FISCAL POLICY FOR THE NATIONAL CAPITAL REGION

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National Institute of Public Finance and Policy

The tax structures of each State (inculding local goverments) have a significant influence on the location of its industries and diversion of trade. Since, these must operate within a federal framework, it is desirable that the States follow uniform principles in accordance with the goals of the national policy. This would result in a balanced socio-economic development as also minimise the scope for evasion of taxes.

This study empirically examines the effects of variation in tax or subsidies on industrial locations or diversion of trade within the National Capital Region (NCR) comprising the Union Territtory of Delhi, one district of Rajasthan, three districts of Uttar Pradesh and six districts of Haryana. The study recommends harmony in the tax structure within the region so that it can enjoy the character of a unified whole and the growth and equity of its different constituents takes place on the basis of their comparatitive advantages. It is hoped that the study would benefit the policy makers as well as the persons interested in matters related to fiscal policy.

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Preface

The National Institute of Public Finance and Policy is an autonomous non-profit organisation set up for carrying out research, undertaking projects or studies and imparting training in the field of public finance and policy.

The Study on the Fiscal Policy for the National Capital Region (NCR) was undertaken at the instance of the National Capital Region Planning Board. The focus of the study is on the examination of the tax structure of the States and Union Territories comprising the NCR and formulation of a new tax structure with a suitable scheme of incentives to achieve the objective of dispersal of industrial and commercial activities. The study seeks to meet the objectives of the study after making an investigation into the existing tax structure of the region and analysing its impact on industrial growth and dispersal.

The Team which undertook this study was headed by Mahesh C. Purohit. The other members of the team were: C. Sai Kumar, Gopinath Pradhan and O.P. Bohra. The study was planned and conducted by Mahesh C. Purohit and all the chapters except the third were drafted by him. Gopinath Pradhan prepared the initial draft of Chapter 3. The field work relating to the study

of industrial structure was carried out mainly by C. Sai Kumar.

It is hoped that the study will be of some help in formulating an appropriate fiscal structure for the National Capital Region.

The Governing Body of the Institute does not take any responsibility for the views expressed by the authors in the research publications of the Institute. The responsibility for the views expressed belongs primarily to the authors of the concerned study.

New Delhi
January 1, 1992

Amaresh Bagchi
Director

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In conducting this study we have been helped by various organisations. We received excellent cooperation from all the officials concerned, through all the phases of this study. We wish to express our thanks to the officials of the National Capital Region Planning Board, Central Statistical Organisation (CSO), and Commercial Taxes Departments of the States in the NCR Region.

We wish to record our deep appreciation of the help given by Shri M. Shankar, the then Member Secretary of the NCR Planning Board; Shri K. Ramanujam, Secretary, Department of Statistics, Government of India, and the Director General of the CSO. We would like to specially mention that without the help of Shri K. Ramanujam in getting us the required statistics from the computer tapes of the CSO for the industrial structure of the NCR, the study would not have taken the present shape.

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Dr. D.N. Rao, Associate Professor, Jawaharlal Nehru University; Dr. D.U. Shastri, Professor, Institute of Economic Growth; Dr. K. Krishnamurty, Professor, Institute of Economic Growth; Dr. Brijesh C. Purohit, Economist, NIPFP; Shri Pawan K. Aggarwal, Senior Economist, NIPFP and Dr. Shyam Nath, Fellow, NIPFP have made substantial contributions at different stages of the study, especially in methodological and statistical work.

The study team derived great help in analysing various aspects relating to NCR from Shri J.C. Gambhir, Director (Perspective Planning), Delhi Development Authority, New Delhi and Shri E.F.N. Rebeiro, Chief Planner, Town and Country Planning.

In collection and analysis of data we were assisted by Shri Lokmani Pathak and Shri A.C. Dubey, Research Investigators of the NIPFP.

The empirical analysis contained in the study is based on the efficient computer services provided by the NIPFP Computer Unit. Shri K.K. Atri, EDP Manager, Shri A.K. Halen, Computer Programmer and Smt. Geeta Bhatnagar provided prompt and efficient computer services. Shri Christopher Cecil's and Mrs. Rita Wadhwa's editorial help has resulted in substantial improvement in the presentation of the study.

The research team derived great help in studying the problems relating to taxation and industrialisation in the districts of the NCR from the Members of the PHD Chambers of Commerce and Industry. Help and information was received from several members in response to our questionnaire issued to them. The study team wishes to acknowledge its indebtedness to them. The authors were able to better appreciate the view point of the industrialists because of the cooperation received from them.

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Mahesh C. Purohit
C. Sai Kumar
Gopinath Pradhan
O.P. Bohra

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Terms and Units Used in the Text

1 Lakh	:	100,000
1 Million	:	1,000,000
1 Crore	:	10 million

ABBREVIATIONS FREQUENTLY USED

NCR	=	National Capital Region.
GST	=	General Sales Tax.
CST	=	Central Sales Tax.

Chapter 1

Introduction

The role of taxation in influencing the choice of location of industries and flow of trade is well recognised. However, the form and content of the impact of taxation on location and regional economic development remains a controversial issue. Existing literature and available information do not enable any definitive judgement about the effects of variations in tax or subsidies on industry location or diversion of trade to a particular region. The question assumes importance in the context of the creation of the National Capital Region (NCR).

The area of the NCR comprises the Union Territory of Delhi, as its core, and contiguous parts of three neighbouring States, viz., Haryana, Uttar Pradesh and Rajasthan (Exhibit 1A). The constituent units of each sub-region are as follows:

a. Haryana sub-region (13,413 sq. kms) comprising (i) Faridabad district; (ii) Gurgaon district; (iii) Rohtak district; (iv) Sonepat district; (v) Rewari and Bawal Tehsils of Mahendragarh district; and (vi) Panipat tehsil of Karnal district;
b. Uttar Pradesh sub-region (10,853 sq. kms) comprising three districts, viz. (i) Meerut; (ii) Ghaziabad; and (3) Bulandshahar;

c. Rajasthan sub-region (4,493 sq. kms) comprising six tehsils of Alwar district, namely, Alwar, Ramgarh, Behror, Mandawar, Kishangarh and Tijara; and
d. The Union Territory of Delhi (1,483 sq. kms).

As the delineated area for the NCR covers a limited number of districts from the neighbouring States, differences in tax structure of two States can create distortions that would not arise elsewhere. These distortions occur because tax difference which might be too small to change the behaviour across the wide geographical areas becomes much more important within a narrow region, such as along the State borders. Therefore, most of the studies on taxes and economic behaviour will be largely irrelevant for such limited geographical areas.[1]

The present study seeks to identify what seem to be policy issues relevant to the framing of a viable tax policy for the NCR. It also outlines the conditions under which adjustments in tax policy may have a positive effect on the regional economic development. This would be in consonance with the basic objectives of the NCR Plan, which envisages rational development of Delhi and a balanced development of the region. For this purpose, it proposes dispersal of economic activities over self-contained regional towns, restructuring of the regional transport network and integrated development of land and infrastructure.[2]

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[1]Recent research has shown that differential tax structures do affect the level of retail activity along the State borders. See, Fox, William F. (1986), "Tax Structure and the Location of Economic Activity along State Borders", *National Tax Journal*, Vol. 39, No. 4, December, pp. 387-401.

[2]Town and Country Planning Organisation (1974), *Regional Plan, National Capital Region*, New Delhi.

Objectives of the Study

Balanced regional development requires an examination of a host of aspects relating to taxation as well as public expenditure, especially concerning infrastructure. However, the objectives of this study are limited to the following aspects:

a. Examination of the tax structure of the States comprising the NCR with special reference to sales tax, taxes on motor vehicles and goods, octroi, local property tax, and electricity duty;
b. Analysis of the built-in incentives in the existing tax structure and their effects on industrial location and concentration of commerce and trade in specific regions;
c. Formulation of a new tax structure to provide necessary incentives to achieve the objectives of dispersal of industrial and commercial activities; and
d. Discussion of policy implications of suggested tax structure.

Within the framework of the above objectives, the tax policy and other fiscal measures proposed in this study could go a long way in fulfilling the objectives of the NCR.

Plan of the Study

The plan of the study is as follows: Chapter 2 reviews the set of considerations relevant in evaluating the effects of various tax policy changes. Chapter 3 is a brief review of the practices in various States and local areas falling within the purview of the National Capital Region (NCR). Empirical analysis of the effects of tax policies on location of industry and on diversion of trade, with supportive evidence, is presented in Chapters 4

EXHIBIT-1A

NATIONAL CAPITAL REGION

and 5, respectively. A concluding section sums up by discussing the conditions under which harmonisation of tax policies could be conducive to the economic development of the NCR.

Many important aspects relating to urban economic development are not covered in this study. Because the subject of this inquiry is limited to the commodity tax policy of the sub-national (viz., State and local) governments, we do not consider tax policies of and incentives given by the Central Government for urban economic development. The scope of this study is further narrowed by the exclusive concern with tax policies, to the neglect of public expenditure, capital subsidies and other devices which the State and local governments may use to develop infrastructural facilities to attract industry.

Chapter 2

Tax Policy Issues

The tax structure of the sub-national (i.e., the State and the local) governments have to follow a number of common principles that are in accordance with national objectives. First, there has to be a reasonable amount of uniformity in tax rates, failing which there might be diversion of trade and commerce as well as industrial activities. This uniformity is far more significant for parts of the three States and Delhi, forming the NCR, as differential tax structures in these States contiguous to Delhi can easily distort the location of trade and industrial activity along its borders. Second, whereas for regional economic development, it is important for the sub-national governments to mobilise greater resources by adjusting tax rates, it is equally important that these governments encourage new industries by offering tax incentives in order to attract investment. At the same time, however, it is essential that the concerned States do not vie with each other in the matter of tax rates and grant of concessions/incentives. Thus, any proposed tax policy for the NCR should necessarily incorporate provisions dealing with these two crucial aspects.

An important issue in framing a tax policy for the States relates to the desirability of granting tax incentives for attracting industries. Presently, tax

incentives are more often than not, based on superficial analysis and the motivation is political rather than economic. In most cases, tax incentives are associated with the opening of a new industry even when the incentive actually plays no role in the decision on its location. Critics of tax incentives see them as little more than a gift to industry from the State exchequer. Its proponents, on the other hand, argue that incentives are essential for attracting new industries because they reduce the effective cost of the industry. Thus, the issues involved in granting tax concession are: (a) Do the incentives have a positive effect on trade, commerce and industrial activity in the region? And, (b) What are the implications of such incentives for the sub-national governments?

An important aspect of a proposed tax policy for the NCR relates to the modus operandi of harmonising the tax rates among the States and the Union Territory of Delhi. Whereas, there is a reasonable amount of uniformity in tax rates among the States, the effective rate of tax in Delhi is substantially lower than in the neighbouring States. It is believed that this variation causes diversion of trade and relocation of industrial activities. If harmonisation is attempted by reducing the States' tax rates, it would have its effect on the whole of each State, major parts of which are not under the NCR and would, therefore, cause loss of revenue. The States would not be expected to agree to revise their rates for that small part which is included in the NCR. Any proposed increase in the tax rates in Delhi, on the other hand, is opposed by the Delhi Administration on the ground that it would vitiate its character as the centre of redistributive trade. One of the necessary tasks would, therefore, be to evolve a tax-mix which placates the vested interests of the Union Territory and the States concerned.

Even in the case of Central Sales Tax (CST), variations exist on account of the provisions under Section 8(5) of the CST Act, which permits variations in rates to suit the specific requirements of a particular State. To illustrate, whereas the rate of tax on the re-export of goods from Delhi is two per cent, in all the States whose areas fall within the NCR[1], this rate is four per cent. Also, in Delhi the CST rates on certain commodities have been reduced, which might cause considerable diversion of trade in the NCR. It would, thus, be relevant to see how uniformity in the CST rates could be achieved to the optimum.

Taxation of road transport is an important issue affecting the NCR Region. In fact, variations in the annual combined tax burden of both the motor vehicles tax and the passengers and goods tax among different States of the NCR might cause diversion of vehicles for registration in the low-tax State. Consequently, the cost of transporting goods could be less and the availability of transport vehicles could be much more in the low-tax area. It would thus, be important to examine whether taxation of transport sector might be a contributing factor in sub-optimal decisions regarding location of industries.

Similarly, local tax policy might also contribute to distortions leading to sub-optimal locational decisions and diversions of trade. In this context, the two important local taxes in the NCR are property tax and octroi. It may be important to examine whether adjustments in these tax rates would contribute to the desired objectives. If the effective rate of octroi varies considerably from one region to another, the cost of movement of goods and ultimately the price of the commodity is affected. Thus, variations in price from one local jurisdiction to another could lead to sub-

[1]Hereafter referred to as "NCR States".

optimal locational decisions. This would also lead to diversion of trade from a high-tax municipal area to a low-tax area. Other factors being equal across regions, rates of property tax too might influence the locational decisions for commercial and industrial enterprises, if the difference in tax rates is considerable.

Objectives of Reform

In the light of the policy issues discussed above, the major objectives of reform in a proposed tax structure for the NCR could be stated as follows:

a. The tax system of the NCR (i.e., of each of its constituent units) should be such as to contribute to the rapid and a balanced development of the whole region;
b. The system should be in consonance, in some essential respects, with the structures prevailing in the neighbouring States;
c. It should be uniform in all respects in regard to local commodity taxes and the Central sales tax; and
d. It should be so administered that evasion of tax due to inter-State transactions within the region is checked through a suitable mechanism.

Keeping in view the above objectives, we shall in the following chapters, analyse the existing structure of taxes, industries and trade in the NCR. We then indicate the structural reforms required for the fiscal policy of the NCR.

Chapter 3

Rate Structure and Abatements in State and Local Taxes

This chapter presents a comparative picture of the bases and rates of various commodity taxes levied by different sub-national governments. The taxes included are sales tax, motor vehicles tax, passengers and goods tax, and electricity duty levied by the State governments and property tax and octroi (including entry tax) levied by the local governments. The analysis of the structure of these taxes is followed by an examination of tax incentives provided by different States.[1] As the scope of the study is to estimate the effects of taxes on the location of industries and on diversion of trade, the other taxes on income and property, although very important, have been excluded from the purview of this study.

Sales Tax

Sales tax is levied either on sale or purchase of

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[1]The analysis is confined to sales tax concessions because the States and local governments make little use of concessions through other taxes.

commodities. All commodities whether domestically produced or imported from other States bear the burden of this tax. The points of levy differ among the States in India. But in the context of the NCR there are two points of levy--viz., the first point and the last-point.[2] While the tax structure of Rajasthan and Uttar Pradesh predominantly follow the first-point tax, Delhi and Haryana have resorted to the last-point sales tax.[3] Recently, however, Delhi has shifted the tax from the last-point to the first point in respect of 43 commodities.[4]

Rates of Tax

Like the points of levy, the rates of sales tax also vary from one commodity to another. An overall view of rates on some selected commodities in the NCR along with the point of levy of various commodities classified as essential consumer items and luxury goods is given in

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[2]When the tax is imposed on the sale by the first registered dealer, who purchases commodities either within the State, or manufactures them, or imports commodities from out of the State, it is called the first-point tax; and when the last registered dealer sells commodities either to the consumers or to unregistered dealers, any tax on the sale by this last registered dealer is called the last-point tax. A combination of both, the first and the last-point tax is known as double-point tax. That is, a tax is levied twice at two different points of the chain of a transaction. However, the term multi-point tax is akin to a turnover tax with all the cascading features.

[3]Irrespective of variations, most of the States derive larger proportion of revenue through the first-point tax. The first-point yield in Rajasthan, Uttar Pradesh, Haryana in 1976-77 is estimated to be 90.06, 54.82 and 52.07 per cent of the total sales tax yield, respectively. See for details, Purohit, M.C. (1982), "Structure of Sales Tax in India", *Economic and Political Weekly*, August 21, 1982, pp. 1365-1375 and also Purohit, Mahesh C. (1988), *Structure and Administration of Sales Taxation in India*, New Delhi, Reliance Publishing House.

[4]Even in respect of these commodities, sales tax is not levied at the first point when the commodities are exported out of Delhi.

Table 3.1. It may be seen from the table that the rates on essential as well as non-essential consumer goods are not strictly comparable because the point of levy differs among most of the commodities. There are only seven commodities viz., matches, kerosene, silk fabrics, drugs, vegetable ghee, and LPG (cooking gas) on which the tax is levied at the same point. It is, therefore, necessary to make the rates comparable for any useful inference.

Nevertheless, it is apparent from the table that the rates in Delhi are lower than those in Haryana for a majority of commodities in respect of 26 out of 31 essential consumer goods, 14 out of 17 semi-durable goods and 27 out of 34 durable goods. A comparison of rates between Rajasthan and Uttar Pradesh indicates that in 74 per cent of the commodities, Rajasthan imposes rates that are either higher than or equal to those in Uttar Pradesh. A comparison of rates in Delhi with those in Rajasthan and Uttar Pradesh, however, does not serve any useful purpose because the points of levy differ. To obtain a relatively clear comparative picture we apply mark-ups (incidental to their transaction in trade channels) on these commodities and convert the last-point tax rates into first-point rates. The estimated rates indicate that if the mark-up is 15 per cent, the nominal rates in Delhi remain lower than those in Rajasthan and Uttar Pradesh in a majority of commodities. In addition, Delhi does not levy a surcharge or an additional sales tax while Uttar Pradesh has a 5 per cent additional tax and Haryana and Rajasthan[5] have a 2 per cent and 10 per cent surcharge, respectively. Thus, the additional tax or surcharge makes the effective rate of tax much higher in the neighbouring States.

For want of reliable data on the transport cost of

[5]In Rajasthan, a surcharge on sales tax is levied on dealers having a turnover of Rs. 75,000 and more only.

Table 3.1

Sales Tax Rates on Essential and Non-essential Consumer Goods in the States of the NCR (1986-87)

Items	*Delhi*		*Haryana*		*Rajasthan*		*Uttar Pradesh*	
	Rate of tax	*Point of levy*	*Rate of tax*	*Point of levy*	*Rate of tax*	*Point of levy*	*Rate of tax*	*Point of levy*
(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*	*(7)*	*(8)*	*(9)*
A. Items of Common Consumption								
a. Basic agricultural products:								
1. Rice, Paddy, Wheat (all forms)	Ex		4	LP[a]	3	FP	4	FP[b]
2. Gram, Tur, Moong, etc.	Ex		4	LP	4	FP	4	FP
3. Bajra, Barley, Jawar, Maize etc.	Ex		4	LP	2	FP	4	FP
4. Maida, Suji	Ex		4	LP	4	FP	4	FP
5. Bread	Ex		8	LP	2	FP	4	LP
b. Textile Goods:								
1. Hosiery garments	1	LP	8	LP	5	FP	4	LP

Contd..

Table 3.1 (Contd.)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2. Ready made garments valued less than Rs 30/- only	2	LP	2	LP	5	FP	6	FP
3. Umbrella cover	1	LP	8	LP	8	FP	8	FP
c. Miscellaneous:								
1. Matches	4	FP	8	FP	8	FP	8	FP
2. Kerosene	3	FP	8	FP	5	FP	8	FP
B. Other Consumer Goods:								
a. Textile Goods:								
1. Ready made garments costing Rs 30 and above	5	LP	8	LP	5	FP	6	FP
2. Hosiery goods sold at a price of above Rs 30	5	LP	8	LP	5	FP	4	FP
3. Silk fabrics	3	FP	8	FP	3	FP	8	FP
4. Goods of canvas cloth	5	LP	Ex		8	FP	8	FP
5. Razai gilafs (quilt covers) costing less than Rs 15	5	LP	8	LP	8	FP	6	FP
b. Food grains:								
1. Powered milk and condensed milk	5	LP	8	LP	5	FP	6	FP

Contd..

Table 3.1 (Contd.)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2. Edible oils	5	FP	6	LP	5	FP	4	FP
3. Honey	5	LP	8	LP	8	FP	Ex	
4. All types of baby food sold in sealed containers	5	LP	8	LP	5	FP	6	FP
5. Tea	7	LP	8	FP	8	FP	8	FP
c. Miscellaneous:								
1. Paper	5	LP	8	FP	8	FP	6	FP
2. Black-lead pencil & coloured pencil	5	LP	6	LP	Ex	8	FP	
3. Drugs, medicines & pharmaceuticals	5	LP	8	FP	5	FP	6	FP
4. Washing soap, detergents and other washing materials	5	FP	8	LP	8	FP	6	FP
5. Foot wear	5	LP	8	LP	7	FP	8	LP
6. Optical lenses, hurricane lantern	5	LP	8	LP	8	FP	8	FP
7. Torches, torch cells etc.	5	FP	8	LP	10	FP	8	FP
8. Soap, tooth brush, tooth paste, tooth powder	5	FP	12	LP	10	FP	8	FP
9. Safety-razor blades, razor blades	5	FP	12	LP	10	FP	8	FP

Contd..

Table 3.1 (Contd.)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
10. Plastic celluoid	5	LP	12	LP	8	FP	8	FP
11. Boot polish	5	LP	8	LP	8	FP	8	FP
C. Semi-durable, Semi-luxury Goods:								
1. Butter (tinned)	5	LP	8	LP	3	FP	6	FP
2. Butter (other than tinned)	5	FP	8	LP	3	FP	6	FP
3. Cream	5	LP	8	LP	Ex	6	FP	
4. Cheese	5	LP	8	LP	3	FP	6	FP
5. Ice Cream	7	FP	8	LP	8	FP	8	FP
6. Vegetable ghee (hydrogenated vegetable oil)	5	FP	8	FP	10	FP	10	FP
7. Deshi sweetmeats & namkins	5	LP	Ex		5	FP	4	LP
8. Cakes and pastries	7	LP	8	LP	10	FP	4	LP
9. Confectionery, cakes & chocolates	7	LP	8	LP	10	FP	4	LP
10. All kinds of eatables and non-alcoholic potable liquids	10	LP	8	LP	10	FP	12	
11. Deshi ghee	5	LP	Ex		3	FP	6	FP
12. Khoa	3	FP	8	LP	Ex		6	FP
13. Aerated water	5	LP	8	FP	12	FP	12	FP

Contd..

Table 3.1 (Contd.)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
14. L P G (cooking gas)	5	FP	8	FP	8	FP	8	FP
15. Gota, kinari etc.	2	LP	8	LP	5to3	FP	6	LP
16. All goods made of glass excluding plain glass	10	LP	12	LP	10	FP	12	FP
17. Vaccumm flasks of all kinds	10	LP	12	LP	10	FP	12	FP
D. Consumer Durables, Luxury Goods and Intoxicant Items:								
a. Means of Transport:								
1. Motor vehicles	10	LP	10	FP	10[d]	FP	10	LP
2. Motor cycles	10	LP	10	LP	10	FP	10	LP
3. Perambulators	7	LP	12	LP	10	FP	10	FP
4. Component parts, spare parts & accessories of motor vehicles, motor cycles, scooters & motorettes	10	FP	12	FP	12	FP	10	LP
b. Consumer Durables:								
1. Refrigerators	10	FP	10	LP	10	FP	12	FP
2. Wireless reception instruments	10	FP	12	LP	12	FP	12	FP
3. Cinematographic equipment	10	LP	12	LP	12	FP	12	FP

Contd..

