3. ROLE OF SALES TAX IN THE FISCAL ARMOURY OF DELHI

1. Introduction

In this chapter an attempt is made to assess the importance of sales tax revenue in the fiscal armoury of Delhi and the factors contributing to the growth of the sales tax revenue. Section 2 outlines the role of sales tax in the tax structure of Delhi Administration as compared to that in the governments of the States. Section 3 discusses the trends in sales tax revenue in Delhi and compares it with the trends in the States and some other cities. Section 4 examines the factors contributing to the growth of sales tax revenue in Delhi.

2. Role of Sales Tax in Tax Revenues

During the past two decades revenue from sales tax has increased manifold and has come to occupy a pivotal place in the tax armoury of Delhi Administration. The percentage share of sales tax in the total (own) tax revenues of Delhi has been high in comparison to that in the neighbouring States of Punjab, Haryana, Uttar Pradesh and Rajasthan. It now equals the percentage share of sales tax in the advanced States such as Maharashtra, Gujarat and Tamil Nadu (Table 3.1).

The most striking feature of trends in tax revenues is that sales tax revenue has grown faster than revenues from all taxes levied by the Administration. Thus, revenue from sales tax has grown from Rs 5.13 crore in 1960-61 to Rs 155.06 crore in 1980-81—an increase of 139 per cent per annum—while total tax revenues have grown from Rs 11.34 crore to Rs 234.51 crore during the same period—an increase of 94 per cent. As a result, the share of sales tax revenue has gone up from 45.9 per cent to 66.1 per cent. Similar is the case in other States as well. The implication of this for resource mobilisation is that dependence on sales tax has been increasing year after the year.

(Rs lakh)

TABLE 3.1
The Role of Sales Tax in States' Own Tax Revenue

		19-0961			1970-71	$\overline{}$		18-0861	
State	Sales tax revenue	Sales State's tax own tax revenue revenue	Sales tax revenue as per cent of State's own tax revenue	Sales tax revenue	State's own tax revenue	Sales tax revenue as per cent of State's own tax revenue	Sales tax revenue	State's own tax revenue	Sales tax revenue as per cent of State's tax revenue
	1	2	۴.	4	S	9	7	8	6
D-1E:	\$13	1134	45.24	2565	4619	55.53	15506	23451	66.12
Deini Andrea Prodesh	1282	4231	30,30	4990	13606	36.67	28226	58208	48.49
Andnra Fraucsii	282	1201	23.48	1154	2476	46.61	3149	6578	47.87
Assam	1054	3209	32.85	3814	8157	46.76	19376	27654	70.07
Bibar	1053	2078	20 67	6383	10808	59.06	35385	53102	66.64
Cujarat	501			1741	4388	39.68	10600	23391	45.32
Haryana	II.a.	n.a.	- E	38	152	25.00	1356	3393	39.96
Himachai Fradesh	11.4.	171	12.87	249	710	35.07	1788	3780	47.30
Jammu & Nashilli	813	2442	33.29	4887	10174	48.03	23736	47468	20.00
Kamataka	608	207	44.72	3742	6798	55.05	20394	33654	09:09
Nerala	120	2722	26.45	4097	8659	47.31	20000	38588	51.83
Madnya riancan Maharashtra	3215	6424	50.05	16002	25556	62.62	74959	113034	66.32
Mailarasiina									Contd

1 2 3 4 5 6 7 8 9 314 860 36.51 1754 3327 52.72 7663 13208 58.02 n.a. n.a. 3728 8602 43.34 15593 34884 44.70 370 1809 20.45 2797 6046 46.26 14731 23023 63.98 1912 4186 45.68 8185 14885 54.99 45963 63911 71.92 1642 5695 28.83 6227 15286 40.74 35085 64519 54.38 1973 4906 40.22 6793 12897 52.67 29955 51408 58.27										
860 36.51 1754 3327 52.72 7663 13208 n.a. n.a. 3728 8602 43.34 15593 34884 1809 20.45 2797 6046 46.26 14731 23023 4186 45.68 8185 14885 54.99 45963 63911 5695 28.83 6227 15286 40.74 35085 64519 4906 40.22 6793 12897 52.67 29955 51408	- 1	1	7	က	4	5	9	7	∞	6
n.a. n.a. 3728 8602 43.34 15593 34884 1809 20.45 2797 6046 46.26 14731 23023 4186 45.68 8185 14885 54.99 45963 63911 5695 28.83 6227 15286 40.74 35085 64519 4906 40.22 6793 12897 52.67 29955 51408		314	860	36.51	1754	3327	52.72	7663	13208	58.02
1809 20.45 2797 6046 46.26 14731 23023 4186 45.68 8185 14885 54.99 45963 63911 5695 28.83 6227 15286 40.74 35085 64519 4906 40.22 6793 12897 52.67 29955 51408		n.a.	n.a.	n.a.	3728	8602	43.34	15593	34884	41.70
4186 45.68 8185 14885 54.99 45963 63911 5695 28.83 6227 15286 40.74 35085 64519 4906 40.22 6793 12897 52.67 29955 51408		370	1809	20.45	2797	6046	46.26	14731	23023	63.98
5695 28.83 6227 15286 40.74 35085 64519 4906 40.22 6793 12897 52.67 29955 51408		1912	4186	45.68	8185	14885	54.99	45963	63911	71.92
4906 40.22 6793 12897 52.67 29955 51408		1642	5695	28.83	6227	15286	40.74	35085	64519	54.38
		1973	4906	40.22	6793	12897	52.67	29955	51408	58.27

Note: 1. v.a.: Not available.

