

CHAPTER-III

EMPIRICAL ANALYSIS OF STATE EXCISES

3.1 Introduction :

In Maharashtra rules and regulations made under Bombay Prohibition Act, 1949 provide for the levy, collection and administration of excise duties and prohibition in Maharashtra. In the subsequent period the Act of 1949 has been subjected to frequent amendments necessitated by the changing policy of the Government. Rates of excise duties have undergone many changes. These rates are specific in nature. They are related to the per gallon of different types and qualities of liquors. It is interesting to note that rates of excises seem to change with the location of liquor production, mainly with reference to different districts.

In this Chapter we give below empirical analysis of State excises for a period of 20 years i.e. 1961-62 to 1980-81.

3.2 Revenue from State Excises :

Table No. 3.1 gives data for the revenue from State excises in case of Maharashtra in comparison with All-States model for the period under study. On the basis of this table, following observations can be made :

1) Both in case of Maharashtra and All-States model the revenue from State excises upto 1970-71 has increased

gradually. In the next year, there seems to be a significant increase in both cases. After 1971-72 again there is an increasing trend in the revenue from State excises which, however, is greater in case of Maharashtra. In this respect we have to remember that relaxation in prohibition policy in a number of States became more and more pronounced and hence the sudden increase and subsequent growth in the revenue from State revenue.

2) The overall increase in the revenue from State excises is almost five times greater than All-States model. One explanation for this may be a greater relaxation in prohibition policy in Maharashtra. The second explanation is technical in that the base year figure for Maharashtra is very small relative to the All-States model.

3) The compound rate of annual growth of the revenue from State excise in Maharashtra is similarly much greater than in case of the All States model, again for the same reasons.

This table is a sufficient proof that revenue from State excises increases in a significant manner with pronounced relaxation in the prohibition policy.

TABLE No. 3.1

REVENUE FROM STATE EXCISES

(Rs. in crores)		
Year	Maharashtra	All-States
1.	2.	3.
1961-62	1.26	58.58
1962-63	1.47	62.81
1963-64	1.72	72.89
1964-65	3.05	84.54
1965-66	3.26	96.37
1966-67	3.77	108.88
1967-68	4.15	130.56
1968-69	5.49	159.04
1969-70	7.26	173.57
1970-71	6.82	193.92
1971-72	7.89	233.82
1972-73	10.12	212.66
1973-74	25.16	353.70
1974-75	29.36	387.30
1975-76	34.92	435.50
1976-77	40.99	504.80
1977-78	47.88	569.87
1978-79	53.75	583.00
1979-80	70.24	698.48
1980-81	88.70	824.28
Overall	7039.68	1407.10
Increase %		
CGR	25.1	14.9
Average	-	-

Source : R.B.I. Bulletins for various years.

3.3 Revenue Significance of State Excises :

Revenue significance of a tax can be expressed in any one of the following manners :

- 1) Percentage ratio of the revenue from a particular tax to the total revenue of the Governmental Unit concerned.
- 2) Percentage ratio of revenue from the tax to the total tax revenue of the Governmental Unit concerned.
- 3) Percentage ratio of the revenue from the tax to the own tax revenue of the Governmental Unit concerned.

This ratio in a simple manner shows the importance of a State tax can be and should be measured with reference to States' own tax revenue.

3.3.1 Overall Revenue Significance :

Table No. 3.2-A gives data regarding the overall revenue significance of State excises. Column 4 and column 7 express these ratios for Maharashtra and the All-States' model respectively. It is evident that -

- 1) In case of Maharashtra the revenue significance shows an increasing trend. But in case of All-States' model no trend is visible. In fact, the

over-all revenue significance of State excises fluctuates in a small range around the average overall revenue significance which happens to be 5.44 percent.

- 2) In case of Maharashtra the compound rate of annual growth of revenue from State excises is much greater than in the case of the growth rate of revenue from State excises in the All-States' model.
- 3) In case of Maharashtra the compound rate of annual growth of the revenue from State excises is much greater than the rate of growth of total revenue. In case of the All-States' model the rates of growth of excise revenue and total revenue are almost very close to each other. But it cannot be neglected that the former is slightly smaller than the latter in case of All-States model.

TABLE No. 3.2-A

TOTAL REVENUE SIGNIFICANCE OF STATE EXCISES

(Rs. in crores)