Table 3.1 (Contd.)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
4. Photographic and other cameras equip.	10	FP	12	LP	12	FP	12	FP
5. All clocks, time-pieces & watches	10	FP	12	LP	10	FP	10	FP
6. All arms including rifles	10	LP	12	FP	15	FP	14	FP
7. Cigarette cases and lighters	10	LP	12	LP	15	FP	12	FP
8. Dictaphone, tape-recorders	10	FP	12	LP	12	FP	12	FP
9. Sound transmitting equipment	10	FP	12	LP	12	FP	12	FP
10. Type-writers, tabulating equip.	10	LP	12	LP	10	FP	12	FP
11. Binoculars, telescopes	10	LP	12	LP	10	FP	12	FP
12. Gramophones	10	FP	12	LP	10	FP	12	FP
13. Iron & steel safes & almirahs	10	LP	12	LP	12	FP	12	FP
14. Furniture including iron & steel	10	LP	12	LP	12	FP	12	FP
15. Safari, cushions, pillows, mattresses	10	LP	12	LP	12	FP	12	FP
16. Articles and ware made of stainless steel	10	FP	12	LP	8	FP	10	FP
17. Lifts	10	FP	8	LP	10	FP	8	FP
18. Television sets	10	LP	10	LP	8	FP	12	FP

Contd..

Table 3.1 (Contd.)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
c. Other Luxury Goods:								
1. Table cutlery	10	LP	12	LP	8	FP	10	FP
2. Liquor (foreign & Indian made foreign liquor)	10	LP	20	LP	10	FP	26	FP
3. Picnic set sold as a single unit	10	LP	12	LP	12	FP	12	FP
4. Cosmetics, perfumery and toilet goods	10	FP	12	LP	10	FP	12	FP
5. Leather goods except footwear	10	FP	12	LP	10	FP	8	FP
6. Furs and articles of personal or domestic use	10	LP	12	LP	12	FP	12	FP
7. Fire works	10	FP	8	LP	12	FP	12	FP
8. Pile carpets	10	LP	12	LP	12	FP	10	FP
9. Woollen carpets	10	LP	8	LP	8	FP	10	FP
10. China ware and glazed earthen ware	10	LP	12	LP	10	FP	10	FP
11. Ivory articles	7	LP	8	LP	5	FP	8	FP
12. Dry fruits	7	FP	8	LP	10	FP	8	FP

Contd..

Table 3.1 (Contd.)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
13. All types of glazed and vitrum tiles, mosaic tiles	10	LP	12	LP	12	FP	12	FP
d. Intoxicant Items:								
1. Opium	-	-	-	-	30	FP	20	FP
2. Lanced poppyhead	-	-	-	-	30	FP	-	FP
3. Bhang	-	-	-	-	30	FP	14	LP

Notes: a: Paddy in Haryana is subject to last point purchase tax; other items subject to purchase tax in the source as for Table 2.2. State are cotton and oil-seeds.

b: Food grains in Uttar Pradesh are taxed at the first point of purchase.

c: Motor bodies of all shapes and designs including those of motor vans tankers/motors tankers, motor trucks and motor buses whether built on chassis or separately are taxed at 12 per cent 1986-87.

d: Motor bodies all shapes and designs including those of motor vans tankers/motors.

Ex: Goods exempted from sales tax.

LP: Last-point tax

FP: First-point tax.

inter-regional trade flows, it is difficult to verify the relative cost advantages of a lower tax rate. However, there are some commodities where the rate differences between the regions appear to be too high. The probability of trade diversion in the case of these commodities cannot be ruled out. Besides, the information gathered from trade representatives also suggests that trade diversion does take place in the case of high value-low volume commodities. Such commodities are: (i) medicine and pharmaceuticals, (ii) clocks and watches, (iii) stainless steel utensils, (iv) television, video cassette recorders, (v) transistors, wireless receiving sets and cassette players, (vi) domestic electrical appliances, (vii) parts of motor vehicles, and (viii) safety matches. A comparison of the tax rates on these commodities in the NCR reveals substantial variation. For example, while other States levy 8 per cent tax on matches, the rate in Delhi is only 4 per cent. Drugs and pharmaceuticals are taxed at 8 per cent in Haryana while Delhi taxes them at 5 per cent. In the case of television sets, the tax rate in Rajasthan is only 8 per cent, while it is 12 per cent in Uttar Pradesh. Thus, to the extent such glaring rate differentials could lead, at least partially, to trade diversion, it is imperative to minimise, if not eliminate, them.

Tax Exemptions

Each State provides for some exemptions under its sales tax laws. In general, the commodities exempt could be classified as follows[6]: First, almost all perishable commodities such as fresh fruits and vegetables, meat and poultry products, milk and butter, are exempt in all

[6]See, for details of classifications of all exemptions under Sales tax laws, Purohit, M.C. (1975), "Sales Tax Exemptions in India". *Economic and Political Weekly*, Vol. 10, No. 10, March 8, pp. 445-452.

the States. This exemption is for the sake of administrative convenience. Second, there are exemptions for socio-cultural as well as ideological reasons. Such exemptions are for *charkha* and its parts, handmade footwear, *khadi* and readymade garments prepared from *khadi*, products of village industries and agricultural implements. Third, sugar, textiles and manufactured tobacco are exempt because in lieu of sales tax, additional excise duty has been levied on them by the Central government under the Central Excise and Salt Act, 1957[7].

Apart from the above mentioned items, there are several commodities which enjoy exemption in some States while they are taxed in others. It is difficult to identify the criteria which cause such variations. For instance, all cereals and pulses are taxed in Haryana, Rajasthan and U.P. whereas these are exempt in Delhi. Bread is exempted from tax in Delhi and Haryana while in Rajasthan and U.P. the same is taxed at the rate of 2 per cent and 4 per cent, respectively. From the economic point of view, there appears to be good reason to exempt these commodities from taxation; the unorganised nature of production and distribution of most of these commodities makes them difficult to administer.

Tax on Inputs

Input taxation leads to cascading. Besides increasing the ultimate price to a greater extent in comparison to the actual tax revenue, such a tax escalates the cost of production and alters the relative price of the commodities. Particularly when the inputs are taxed at different rates in two regions, the cost structure of the

[7]See for details Purohit, Mahesh C., (1990), *Exemptions under Additonal Excise Duties in lieu of Sales Tax*, National Institute of Public Finance and Policy, New Delhi.

commodity leads to price differences. With the change in prices, unintended but serious distortions in resource allocation could take place across economic regions.

The statutory rates of sales tax on inputs in the States of the NCR are presented in Table 3.2. A comparison of tax rates between Delhi and Haryana indicates that more than 60 per cent of the commodities have lower tax rates in Delhi than in Haryana. Further, a comparison of tax rates in Rajasthan and Uttar Pradesh shows that the former levies a higher tax on 40 per cent of the commodities. In another 30 per cent, both the regions have equal tax rates. Thus, it appears that even when the point of levy between the two regions is the same, there is absence of a uniform pattern of tax rates on inputs.

The above comparison of statutory rates, however, fails to capture the real difference, because the tax on inputs is different when these are purchased by a manufacturer. Whereas Delhi and Haryana provide complete exemption to inputs purchased by manufacturers, Uttar Pradesh and Rajasthan grant such exemption only to a limited number of industries. In Uttar Pradesh there are 46 classes of goods listed for this purpose; other industries are allowed to buy raw materials at the rate of four per cent.[8]

Similarly, in Rajasthan all machinery purchased for setting up textile, ceramic, glass, cement, sugar, metal engineering and other mineral-based industries are exempt from State sales tax, while other industries are allowed to buy raw materials at the concessional rate of one per cent.

Thus, the statutory tax rates as well as the concessions given to manufacturers on purchase of inputs are not

[8]Under Section 4(b) of the U.P. Sales Tax Act, certain industries notified in the U.P. Gazette are exempted from payment of sales tax on raw materials purchased by them.

Table 3.2

Sales Tax Rates on Raw Materials and Intermediate Goods in the States of the NCR (1986-87)

Items	Delhi		Haryana		Rajasthan		Uttar Pradesh	
	Rate of tax	Point of levy	Rate of tax	Point of levy	Rate of tax	Point of levy	Rate of tax	Point of levy
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
I. Basic raw materials included in the list of declared goods								
1. Coal	3	FP	4	FP	4	LP	4	LP
2. Iron and steel	4	FP	4	LP[a]	4	LP	4	FP
3. Oil seeds	3	LP	4	LP[a]	4	LP	4	FP
4. Hides and skins	2	LP	4	FP	4	FP	4	LP
5. Jute	4	LP	4	FP	4	LP	4	FP
6. Cotton	4	LP	4	LP[a]	4	LP	4	LP
7. Crude oil	4	LP	4	FP	4	LP	4	LP
8. Cotton yarn	1	LP	2	FP	2-4	LP	2	FP

Contd..

Table 3.2 (Contd.)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
II. Other raw materials and products goods:								
a. Textile materials:								
1. Cotton waste	5	LP	4	LP	4	LP	4	FP
2. Cotton yarn waste	5	LP	4	LP	1-5	LP	2	FP
3. Polyester staple fibre	5	LP	8	LP	1-5	FP	2	FP
4. Raw wool and wool tops	2	LP	2	LP	4	LP	4	LP
5. Woollen carpet yarn	5	LP	8	LP	2	FP	2	FP
6. Knitting wool	5	LP	2	LP	2	FP	6	FP
7. Yarn of all varieties other than cotton yarn and knitting wool	2	LP	2	LP	3	FP	2	FP
8. Silk and silk yarn	2	LP	2	LP	3	FP	6	FP
9. Acrylic yarn	2	LP	2	LP	1	FP	6	FP
b. Chemicals								
1. Paints, lacquers and varnishes	10	LP	12	LP	12	LP	10	FP
2. Pesticides and insecticides	5	LP	2	LP	4	LP	6	FP
3. Fertilizer	Ex	Ex	5	FP	5	FP		
4. Industrial chemicals	7	FP	8	LP	8-12	FP	8	FP

Contd..

Table 3.2 (Contd.)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
5. Furnace oil	7	LP	8	FP	8	FP	8	FP
6. Hydraulic brake fluid	7	LP	8	LP	8	FP	8	FP
7. Dyes and dry colour	7	LP	8	LP	8	FP	8	FP
c. Metal Products and Machinery:								
1. Parts of industrial machinery & plant	5	LP	8	LP	8	FP	6	FP
2. Industrial machinery	7	LP	8	LP	8	FP	6	FP
3. Agricultural machinery & implements	Ex	Ex	Ex	Ex[b]				
4. All kinds of non-ferrous	7	FP	4	LP	8	LP	4	FP
5. Tractor and parts	5	LP	8 4	imported indigenous	- 4	FP	6	FP
6. Electrical equipments, parts and their accessories	10	LP	12	LP	10	FP	12	FP
7. Manufactured metals	7	LP	8	LP	8	LP	8	FP
8. Plants & equipments required for generation, transmission or distribution of electric power	10	LP	12	LP	5	FP	12	FP
d. Mineral Products:								
1. Lubricants	7	LP	8	LP	12	FP	8	FP

Contd..

Table 3.2 (Contd.)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2. Mineral turpentile oil	7	LP	8	LP	8	FP	8	FP
3. Light diesel oil, high speed diesel	7	FP	8	FP	12.5	FP	12	FP
4. Petrol	7	FP	8	FP	15	FP	8	FP
5. Aviation spirit	7	LP	8	LP	12	FP	8	FP
e. Miscellaneous:								
1. Molasses	5	LP	8	FP	8	FP	12	FP
2. Distilled water	5	LP	8	LP	8	FP	8	FP
3. Waste paper	7	LP	8	LP	8	FP	8	LP
4. Bullion and specie	0.5	LP	0.5	LP	0.5	FP	1	FP
f. Building Materials:								
1. Bitumen/asphalt	7	LP	8	LP	8	FP	8	FP
2. Plywood, straw board, card board	7	LP	8	FP	10	FP	8	FP
3. Building stone	7	FP	8	FP	8	FP	6	FP
4. Cement and cement products	7	FP	12	FP	13	FP	8	FP
5. Marble and marble chips	7	LP	8	LP	12	FP	6	LP
6. Asbestos sheet	7	LP	7	LP	12	FP	8	FP

Contd..

Table 3.2 (Contd.)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
7. Bricks	7	FP	8	FP	8	FP	8	FP
8. Timber and bamboo	7	LP	8	LP	8	FP	12	FP[c]
9. Packing materials	5	LP	8	LP	4	FP	4-6	FP
10. Sanitary fittings	10	LP	12	LP	10	FP	12	FP

Notes: a: When imported taxes at FP of sale

Source: Office of the Commissioner, Sales Tax,

LPP: Last point purchase in various States and Budget Papers of

b: Power driven implements were taxed at 6 per cent the State government. prior to exemption from 1.2.1985.

c: Provided that where the sale is made by Forest Department to U.P. Forest Corporation, the tax shall be levied on that point of sale as in the Corporation.

uniform among the NCR States. Besides, the concessions in Delhi and Haryana are given to all manufacturers whereas in the other States, these are available to manufacturers in respect of goods sold within the State or in the course of inter-State trade and commerce or in the course of export outside the territory of India. These variations, as explained in Chapter 4, influence the effective rate of tax for the manufacturer as also the locational decisions. Also, as explained in Chapter 5, these variations could lead to sub-optimal decision in regard to trade pattern.

Incentives for Industrialisation

Sales tax incentives are provided in the NCR region by all the States except Delhi where several factors including low rate of tax attract industries. In the other States, incentives are in the nature of exemption from sales tax on the sale of finished goods or in the form of granting interest-free loan for the amount of sales tax collected by the manufacturers. Haryana grants sales tax exemption for products of industries situated in rural areas, provided these industries have an investment upto one lakh rupees only. The exemption is available for a period of two years from the date of production. But industries situated in urban areas are not eligible for this exemption. Further, with effect from May 6, 1986, Haryana has enforced the scheme of deferment of payment of sales tax. This concession is available to all such industries that are set up on or after November 1, 1983. According to this scheme, the benefit of deferment of tax is available for a period of five to nine years upto an amount of Rs 1.5 to 5 crore or an amount ranging from 30 per cent of fixed assets to an amount equal to the value of fixed assets (Annexure A.3.1). Uttar Pradesh provides for more liberal exemptions. All new industries with capital investment upto Rs. 3 lakhs are

exempted from payment of sales tax for a minimum period of three years and those having investment of more than Rs 3 lakhs get exemption for five years. The period of exemption for the former group of industries increases to four years and for the latter category to six years in Bulandshahar District and Dadri Tehsil of Ghaziabad District.

The important features of the existing structure of sales tax in the NCR are, thus, as follows: First, all the constituent parts of the NCR have a single-point sales tax. Most of the commodities in Delhi are being taxed at the last-point while Rajasthan, Haryana and Uttar Pradesh rely mostly on the first-point. Second, in general the rate of tax on inputs is below 4 per cent. The exemptions given to industries in terms of nominal sales tax rates for purchase of inputs have a wider coverage in Delhi and Haryana. And, finally, the sales tax incentives for attracting industries in the neighbouring States vary from meagre to liberal concessions. All these characteristics create differences in the effective tax rates among the States of the NCR. Given the fact that the levels of infrastructure differ from one State to another, the existing rate differentials might influence the locational decisions of firms and cause diversion of trade to Delhi from the neighbouring States.

Motor Vehicles Tax

Taxes on motor vehicles and passengers and goods are essentially a levy on road transport. Besides, the burden of sales tax on motor spirit is also being borne by the transport sector. As regards motor vehicles tax, it is levied in all the States on all types of vehicles. Motor cycles (including scooters and mopeds) and private motor cars are taxed according to laden or unladen weight. Taxis and state carriages are required to pay tax according to their seating capacity and goods

vehicles are taxed according to the authorised payload.

A comparison of the prevailing rates in each of the NCR States shows wide variations. A scooter, for example, is taxed at the rate of Rs 40 in Delhi, Rs 55 in Uttar Pradesh and Rs 62.50 in Haryana (Table 3.3). Rajasthan has substituted the annual tax by a lumpsum tax. The rate of tax on two-seater and three-seater taxi cabs is Rs 303 in Uttar Pradesh, that is, three times the rate in Delhi. As the number of seats increases, the rate differentiation also increases in Uttar Pradesh in comparison to other States.

Motor vehicles tax on goods vehicles is levied on the basis of unladen weight in Haryana and Uttar Pradesh and laden weight in Delhi and Rajasthan. In Uttar Pradesh, the rate of the tax further varies according to the class of route (the rate for special class route being 25 per cent higher than the A class route) or according to the quality of tyres (e.g., the tax rate is higher for

Table 3.3

Motor Vehicles Tax on Taxi Cabs

States	*Annual rate of tax (Rs)*			
	Two seater	*Three seater*	*Four seater*	*Five seater*
Delhi	100.00	200.00	200.00	375.00
Haryana	117.50	117.50	156.25	195.30
Rajasthan	150.00	200.00	250.00	300.00
Uttar Pradesh	303.00	303.00	605.00	757.00

Sources: 1. State Government memoranda submitted to Eighth Finance Commission.
2. Transport Authority, Delhi.

vehicles fitted with resilient tyres).

As regards stage carriages, the base of the tax is generally the number of seated passengers permitted to be carried under the law. Some States have, however, introduced additional requirement of distance, a vehicle is permitted to ply. Thus both these conditions are taken into account to determine the quantum of tax. In Uttar Pradesh, for example, routes are divided into different categories (such as classes A, B and special) and for each class there is a different rate of tax.

Although the basis for determining the road tax liability does not differ very much, the rates imposed according to seating capacity show wide variations among the States. Vehicles with a carrying capacity of upto 6 persons attract a total sum of Rs 630 in Delhi, Rs 600 in Haryana, Rs 757 in Uttar Pradesh and Rs 264 in Rajasthan.[9]

Passengers and Goods Tax

Passengers tax and goods tax is not levied in the Union Territory of Delhi. Haryana and Uttar Pradesh levy both these taxes but Rajasthan has merged them into a special road tax. The passengers tax in Uttar Pradesh is levied on every passenger carried by a stage carriage (or contract carriage) at the rate of 16 per cent of the value of the fare payable by a passenger. This rate increases to 60 per cent of the value of the fare in Haryana, where the tax is levied in respect of all the passengers carried by public vehicles. Accordingly, this tax is subject to compounding fees in both the States. The system of compounding in Uttar Pradesh, as presented in Table 3.4, shows that the actual amount is approximately 75 per cent of the maximum amount of

[9]The tax rate in Rajasthan with respect to 6 persons given above is inclusive of the driver whereas in other States the number excludes the driver.

tax estimated on the basis of a specified formula. In Haryana, the tax payable by contract carriages in lieu of the *ad valorem* tax chargeable on fares varies between Rs 272 in case of two-seater scooter rickshaws and Rs 544 with respect to station wagons.

In addition to passengers tax, goods tax is levied in Haryana and Uttar Pradesh. Like the passengers tax, the rates of goods tax also vary in these States. Uttar Pradesh provides for the levy of goods tax at the rate of 10 per cent of the freight charged for the carriage of goods.[10] In Haryana, the tax is levied on goods transported by public vehicles at the rate of 60 percent. The effective rate of goods tax is however different because transport operators opt mostly for the compounding fee, an alternative to the *ad valorem* goods tax. In Haryana, for example, the lumpsum amount payable by owners of public carriers in lieu of the tax chargeable on freight is Rs 1215 for the public carriers plying on hill routes and Rs 810 for vehicles plying on other routes. In Uttar Pradesh, the compounding fee in lieu of goods tax on public carriers operating in the plains is Rs 4.50 per month per quintal of the authorised pay load. Thus the compounding fee which could be collected from a vehicle with an authorised payload of 10 tonnes is about Rs 5400. In case the vehicle is operating in hill areas the compounding fee per annum will increase further as the levy for these vehicles is Rs 10.50 per month per quintal of the authorised payload. The details of goods tax rates, as presented in Table 3.4 and 3.5 show that as between Haryana and Uttar Pradesh there are conspicuous differences.

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[10]From the actual accrual of revenue, the receipt of 2 per cent of the freight is utilised for compensating the loss in revenue resulting to urban bodies on account of abolition of octroi and transit duties in town areas and notified areas. Thus the goods tax rate remains at 8 per cent of the value of freight.

Rajasthan has resorted to a comprehensive tax on road transport. The Passengers and Goods Taxation Act, 1959 has since been repealed and a comprehensive tax has been introduced with effect from 1st October, 1982. The tax is called special road tax and the rates of tax vary according to the types of vehicles. In the case of stage carriages, depending on the standard of services provided, the rate of tax varies from 18 paise to 40 paise

Table 3.4

Compounding Fees in Lieu of Goods Tax on Public Carriers in Haryana and Uttar Pradesh

Sl. no.	*Public carrier*	*Tax rate (Rs)*	
		Haryana (per annum)	*Uttar Pradesh (per month per quintal of authorised payload)*
1.	Public carriers other than those plying on hill routes	810	4.50
2.	Public carriers plying on hill routes	1215	10.50
3.	Public carriers plying on Pathankot-Jammu routes only	220	N.A.
4.	Tempo rickshaw plying with public carrier permit	610	N.A.
5.	Private carriers operating on plain routes	N.A.	3.45
6.	Private carriers operating on hill routes	N.A.	7.95

Note: N.A.: Not applicable.

Sources: 1. Government of Haryana, Budget Papers, 1986-87.
2. Commissioner, Transport, Uttar Pradesh.

per seat per 10 kms for the entire distance to be covered during the month. The stage carriages plying exclusively within municipal or city limits have to pay the tax annually. The tax liability for the first 20 seats is Rs 500 per seat and for the next 20 seats is Rs 300 per seat. For seats in excess of 40, Rs 250 per seat is added. The public and private goods vehicles have to pay the tax per annum depending on the load-carrying capacity. The payment varies within the range of Rs 550 to Rs 2200. Apart from these, there are separate rates for contract carriages and vehicles operating on temporary permits.

With a view to comparing the tax burden on road transport in different States of the NCR, it is necessary to take their combined incidence. For this purpose, we worked out the annual tax burden on a public carrier with a 10-tonne payload. The results are presented in Table 3.5. It will be seen that the amount of tax paid by

Table 3.5

Annual Tax Burden on Goods Vehicles

States	*Burden on goods vehicles of 10 tonnes payload capacity*		*Total*
	Road tax	*Goods tax on compounded fees basis*	
Delhi	1100	-	1100
Haryana	1500	1215	2715
Rajasthan	2500	2200*	4700
Uttar Pradesh	2933	5400	8333

Note: *Special road tax.

the goods vehicles is the highest in U.P., followed by Rajasthan and Haryana. Delhi has the lowest combined tax burden among the NCR States. This might cause diversion of vehicle registration to the Union Territory of Delhi. Consequently, the cost of transporting goods could be less and the availability of transport vehicles could be much more in Delhi, as compared to the districts in the neighbourhood of Delhi.

