by the new industries for a period of 5 years from the date of production.

would be available normally when both the components and the manufactured goods fall within the purview of single-point taxation.

The examination of the provisions in respect of the taxation of inputs in the different States shows that, generally speaking, either producers are allowed to buy the raw materials at a concessional rate varying from 1 to 4 per cent, or there is a conditional or an unconditional exemption for such purchases. In Gujarat, relief is also provided through a system of 'set-off' whereby the producers first buy the inputs on payment of tax but are allowed to set-off the tax against that payable on their output.

On a careful consideration of the present relevant provisions under the TNGST Act, the policies followed by the majority of other States, and the representations made by the Chambers of Commerce and Industry, etc., we recommend that in the interest of the economic development of the State, and for creating a higher tax base in the future, there should be no tax on the use of any raw material by manufacturers. A change to this effect would be an important step towards an economically rational sales tax policy for the State. It would give a boost to industrial activity and would dampen the unnatural movement of trade in raw materials. Presently, there is a tendency to buy several raw materials from out of the State to save the higher rate of tax on their use. In fact, there has been an increase in the diversion of trade due to the policy of high taxation of inputs in the State. This is corroborated by the fact that a large

number of dealers and representatives of trade and chambers of commerce have submitted their memoranda to us on this point. In almost all the cases it has been shown that the diversion of trade is taking place slowly but steadily. Although we have not been able to empirically examine these cases of diversion, we are of the firm opinion that the concessional treatment would go a long way to help create conditions that would avoid unnecessary diversion of trade. However, we do not recommend any concessional tax treatment of a specific commodity.

Besides, the policies followed by Pondicherry should be a matter of concern for Tamil Nadu; the CST rate for some commodities in the former has been reduced to 2 per cent to further escalate the diversion of trade in its favour. Though it is certainly not desirable to engage in tax competition, reasonable steps need to be taken to protect the interests of the State.

While it is necessary to exempt the purchase of inputs by producers, in general, the grant of the right to purchase raw materials without payment of tax is not desirable. Apart from the administrative problems involved, the right is also subject to misuse. It is, therefore, useful to introduce a system of set-off against the liability of tax on final output.

As stated earlier, generally speaking, manufacturers can at present buy only components at the concessional rate of 4 per cent. That is to say, any commodity which does not become an identifiable component of the manufactured goods is taxed at the full rate. However, all the

raw materials in the case of chemicals, rubber products, synthetic rubber, paints, gases and drugs can be brought at the concessional rate of 4 per cent with the limitation mentioned in chapter 4 (page 35). The remaining inputs are taxed at the usual rate if they are not identifiable components. As the usual rate is generally higher than the CST rate, the manufacturers normally buy the raw materials from out-of-State. In fact, quite a few manufacturers have indirectly admitted the fact that even when the transactions are locally carried out, they are shown in the books as those involving inter-State purchases. This is because agencies have developed in the State that supply goods at the door of the manufacturer with the documents to show their having borne CST on inter-State transactions. Having regard to all the relevant factors, we recommend both from the point of economic effect and to avoid evasion of tax, that the manufacturers be allowed to buy all the raw materials at the concessional rate of 4 per cent. The second recommendation we make in this regard is that full set-off of the tax paid (4 per cent paid on raw materials) by manufacturers be provided against any sales tax required to be paid on the output[5/]. After the implementation of this recommendation, there would be no inter-State transactions (of raw material) to avoid tax on it. Even the 2 per cent rate on CST by Pondicherry would not cause any transaction to be diverted through Pondicherry, because no set-off would be available to the manufacturers on the CST payment.

5/ This recommendation was first made by the NIPFP in 1979 in its Report to the Government of Bihar. (See NIPFP, 1980, p. 63).

In that event, the manufacturer would buy inputs at the rate of 4 per cent but would deduct the tax paid on inputs from his tax liability arising through the sale of its output. Since the tax liability on inputs would always be less than the liability on the final goods, the set-off procedure would work in a semi-automatic manner; the manufacturer would first calculate the tax he has to pay on his output and subtract from it the tax he has paid on the inputs used in producing that output. The manufacturer would be required to deposit in the treasury only the net amount after subtracting the tax paid on the input. Since advance payments are made every quarter, this procedure in effect would mean that the raw material or other input tax would be refunded to the producer in instalments quarter by quarter. However, in case the manufacturer does not pay the tax on his output and is, therefore, unable to obtain a set-off in respect of raw material taxation, there would be some disadvantage to him, because in that case the tax on raw material would "stick". Similarly, the set-off would not be possible if the commodity that a manufacturer produces is moved to other States on stock-transfer. In all other cases, the set-off provision would be tantamount to completely exempting the raw materials used from taxation.

