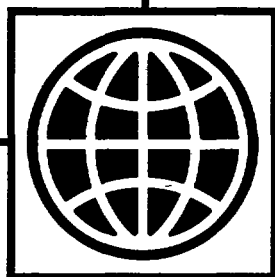


India

An Industrializing Economy in Transition

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A WORLD BANK COUNTRY STUDY

India

An Industrializing Economy in Transition

The World Bank
Washington, D.C., U.S.A.

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Washington, D.C. 20433, U.S.A.

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First printing December 1989

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Library of Congress Cataloging-in-Publication Data

India, an industrializing economy in transition.

p. cm. -- (A World Bank country study)

ISBN 0-8213-1421-1

1. Industry and state--India. 2. India--Commercial policy.

3. India--Economic conditions--1947- 4. Foreign trade regulation--India. I. International Bank for Reconstruction and Development.

II. Series.

HD3616.I43I423 1990

338.954--dc20

89-70551
CIP

ABSTRACT

This Report analyzes the industrial and trade policies that would help assure a smooth transition from the highly protected industrial environment of the past, in which direct controls were a key means of allocating resources, to a more open environment in which competitive forces have a much greater role in shaping investment, output and pricing decisions. After a surveying recent economic developments (Chapter 1) and analyzing of progress and problems in domestic resource mobilization (Chapter 2), the report examines the past framework of domestic regulatory policies and incentives for industrial development, the impact of these policies on industrial structure and performance, the recent changes in industrial policies, and extensions of these measures that would accelerate the transition (Chapter 3). As domestic regulatory policies have been closely linked to external trade policies, the following chapter examines ways in which trade policies have protected domestic industry, the effects of this protection on manufacturing performance, and the measures which could be taken over time to restore a greater degree of competition--both with imports and in export markets. The report concludes that reforms of domestic and external regulatory policies would need to be made simultaneously over the medium term to effect a successful transition to a more competitive, efficient and faster growing industrial sector. Chapter 5 ends with a call for a significant increase in concessional assistance to provide the resource cushion needed to reduce the risks of BOP problems--and thus to help assure the success of the liberalization process that is already underway.

Acknowledgements

This report was prepared under the leadership of John R. Hansen, with written contributions and guidance from E. Bevan Waide, David Greene and James A. Hanson. Responsibility for drafting lay with: Roberto Bentjerodt, Anand Gupta, Lloyd McKay, Sharif Mohammad, Sally Mott, Peter Pollak, Garry Pursell, V.J. Ravishankar, Sunanda Sengupta, K. Subbarao and J.P. Wogart. Statistical and computing assistance was provided by Sajitha Bashir, Rajesh Dewan, Robert King, and P. Rajagopalan.

The report benefitted from published studies and a variety of papers prepared as part of the overall World Bank program of economic and sector work on the Indian industrial sector; selected papers from this series will be available in due course. References are given in the Bibliographical Note at the end of Volume II of the report.

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MAP

Abbreviations

ASI	Annual Survey of Industry
BICP	Bureau of Industrial Costs and Prices
BTN	Brussels Tariff Nomenclature
CCS	Cash Compensatory Support
DGCIS	Directorate General of Commercial Intelligence and Statistics
DGS&D	Directorate General of Supplies and Disposals
DGTD	Directorate General of Technical Development
EIC	Export Inspection Council
EPC	Effective Protection Coefficient
EPR	Effective Protection Rate
FERA	Foreign Exchange Regulation Act
FRPS	Fertilizer Retention Price Scheme
GATT	General Agreement on Trade and Tariffs
GFCF	Gross Fixed Capital Formation
HSC	Harmonized System of Classifications
ICOR	Incremental Capital Output Ratio
IDRA	Industrial Development and Regulation Act
IISCO	Indian Iron and Steel Company
IRD	Integrated Rural Development Program
ITI	Indian Telephone Industry
LTFP	Long Term Fiscal Policy
MES	Minimum Economic Scale
MLT	Medium and Long Term (debt)
MODVAT	Modified Value Added Tax
MOU	Memorandum of Understanding
M RTP	Monopolies and Restrictive Trade Practices
NPC	Nominal Protection Coefficient
OGL	Open General Licence
PAD	Public Administration and Defence
PMP	Phased Manufacturing Program
POL	Petroleum, Oil and Lubricants
PSE	Public Sector Enterprise
QR	Quantitative Restriction
RBI	Reserve Bank of India
REP	Replenishment License (for imports)
SAIL	Steel Authority of India, Ltd.
SSI	Small Scale Industry
TFP	Total Factor Productivity
TISCO	Tata Iron and Steel Company

CURRENCY AND OTHER EQUIVALENTS

Currency

Prior to June 6, 1966:	US\$1.00 = Rs 4.7619 Rs 1.00 = US\$0.21
From June 6, 1966 to mid-December 1971:	US\$1.00 = Rs 7.50 Rs 1.00 = US\$0.13333
Mid-December 1971 to end-June 1972:	US\$1.00 = Rs 7.27927 Rs 1.00 = US\$0.1374
After end-June 1972:	floating rate
Rate end-March 1987	US\$1.00 = Rs 12.87 Rs 1.00 = 0.0777

Rupee values have been converted into dollars by using the prevailing exchange rates indicated above up to 1970/71. For subsequent years the following average rates in rupees per US dollar have been used:

1971/72	: 7.444
1972/73	: 7.706
1973/74	: 7.791
1974/75	: 7.976
1975/76	: 8.653
1976/77	: 8.939
1977/78	: 8.563
1978/79	: 8.206
1979/80	: 8.076
1980/81	: 7.893
1981/82	: 8.929
1982/83	: 9.628
1983/84	: 10.312
1984/85	: 11.887
1985/86	: 12.237

Source: IMF, International Financial Statistics (IFS), line "rf."

In this report an estimate of 12.75 Rupees per US Dollar was used for 1986/87.

Weights

Unless otherwise specified all weight measures are metric.

Years

The Indian fiscal year runs from April 1 through March 31.

ECONOMIC DEVELOPMENT DATA

GNP PER CAPITA IN 1983 US\$260 a/

	GROSS DOMESTIC PRODUCT IN 1985/86 b/		ANNUAL RATE OF GROWTH (% Constant Prices) c/				
	US\$Bln	%	61/62-	65/66-	70/71-	75/76-	80/81-
			64/65	69/70	74/75	79/80	84/85
Gross Domestic Product	199.03	100.0	3.2	3.9	2.9	4.0	5.4
Gross Domestic Investment	48.96	24.6	6.2	2.6	5.2	5.5	4.3
Gross National Saving	45.30	22.8	8.0	4.6	5.3	5.1	4.0
Current Account Balance	3.67	1.8	-	-	--	-	-

OUTPUT, LABOR FORCE AND PRODUCTIVITY IN 1981

	Value added (at factor cost)		Labor Force d/		V.A. Per Worker	
	US\$ Bln.	%	Mil.	%	US\$	% of Nat. Average
Agriculture	52.5	35.9	172.7	70.6	304	50.8
Industry	34.5	23.6	31.6	12.9	1092	182.6
Services	59.2	40.5	40.3	16.5	1469	245.7
Total/Average	146.2	100.0	244.6	100.0	598	100.0