Year	Maharashtra			All-States		
	Excise Revenue	Total Revenue	2 as % of 3	Excise Revenue	Total Revenue	5 as % of 6
1.	2.	3.	4.	5.	6.	7.
1961-62	1.26	116.77	1.08	58.58	1073.49	5.45
1962-63	1.47	145.93	1.01	62.81	1283.06	4.89
1963-64	1.72	183.61	0.94	72.89	1490.20	4.89
1964-65	3.05	198.43	1.54	84.54	1634.98	5.17
1965-66	3.26	221.45	1.47	96.37	1850.21	5.21
1966-67	3.77	265.70	1.42	108.88	2135.20	5.10
1967-68	4.15	293.14	1.42	130.56	2324.68	5.62
1968-69	5.49	345.49	1.59	159.04	2670.00	5.96
1969-70	7.26	377.03	1.93	173.57	3052.70	5.66
1970-71	6.82	431.14	1.58	193.92	3370.49	5.75
1971-72	7.89	494.61	1.60	233.82	4044.72	5.78
1972-73	10.12	592.54	1.71	212.66	4912.35	4.38
1973-74	25.16	771.04	3.26	353.70	5552.00	6.37
1974-75	29.36	850.67	3.45	387.30	6431.51	6.02
1975-76	34.92	1049.38	3.33	435.50	7938.16	5.49
1976-77	40.99	1204.83	3.40	504.80	9037.02	5.59
1977-78	47.88	1290.20	3.71	569.87	9030.57	6.31
1978-79	53.75	1533.45	3.51	583.00	11646.69	5.01
1979-80	70.24	1794.33	3.91	698.48	13629.31	5.12
1980-81	88.70	2038.06	4.35	824.28	16293.30	5.06
Overall increase %	7039.68	1745.36	-	1407.10	1517.79	-
CGR	25.1	16.2	-	14.9	15.4	-
Average	-	-	2.31	-	-	5.44

Source : For tax and total revenue figures R.B.I. Bulletins.

3.3.2 Own Revenue Significance :

Table No. 3.2-B gives information regarding own revenue significance of State excises. Revenue from State excises expressed as a percentage ratio of total own revenue measures the own revenue significance of the State excises. Column 4 and Column 7 of the table give these ratios for Maharashtra and All-States model respectively. In this case total own revenue of the States is equal to total revenue of the States minus tax and non tax transfers from the Centre to the State. On the basis of this data we can make following statements :

- 1) In case of Maharashtra own revenue significance of State excises shows a rising trend. More interestingly it is seen that upto 1966-67 this ratio is about 1.66, then from 1967-68 to 1972-73 it is around 2.34 and in the remaining period it is around 4.05. It means that by periods, the own revenue significance of State excises in Maharashtra has made significant jumps.
- 2) In the case of All-States model, however, excepting the year 1973-74 (12.86%) the own revenue significance of State excises has fluctuated around - the overall average of 8.72%. In otherwords, in case of the All-States model the own revenue significance of the State Excises has remained more or less stable.

Even though the own revenue significance of State excises in Maharashtra has shown a rising tendency, for the whole period and yearwise, it is significantly less than the own revenue significance of State excises in case of the All-States model. This may be due to the relatively more efficient administration of State excises and prohibition policy even after large doses of relaxation in the prohibition policy in Maharashtra.

- 3) In case of Maharashtra revenue from State excises has increased much faster than the total own revenue. In case of All-States model both the revenue from State excises and total own revenue show the same rate of annual growth.

TABLE No. 3.2-B

OWN REVENUE SIGNIFICANCE OF STATE EXCISES

(Rs. in crores)

Year	Maharashtra			All-States		
	Excise Revenue	Total Own Revenue	2 as % of 3	Excise Revenue	Total Own Revenue	5 as % of 6
1961-62	1.26	89.85	1.40	58.58	699.70	8.37
1962-63	1.47	107.12	1.37	62.81	850.45	7.31
1963-64	1.72	140.54	1.22	72.89	1003.11	7.27
1964-65	3.05	150.76	2.02	84.54	1107.03	7.64
1965-66	3.26	165.93	1.96	96.37	1244.96	7.74
1966-67	3.77	194.52	1.94	108.88	1369.54	7.95
1967-68	4.15	207.79	2.00	130.56	1441.20	9.06
1968-69	5.49	255.74	2.15	159.04	1745.07	9.11
1969-70	7.26	276.44	2.63	173.57	1847.86	9.39
1970-71	6.82	302.92	2.25	193.92	1980.01	9.79
1971-72	7.89	332.05	2.38	233.82	2661.71	8.78
1972-73	10.12	381.85	2.65	212.66	2438.36	8.72
1973-74	25.16	529.40	4.75	353.70	2750.26	12.86
1974-75	29.36	689.55	4.26	387.30	4081.41	9.49
1975-76	34.92	838.91	4.16	435.50	5120.54	8.50
1976-77	40.99	983.64	4.17	504.80	5852.05	8.63
1977-78	47.88	1034.37	4.63	569.87	6286.69	9.06
1978-79	53.75	1218.83	4.41	583.00	7421.17	7.86
1979-80	70.24	1373.84	5.11	698.48	8138.35	8.58
1980-81	88.70	1567.68	5.66	824.28	9881.82	8.34
Overall increase %	7039.68	1744.77	-	1407.10	1412.29	-
CGR	25.1	16.2	-	14.9	14.9	-
Average	-	-	3.06	-	-	8.72

Source : R.B.I. Bulletins.

Note : Total Own Revenue = Total Revenue - Central Transfers.

3.3.3 Own Tax Revenue Significance
of State Excises :

Table No. 3.2-C gives information for Maharashtra and All-States model regarding the own tax revenue significance of State Excises (Column 4 and 7). The revenue significance of a State tax with reference to its own tax system given by the constitution is a more relevant concept from the point of view of the own tax policy of the Government. The own tax revenue significance of a tax is measured by the percentage ratio of the revenue from the tax to the total revenue from all the taxes under the jurisdiction of the State Governments. It is seen that most of the observations made in connection with Table No. 3.2-B are almost applicable in this case also. However, there is one significant difference. In this case revenue from State excises as before has increased at a faster rate than the rate of growth of total own tax revenue in case of Maharashtra. But unlike before, in case of the All-States model the rate of growth of revenue from State excises is less than the rate of growth of total own tax revenue. This may be considered as an indication that State excises at the all States level have reached a saturation point whereas in case of Maharashtra there remains further scope for additional revenue from State excises.