Although this may mean some fall in the revenue in the short-run, it is not going to have any significant effect. An estimate of the possible revenue-effect, presented in Annexure V.2, shows that the loss would not be large. Moreover, in the long-run, a boost would be given to sales tax collections because, the measures we are recommending should lead to a greater degree of

industrial activity as well as local purchases in the State.

Summing Up

Prior to 1959, Tamil Nadu had a multi-point levy. From that year onward, there has been a trend towards having a single-point tax, so much so that today the State gets only 12 per cent of the revenue from the multi-point tax. As the choice of the structure of a tax cannot be made without looking into the overall framework, we have attempted to evaluate the sales tax structure of the State after keeping in mind the objectives of growth, equity, administrative convenience and co-ordination.

An examination of all the arguments for and against different points of levy suggests that the predominant reliance on the first-point tax should be reconsidered, for, this system is based on monitoring the flow of goods through the checkposts, verifications of documents and checking of all the manufacturers and importers, many of which are not in the proper state of affairs, leaving scope for large-scale evasion of tax. From the point of economic rationale as well, this tax is not superior to the retail sales tax and the multi-point value-added tax. Both these taxes do not have any cascading or distortion, and cover value-added at almost all the stages of the production-distribution process. Also, they do not interfere with the process of production nor impose cumulative taxation on inputs and final products which leads to unintended interferences and reallocation of resources. Nevertheless, the value-added form of tax

as between the two is administratively more convenient. Hence, it is recommended that in Tamil Nadu we should have a combination of single-point tax and a value-added tax. To begin with, we could have the latter tax on a few select commodities. When the State has successfully administered it, the value-added tax could be extended to other commodities too.

There exists a problem of multiplicity of rates. As this is economically irrational and administratively inconvenient both to the Department and to the dealers, it is necessary that we should have only a few rate categories. At the most we could have about six rate categories instead of the existing fifteen categories.

Finally, the inputs should not be taxed in the interest of having (i) a higher rate of economic growth and (ii) a rational tax system. We, therefore, recommend that (a) all the raw materials and other inputs be taxed only at the rate of 4 per cent when these are bought by manufacturers, and (b) the tax paid on inputs and raw materials be allowed to set-off against the tax to be paid on final goods. This would make at least the manufacturing sector economically rational - all the taxes to be levied at the last point only.

Annexure V.1

Effect of Rationalisation of Sales Tax Rates on Sales Tax Revenue in Tamil Nadu
(1979-80)

(Per cent)

Commodity code	Name of the commodity	Actual rate	Proposed rate	Proposed yield (Rs lakh)
(1)	(2)	(3)	(4)	(5)
101	Typewriters, tabulating machines, etc.	15.00	15.00	65.22
102	Clocks, timepieces, watches and parts	15.00	15.00	59.41
103	Motor vehicles, component parts	7.00	7.00	1943.73
104	Electric storage batteries	15.00	12.00	80.96
105.	Dry cells	15.00	15.00	66.24
106.	Spark plugs	15.00	12.00	1.21
107.	Refrigerators, airconditioning plants	15.00	15.00	92.82
108.	Wireless instruments and apparatus	15.00	15.00	227.81
109.	Cinematographic equipment	15.00	15.00	179.07
110.	Photographic cameras, and parts	15.00	15.00	69.73
111.	Binoculars, telescop	15.00	15.00	0.18
112.	Gramophones and parts	15.00	15.00	6.96
113.	Dictaphone, tape recorder	10.00	15.00	6.96
114.	Sound transmitting equipment	15.00	15.00	0.52
115.	All arms, rifles, revolvers etc.	15.00	15.00	0.59
116.	Iron and steel safes and almirahs	15.00	15.00	102.92

Contd.....

Annexure V.1 (Contd.)