GOVERNMENT FINANCE

	General Government e/			Central Government		
	Rs Bln	% of GDP		Rs Bln	% of GDP	
	1985/86	1981/82-1985/86	1985/86	1985/86	1981/82-1985/86	1985/86
Current Receipts	507.56	19.9	20.8	278.05	10.7	11.4
Current Expenditures	563.52	20.9	23.1	337.45	12.0	13.9
Current Surplus/Deficit	-55.96	-1.0	-2.3	-59.40	-1.2	-2.4
Capital Expenditures f/	198.41	7.0	8.1	173.29	6.2	7.1
External Assistance (net)g/	22.30	0.9	0.9			

	MONEY, CREDIT AND PRICES								February	
	1970/71	1975/76	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	1986	1987
	(Rs Billion outstanding at end of period)									
Money and Quasi Money	109.8	224.8	557.7	627.5	728.7	860.9	1023.6	1186.7	1170.7	1372.0
Bank Credit to Government (net)	54.6	106.3	251.2	306.3	352.6	406.4	502.3	583.2	593.7	714.0
Bank Credit to Commercial Sector	64.6	156.2	366.4	434.6	511.6	607.3	709.5	828.0	797.2	904.6
	(Percentage or Index Numbers)									
Money and Quasi Money (as a % of GDP)	27.3	30.3	43.6	42.5	44.1	44.4	47.7	48.7	48.1	49.6
Wholesale Price Index (1970/71=100)	100.0	173.0	257.3	281.3	288.7	316.0	338.4	357.8	357.5	377.0
Annual Percentage changes in:										
Wholesale Price Index	7.7	-1.1	18.2	9.4	2.6	9.5	7.1	5.7	5.8	5.5
Bank Credit to Government (net)	15.0	22.7	28.5	19.1	15.1	15.3	23.6	16.1	18.2 h/	22.4 i/
Bank Credit to Commercial Sector	19.4	22.7	18.2	18.6	17.7	18.7	16.8	16.7	12.4 h/	9.3 i/

a/ The per capita GNP estimate is at market prices, using World Bank Atlas methodology, base period 1981-83. All other conversions to dollars in this table are at the average exchange rate prevailing during the period covered.

b/ Quick Estimates, Central Statistical Organization. Value of GDP is at market price.

c/ Computed from trend line including one observation before first year and one observation after last year of listed period. Growth rate of GDP has been computed using the series for GDP at factor cost.

d/ Total labor force and percentage breakdown from 1981 Census. Excludes data for Assam.

e/ Transfers between Centre and States have been netted out.

f/ All loans and advances to third parties have been netted out.

g/ World Bank estimates of net disbursement of concessional aid and IBRD.

h/ Percentage change from end March 1985 to end Feb 86.

i/ Percentage change from end March 1986 to end Feb 87.

BALANCE OF PAYMENTS (US\$ mln.)	1983/84	1984/85	1985/86	1986/87	MERCHANDISE EXPORTS (AVERAGE 1982/83-85/86 b/ US\$ Mln. %
				a/	
Exports of Goods b/	8667	8746	8956	10249	Engineering Goods 951.1 11.2
Imports of Goods b/	14360	14400	16066	15757	Tea 507 6.0
Trade Balance b/	-5693	-5654	-7110	-5508	Gems 1141.1 13.4
NFS (net)	1036	1039	1514	2113	Clothing 730 8.6
<u>Resource Balance</u>	-4657	-4615	-5596	-3395	Leather and Leather Prod. 456 5.4
Interest Income (net) c/	-526	-838	-1009	-1198	Jute Manufacturers 222 2.6
Net Transfers d/	2570	2526	2654	2176	Iron Ore 406 4.8
<u>Balance on Current Account</u>	-2614	-2927	-3951	-2417	Cotton Textiles 339 4.0
Direct Investment	63	62	160	209	Sugar 70 0.8
Official Loans & Grants (net)	1598	1687	2093	2460	Others 3696 43.2
Gross Disbursements	2198	2235	2722	3400	<u>Total</u> 8518 100.0
Amortization	598	548	629	940	
Private Borrowing (net)	873	1366	1210	518	<u>EXTERNAL DEBT, MARCH 31, 1986</u>
Non Resident Deposits	570	210	1175	1255	
Transaction with IMF (net)	1306	67	-209	-540	US\$ billion
All other Items e/	-1015	-202	69	-1334	Outstanding and Disbursed 29.74
Increase in Reserves (-)	-881	-263	-547	151	Undisbursed 15.65
Gross Reserves (end year) f/	5847	6110	6657	6808	Outstanding incl. Undisbursed h/ 45.39
Net Reserves (end year) g/	1697	2178	2367	3058	<u>DEBT SERVICE RATIO FOR 1985/86 a/ i/</u>
<u>Fuel and Related Materials</u>					20.5%
Imports (Petroleum) b/	3473	3182	3943	1802	<u>IBRD/IDA LENDING, SEPT. 30, 1986 a/</u>
of which: Crude	2240	1571	2902	1170	
Products	1233	1611	1041	632	US\$ million
					<u>IBRD IDA</u>
					Outstanding and Disbursed 3536 9785
					Undisbursed 5232 3937
					Outstanding incl. Undisbursed 8768 13723

RATE OF EXCHANGE

June 1966 to mid-December 1971	US\$1.00 = Rs 7.50 Rs 1.00 = US\$0.13333
Mid-December 1971 to end-June 1972	US\$1.00 = Rs 7.2797 Rs 1.00 = US\$0.137376
After end-June 1972	Floating Rate
Spot Rate end-March 1987	US\$1.00 = Rs 12.87 Rs 1.00 = US\$0.0777

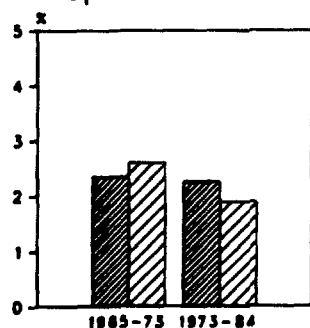
- a/ Estimated
- b/ Net of crude petroleum oil exports.
- c/ Figures given cover all investment income (net). Major payments are interest on foreign loans and charges paid to IMF; and major receipts are interest earned on foreign assets.
- d/ Figures given include workers' remittances but exclude official grant assistance, which is included within official loans and grants, and non-resident deposits which are shown separately.
- e/ Includes exchange rate adjustments to the valuation of reserves and financing of imbalances in rupee trade.
- f/ Excluding gold.
- g/ Excludes net use of IMF credit.
- h/ Includes IMF.
- i/ Amortization and interest payments on foreign loans as a percentage of total current receipts.