TABLE No. 3.2-C

REVENUE SIGNIFICANCE OF STATE EXCISES

(Rs. in crores)

Year	Maharashtra			All-States		
	Excise Revenue	Total Own Tax Revenue	2 as % of 3	Excise Revenue	Total Own Tax Revenue	5 as % of 6
1961-62	1.26	66.76	1.89	58.58	438.68	11.35
1962-63	1.47	77.46	1.90	62.81	569.92	11.02
1963-64	1.72	100.39	1.71	72.89	680.70	10.71
1964-65	3.05	112.62	2.71	84.54	764.83	11.05
1965-66	3.26	122.43	2.66	96.37	842.60	11.44
1966-67	3.77	153.01	2.46	108.88	937.24	11.62
1967-68	4.15	168.17	2.47	130.56	1065.52	12.25
1968-69	5.49	187.49	2.93	159.04	1205.00	13.20
1969-70	7.26	216.53	3.35	173.57	1355.51	12.80
1970-71	6.82	255.56	2.67	193.92	1527.85	12.69
1971-72	7.89	274.57	2.87	233.82	1695.28	13.79
1972-73	10.12	302.82	3.34	212.66	1928.48	11.03
1973-74	25.16	382.31	6.58	353.70	2305.37	15.34
1974-75	29.36	497.87	5.90	387.30	2880.57	13.44
1975-76	34.92	585.96	5.96	435.50	3546.16	12.28
1976-77	40.99	679.97	6.03	504.80	4033.45	12.51
1977-78	47.88	712.80	6.72	559.87	4349.24	13.10
1978-79	53.75	850.81	6.32	583.00	4970.35	11.73
1979-80	70.24	980.85	7.16	698.48	5669.14	12.32
1980-81	88.70	1130.34	7.85	824.28	6616.18	12.46
Overall increase %	7039.68	1693.14	-	1407.10	1508.20	-
CGR	25.1	16.1	-	14.9	15.3	-
Average	-	-	4.17	-	-	12.41

Source : R.B.I. Bulletins.

Note : Total Own Tax Revenue = Total Tax Revenue - transferred revenue.

3.4 Level of State Excise :

Level of a tax is measured by the percentage ratio of the revenue from the tax to the national income of the Governmental Unit concerned. In our analysis we use State domestic product for Maharashtra and gross national product for the All-States model. The level of a tax highlights the proportion of income which the Government collects in the form of the particular tax. We have already pointed out in Chapter-I & II that the demand for alcoholic drinks and intoxicants shows price inelasticity and at the same time income elasticity. This peculiar feature of the demand for the concerned goods, suggests that with increasing income people will spend larger amounts on the particular item of expenditure and as a reason even at the constant rate of taxation the revenue from State excise will increase rapidly and naturally the level of the tax also will tend to increase.

Table No. 3.3 gives information about the level of State excises in Maharashtra (Column No. 4) and in the All States model (Column No. 7) for a period of 20 years from 1961-62 to 1980-81. On the basis of the data in this table, we can make following observations :

- 1) The average level of State excises in Maharashtra (.25%) is almost half of that in the All-States model (.54%).

- 2) Both in case of Maharashtra and the All-States model the level of State excises shows a rising trend. However, throughout the period the level of State excises in All-States model is significantly higher than the level in case of Maharashtra.

- 3) The rate of growth of revenue from State excises both in case of Maharashtra and All-States model is significantly greater than the respective growth rates of State domestic product and gross national product. This shows the buoyant and income elastic nature of the State excises.

TABLE No. 3.3

LEVEL OF STATE EXCISES

(Rs. in crores)

Year	Maharashtra			All-States		
	Excise Revenue	State Domestic Product	2 as % of 3	Excise Revenue	Gross National Product	5 as % of 6
1.	2.	3.	4.	5.	6.	7.
1961-62	1.26	1556.20	0.08	58.58	14799	0.39
1962-63	1.47	1748.20	0.08	62.81	15727	0.40
1963-64	1.72	2030.80	0.08	72.89	17989	0.40
1964-65	3.05	2230.80	0.14	84.54	21113	0.40
1965-66	3.26	2354.50	0.14	96.37	21866	0.44
1966-67	3.77	2759.00	0.14	108.88	25279	0.43
1967-68	4.15	3155.80	0.13	130.56	29652	0.44
1968-69	5.49	3323.08	0.17	259.04	30417	0.52
1969-70	7.26	3656.37	0.20	173.57	33569	0.51
1970-71	6.82	4004	P 0.17	193.92	36558	0.53
1971-72	7.89	4307	" 0.18	233.82	38814	0.60
1972-73	10.12	4566	" 0.22	212.66	42077	0.50
1973-74	25.16	5958	" 0.42	353.70	51902	0.68
1974-75	29.36	7463	" 0.39	387.30	63203	0.61
1975-76	34.92	7693	" 0.45	435.50	64996	0.67
1976-77	40.99	8479	" 0.48	504.80	80600	0.63
1977-78	47.88	9400	" 0.51	569.87	90200	0.63
1978-79	53.75	9909	Q 0.54	583.00	97700	0.60
1979-80	70.24	N.A.	-	698.48	108500	0.64
1980-81	88.70	N.A.	-	824.28	104601	0.79
Overall increase %	7039.74	636.74	-	1407.10	706.81	-
CGR	25.1	11.5	-	14.9	10.9	-
Average	-	-	0.25	-	-	0.54

Source : For tax data - R.B.I. Bulletins.