*There are no shared taxes in the case of Delhi. Source: 1. National Institute of Public Finance and Policy.

2. RBI Bulletin, September, 1982.

3. Trends in Sales Tax Revenue

Table 3.2 shows the growth of sales tax revenue under Delhi Sales Tax (DST) and Central Sales Tax (CST) during 1960-61 to 1982-83. Revenue under DST increased from Rs 3.77 crore in 1960-61 to Rs 134.02 crore in 1982-83—an increase of 165 per cent per annum, while revenue under CST increased from Rs 1.36 crore to Rs 77.00 crore during the same period—an increase of 265 per cent per annum. The combined yield of DST and CST increased from Rs 5.13 crore to Rs 211 crore—an increase of 191 per cent per annum. It is interesting to notice that revenue under the CST Act has grown faster than that under the DST Act; as much as 36 per cent of the growth in total sales tax revenue is accounted for by the rapid growth rate in the revenue from CST.

It would be more meaningful to compare the growth of sales tax revenue in Delhi with that in the States. Such a comparison is made in Table 3.3. It can be seen that revenue from CST has grown faster in Delhi than in the States surrounding it, namely, Punjab, Haryana, Uttar Pradesh and Rajasthan, as well as in many of the developed States like Maharastra, Gujarat and West Bengal, while the growth of revenue under the local tax in Delhi has kept pace with that in the States during the period under review.

It may be said that the experiences of Delhi and the States in this regard are not strictly comparable as the bases of the tax and structures of the economy in Delhi and in the States are quite different. Delhi is mainly an urban agglomeration and its economic structure is highly dominated by tertiary and secondary sectors while the economies of the States are mainly rural and their economies are dominated by agricultural activity. Therefore, one need not be surprised if the growth of sales tax revenue in Delhi is somewhat faster than in many of the States.

Perhaps a more realistic comparison of the growth of sales tax revenue in Delhi may be with the growth of the same in important cities whose bases of the tax, economic structures and growth pattern are somewhat comparable. An attempt at such a comparison is made in Table 3.4. It can be seen that the growth of sales tax revenue in Delhi has been lower than in Ahmedabad, Bangalore, Hyderabad and Madras during 1977-

TABLE 3.2

Growth of Revenue in Delhi under Delhi Sales Tax Act and Central Sales Tax Act: 1960-61 to 1982-83

Year	Dethi Sales Tax (DST) (Rs crore)	Growth rate over the previous year (%)	Central Sales Tax (CST) (Rs crore)	Growth rate over the pre- vious year (%)	Total sale tax (DST +CST) (Rs crore)	s Growth rate over the pre- vious year (%)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1960-61	3.77		1.36		5.13	
1961-62	4.43	17.51	1.50	10.29	5.93	15.59
1962-63	4.90	11.96	1.68	12,00	6.58	10.96
1963-64	6.27	27.96	2.72	61.90	8.99	36.63
1964-65	7.83	24.88	3.31	21.69	11.14	23.92
1965-66	8.82	12.64	3.66	10.57	12.48	12.03
1966-67	10.92	23,81	4.67	27.60	15.59	24.92
1967 -6 8	12.38	13.37	5.66	21.20	18.04	15.72
1968-69	15.27	23.34	6.61	16.78	21.88	21.29
1969-70	15.74	3.08	6.91	4.54	22.65	3.52
1970-71	17.67	12.26	7.98	15.48	25.65	13.25
1971-72	20.31	14.94	8.51	6.64	28.84	12,36
1972-73	23.87	17.53	10.40	22.21	34.27	18.91
1973-74	26.51	11.06	13.28	27.69	39.79	16.11
1974-75	33.76	27.35	18.70	40.81	52,46	31.84
1975-76	46.03	36.34	26.97	44.22	73.00	39.15
1976-77	53.87	17.03	33.88	25.62	87.75	20.21
1977-78	58.71	8.98	36.70	8.32	95.41	8.73
1978-79	62.69	6.78	43.78	19.29	106.47	11.59
1979-80	72.45	15.57	52.73	20.44	125.18	17.57
1980-81	92.38	27.51	62.68	18.87	155.06	23.82
1981-82	117.82	27.54	73.07	16.58	190.89	23.15
1982-83	134.02	13.75	77.00	5.38	211.02	10.55

Source: Office of the Commissioner of Sales Taxes, Delhi.