(1)	(2)	(3)	(4)	(5)
117.	Mechanical lighters	15.00	15.00	0.39
118.	Bullion pure and alloy	2.00	2.00	14.07
119.	Cotton waste	4.00	4.00	26.93
120.	Cotton yarn waste	10.00	4.00	19.01
121.	Artificial silk yarn and staple	4.00	4.00	355.26
122.	Jari	4.00	8.00	55.37
123	Chemical fertilisers (item 21)	3.00	4.00	657.83
124.	Milk foods (excluding milk)	4.00	4.00	90.96
125.	Precious stones	9.00	10.00	13.44
126.	Chicory	6.00	8.00	4.82
127	Coffee, coffee powder	4.00	8.00	234.51
128.	Cement	10.00	4.00	217.40
129.	Kerosene	8.00	8.00	697.14
130.	Tea, tea leaves etc.	6.00	8.00	371.62
131	All kinds of soaps (not handmade)	6.00	8.00	341.96
132	Bicycles	3.00	4.00	135.22
133	Articles of foam rubber	9.00	12.00	24.55
134	All kinds of electrical goods	3.00	12.00	628.76
135	All electrical instruments	9.00	12.00	421.83
136	Electrical grinders mixers	12.00	12.00	63.17
137	Electronic systems appliances	12.00	15.00	43.00
138	Vacuum flasks of all kinds	8.00	8.00	8.10
139	Vegetable products, oils etc.	8.00	8.00	80.01
140	Lubricating oils (not greases)	8.00	4.00	747.68
141	All kinds of mineral oils	6.00	4.00	253.29
142	Mercury	8.00	4.00	0.83

Contd.....

Annexure V.1 (Contd.)

(1A)	(2)	(3)	(4)	(5)
143	Seents and perfumes	12.00	8.00	55.70
144	Fireworks, coloured matches	8.00	8.00	21.15
145	Tractors, bull-dozers	9.00	8.00	128.30
146	Rear dumps, loaders etc.	3.00	15.00	14.92
147	Folding umbrellas and parts	8.00	8.00	12.52
148	Mattle bark, ayaran banr	2.00	2.00	21.39
149	Raw wool, goats hair	2.00	4.00	3.91
150	Sugarcane	12.00	12.00	770.35
151	Aluminium pure, and alloy	6.00	4.00	57.25
152	Caustic soda	6.00	4.00	43.48
153	Peseicides and insecticides	3.00	4.00	72.35
154	Fuel gas	10.00	8.00	59.54
156	All kinds of foreign liquors	25.00	25.00	46.65
157	All kinds of alcoholic liquors	25.00	25.00	2.99
159	Asphalt (bitumen)	8.00	8.00	170.86
160	Sulphurf	8.00	8.00	48.81
161	Raw rubber, namely latex	9.00	4.00	3.12
162	Wheat products	2.00	2.00	93.82
163	Cardamom	3.00	4.00	17.06
164	Oil cakes	3.00	4.00	58.37
165	All vegetable oils	4.00	4.00	463.29
166	Machine-made matches	4.00	2.00	0.03
167	Pulses and grass	4.00	4.00	128.54
168	Dhalls of pulses and grams	4.00	4.00	136.46
169	All machineries	6.00	4.00	340.73
170	Charcoal and leco	5.00	4.00	7.15
171	Laural oil	5.00	4.00	0.05

Contd.....

Annexure V.1 (Contd)

(1)	(2)	(3)	(4)	(5)
172	Timber and bamboo	5.00	4.00	171.36
173	Lemongrass oil	5.00	4.00	0.37
174	Hosiery goods - cotton	5.00	4.00	47.21
175	Ready-to-wear apparels	5.00	8.00	17.22
176	Cashewnut and kernel	5.00	4.00	30.59
177	Sewing and embroidery machines	5.00	8.00	28.38
178	Bricks, roof tiles	5.00	15.00	250.29
179	Aerated waters, soft drinks	5.00	8.00	23.04
180	Ice	5.00	4.00	3.58
181	X-ray apparatus	5.00	4.00	6.88
182	French coffee	6.00	8.00	0.03
183	Drugs, proprietory medicines	8.00	8.00	682.84
184	Lithographic printing inks	8.00	8.00	33.41
185	Welding electrodes	8.00	8.00	30.68
186	Roller bearings	8.00	8.00	62.81
187	Power driven pumps	8.00	8.00	55.50
188	Arecanut, betelnuts	5.00	4.00	41.06
189	Scented nut	8.00	8.00	31.34
190	Chinaware and porcelainware	8.00	8.00	22.32
191	Glass and glassware	10.00	10.00	66.18
192	Tinned, canned, packed foods	8.00	8.00	.
193	Water meters	8.00	8.00	1.98
194	Brako fluid	8.00	8.00	1.18
195	Gases, in compressed form	10.00	10.00	65.34
196	Ethyl alcohol	8.00	8.00	2.45
197	Nitric acid	8.00	4.00	10.67
198	Articles of stainless steel	10.00	10.00	100.55