1986 SOCIAL INDICATOR DATA SHEET

INDIA

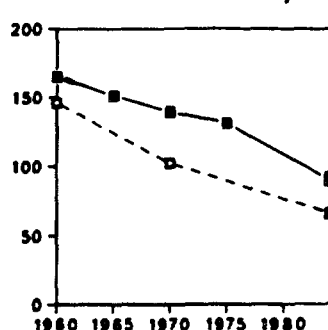
	1965	1973	Most Recent Estimate	Reference Groups (MRE)	
				Low-income Asia & Pac	Mid-income Asia & Pac
AREA					
Total land area (thou sq km)	3287.6	3287.6	3287.6		
Agricultural (% of total)	53.9	54.5	54.8		
GNP PER CAPITA (US\$)	..	..	260.0	283.7	1021.2
POPULATION AND VITAL STATISTICS					
Total population (thou)	487324.1	586182.1	749184.1		
Urban pop. (% of total)	18.3	20.2	24.7	23.0	34.6
Population growth rate(%):					
Total		2.3	2.3	1.9	2.3
Urban		4.0	4.2	3.7	4.2
Life expect. at birth (yrs)	44.9	48.7	55.8	61.9	60.6
Population projections:					
Pop. in 2000 (mill)			994.3		
Stationary pop. (mill)			1700.1		
Population density per sq km of agricultural land	274.9	327.0	415.5	317.0	176.5
Pop. age structure (%):					
0-14 yrs	42.4	42.7	39.7	36.1	38.7
15-64 yrs	53.9	54.3	56.2	59.5	57.7
65 and above	3.7	3.0	4.0	4.5	3.6
Crude birth rate (per thou)	45.2	39.3	32.9	27.1	29.7
Crude death rate (per thou)	20.7	16.4	12.1	9.7	9.4
Total fertility rate	6.3	5.6	4.6	3.6	3.8
Infant mort. rate (per thou)	151.0	132.6	90.1	66.3	64.7
Child death rate (per thou)	23.0	19.3	10.7	7.4	6.9
Family planning:					
Acceptors, annual (thou)	2,985.0	4,369.0	6,826.0 a	..	..
Users (% of married women)	..	16.5	32.0	49.1	56.2
FOOD, HEALTH AND NUTRITION					
Index of food production per capita (1974-76 = 100)	91.5	102.0	114.1	123.2	115.8
Per capita supply of:					
Calories (% of requirements)	95.7	83.8	95.7	102.8	110.3
Proteins (grams per day)	53.2	50.5	52.0	56.7	50.0
Pop. per physician (thou)	4.9	4.2	3.7	3.1	7.9
Pop. per nurse (thou)	6.4	6.7	5.0	4.4	1.8
Pop. per hospital bed (thou)	1.7	1.5	1.4	1.1	0.6
Access to safe water (% of population):					
Total	..	17.0	41.0 a	44.2	44.1
Urban	..	60.0	77.0 a	75.9	64.6
Rural	..	6.0	31.0 a	34.7	34.4

Population Growth



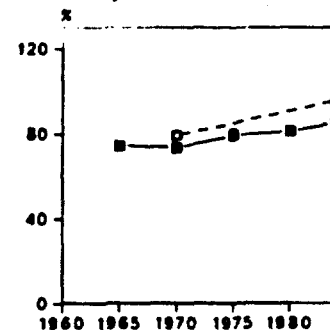
■ INDIA
▨ FIRST REF GROUP

Infant Mortality



■ INDIA
□ FIRST REF GROUP

Primary School Enrollment



1986 SOCIAL INDICATOR DATA SHEET

INDIA

			Most Recent Estimate	Reference Groups (MRE)	
	1965	1973		Low-income Asia & Pac	Mid-income Asia & Pac
LABOR FORCE					
Total Labor Force (thou)	198950.4	230194.6	286967.4		
Female (%)	32.0	32.6	31.6	34.2	34.6
Agriculture (%)	73.0	71.2	69.7 a	68.6	53.3
Industry (%)	11.9	12.7	13.2 a	15.6	16.6
Participation rate (%):					
Total	40.8	39.3	38.3	41.8	38.8
Male	53.8	51.2	50.8	53.5	50.7
Female	27.0	26.5	25.0	29.4	26.9
Age dependency ratio	0.9	0.8	0.8	0.7	0.7
HOUSING					
Average size of household:					
Total	..	5.6	..	..	..
Urban	..	5.6	..	..	..
Rural	..	5.6	..	..	..
Percentage of dwellings with electricity:					
Total	..	..	..	..	..
Urban	..	..	..	..	..
Rural	..	..	..	..	..
EDUCATION					
Enrollment rates:					
Primary: Total	74.0	73.0	85.0	94.8	109.5
Male	89.0	90.0	100.0	104.2	111.6
Female	57.0	56.0	68.0	78.7	107.3
Secondary: Total	27.0	26.0	34.0	33.0	47.8
Male	41.0	36.0	44.0	40.5	50.2
Female	13.0	15.0	24.0	24.7	44.7
Pupil-Teacher ratio:					
Primary	40.5	42.6	55.4	38.2	29.6
Secondary	22.8	20.9	..	18.2	21.8
Pupils reaching grade 6 (%)	..	38.0	..	56.2	74.6
INCOME, CONSUMPTION, AND POVERTY					
Energy consumption per cap. (kg of oil equivalent)	100.1	122.9	187.0	316.5	510.2
Percentage of private income received by:					
Highest 10% of households	35.2	33.6	..	..	..
Highest 20%	48.9	49.4	..	..	..
Lowest 20%	6.7	5.9	..	..	..
Lowest 40%	17.2	16.2	..	..	..
Est. absolute poverty income level (US\$ per capita):					
Urban	..	..	132.0 b	..	181.8
Rural	..	..	114.0 b	..	135.6
Est. pop. below absolute poverty income level (%):					
Urban	..	..	40.3 b	..	27.0
Rural	..	..	50.7 b	..	43.0
Passenger cars/thou pop.	0.9	1.2	..	0.5	5.7
Newspaper circulation (per thousand population)	13.0	15.1	..	28.4	62.7

EPD July 1986

.. Not available

Note: Group averages are population weighted. Country coverage depends on data availability and is not uniform. Unless otherwise noted, 1986 refers to any year between 1982 and 1988; 1973 between 1970 and 1978; and most recent estimate between 1982 and 1985.
a. 1980. b. 1979.

Definitions of Social Indicators

The definition of a particular social indicator may vary among countries or within one country over time. For instance, different countries define "urban area" or "safe water" in different ways.

AREA (thousand square kilometers)

Total - Total surface area comprising land area and inland waters.

Agricultural (percentage of total) - Estimate of agricultural area used for crops, pastures, market and kitchen gardens or to lie fallow, as percentage of total.

GNP PER CAPITA (US\$) - GNP per capita estimates at current market prices, calculated by the conversion method used for the *World Bank Atlas*, 1986.

POPULATION AND VITAL STATISTICS

Total population - mid-year (millions)

Urban population (percentage of total) - Different countries follow different definitions of urban population. Such differences may affect comparability of data among countries.

Population growth rate (percent) - total and urban - Annual growth rates of total and of urban populations.

Life expectancy at birth (years) - Number of years a newborn infant would live if prevailing patterns of mortality for all people at the time of its birth were to stay the same throughout its life.

Population projections

Population in 2000 - The projection of population given total population by age and sex, fertility and the demographic parameters of mortality rates, and migration in the base year 1980, until the population reaches a stationary state.

Stationary population - The projected population level when zero population growth is achieved: i.e., the birth rate is constant and equal to the death rate, the age structure is stable, and the growth rate is zero.

Population density, agricultural land - Population per square kilometer (100 hectares) of agricultural area.

Population age structure (percent) - Children 0-14 years, working age 15-64 years, and people of 65 years and over as percentages of population.

Crude birth rate - Annual live births per thousand population.

Crude death rate - Annual deaths per thousand population.

Total fertility rate - The average number of children that would be born alive to a woman during her lifetime if during her childbearing years she were to bear children at each age in accordance with prevailing age-specific fertility rates.

Infant (age 0-1) mortality rate - Number of infants per thousand live births who die before reaching one year of age, in a given year.

Child (age 1-4) mortality rate - Number of deaths of children, age 1-4, per thousand children in the same age group in a given year. For most developing countries these data are derived from models using information on infant mortality rates.

Family planning - acceptors, (thousands) - Annual number of acceptors of birth-control measures received under the auspices of a national family planning program.

Family planning - users (percentage of married women) - Percentage of married women of child-bearing age who are practising, or whose husbands are practising, any form of contraception. Women of child-bearing age are generally women aged 15-49, although for some countries contraceptive usage is measured for another age group.