TABLE 3.3

Annual Compound Growth Rates of Sales Tax Revenue in
Different States
(1970-71 to 1980-81)

(Per cent)

State	General sales tax	Central sales tax	Total sales
1. Delhi	18.11	24.99	20,52
2. Andhra Pradesh	19.72	22.65	19.96
3. Assam	12.09	28.86*	12.16
4. Bihar	20.82	2.49	18.26
5. Gujarat	17.99	22.00	18.88
6. Haryana	20,70*	21.59*	20.35
7. Himachal Pradesh	30.68	34.15	30.87
8. Jammu & Kashmir	22.02*	_	21.77
9. Karnataka	17 25	23.14	18.23
10. Kerala	19.09	19.66	19.15
11. Madhya Pradesh	18.42	16.08	17.8∔
12. Maharashtra	17.62	18.72	17.89
13. Orissa	18.24	15.43	17.33
14. Punjab	16.40	16.96	16.51
15. Rajasthan	19.01	20.29	19.19
16. Tamil Nadu	16.98	19.38	17.39
17. Uttar Pradesh	20.10	21.90	20.23
18. West Bengal	17.94	15.19	17.06

Notes: General sales tax = Total sales tax - Central sales tax (that is, it includes Motor spirit tax and Purchase tax).

•1970-71 to 1979-80.

Source: See Tables A. 3.1, A. 3.2, A. 3.3 and A. 3.4.

78 to 1982-83. The growth of sales tax revenue in Delhi was 18.48 per cent per annum as against 24.25 per cent in Ahmedabad, 20.94 per cent in Bangalore, 19.88 per cent in Hyderabad and 22.50 per cent in Madras. It was only in the case of Bombay that the growth of sales tax revenue was somewhat lower than that in Delhi. It may be concluded that the performance of Delhi in this respect is lower than the other cities. However, it may be remembered that the other cities have the advantage that the headquarters of several large concerns are situated within their jurisdiction.

In terms of per capita sales tax revenue Delhi obtains the lowest rank among all the cities. It can be seen from Table 3.5

1982-83

24.95

20.94

TABLE 3.4
Growth of Sales Tax Revenue in Important Cities

(Rs lakh) Ahme-Ban-Cal-Bombay Delhi Hyde- ' Madras Year dabad galore cutta rabad 1970-71 2812 2437 NA 13063 2565 NA NA 1971-72 3286 2575 NA 13266 2882 NA NA 1972-73 3869 2881 NA 14740 3427 NA NA 1973-74 4072 3367 NA 18877 3979 NA 6519 1974-75 5751 4882 NA 24940 5246 NA 10503 1975-76 7466 5998 NA 29294 7300 NA 13048 1976-77 9298 7185 NA 34483 8775 NA 14413 1977-78 9577 8040 NA 36082 9541 6023 15486 1978-79 11190 8618 NA 42420 10647 6908 18684 1979-80 13949 10636 NA 48855 12518 7980 22689 1980-81 17792 12403 29843 58626 15500 10312 28430 1981-82 24874 17621 31870 72281 19089 11665 36741 1982-83 26854 19215 35463 79743 21102 14864 40850 Compound growth rate of Sales tax revenue in important cities. 1977-78 to

Source: Offices of the Commissioner of Sales Tax/Commercial Taxes of Gujarat, Karnataka, West Bengal, Maharashtra, Delhi, Andhra Pradesh and Tamil Nadu.

17.84

18.48

19.88

22.50

6.28

TABLE 3.5

Growth of Per Capita Sales Tax Revenue in Important Cities
(Runees)