Electricity Duty

The electricity duty levied under the respective Electricity Duty Acts of the States is a charge on the consumption or sale of energy. While Delhi and Rajasthan collect the duty per unit of consumption, Haryana and Uttar Pradesh have linked the duty rate with the electricity tariff. The rates of electricity duty in different regions (Table 3.6) show that there is no uniform pattern. However, the rates in Delhi are lowest among all the constituent regions of the NCR. For industrial power, for example, the rate in Delhi is three paise per kwtt. while in Haryana, it varies from 13 paise per unit to 17 paise per unit depending upon the supply load.[11] In Uttar Pradesh also the rate varies with the connected load of below or above 75 kwtts. In either situations the rates fixed are at a higher level than those in Delhi. Therefore, the electricity duty which is borne by the industrial units as part of the costs of one of the inputs, might lead to an undesirable economic effect in areas where the duty is higher.

This effect could be discounted by the fact that in the States of Haryana and Uttar Pradesh, some concessions have been given in respect of electricity duty to specified industries (Annexure A.3.3). However, coverage of electricity duty concessions is wider in Haryana than in

[11]For details of electricity duty in Haryana and Uttar Pradesh, See Annexure A.III.2.

Table 3.6

Electricity Duty Rates in NCR

(Paise per KWH)

	Delhi	*Haryana*[1]	*Rajas-than*	*Uttar Pradesh*[2]
1. a. Lighting and fan	2	9-15	6	4
b. Domestic power	2		6	4
c. Commercial, non-domestic power	3	16-21	6	4
d. Industrial power (low, medium and high voltage)	3	13-17	6	4-6
e. Agricultural purchases (low, medium and high voltage)	1		1	4
f. Non-domestic mixed load supply (low, medium, high voltage)	5		6	4
2. Tax payable by consumers of electricity on energy generated by themselves within the area of the corporation for any purposes specified in (a), (c) and (d)	5		2	1

Notes: 1. Rates given in the table refer to lower and upper limits.
2. For scheduled rates see Annexure III.2 & III.3.

Sources: 1. Information submitted by States to Eighth Finance Commission.
2. Budget papers, 1986-87 of State Governments.
3. Municipal Corporation of Delhi.

Uttar Pradesh. In view of this, the effective rate of electricity duty in Haryana may not be as high as reflected by the nominal rates.

However, it may be stated that as of today the electricity duty alone in the NCR is not a very

important factor in influencing the resource flow in the region. The real issues related to electricity is not with respect to tax but to its adequate availability. The effect of the tax could be of some relevance when the supply is uniform and adequate.

LOCAL TAX POLICY

Octroi or Terminal Tax

Among the local taxes, octroi is one of the most important sources of revenue for the finance of the local government.[12] The rates of this local tax vary widely from one State to another and in some cases from one local government to another. With a view to examining the rates, we present the tax structure of the local bodies of most of the important towns of the NCR. Thus, besides Delhi, the tax rates prevailing in one municipality of Haryana, two of Rajasthan and seven of Uttar Pradesh are presented in Table 3.7. The rates presented for the different municipalities show wide variations. Ghaziabad, for example, collects toll tax while the other six municipalities of Uttar Pradesh impose octroi. The tax levied and collected by Delhi Administration on the entry of goods into the local area is known as terminal tax.

With a few exemptions in Haryana and Rajasthan, octroi is levied as a specific tax. Besides, the large number of rates make any useful comparison difficult.

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[12]Some of the local governments levy terminal tax or entry tax in place of octroi. Terminal tax is similar to octroi with some minor differences and is administered by the local government. Entry tax is different in as much as it is a percentage of the yield of sales tax and administered by the State government. Notwithstanding the differences in nomenclature, this local tax is levied on the value or volume of goods brought into a local area for sale or use or consumption. It accounts for about 40 per cent of the income of the local governments.

There are as many as 28 rates in Delhi, 22 in Haryana, 37 in Alwar (Rajasthan) and 20 rates in Meerut (U.P.). The variations in the rates among the local bodies show that while the basic items of consumption like cereals are taxed at the rate of 10 paise per quintal in Delhi, the rate goes upto 60 paise per quintal in Khurja. Cotton cloth attracts a tax of Rs 2.33 per quintal in Delhi but Rs 15.00 per quintal in places like Bulandshahar, Khurja, Sikandarabad and Meerut. The rates of tax on consumer durables and luxury items also show similar variations. Motor vehicles, for example, are taxed at Rs 8.00 each in Haryana but at Rs 50.00 in Meerut. Some luxury items like cosmetics, perfumery and toilet goods are taxed between Rs 4.64 per quintal in Delhi and Rs 15.00 per quintal in Bulandshahar, Khurja, Modinagar and Meerut.

The variations in octroi rates, presented in Table 3.7, show the upper and lower limits of octroi on items of common consumption, consumer durables, luxury goods and basic raw materials. The rate most frequently found in each group of these commodities is given in parentheses. It will be seen from the table that in general, Delhi has not only the lowest nominal rate but also a smaller range of variation as compared to the other municipalities. Many commodities of the nature of raw materials and common consumer goods are taxed only at the rate of 30 paise per quintal while other municipalities levy octroi to the extent of Rs 5 per quintal. In the case of consumer durables and luxury goods too, Delhi seems to have the advantage with a maximum rate of Rs 9.40 in contrast to Rs 40 per quintal in municipalities in Uttar Pradesh.

The variations in the rates of octroi on raw materials and intermediate goods show that the basic raw materials like coal are taxed at 9 paise per quintal in Haryana and at 50 paise per quintal in the municipalities

Table 3.7

Maximum and Minimum Rates of Octroi@ among Local Bodies

	Delhi	*Haryana*	*Alwar*	*Buland-shahar*	*Khurja*	*Sikand-rabad*	*Hapur*	*Modinagar*	*Meerut*
I. Basic raw materials & intermediate goods	0.08-3.53 (3.30)*	0.05-5.60 (3.35)	0.02-8.00 (3.00)**	0.15-10.00 (5.00)	0.50-10.00 (5.00)	0.50-20.00 (5.00)	0.25-15.00 (2.00)	0.20-7.00 (5.00)	0.20-10.00 (6.00)
consumption	(0.30)	(1.40)	(8.00)	(5.00)	(5.00)	(15.00)	(0.30)	(5.00)	(6.00)
III. Consumer durables and luxury goods	1.20-9.40 (2.89)	0.70-16.80 (2.80)	7.25-13.00 (13.00)	5.00-40.00 (10.00 & 40.00)	4.00-40.00 (4.00)	4.00-15.00 (10.00)	2.50-40.00 (5.00)	5.00-40.00 (40.00)	6.00-40.00 (15.00)

Notes: @: The term 'Octroi' indicates different nomenclatures of this tax in different local governments.
: Figures within parentheses denote the mode value of the rates.
*: 0.30 per quintal is the general rate of octroi in Delhi. Except for this rate, 0.56 per quintal and 2.33 per quintal are applicable to groups I and II respectively in a larger number of commodities.
**: In some commodities, the municipality has fixed the rate both at *ad valorem* and specific form. If we consider the *ad valorem* rates, 2 per cent will emerge as the mode value.

Source: As in Table 3.6.

of Khurja, Sikandarabad and Hapur. Distilled water is taxed at the rate of Rs 1.20 per quintal in Delhi in contrast to Rs 15.00 per quintal in Sikandrabad. Even the general rate, that is, residuary entry applicable to commodities not specified in the list of items shows wide variations. While it is 30 paise per quintal in Delhi, in Sikandrabad it turns out to be Rs 10 per quintal. By and large, the nominal rates of octroi on inputs are the lowest in Delhi.

In general, most of the items entering local areas are taxed. However, some of the local governments grant tax concessions to industries. Such concessions for raw materials in the NCR region are as follows: In Haryana, all industrial units set up outside the municipal limits are exempted from octroi for five years from the date of their commencing production. The new units located within the municipal limits are exempted from octroi for five years on capital equipments and building materials and for three years on raw materials. In Rajasthan, plant and machinery brought into the State are totally exempt from octroi. Also, new units are exempted from octroi on their purchases of raw materials, construction and fabrication material for seven years. Similarly, in Uttar Pradesh, all registered industrial units (small/ medium/large) are exempted from payment of octroi on construction materials and machinery for a period of five years from the date of registration. Thus, the concessions accorded to industries in Rajasthan appear to have wider coverage than elsewhere in the NCR.

Some commodities enjoy exemption in all municipalities. These include bonafide personal luggage, personal affects of a public servant transferred on duty; articles imported through post office; bonafide property of Central and State governments or municipality; raw materials meant for production by *Khadi* and village industries; old household goods sent out for repairs; the

luggage of circus parties, theatrical companies; articles of industrial or educational exhibitions not meant for sale; goods imported for free distribution by organisations such as Indian Red Cross Society and UNICEF, etc; goods imported by organisations for providing relief to persons affected by natural calamities; and goods brought for rehabilitation of physically handicapped people (Annexure A.3.4).

Property Tax

This is another important local tax consisting of a basic tax on building with its appurtenant land and of a number of service taxes like water tax, conservancy and drainage tax, and lighting and fire tax. As regards the basic tax on building, called house tax, the owner has to pay a part of income from the building if the property is rented, while self-occupied property is taxed at a concessional rate. The scope and base of property tax differ from one municipality to another. Uttar Pradesh, for example, provides for two kinds of taxes, compulsory and optional, which a corporation can levy. A corporation, therefore, can widen its tax base by levying the optional taxes and keep the rates at a lower level compared to another corporation which does not utilise the optional sources. The tax base for Municipal Boards, on the other hand, is left to the discretion of the administration without the provision of compulsory tax at their disposal. In Rajasthan, only an obligatory tax, called house tax, is levied by the municipalities. Thus, the variations in statutory provisions provide ample scope for differences in the base of the property tax.

The rate structure and determination also differ from municipality to municipality. In general, either a flat rate or a proportional rate is levied. For example, in most of the States falling under the NCR (except Delhi) a house tax is imposed on the basis of rateable value.

Table 3.8

House and Water Tax Rates in Selected Municipalities Under the NCR

(per annum as percentage of rateable value)

Local Bodies	*House tax*	*Water tax*
1. Municipal Committees in Haryana		
i. Faridabad	10.	-
ii. Gurgaon	12.5	-
iii. Palwal	10.	-
iv. Panipat	12.5	-*
v. Rewari	12.5	10.0
vi. Rohtak	12.5	-
vii. Sonepat	12.5	-
2. Municipal Boards in Uttar Pradesh		
i. Bulandshahar	6.25	6.25
ii. Ghaziabad	10.	10.
iii. Hapur	5.	10.
iv. Khurja	7.	7.
v. Meerut	10.	**
vi. Modinagar	8.	-
vii. Sikandarabad	10.	10.
3. Municipalities in Rajasthan		
i. Alwar (Municipal Council)	6.25% (for ARV Rs. 601-1200) 7.50% (for ARV Rs. 1201 & above)	-
ii. Khairtal	-	-

Notes: (-) Indicates that tax is not levied.

* For first tap Rs 12 per month and Rs 3 per tap for excess.

** Water charges at the rate of 40 paise per thousand litres of domestic consumption and at the rate of 60 paise per thousand litres of non-domestic consumption. The rate of sewerage tax is 2.5% of ARV.

ARV Annual rateable value.

The maximum rate of house tax, as can be seen from Table 3.8, is 12.5 per cent in municipalities in Haryana. The combined rate of house tax and water tax in Uttar Pradesh varies between 8 per cent and 20 per cent. Two local bodies of Rajasthan, which impose only house tax are found to have lower rates than most of the municipalities of the areas under the NCR. As water tax is not levied in most of the municipalities, the local tax on property is lower than the property tax rate leviable on residential land and buildings in Delhi.

The tax structure in Delhi makes a distinction between residential and non-residential properties. Land and buildings used for residential purposes which have rateable value (RV) upto Rs. 10,000 attract tax at the rate of 10 per cent of the value. When the property falls between Rs 10,000 and Rs 20,000 in terms of the RV, the charge amounts to a lumpsum of Rs 10,000 plus 20 per cent of the amount by which the RV exceeds Rs 10,000. For the remaining slabs of rateable values exceeding Rs 20,000 the lumpsum component of the tax increases to Rs 30,000 in addition to 30 per cent of the amount by which the RV exceeds RS 20,000. The other three constituents of property tax in Delhi are water tax, scavenging tax and fire tax, also levied according to the RV of the property. While the water tax is fixed at 10 per cent of the RV, fire tax is levied at the rate of 1 per cent on residential lands and buildings and at 2 per cent on non-residential property. The scavenging tax is designed to have three rates, *viz.*, 2 per cent for residential lands and buildings, 10 per cent for hotels and restaurants and 5 per cent for all other non-residential lands and buildings. There is no difference between urban and rural areas. As regards urban and rural areas of Delhi, the general tax rate on land and buildings, is lower in the former areas, but there is no difference in service charges (Table 3.9). The property

Table 3.9

Rate of Property Tax in Delhi (Year 1986-87)

Rateable Value	*General Tax*			*Wate tax*	*Scavenging tax*			*Fire tax*		
	(a)	*(b)*	*(c)*		*(a)*	*(b)*	*(c)*	*(a)*	*(b)*	*(c)*
Rateable Value (RV) of Property (Rs. thousand)										
(A) Urban Areas										
i. Upto Rs 10	10%	15%	15%	10%	2%	10%	5%	1%	2%	2%
ii. Rs 10 to 20	Rs 1000 + (20% of the RV for the amount exceeding Rs 10000)	Rs 1500 + (25% of the RV for the amount exceeding Rs 10000)	Rs 1500 + (25% of the RV for the excess of Rs 10000)	10%	2%	10%	5%	1%	2%	2%
iii. More than Rs 20	Rs 3000 + (30% of RV for excess of Rs 20000)	Rs 4000 + (20% of RV for excess of Rs 20000)	Rs 4000 + (20% of RV for for excess of Rs 20000)	10%	2%	10%	5%	1%	2%	2%

Rateable Value	*General Tax*			*Wate tax*	*Scavenging tax*			*Fire tax*		
	(a)	*(b)*	*(c)*		*(a)*	*(b)*	*(c)*	*(a)*	*(b)*	*(c)*
(B) Rural Areas										
i. Upto Rs 100	3%	4.5%	4.5%	10%	2%	10%	5%	1%	2%	2%
ii. More than Rs 100	Rs 3000 + (20% of RV for excess of Rs 100000)	Rs 4500 + (20% of RV for excess of Rs 100000)	Rs 4500 + (20% of RV for excess of Rs 100000)	10%	2%	10%	5%	1%	2%	2%

Notes: 1. All residential properties upto Rs 1000/- be exempted payment of water tax.
2. Such land and building with RV not exceeding Rs 100 per annum excepted from scavanging tax.
3. All residential properties upto RV Rs 1000/- is exempted from scavenging tax.
4. All residential land and building upto Rs 5000/- is exempted from fire tax.
RV: Rateable Value.
a: Land and building used for or to be used for residential purposes.
b: Hotels and restaurants, clubs and cinema etc.
c: Other land and buildings based or to be used for non-residential purposes.

Source: Municipal Corporation of Delhi.

tax in Delhi on residential land and buildings having a rateable value upto Rs 10,000 is worked out at 13 per cent (10 per cent general tax plus 2 per cent scavenging tax plus 1 per cent fire tax). When the rateable value goes beyond this level the tax liability increases. Non-residential land and buildings also force a greater tax burden than residential properties.

The above analysis of the rate structures of taxes like sales tax, motor vehicles tax, passengers and goods tax, electricity duty, octroi and property tax in the NCR reveals that there are wide differences in the base and rates of the taxes. A comparison of rates of different taxes among the States of the NCR indicates that the effective rate is likely to vary considerably from one region to another. Except for property tax, the nominal rates of all the other States and local taxes are found to be lower in Delhi than elsewhere. This might considerably affect the locational decisions of firms, and could also lead to a diversion of trade from the neighbouring States to the Union Territory of Delhi. How far this factor influences industry and trade, would be the subject matter of discussion in the following chapters.

Annexure A.3.1

SALES TAX INCENTIVES IN THE NATIONAL CAPITAL REGION

A. Uttar Pradesh

Any goods manufactured in an industrial unit, which is a new unit as defined in the Uttar Pradesh Sales Tax Act, 1948, the date of starting production whereof falls on or after the first day of October, 1982 but not later than the thirty-first day of March, 1990, no tax under the aforesaid Act of 1956 shall be payable by the manufacturer thereof on the sale by him in the course of inter-State trade or commerce of such goods for the period specified, which shall be reckoned from the date of first sale, if such sale takes place not later than six months from the date of starting production or, in other cases, from the date following the expiration of six months from the date of starting production, subject to the following conditions:

1. That the said industrial unit has not discontinued production of such goods for a period exceeding six months at a stretch;
2. That the said industrial unit furnishes to the assessing authority concerned an Eligibility Certificate granted in this behalf by the Director of Industries, Uttar Pradesh, the Chairman, New Okhla Industrial Development Authority (NOIDA) or the Divisional Joint Director of Industries, as the case may be, in accordance with the procedure detailed below:
   a. The applications for grant of eligibility certificate shall be submitted to the General Manager, District Industries Centre of the district in which the new unit has been

established and, in the case of a unit established in NOIDA area, to the Area Development Officer, NOIDA;

b. the application shall be examined by a Committee consisting of the District Magistrate of the district in which the new unit has been established as Chairman, the General Manager, District Industries Centre as Member Convener and the concerned assessing authority as member and in the case of NOIDA, the Committee shall consist of the Deputy Chief Executive Officer, NOIDA as Chairman, the Deputy Commissioner (Executive), Sales Tax Ghaziabad as Member and the Area Development Officer, NOIDA as Member Conveners;

c. the Committee shall forward the applications along with its recommendations to the Divisional Joint Director of Industries and, in the case of NOIDA, to the Chairman, NOIDA;

d. applications from small scale units forwarded to the Divisional Joint Director of Industries shall be considered by a Divisional Level Committee headed by the Divisional Commissioner with the Deputy Commissioner (Executive), Sales Tax as Member and the Divisional Joint Director of Industries as Member Convener. The Divisional Legal Committee shall take a final decision regarding grant or otherwise of eligibility certificate to the unit concerned. The applications from small scale Units forwarded to the Chairman, NOIDA shall be considered and the final decision taken by him;

e. applications from medium and large scale units shall be forwarded by the Divisional

Joint Director of Industries or, as the case may be, the Chairman, NOIDA, along with the recommendations of the Divisional Level Committee or the recommendations of the Chairman, NOIDA, to the Director of Industries, Uttar Pradesh for consideration and decision by a State Level Committee comprising himself, the Commissioner, Sales Tax, Uttar Pradesh and the Managing Director, Pradeshiya Industrial and Investment Corporation of Uttar Pradesh;

f. the Eligibility Certificate shall be issued, in the case of small scale units, by the Joint Director of Industries concerned or, as the case may be, by Chairman, NOIDA, and in the case of medium and large scale units, by the Director of Industries, Uttar Pradesh; and

g. in the event of any disagreement between the Director of Industries and the Commissioner, Sales Tax, Uttar Pradesh, the matter shall be referred to Government for consideration by a Committee headed by the Principal Secretary, Industries Department, with the Secretaries of the Finance and Institutional Finance Departments as members, whose decision shall be final.

Sl. no.	*Location of unit*	*Period of exemption*	
		In the case of units with capital investment not exceeding 3 lakh rupees	*In the case of units with capital investment not exceeding 3 lakh rupees*
(1)	*(2)*	*(3)*	*(4)*
1.	The districts of Banda, Jalaun, Hamirpur, Jaunpur, Fatehpur, Pauri Garhwal, Tehri Garhwal, Chamoli, Uttar Kashi, Sultanpur, Kanpur (Rural), Almora, Pithoragarh, Nainital and Dehradun	Five years	Seven years
2.	The districts of Azamgarh, Bahraich, Ballia, Barabanki, Basti, Budaun, Bulandshahar, Deoria, Etah, Etawaha, Faizabad, Farrukhabad, Ghaziabad, Gonda, Hardoi, Jhansi, Lalitpur, Mainpuri, Mathura, Moradabad, Pilibhit, Pratapgarh, Rai Bareilly, Rampur, Shahjahanpur, Sitapur and Unnao and Tehsil Dadri of Ghaziabad district	Four years	Six years

(1)	*(2)*	*(3)*	*(4)*
3.	The districts of Agra, Aligarh, Allahabad, Bareilly, Bijnor, Ghaziabad (excluding Tehsil Dadri) Gorakhpur, Kanpur (urban), Lakhimpur Kheri, Lucknow, Meerut, Mirzapur, Muzaffarnagar, Saharanpur and Varanasi	Three years	Five years

Explanation: For the purposes of this notification--

1. "Industrial Unit" means an industrial unit holding permanent registration with the Directorate of Industries, Uttar Pradesh as a small, handloom or handicraft industry or an industrial licence/ registration granted by the Iron and Steel Controller or the Textile Commissioner or the Director, Sugar or the Director General of Technical Development or the Government of India; and
   a. registered under the Factories Act, 1948 or established after obtaining a Term Loan from the U.P. Financial Corporation or from a scheduled Commercial Bank, in the case of units with a capital investment not exceeding three lakh rupees; or
   b. registered under the Factories Act, 1948 or having applied for registration under the said Act and deposited the required fee for the purpose, in the case of units other than those referred to above
2. "Date of starting production" and 'new unit' shall

have the meaning assigned to them in the explanation to section 4-A of the Uttar Pradesh Sales Tax Act, 1948; and

3. "Capital investment" means investment in land, building, plant, machinery, equipment and apparatuses.

B. Haryana

For attracting the new industries to be set up in the State of Haryana, the State Government with effect from 6th May, 1986 has enforced the scheme of deferment of payment of sales tax. This concession is available to all such industries which were and are set up in the State on or after 1.11.1983. According to this scheme, pioneer and prestigious industrial units and the new eligible industrial units are entitled to the benefit of deferment of tax due from them on or after the 6th May, 1986, for five years to nine years and during the period and to the extent reproduced below:

Sl. no.	*Name of the zone and the area comprised there in*	*Extent upto which deferment is admissible*	*Period during which deferment is admissible*
(1)	*(2)*	*(3)*	*(4)*
1.	Zone 'A' comprising Centrally and State notified backward areas	Equivalent to 90% of fixed assets of the unit or Rs 5 crores, whichever is lesser	9 years from the grant of first entitlement certificate
2.	Zone 'B' comprising areas other than specified at Srs. 1 and 3	Equivalent to 60% of fixed assets of the unit or Rs 3 crores whichever is lesser	7 years from the grant of first entitlement certificate
3.	Zone 'C' comprising Faridabad and Ballabgarh Complex Administration areas	Equivalent to 30% of fixed assets of the unit or Rs 1.5 crores whichever is lesser	5 years from the grant of first entitlement certificate
4.	Pioneer or prestigious units in zones 'A' and 'B' of the State	Equivalent to the fixed assets or Rs 5 crores whichever is lesser	9 years from the grant of first entitlement certificate

The benefit of deferment of tax is available to the new units on their obtaining eligibility certificate from the Industries Department and the Entitlement Certificate from the District Officers-in-Charge of the district offices of the Excise and Taxation Development.

C. Rajasthan

All machines purchased for setting up textile, ceramic, glass, cement, engineering, sugar, metal and mineral based industries are exempted from payment of sales tax. Sales Tax is also exempted on raw material for 5 years.