FOOD, HEALTH AND NUTRITION

Index of food production per capita (1974-76 = 100)

- Index of per capita annual production of all food commodities. Production excludes animal feed and seed for agriculture. Food commodities include primary commodities (for example, sugarcane instead of sugar) which are edible and which contain nutrients (for example, tea and coffee are excluded). Commodities include nuts, fruits, pulses, cereals, vegetables, oil seeds, sugarcane and sugar beets, livestock, and livestock products. Aggregate production of each country is based on national average producer price weights.

Per capita supply of calories (percentage of requirements) - Computed from energy equivalent of net food supplies available in country per capita per day. Available supplies comprise domestic production, imports less exports, and changes in stock. Net supplies exclude animal feed, seeds for use in agriculture, quantities used in food processing, and losses in distribution. Requirements were estimated for 1977 by the Food and Agriculture Organization (FAO) based on physiological needs for normal activity and health considering body weights, environmental temperature, age and sex distribution of population.

Per capita supply of protein (grams per day) - Protein content of per capita net supply of food per day. Net supply of food is defined as above. Requirements for all countries established by United States Department of Agriculture provide for minimum allowances of 60 grams of total protein per day and 20 grams of animal and pulse protein. These standards are lower than those of 75 grams of total protein and 23 grams of animal protein as an average for the world, as proposed by FAO.

Population per physician - Population divided by number of practising physicians qualified from a medical school at university level.

Population per nursing person - Population divided by number of practising graduate nurses, assistant nurses, practical nurses and nursing auxiliaries.

Population per hospital bed - Population divided by number of hospital beds available in public and private, general and specialized hospitals, and rehabilitation centers. Hospitals are establishments permanently staffed by at least one physician. Establishments principally providing custodial care are not included.

Access to safe water (percentage of population) - total, urban, and rural - People (total, urban, and rural) with reasonable access to safe water supply (includes treated surface waters or untreated but uncontaminated water such as that from springs, sanitary wells, and protected boreholes). In an urban area a public fountain or standpost located not more than 200 meters from a house may be considered within reasonable access of that house. In rural areas reasonable access would imply that members of the household do not have to spend a disproportionate part of the day fetching water. Absent and incomplete responses, and large variations between countries, may affect the validity of the overall results of the country and regional comparisons. In addition, certain definitions and classifications such as urban and rural, reasonable access to safe water in rural areas, safe water sources (when they are not subject to laboratory control) vary considerably from country to country and thus affect comparability of the data.

LABOR FORCE

Total labor force (millions) - Economically active persons, including armed forces and unemployed but excluding housewives and students. Definitions in various countries are not comparable.

Female (percent) - Female labor force as a percentage of total labor force.

Agriculture (percent) - Labor force in farming, forestry, hunting and fishing as a percentage of total labor force.

Industry (percent) - Labor force in mining, construction, manufacturing and electricity, water and gas as a percentage of total labor force.

Participation rate (percent) - total, male, and female - Participation rates are computed as the percentage of population of all ages in the labor force. These are based on International Labour Office (ILO) data on the age-sex structure of the population.

Age dependency ratio - Ratio of population under 15, and 65 and over, to the working age population (age 15-64).

HOUSING

Average size of household (persons per household) - total, urban, and rural - A household consists of a

group of individuals who share living quarters and main meals. A boarder or lodger may or may not be included in the household for statistical purposes.

Percentage of dwellings with electricity - total, urban, and rural - Conventional dwellings with electricity in living quarters as percentage of all dwellings.

EDUCATION

Enrollment Rates

Primary School Enrollment - total, male and female - Gross enrollment of all ages at primary level as a percentage of primary school-age children. While many countries consider primary school age to be 6-11 years, others have wider age groups. Differences in country practices in the ages and duration of school are reflected in the ratios given. For some countries with universal education, gross enrollment may exceed 100 percent since some pupils are younger or older than the country's standard primary-school age.

Secondary School Enrollment - total, male and female - Computed in a similar manner, but includes pupils enrolled in vocational, or teacher training secondary schools, for pupils usually of 12 to 17 years of age.

Pupil-teacher ratio - primary, and secondary - Total students enrolled in school divided by the total number of teachers.

Percentage pupils reaching grade six - The percentage of a cohort of 1,000 pupils starting primary school that persist into grade six.

INCOME, CONSUMPTION, AND POVERTY

Energy consumption per capita (kilograms of oil equivalent) - Annual consumption of commercial primary energy (coal and lignite, petroleum, natural gas, and hydro, nuclear and geothermal electricity).

Private income distribution - Income (both in cash and kind) accruing to percentile groups of households ranked by total household income.

Passenger cars (per thousand population) - Includes motor cars seating fewer than eight persons; excludes ambulances, hearses and military vehicles.

Newspaper circulation (per thousand population) - Average circulation of "daily general interest newspaper," defined as a periodical publication devoted primarily to recording general news. It is considered to be "daily" if it appears at least four times a week.

Estimated absolute poverty income level (US\$ per capita) - urban and rural - Absolute poverty income level is that below which a minimal nutritionally adequate diet plus essential nonfood requirements are not affordable. These estimates are very approximate measures of poverty levels, and should be interpreted with considerable caution.

Estimated population below absolute poverty income level (percent) - Percentages of urban and rural populations who live in "absolute poverty."

EXECUTIVE SUMMARY

1. This report examines growth in the Indian economy, the policies that have been shaping domestic resource mobilization and balance of payments performance, and the economy's future prospects. The report takes a special look at the performance of the industrial sector, which has been the subject of intense development efforts, with mixed results, for three decades. It examines the past policy environment, the changes being introduced, and prospects for the transition from a highly protected environment, in which direct controls have been a key means of allocating resources, to a more open environment in which competitive forces are shaping investment, output and pricing decisions.

A. RECENT ECONOMIC DEVELOPMENTS

1. Economic Growth

2. The last two years have seen a good growth performance: GDP grew at an average rate of about 5%, so the Seventh Plan is off to a commendable start. The 1980's to date are showing that growth of at least 5% a year is achievable. Investment is being sustained at nearly 25% of GDP. A consistent 92-94% of this investment is being financed by domestic savings, which have been growing. The buoyancy of savings is, however, confined to the private sector; despite a successful tax reform that increased public revenues dramatically, and some improvement in internal resource generation by public enterprises, public sector savings are declining as a percentage of GDP. The consequent rise in deficit financing is putting some pressures on money, prices, imports and the overall balance of payments. The trade balance improved in 1986/87, and the current account deficit fell to US\$2.4 billion, or from 2.0% to 1.1% of GDP. This improvement largely reflected higher export growth and the positive impact of lower oil prices on India's terms of trade (imports other than petroleum, petroleum products, and fertilizers have been rising rapidly). India's gross reserves rose by about US\$150 million during 1986/87.

3. With growth of 5% a year, the process of poverty alleviation observed over the 1977/78 to 1983/84 period is doubtless continuing, aided by direct interventions aimed at specific target groups. Various studies indicate large differences in the cost-effectiveness of these interventions, in the regional and inter-personal distribution of income growth, and in access to health care, nutrition, and primary and non-formal education programs. The incidence of poverty thus remains high, with more than one third of the population remaining below the poverty line.