					(114	(pees)
Ahme- dabad	Banga- lore	Calcutta	Bombay	Delhi	Hydera- bad	Madras
161.47	147.36	N.A.	218.79	70.33	N.A.	N.A.
181.88	147.13	N.A.	215.18	75.50	N.A.	N.A.
206.42	15 5 .55	N.A.	213.54	85.78	N.A.	N.A.
209,49	171.78	N.A.	287.17	95.16		188.11
285.07	235.37	N.A.	367.44	199.87		294.10
356.73	273.25	N.A.	417.97	159.38		354.55
428,23	309.30	N.A.	476.48			380.05
425.16	327.05	N.A.	482.84			396.26
478.84	331.26	N.A.	549.74			463.94
575.35	386.32	N.A.				546.71
707.38	425.70	325.60				664.77
953.26	571.50					833.69
991.99	588.89	366.93	909.04	334.87	549.09	899.49
	dabad 161,47 181,88 206,42 209,49 285,07 356,73 428,23 425,16 478,84 575,35 707,38 953,26	dabad lore 161.47 147.36 181.88 147.13 206.42 155.55 209.49 171.78 285.07 235.37 356.73 273.25 428.23 309.30 425.16 327.05 478.84 331.26 575.35 386.32 707.38 425.70 953.26 571.50	dabad lore 161.47 147.36 N.A. 181.88 147.13 N.A. 206.42 155.55 N.A. 209.49 171.78 N.A. 285.07 235.37 N.A. 356.73 273.25 N.A. 428.23 309.30 N.A. 425.16 327.05 N.A. 478.84 331.26 N.A. 575.35 386.32 N.A. 707.38 425.70 325.60 953.26 571.50 338.62	dabad lore 161.47 147.36 N.A. 218.79 181.88 147.13 N.A. 215.18 206.42 155.55 N.A. 213.54 209.49 171.78 N.A. 287.17 285.07 235.37 N.A. 367.44 356.73 273.25 N.A. 417.97 428.23 309.30 N.A. 476.48 425.16 327.05 N.A. 482.84 478.84 331.26 N.A. 549.74 575.35 386.32 N.A. 613.16 707.38 425.70 325.60 712.58 953.26 571.50 338.62 850.83	dabad lore 161.47 147.36 N.A. 218.79 70.33 181.88 147.13 N.A. 215.18 75.50 206.42 155.55 N.A. 213.54 85.78 209.49 171.78 N.A. 287.17 95.16 285.07 235.37 N.A. 367.44 199.87 356.73 273.25 N.A. 417.97 159.38 428.23 309.30 N.A. 476.48 183.04 425.16 327.05 N.A. 482.84 190.16 478.84 331.26 N.A. 549.74 202.75 575.35 386.32 N.A. 613.16 227.76 707.38 425.70 325.60 712.58 269.45 953.26 571.50 338.62 850.83 317.05	Ahme- dabad Banga- lore Calcutta Bombay Delhi bad Hydera- bad 161.47 147.36 N.A. 218.79 70.33 N.A. 181.88 147.13 N.A. 215.18 75.50 N.A. 206.42 155.55 N.A. 213.54 85.78 N.A. 209.49 171.78 N.A. 287.17 95.16 N.A. 285.07 235.37 N.A. 367.44 199.87 N.A. 356.73 273.25 N.A. 417.97 159.38 N.A. 428.23 309.30 N.A. 476.48 183.04 N.A. 425.16 327.05 N.A. 482.84 190.16 263.95 478.84 331.26 N.A. 549.74 202.75 292.57 575.35 386.32 N.A. 613.16 227.76 326.61 707.38 425.70 325.60 712.58 269.45 407.88 953.26 571.50 338.62 850.83

Source: As for Table 3.4.

that the per capita sales tax revenue in Delhi was Rs 335 as against Rs 992 in Ahmedabad, Rs 589 in Bangalore, Rs 909 in Bombay, Rs 549 in Hyderabad, Rs 899 in Madras and Rs 367 in Calcutta in 1982-83. The relative positions were not different even during the earlier years.

What could have been the reasons for the lower growth of sales tax revenue in Delhi than in the other cities or States? Several reasons seem to have been responsible. One reason usually adduced is the "distributive character of trade" in Delhi. Delhi does not have the manufacturing activity that Bombay, Calcutta, Madras and Ahmedabad have and, therefore, the lower growth of sales tax revenue must be understandable. But such an explanation for the lower growth of sales tax revenue may not be justified, as Delhi has witnessed a significant change in its economic structure recently (Chapter 2).

4. Factors Contributing to Growth of Tax Revenue

It may be hypothesised that the following major factors contribute to the growth of sales tax revenue:

- (i) Increase in the quantum of production of commodities subject to sales taxation;
- (ii) Increase in the consumption of commodities (due to increase in income, nominal and real) subject to sales taxation;
- (iii) Increase in the extent of turnover consequent upon the rise in prices of commodities subject to sales taxation;
- (iv) Expansion in the base of taxation, i.e., addition to the existing number of commodities subject to sales taxation or removal of the tax concessions granted to certain commodities or deletion of certain commodities from the list of tax-free goods;
- (v) Increase in the rates of sales tax; and
- (vi) Improvement in the efficiency of sales tax administration.

To quantify the contribution each of these factors makes to the growth of sales tax revenue would be extremely difficult since all, or most of, the factors would be influencing the growth of sales tax revenue simultaneously. A multivariate regression analysis could of course be attempted, but the necessary data in relation to sales tax are usually hard to get. Therefore, following the usual procedure, we may seek to measure the influence of the economic factors through the estimation of buoyancy and elasticity coefficients.

Buoyancy refers to the ratio of percentage change in tax revenue to the percentage change in SDP or income (SDP is usually taken as a proxy for the tax base). It indicates the rate at which the revenue increases for a one per cent increase in the income. It is calculated with reference to the total increase in tax revenue, whether brought about through additional tax measures or occurring in response to the growth in income or the base or because of improvements in administration. Elasticity denotes the rates of the automatic growth in tax revenue to the growth in income. In computing it, the influence of discretionary changes, namely, changes in tax rates, exemptions and concessions and changes in the base of the tax are excluded. Thus, the elasticity of tax can be said to reflect all the influences on the growth of revenue listed in section 4 above other than discretionary changes (i.e., items iv and v).

To be more specific,

Elasticity Coefficient reflects the influence of

Buoyancy Coefficient reflects the influence of

- i. Increase in the quantum of production of commodities subject to tax;
- ii. Increase in the consumption of commodities subject to tax;
- iii. Increase in turnover due to price rise, and
- iv. Improvement / deterioration in administration that may take place gradually.
- v. All the above four factors;
- vi. Discretionary changes in the tax base and/or tax rates, and

vii. Any conscious attempt at improvement in administration or a sudden change in procedure, etc.