For GNP - Year-book of National Accounts 1980 UN, New York, 1982 and Economic Survey of the Government of India, 1982-83.

For SDP - R.B.I. Bulletins April 1978 and September, 1982.

3.5. Per Capita Burden of State Excises :

Table No. 3.4 gives information regarding per capita burden of State excises for the period 1961-62 to 1980-82 for Maharashtra (Column No. 4) and All-States model (Column No.7). On the basis of this data we can make following observations :

- 1) Both in case of Maharashtra and All-States model per capita burden of State excises shows a clearly rising trend particularly during the decade 1971 to 1981.
- 2) Period as a whole the average per capita burden of State excises in case of Maharashtra is Rs. 3.99 and in case of All-States model Rs. 5.02. In other words, the period average of per capita burden of State excises in case of the All-states model is greater than in case of Maharashtra. However, if we make year by year comparison, then upto 1978 this burden is constantly greater in case of All-States model than for Maharashtra. But in the last three years the per capita burden of State excise is greater in Maharashtra than that in case of All-States model.
- 3) The more interesting thing is the large discrepancy between the compound growth rate of per capita burden of State excises in Maharashtra (22.3%) and

in All-States model (12.5%). This perhaps highlights the effect of latter relaxation of prohibition policy in Maharashtra.

3.5.1 Micro-level of State Excises :

By micro level of State excises we mean percentage ratio of per capita burden of State excises to per capita income. Table No. 3.4-A gives information regarding this ratio for Maharashtra and All-States model. Most of the observations we made regarding macro level of State excises are more or less applicable to this data also.

TABLE No. 3.4

PER CAPITA BURDEN OF STATE EXCISES

(Rupees)

Year	Maharashtra			All-States		
	Excise Revenue	Popula- tion	Per Capita Burden of State Excise 2 ÷ 3 = 4	Excise Revenue	Popula- tion	Per capita Burden of State Excise 5 ÷ 6 = 7
1.	2.	3.	4.	5.	6.	7.
1961-62	1.26	3.99	0.32	58.58	44.24	1.92
1962-63	1.47	4.09	0.37	62.81	45.29	1.38
1963-64	1.72	4.18	0.41	72.89	46.20	1.57
1964-65	3.05	4.28	0.71	84.54	47.21	1.79
1965-66	3.26	4.38	0.74	96.37	48.25	1.99
1966-67	3.77	4.49	0.84	108.88	49.32	2.21
1967-68	4.15	4.50	0.92	130.56	50.43	2.58
1968-69	5.49	4.71	1.16	159.04	51.54	3.08
1969-70	7.26	4.83	1.50	173.57	52.60	3.29
1970-71	6.82	4.95	1.37	193.92	53.89	3.59
1971-72	7.89	5.07	1.55	233.82	55.08	4.24
1972-73	10.12	5.18	1.95	212.66	56.25	3.78
1973-74	25.16	5.29	4.75	353.70	57.42	6.15
1974-75	29.36	5.41	5.42	387.30	58.61	6.60
1975-76	34.92	5.52	6.32	435.50	59.79	7.28
1976-77	40.99	5.60	7.30	504.80	61.33	8.23
1977-78	47.88	5.71	8.38	569.87	62.58	9.10
1978-79	53.55	5.81	9.21	583.00	63.84	9.13
1979-80	70.24	5.91	11.88	698.48	65.10	10.72
1980-81	88.70	6.01	14.76	824.28	66.36	12.42
Overall increase	7039.68	150.62	4612.5	1407.10	150.00	940.90
% CGR	25.1	2.2	22.3	14.9	2.1	12.5
Average	-	-	3.99	-	-	5.02

Source : 1) For Excise Revenue - R.B.I. Bulletins for various years
 1i) For Population - Statistical Abstract of India.

**3.5.2 Consumer Expenditure on pan,
tobacco and intoxicants :**

We have also tried to find out the relation between per capita burden of State excises per month and per capita consumer expenditure on pan, tobacco and intoxicants for the average household, in case of Maharashtra and All-States model. In this case we have used data for per capita burden of State excises per month from table No. 3.4 by dividing Column No. 4 (in case of Maharashtra) and Column No. 7 (in case of All-States model) by 12. We made calculations only with reference to 1965-66 and 1970-71. The information regarding consumer expenditure on pan, tobacco and intoxicants is taken from Basic Table No. 13. In the year 1965-66 in case of Maharashtra the percentage ratio of per month per capita State excise revenue to per month per capita consumer expenditure on the related items comes to be 5.45%. For the year 1970-71 the same ratio comes to be 7.98%. In other words, this means that the effective incidence of State excises as a percentage of respective consumer expenditure per month was 5.45% and around 7.98% in the years 1965-66 and 1970-71 respectively in Maharashtra.