4. What lies behind the 5% growth in GDP? In agriculture, with a monsoon that was below average, the sector did well to attain a projected growth in value added of 1.5% in 1986/87, albeit below the Plan target of 2.5% (ref. Table 1). For the third consecutive year, foodgrain output was about the same as the 1983/84 peak of 152 million tons, and stocks remain high. The maintenance of output in the face of poor weather suggests progress has been made in "drought proofing" agriculture through irrigation, and in spreading high yield varieties of rice to the eastern states. Relative foodgrain prices have fallen, benefiting consumers

rather than producers. Output growth in other agricultural products, except tea and oilseeds, was better than foodgrains. Overall the contribution of agriculture to GDP growth in the 1980s has fallen since the period of its rapid growth in the last half of the 1970s--somewhat more so than has been typical of other large low and middle-income countries.

Table 1
INDIA: GDP and Sectoral Value Added
(percent per annum)

	<u>Growth Rates (percent per annum)</u>				<u>Percent of GDP</u>	
	<u>74/75-80/81</u>	<u>80/81-84/85</u>	<u>85/86</u>	<u>86/87</u>	<u>74/75</u>	<u>85/86</u>
GDP(factor cost)	<u>4.4</u>	<u>5.1</u>	<u>5.1</u>	<u>4.9</u>	<u>100.0</u>	<u>100.0</u>
Agriculture	3.0	2.8	1.4	1.5	45.9	31.4
Industry	4.7	5.4	6.5	6.5	21.9	27.3
Manufacturing	4.3	5.7	6.8	6.1	15.6	16.6
Services	5.9	7.4	7.7	6.9	32.2	41.3

Source: Text Table 1.1.

5. Industrial value added is estimated to have grown by 6.5% in 1986/87, the same as the previous year and slightly below the 6.8% target for the Seventh Plan period. (Growth may well have been faster; the recently revised index of industrial production, which indicates a considerable acceleration of growth in recent years, has not yet been incorporated into the national accounts). The manufacturing growth of around 5.5-6.0% during the first half of the 80s represents a considerable improvement over the average of 4.3% p.a. attained during the period 1974/75-80/81, and growth of the sector in 1985/86 was particularly good (6.8%). In 1986/87 growth slackened somewhat to an estimated 6.1%. Real gross output in mining grew by 7.5% in 1986/87, compared to only 4.2% in 1985/86 when coal production lagged. Power generation rose by a healthy 10.5% in 1986/87, partly in response to improved plant load factors. Nonetheless, drought conditions hindered hydro generation, and downtime in thermal plants continues to be a problem.

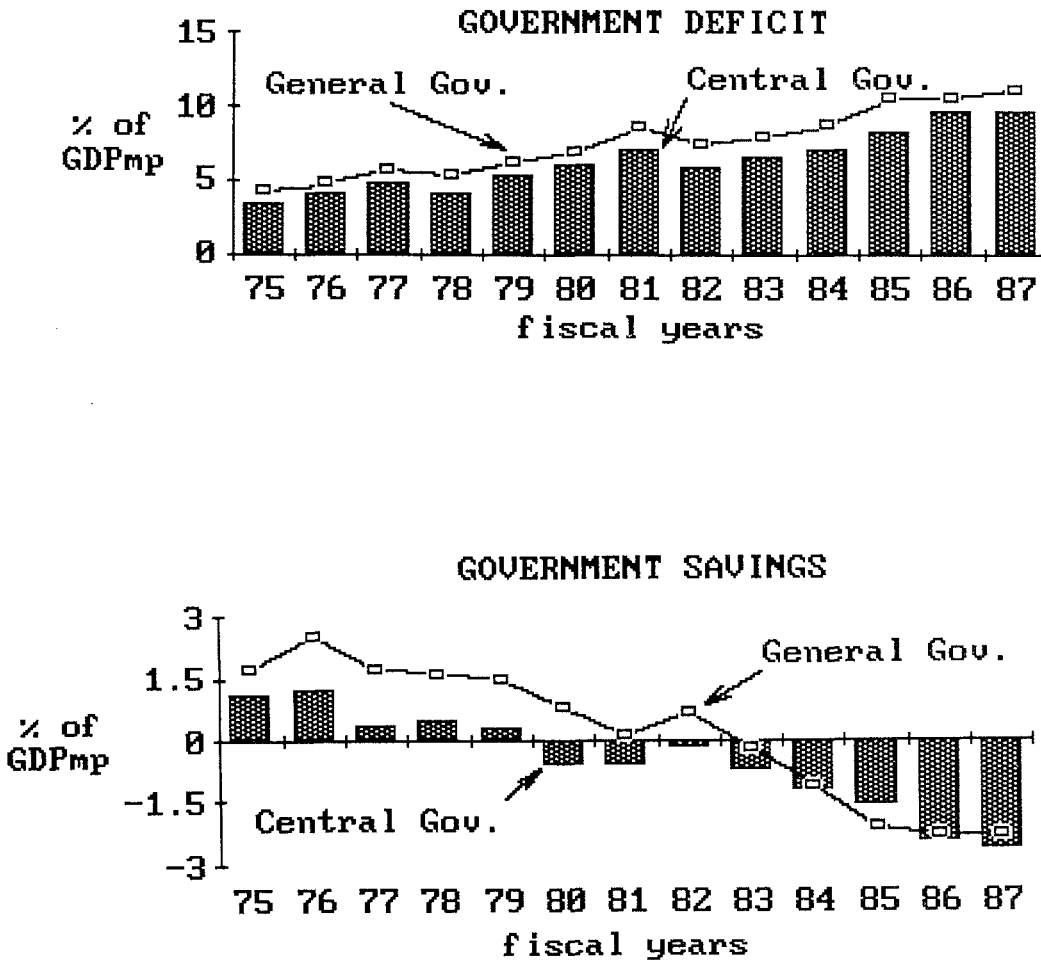
6. The services sector continued to grow rapidly in 1986/87. Value added rose at 6.9%, close to the 7.4% p.a. average for the last 5 years, and was an important factor in sustaining GDP growth. The most buoyant element again appears to have been public administration and defense (PAD). Excluding PAD, services grew at 5.9% in the 1979/80-1984/85 period, with tourism emerging as one of the key growth areas in 1986/87.

7. In sum, GDP growth is being sustained across most sectors, but less vigorously in agriculture. It is driven more by the sheer volume of investment over the past decade in power, irrigation, energy, industry, services and infrastructure than by significant increases in productivity or by gains from specialization in external trade. It is perhaps too early to expect large increases in growth from the deregulatory measures in trade and industry and the other changes in the policy environment introduced over the past two years. Given the already high level of saving relative to GDP and the domestic resource mobilization constraints that are discussed next, it would be difficult to raise the investment rate further without risking excessive dependence on external savings. Thus higher productivity, induced by further policy measures in trade and industry, will be of critical importance in sustaining growth.

2. Domestic Resource Mobilization

8. A serious domestic resource mobilization problem has emerged in the public sector in recent years. Total Government spending plus the Plan expenditures of public sector enterprises is estimated to have risen from 29.2% of GDP in 1980/81 to about 37% in 1986/87, based on budget data. Tax revenues rose, but not as fast. Even though internal resource generation by public enterprises also rose over this period, mainly in the oil sector, the result has been a rise in the overall gap between these budgetary revenues and expenditures from 8.6% in 1980/81 to an estimated 12.2% of GDP in 1986/87. This gap largely reflects trends in the deficit of the General Government, within which the Central Government predominates. The Central Government's current budgetary savings have become markedly negative, contributing to a notable rise in the overall Central Government deficit.

Figure 1.