In estimating the elasticity coefficient, it is possible to isolate the influence of prices from that of other factors, in case a satisfactory index of prices of the taxed commodities could be prepared. Then we can separately measure the influence of the growth of real income. In what follows, however, we have computed only the elasticity and buoyancy of the tax with reference to nominal income.

5. Buoyancy of Sales Tax

Table 3.6 shows the buoyancy of total sales tax, the general sales tax and the Central sales tax for the period 1970-71 to

TABLE 3.6

Buoyancy of Sales Tax
(1970-71 to 1980-81)

State	General sales tax	R^2	Central sales tax	R^2	Total sales tax	R ²
1. Delhi	1.2454	0.9927	1.6701	0.9918	1.3966	0.9937
2. Andhra Pradesh	1.7903	0.9202	2.1952	0.8627	1.8303	0.9284
3. Assam*	1.1845	0.8205	2.2911	0.6699	1.1220	0.9531
4. Bihar*	1.9869	0.9436	0 0187	0.0001	1.6011	0.9161
5. Gujarat	1.3845	0.9430	1.6753	0.9469	1.4536	0.9448
6. Haryana*	1.5894	0.9854	1.6748	0.9911	1,6327	0.9909
7. Himachal Pradesh	2.7405	0.8233	3.0038	0.8535	2.7702	0.8198
8. Jammu & Kashmir*	1.5844	0.9598	_		1.5005	0.9623
Karnataka	1.7104	0.9028	2.2421	0.9092	1.7963	0.9183
10. Kerala		_		_	_	
11. Madhya Pradesh	1.6925	0.9036	1.4311	0.8943	1.5772	0.8970
12. Maharashtra	1.2251	0.9906	1.2763	0.9849	1.2316	0.9919
13. Orisas*	1.9731	0.8602	1.4154	0.5795	1.6963	0.8247
14. Punjab*	1.3728	0.9685	1.4399	0.9277	1.3830	0.9818
15. Rajasthan	1.6459	0.9300	1.7826	0.9024	1.6650	0.9328
16. Tamil Nadu	1.6225	0.9484	1.8185	0.9649	1.6443	0.9542
17. Uttar Pradesh	1.6568	0.9186	1.7723	0.8407	1.6563	0.9219
81. West Bengal	1.6189	0.9785	1.2984	0.9146	1.4839	0.9821

Note: *1970-71 to 1979-80.

1980-81. It can be seen that the buoyancy of total sales tax in Delhi was 1.40 as against 1.63 in Haryana, 1.66 in Uttar Pradesh, 1.67 in Rajasthan and 2.77 in Himachal Pradesh. The buoyancy of sales tax under the general sales tax has been lower than that of most of the States.

6. Elasticity of Sales Tax

Table 3.7 shows the elasticity of sales tax revenue for the period 1974-75 to 1980-81. But the measure of the elasticity

TABLE 3.7
Elasticity Coefficients (1974-75 to 1980-81)

State	Elasticity	R ²
1. Delhi	1.2678*	0.99
2. Andhra Pradesh	1.2755*	0.70
3. Assam	0.6138**	0.49
4. Bihar@	2.1154**	0.78
5. Gujarat	1.1757*	0.95
6. Haryana@	1.3916*	0.97
7. Karnataka	1.6 5 23 •	0.79
8. Kerala@	1.4725*	0.87
9. Madhya Pradesh	0.9942**	0.57
10. Maharashtra	1.2087*	0.98
11. Orissa@	1.6155	0.49
12. Punjab@	1.4509*	0.97
13. Rajasthan	1.7330*	0. 81
14. Tamil Nadu	1.2594*	0.83
15. Uttar Pradesh	1.1051**	0.70
16. West Bengal	1.2054*	0.94

Notes: @1974-75 to 1979-80;

- *Significant at 1 per cent level;
- **Significant at 5 per cent level.

Source: 1. Additional Resources Mobilisation (1983), Delhl Administration.

- 2. Commissioner of Sales Tax, Delhi.
- 3. RBI Bulletin, October, 1980.
- 4. National Institute of Public Finance and Policy.

coefficient of sales tax in Delhi is not statistically reliable as there were only seven observations (Table 3.8), whereas for the States the estimates are based on a sufficiently large number of observations.