Contd.....

Annexure V.1 (Contd.)

(1)	(2)	(3)	(4)	(5)
199	Paints, colours, distempers	4.00	4.00	264.41
200	Oil engines and its parts	3.00	4.00	102.87
201	Spectacles,sunglasses	8.00	8.00	5.83
203	Plywood, blackboard	3.00	10.00	49.78
204	Products of cement and asbestos	8.00	4.00	27.48
205	Leather goods (not footwear)	8.00	8.00	24.38
206	All sorts of paper and paper boards	8.00	8.00	385.84
207	Rail coaches; wagons	8.00	8.00	8.19
208	Bolts and nuts and screws	8.00	8.00	95.35
209	Hosiery goods other than cotton	8.00	8.00	18.14
210	Furniture of all kinds	8.00	10.00	22.36
211	Pressure lamps and parts	8.00	8.00	1.67
212	Pressure cookers, stoves	8.00	8.00	13.60
213	Playing cards	9.00	8.00	5.40
214	Synthetic rubber	9.00	10.00	0.75
215	Rubber products	9.00	10.00	55.78
216	Pure silk cloth (not handloom)	5.00	0.00	0.00
217	Furniture and other office equipment	10.00	15.00	104.59
218	Linoleum	15.00	15.00	0.83
219	Marble and marble articles	15.00	15.00	13.29
220	Pile carpets	15.00	15.00	0.67
221	Ceramic and mosaic tiles	15.00	15.00	8.05
223	Molasses	25.00	25.00	26.93
224	Arishtams and asavas	30.00	30.00	4.86
225	P.V.C. conduit pipes	9.00	10.00	27.04
226	Prawns, lobsters, frogs	5.00	4.00	0.56

Contd.....

Annexure V.1 (Contd)

(1)	(2)	(3)	(4)	(5)
228	Toothpaste, powder brush etc.	8.00	8.00	62.13
229	Shaving sets	8.00	8.00	25.39
230	Dyes and chemicals	8.00	4.00	250.65
231	Essences and squashes	8.00	8.00	11.90
232	Rough synthetic	15.00	15.00	13.29
233	Cotton sewing thread	3.00	4.00	9.56
234	Handmade matches	2.00	2.00	21.65
401	Coal and coke, not charcoal	3.00	4.00	12.43
402	Cotton in all its forms	3.00	4.00	311.28
403	Cotton yarn, not waste	3.00	4.00	1105.38
404	Iron and steel	4.00	4.00	885.38
405	Jute	4.00	4.00	0.79
406	Oilseeds other than groundnut	3.00	4.00	233.88
407	Groundnut	3.00	4.00	265.93
408	Raw hides and skins	3.00	4.00	161.55
409	Dressed hides and skins	2.00	2.00	82.34
410	Bura, sugar, sugar candy	3.00	4.00	2.95
411	Cereals	4.00	0.00	0.00
412	Crude oil	4.00	8.00	0.03
413	Pulses	4.00	4.00	274.77
601	Abrasives	4.00	8.00	1.46
602	Acids*	4.00	8.00	0.61
603	Aerated water*	5.00	8.00	4.91
604	Aromatic chemicals	4.00	8.00	0.95
605	Articles of food and drinks*	4.00	8.00	13.96
606	Arts and crafts	4.00	8.00	5.56
607	Asafoetida	4.00	8.00	4.64
608	Baking products*	4.00	8.00	15.81

Contd.....

Annexure V.1 (Contd.)