The same for All-States model are 17.83% and 21.99% respectively for the years 1965-66 and 1970-71. From these figures it is clear that incidence of State excises in relation to respective expenditure during the period has

increased both in case of Maharashtra and All-States model. This incidence in case of All-States model is more than 3 times that of Maharashtra. More directly we can say that share of State excises in the consumer expenditure on the respective commodities has shown a significant increase during the period 1965 to 1971.

TABLE No. 3.4-A

PER CAPITA LEVEL OF STATE EXCISES

(Rupees)

Year	Maharashtra			All-States		
	Per capi- ta burden of State Excises	Per capi- ta Income SDP	2 as % of 3	Per capi- ta burden of State Excises	Per capi- ta income NDP	5 as % of 6
1.	2.	3.	4.	5.	6.	7.
1961-62	0.32	412	0.07	1.92	317	0.60
1962-63	0.37	442	0.08	1.38	328	0.42
1963-64	0.41	485	0.08	1.57	368	0.43
1964-65	0.71	526	0.13	1.79	425	0.42
1965-66	0.74	534	0.14	1.99	429	0.46
1966-67	0.84	610	0.14	2.21	486	0.45
1967-68	0.92	676	0.14	2.58	560	0.46
1968-69	1.16	700	0.16	3.08	517	0.59
1969-70	1.50	752	0.20	3.29	603	0.54
1970-71	1.37	803	0.17	3.59	642	0.56
1971-72	1.55	8.36	0.18	4.24	662	0.64
1972-73	1.95	861	0.23	3.78	707	0.53
1973-74	4.75	1091	0.43	6.15	862	0.71
1974-75	5.42	1271	0.43	6.60	995	0.66
1975-76	6.32	1393	0.45	7.28	1033	0.70
1976-77	7.30	1505	0.48	8.23	1097	0.75
1977-78	8.38	1637	0.51	9.10	1214	0.75
1978-79	9.21	1694	0.54	9.13	1270	0.72
1979-80	11.88	N.A.	-	10.72	N.A.	-
1980-81	14.76	N.A.	-	12.42	N.A.	-
Overall	4612.50	411.16	-	646.87	400.00	-
increase %						
CGR	22.3	8.6	-	12.5	8.5	-
Average	-	-	0.25	-	-	0.58

Source : For Per capita Income SDP and NDP, R.B.I. Bulletins
April 1978 and September 1982.

3.6 Cost of Collecting State Excises :

Table No. 3.5 gives data regarding cost of collection ratio of State excises for Maharashtra and All-States model for the period 1961-1981. It is evident from this data that -

- 1) Both in case of Maharashtra and All-States model, this ratio shows a decreasing trend. This decrease in case of Maharashtra is quite substantial after 1964. In other words, in the initial stage when prohibition was in full force in Maharashtra, the cost of collection ratio was almost in the range of 15 to 20% of the excise revenue. This shows in an indirect manner the burden of prohibition. This is significantly proved if we take into consideration, this ratio for the years 1974 to 1981.
- 2) On the average, the cost of collection ratio in Maharashtra is slightly greater than the respective ratio for All-States model.
- 3) Both in case of Maharashtra and All-States model the rate of growth of excise revenue is much faster than the rate of growth of cost of collection.

It seems from the above facts that relaxation or scrapping of prohibition policy has resulted into a substantial increase in the revenue but not a very high

increase in the cost of collection and it may be that in future also this cost ratio may further decline. Of course, this itself cannot be considered as an indication of increasing efficiency of the excise administration. But at least it suggests that a more rational excise policy mainly with reference to prohibition reduces significantly the relative burden of excise administration.

COST OF COLLECTING STATE EXCISES

(Rs. in crores)

Year	Maharashtra			All States		
	Excise Revenue	Cost of collecting State Excises	Cost Ratio 3 as % of 2	Excise Revenue	Cost of collecting State Excises	Cost Ratio 6 as % of 5
1.	2.	3.	4.	5.	6.	7.
1961-62	1.25	0.242	19.21	58.58	5.62	9.59
1962-63	1.47	0.254	17.29	62.81	5.76	9.17
1963-64	1.72	0.257	14.94	72.89	5.90	8.09
1964-65	3.05	0.292	9.57	84.54	5.82	6.88
1965-66	3.26	0.287	8.80	96.37	6.29	6.53
1966-67	3.77	0.268	7.11	108.88	6.75	6.20
1967-68	4.15	0.335	8.07	130.56	7.77	5.95
1968-69	5.49	0.531	9.67	159.04	13.14	8.26
1969-70	7.26	0.717	9.88	173.57	10.62	6.12
1970-71	6.82	0.731	10.72	193.92	11.74	6.05
1971-72	7.89	0.777	9.85	233.82	13.21	5.65
1972-73	10.12	0.839	212.66	15.54	7.31	7.31
1973-74	25.16	0.924	3.67	353.70	18.03	5.10
1974-75	29.36	0.848	2.89	387.30	21.08	5.44
1975-76	34.92	0.953	2.73	435.50	23.91	5.49
1976-77	40.99	1.14	2.78	504.80	27.09	5.37
1977-78	47.88	1.12	2.34	569.87	N.A.	-
1978-79	53.75	1.75	3.26	583.00	N.A.	-
1979-80	70.24	1.86	2.65	698.48	N.A.	-
1980-81	88.70	2.18	2.46	824.28	N.A.	-
Overall increase %	7039.68	900.82	-	1407.10	482.02	-
CGR	25.1	12.3	-	14.9	11.0	-
Average	-	-	7.81	-	-	6.7