TABLE 3.8
Additional Resources Mobilisation
(Effect of the Measures Introduced During the Year)

s Excise Market Terminal Road Enter- (2) (3) (4) (5) (6) 0.71 — — — 0.08 — — — 2.85 — — — 1.60 — — — 3.37 2.07 — — 8.16 — — —									(Rs	(Rs crore)
(1) (2) (3) (4) (5) (6) - 0.71	Year	Sales tax	Excise	Market cess	Terminal tax	Road	Enter- tainment	Betting tax	Stamp duty	Vehicle tax
9.00 0.08		(1)	(2)	(3)	(4)	(5)	(9)	(3)	(8)	(6)
9.00 0.08 — — — — — — — — — — — — — — — — — — —	1974-75	1	0.71	1		I	ı	ı	1	١
- 2.85	1975-76	9.00	0.08	i	1	I	ı	1	i	I
- 1.60	1976-77	i	2.85	i	i	i	1	ı	0.50	I
1.18 8.16 — — — — — — — — — — — — — — — — — — —	1977-78	I	1.60	1	1	ļ	i	i	I	0.01
1.18 8.16	1978-79	i	3.37	2.07	ĺ	ſ	ı	ı	Ī	1
	1979-80	1.18	8.16	i	1	I	1	l	1	1
	1980-81	1	i	I	1	1	1	i	I	1

The elasticity coefficient of sales tax in Delhi (1.27) like buoyancy, has been lower than of Rajasthan, Haryana, Punjab, Orissa, Karnataka and Kerala, indicating thereby that the sales tax revenue has been responding to increases in SDP relatively at a lower degree.

7. Relative Tax Effort

The buoyancy coefficient gives the impression that Delhi Administration did not make enough effort to raise resources but a close examination of the record of the past eight years reveals a different picture. For example, with effect from October, 1975 general rate of tax was increased from 5 per cent to 7 per cent and the scope of the Delhi Sales Tax Act was increased by including in the sales tax net some luxury goods which were exempted earlier. Similarly, with effect from 1.7. 1975 the rates of CST were raised from 3 per cent to 4 per cent. Further, with effect from 1978-79 some of the exemptions given to the sales made to the Ministry of Defence and its subordinate offices were withdrawn. Therefore, it may be wrong to conclude that Delhi Administration did not make efforts to raise sales tax revenue. In this connection, we shall study the relative tax efforts of Delhi in the field of sales tax.

One of the ways of measuring tax effort is to carry out a multiple regression to work out the average degree of relationship between tax ratios in different States and what are identified as taxable capacity factors. The tax ratio estimated on the basis of the regression equation is taken to represent the tax ratio which a State would have had if it had used its capacity to an average extent. Hence a comparison of the estimated ratio with the actual ratio will indicate whether the State or Union Territory concerned is making the average degree of effort, or more or less.

For carrying out the above exercise the selection of the capacity factors is crucial. We initially selected a number of factors which a priori could be said to affect taxable capacity. These factors were:

- (i) Per capita income (Y/P);
- (ii) The proportion of income from manufacturing and trade of total SDP $(Y_{mt}|Y)$; and

(iii) The ratio of urban population to total population of the State or Union Territory (U).

Relating all the above capacity factors with a total tax income ratio (T/Y) showed that Y/P could explain only a minor part of the variation in tax ratio. Nor it could explain in association with other capacity factors, namely, Y_{mt}/Y and U. We had to exclude Y/P altogether. The equation finally employed, for measuring Delhi's tax effort, is as follows:

$$T/Y = 0.0388 + 0.0411 (Y_{mt}/Y) + 0.0860(U)$$
 (1)
 (0.8984) (4.0518)
 $\bar{R}^2 = 0.5934$; SEE=0.013; DW=1.7547
(Figures in parentheses denote t-values).

The above equation relates to the overall tax ratio. A similar exercise has been carried out with reference to the ratio of sales tax revenue to SDP. In doing so all the components of the sales tax were included in the sales tax income ratio (ST/Y) and it was related to the same capacity factors as in equation (1).

$$ST/Y = 0.0108 + 0.0495 (Y_{mi}/Y) + 0.0644 (U)$$
 (2)
 (1.6618) (4.6556)
 $\overline{R}^2 = 0.06976$; $SEE = 0.0093$; $DW = 2.0425$
(Figures in parentheses denote t-values).

The tax effort indices worked out on the basis of the above two equations in respect of total tax revenue and sales tax revenue are given in Table 3.9. It may be noted that the overall tax effort of Delhi is lower than that of Rajasthan, Haryana, and Punjab and the ranking of Delhi in respect of the tax effort is more or less the same.

TABLE 3.9

Ranking of Relative Tax Effort of Delhi and Various States (1970-71 to 1980-81)