Annexure A.3.2

THE RATES OF ELECTRICITY DUTY IN HARYANA AND U.P.

a. General Supply (Haryana)

i. Domestic supply for first 40 units	9 paise per unit
ii. Above 40 units and upto 100 units	10 paise per unit
iii. Above 100 units and upto 200 units	13 paise per unit
iv. Above 200 units	15 paise per unit

b. Commercial Supply (Haryana)

i. Upto first 30 units	19 paise
ii. Above 30 units and upto 80 units	21 paise

c. Industrial Consumer (Haryana)

Large supply	for loads above 100 kw	17 paise per unit
Medium supply	for loads above 20 kw and upto 100 kw	16 paise per unit
Small supply	for loads upto 20 kw	13 paise per unit

d. For industrial or motive power purposes at medium, higher voltage (U.P.)

i. With connected load less than 75 kws	4 paise per unit

ii. With Contracted load more than 75 kws — 6 paise per unit

e. For purposes other than (a) above (U.P.)

i. Upto 24 paise per unit of tariff 35% of the charge

ii. For 25-30 paise per unit of tariff 6 paise
   -- 25 per cent of the price of energy.
   -- Industrial undertaking generating energy for their own use or consumption but in public interest, duty is exempted for 5 years.

Annexure A.3.3

EXEMPTION AND CONCESSIONS ON ELECTRICITY DUTY IN THE STATES OF NCR

1.a. Haryana

i. In industrial undertakings generating energy for their own use or consumption but in the public interest (the State has exempted such industries from the payment of whole of electricity) for a period of 5 years with effect from 1.4.1975.

ii. Small scale industries in Faridabad and Ballabgarh with also investment in plant and machinery upto 37.5 lakhs for a period of 3 years with effect from 20.3.1970.

iii. In the backward areas of district Mahendragarh and Jind, Tehsils of Rewari, Naraingarh, Gurgaon and sub-tehsil Nehor, the industrial undertakings upto capital investment of Rs. 1 crore, for 7 years with effect from 20.3.1970.

iv. In the areas other than (ii) and (iii), the industries with capital investment upto Rs. 50 lakh for 5 years with effect from 20.3.1970.

v. To all new industries engaged in manufacture, processing and preservation of goods.

b. Uttar Pradesh

i. Factories having capital investment upto 25 lakh and established in the backward districts are exempted for a period of 5 years.

ii. New industrial units which had set up their own power plants after January 2, 1973 were given exemption is continuing until now.

2. Exemption of Duty Common in all the States

Energy sold to/consumed by:

i. Central Government
ii. State Government
iii. Railway for construction, maintenance and administration
iv. Agricultural operations, such as pumping of water for irrigation.

Source: Government of India, Central Electricity Authority, Ministry of Energy, "Schedule 2 Electricity Duty/Tax on generation, sale and consumption of electricity in various States of India"

Annexure A.3.4

LIST OF EXEMPTIONS IN OCTROI

In general, the following items are exempted from the Octroi/Terminal Tax.

1. Dead animals and living animals other than those mentioned in the rate schedules.
2. Ghee for personal use.
3. Head load fuel other than gas cylinder.
4. Cattle feed.
5. Fresh vegetables, flowers, etc.
6. Milk and butter milk, etc.
7. Books, newspapers, other than waste papers.
8. Empty canes or containers of milk, petrol, lubricants.
9. Common salt.
10. Petroleum and aviation spirit.
11. Ammunition, warlike stores imported by the defence forces or police departments.
12. Bonafide personal and transferred households effects.
13. Goods taken from within octroi/terminal tax limits to railway premises and returned unbooked.
14. Articles imported through the post office.
15. Agricultural implements and kohlas and their component parts.
16. Spare wheel not exceeding four kept in a motor vehicle.
17. Goods seized by the police.
18. Fruits carried on head load.
19. Goods imported by any diplomatic or consular mission of a foreign state or the High Commission of a Commonwealth country and any official of such mission or High Commission.

20. Goods imported by the International Labour Organisation, United Nations and Allied Organisations operating in India.
21. Genuine and pure khadi imported by various voluntary organizations like Gandhi Ashram, All India Spinners Association.
22. All suppliers of power alcohol imported by the Excise Departments.
23. All free gifts of foodgrains and other food supplies including milk powder; processed foodstuff and multi-purpose goods, drugs, medicines, multi-vitamin tablets, hospital equipment and supplies, agricultural implements.
24. Multi-purpose Food and Nutro Biscuits, imported by the meals for Millions Association of India, for free distribution only.
25. All supplies of bonafide Red Cross material received by the Indian Red Cross Society.
26. All articles received as gifts by the Blind Relief Associations.

Chapter 4

Impact of Tax Policies on Location of Industries

In the previous chapter we have analysed the structure of State and local taxes in the constituent parts of the NCR and have shown that there are variations in the rate structure of most of the taxes. In this chapter, we shall first present an analysis of the industrial structure of the constituent parts of the NCR. This is followed by an empirical analysis of the factors that affect the location of industry in the region.

Our analysis is supported by data for Meerut and Bulandshahar districts in Uttar Pradesh; Rohtak, Gurgaon, Sonepat, Karnal and Mahendragarh districts in Haryana; Alwar district in Rajasthan; and the Union Territory of Delhi. The analysis of the industrial structure is presented for the period 1979 to 1984 in terms of major groups of industries. The data source is the Annual Survey of Industries.[1]

Industrial Structure of the NCR Region

The number of registered factories in the NCR

[1]As the district-wise data are not published, these have specifically been obtained from the computer tapes of the Central Statistical Organisation.

Table 4.1

Number of Factories in Districts of NCR by Major Groups (During 1979 and 1984)

District industry group code	*Meerut*		*Bulandshahar*		*Rohtak*		*Sonepat*		*Gurgaon*	
	1979	*1984*	*1979*	*1984*	*1979*	*1984*	*1979*	*1984*	*1979*	*1984*
20-21	40 (40.0)	68 (44.74)	110	117	30 (26.79)	26 (17.93)	4 (1983) (13.33)	4 (9.30)	4 (16.00)	12 (26.09)
22	13 (13.0)	13 (8.55)							4	
23					47 (41.96)	59 (40.69)			4 (16.00)	7 (15.22)
24							N.A.	4 (1983) (13.33)		
26										

(Contd....)

District industry group code	Meerut		Bulandshahar		Rohtak		Sonepat		Gurgaon	
	1979	1984	1979	1984	1979	1984	1979	1984	1979	1984
27	7 (1980) (6.09)	4 (2.63)							4 (1982) (10.81)	4 (1984) (8.70)
28	6 (1980) (5.22)	3 (1.97)			5 (1983) (3.36)	3 (1984) (2.07)			-	-
29										
30					6 (1980) (3.70)	4 (2.76)			2 -	4 (8.70)
31	4 (4.0)	5 (3.29)			6 (1980) (3.70)	8 (5.52)	3 (1980) (15.00)	3 (1983) (10.00)	2 (13.04)	1 (8.62)
32	-	26 (1984) (17.11)	(19.33)	29 (2.01)	3 (1983) (2.07)	3	N.A. (.15)	20 (16.00)	4 (17.39)	8

(Contd....)

District industry group code	*Meerut*		*Bulandshahar*		*Rohtak*		*Sonepat*		*Gurgaon*	
	1979	*1984*	*1979*	*1984*	*1979*	*1984*	*1979*	*1984*	*1979*	*1984*
33	13	4			13	30	7 (1980)	10	2 (1981)	3
	(13.00)	(2.63)			(16.96)	(20.69)	(35)	(3.52)	(20.69)	(6.52)
34	9	7			4	4 (1980)	3 (1982)	3		
	(9.00)	(4.65)			(3.57)	-	(20.00)	(.30)		
35	7	14			4	6	N.A.	4 (1983)	2 (1982)	4
	(7.00)	(9.21)			(3.57)	(414)	-	(13.33)	(10.81)	(8.70)
36	4 (4.00)	4 (2.63)								
37	3 (1981) (3.12)	4 (1982) (3.17)								
Total	100	152	113	150	112	145	10	43	25	46
Growth Rate	8.61		6.08		2.99		27.07		13.61	

(Contd....)

Table 4.1 (Contd.)

District industry group code	*Karnal*		*Mahendragarh*		*Alwar*		*Delhi*		*N.C.R.*	
	1979	*1984*	*1979*	*1984*	*1979*	*1984*	*1979*	*1984*	*1979*	*1984*
20-21	14 (16.28)	8 (6.25)	35 (64.31)	62 (54.39)	12 (30.77)	22 (14.57)	109 (3.95)	186 (5.31)	354 (10.74)	505 (12.22)
22					3 (1980) (5.77)	3 (1.99)	15 (.54)	22 (.69)	28 (.85)	28 (.92)
23	6 (6.98)	9 (7.03)					32 (1.16)	21 (.66)	89 (2.70)	96 (32.00)
24					4 (1981) (5.26)	13 (8.61)	32 (1.16)	43 (1.34)	32 (.97)	60 (1.45)
26							335 (12.15)	402 (12.55)	335 (10.16)	402 (9.73)
27							42 (1.52)	34 (1.06)	42 (1.27)	42 (1.02)

(Contd....)

District industry group code	Karnal		Mahendragarh		Alwar		Delhi		N.C.R.	
	1979	1984	1979	1984	1979	1984	1979	1984	1979	1984
28	N.A.	3 (1982) (3.09)	3 (1981) (4.55)	3 (2.63)	5 (1980) (8.62)	7 (4.64)	267 (9.68)	237 (7.40)	267 (8.10)	253 (6.12)
29					3 (1981) (3.09)	3 (1983) (3.30)	17 (.62)	8 (.25)	17 (.52)	8 (.19)
30	4 (4.65)	4 (3.12)			5 (1983) (5.49)	5 (3.31)	193 (7.00)	243 (7.59)	197 (5.98)	256 (6.20)
31	9 (10.47)	16 (12.50)	5 (9.26)	14 (12.28)	7 (17.95)	31 (20.53)	99 (3.59)	135 (4.21)	124 (3.76)	209 (506)
32	5 (5.81)	29 (22.66)			9 (23.08)	27 (17.88)	44 (1.60)	49 (1.84)	62 (1.88)	226 (5.47)
33	11 (12.79)	21 (16.41)	6 (1981) (9.09)	6 (5.26)	5 (12.82)	19 (12.58)	185 (6.71)	193 (6.03)	233 (7.07)	286 (6.92)

(Contd....)

District industry group code	Karnal		Mahendragarh		Alwar		Delhi		N.C.R.	
	1979	1984	1979	1984	1979	1984	1979	1984	1979	1984
34	14	10	3	-	3 (1980)	3	322	311	352	334
	(16.28)	(7.81)	(5.56)	-	(5.17)	(1.99)	(11.68)	(9.71)	(10.68)	(8.08)
35	12	13	5	4	6 (1982)	6	290	287	318	334
	(13.95)	(10.16)	(9.26)	(3.51)	(5.56)	(3.97)	(10.52)	(8.96)	(9.65)	(8.08)
36	4 (1980)	6			4 (1982)	7	187	370	191	387
	(3.96)	(4.69)			(5.26)	(4.64)	(6.78)	(11.55)	(5.79)	(9.37)
37	-	-			3 (1980)	5	263	264	268	275
	(5.81)	(4.69)			(5.17)	(3.31)	(9.54)	(8.24)	(8.13)	(6.66)
Total	86	128	54	114	39	151	2757	3203	3296	4132
Growth Rate Per cent per annum	8.47		17.49		27.38		0.89		2.66	

Note: Name of the industry with reference to code number is given in Annexure A.IV.1.

increased from 3,296 in 1979 to 4,132 in 1984 (Table 4.1). Similarly, the capital employed, rose from Rs. 39,850 lakh to Rs 64,340 lakh during the period at a growth rate of 10.95 per cent per annum and the total industrial employment in the region went up from 1,46,000 to 2,20,000 at a growth rate of 7.34 per cent per annum. The total output in the region went up from Rs 1,18,224.71 lakh to Rs 3,32,798.54 lakh, indicating a growth rate of 20.94 per cent per annum. These figures point to the substantial growth of industries in the NCR. An industry-wise analysis of the constituent districts is attempted in the following paragraphs.

The industry-wise distribution, as presented in Table 4.2, shows that the maximum output is contributed by the food and beverages industry. In 1979, the share of output of this industry was 21.51 per cent which increased to 38.88 per cent in 1984, showing a growth rate of 30.6 per cent per annum. The chemical and chemical products industry followed, with a 9.73 per cent share in output in 1979. In 1984, the second place was taken by non-metallic mineral products with 10.32 per cent share. When the industries are categorised on the basis of output share, the first category incorporates those industries which contribute upto 3 per cent share in output. Industries falling in this category in 1979 were that of tobacco, footwear, paper and paper products, leather products, rubber products, petroleum products, basic metals, and electrical machinery. The ranking of this group of industries remained unchanged in 1984. The second category comprises industries with an output share of 3 to 5 per cent; in 1979 these were metal products, printing, and non-electrical machinery. The last item was displaced in 1984 by textiles industry. Food and beverages, textiles, furniture, chemical and non-metallic industries constituted the third category in the year 1979, which contributed more than 5 per cent

Table 4.2

Output in the Districts of NCR by Major Groups (During 1979 and 1984)

(Figures in thousands)

District industry group code	*Meerut*		*Bulandshahar*		*Rohtak*		*Sonepat*		*Gurgaon*	
	1979	*1984*	*1979*	*1984*	*1979*	*1984*	*1979*	*1984*	*1979*	*1984*
20-21	190460	410281	184627	358588	230331		3453 (1983)	7373699	19087	95174
	(25.1)	(33.3)	(95.86)	(83.74)	(27.17)	(29.09)	1.40)	(97.94)	(4.11)	(11.84)
22	4915 (0.6)	12969 (1.1)								
23					253048 (29.85)	568253 (20.66)			143513 (30.92)	150547 (18.72)
24							N.A.	129148 (1983) (53.15)	326249 (1982) (39.19)	315077

(Contd....)

District industry group code	Meerut		Bulandshahar		Rohtak		Sonepat		Gurgaon	
	1979	1984	1979	1984	1979	1984	1979	1984	1979	1984
26										
27	5606 (1980) (0.63)	2866 (0.2)							18 (1982) (0.00)	50 (0.01)
28	1843 (1980) (0.21)	599 (0.1)			1284 (1983) (0.06)	1138 (1984) (0.04)				
29										
30					5240 (1980) (0.45)	58491 (2.13)				
31	424695 (54.3)	677091 (54.9)			17738 (1980) (1.52)	12943 (1980) (.47)	9922 (1983) (6.67)	29613 (1980) (12.08)	59626 (10.89)	67892
32	-	19478 (1.6)		8182 (1.91)	2601(83) (.12)	3248 (.12)	N.A.	6914 (0.05)	1462 (0.32)	152110 (18.4)

(Contd....)

District industry group code	Meerut		Bulandshahar		Rohtak		Sonepat		Gurgaon	
	1979	1984	1979	1984	1979	1984	1979	1984	1979	1984
33	6139	3864			352958	1300864	48400	72320	104595 (81)	69681
	(0.8)	(0.3)			(41.63)	(47.30)	(32.55)	(.96)	(17.68)	(8.67)
34	30252	21941			6871	N.A.	6317(82)	4290		
	(3.9)	(1.8)			(.81)		(0.52)	(.06)		
35	7196	15879			671	2470	N.A.	1106(83)	1656(82)	1837
	(0.9)	(1.3)			(.08)	(.09)	-	(0.45)	(0.27)	(0.23)
36	1181	1956								
	(0.2)	(0.2)								
37	46511(81)	54988(82)								
	(5.40)	(4.92)								
Total	782576	1232874	192490	428197	847833	2750317	31491	7528797	464090	804062
	(6.6)	(3.70)			(7.17)	(8.26)		(22.62)	(4.00)	(2.42)
Growth Rate Per cent per annum	9.21		23.05		25.53		127.39		12.97	

(Contd....)

Table 4.2 (Contd.)

District industry group code	Karnal		Mahendragarh		Alwar		Delhi		N.C.R.	
	1979	*1984*	*1979*	*1984*	*1979*	*1984*	*1979*	*1984*	*1979*	*1984*
20-21	69971 (13.79)	166018 (13.90)	206241 (89.22)	585381 (85.66)	(8.73)	168156 (13.28)	1621862 (18.82)	3069500 (17.49)	2542618 (21.51)	12938865 (38.88)
22					3483 (1980) (1.10)	27595 (2.29)	159136 (1.85)	420200 (2.39)	164051 (1.39)	460764 (1.38)
23	62338 (12.29)	82965 (6.95)					548748 (6.37)	720100 (4.10)	1007647 (8.52)	1521865 (4.57)
24					164634 (1981) (31.72)	406341 (33.60)	12601 (.15)	304300 (1.73)	12601 (.11)	709641 (2.13)
26							1037330 (12.03)	1762700 (10.05)	1037330 (8.77)	1762700 (5.30)
27							23967 (.2	73600 (.42)	23967 (.20)	76516 (.23)

(Contd....)

District industry group code	Karnal		Mahendragarh		Alwar		Delhi		N.C.R.	
	1979	1984	1979	1984	1979	1984	1979	1984	1979	1984
28	N.A.	13895 (1980) (1.59)	11907 (1981) (3.29)	2409 (.41)	1754 (1980) (0.50)	13244 (1.10)	436591 (5.06)	983200 (5.60)	436591 (3.69)	1000590 (3.01)
29					21063 (1981) (4.06)	3356 (1983) (0.31)	55663 (.65)	50400 (.29)	55663 (.47)	50400 (.15)
30	3805 (0.75)	3735 (0.31)			42069 (1983) (3.92)	49782 (4.13)	229046 (2.66)	753200 (4.29)	232851 (1.97)	665208 (2.60)
31	11432 (2.25)	78636 (6.59)	17885 (7.74)	63519 (10.77)	16488 (11.41)	157191 (13.03)	697552 (8.09)	1877700 (10.70)	1150137 (9.73)	2805703 (8.43)
32	152685 (30.05)	357724 (29.96)			7848 (5.44)	66878 (5.54)	75944 (.88)	139900 (.80)	237989 (.86)	754434 (1.33)
33	148031 (29.13)	348723 (29.21)	3304 (1.02)	54 (0.88)	48024 (33.29)	212274 (17.60)	529659 (6.14)	1717400 (9.79)	941607 (7.96)	3436085 (10.32)

(Contd....)

District industry group code	*Karnal*		*Mahendragarh*		*Alwar*		*Delhi*		*N.C.R.*	
	1979	*1984*	*1979*	*1984*	*1979*	*1984*	*1979*	*1984*	*1979*	*1984*
34	25755	51697	77	N.A.	7659 (1980)	32521	286333	627200	351214	737649
	(5.07)	(4.33)	(.98)	-	(2.19)	(2.70)	(3.32)	(3.57)	(2.97)	(2.22)
35	18403	24589	77	86	8472	17857	438693	933800	467733	1004910
	(3.62)	(2.06)	(1.20)	(0.93)	(0.89)	(1.48)	(5.09)	(5.34)	(3.96)	(3.02)
36	808 (1980)	2092			7533 (1981)	22611	502678	2278100	583259	2304195
	(0.13)	(0.18)			(3.45)	(1.87)	(6.75)	(12.98)	(4.93)	(6.92)
37	8010	4494			14190(80)	33029	323888	577900	331898	615423
	(1.58)	(0.38)			(4.05)	(2.74)	(3.76)	(3.29)	(2.81)	(1.85)
Total	508159	1194116	231168	589954 (1984)	144254	1206337	8620410	17545200	11822471	33279854
Growth Rate	22.67		23.60		51.70		17.95		20.94	

Notes: Figures in the parenthesis indicate per cent to total output.
Name of the industry with reference to code number is given in Annexure A.4.1.

Table 4.3

Productive Capital and Employment in the NCR (During 1979 and 1984)

Variables / Districts	*Productive capital*		*Employment*	
	1979	*1984*	*1979*	*1984*
Meerut	370789 (6.23)	487148 (4.39)	14465 (7.99)	17263 (7.87)
Bulandshahar	48215 (0.81)	182026 (1.67)	8999 (4.99)	10500 (4.79
Rohtak	181958 (3.06)	409214 (3.75)	6926 (3.82)	9739 (4.44)
Sonepat	162884 (2.74)	218599 (2.00)	455 (0.25)	3065 (1.40)
Gurgaon	69129 (2.00)	948194 (8.70)	6462 (3.67)	7368 (3.36)
Karnal	165981 (2.80)	409893 (3.80)	5715 (3.16)	8773 (4.00)
Mohindergarh	39540 (0.66)	95396 (0.97)	1619 (.89)	6388 (2.91)
Alwar	140909 (2.37)	1068179 (9.87)	1727 (.95)	11573 (5.23)
Delhi	1766718 (79.33)	7017600 (64.82)	521702 (74.40)	1037460 (65.94)
N.C.R. (Total)	5950957 (100)	10902813 (100)	131111 (100)	219263 (100)

Note: Figures within parenthesis indicate district proportion to the total of the NCR.

to the total industrial output. In 1984 non-electrical machinery industry joined this group displacing textiles industry. Thus, during 1979 to 1984, there were only a few important changes in the industrial structure from the point of view of share in total output. The share of textiles, furniture, and leather industries showed a decline, while food and beverages, footwear, petroleum, non-metallic mineral and non-electrical machinery witnessed an increase.

In respect of employment provided (Table 4.3), the food and beverages industry ranked first over the five year period 1979-84, its share increasing from 10.74 per cent to 12.22 per cent. On the basis of the proportion of employment provided by each industry, the first group comprises industries accounting for upto 5 per cent share of employment. These industries are tobacco, footwear, chemicals, textiles, paper, petroleum and leather and fur products. Petroleum industry made a significant improvement in its share of employment from 1.88 per cent in 1979 to 5.47 per cent in 1984. The share of tobacco, footwear and leather and fur products industries was insignificant, each industry accounting for less than one per cent of the total. The second group of industries with 5 to 8 per cent share includes rubber, printing and non-metallic and non-electrical machinery. Non-electrical machinery industry's share increased significantly from 5.79 per cent in 1979 to 9.37 per cent in 1984, and the rubber industry too showed an encouraging increase in terms of employment provided. The third group of industries, raising more than 8 per cent share of employment, are food, furniture, basic metals, metal products and electrical machinery.

Industrial Structure of the NCR States

The industrial structure of the NCR shows uneven development of the constituent States. The Union

Territory of Delhi, as the hub of the NCR, continues to exercise strong gravitational pull on industrial activity in the neighbouring areas. A brief review of the industrial structure of the constituent States, for the period 1979-84, is presented here.