9. To finance this growing deficit, the Government has relied mainly on the commercial banks, provident funds, small savings and, recently, the capital market. Non-concessional external borrowings have grown somewhat but remain within prudent limits. Thus far the public sector's demands for funds have been met largely by rising private savings and financial deepening, particularly in the capital market, without much crowding out of funds for industry or rises in inflation. Recently, however, there are some signs that private firms may be facing rising costs of funds, particularly as public enterprises have started mobilizing large volumes of funds through bonds offering very generous tax concessions. To combat this risk, the Government has placed a limit of Rs 15 billion on the amount of funds which public enterprise will be allowed to mobilize through bonds this year. There is also some risk that growing public sector deficits may exacerbate inflation. The consumer price index rose by 8.4% per annum last year versus 8.9% last year. The wholesale price increase was a more modest, 5.1% in 1986/87 compared to 3.8% in 1985/86. Increased inflationary pressures would have an adverse impact on the poor and make management of the balance of payments more difficult. It also would curtail the deregulation process, if the experience of other countries is any guide. Continued efforts thus are needed to avoid these problems: Public sector savings need to be restored, and the sooner this is done, the easier it will be.

10. The causes of this growing public sector deficit lie more with expenditures than revenues. Revenue performance over the past two years has been remarkable; tax receipts of Central Government rose by 19% in nominal terms in 1985/86 and another 15% in 1986/87. All tax categories, and the buoyancy of the economy, have contributed to this growth. The Government has lowered tax rates, introduced a modified value added tax (MODVAT), simplified tax structures and ensured stricter enforcement. Various amnesty schemes have been introduced to encourage collections from those who had stayed outside the tax net. Customs revenues have increased substantially as non-oil imports and the actual tariff paid on them both increased. It is estimated that tax revenues have, within two years, nearly attained the Seventh Five Year Plan's target of 18.3% of GDP.

11. Current expenditures, however, have risen even faster than revenue over the past six years, and as fast in the past two. Subsidies, interest payments, and employee compensation have been significant growth items. Defense has shown a rapid growth recently, with the 1987/88 budget being 43% higher than the 1986/87 budget and 23% higher than revised estimates of 1986/87 spending. There has been a favorable trend in internal resource generation by public enterprises since 1980, helped by increases in administered prices for a variety of products and services including oil, steel, coal, fertilizers, freight, electricity and telecommunications. Excluding the oil sector, however, returns on capital in public sector enterprises are barely positive in real terms and internal resource generation remains low. There remains great scope for further improvements in resource mobilization through efficiency improvements.

3. External Resources

12. 1986/87 saw a welcome reversal of last year's trends in the current account. Exports (net of crude oil) grew about 5% in constant prices, with manufactures growing an estimated 6% in constant prices and 15% in current dollars. Hopefully this performance signals a sustained reversal of the decline that occurred in India's share of manufactured exports from developing countries over the 1975-85 period, and of the slight decline in exports relative to India's GDP since 1979/80. Various export incentives were announced and gradually implemented over the past two years. Also, after a decade of relative stability, the real effective exchange rate improved about 8% in 1986. This will start to help reduce the systematic bias against exporting that has characterized the incentive framework for most of the past three decades.

13. Imports (net of crude oil exports) fell 2% in 1986/87, mainly because of lower prices for petroleum and its products, and fertilizers. However, other imports were up 20% in current dollars, continuing the rapid rise of the previous year. This increase was distributed over a range of capital and intermediate goods, reflecting the easing of import licensing. Nevertheless, the present ratio of imports to GDP, 7%, is lower today than it was at the turn of the decade and the same is true of exports (5%), reflecting the limited role played by external trade in the economy.

14. These trade trends contributed to a reduction in the current account deficit in 1986/87, to 1.1% of GDP, well below the average for the first half of the 1980s.

15. Gross external reserves increased only marginally during 1986/87, by US\$150 million, as there was a large decline in "other capital inflows" which, atypically, had been positive in 1985/86. Disbursements on MLT loans declined somewhat during the year, and a large repayment was made to the IMF.

16. The share of commercial debt in total debt has risen from 5% to 22% since 1980/81. The consequent hardening of terms has contributed to a rise in the debt service ratio on medium and long term (MLT) loans from 8% of current account earnings in 1981/82 to 17.1% in 1985/86 and 19.8% in 1986/87 according to the World Bank's Debt Reporting System. (These figures are higher than those reported in the GOI's Economic Survey, 1987, because of different sources, coverage, and exchange rates). Including the rising IMF repayment obligations, the debt service ratio in 1986/87 is estimated at 24.4% compared to 20.5% in 1985/86 and 8.1% in 1981/82. This is still manageable, but given the export growth rate, it cautions against increases in borrowing on market terms beyond those now projected. The debt service position also underlines the critical role still played by concessional aid flows in keeping external debt service within prudent limits.

17. In sum, the picture that emerges is one of reasonably successful macro-economic management for the 1980s to date. Inflation has been kept on average to single digits, and foreign borrowing has been kept to sustainable levels. Saving and investment have been maintained at high

levels, and have resulted a growth rate that would be the envy of many countries. There are, however, some danger signals: public sector savings have diminished to a dangerously low level; income growth is very uneven, while population growth is persistent, and absolute poverty remains widespread; the long-standing problem of slow export growth, and thus constrained imports and limits on borrowing capacity, likewise remains. The record of economic management is such that there is little doubt that the problems of macro-economic balance will be contained. There exists, however, much unutilized potential: higher returns from the savings and investment effort are not only necessary but feasible, both in the public and private sectors; interventions in the labor market and in production and social programs that benefit the poor could make more of a dent in the extent of poverty; and a modest increase in the share of exports and imports in GDP could yield gains from trade which would also, on balance, be labor intensive. The manufacturing sector in particular has great potential for dramatic improvements in efficiency and growth. The next section therefore examines the factors that have affected past industrial performance, and the scope for greater use of decentralized decision-making in competitive markets to help improve resource use.

B. INDUSTRIAL POLICY

1. Introduction

18. From the very start of planning in India, policy towards industry has been the subject of intense debate. Unlike agriculture, the outcome for industry was an enlarged and sustained role for the State as promoter, owner and regulator. There was and remains a broad consensus among political leaders, intellectuals and businessmen that the achievement of the nation's most basic goals--growth, social justice and self-reliance--requires a centrally planned industrial strategy. This reflects concerns about the impact of imports and foreign investment that go back to the colonial period. There is also concern that the unregulated behavior of monopolies and large industrial houses, and the unregulated pursuit of profits in a society in which wealth and incomes are very unevenly distributed, will not bring broad benefits, especially to the poor.

19. This consensus led to more detailed objectives, which remain dominant influences today. These include: reducing external dependence through import substitution in as many products and technologies as possible; curtailing and regulating the role of foreign companies; encouraging the dispersal of industrial development, avoiding urban congestion and developing of backward areas; controlling large conglomerates or individual firms lest they act against the public interest; ensuring employment preservation, and promoting employment generation and the development of entrepreneurship; establishing and preserving a dominant role for the public sector in specified core sectors; and ensuring the provision of key goods to the poor and other preferred users at low prices. In addition there has been, at least since the balance of payments crisis of 1957-58, a perception that foreign exchange is inherently scarce: a further objective has thus been to conserve and allocate foreign exchange to meet what are considered to be essential needs and to do this through administrative means rather than through price and market mechanisms.