(1)	(2)	(3)	(4)	(5)
609	Beds, quilts, pillows	4.00	8.00	1.85
610	Beedi leaves	4.00	8.00	12.65
611	Building materials	4.00	8.00	38.46
612	Milk products*	4.00	8.00	18.77
613	By-products of sugar industry	4.00	8.00	5.23
614	Camphor	4.00	8.00	11.97
615	Candles, paraffin wax	4.00	8.00	1.76
616	Coconut products	4.00	8.00	0.17
617	Chillies	4.00	8.00	94.98
618	Cinder	4.00	8.00	1.05
619	Condiments and spices	4.00	8.00	1.45
620	Packing materials	4.00	8.00	106.28
621	Domestic utensils	4.00	8.00	80.70
622	Drugs and medicines*	4.00	8.00	10.86
624	Engineering goods	4.00	8.00	84.97
625	Footwear	4.00	8.00	67.76
626	Forest produce	4.00	8.00	1.75
627	Frames and pictures	4.00	8.00	7.06
628	General goods	4.00	8.00	382.23
629	Gunnies and hessian cloth	4.00	8.00	80.11
630	Hardware	4.00	8.00	175.69
631	Handmade soaps	2.00	8.00	75.36
632	Homeopathic medicines	4.00	8.00	0.02
633	Ice-creams	4.00	8.00	2.51
634	Jewellery	4.00	8.00	197.75
635	Light lanterns	4.00	8.00	3.24
636	Lime shell	4.00	8.00	11.14

Contd.....

Annexure V.1 (Contd)

(1)	(2)	(3)	(4)	(5)
637	Livestock	4.00	8.00	0.34
638	Manures*	4.00	8.00	6.09
639	Metals and minerals	4.00	8.00	120.08
640	Music instruments	4.00	8.00	0.82
641	Optical goods	4.00	8.00	5.55
642	Plastic and its products*	4.00	8.00	96.94
643	Poultry feed	4.00	8.00	28.12
644	Polyester fibre, staple	4.00	8.00	32.99
645	Printed matter	4.00	8.00	166.02
646	P.V.C. cloth, Rexine	4.00	8.00	8.94
647	Readymade garments*	4.00	8.00	58.86
648	Rubber goods*	4.00	8.00	9.49
649	Raw silk	4.00	8.00	0.23
650	Splints and verners	4.00	8.00	16.21
651	Scented sticks	4.00	8.00	6.79
652	Scientific equipments*	4.00	8.00	4.20
653	Sports goods	4.00	8.00	8.87
654	Stationery, office equipments	4.00	8.00	55.44
655	Stores*	4.00	8.00	1.28
656	Tamarind	4.00	8.00	47.39
657	Tapioca products	4.00	8.00	65.45
658	Transport vehicles*	4.00	8.00	1.79
659	Turmeric	4.00	8.00	45.46
660	Wigs and human hair	4.00	8.00	0.02
661	Waste paper	4.00	8.00	18.88
662	Menthi	4.00	8.00	2.57
665	Vermicelli	4.00	8.00	2.57

Contd.....

Annexure V.1(Contd)

(1)	(2)	(3)	(4)	(5)
666	Pepper	4.00	8.00	3.60
667	Jaggery and gur	3.00	8.00	173.74
699	Others	4.00	8.00	265.50
	TOTAL	0.00	0.00	14070.73

* Other than first schedule.

Annexure V.2

Estimating Revenue Effect of 'Set-off Procedure': A Note on Methodology

The rational policy of taxation of inputs for the States is to adopt a system of set-off whereby producers first buy the inputs on payment of tax but are allowed to set-off input tax against that payable on their output. Whereas, in the long-run, the State would definitely be raising larger resources due to enhanced industrial activity, the yield, in the short-run, may slightly decline. However, the short-fall would partially be off-set in no time by increased intra-State purchases. Nevertheless, the government would genuinely be concerned with the decline of revenue in the current year, it might have to adjust the rate structure to compensate for the immediate loss. Appreciating this concern of the Department of Commercial Taxes, we have, in this note, attempted to present the estimates of decline in the revenue in the "current year"; part of this would be off-set in the next and the following years due to increased industrial activity and upsurge in the intra-State purchases.