Source : i) Combined Finance and Revenue Accounts of the Union and State Government of India upto 1976-77 for various years.

ii) Budget of Maharashtra Government, 1977-78 onwards.

3.7 Buoyancy and Income Elasticity of State Excises :

Buoyancy which measures the overall responsiveness of a tax to changes both in national income and the tax parameters like rate, base, coverage and administrative efficiency, generally shows whether a tax will become increasingly productive or not in the process of economic change. However, income-elasticity of a tax is a more precise measure of the responsiveness of a tax to the change, exclusively, in the national income, with the tax parameters remaining constant. Income-elasticity of a tax indicates productivity of a tax of an inherent nature. It, therefore, introduces in the tax system an in-built flexibility. It is generally suggested that a tax system of a developed economy should be, as far as possible, income-elastic which naturally will depend upon the income-elasticity of component taxes. An income-elastic tax system is beneficial from productivity, progressivity and stabilization point of view.

Table No. 3.6 gives information regarding buoyancy and income-elasticity of State Excises in comparison with the overall tax-system for Maharashtra and All-States model. It is clear from this table that -

- 1) Buoyancy of State excises is higher than the buoyancy of all taxes taken together both in Maharashtra and All-States model.

- 2) Similarly, income-elasticity of State excises is also greater than income-elasticity of All taxes together both in Maharashtra and All-States model.
- 3) The more interesting is the fact, that compared to All-States model, the State excises in Maharashtra show a higher buoyancy and income elasticity.

This can be due to the higher level of per capita income in Maharashtra, increasing concentration of a alcohol production in Maharashtra or perhaps a more rational and accelerated relaxation of prohibition policy in Maharashtra. However, it is clear that State excises do contribute positively to the buoyancy and income elasticity of States' own tax structure.

TABLE No. 3.6

BUOYANCY AND INCOME ELASTICITY
OF STATE EXCISES

	<u>Buoyancy</u>		<u>Income Elasticity</u>	
	<u>State</u>	<u>All taxes</u>	<u>State</u>	<u>All taxes</u>
	<u>Excises</u>		<u>Excises</u>	
Maharashtra	2.25024	1.43652	2.25024	1.39685
All-States	1.31829	1.19044	1.27656	1.06593

Source : ARTHA VIJNANA,
September 1978, Vol. XX No. 3,
p. 249 and 262.
Buoyancy and Income Elasticity of
State Taxes in India,
M.C. Purohit.

3.8 Developmental Significance of State Excises :

Developmental significance of State excises can be examined from theoretical point of view as well as practical point of view. Theoretically speaking, consumer expenditure on commodities like pan, tobacco, intoxicants etc. is non essential and avoidable and of a luxury type. If these commodities are subjected to a high level of excise duties, leading to a decreased demand for such commodities, then the amounts thus released may either be saved or expenditure on more important items may be increased. The latter effect may increase the general efficiency of the population. On the supply side the production of such commodities will decrease releasing capital for investment in more desirable production areas. Thus, State excises may contribute qualitatively as well as quantitatively to the process of economic development. However, in view of the fact that demand for such commodities is generally price-inelastic and income-elastic, State excises may not achieve the above mentioned objectives in a big way. But on the other hand, they will certainly bring in larger and larger amounts of revenue for the Government, increasing the ability of the Government to finance the general increase in public expenditure including developmental expenditure. It is in this latter sense that we have tried to find out developmental significance of State excises.

**3.8.1 Revenue Account Developmental
Significance of State Excises :**

Table No. 3.7 relates revenue from State excises to total development expenditure on the revenue account, for Maharashtra (Column No. 4) and All-States model (Column No.7). On the basis of this table we can make following observations:

- 1) Period as a whole the average revenue account developmental significance of State excises is 4.45% in case of Maharashtra and 9.43% in case of All-States model. However, in case of Maharashtra, this ratio has gradually increased throughout the period but in case of All-States model it certainly shows a gradually decreasing trend.
- 2) In case of Maharashtra, the revenue from State excises has increased faster than developmental expenditure. But in case of All-States model the rate of growth of revenue from State excises is slightly less than the rate of growth of developmental expenditure.
- 3) Broadly speaking, we can say that revenue from State excises may cover revenue account developmental expenditure to the extent of 10%.

**3.8.2 Revenue Account (Plan) Developmental
Significance of State Excises :**

Table No. 3.7-A relates revenue from State excises to plan developmental expenditure on revenue account. In this

case, eventhough the data is available only for the period 1972 to 1981, the trends are clear -

1) In case of Maharashtra, the average revenue account plan developmental significance of State excises is 33.71% and in case of All-States model 42.68%. In case of All-States model in the year 1974-75 this ratio was almost 61%.