20. The pursuit of these objectives led to the creation of a set of policy tools, of which the main ones are: the industrial license usually required to set up a plant, expand it, move it, change the product mix or in some cases the input mix; monopoly or dominance clearance for the same purposes for large firms or industrial houses; control over mergers or closures; reservation of a large set of products for small firms and other items for the public sector along with preferential treatment for both categories of firms; control over access to capital, domestic and foreign; controls on direct foreign investment in India; control over foreign exchange payments and hence technology through royalties; control over a large proportion of imports and exports via licensing, canalization, actual user policy (under which only actual users--not dealers--can import), phased manufacturing programs (which require rising domestic content in local production), technology agreements, domestic purchase preferences, and high tariffs; and the system of taxes and administered prices. In addition to these tools of the regulatory and incentive framework (but beyond the scope of this report), the industrial environment has been conditioned by immense investments in public sector and defense production enterprises, in supporting infrastructure and industrial services, and in financial, training, and science and technology institutions.

21. Progress towards India's objectives has been substantial. There is now a large indigenous industrial base, diversified in products, location and ownership, with chemicals, basic metals and machinery accounting for 40%-45% of gross output. Domestic production accounts for about 95% of the supply of manufactures, including almost 100% of consumer goods. There has, however, been a growing awareness among analysts and within the Government of India that productivity, output and employment performance over the past 30 or so years has not always been commensurate with the resources invested. The share of manufacturing in GDP and in employment has not risen much in two decades. In many sectors, uneconomic technologies and scales of production have been encouraged, leading to high costs. Inducements to raise productivity have frequently been low because of the way in which the pattern of public, private and small scale ownership, and control systems, discourage both internal and external competition and restructuring. Similarly, the absence of effective incentives to export meant that firms were not tested in world markets. For a long time, these inefficiencies were hidden by the growth rate of output during the import substitution process. Over the last decade, however, evidence has accumulated that the pursuit of these multiple goals, with these instruments, was producing an industrial structure that did not generate the growth in employment, productivity and trade that the economy requires. It has also been recognized that the lack of internal competition, export rivalry and import competition was a major factor in this performance.

22. Since the mid-1970s, and especially over the past two years, Government policy has begun to address these problems. In many ways, the reforms that have begun in industry are similar to those that were carried out twenty years ago in the agricultural sector. At that time the latter sector moved from a system of widespread physical and price controls (including compulsory procurement and bans on inter-state trade in grains) to a situation in which the free market works reasonably well and where foodgrain supplies are adequate to meet market demands. There is

extensive use of price signals, and Government's role is to be the provider of infrastructure, supporting institutions, and services; producers are largely autonomous.

23. In industry, many regulatory barriers have been lifted (see paras 87-98 for a fuller discussion). For example, more liberal conditions for entry and expansion in the capital goods sector began to be introduced in the mid-1970s and provided an impetus for its growth and modernization. In cement, there was a dramatic investment and output response to the partial decontrol of prices and reduced barriers to entry and expansion in the early 1980s. Recent policy changes in telecommunications, electronics, drugs and automotive products, which provide the private and the joint public-private sectors with expanded opportunities, seem to be bearing fruit. Industrialists are also reacting favorably to the partial removal of licensing requirements; to the easing of some licensing restrictions for expansion (e.g. broadbanding); to measures that encourage reaching more efficient plant size, and to improved access to capital markets, imported technology and imported capital goods. There have been significant improvements in direct and indirect tax policy, and in some export policies. Overall, the results have been positive: industrial growth and productivity seem to have risen significantly in recent years. However, India's manufacturing performance still lags behind some of the other Asian economies.

24. The environment facing Indian industry today suggests that further changes along the lines already initiated by the Government in its industrial policies would be appropriate. With changes in both international and domestic markets, an increasing number of industrial activities are characterized by rapid technical progress, short product cycles and switches in comparative advantage. Competing in this environment requires flexibility in resource allocation and speed of decision making that is precluded by the traditional regulatory instruments. The long delays in approving some new large-scale industrial projects or expansion of existing concerns, and the policy-related difficulties in exiting from declining industries, are inconsistent with a quick response to technological and marketing opportunities. In order to take full advantage of India's strengths--a large pool of educated manpower and numerous progressive industrialists well able to respond to the rapidly shifting domestic and international markets--further reductions in regulatory barriers and incentive distortions are both desirable and feasible.

25. The structure, behaviour and growth of manufacturing industry is affected by the regulation of firms on the one hand, and the incentive system on the other. The regulatory system often requires that permission be obtained by a firm from Government or a public agency before it can, for example, set up a plant, expand it, produce more than its licensed capacity, change the product mix, relocate, seek external finance or collaboration, import specified goods or services, or close down. The regulatory system is a negative one in that some requests are denied, and others are never presented for fear of denial. The incentive system, on the other hand, can be promotional--it affects the prices of outputs, inputs, imports, exports, capital, wages, etc. and hence firms' intentions, actions, and ultimately their allocation of resources. The regulatory system is described first, and the incentive system next. This

summary then discusses the consequent achievements and problems of the industrial sector, and the steps already taken to address these problems. It concludes with some ideas for further policy evolution and observations on the possible speed, sequence and effects of reform.

2. The Regulatory System

26. The regulatory system in India domestically controls the entry and growth of firms, the activities of large and dominant firms, foreign investment and technology collaborations, production of items reserved for SSI and the public sector, the distribution of goods, and the exit of firms. On the external front the control system regulates the flow of imports and exports. The distribution system also affects competition and the allocation of resources, both domestic and imported.

(a) The Domestic Economy

27. Entry and growth of firms is affected by capacity licensing, monopoly control, foreign investment and technology import control, and reservation of products for the public sector or for small-scale firms. Capacity licensing, under the Industrial Development and Regulation Act of 1951 (IDRA), has been the tool through which the Government has attempted to match domestic capacity to planned demand. A license is usually required to set up a new unit, expand it beyond a certain pace, manufacture a new product in an existing plant, or relocate a plant. The perception was that scarce capital must be allocated to priority uses. Indeed, given that there is virtually complete protection from foreign competition, the licensing system helps prevent excessive entry.

28. There has been a general easing of licensing requirements in recent years in recognition of the rigidities created by the system. These are detailed in paras 93-95 below. However, the relaxations of controls are subject to significant qualifications, and licensing continues to be a significant barrier to entry and growth.

29. The approval rate for license applications in the first half of the 1980s was typically 40%-50%, the most common reason for rejection being the existence of "adequate capacity". However, some of the approvals were not used, not least because some of these applications were for capacity that preempted entry or expansion by competitors and thus helped maintain sellers markets. Restrictions on expansion appear in the past to have been greater than those on entry, so licensing acted as a barrier to growth, specialization and the attainment of scale economies. In the nylon filament yarn industry, for example, between 1962 and 1985 eleven firms set up eleven plants with an average capacity of between a quarter and a tenth of those found in India's competitors. In 1986, a new minimum economic scale (MES) criterion for such licensing was announced, which would imply that the Indian market should eventually be supplied by only three plants.

30. Control of large and dominant firms is effected through clearances under the Monopolies and Restrictive Trade Practices (MRTP) Act of 1969. MRTP firms are generally restricted to "core" industries, which comprised about 40% of manufacturing value added in 1982, and are subject

to more onerous export and location conditions. Control on entry and growth of large or dominant MRTP firms takes place through the additional requirement for MRTP clearance before an industrial license can be issued. The rate of approvals is now about the same as for licenses as a whole, but the process has traditionally been far slower: in the 1982-85 period, 72% of non-MRTP applications were decided within one year, whereas for MRTP companies the figure was less than half, and many applications took 2-3 years to be decided. Efforts in the past two years seem to have accelerated the speed with which approvals are granted.