The effect of the concessional treatment of raw materials is estimated by employing the input-output model. The inter-industry demand (IID) for the i^{th} commodity is given as:

$$IID_i = \sum_{j=1}^{n} a_{ij} X_j$$

where, a_{ij} = the input-output coefficient indicating the input of i^{th} commodity per unit of output of the j^{th} product; and

X_j = the total output of the j^{th} product.

In matrix form, it can be expressed as,

$$IID = A.X$$

i.e., the coefficient matrix A is post-multiplied by the output vector X to obtain the IID for the State.

With a view to following the above methodology, we have used the input-output matrix prepared by the Gokhale Institute of Politics and Economics[1]. This matrix is available for the year 1965, in both the producers prices and mixed prices[2]. We have used the coefficient matrix available in the latter prices, because the product of the matrix at mixed coefficients and the output vector at producer prices gives us the inter-industry demand directly at the purchaser's prices.

The IID so obtained for the year 1977-78, is met both from the local production and from the imports (including inter-State purchases add stock-transfers

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1/ See Venkataramaiah, P., Kulkarni, A.K., and Argade, Ladik (1980), Regional Input-Output Matrics - India, 1965, Gokhale Institute of Politics and Economics, Pune-411004.

2/ Mixed prices refer to using, X_{ij}'s in purchaser's prices and DX_j's in producer's prices.

from other States). To estimate the IID net of imports, we have calculated the IID of each industry as per cent of its output. Where the former was more than 100 per cent, we assumed that the same was met from imports and the IID was adjusted accordingly. For the rest, it was assumed that at least 50 per cent was met from the imports if the tax rate was 5 per cent or more. This proportion was inferred from the representations of the trade and manufacturing organisations received by us. The IID net of imports, so derived, has been shown in column 4 of the Table.

The net IID estimated as above has been pruned by subtracting the effect of the tax treatment to components [vide section 3(3) of the TNGST Act], independently estimated as follows:

Actual revenue = $b_1 r_1 + b_2 r_2$

Estimated revenue with the normal rate = $r_2(b_1 + b_2)$

Excess of estimated yield over actual yield (EEA) = $r_2(b_1 + b_2) - (r_1 b_1 + r_2 b_2)$

or, EER = $(r_2 - r_1)b_1$

where, b_1 = base for imposing tax at the normal statutory rate for non-component items;

r_1 = statutory rate for non-component items;

b_1 = base being taxed at the concessional rate; and

r_2 = concessional rate of tax for the components.

The excess of the yield so estimated, representing the loss of revenue to the Government attributable to the concessional treatment, has been shown in Table 4.2.

The estimated IID net of all effects, shows that the State may suffer an immediate short-fall in the sales tax revenue to the tune of Rs 5 crore only. This would, however, be inconsequential in the long-run.

TABLE A.5.1

Revenue Effect of "Set-Off"

Sector	Statutory tax rate (per cent)	Estimated inter-industry demand (Rs '000)	Inter-industry demand (Rs '000)	Nominal tax revenue at statutory tax rates (Rs '000)	Estimated tax revenue at 4 per cent tax rate	Estimated gross difference (5-6) (Rs '000)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Confectionery	7.62	52	52	4	2	2
Miscellaneous food products	8.00	1811189	905595	72448	36224	36224
Alcohol	18.02	1628	814	147	33	114
Breweries	25.00	1975	988	247	40	207
Furniture and fixture	9.56	191	96	9	4	5
Paper and paper products	6.48	662952	510473	33079	20419	12660
Basic chemicals	7.85	937376	468688	36792	18748	18044
Paints and varnishes	9.69	86854	43427	4208	1737	2471
Miscellaneous chemical products	6.17	392858	179397	11069	7176	3893
Petroleum refineries	8.14	933497	466749	37993	18670	19323
Petroleum products	5.11	181076	90538	4626	3622	1004
Structural clay products	5.00	26640	26640	1332	1066	266
Pottery	4.63	8634	8634	400	345	55
Cement	10.00	43082	21541	2154	862	1292
Metal products	7.79	377059	188530	14686	7541	7145
Electrical machinery etc.	10.45	213760	106880	11169	4275	6894
Photographic and optical goods	14.32	2206	1103	316	88	228
Rubber and rubber products	8.53	216749	202261	17253	8090	9163
Wearing apparel	8.00	1288	1288	103	52	51
Glass and glass products	8.97	93622	46811	4199	1872	2327
Non-metallic products	15.00	21322	10661	1599	426	1173
Non-ferrous basic metals	4.65	734832	651324	30287	26053	4234
Other machinery-non-electrical	7.16	760827	380414	27238	15217	12021
Machine tools	7.16	8293	4147	297	165	132
Motor vehicles	15.00	424906	212453	31868	8498	23370
Other transport equipments	6.00	30312	15156	909	606	303
Unspecified industries	6.70	161917	80959	5424	3238	2186
TOTAL				349856	185069	164787