	Actual tax-	Estimated tax-income	Index of tax	Rank	Actual sales tax-	Estimated sales tax-	Index of use of	Rank
č	income	ratio	effort		income		sales tax	
State	ratio				ratio		potential	
1. Delhi	12.41	13.13	0.95	12	8.31	8.57	76.0	10
2. Andhra Pradesh	8.71	6.87	1.19	3	3.75	3.77	66.0	6
3. Assam	3.61	5.62	0.64	18	1.61	2.83	0.57	18
4. Bihar	4.78	5.70	1.8.0	15	3.21	2.79	1.15	9
5. Gujarat	8.13	8.05	1.01	8	5.28	4.83	1.08	7
6. Haryana	7.85	68.9	1.14	4	3.60	3.85	0.94	11
7. Himachal Pradesh	5.10	5.02	1.02	7	1.93	2.15	0.00	13
8. Jammu & Kashmir	4.42	6.14	0.72	17	1.79	3.07	0.58	17
9. Kamataka	9.36	7.23	1.29	C 3	4.64	3.98	1.17	2
10. Kerala	9.75	6.50	1.50	_	5.68	3.50	1.62	_
11. Madhya Pradesh	6.79	6.42	1.06	9	3.45	3.35	1.03	8
12. Maharashtra	7.97	8.65	0.92	13	5.15	5.45	0.94	12
13. Orissa	5.40	5.49	86.0	10	3.12	2.56	1.22	ю
14. Punjab	7.39	7.49	0.99	6	3.24	4.34	0.75	16
15. Rajasthan	6.14	6.35	0.97	Ξ	3.78	3.24	1.17	4
16. Tamil Nadu	60.6	8.28	1.10	ν.	6.24	5.08	1.23	7
17. Uttar Pradesh	5.05	6.47	0.78	16	2.72	3.50	0.78	15
18. West Bengal	6.10	7.23	0.84	14	3.62	4.20	98.0	14

Source: As for Table A.3.1.

TABLE A.3.1 Sales Tax Revenue in States (1970-71 to 1980-81)

				7 23 -	(10-00/T of 1/-0//2)					(Rs lakh)	kh)
State	1970-71	1971-72	1972-73	1973-74	1973-74 1974-75	1975-76	1975-76 1976-77	1977-78	1978-79	1979-80 1980-81	1980-81
(1)	(2)	(3)	5	(5)	(9)	3	(8)	6)	(10)	(11)	(12)
1. Delhi	2569	2882	3427	3979	5246	7300	8775	9541	10647	12518	15506
2. Andhra Pradesh	4990	5001	2660	7386	11399	14108	15264	16271	18493	22022	28226
3. Assam	1154	1416	1475	1618	2076	2718	2854	2844	3432	3508	3149
4. Bihar	3814	4227	4916	5240	7119	9491	11649	12165	13063	15546	19376
5. Gujarat	6383	7362	8742	9397	13452	15585	19835	21193	23526	28937	35385
6. Haryana	1741	2162	2459	3105	3899	4950	6395	6965	2964	9005	00901
7. Himachal Pradesh	38	225	274	290	368	472	571	L 99	801	1113	1356
8. Jammu & Kashmir	249	260	368	349	422	657	650	988	1049	1280	1788
9. Karnataka	4887	5159	5801	6822	9364	11787	13730	15109	16449	19978	23736
10. Kerala	3742	4237	4614	5380	7532	9792	10760	11874	14689	16264	20394
11. Madhya Pradesh	4097	4421	5266	5903	8374	11738	12658	12674	14407	16104	20000
12. Maharashtra	16002	16216	18233	23115	30872	37004	43910	46085	53727	62643	74959
13. Orissa	1754	1748	2121	2247	2731	3804	4707	4713	5518	6595	7663
14. Punjab	3728	3769	4609	5251	6335	7316	9612	10751	11931	12979	15593
15. Rajasthan	2797	3310	3705	4488	5754	0929	8429	10025	11366	13586	14731
16. Tamil Nadu	8185	2686	11402	13225	19075	21127	23055	23055	29418	32506	45963
17. Uttar Pradesh	6227	7050	8680	10118	13542	20826	24317	24603	27225	30252	35085
18. West Bengal	6793	7418	9124	10169	12507	15912	18247	19802	23720	28107	29955

Sources: 1. National Institute of Public Finance and Policy.

2. RBI, RBI Bulletin, August, 1981 and Sept. 1982; CST, Delhi.

3. Office of Commissioner of Sales Tax, respective States.

TABLE A.3.2 General Sales Tax Revenue in States (1970-71 to 1980-81)

										(Rs lakh)	ch)
State	-0/61	1971-	1572-	1973-	1974-	1975-	-9/61	1977-	1978-	1979-	1980-
	71	7.5	73	74	75	76	77	78	79	80	81
(1)	(2)	3	(4)	(5)	(9)	(7)	(8)	(6)	(10)	(11)	(12)
1. Delhi	1767	2031	2387	2651	3376	4603	5387	5871	6569	7245	9238
2. Andhra Pradesh	4628	4553	5169	6429	9463	11669	13274	14600	16623	19891	24913
3. Assam	613	1032	794	898	1029	1348	1525	1520	1756	3009	
4. Bihar	2497	3061	3085	4560	6062	8048	10078	9825	11303	15273	17184
5. Gujarat	2704	5386	6504	7005	6746	11204	14025	14907	16576	20652	23714
6. Haryana	992	1235	1400	1742	2219	2924	3402	3889	4471	4890	
7. Himachal Pradesh	470,	213	237	266	336	434	325	919	720	994	1230
8. Jammu & Kashmir	226	237	344	321	399	919	557	988	1049	1280	
9. Karnataka	4281	4432	4691	5337	7652	9482	10964	12099	12474	16225	19075
10. Kerala	3387	3843	4149	4879	0069	FL68	9718	10769	13285	14762	18251
11. Madhya Pradesh	2817	3098	3810	4287	6260	8995	9533	9864	10874	12234	15575
12. Maharashtra	11336	11148	12501	15821	21564	26182	30192	32199	36979	43202	51218
_	1008	066	1237	1501	1964	2929	3069	2778	3899	4642	5637
14. Punjab	2626	2744	3388	3911	4021	5061	7117	7434	8630	9275	11384
_	2464	2930	3234	3901	4944	5672	7003	8562	3996	11818	13109
16. Tamil Nadu	6105	73:46	8591	8086	14044	15594	16506	17680	21736	23412	34539
17. Uttar Pradesh	5171	5893	7298	8739	18255	17818	20355	20990	22845	25669	28030
18 West Bengal	3577	4533	5195	6403	7765	1566	11252	13424	15382	17782	20178