Delhi

Delhi has witnessed the maximum industrialisation in the NCR. The number of factories went up from 2,757 in 1979 to 3,203 in 1984. Productive capital increased from Rs 3,243.9 million to Rs 4,286.5 million with a growth rate of 6.39 per cent per annum during the same period. The total number of industrial workers increased from 106,400 in 1979 to 158,000 in 1984, recording a growth rate of 6.12 per cent per annum. Total industrial output has increased from Rs 7,059.8 million to Rs 17,545.2 million during the same period, indicating an annual growth rate of 17.94 per cent. Thus, in 1979 around 73 per cent of industrial output of the NCR was contributed by Delhi alone. This, however, declined to 69.66 per cent in 1983.[2]

Industry-wise distribution of the industrial sector in Delhi shows that the share of food and beverages industry is quite significant. The output share of this industry was 18.82 per cent in 1979 and 17.49 per cent in 1984. Among the other industries, a major contribution came from furniture, chemical products, and non-metallic mineral industries. The first two of these contributed more than 8 per cent in both 1979 and 1984 but the non-metallic mineral industry joined this group in 1984 only. Industries contributing less than 3 per cent share in 1979 were footwear, paper, leather, rubber and petroleum. The contribution of the rubber industry

[2]As there is some discrepency in the aggregation of output data for the year 1984, we have confined our analysis in relation to share of output in the NCR, by district, upto the year 1983.

went up from 2.66 per cent in 1979 to 4.29 per cent in 1984, and of footwear from 0.15 to 1.73 per cent but declined in the case of leather product industry. The basic metal and electrical machinery industries were contributing a share of 3 to 5 per cent in both 1979 and 1984. The textile industry has joined this category because its share declined from 6.37 per cent in 1979 to 4.10 per cent in 1984, whereas the rubber industry joined this group by virtue of an increase in its share from 2.66 to 4.24 per cent. The third group comprises all those industries which contributed between 5 and 8 per cent to the total output: printing, non-metallic mineral, basic metal and non-electrical machinery.

NCR Districts in Haryana

The districts of the State of Haryana, *viz.*, Rohtak, Sonepat, Gurgaon, Karnal and Mahendragarh contributed roughly 17.62 per cent of the industrial output in 1979 and 38.66 per cent in 1984. Of these districts, Rohtak and Karnal led the others, with the former contributing 7.17 per cent and 8.26 per cent of the output in 1979 and 1984, respectively. Among industries, the food industry accounted for 21.51 per cent in 1979 and 38.8 per cent in 1984. The textile industry's share was 29 per cent in 1979 but it declined to 20.66 per cent in 1984. The industry provides more than half of the total employment of the districts, which increased from 56.36 per cent in 1979 to 64.41 per cent in 1984. In Karnal there are a variety of industries such as food and beverages, textiles, rubber, chemical, petroleum, non-metallic, basic metal, metal products and non-electrical machinery. The petroleum as well as non-metallic industries contributed approximately 30 per cent of the industrial output of the district in 1979 as well as in 1984. The industrial output of Gurgaon district went up from Rs 464.1 million in 1979 to

Rs 804.1 million in 1984. Textile is one of the leading industries, and contributed 31 per cent of the total industrial output of the district in 1979. However, in 1984 the footwear industry emerged as a major competitor contributing almost 39 per cent of the district's output. The industrial profile of Mahenderagarh district includes food and beverages, printing, chemical, non-metallic and metal products. However, the share of these industries in the total is insignificant.

NCR Districts in Uttar Pradesh

The industrial development of Bulandshahar district of Uttar Pradesh has been negligible. It contributed only 1.63 per cent output to the NCR total in 1979 and 1.29 per cent in 1984. In contrast, Meerut district has been industrially active, with chemical industry contributing 54.3 per cent of the district's industrial output in 1979 and 54.9 per cent in 1984. Food and beverages with a 25 per cent share, was the second important industry in the district.

NCR Districts in Rajasthan

Alwar district has been witnessing industrial changes in recent years. The total industrial output of the district was only Rs 144.2 million in the year 1979 which increased eight times and went up to Rs 1,206.3 million in 1984. The footwear industry, which was started in 1981, claimed 34 per cent of total industrial production in 1984. Other important industries in the district are non-metallic, chemical and food.

Share of Industries

Analysing the share of each industry by district, we find that there is concentration of two industries, (viz., wearing apparel, and leather and fur products) in Alwar. The wearing apparel industry's contribution to

the NCR total output remained around 59 per cent in the year 1981 as well as in 1984. Leather and fur products contributed 40 per cent in 1981. Other industries contributing approximately 5 per cent share in 1984 were electrical machinery and basic metals (Table 4.4).

In the Haryana districts of the NCR, food industry is concentrated in Rohtak and Mahendragarh. These two districts accounted for 17.17 per cent of output in 1979 and 14.81 per cent in 1983. Textile industry is confined largely to Rohtak, Karnal and Gurgaon districts with their total share in the output amounting to 45.54 per cent in 1979 and 54.11 per cent in 1983. Wearing apparel industry, concentrated in Sonepat and Gurgaon, contributed more than half of the total output of this industry (except in 1979). Similarly, around fifty per cent of the output of non-metallic mineral industry came from Karnal and Rohtak and around 64 per cent of the output of petroleum products industry came from Karnal. Gurgaon and Karnal jointly contribute 71 per cent of petroleum products.

Thus industries' concentration in Rohtak, Karnal, Gurgaon, Sonepat and Mahendragarh in the descending order of their share in output are petroleum products, non-metallic mineral, wearing apparel, textiles and food industries. Among the two NCR districts in Uttar Pradesh, Bulandshahar has only a food industry, which contributes around 7 per cent of the total output of this industry. Meerut with its chemical and chemical products industry, contributed 37 per cent of the output in 1979, subsequently declining to 23.32 per cent by the year 1983. Other industries of some importance in the districts are food, paper, basic metal and electrical machinery, which have lost their place over time.

Unlike the States mentioned above, Delhi has a prolific industry profile. For example, in the year 1979,

Table 4.4

Industry-wise Share of Output in the NCR by Districts (1979 and 1983)

Industry code	*Meerut*		*Bulandshahar*		*Rohtak*		*Sonepat*		*Gurgaon*		*Karnal*		*Mahendragarh*		*Alwar*		*Delhi*	
	1979	*1983*	*1979*	*1983*	*1979*	*1983*	*1979*	*1983*	*1979*	*1983*	*1979*	*1983*	*1979*	*1983*	*1979*	*1983*	*1979*	*1983*
20-21	7.72	5.90	7.26	7.57	0.06	6.16	-	0.06	0.75	1.41	2.75	4.22	6.11	8.65	0.55	1.04	63.79	64.99
22	3.00	4.30												(1980)	0.58	4.14	97.00	91.48
23					25.11	39.22			14.24	9.78	6.19	5.11					54.46	45.89
24							-	17.22 (1982)	58.73 (1984)	44.43			(1981)		59.87	59.00	100.00	23.71
25																	100.00	100.00
27	13.17	0.30							0.04	0.07							100.00	96.70
(1980)							(1982)	(1984)										
28	0.32	0.19			-	1.79					1.61	-	1.03	0.31	0.80	0.67	100.00	97.70
(1980)									(1982)	(1981)	(1981)							
29													-		40.17	4.68	100.00	95.32
														(1981)				
30					1.21	8.77					1.60	0.50			-	5.97	98.37	84.69
				(1980)														
31	36.93	23.32			1.13	0.57	0.63	1.18	3.81	2.69	0.99	3.10	1.56	1.87	1.43	4.54	60.65	64.61
				(1980)	(1980)	(1980)												

Industry code	*Meerut*		*Bulandshahar*		*Rohtak*		*Sonepat*		*Gurgaon*		*Karnal*		*Mahendragarh*		*Alwar*		*Delhi*	
	1979	*1983*	*1979*	*1983*	*1979*	*1983*	*1979*	*1983*	*1979*	*1983*	*1979*	*1983*	*1979*	*1983*	*1979*	*1983*	*1979*	*1983*
32	- (1984)	2.56 (1984)	-	1.68	- (1984)	0.43	-	0.91	0.61 (1981)	17.90 (1984)	64.17	62.72	1.79	0.68	3.30	6.44	31.92	22.50
33	0.65	0.63			37.48	35.72 (1980)	4.42 (1981)	2.58	6.42	5.49	15.72	14.04	0.24	-	5.10	5.75	56.25	48.71
34	8.61	3.29			1.96	- (1982)	1.28 (1984)	0.58			7.33 (1982)	9.33 (1984)	0.79 (1984)	0.74	1.54	4.41	81.57	86.27
35	1.54	1.41			0.14	0.31	-	0.13 (1982)	0.17 (1984)	0.18	3.93	8.35	- (1982)	0.67 (1984)	0.89	1.78	93.79	89.81
36	0.20 (1984)	0.80									0.06	0.09 (1981)			0.47	0.98	90.80	100.00
37	7.53 (1982)	2.73							(1980)	(1984)	2.41	2.95	(1984)		2.84	5.37	97.59	97.05
Share of each district in NCR as a whole	6.62	4.20	1.63	1.80	7.17	8.33	0.27	1.92	3.93	3.54	4.30	5.11	1.96	2.16	1.22	4.22	72.92	69.66

Note: Name of the industry with reference to code number is given in Annexure A.IV.1

industries localised only in Delhi were wearing apparel, furniture, paper, printing, leather, rubber, non-electrical machinery and electrical machinery. Most of these industries continued to be localised in Delhi even in 1983. Except wearing apparel, petroleum, non-metallic and textiles industries, all other industries located in Delhi contributed more than half of the output of the individual industries in the region.

Location Quotient

To ascertain whether industries are concentrated in a particular region or are widely dispersed, we have calculated Location Quotient (LQ) which is used to compare a region's percentage share of a particular activity with its percentage share of some basic aggregate. Thus, LQ is defined as a ratio of percentage share of i^{th} industry in the total sector of j^{th} region to the percentage share of the i^{th} industry in total manufacturing sector, i.e.,

$$LQ = \Sigma \frac{S_{ij}/S_j}{N_i/N}$$

where,

S_{ij} = output of ith industry in jth region,
S_j = total output of the jth region,
N_i = output of ith industry in the NCR, and
N = total industrial output of the NCR.

If the LQ is exactly unity, it can be inferred that the structure at the NCR level is more or less replicated at the district level. Also, it shows that the district has a fair share of that industry as compared to the total of the NCR. If LQ>1, the district has more than a fair share of the industrial activity, and the converse would be true if LQ<1.

Location quotient could be calculated on the basis of output, employment or capital employed. In Tables 4.4 and 4.5 we present such estimates for the years 1979 and 1984. The output-based estimates (Table 4.4) indicate contribution of that specific industry in the State's domestic product. On the other hand, LQ estimates on the basis of employment (Table 4.5) indicate existing labour absorption capacity. Similarly, LQ on the basis of capital investment would indicate its share in the particular industry of a district as compared to the NCR capital investment.

Output based LQs suggest that Meerut district had a fair share of food and beverages, chemicals, and basic metal industries. However, capital based LQ presents a revised picture, with paper, printing, and electrical machinery industries showing more than an even share. A comparison of LQs for the years 1979 and 1984 shows that in 1984 these industries achieved a greater share in comparison to the NCR total. Food and beverages industry was losing its share as regards output and capital but its absorption of employment increased in 1984. Another district of Uttar Pradesh, *viz.*, Bulandshahar, had only one industry (food and beverages) having a value of LQ>1. However, over the years, the coefficient of LQ was declining and the industry was losing its place in the district.

Among the districts of Haryana, Rohtak had more than a fair share of food, textiles, and non-metallic industries in 1979. The share of these industries declined in 1984, with the exception of textiles which had a higher LQ. The LQ for rubber industry considerably increased, showing that the industry had acquired a fairly good position in 1984. Petroleum, chemical and metal products industries of the district had LQ<1 indicating their relatively less important position in the NCR. In the Sonepat district of Haryana, most industrial

development has taken place after 1979. LQ on the basis of capital and employment was very high in non-metallic and basic metal industries in the first year but declined in later years. The footwear industry recorded a big spurt with an LQ of 17.75. Other industries such as petroleum, non-metallic and basic metals have low shares in the NCR. In Gurgaon district, textiles, footwear and non-metallic industries seemed to dominate in 1979 as well as 1984. The textiles industry has shown an improvement over the years. Those having a lower LQ are food, paper and paper products and chemical industries. Karnal is one of the districts with a significant concentration of almost all industries. Excepting a few industries such as food and beverages, rubber and rubber products, metal products, electrical machinery, and non-metallic machinery, which have LQ<1, all the other industries record an LQ>1. Mahendragarh district of Haryana has printing and publishing, petroleum products, basic metals, metal products and food industries of which only the first two have some significant share in the NCR.

Alwar, the only district of Rajasthan in the NCR, shows a gradually improving industrial profile since 1979. The district has a high LQ in footwear industry (Table 4.4). Other noteworthy industries are non-metallic, leather and fur, chemical and petroleum products. Food and beverages, tobacco, basic metals, metal products, electrical machinery, and non-electrical machinery recorded an LQ>1.

Delhi has a fairly significant LQ in the NCR, with a sizeable population of almost all industries which are found elsewhere in the region. The three industries which kept a low profile in the years 1979 and 1984 were food and beverages, textiles and non-metallic minerals. Chemical industry improved its position in 1984 over that in 1979 but petroleum and footwear

Table 4.5

Industry-wise Share of Employees in the NCR by Districts (1979 and 1983)

Industry code	Meerut		Bulandshahar		Rohtak		Sonepat		Gurgaon		Karnal		Mahendragarh		Alwar		Delhi	
	1979	1983	1979	1983	1979	1983	1979	1983	1979	1983	1979	1983	1979	1983	1979	1983	1979	1983
20-21	21.40	24.34	31.51	32.45	2.59	2.45	-	0.03	0.42	0.71	1.25	5.08	4.40	8.90	0.29	1.04	38.14	
22	4.94	11.16												(1980)	4.87	7.37	95.06	
23					14.91	22.42			13.74	13.76	4.99	5.24					66.36	
24								19.00 (1982)	35.19 (1984)	30.37			(1981)		63.42	56.97	100.00	
25																	100.00	100.00
27	13.30 (1980)	3.97						(1982)	2.63 (1984)	0.46							99.86	
28	0.60 (1980)	0.48			-	1.00				(1982)	0.69 (1981)	- (1980)	1.05	1.04	1.25	3.58	100.00	
29														(1981)	31.84	28.97	100.00	
30				(1980)	2.27	3.32					1.95	0.71			-	5.89	98.05	
31	39.69	35.56		(1980)	0.90 (1980)	0.51 (1980)	1.58	0.93	1.12	0.98	1.79	1.74	1.70	3.56	0.73	4.50	56.09	

Contd...

Industry code	*Meerut*		*Bulandshahar*		*Rohtak*		*Sonepat*		*Gurgaon*		*Karnal*		*Mahendragarh*		*Alwar*		*Delhi*	
	1979	*1983*	*1979*	*1983*	*1979*	*1983*	*1979*	*1983*	*1979*	*1983*	*1979*	*1983*	*1979*	*1983*	*1979*	*1983*	*1979*	*1983*
32	- (1984)	3.02 (1984)	-	3.72	- (1984)	0.10	-	1.82	0.11 (1981)	1.00 (1984)	10.78	8.12	0.39	0.16	1.22	2.18	16.91	
33	0.83	1.37			24.18	15.54 (1980)	3.77	3.15 (1981)	5.11	5.84	7.26	7.70	0.25	-	5.58	14.34	62.14	
34	19.54	7.49			2.09	- (1982)	1.26	-			5.58	10.28 (1984)	1.49 (1980)	0.54 (1984	1.93	4.60	70.97	
35	2.86	1.52			2.09	0.38	-	0.24 (1982)	0.38 (1984)	0.31	3.69	6.56	- (1982)	10.20 (1984)	2.09	2.57	92.00	
36	0.26 (1984)	0.16							(1980)	(1984)	0.36	0.34 (1981)	(1984)		0.55	0.68	99.74	
37	24.76 (1981)	-												(1980)	3.57 (1984)	13.83	98.12	
Share of each district in NCR as a whole	7.99	7.87	4.97	4.80	3.82	4.49	0.25	0.90	3.67	3.91	3.16	4.18	0.89	2.05	0.95	4.49	74.40	

Note: Name of the industry with reference to code number is given in Annexure A.IV.1.

Table 4.6

Industry-wise Share of Productive Capital in the NCR by Districts (1979 and 1983)

Industry code	*Meerut*		*Bulandshahar*		*Rohtak*		*Sonepat*		*Gurgaon*		*Karnal*		*Mahendragarh*		*Alwar*		*Delhi*	
	1979	*1983*	*1979*	*1983*	*1979*	*1983*	*1979*	*1983*	*1979*	*1983*	*1979*	*1983*	*1979*	*1983*	*1979*	*1983*	*1979*	*1983*
20-21	23.35	4.26	11.80	17.02	4.80	5.57	-	0.08	0.44	0.96	3.70	4.31	6.44	9.24	0.52	4.26	48.95	54.
22	8.77	19.07													37.54	23.21	91.23	57.
														(1983)				
23					21.02	27.03			7.51	23.78	6.43	5.57					65.03	43.
24							-	28.92	28.70	66.03					73.71	62.50	100.00	8.
								(1982)	(1984)				(1981)					
25																	100.00	100.00
27	22.13	5.20						2.38	0.19								100.00	94.
	(1980)						(1982)	(1984)										
28	0.49	0.11			-	1.08					0.53	-	0.91	0.78	1.46	13.04	100.00	84.
	(1980)									(1982)	(1981)	(1980)						
29															68.28	72.53	100.00	27.
														(1981)				
30					2.07	9.87					1.57	0.88			-	10.80	98.43	78.
				(1980)														
31	74.50	34.74			1.52	0.17	5.66	10.90	1.92	1.74	1.48	1.49	3.22	4.18	4.76	8.73	55.36	50.
				(1980)	(1980)	(1980)												

Contd...

Industry code	*Meerut*		*Bulandshahar*		*Rohtak*		*Sonepat*		*Gurgaon*		*Karnal*		*Mahendragarh*		*Alwar*		*Delhi*	
	1979	*1983*	*1979*	*1983*	*1979*	*1983*	*1979*	*1983*	*1979*	*1983*	*1979*	*1983*	*1979*	*1983*	*1979*	*1983*	*1979*	*1983*
32	-	2.15	-	1.65	-	1.07	- (1984)	0.88	0.87	12.22	62.43	47.59	-	0.93	5.67	15.06	32.07	23.
33	0.75	0.69			35.60	21.23 (1980)	3.02 (1981)	2.62	12.70	7.71 (1982)	12.39 (1984)	14.15	0.74	0.21	13.54	21.95	37.72	31.
34	29.29	-6.50			1.11	- (1982)	0.91 (1984)	0.28			9.37	21.91	0.23 (1980)	- (1984)	3.62	4.95	60.00	84.
35	0.83	2.97			0.86	1.79	- (1982)	0.79	0.31 (1984)	0.26	5.05	14.60 (1984)	1.12 (1982)	0.56 (1984)	14.38	12.14	92.13	79.
36	0.44 (1984)	0.11							(1980)	(1984)	0.21	0.18 (1981)	(1984)		0.40	3.36	99.56	100.
37	7.43 (1982)	15.10									2.10	2.10	(1980)	(1984)	14.08	47.70	97.90	97.
Share of each disrict in NCR a whole	0.23	2.70	0.81	1.35	3.06	2.45	2.74	1.96	2.00	2.20	2.80	2.80	0.66	0.93	2.37	6.81	79.33	78.

Note: Name of the industry with reference to code number is given in Annexure A.IV.1

Table 4.7

Location Quotient (Output)

Industry code	Meerut		Bulandshahar		Rohtak		Sonepat		Gurgaon		Karnal		Mahendragarh		Alwar		Delhi	
	1979	1983	1979	1983	1979	1983	1979	1983	1979	1983	1979	1983	1979	1983	1979	1983	1979	1983
20-21	1.17	0.86	4.46	2.15	1.26	0.75 (83)	.06	2.52	0.19	0.30	0.64 (81)	0.36	.19	0.01	.45	0.34	0.87	0.45
22	0.45	0.76													.27	1.65	1.33	1.73
														(80)				
23					3.50	4.52			3.63	4.09	1.44	1.52					0.75	0.90
24	0	0	0	0	0	0	0 (83)	17.75 (82)	20.56	18.38	0	0	0 (81)	0	20.80	15.76	1.37	0.81
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.37	1.90
27	2.44	1.01	0	0	0	0	0	0	0.02	0.03	0	0	0	0	0	0	1.37	1.32
28	0.06 (80)	0.02		(83)	0.02	0.01	0	0	0	0 (82)	0	0.40 (80)	2.10	3.58	0.14	0.37	1.37	1.86
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (81)	13.96 (83)	1.11	1.37	1.90
30	0	0	0	0 (80)	0.17	0.82	0	0	0	0	0.39	0.12	0 (83)	0	1.41	1.59	1.35	1.65
31	5.58	6.51	0	0 (80)	0.16 (80)	0.06 (83)	0.70 (80)	1.21 (83)	1.14	0.76 (81)	0.23	0.78	0.10	0.10	1.17	1.55	0.83	1.27

Contd...

Industry code	Meerut		Bulandshahar		Rohtak		Sonepat		Gurgaon		Karnal		Mahendragarh		Alwar		Delhi	
	1979	1983	1979	1983	1979	1983	1979	1983	1979	1983	1979	1983	1979	1983	1979	1983	1979	1983
32	0	1.19	0	1.44 (83)	.09	0.09	0	0.07	0.37	14.23	34.94	22.53 (83)	1.01	1.15	6.33	4.17	1.02	0.60
33	0.10	0.03	0	0	5.23	4.58 (80)	4.83 (81)	0.09	1.96	0.84	3.56	2.80	0.12	0	4.18	1.70	0.77	0.75
34	1.00	0.80	0	0	0.27	0 (82)	4.57	0.03	0	0	1.71	1.95	0.40 (80)	0.42	0.72	1.22	1.12	1.61
35	0.23	0.43	0	0	0.02	0.03	0	0	0	0.08	0.92	0.68	0.31	0.45 (82)	0.20	0.49	1.29	1.77
36	0.03	0.02	0	0	0	0	0	0	0	0	0	0.03	0	0 (81)	0.16	0.27	1.37	1.38
37	1.57 (81)	0.51 (82)	0	0	0	0	0	0	0	0	0.56	0.20	0	0 (80)	1.88	1.40	1.34	1.79

Note: 1) Location equation is calculated as follows:

$$LQ \; \Sigma \; \frac{S_{ji}/S_i}{N_i/N}$$

where,

S_{ji} = Output variable of ith industry in jth region.
S_j = Total industrial output in jth region.
N_i = Output variable of ith industry in the NCR.
N = Industrial output in all the industries in the NCR.

2) Name of the industry with reference to code number is given in Annexure A.IV.1.

Table 4.8

Location Quotient (Employment)

District / Industry group	Meerut		Bulandshahar		Rohtak		Sonepat		Gurgaon		Karnal		Mahendragarh		Alwar		Delhi	
	1979	1983	1979	1983	1979	1983	1979	1983	1979	1983	1979	1983	1979	1983	1979	1983	1979	1983
20-21	2.58	3.11	6.34	5.34	.68	.53	.03	3.13	.12	.29	.10	.82 (81)	.30	.15	.30	.20	.51	.41
22	.62	1.31												(80)	1.79	1.00	1.28	1.28
23					3.90	5.64			3.85	3.73	1.38	1.46					.09	.86
24							(80)	21.05 (82)	8.49	9.04			(81)		20.36	9.25	1.34	.40
26																	1.34	1.52
27	2.10 (80)	.64						(82)	.63	.14							1.34	1.44
28	.09 (80)	0.05	(83)		.22	.15			(82)		- (80)	.15	1.63	1.18	.45	.60	1.34	1.44
29														(81)	10.22 (83)	6.45	1.34	1.52
30				(80)	.65	.43					.62	.20	(83)		1.31	.99	1.32	.40

Contd...