2) This ratio in case of Maharashtra shows a rising trend and this ratio in case of All-States model shows falling trend.

3) The more important conclusion of this analysis is the fact that a substantial part of plan developmental expenditure is covered by the excise revenue. Of course, it seems that with rapid growth in plan developmental expenditure, this significance of State excise revenue may gradually decrease atleast in the early stages of development. Without prohibition fad, State excises can be effectively used in financing a substantial part of plan developmental expenditure.

TABLE No. 3.7

REVENUE ACCOUNT DEVELOPMENTAL SIGNIFICANCE OF STATE EXCISES

(Rs. in crores)

Year	Maharashtra			All-States		
	Revenue from State Excise	Revenue Account Devp. Expen.	2 as % of 3	Revenue from State Excise	Revenue Account Devp. Expen.	5 as % of 6
1.	2.	3.	4.	5.	6.	7.
1961-62	1.26	6.82	2.03	58.58	660.23	8.87
1962-63	1.47	64.42	2.28	62.81	720.06	8.72
1963-64	1.72	79.24	2.17	72.89	797.94	9.13
1964-65	3.05	100.31	3.04	84.54	913.04	9.26
1965-66	3.26	126.91	2.58	96.37	1103.14	8.73
1966-67	3.77	134.47	2.80	108.88	1213.19	8.97
1967-68	4.15	88.51	4.68	130.56	1062.56	12.29
1968-69	5.49	120.62	4.55	159.04	1156.88	13.63
1969-70	7.26	181.61	3.99	173.57	1629.70	10.65
1970-71	6.82	121.46	5.61	193.92	1844.14	10.91
1971-72	7.89	229.04	3.44	233.82	2155.77	10.85
1972-73	10.12	410.81	2.46	212.66	3349.49	6.35
1973-74	25.16	540.84	4.65	353.70	3742.91	9.45
1974-75	29.36	495.99	5.92	387.30	4102.55	9.44
1975-76	34.92	578.17	6.04	435.50	4709.24	9.25
1976-77	40.99	628.87	6.52	504.80	5369.28	9.40
1977-78	47.88	717.06	6.67	569.87	6126.55	9.30
1978-79	53.75	888.09	6.05	583.00	7377.77	7.90
1979-80	70.24	1073.83	6.54	698.48	8601.20	8.12
1980-81	88.70	1277.87	6.94	824.28	10514.74	7.83
Overall	7039.68	2066.75	-	1407.10	1592.59	-
increase %						
CGR	25.1	17.3	-	14.9	15.7	-
Average	-	-	4.5	-	-	9.43

Source : R.B.I. Bulletins for various years.

TABLE No.3.7-A

REVENUE ACCOUNT (PLAN) DEVELOPMENTAL
SIGNIFICANCE OF STATE EXCISES

(Rs. in crores)

Year	Maharashtra			All-States		
	Revenue from State Excise	Revenue from Account Plan Devp. Expen.	2 as % of 3	Revenue from State Excise	Revenue from Account Plan Devp. Expen.	5 as % of 6
1.	2.	3.	4.	5.	6.	7.
1961-62	1.26	N.A.	-	58.58	N.A.	-
1962-63	1.47	N.A.	-	62.81	N.A.	-
1963-64	1.72	N.A.	-	72.89	N.A.	-
1964-65	3.05	N.A.	-	84.54	N.A.	-
1965-66	3.26	N.A.	-	96.37	N.A.	-
1966-67	3.77	N.A.	-	108.88	N.A.	-
1967-68	4.15	N.A.	-	130.56	N.A.	-
1968-69	5.49	N.A.	-	159.04	N.A.	-
1969-70	7.26	N.A.	-	173.57	N.A.	-
1970-71	6.82	N.A.	-	193.92	N.A.	-
1971-72	7.89	N.A.	-	233.82	N.A.	-
1972-73	10.12	89.82	11.27	212.66	525.48	40.47
1973-74	25.16	105.04	23.95	353.70	657.61	53.78
1974-75	29.36	83.58	35.13	387.30	636.64	60.83
1975-76	34.52	102.20	34.17	435.50	854.39	50.97
1976-77	40.99	100.42	40.82	504.80	1236.73	40.82
1977-78	47.88	131.90	36.30	569.87	1353.77	42.09
1978-79	53.75	157.00	34.23	583.00	1942.05	30.02
1979-80	70.24	162.02	43.35	698.48	2001.11	34.90
1980-81	88.70	200.64	44.21	824.28	2728.18	30.21
Overall increase %	7039.68	223.38	-	1407.10	519.18	-
CGR	25.1	10.6	-	14.9	22.8	-
Average	-	-	33.71	-	-	42.68

Source : R.B.I. Bulletins for various years.

**3.8.3 Capital Account Developmental
Significance of State Excise :**

Table No. 3.8 relates excise revenue to total developmental expenditure on capital account for Maharashtra (Column 4) and All-States (Column 7) for the period under study. This ratio can be considered as a measure of the possible contribution of State excises to long term developmental projects or investment projects of the Government. It is clear from the table :

- 1) In case of Maharashtra excise revenue, on the average can possibly finance more than 14% of the capital account developmental expenditure and in case of All-States, 28.28%.
- 2) In case of Maharashtra, this ratio shows a rising tendency throughout the period, but in case of All-States model initially a rising trend and latter on some decrease.
- 3) Both in case of Maharashtra and All-States model, the rate of growth of revenue from State excise is greater than rate of growth of capital account developmental expenditure.