Source: As for Table A. 3.1.

(Rs lakh)

TABLE A.3.3 Central Sales Tax Revenue in States (1970-71 to 1580-81)

	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	18-0861 08-6261 62-861	1980-81
(I)	(2)	(3)	4	(5)	(9)	(7)	(8)	(6)	(10)	(11)	(12)
1 Delhi	798	851	1040	1328	1870	2677	3388	3670	4378	5273	6268
2 Andhra Pradesh	362	448	491	957	1936	2439	1990	1671	1870	2131	3313
3 Assam	9	9	128	170	437	669	637	655	621	251	
A Rihar	866	786	1689	674	1049	1420	1556	2340	1756	273	2192
5. Guiarat	1290	1497	1747	1865	2787	3353	4567	4997	5571	6851	9240
6. Haryana	673	839	926	1241	1463	1822	2722	2723	3103	3682	
7. Himachal								1	1	;	ì
	7	12	∞	14	16	20	27	27	37	22	2
8 Jammu & Kashmir	1	1	I	l	I	1	I	1	1	ļ	i
	591	727	1110	1285	1712	2305	2766	3010	3975	3753	4661
10 Kerala	355	394	465	501	632	818	1042	1105	1404	1502	2142
11. Madhva Pradesh	1064	1110	1598	1614	2114	2743	3125	2810	3533	3870	4425
12. Maharashtra	3743	3957	3476	5591	7101	8658	11137	11137	13845	15836	12937
	635	620	715	582	989	791	1549	1690	1618	1953	2026
	887	774	871	1017	1751	1700	1898	2680	2458	2939	3414
15. Rajasthan	333	380	471	587	810	1088	1426	1463	1706	1768	1622
16. Tamil Nadu	1379	1582	1811	2082	2887	3327	4242	4290	4984	6245	8559
17. Uttar Pradesh	501	209	628	527	1055	1658	2347	1935	2301	2197	2819
18. West Bengal	2525	2230	2675	2507	3637	4681	5402	4867	6477	1966	8539

Source: As for Table A. 3.1.

TABLE A.3.4
Motor Spirit Tax Revenue in States (1970-71 to 1980-81)

		***************************************								(AS IURII)	K/1)
State	12-0261	1971-72	1971-72 1972-73 1973-74 1974-75 1975-76 1976-77	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79 1979-80	1979-80	1980-81
(1)	(2)	(3)	(4)	(5)	9	6	8	6	(10)	(1)	(12)
1. Delhi	1	ı	1								
2 Andhra Dradash			İ	I	ĺ	I	ľ	I		İ	I
2. Anuma Flauesii	į	1	ļ	ı	I	ĺ	i	I	1	١	i
3. Assam	481	324	553	280	610	1/9	692	699	805	248	
4. Bihar	319	380	142	9	~	23	15	}	8 4	249	1
5. Gujarat	389	479	491	527	916	1028	1243	1280	1370	177	7731
6. Haryana	92	88	103	122	217	207	27.	350	307	733	1647
7. Himachal Pradesh	1	ſ	53	10	16	8	13	25	<u>4</u>	54	7.7
8. Jammu & Kashmir	3	23	77	28	23	4	6	l	:	F !	ř
9. Kamataka	15	I	1	1	;	:	3	İ	l	ŀ	l
10. Kerala		ļ				!	I	l	i	ſ	l
11 14 11			ľ	I	ſ	I	I	l	١	I	!
	216	213	28	7	Į	l	ĺ	ſ	ı	I	ı
12. Maharashtra	923	1111	1256	1703	2207	2224	2503	2749	2903	3605	4804
13. Orissa	111	138	169	1 6	81	84	68	245	-		5
14. Punjab	220	251	350	323	\$63	588	198	637	6/3	376	١
15. Rajasthan	i		; i	1			Š	100	6+0	60/	66
16 Tr. 13T 1	1	1	1	ļ	I	l	I	l	I	1	ı
	701	696	100	1335	1857	1972	2186	2216	2638	2820	2865
	555	648	854	852	1232	1350	1615	1678	2079	2386	3236
18. West Bengal	169	655	834	1259	1105	1278	1593	1511	1861	2346	1238
									,	,	2007

Source: National Institute of Public Finance and Policy. RBI Bulletin, August, 1981 and September, 1982.