Industry code	*Meerut*		*Bulandshahar*		*Rohtak*		*Sonepat*		*Gurgaon*		*Karnal*		*Mahendragarh*		*Alwar*		*Delhi*	
	1979	*1983*	*1979*	*1983*	*1979*	*1983*	*1979*	*1983*	*1979*	*1983*	*1979*	*1983*	*1979*	*1983*	*1979*	*1983*	*1979*	*1983*
31	4.97	3.51		(80)	.28 (82)	.17 (83)	1.72 (84)	1.03 (33)	.33	.25 (81)	.57	.54	.35	.23	.76	1.93	.75	.85
32	-	.38	-	.78 (83)	.02	.03	-	1.28	.00	.31	3.42	1.76 (83)	.67	.08	1.28	.40	.23	.09
33	.10	.04			6.32	3.80 (80)	4.10 (81)	2.51	1.44	1.30	2.30	1.62	.28	-	5.86	3.20	.84	.77
34	2.45	1.04			.55	- (82)	3.96	.67			1.77	2.09	1.67 (80)	.19	.71	.87	.95	1.18
35	0.36	0.41			.08	.16	-	.26	-	.09	1.17	.81	4.97	7.26	.40	.89	1.24	1.36
36	0.00	.02									- (81)	.08			.18	.13	1.34	1.50
37	2.85 (81)	2.95 (82)									.60	.17		(80)	1.31	2.62	1.32	1.30

Note: Name of the industry with reference to code number is given in Annexure A.IV.1.

industries recorded a decline. The other industries have done fairly well with most of them showing an increasing trend (Table 4.4). They include tobacco, furniture, printing, paper, leather, rubber, basic metals, metal products, non-electrical machinery and electrical machinery industries.

Factors Affecting Location of Industries

The two broad factors which govern the choice of location of an industry relate to demand and supply. While demand relates to market conditions and tax incentives on finished goods, the supply factor covers production costs, *viz.*, costs of raw materials, fuel and energy, wages, transportation and taxes on inputs.

In this section, we present an empirical analysis of the effects of the relative importance of various locative influences on industries established in the National Capital Region. All the two-digit level industries in the region have been considered. The study includes the variables that affect supply, and consequently costs, and also factors that affect demand. In examining all these factors, special emphasis is laid on the effect of sales tax on the location of industry.

Using each variable, the following specification is estimated by applying the ordinary least squares (OLS) method:

$$Y = a+b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4$$

where,

Y = Location quotient,

X_1 = Input cost per rupee of output,

X_2 = Wage cost per rupee of output,

X_3 = Effective tax rate per rupee of output,[3]
X_4 = Deficiency in availability of electricity.

The OLS results of the above model as obtained for the different districts of the NCR are as follows.[4]

Meerut

$$Y = 41.3568 \underset{(-1.3734)}{-45.3743X_1} \underset{(-1.4210)}{-51.4441X_2}$$

$$31.6267X_3 + \underset{(-1.0235)}{0.4775X_4}^{**} \quad R^2 = 0.6468 \quad \underset{(2.0450)}{}$$

Rohtak

$$Y = 341.8862 \underset{(-8.8071)}{-323.9240X_1}^{*} \underset{(-9.2176)}{-570.2012X_2}^{*}$$

$$-425.2133X_3^{*} \underset{(-11.1197)}{-2.0445X_4}^{*} \quad R^2 = 0.9949$$

Karnal

$$Y = 108.0634 \underset{(-3.0917)}{-7.4137X_1}^{*} \underset{(-2.4411)}{-422.14650X_2}^{*}$$

$$173.3497X_3^{*} \underset{(4.0064)}{-4.0734X_4}^{*} \quad R^2 = 0.8286 \quad \underset{(-2.2432)}{}$$

Alwar

$$Y = -42.5381 \underset{(1.3411)}{+44.3708X_1} \underset{(1.7164)}{+138.4723X_2}^{**} +$$

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[3]The effective tax rate has been calculated by taking weighed average of all the commodities falling under each industry group. The weights have been assigned on the basis of the proportion of the gross turn-over of the commodities under each industry. As we have used ratio of tax yield/gross turnover, it takes care of the exemptions and concessions given under the Sales Tax Laws of each State.

[4]We have presented here the results which are statistically significant. The other results are shown in Annexure A.4.2.

	$68.0862X_3$*	$-0.0211X_4$	$R^2 = 0.4441$
	(2.0470)	(0.4795)	

Delhi

Y	=	0.8910 +	$0.1070X_1$	$-1.3351X_2$ +
			(0.2527)	(0.7710)
		$3.7285X_3$*	$-0.0451X_4$	$R^2 = 0.2547$
			(1.8687)	(0.9533)

Notes: * Significant at 5% level
** Significant at 10% level.

These results show that input costs have prevented the location of industries in some of the districts in Haryana. Likewise, for districts of Rohtak and Karnal, the wage cost has also been a deterrent. This could, in fact, have resulted because of low availability of raw materials and labour as well as transport bottlenecks existing in these areas. In contrast to Haryana, the cheap availability of labour (as shown by a positive value of X_2) has been helpful with regard to establishment of industrial units in Rajasthan for its Alwar district.

An important and more interesting fact revealed by these results relates to the sales tax factor. Among the significant results produced above, this factor, except for Meerut, has shown its influence for all the districts. The positive sign of the effective tax rate (measured in terms of per rupee of output), for most of these districts, implies that exemptions and concessions provided by their parent States do have their positive bearing on the location of industries. However, any generalisation with respect to the tax factor (and for other factors too) for the entire State is unwarranted in view of the existing inter-district variations even within the same State. Considering Haryana, for instance, it can be noted that unlike Karnal its other district, namely, Rohtak seems

to have suffered from higher effective tax rates.[5] This possibly might have adversely affected the location of industries in this particular district.

Yet another significant noticeable fact in these results pertains to Haryana. The negative sign of the power deficiency variable in the related results reaffirm the fact that industrial location in Haryana (unlike in U.P. for Meerut) has been hampered because of scarcity of power.

These results, though limited by their paucity of coverage, are yet broadly indicative of the influence of sales tax rates on the location of industries in most of the States of the NCR. Besides, these results also highlight the importance of infrastructure variables namely the cost of inputs, wage costs and power deficiency.

[5]The sign of X_3 is negative for this particular district.

Annexure A.4.1

CORRESPONDENCE BETWEEN INDUSTRIES AND COMMODITIES

Code No.	*Name of industry*	*Items*
(1)	*(2)*	*(3)*
20-21	Manufacture of Food	Atta, Maida, Suji, Sweet Meats, Namkin, Cooked food, Rawart, Gagak, Biscuits, Bread cakes, Pastries, and sugar products such as Sugar candy, Batasa, Getta sugar, Toys (Chini Ka Khilons) and Illaichi Dana.
22	Manufacture of Beverage, Tobacco and its products	1. Tobacco and its products - Exemp. 2. Tea pepared and coffee 3. Soda water, Lemonade, Fruit juice and other soft beverages. 4. Alcohol
23	Manufacture of Cotton Textile	
24	Manufacture of Wool, Silk and Synthetic Fibre Textile	

25-26	Manufacture if Jute, Hemp. Mesta Textiles & Manufactures of Textile products (including Wearing Apparel other than Footwear)	
27	Manufacture of wood & its products	Wood and timber of all kinds
28	Manufacture of Paper and Paper Products, Printing, Publishing and Allied Industries	1. Paper of all kinds 2. Card Board and Straw Board
29	Manufacture of leather and leather products	1. Foot wear of all kinds 2. Suit cases, etc.
30	Manufacture of rubber, plastic and coal products	1. Rubber hoses 2. Rubberised coir sheet, cushions Pillow mattresses & other articles made from rubberised coir 3. Plastic buckets Plastic basin Plastic soap case Plastic and other 4. Coal briquettes.
31	Manufacture of Chemical and its products	1. Chemical of all kinds including fuel gases 2. Chemical fertilisers
32	Manufacture of Non-metallic mineral products	1. All kinds of mineral

33	Basic metals and alloy industries	1. All kinds of ore, metals: scrap and alloys machinery sheet and circles used in the manufacture of brass.
34	Manufacture of metal products and parts except machinery and transport equipments	Metals of all kinds
35	Manufacture of machinery tools and parts except electrical machinery	Machinery and spare parts
36	Manufacture of electrical machinery, appliances & parts	All electrical goods
37	Manufacture of transport equipment and parts	Motor vehicles including motor cars, motor cycles motor vans, etc. Tractor and parts
38	Other manufacturing industries	1. Carpets 2. Hosiery 3. Medicines

Annexure A.4.2

RESULTS OF ORDINARY LEAST SQUARES

Years	*Intercept*	X_1	X_2	X_3	X_4	R^2	*D.F.*
(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*	*(7)*	*(8)*
			Meerut				
1979	35.6384	-39.571	-44.0723	-29.9039	+0.02218	0.3320	2
	(-0.5025)	(-6.4878)	(-0.3742)	(0.5367)			
1980	(-)5.9760	6.7974	2.3456	6.3831	.2915	0.3983	3
	(0.3632)	(0.1923)	0.4564	(0.7748)			
1981	41.3568	-45.3743	-51.4441	-31.6267	0.4775*	0.6468	4
	(1.3734)	(-1.4210)	(-1.0235)	(2.0450)			
1982	.68301	2.0917	-.04244	6.2492	-.0869	0.2099	3
		(0.509)	(-0.0962)	(0.3163)	(-0.1513)		

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1983	-20.1382	23.9016 (0.8845)	18.4736 (0.8170)	27.9254 (0.8432)	-0.0357 (-0.0906)	0.2804	3
1984	-1.2963	2.8025 (0.2154)	.3778 (0.0422)	3.7092 (0.2254)	.0205 (0.0670)	0.0567	5
			Rohtak				
1979	4.4390	3.4313 (0.9435)	-43.0255 (-1.1001)	-9.0196 (-0.3230)	-.06527 (-1.0458)	0.7265	1
1980	-6.2777	10.5876 (0.0673)	9.5796 (0.0376)	26.3426 (0.1562)	-.5391 (-0.5833)	0.5840	1
1981	341.8860	-324.9240 (-8.8071)	-570.2012 (-9.2176)	-425.2133 (-8.8333)	-2.0449 (-11.1197)	.9949	1
1982	72.6405	-63.4739 (-1.721)	-95.0561 (1.4414)	-26.4054 (-1.3115)	-1.1057 (-3.4468)	0.9766	1

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1983	12.1246	-6.6043	-24.1331	-23.4230	-.5174	0.5861	3
		(-0.2242)	(-.4401)	(-.4165)	(-1.4156)		
1984	18.4024	-13.3728	-23.0849	-18.2799	-.5420	0.5914	3
	(-.3929)	(-.5171)	(-.5646)	(-1.2454)			
			Gurgaon				
1984	21.1048	-18.8416	-52.2117	-13.6554	1.5315	0.4537	2
	(-1.1563)	(-1.2111)	(-0.9989)	(0.6389)			
			Karnal				
1979	484.9003	-473.7351**	-839.2125**	-443.8145	-2.5046**	0.7203	4
	(-1.9397)	(-2.0836)	(-1.3645)	(-1.5684)			
1981	108.0634	-97.4137*	-422.14650*	173.3497*	-4.0754*	0.8286	4
	(-3.0917)	(-2.4411)	(4.0064)	(-2.2332)			
1981	13.1026	16.1259	-45.9973	68.3141	-.2635	0.4985	4
	(-1823)	(-0.3033)	(0.6442)	(-.2784)			

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1982	-9.8957	8.7782	71.0282	18.1665	.5031	0.0388	5
	(0.3018)	(0.2179)	(0.4321)	(0.1753)			
1983	110.6962	-107.9899	-177.8247	-91.5175	-.6314	0.2855	4
	(-0.7643)	(-0.6133)	(-0.5357)	(0.3527)			
1984	24.2772	-15.3401	-155.9089	106.2973**	-1.7988	0.459	5
	(0.8225)	(41.1853)	(1.9962)	(-1.2356)			
			Alwar				
1980	0.1830	2.6714	4.8362	7.0700	-0.0151	0.3159	0.1915	4
	(0.0570)	(0.4219)	(1.0937)	(0.3802)			
1981	0.1342	2.2306	64.7705	16.2653	-0.0714	0.2517	0.1365	5
		(0.3446)	(0.5798)	(1.0459)	(0.9431)		
1982	-42.5381	44.3708	138.4723**	68.0862	-0.0211	0.4441	0.3674	7
		(1.3411)	(1.7164)	(2.0470)	(0.4759)		

(1)	(2)		(3)	(4)	(5)	(6)	(7)	(8)
1983	1.10669	4.9952 (0.1640)	-16.7850 (0.2945)	0.4483 (0.0350)	-0.1132 (0.4897)	0.0524	-0.0739	3
1984	-49.9060	54.8579	144.2618	52.8994	-0.0307	0.3257	0.2357	7
				Delhi				
1979	1.1305	-0.1825 (0.9996)	0.5445 (0.3385)	1.2611 (0.9862)	0.0173 (0.3580)	0.1507	-0.1582	11
1980	1.4933	-0.2703 (0.7435)	-1.4129 (1.1320)	0.2213 (0.8942)	-0.0241 (0.5762)	0.1819	-0.1156	11
1981	1.5817	-0.5887 (1.0003)	-1.6829 (1.2039)	1.3946 (0.9548)	-0.0238 (0.5100)	0.2547	-0.0164	11
1982	0.8910-	0.1070 (0.2527)	-1.3351 (0.7710)	3.7285* (1.8687)	-0.0451 (0.9533)	0.5117	0.3341	11

(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*	*(7)*	*(8)*
1983	4.3079	-3.3162 (0.9619)	-5.7034 (1.1006)	-2.0879 (0.4334)	-0.0078 (0.1214)	0.2398	-0.0366	11
1984	0.9024	0.5202 (0.1062)	-1.6264 (0.2261)	2.4872 (0.5028)	0.0071 (0.0781)	0.2551	-0.0158	11

Notes: ** Significant at 10 per cent level.
* Significant at 5 per cent level.

Chapter 5

Variations in Tax Rates and Diversion of Trade

Marked differences in the tax structures of the constituent regions make the task of framing a viable tax policy for the NCR, a difficult one. There is lack of uniformity in the levy of three major taxes viz., the State's general sales tax, the Central sales tax[1] and octroi. As mentioned earlier, such variations lead to a possible diversion of trade. In this context, we analyse in this chapter the existing structure of trade in Delhi, the structure of trade and commerce in the other districts of the NCR, and the effects of taxes on the concentration of trade in Delhi.

Concentration of Wholesale Trade in Delhi

Approximately three-fourths of the trade of the NCR is conducted in Delhi alone. According to the Wholesale Merchants Association, in 1981, there were about 24,600 wholesale establishments in Delhi.[2] An analysis

[1]Under the provisions of the Central Sales Tax, as per section 8(5), the States are empowered to reduce the CST rate. This provision has been used by the States to reduce the rate of CST on many commodities. This causes variation in the CST rates.

[2]National Capital Region (1986), *Interim Development Plan*, New Delhi, p. 51.

of their composition shows that the largest number of shops (i.e., 17.8 per cent) were in textiles and textile products. The other major commodities were auto, motor parts and machinery (16.3 per cent), fruits and vegetables (7.1 per cent), hardware and building materials (5.5 per cent), paper, stationery and books (4.9 per cent), general merchant and *kiryana* (4.5 per cent) and iron and steel (3.5 per cent). All these items, as shown in Annexure A.5.1 account for 60 per cent of the wholesale establishments.[3]

Most of the wholesale markets are located in the Chandni Chowk area and were established during the late 19th and early 20th century (Annexure A.5.2). The distribution of markets among different areas of Delhi shows that most of the shops are located in Old Delhi (58 per cent) and Civil Lines (22.4 per cent). In these areas there are 1,122 and 508 shops respectively, per lakh of population (Annexure A.5.3). A survey of trade and commerce conducted in 1959 indicated that the share of urban Delhi in total sales of most of the commodities was between 20 and 40 per cent, except in spices and provisions in which it was 66 per cent. It also revealed that of all the trade and commerce establishments in urban Delhi 21.3 per cent were dealing with wholesale business and the share of old Delhi in the wholesale business was as high as 92 per cent.

Delhi, as a predominantly redistributive centre, procures most of the commodities from all over the country and some also from abroad. Similarly, these commodities are not consumed in Delhi but distributed to various parts of the country as well as exported from India (Table 5.1).

The redistributive character of trade in Delhi has

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[3]Delhi Development Authority (1983), *Wholesale Markets: Perspective Development and Plan, Delhi 2001*, Perspective Planning Wing, New Delhi pp. 1-2.

Table 5.1

Wholesale Trade in Delhi - 1959
Area of Distribution

S. no.	Name of commodities*	Urban Delhi (less than 5 miles radius)	Delhi Metropolitan area (5-25 miles radius)	Region (25-100 miles radius)	Northern India (100-500 miles radius)	Rest of India
1.	Foodgrains	40.00	-	5.00	5.00	50.00
2.	Spices, provisions etc.	66.00	33.33	-	-	-
3.	Hosiery toilets etc.	25.70	17.20	14.30	22.80	20.00
4.	Cloth	38.60	26.30	10.50	15.80	8.00
5.	Paper and stationery	24.40	22.20	20.00	17.80	15.60
6.	Watches, radios etc.	22.20	22.20	11.10	22.20	22.30
7.	Electrical goods	24.20	21.30	18.20	24.20	12.10
8.	Iron and steel	25.00	16.70	16.70	25.00	16.60
9.	Chemicals and drugs	30.80	15.40	7.70	19.20	26.90
10.	Sanitary goods	20.00	20.00	20.00	20.00	20.00
11.	Automobiles & spare parts	26.90	19.30	11.50	23.10	19.20
12.	Industrial machinery	20.00	20.00	20.00	20.00	20.00
13.	Leather & footwear	20.00	20.00	20.00	20.00	20.00

Note: *Other major commodities not shown here are films, toys, ready-made garments, plywood & timber, glass-sheets, crockery etc.

Source: '*Regional Plan of the Capital Region*', Table 4.3.7

Table 5.2

Distributive Trades in Delhi 1969-70

Sl. no.	Name of wholesale trade	*Total sales yearly (in Rs (crore)*	*Sales outside (%)*
1.	a. Fruits & vegetables (Subzi Mandi)	144	55
	b. Fruits & vegetables (Phool Mandi)	4	-
2.	Dry fruits, spices, herbs etc.	125	90
3.	Cloth	100	95
4.	Fur, skin and wool	15	98
5.	Motor parts and machinery	10	70-90
6.	Timber:		
	a. D.B. Gupta Road	7	44
	b. Lakar Mandi, Motia Khan	N.A.	5-10
7.	Hosiery	5	80
8.	Glass sheets	5	80
9.	Fodder	4	25-30
10.	Iron scrap and junk	2	25
11.	Bicycles, tyres and tubes	1	95
12.	Iron and steel:		
	a. Chawri Bazar	1	70
	b. Loha Mandi, Motia Khan	N.A.	N.A.
13.	Foodgrains	N.A.	-
14.	Cotton	N.A.	10-15
15.	Hardware	N.A.	10-15
16.	Electricals	40	75
17.	Radio components	30	45
18.	Films	7	75
19.	Drugs and pharmaceuticals	40	50
20.	Surgicals	2	90
	TOTAL	542	-

Source: *National Capital Region Plan*, Table 4.3.8.

further strengthened over the years. This is revealed from a quick reconnaissance survey conducted by the Town and Country Planning Organisation in 1969-70 (Table 5.2). The notable exception is the foodgrains trade where Delhi has lost to other markets, due to the creation of food-zones. Delhi has a very large share in the regional market in some commodities like bicycles, fresh fruits and vegetables, furs, skins and wool, motor parts and machinery and iron and steel. However, in timber, glass-sheets, fodder, iron scrap and junk, and cotton, the share of Delhi is small.

A survey of movement of goods by all modes of transport to and from Delhi, conducted by the Rail India Technical Services (RITES) in 1978-79[4] reveals that foodgrains, bamboo, timber and other woods, chemicals and chemical products, cotton textiles, iron and steel, and non-ferrous metals amounted to nearly 60 per cent of the total value of imports into Delhi. Among its exports, foodgrains, chemicals and chemical products, transport equipment and raw materials accounted for 65 per cent of the total value (Table 5.3). Another study prepared by the Perspective Planning Wing of the Delhi Development Authority (DDA) for the movement of goods through National Highways conducted in 1981 revealed that in some of the commodities, the percentage of exports outside Delhi is as high as 80. Such commodities are: cycles and cycle parts, tyres and tubes, automobile parts, raw cotton, textile products, leather manufactures, radio, TV parts, fruits and vegetables, agro-based raw materials, edible oils, electrical and

[4]To derive values from data on physical quantities given by the RITES, the study of the National Institute of Public Finance and Policy has used the wholesale prices and converted the RITES classification into Revised Trade Classification. We have used the data presented by the NIPFP. See NIPFP (1984), *Sales Tax System in Delhi*, New Delhi, pp. 17-24 and 36.37 (Mimeo).

Table 5.3

Structure of Trade in Delhi by Selected Major Commodity Groups (1978-79)

(Rs crore)

Sl. No.	Commodity groups	Imported into Delhi		Exported from Delhi	
		Estimated value	Percentage of total imports	Estimated value	Percentage of total exports
(1)	(2)	(3)	(4)	(5)	(6)
1.	Food and food preparations				
	Food-grains	317.85	30.23	234.04	27.75
	Milk and milk products	199.04	18.93	50.87	6.03
	Sugar, gur and molasses	54.75	5.21	149.73	17.75
	Salt	1.78	0.17	0.31	0.04
	Tea and coffee	245.06	23.31	264.03	31.31
	Edible oils	232.90	22.15	144.43	17.12
	Total	1051.38	100.00	843.41	100.00
2.	Fruits and vegetables	297.06	100.00	180.86	100.00
3.	Crude materials				
	Hides, skins and bones	5.09	0.47	1.97	2.53
	Bamboo, timber and Other wood	1072.30	99.53	75.96	97.47
	Total	1077.39	100.00	77.93	100.00
4.	Chemicals and chemical products including Pharmaceuticals				
	Paints and dyes	127.95	14.93	38.67	5.92
	Coaltar and bitumen	12.81	1.49	3.80	0.58

	Chemicals and drugs	716.38	83.58	610.98	93.50
	Total	857.14	100.00	653.45	100.00
5.	Manufactured goods				
	Leather manufactures	80.62	8.44	71.91	43.70
	Cotton textiles	865.37	90.64	70.18	42.64
	Jute manufactures	8.75	0.92	22.48	13.66
	Total	954.74	100.00	164.57	100.00
6.	Transport equipment				
	Automobile parts	232.06	31.83	242.74	54.85
	Tyres and tubes	438.03	59.40	153.59	34.71
	Cycle and cycle parts	63.88	8.77	46.21	10.44
	Total	728.97	100.00	442.54	100.00
7.	Raw materials (Auto-based)				
	Oil seeds	30.83	3.94	11.13	2.72
	Sugarcane	0.22	0.03	0.04	0.01
	Raw cotton	745.06	95.16	392.67	95.93
	Jute raw	0.11	0.01	0.43	0.11
	Tobacco	6.71	0.86	5.07	1.24
	Total	*782.93*	*100.00*	*409.34*	*100.00*

Source: NIPFP (1984), *Sales Tax System in Delhi*, New Delhi, pp. 22-23.

electronic goods, chemicals, food and spices and surgical and scientific instruments (Annexures A.5.5 and A.5.6).