TABLE A.5.2

Estimates of Yield due to Tax Concession to Components
(1976-77)

Sl. No.	Commodity group	Estimated loss (Rs lakh)
(1)	(2)	(3)
1.	Typewriters, tabulating machines, calculating machines, etc.	1.00
2.	All clocks, timepieces and watches	0.44
3.	Motor vehicles, including motor cars, motor cycles, vans, lorries, etc.	791.74
4.	Dry cells	24.98
5.	Refrigerators, airconditioning plants	0.36
6.	Wireless reception instruments and apparatus, television sets, etc.	14.63
7.	Cinematographic equipment including cameras, projectors, etc.	16.93
8.	Photographic and other cameras	0.17
9.	Gramophones and component parts	0.04
10.	Dictaphone and tape recorders	0.17
11.	Sound transmitting equipments	0.04
12.	All arms including rifles, revolvers, pistols	0.39
13.	Iron and steel safes and almirahs	0.18
14.	Mechanical lighters and cigarette cases	0.40
15.	Chemical fertilisers	48.60
16.	Milk foods	0.01
17.	Cement	8 3.05
18.	Kerosene	102.74
19.	Bicycles and cycle combination	0.09

Contd.....

TABLE A.5.2 (Contd.)

(1)	(2)	(3)
20.	Articles made of foam rubber, plastic foam or synthetic foam	0.31
21.	Electrical grinders, mixers, blenders, heaters, etc.	7.53
22.	Electric systems, instrument, apparatus, appliances	1.77
23.	Vegetable products, i.e., oils	0.03
24.	Lubricating oils	105.25
25.	All kinds of mineral oils	18.42
26.	All varieties of tractors and bulldozers, components	15.09
27.	Rear dumps, loaders, scrapers, platform truck, fork-lift trucks	2.52
28.	Folding umbrellas and parts	0.57
29.	Aluminium pure or alloy	0.58
30.	Caustic soda	0.19
31.	All kinds of foreign liquors	1.53
32.	Asphalt (Bitumen)	2.89
33.	Sulphur	0.03
34.	Wheat products	0.01
35.	All vegetable oils other than those mentioned in the first schedule	0.90
36.	Dhalls of pulses and grams	0.08
37.	All machinery worked by electricity and other power	6.46
38.	Charcoal and leco	0.22
39.	Timber and bamboo	0.03
40.	Articles of readymade garments	8 0.02
41.	Bricks, roof tiles and cement flooring stones	0.01
42.	Ice	0.05

Contd.....

TABLE A.5.2 (Contd.)

(1)	(2)	(3)
43.	French coffee	0.06
44.	Drugs, patent or proprietory medicines	0.04
45.	Lithographic, printing inks	0.07
46.	Roller bearing (all kinds	3.96
47.	Chinaware	0.01
48.	Glass and glassware	0.08
49.	Tinned, canned, packed foods in any registered brand name	0.39
50.	Water meters, parts and accessories	0.05
51.	Brake fluid	0.02
52.	Gases	0.31
53.	Articles made of stainless steel	3.02
54.	Oil engines, parts and accessories	4.63
55.	Spectacles, sunglasses, goggles	0.21
56.	Plywood, block-board, battern board	5.39
57.	Products aof asbestos and cement	2.30
58.	All sorts of paper and paper boards	0.21
59.	Rail coaches, wagons and parts	0.53
60.	Bolts and nuts and screws	0.60
61.	Rubber products	3.62
62.	Furniture and other office equipment made of steel or any other metal	2.87
63.	Linoleum	0.03
64.	Aristhams and asavas	0.19
65.	P.V.C. conduit pipes and fittings	0.67
66.	Iron and steel defined in second schedule	1.57
67.	Raw hides and skins	0.52
		1,211.81