In this respect also the significant extent of possible contribution of excise revenue to developmental expenditure on capital account is evident.

TABLE No.3.8

CAPITAL ACCOUNT DEVELOPMENTAL SIGNIFICANCE OF STATE EXCISES

(Rs. in crores)

Year	Maharashtra			All-States		
	Revenue from State Excise	Capital Account Devp. Expen.	2 as % of 3	Revenue from State Excise	Capital Account Devp. Expen.	5 as % of 6
1.	2.	3.	4.	5.	6.	7.
1961-62	1.26	27.33	4.61	58.58	315.15	18.59
1962-63	1.47	25.42	5.78	62.81	330.20	19.02
1963-64	1.72	24.00	7.17	72.89	350.07	20.82
1964-65	3.05	33.81	9.02	84.54	401.07	21.08
1965-66	3.26	44.75	7.28	96.37	403.89	23.86
1966-67	3.77	46.34	8.13	108.88	421.41	25.84
1967-68	4.15	53.05	7.82	130.56	426.18	30.63
1968-69	5.49	60.49	9.07	159.04	515.05	30.88
1969-70	7.26	67.66	10.73	173.57	500.48	34.68
1970-71	6.82	76.44	8.92	193.92	584.43	33.18
1971-72	7.89	85.40	9.24	233.82	705.49	33.14
1972-73	10.12	89.57	11.30	212.66	718.25	29.61
1973-74	25.16	110.46	22.78	353.70	952.95	37.12
1974-75	29.36	122.21	24.02	387.30	1086.79	35.64
1975-76	34.92	204.01	17.12	435.50	1381.97	31.51
1976-77	40.99	166.93	24.55	504.80	1622.90	31.10
1977-78	47.88	205.46	23.30	569.87	1818.17	31.34
1978-79	53.75	256.91	20.92	583.00	2243.79	25.98
1979-80	70.24	280.13	25.07	698.48	2625.85	26.60
1980-81	88.70	340.49	26.05	824.28	3128.66	26.35
Overall increase %	7039.68	1245.85	-	1407.10	992.75	-
CCR	25.1	14.2	-	14.9	12.8	-
Average	-	-	14.14	-	-	28.34

Source : R.B.I. Bulletins for various years.

**3.8.4 Capital Account (Plan) Development
Significance of State Excises :**

Table No. 3.8-A relates State excise revenue to plan developmental expenditure on capital account for Maharashtra (Column 4) and All-States model (Column 7) for the period 1972 to 1981. In this case again the observations made in respect of Table No. 3.8 hold, excepting one particular aspect only. It is seen that in case of Maharashtra excise revenue has increased at a faster rate than the rate of growth of plan developmental expenditure on capital account, whereas in case of All-States model the reverse seems to be fact.

TABLE No. 3.8-A

CAPITAL ACCOUNT (PLAN) DEVELOPMENTAL SIGNIFICANCE OF STATE EXCISES

(Rs. in crores)

Year	Maharashtra			All-States		
	Revenue from State Excise	Capital Account Plan Devp. Expen.	2 as % of 3	Revenue from State Excise	Capital Account Plan Devp. Expen.	5 as % of 6
1.	2.	3.	4.	5.	6.	7.
1961-62	1.26	N.A.	-	58.58	N.A.	-
1962-63	1.47	N.A.	-	62.81	N.A.	-
1963-64	1.72	N.A.	-	72.89	N.A.	-
1964-65	3.05	N.A.	-	84.54	N.A.	-
1965-66	3.26	N.A.	-	96.37	N.A.	-
1966-67	3.77	N.A.	-	108.88	N.A.	-
1967-68	4.15	N.A.	-	130.56	N.A.	-
1968-69	5.49	N.A.	-	159.04	N.A.	-
1969-70	7.26	N.A.	-	173.57	N.A.	-
1970-71	6.82	N.A.	-	193.92	N.A.	-
1971-72	7.89	N.A.	-	233.82	N.A.	-
1972-73	10.12	105.10	9.63	212.66	482.82	44.04
1973-74	25.16	104.07	24.18	353.70	710.85	49.75
1974-75	29.36	111.14	26.42	387.30	990.37	39.11
1975-76	34.92	139.74	24.99	435.50	1217.55	35.77
1976-77	40.99	190.04	21.57	504.80	1591.84	31.71
1977-78	47.88	213.87	22.39	569.87	1850.19	30.80
1978-79	53.75	239.99	22.40	583.00	2228.99	26.15
1979-80	70.24	260.04	27.01	698.48	2525.88	27.65
1980-81	88.70	239.95	36.97	824.28	2950.54	27.94
Overall increase %	7039.68	228.31	-	1407.10	611.10	-
CGR	25.1	10.9	-	14.9	25.4	-
Average	-	-	23.95	-	-	34.77

Source : R.B.I. Bulletins for various years.