Wholesale Trade in Uttar Pradesh, Haryana and Rajasthan Regions of the NCR

The wholesale trade of the NCR (excluding Delhi) is concentrated mainly in the constituent districts of Uttar Pradesh. The share of trade of this State in the total amounts to 83.83 per cent. The next in order is Haryana, with 12.42 per cent of the trade; Rajasthan has a negligible share.

There are 14 wholesale markets in Uttar Pradesh,

where more than half of the trade of the NCR excluding Delhi is transacted. The survey conducted by the Town and Country Planning Department of Uttar Pradesh shows that Meerut is the most important town of this sub-region and has a prominent place in wholesale trade in several items like foodgrains and pulses, vegetables and fruits, cloth and timber. Two other important markets are Hapur and Baraut, accounting for 18.5 per cent and 15.2 per cent share respectively, of the total trade in the region. The major items traded in Hapur are foodgrains, timber, vegetables and fruits, and utensils. The items traded in Baraut are foodgrains, iron and steel and dairy products. The other notable markets are Khurja, Ghaziabad and Bulandshahar which account for a little less than 5 per cent each. Apart from some items mentioned above, commodities special to Khurja are pottery and wares and to Ghaziabad machinery items and bicycles (Table 5.4).

The towns in the Haryana sub-region of the NCR have comparatively small distributive functions, though many of the markets of these towns were established even before 1920. Rewari has five distributive trades, Rohtak has four and other districts have less. The main commodities handled are fruits and vegetables, grains, timber products, cloth and utensils.[5] The distribution of these commodities is mainly in the local areas excepting foodgrains which are exported in large quantities to many States. Table 5.5 indicates that Sonepat contributes approximately 38 per cent of the total trade in three commodities, *viz.*, fruits and vegetables, grains and cloth. The wholesale trade in grains is the most important one and has a business of Rs 10 crore per annum. About 55 per cent of the marketed grains go

[5]Government of Haryana (1970), *Distributive Trade in Haryana*, Town Planning Department quoted in NCR Regional Plan, *op. cit.*, New Delhi.

outside the State. The cloth trade is worth about Rs 1.5 crore.[6] The other important towns from the point of view of trade in Haryana sub-region are Rohtak, Rewari and Panipat. These towns contribute 28, 24 and 10 per cent of the total trade, respectively. Rewari has five trades, the most important of which is the cloth trade. This trade turns out an annual business of Rs 4 crore. The utensil trade stands second. The trade in grains is important inasmuch as it exports 75 per cent of traded commodities out of the State. Rohtak is an important centre for the wholesale trade in grains. The other important items traded are cloth and fruits and vegetables. Panipat is important in regard to trade in foodgrains where the turnover amounts to Rs 2.8 crore. The other towns in this sub-region are Bahadurgarh and Gurgaon. Both these towns deal mainly in grains.

According to the shopping survey conducted by the Town Planning Department, Rajasthan, the wholesale trade in Alwar in 1966 contributed a major share to the total commercial activity of the district. The town is a flourishing distribution centre for the products which are locally manufactured. These include food and allied products, chemicals, agricultural implements, etc. The other important NCR town in the NCR region of Rajasthan is Khairtal with 110 wholesale shops dealing in wheat, barley, grain and mustard seeds. The largest quantity handled is that of mustard seeds.

Factors Affecting Concentration of Trade in Delhi

Over the years, Delhi has become the *entrepot* for North India for a number of commodities. The concentration of trade in Delhi is due to a variety of factors. First, Delhi as the capital city is the centre of political as well as administrative power. Second, the

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[6]NCR Regional Plan, *op.cit.*, p. 197.

Table 5.4

Distributive Trades in the U.P. Sub Region (1970)

Sl. no.	Commodities	Baraut			Hapur			Ghaziabad			Khurja		
		Amount of business (Rs lakh)	% of business out side	No. employed	Amount of business (Rs lakh)	% of business out side	No. employed	Amount of business (Rs lakh)	% of business out side	No. employed	Amount of business (Rs lakh)	% of business outside	No. employed
1.	Foodgrains and pulses	2050	85	2500	2035	80	700	85	40	150	600	50	70
2.	Dairy products	22	Nil	20	-	-	-	-	-	-	14	70	20
3.	Vegetables, fruits	-	-	-	200	88	500	35	30	70	25	25	64
4.	Oil and oil products	5	Nil	630	22	25	50	-	-	-	-	-	-
5.	Cloth	2	Nil	13	70	40	400	-	Nil	3	80	Nil	36
6.	Tobacco	7	Nil	30	-	-	-	-	-	-	-	-	-
7.	Kerosene, diesel etc.	16	Nil	10	-	-	-	-	-	-	-	-	-

Sl. no.	Commodities	Baraut			Hapur			Ghaziabad			Khurja		
		Amount of business (Rs lakh)	% of business out side	No. employed	Amount of business (Rs lakh)	% of business out side	No. employed	Amount of business (Rs lakh)	% of business out side	No. employed	Amount of business outside (Rs lakh)	% of business outside	No. employed
8.	Stoneware, pottery	-	-	-	-	-	-	-	-	-	200	48	500
9.	Metal vessels etc.	-	-	-	125	40	250	-	-	-	-	-	-
10.	Iron and steel products agricultural implements	28	60	166	-	-	-	30	15	30	-	-	-
11.	Bicycles	-	-	-	-	-	-	14	-	40	-	-	-
12.	Timber	-	-	-	200	65	500	-	-	-	-	Nil	20
13.	Machinery	-	-	-	-	-	-	250	50	1250	-	-	-
14.	Cement, fertilizers, etc.	15	Nil	100	-	-	-	-	-	-	-	-	-
15.	Woods	-	-	-	-	-	-	-	-	-	-	-	-
	Total	2145	-	3469	2652	-	2400	414	-	1543	919	-	710

Table 5.4 (Contd.)

Sl. no.	Commodities	Bulandshahar			Pilkhua			Dhankaur			Modinagar		
		Amount of business (Rs lakh)	% of business out side	No. employed	Amount of business (Rs lakh)	% of business out side	No. employed	Amount of business (Rs lakh)	% of business out side	No. employed	Amount of business (Rs lakh)	% of business outside	No. employed
1.	Foodgrains and pulses	175	30	70	40	Nil	80	75	43	300	15	Nil	80
2.	Dairy products	-	-	-	-	-	-	-	-	-	2	20	12
3.	Vegetables, fruits	35	20	40	-	-	-	0	10	50	-	-	-
4.	Oil and oil products	-	-	-	-	-	-	-	-	-	-	-	-
5.	Cloth	110	Nil	20	800	75	700	20	Nil	550	6	Nil	6
6.	Tobacco	-	-	-	-	-	-	-	-	-	-	-	-
7.	Kerosene, diesel, etc.	-	-	-	-	-	-	-	-	-	-	-	-
8.	Stoneware, pottery	-	-	-	-	-	-	-	-	-	-	-	-

Sl. no.	Commodities	Bulandshahar			Pilkhua			Dhankaur			Modinagar		
		Amount of business (Rs lakh)	% of business out side	No. employed	Amount of business (Rs lakh)	% of business out side	No. employed	Amount of business (Rs lakh)	% of business out side	No. employed	Amount of business (Rs lakh)	% of business outside	No. employed
9.	Metal vessels etc.	-	-	-	-	-	-	-	-	-	-	-	-
10.	Iron and steel products, agricultural implements	14	15	9	-	-	-	-	-	-	-	-	-
11.	Bicycles	-	-	-	-	-	-	-	-	-	-	-	-
12.	Timber	7	17	36	-	-	-	-	Nil	20	-	-	-
13.	Machinery	-	-	-	-	-	-	-	-	-	-	-	-
14.	Cement, fertilizers, etc.	-	-	-	-	-	-	-	-	-	-	-	-
	Total	341	-	175	840	-	780	95	-	920	23	-	98

Table 5.4 (Contd.)

Sl. no.	Commodities	Anupshahar			Meerut			Amount of business in (Rs lakh)	Total no. employed
		Amount of business (Rs lakh)	% of business outside	No. employed	Amount of business (Rs lakh)	% of business outside	No. employed		
1.	Foodgrains and pulses	190	15	15	3020	10	675	8285	4640
2.	Dairy products	-	-	-	-	-	-	38	52
3.	Vegetables, fruits	1	10	17	94	4	265	390	1006
4.	Oil and oil products	-	-	-	-	-	-	27	680
5.	Cloth	-	-	-	3500	33	1100	4588	2828
6.	Tobacco	-	-	-	-	-	-	7	30
7.	Kerosene, diesel etc.	-	-	-	-	-	-	16	10
8.	Stoneware, pottery	-	-	-	-	-	-	200	500
9.	Metal vessels, etc.	-	-	-	-	-	-	125	250

Sl. no.	Commodities	Anupshahar			Meerut			Amount of business in (Rs lakh)	Total no. employed
		Amount of business (Rs lakh)	% of business outside	No. employed	Amount of business (Rs lakh)	% of business outside	No. employed		
10.	Iron and steel products agricultural implements	-	-	-	1200	Nil	60	1272	265
11.	Bicycles	-	-	-	-	-	-	14	40
12	Timber	-	-	-	506	Nil	125	713	701
13.	Machinery	-	-	-	-	-	-	250	1250
14.	Cement, fertilizers etc.	-	-	-	-	-	-	15	100
15.	Woods	-	-	-	410	Nil	200	410	200
	Total	191	-	32	8730	-	2425	16351	12552

Source: Government of Uttar Pradesh, Town and Country Planning Department, Lucknow.

Table 5.5

Distributive Trades in the Haryana Sub-Region (1970)

Sl. no.	Commodities	Rohtak			Sonepat			Bahadurgarh			Gurgaon		
		Amount of business (Rs lakh)	% of business out side	No. employed	Amount of business (Rs lakh)	% of business out side	No. employed	Amount of business (Rs lakh)	% of business out side	No. employed	Amount of business (Rs lakh)	% of business outside	No. employed
1.	Fruits and vegetables	50	Nil	200	10	5	100	-	-	-	-	-	-
2.	Grains	395	33	450	1000	55	1000	N.A.	N.A.	150	N.A.	20	65
3.	Timber and stone	110	20	N.A.	-	-	-	-	-	-	-	-	-
4.	Utensils	-	-	-	-	-	-	-	-	-	-	-	-
5.	Cloth	300	20	250	150	40	150	-	-	-	-	-	-
	Total	855	-	900	1160	-	1250	N.A.	N.A.	150	-	-	65

Table 5.5 (Contd.)

Sl. no.	*Commodities*	*Rewari*			*Panipat*			*Total*	
		Amount of business (Rs lakh)	*% of business out side*	*No. employed*	*Amount of business (Rs lakh)*	*% of business out side*	*No. employed*	*Amount of business (Rs lakh)*	*No. employed*
1.	Fruits and vegetables	60.	20	225	10.	55	40	130	565
2.	Grains	N.A.	75	465	280	2	380	1675	2510
3.	Timber and stone	35	15	31	-	-	-	145	31
4.	Utensils	250	55	825	-	-	-	250	825
5.	Cloth	400	45	350	10	Nil	50	860	800
	Total	745	-	1896	300	-	470	3060	4731

Source: Government of Haryana (1970), *Distributive Trade in Haryana*, Town Planning Department.

availability of requisite infrastructure (such as banking activities, warehouses, transport, communication facilities, marshalling yards) has helped the growth of wholesale trade. Third, variations in tax rates among the neighbouring districts and relatively low transportation costs have contributed considerably to the diversion of trade to Delhi.[7] Fourth, prices of commodities (exclusive of tax) in the two markets, i.e., in Delhi and the neighbouring districts, are also found to be different, with Delhi enjoying, in general, lower wholesale prices. This encourages not only dealers but consumers too, to come to Delhi for bulk purchases. Finally, weakness in the administration of sales tax is believed to be an important factor in the movement of goods and consequent diversion of trade. There is a general feeling that both dealers and consumers from the neighbouring areas make bulk purchases mostly without payment of tax. These goods are then carried out as personal baggage, often for sale in local areas without payment of the local tax too. Finally, the provisions of the Central Sales Tax also causes unnecessary movement of goods to Delhi. In this regard, it is worthwhile to note that in Delhi the CST rate on re-export of goods is 2 per cent whereas in all neighbouring State this rate is 4 per cent.[8]

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[7]This has been convincingly demonstrated in a recent study pertaining to the States in the USA which suggests that the variations in sales tax rates in the neighbouring areas induced a substantial shift in the geographic location of sales decisions. See Fox, William F. (1986), "Tax Structure and Location of the Economic Activity Along State Borders", *National Tax Journal*, Vol. 39, No. 4, December, pp. 387-401.

[8]See S.O. 524 dated the February 1967, substituted by Notification S.O. 612(E) dated 21.10.1975.

Annexure A.5.1

DISTRIBUTION OF WHOLESALE SHOPS BY COMMODITIES IN URBAN DELHI - 1981

Sl. no.	*Commodity*	*Total shops*	*Per cent*	*Shops per lakh population*
1.	Textile and textile products	2142	17.8	39
2.	Auto, motor parts and machinery	1965	16.3	36
3.	Fruits and vegetables	858	7.1	16
4.	Hardware and building materials	659	5.5	12
5.	Paper, stationery and books	590	4.9	11
6.	General merchant and kiryana	541	4.5	10
7.	Iron and steel	423	3.5	8
8.	Bicycles, tyres and tubes	411	3.4	8
9.	Electrical and electronics	405	3.4	7
10.	Chemicals	365	3.1	7
11.	Rubber and plastic goods	333	2.8	6
12.	Scrap material (kabari)	319	2.7	6
13.	Hosiery	299	2.5	5
14.	Leather, fur, skin and woollen products	289	2.4	5
15.	Other metal products	268	2.2	5
16.	Timber and plywood	263	2.2	5

Sl. no.	*Commodity*	*Total shops*	*Per cent*	*Shops per lakh population*
17.	Food grains	252	2.1	5
18.	Other food material	230	1.9	4
19.	Radio, T.V., parts and accessories	209	1.7	4
20.	Cosmetics and toiletries	201	1.7	4
21.	Furniture and fixtures	185	1.5	3
22.	Dry fruits and spices	148	1.2	3
23.	Crockery and utensils	142	1.2	3
24.	Oil, ghee etc.	126	1.1	2
25.	Footwear	110	0.9	2
26.	Pan, bidi, cigarette	71	0.6	1
27.	Watch, clock, opticals	69	0.6	1
28.	Fedder and straw	47	0.4	1
29.	Medicines	34	0.3	1
30.	Surgical and scientific instruments	28	0.2	1
31.	Seeds	18	0.1	1
32.	Cotton	14	0.1	1
33.	Others	15	0.1	1
	TOTAL	12,029	100.0	221

Note: Shops - includes only regular/built-up shops.
Source: Quoted as Annexure I-A in Perspective Planning Wing, DDA, January 1983.

Annexure A.5.2

WHOLESALE MARKETS IN DELHI BY TYPES, YEAR OF ESTABLISHMENT AND LOCATION

Sl. no.	*Commodity*	*Year of establishment*	*Location*
1.	Hardware	1840	Chawri Bazar
2.	Dry fruits, spices, herbs etc.	1850	Khari Baoli
3.	Fur, skin and wool	1890	Motia Khan, Bahadurgarh Road
4.	Cloth	1893	Chandni Chowk, Nai Sarak
5.	Food-Grains	1905	Naya Bazar, Mod Ganj, Rui Ki Mandi
6.	Cotton	1913	Mod Ganj, Rui Ki Mandi
7.	Bicycles, tyres and tubes	1918	Esplanade Road, Lajpat Rai Market, Chandni Chowk
		1970	Jhandewalan
8.	Glass sheets	1924	Fatehpuri, D.B. Gupta Marg
9.	Hosiery	1930	Sadar Bazar
10.	Iron scrap & junk (Kabar)	1933	Jhandewalan Road
11.	Old motor parts and machinery	1933	Jhandewalan Road (Motia Khan)
12.	Fruits and vegetables	1943 & 1869	Subzi Mandi and Phool Mandi
		1968	Mandi, Azadpur
13.	Timber	1945	D.B. Gupta Road,

Sl. no.	*Commodity*	*Year of establishment*	*Location*
			Teliwara
		1968	Kirtinagar
14.	Iron & steel	1975	Naraina
15.	Fodder	1954	Zakhira, Near Daya Basti Railway Station
16.	Medicines	1947	Bhagirath Place
17.	Surgical instruments	1949	Bhagirath Place.

Source: Delhi Development Authority (1983), *Wholesale Markets Perspective Development Plan. Delhi - 2001'* Perspective Wing DDA, January 1983.

Annexure A.5.3

DISTRIBUTION OF COMMODITY HANDLING WHOLESALE SHOPS (1981)

	Division	*Number*	*Per cent*	*Per lakh population*
A	Old Delhi	6979	58.0	1122
B	Karol Bagh	880	7.3	155
C	Civil Lines	2698	22.4	508
D	New Delhi	55	0.5	11
E	Shahadara	768	6.4	85
F	South Delhi	105	0.9	13
G	West Delhi	493	4.1	59
H	North-West Delhi	51	0.4	11
Total Urban Delhi		12029	100.0	221

Source: Quoted as Annexure IC in *Wholesale Markets Perspective Development Plan Delhi 2001*, DDA, January 1983.

Annexure A.5.4

DISTRIBUTIVE TRADES IN DELHI - ORIGIN & DESTINATION OF COMMODITIES (1969)

Sl. No.	*Distributive trades*	*Procurement area*	*Distributive area*
(1)	*(2)*	*(3)*	*(4)*
1.	Fruits & vegetables	Afghanistan, Jammu and Kashmir, Haryana, Punjab, Uttar Pradesh Bombay, Rural Delhi, Jaipur, Himachal Pradesh, Andhra Pradesh	Delhi Metropolitan Area, Kanpur, Lucknow, Bareilly, Northern and Southern India
2.	Foodgrains (Coarse)	Haryana, UP, MP, Punjab Rajasthan	Delhi, MP, UP, Bihar, Maharashtra, Gujarat, West Bengal, AP, Kerala, Madras Mysore

(1)	(2)	(3)	(4)
2a.	Wheat and rice	-do-	Delhi
3.	Fodder	Haryana, Punjab, MP, Rajasthan	Delhi, UP, Rajasthan, Bihar
4.	Cloth	Bombay, Ahmedabad, Indore Kanpur, Delhi, Modinagar Punjab	Punjab, Haryana, Rajasthan HP, UP, MP, Bihar, Orissa, Assam, West Bengal, Delhi
5.	Bicycles, tyres and tubes	Bombay, Calcutta, Kerala Madras, Bengal, Sonepat	UP, MP, Assam, Haryana, Punjab, Bombay, Delhi
6.	Dry fruits, spices, herbs, etc.	Iran, Afganistan, J&K, UP, MP, S.India, Maharashtra, Gujarat	Delhi & area of 200 miles radius, J&K, Western UP, Rajasthan, Haryana
7.	Hosiery	Delhi, Calcutta, Kanpur, Ludhiana, Bombay	Delhi, Punjab, HP, MP, UP, Bihar, Rajasthan, Kashmir
8.	Timber	MP, HP, J&K, Maharashtra	Delhi, Punjab, UP, Haryana, Rajasthan

(1)	(2)	(3)	(4)
9.	Cotton	Hissar and other districts of Haryana	Delhi, Uttar Pradesh
10.	Iron scrap & junk	COD Cantt., Delhi, Rly. Depot Shakurbasti and such other depots through out India	Delhi, Punjab, Haryana, Rajasthan, UP, MP
11.	Old motor parts and machinery	Delhi, Bombay, Allahabad Kanpur	Delhi, Punjab, Haryana, Rajasthan, UP
12.	Iron and steel	Hindustan Steel TISCO, ISCO, Calcutta, Govindgarh, Faridabad	Delhi, Rajasthan, UP Punjab, Haryana
13.	Hardware	Delhi, Calcutta, Bombay	Delhi, Punjab, Haryana, UP
14.	Furs, skins and wool	Delhi, Rajasthan, Punjab, Jaipur, UP	Europe, America, Russia, Madras, Panipat, Delhi
15.	Glass sheets	Faridabad, Calcutta, Ahmedabad	Delhi, Punjab, Haryana, Rajasthan, UP

(1)	(2)	(3)	(4)
16.	Oil	-	-
17.	Electrical goods	Delhi, Bombay, Calcutta, Patna, Kanpur	Haryana, UP, MP, Punjab and neighbouring areas
18.	Radio parts	Delhi, Faridabad, Hyderabad	Delhi, Western UP, HP, J&K, MP, Haryana, Punjab, Rajasthan
19.	Films	Bombay, Madras	Delhi, Uttar Pradesh
20.	Medicines	Bombay, Calcutta, Madras, Delhi	Delhi, Rajasthan, UP, HP, J&K, Punjab
21.	Surgical instruments	Jullundur, Delhi, Meerut, Ambala	All-India

Source: Government of India (1969), *The Dominant Role of Delhi as a Distributive Centre: A Case for Decentralisation in the National Capital Region*: Town and Country Planning Organisation,pp. 9-11.

Annexure A.5.5

COMMODITY-WISE GOODS MOVEMENT BY NATIONAL HIGHWAYS/MAJOR ROADS IN DELHI - 1981

(Unit: Number of Trucks)

Commodity	*N.H.1*		*N.H.2*		*N.H.8*		*N.H.10*		*N.H.24*		*LONI*		*Total*	
	In-ward	*Out-ward*	*In-ward*	*Out-ward*	*In-ward*	*Out-ward*	*In-ward*	*Out-ward*	*In-ward*	*Out-ward*	*In-ward*	*Out-ward*	*In-ward*	*Out-ward*
Building material	46	39	260	41	170	46	37	15	77	37	181	32	771	210
Fruits and vegetables	445	81	31	188	80	115	7	43	26	223	39	16	628	669
Cereal	58	76	115	50	100	140	76	21	110	37	32	6	491	330
Iron and steel	10	82	175	41	45	9	12	12	62	31	-	7	304	182
Textiles	10	23	38	6	35	23	99	-	11	149	-	7	193	208
Retail	68	146	68	51	194	162	42	58	190	179	16	20	578	616
Coal	2	30	54	4	10	9	-	12	78	-	-	-	144	55
Ind. raw material	33	55	139	65	111	50	13	30	84	9 4	8	26	388	320
Commodities Miscellaneous	22	157	121	125	157	106	117	36	125	242	16	21	558	687
TOTAL	694	692	1001	571	902	660	403	227	763	992	292	135	4055	3277

Source: Quoted as Annexure II-D in *Wholesale Markets - Perspective Development Plan Delhi - 2001*, DDA, January, 1983.

Annexure A.5.6

DISTRIBUTION OF WHOLESALE COMMODITIES BY EXPORTS OUTSIDE DELHI - 1981

(per cent)

Sl. no.	*Commodity*	*Export outside Delhi*
1.	Textiles and textile products	95
2.	Radio, T.V. parts and accessories	90
3.	Fruits and vegetables	80
4.	Electricals and electronics	80
5.	Chemicals	80
6.	Food grains	80
7.	Cosmetics and toiletries	80
8.	Dry fruits and spices	80
9.	Surgical and scientific instruments	80
10.	Leather, fur, skin and woollen products	78
11.	Bicycles, tyres and tubes	77
12.	Hosiery	75
13.	Watch, clock, opticals	75
14.	Petroleum products	71
15.	General merchants and kiryana	64
16.	Rubber and plastic goods	63
17.	Other metal products	60
18.	Medicines	60
19.	Auto motor parts and machinery	50
20.	Paper stationery and books	50
21.	Furniture and fixtures	50
22.	Hardware and building material	40
23.	Timber and plywood	40
24.	Iron and steel	34
25.	Crockery and utensils	25

Source: P.P. Division, DDA, New Delhi.

Chapter 6

Summary of Conclusions and Recommendations

Taxation is an important factor influencing the location of industries and diversion of trade. The existing literature and available information, however, do not permit us to assess the effects of variations in tax or subsidies on industrial location or diversion of trade in a particular region. This study is an attempt to empirically examine these aspects in the context of the National Capital Region (NCR) which consists of the Union Territory of Delhi, one district of Rajasthan, three districts of Uttar Pradesh and six districts of Haryana. It seeks to analyse the impact of the various taxes in relation to changes in industrial structure and diversion of trade in the region. Finally, it puts forward some policy prescriptions to harmonise taxes of the sub-national (i.e., the State and local) governments within the NCR.

As the tax system of States (including local governments) has to operate within a federal framework, it is desirable that they follow certain common principles in accordance with the goals of national policy. Keeping the national objectives in view and taking care of the issues concerning the NCR, the major objectives of

reform in the tax structure could be stated as follows:

a. The tax system of the NCR (i.e., of each of its constituent units) should be such as to promote the rapid and balanced development of the whole region;
b. It should be in consonance, in some essential respects, with the structures prevailing in the neighbouring States;
c. It should be uniform in essential aspects in regard to local commodity taxes and the Central sales tax; and
d. It should be so structured and administered that the scope for evasion through inter-State transactions within the region is minimised.

The above objectives have been kept in view while examining the structural reforms needed for a proposed tax policy of the NCR. In this context, we examine the systems of both state taxes as well as local taxes. The State taxes included in the study are sales tax, motor vehicles tax, passengers and goods tax and electricity duty. The local taxes considered are property tax and octroi.

Tax Structure

Sales tax is among the most important taxes of the States. While Rajasthan and Uttar Pradesh follows predominantly the first-point tax, Delhi and Haryana, by and large, rely on the last-point tax, although in Haryana, a substantial amount of sales tax yield comes from the first-point tax. Delhi levies mostly the last-point tax.

Sales tax rates in Delhi are relatively low for most commodities. In addition, Delhi has no surcharge or additional sales tax whereas Uttar Pradesh levies an

additional sales tax of 5 per cent and Haryana and Rajasthan levy a surcharge at the rate of 2 and 10 per cent, respectively. The effective rate of tax in all the neighbouring States of Delhi is, therefore, greater than that prevailing in Delhi.

There are wide variations also in the matter of tax treatment of raw materials and inputs used in industrial production. Whereas Delhi and Haryana allow tax-free purchases by manufacturers, Uttar Pradesh provides for exemption on some raw materials and a concessional rate of 4 per cent on certain specified raw materials. Rajasthan exempts purchase of raw materials for a few select industries but in general provides for a concessional rate of one per cent for the purpose of raw materials by all manufacturers.

Incentives in sales tax are given in all the States of the NCR (except Delhi) to attract new industries. These concessions are in the form of (a) complete and unconditional exemption from payment of sales tax for a limited period of time, (b) conditional exemption depending upon the type of industry and (c) deferment of sales tax payment on finished goods as an interest-free loan for a limited number of years upto a specified limit related to the size of capital or assets of the manufacturer.

Taxation of Road Transport

Motor vehicles tax is levied in all the States, the rates varying according to the type of vehicle. The tax on two-wheelers and cars is levied according to their weight and on taxis and stage carriages according to seating capacity. Goods carriers pay according to their laden or unladen weight.

Goods tax is levied only in Haryana, Uttar Pradesh and Rajasthan; there is no such tax in Delhi. The rates of tax vary from one State to another. However, the

statutory rate of tax is normally allowed to be compounded. The amount of the compounded tax (the one which is generally adopted in practice) shows that the burden is lowest in Delhi. It is followed by Haryana, while Rajasthan, which has introduced a special compounded levy, comes third. The maximum incidence is in Uttar Pradesh. Passenger tax is levied in Haryana and Uttar Pradesh only.

Since variations in rates abound, their combined incidence suggests that the lower effective tax rate in Delhi could cause diversion of vehicles for registration in the Union Territory of Delhi. Consequently, the cost of transporting goods should be less and the availability of transport could be much more in Delhi as compared to the neighbouring districts of the NCR.

Electricity Duty

This tax is levied at varying rates in constituent regions of the NCR. The rates are the lowest in Delhi. Tax rates in Haryana and Uttar Pradesh are quite high in spite of some concessions and apparently lower effective rates. However, this levy does not influence the location of industry to any appreciable extent. The important issue is the availability of adequate and uninterrupted power, and not its price or tax rate.

Local Taxation

Among the local taxes, octroi is the most important source of local finances. It is known as toll tax in Ghaziabad, terminal tax in Delhi and octroi in the other local governments. The rates of this tax vary widely from one State to another. Although a comparative study of exemptions and the structure of specific and *ad valorem* rates presents a formidable problem, it is evident that the rates of tax are lower in Delhi.

Another important local levy is the property tax. The

scope and bases as well as structures of property tax differ from one local government to another. In general, either a flat rate or a proportional rate is levied in all the States except Delhi where the rates are progressive. Further, in Delhi the tax rate on non-residential property is higher than in other areas of the NCR.

Industrial Structure of the NCR

The NCR has witnessed a substantial growth of industries. The number of registered factories in the NCR increased from 3,296 in 1979 to 4,132 in 1984. Similarly, the capital employed has risen at a rate of 10.95 per cent per annum, total industrial employment at the rate of 7.34 per cent per annum and total output at 2.94 per cent per annum.

Industry-wise analysis of the NCR shows that the food and beverages industry has contributed the maximum output which is followed by chemicals and chemical products. During 1979 to 1984, the share of textiles, furniture and leather industries showed a decline, but food and beverages, footwear, petroleum, non-metallic minerals and non-electrical machinery witnessed an increase in their respective shares in the total output.

The share of industries in employment shows that the maximum contribution is made by food and beverages. Petroleum industry recorded a significant rise in its share of employment from 1.88 per cent in 1979 to 5.47 per cent in 1984. Non-electrical machinery industry's contribution also increased significantly.

A comparative analysis of the industrial structure of the regions in the NCR shows uneven development. Delhi has made impressive strides in industrialisation, as compared to a very low growth of the other districts falling within the NCR. The industrywise distribution of industrial sector in Delhi shows that the share of food

and beverages is significant. Among the other industries, major contribution comes from furniture, chemical products, and non-metallic mineral industries. The districts of the State of Haryana contributed roughly 17.62 per cent of the total output in 1979 and 38.66 per cent in 1984, with Rohtak and Karnal leading among them. The industrial development of Bulandshahar district in Uttar Pradesh and Alwar in Rajasthan has been negligible, although in the latter area, there has been some change in recent years.

Analysing the share of each industry by district, we find concentration of wearing apparel and leather and fur products in Alwar. Other industries which contributed approximately 5 per cent share in 1984 were electrical machinery and basic metals. Among the districts of Haryana, food industry is concentrated in Rohtak and Mahindragarh. Textile industry is centered in Rohtak, Karnal and Gurgaon districts. Wearing apparel industry concentrated in Sonepat and Gurgaon, contributed more than half of the total output. Similarly, around 50 per cent of the output of non-metallic mineral industry comes from Karnal and Rohtak and around 64 per cent of the output of petroleum products industry comes from Karnal. Thus, the industries concentrated in Rohtak, Karnal, Gurgaon, Sonepat and Mahendragarh districts, in descending order of their shares in output, are petroleum products, non-metallic mineral products, wearing apparel, textiles and food industries.

Location of industries in a region is dependent upon a variety of factors such as availability of raw materials, transportation facilities, political and cultural barriers and availability of requisite resources. With a view to ascertaining the concentration of industries in various districts we have estimated locational quotients. Estimates of the location quotients indicate that the NCR districts in Haryana have a concentration of

industries such as food and beverages, textiles and footwear and non-metallic minerals. Industries concentrated in Alwar district are chemicals, non-metallic mineral and food and beverages, whereas in Meerut food and beverages, basic metals and chemical industries have a high concentration. Further, a comparison of location quotients during 1979 and 1983 shows that there was no significant change in the industrial structures of the region over the two points of time.

The location of industry on *a priori* reasoning seems to be influenced by certain policy and non-policy variables. However, given the limitations of availability of data, we have considered the variables that could affect the cost of locating an industry. Using such variables, regression coefficient is estimated by applying the ordinary least squares (OLS) method. The regression exercise undertaken, highlight the quantitative significance of various factors that could *a priori* be considered important from the point of view of location of industries in the NCR region.

The results are broadly indicative of the influence of both the infrastructure as well as policy variables. In general, the lack of infrastructure facilities like availability of raw materials, cost of inputs, transport bottlenecks, labour availability were found impeding the location of industries. The significance of these variables, however, was uniquely guided by the specific nature of a particular district in the NCR zone. The same was true for the effective tax rate whose influence was significant and seemed to vary with the inter-district variations.

Concentration of Wholesale Trade

Approximately three fourths of the wholesale trade of the NCR is conducted in Delhi alone. Wholesale markets

came up in Delhi during the late 19th and early 20th century, and over the years, Delhi has achieved the distinction of being the *entrepot* for the whole of the Northern India. The redistributive character of trade in Delhi is reflected in the fact that the commodities traded in Delhi are procured from and distributed all over Northern India. This is revealed by surveys conducted in 1959, 1969-70, 1978-79 and 1981. The surveys also show that 60 to 90 per cent of the total turnover was accounted for by some commodities that are imported into and re-exported from Delhi. Wholesale trade surveys conducted in Uttar Pradesh, Haryana and Rajasthan suggest that in each of the districts, there are a few wholesale markets. However, the districts of Uttar Pradesh account for a major part of the trade of these districts. The next in order are Haryana and Rajasthan.

The concentration of trade in Delhi is due to a variety of factors: being the centre of political as well as administrative power, availability of requisite infra-structure (such as banking activities, warehouses, transport, communication facilities and marshalling yards), variations in tax rates among the neighbouring districts, differences in prices of commodities (exclusive of tax) in the two markets, i.e., Delhi and the neighbouring districts, and weaknesses in administration of sales tax in regions outside Delhi. There is a general feeling that both dealers and consumers from neighbouring areas make bulk purchases in Delhi, mostly without payment of tax, and carry those goods as personal baggage. Subsequently, dealers often sell them in local areas without payment of the local tax. The provisions of the Central Sales Tax are also no less responsible for unnecessary movement of goods into Delhi; the CST rate on re-export of goods is 2 per cent in Delhi whereas in all the other neighbouring States this rate is 4 per cent.

Policy Recommendations

For an integrated development of the NCR, it is necessary to look at the NCR as an economically unified area. That is, in spite of its constituent parts belonging to different States, for a proper development of the region, the economic policies within the region should be so harmonised that the region comes to have the character of a unified whole and the growth of the different constituents of the region takes place on the basis of their comparative advantages.

In our study of the NCR as an economically unified area, among commodity taxes of the sub-national governments, sales tax and octroi are largely responsible for variations in the cost of production for the industry and creating inefficiencies through an undesirable diversion of trade in the region.

As regards sales tax, the lack of uniformity in the rates is striking. The effective rate of tax in Delhi is very low as compared to the rates prevalent in the adjoining States of Haryana, Rajasthan and Uttar Pradesh.

With a view to framing a tax policy that fulfils the objectives set out in the earlier section, it is important to reform the sales tax system of the NCR States (including the Union Territory of Delhi) in such a way that uniformity exists within a broad framework. We, therefore, recommend the following reforms in the structure of sales tax: First, the existing structure of sales tax in Delhi needs to be replaced by the first-point tax. The experience of all the States in India shows that the evasion of tax is much greater in the last-point levy, which in Delhi has also been unable to capture a large chunk of turnover presently escaping tax. Evidence gathered from different sections of society, the study team of the NIPFP suggests that both consumers as well as dealers from the nearby NCR districts make

bulk purchases in Delhi so as to take advantage of the "no-tax-regime", a phenomenon related to the last-point tax. Hence, the proposed switchover would stop diversion of trade meant for avoiding the tax.[1] However, the change in the point of levy is not going to distort the redistributive character of Delhi's trade because the transactions relating to inter state trade would not suffer any tax. Second, a switchover to a first-point tax would further bring down the level of sales tax rate in Delhi in comparison with that prevailing in the neighbouring States. For the sake of parity, the rates of sales tax at the first-point in Delhi would have to be raised. The change in the tax rate would vary for different commodities depending upon the trade (or profit) margin between the first - and the last-point tax. It can be calculated for each commodity by using the formula FPR=(1+x)r, where FPR is the rate at the first-point, x is the margin of profit, and r is the last-point rate. Finally, sales tax rates in Delhi should be raised in a few specific cases where diversion of trade is evidenced.

Variations in the rates of Central Sales Tax (CST) among the States of the NCR is an important factor leading to diversion of trade. The concessional rate of two per cent [under Section 8(5) of the CST Act] in Delhi, notified to preserve the *entrepot* character of Delhi, has been used to divert trade from the neighbouring States where the CST rate is 4 per cent. It is, therefore, important that to have a balanced regional development of the NCR and to have this region as a unified economic zone, the States exporting goods from the NCR zone should levy CST at the rate of two per

[1]It is important to note that very recently Delhi has switched over to a first-point tax in 43 commodities. But the procedure of using Form 31 does not check evasion of tax. This needs to be abolished.

cent on all exports. That is to say, the CST rate should be reduced to two per cent only. This would in the short run affect the yield of the CST in the States of Rajasthan, Haryana and Uttar Pradesh but in the long run, this would be more than offset. As a consequence of the reduction in the CST rate in these States, the exodus of goods to Delhi would come to a halt. Besides, there would be a tremendous growth of trade in the NCR districts because of the savings in transportation costs to Delhi. Finally, the reduced rate of the CST would cause export of goods directly from the NCR States, yielding them the CST revenue.

An important aspect of the sales tax structure relates to input taxation. An examination of the provisions of the sales tax laws of other States of the country shows that raw materials bought by manufacturers are exempt from tax in Punjab, Himachal Pradesh and Jammu & Kashmir. In Himachal Pradesh and Punjab, exemption is granted only for the raw materials used in the manufacture of taxable goods sold within the State. However, a number of other States do not fully exempt inputs bought by manufacturers. Several States provide for some concessional treatment in varying degrees. Maharashtra and Orissa tax raw materials at the concessional rate of four per cent, Madhya Pradesh at two per cent and Bihar at three per cent. Another category of input taxation in the country is of those States who do not grant any concessional treatment. Assam falls in this category.

A careful consideration of the existing provisions of concessions under the sales tax systems in the country suggests, that in the interests of economic development and for creating a higher tax base in the NCR States, it would be advisable not to levy any tax on raw materials used by manufacturers. A move in this direction would be an important step towards an

economically rational tax policy for the NCR States. It would give a boost to industrial activity and discourage the unnecessary movement of goods from one State to another.

Incentives

The States have been introducing various concessions and incentives in their sales tax systems.[2] In evaluating these, we have to examine their efficacy and assess the resultant loss of revenue. Information required for such an exercise is not available. We have, therefore, no alternative but to analyse them on *a priori* grounds only.

First, it should be appreciated that in a federal set-up, when one State offers liberal tax concessions, it may, in the short run, succeed in diverting investment from other States, but in the long run, the advantage is neutralised when the affected States follow suit to avoid outflow of investment. It is, therefore, important that the States should give only reasonable tax concessions for industries in backward areas both for attracting them and for making them competitive, until they are established and can stand on their own. At the same time, the States should not vie with one another to attract industries through over-generous tax concessions because, collectively, the NCR States stand to lose revenues and if the concessions influence the location decisions, the regional industrial development of the NCR would be achieved only at the cost of uneconomic location of industries in the region as a whole.

Second, blanket exemption to a small-scale sector is not desirable. It causes an unduly large loss of revenue to the Government and opens up avenues for evasion.

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[2]For details of sales tax incentives in different States in India, see Purohit, Mahesh C. (1988), *Structure and Administration of Sales Taxation in India*, New Delhi, Reliance Publishing House.

Besides, a small-scale unit may not necessarily be a very small or tiny unit which could merit concession. To understand this aspect, its implications need to be examined. A small-scale unit is defined as one, whose investment in plant and machinery does not exceed Rs. 3.5 million. Investment, including building may exceed this level. A manufacturing unit having fixed investment of this order, would have a turnover ranging anywhere between Rs 30 million and Rs 80 million or even more. Even at the most conservative estimate, it would be seen that the exemption of a dealer with a turnover of Rs 30 million would not be warranted, while non-manufacturing dealers with as low a turnover as Rs 20,000 to one million are required to be registered with the government and pay taxes.

Keeping the above points in view, the following policy imperatives emerge:

a. Total exemption of small-scale industries is not desirable;
b. All new industrial units could be granted an interest-free "tax loan" for a period of five years. However, in granting the tax-loans, selectivity or industry specification could be introduced. As in many States, specific industries could be given preferential treatment. Also, the States could define their own categories of `essential' industries for such loans; and
c. Finally, there should be a ceiling on the tax loan as a proportion of the productive capital of the entrepreneur. A reasonable ceiling could be 50 per cent of the productive capital beyond which the collected tax must be paid by the industry.

Taxation of Road Transport

For comparing the tax burden on road transport in

the different NCR States, it is necessary to take their combined incidence. It is found that the amount of tax paid by goods vehicles is the highest in Uttar Pradesh. Rajasthan and Haryana follows it. Delhi, with the lowest combined tax burden among the NCR units, exerts a strong gravitational pull on the transport industry in the region. In fact, many of the representations from the trade and commerce submitted to the Study Team of the NIPFP bring out the fact that the easy availability of transport in Delhi is an important factor and also a great hindrance in shifting industry and trade out of Delhi. It is, therefore, important that the effective combined burden of the motor vehicle tax and passengers and goods tax in Delhi be substantially raised to bring it at par with the other States of the NCR.

Octroi

Like sales tax at the State level, octroi is very important at the local government level. It continues to be a predominant and growing source of revenue for these governments in the NCR States. However, there is a general feeling that this tax has several demerits, such as hindrance to smooth traffic flow, corruption in its administration, high cost of collection, regressivity of incidence, collection of large revenue from inputs and producers' goods leading to cascading, and perfunctory assessment of the tax. It is, therefore, necessary that to evolve the NCR as a unified economic region, we do away with such an obnoxious tax. To compensate for the loss of revenue, the States comprising the NCR could adopt entry tax along the lines recommended by the Gujarat Taxation and Enquiry Commission, 1980.[3] However, the entry tax should not be levied on raw materials.

[3]Government of Gujarat (1980), Report of the *Gujarat Taxation Enquiry Commission*, Gandhi Nagar.

Property Tax

Compared to the other NCR constituents, property tax rates are high in the Union Territory of Delhi. Notwithstanding a gradation of rates according to residential and commercial or industrial use, the concentration of property ownership in Delhi has increased over the years. It is, therefore, recommended that to achieve a synergy effect on the diversification of ownership of assets to neighbouring districts, an additional tax could be levied on the preferences of the persons owning property in Delhi. This could be in the form of an additional tax on new commercial properties constructed in Delhi for commercial and industrial purposes. The rate of the tax should be related to the present tax liability borne by owners. That is to say, the tax would be in the nature of an additional levy on new properties only. While this may not be a great inducement to go out of Delhi, it would surely have some deterrent effect on the decisions to own new property in Delhi. Also, this would collect extra revenue for the use of the infrastructure facilities within the Union Territory of Delhi.

Congestion Tax

As examined in relation to the concentration of trade in Delhi, there is a heavy traffic inflow as well as outflow. From a Trade Flow Survey conducted by the Delhi Development Authority in 1981, it is very clearly seen that the wholesale trade in most of the commodities is concentrated in Delhi for redistributive purposes. This is because of the fact that Delhi works as an *entrepot* for the whole of North India. Although various measures are required to shift the wholesale trade, a token levy in the form of a congestion tax of Rs 10 per truck entering the Union Territory of Delhi could be considered. This would be in the nature of a toll tax on each truck

entering the territory. As this would not be related to value, goods of less value and requiring more space would have to pay more in the form of this tax. It would, therefore, possibly be exerting a positive effect on diversifying the wholesale market outside the Union Territory of Delhi for commodities using more space.

Infrastructure Facilities

Notwithstanding the fact that the objectives of our study is to confine our observations to tax policy alone, the area of fiscal policy (the subject matter of the title of the study) is not restricted to tax alone. Fiscal policy covers both aspects, namely, tax and public expenditure. As we do not have data on public expenditure for the districts of the NCR, this study has attempted to examine infrastructure in a very limited way. It has been revealed that the NCR districts, with the obvious exception of Delhi have poor infrastructure facilities. Power, transport, communication, road, warehouses, etc. are conspicuously meagre in most of the districts. This lacuna has been an important factor causing concentration of industry and trade in Delhi. This has been corroborated by the members of the PHD Chamber of Commerce, New Delhi, in response to our questionnaire. In fact, the most important hindrance is the inadequate availability of electricity in these districts, as corroborated by the data made available by the Central Electricity Authority. We are, therefore, of the view that tax policy alone would not be able to diversify industry from Delhi. What is important is to create the requisite infrastructure in all these districts. In this regard it is important to note that the Bombay Metropolitan Regional Planning Board (BMRPB) had taken the right step in setting up the City and Industrial Development Corporation of Maharashtra Ltd. (CIDCO) for shifting the thrust of activity from the

island city of Bombay to an area across Thane Creek. In this context, the CIDCO was instrumental in the shifting of wholesale iron and steel market from Bombay to Kalamboli, New Bombay. For this purpose, the CIDCO carried out a detailed study of the existing market of iron and steel. The study included an indepth analysis of flow of goods, movement of trucks, space requirements, housing and commercial space requirements, etc. The result was a new wholesale market with all infrastructure facilities. In this process, the CIDCO invested Rs 40 crore. This has helped reduce a great deal of congestion in Bombay. The CIDCO's experience suggests that specific studies are required to be carried out for each commodity on the basis of flow of goods to and from Delhi in relation to congestion of traffic in the city. On the basis of the recommendations of these studies, new wholesale markets in designated areas outside Delhi would have to be developed by the NCR or by an agency similar to CIDCO. This agency would be responsible for providing all the requisite infrastructure in the designated new markets. Thus, a detailed layout has to be prepared for each of the commodity markets. In addition, a modern truck terminal service as well as transport, communication and housing facilities have to be provided for. To conclude, the push factors to divert industry to the neighbouring districts would be relevant when some pull factors are also created in the neighbouring districts. In the absence of the requisite infrastructure facilities, fiscal policy alone would be ineffective.

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