31. The way MRTP regulations are interpreted has effectively meant that additional competition in some markets already dominated by large, often very profitable, firms is severely limited because other large and potentially competitive firms are forbidden entry, paradoxically prolonging the dominance of early entrants. In recent years, changes were made in rules governing the applicability of the Act, reducing coverage from about 1,350 to 1,100 large companies and increasing the areas in which MRTP firms can enter and expand, but it remains a powerful instrument limiting entry and growth.

32. Foreign investment and technology collaborations approvals were highly selective from the mid '60s to the early '80s. However, in an effort to achieve technical upgrading of industry, approvals of foreign collaborations--mainly technical ones--was increased from 389 in 1981 to 1024 in 1985. Nevertheless, limits continue to be prescribed on the fees payable for outright purchase or use of imported technology, and imports of technology may not be approved if the import content of the processes is considered to be too high. Direct foreign investment remains strictly controlled under the Foreign Exchange Regulation Act (FERA) of 1973. Only about 100 companies have been permitted to retain a foreign equity holding in excess of 40%; of these, less than half are in manufacturing. Their freedom to expand or enter new fields is even more constrained than that of MRTP companies.

33. The freedom of firms to enter or grow is also affected by the lists of products reserved for the small scale industry (SSI) sector. The aim of SSI reservation is to improve the distribution of income and wealth by encouraging employment and new entrepreneurs. Some 863 products are now reserved for the SSI sector: existing firms above the SSI investment ceiling are not given licenses to expand, nor are new larger firms allowed to enter unless they export over 75% of their output. Quite apart from the provisions for preferential purchases, input supplies, and financial incentives, small-scale firms are protected from internal competition from medium and large scale private firms. Similarly, certain products are reserved for production by the public sector, in the conviction, stated in the 1956 Industrial Policy Resolution and not seriously challenged since, that the "commanding heights" of the economy should be not only controlled, but also owned, by the state. They too face little competition. A heavy price has been paid in certain product lines in terms of quality, cost and technological obsolescence.

34. Exit: While the above controls, even after the recent liberalizations, often make it difficult to enter an industry, or grow, it is even more difficult in India to exit, i.e. to close down or merge with another company. There were 120,000 "sick" units (firms that had zero or negative net worth) at the end of 1985; nearly 80% of such firms were in

the small scale sector. Only a minute fraction, about 60, actually closed that year. Behind current actions that reduce the ease with which firms can close are the goals of employment preservation, the conservation of assets, and protection of worker's vested rights, especially unpaid wages and pension funds. Closures or retrenchment of labor are controlled by the Industrial Disputes Act (1984 Amendment). Permission to retrench, which is commonly handled by individual states, can be very difficult to obtain. Mergers are controlled by the Companies Act and are rare. Almost no mergers have been approved that would create or expand an MRTP company or breach SSI reservations.

35. In addition to management, infrastructural, input and marketing problems, industrial sickness in India reflects to a significant extent the lack of opportunity or need for timely adaptation to difficulties, and to market forces. Survival does not require competitiveness, and the financial institutions (17% of whose outstanding loans are to sick enterprises) are not under pressure to maintain healthy portfolios. It is not yet widely recognised that assets of sick firms could be used more productively by others, and since their sale is inhibited, banks have no incentive to foreclose and so stimulate the adaptation process. In the longer run this discourages new entrants and employment growth. Greater flexibility for firms to adapt, merge and in extreme cases exit is an important corollary to progressive relaxation of entry and growth constraints.

(b) External Trade

36. Imports: Non-tariff barriers have long been the principal means of regulating imports and protecting local industries. These controls include the import licensing system, the "actual user" policy (which forbids imports by intermediaries), canalization (i.e. monopoly import by a public sector firm), and phased manufacturing programs (that mandate progressive import substitution). In addition, the industrial licensing system is used as a tool of import control.

37. Import licensing divides imports into consumer goods, intermediates and capital goods. Finished consumer goods have long been banned and remain so, except for a few essential items not produced locally in sufficient quantities such as edible oils, kerosene and certain drugs whose import is canalized. Intermediates are divided into "banned", "restricted", "limited permissible" and "open general license" (OGL) categories, and capital goods into "restricted" and "OGL" lists. Goods on OGL can in principle be imported freely by a qualified "actual user". There has been a steady expansion over the last ten years of goods on OGL lists. However, while there are exceptions, these generally comprise products not produced in India.

38. Outside the OGL category, the various restrictive categories require review on a case-by-case basis. The requesting firm must have its sponsoring ministry confirm that the import is "essential" and give an "indigenous angle clearance" certifying the product is not available locally. The cost of a domestic equivalent is generally not considered in making this judgement. Indications are that discretionary imports of both capital goods and intermediates have risen steadily over the past decade, reflecting more permissive operation of the control system.

39. The fact that an import is on an "OGL" list does not necessarily imply that it may be imported. The importer must generally be an actual user (industrial), i.e. a firm which uses the imported machinery or input in its own production process. The intention and effect of this policy (subject to some carefully controlled exceptions) is to prevent imports by intermediaries for resale or by final consumers so as to control the end use of imports. Truck tires, for example, are on OGL, but there have been no imports, in part because of the high tariff (140%), but also because none of the truck and bus companies buying replacement tires qualify as "actual users (industrial)", while tire imports by car and truck manufactures are prevented by Phased Manufacturing Programs. These PMP's and their accompanying "List Attestation" procedures, aimed at progressive and permanent indigenization, override OGL lists and are an important new import barrier. In some cases, e.g. imports for incorporation into exports, there is continuous customs inspection to ensure that imported goods are not put to a higher-value use.

40. The principal intermediaries allowed to import for resale are the 16 public canalizing agencies which import (or export) commodities in bulk. These agencies account for half of all imports including POL, or one fifth of non-POL imports, and about 11% of exports. Of the canalized goods, POL, fertilizers, iron and steel, non-ferrous metals, edible oils, natural rubber, newsprint, cement, scrap metal and sugar are the most important, but there are many other imports with lower volumes. Since it is far from clear that economies of bulk purchase or adequate quality or service are attained, the main use of canalization is to maintain discretionary controls on the import, pricing and distribution of these products. The share of canalized imports has declined in the 1980s, largely due to lower prices for petroleum, petroleum products and fertilizer, but also to import substitution in some canalized products such as cotton and wheat.

41. Finally, entry and growth controls also act as discretionary import controls, in that the issue of an industrial license requires Capital Goods Committee clearance, which may be denied if either the capital or the recurrent foreign exchange outlay is deemed "too great". The same applies to technology imports, which are often linked to capital goods imports. Government domestic purchase preferences also act as a significant non-tariff barrier to imports.

42. While the non-tariff import control system remains firmly in place, the proportion of "open general licence" (OGL) imports not subject to these controls has risen during the past decade. However, most OGL imports are intermediate materials or capital equipment which are not produced domestically; consequently, only a very small part of imports (probably less than 5 percent) is directly competitive with domestically manufactured products and not subject to discretionary non-tariff controls. There is recent evidence of increased import competition for a few domestic industries (particularly those supplying capital equipment for projects) arising from greater permissiveness in the administration of import licensing and canalization, which still applies to the bulk of imports. However, such increased competition is still quite limited. Also, the improved accessibility of imported equipment and intermediate imports (which has been typically accompanied by ad hoc tariff reductions)

has tended to increase the effective protection of manufactured products, the import of which either remains banned or subject to restrictive import licensing and/or prohibitive tariffs.

43. Together with most primary commodities, various manufactured products are also subject to export licensing. In some cases these controls have been used to restrict exports in order to keep domestic prices below world prices (e.g. cotton, cotton yarn, tea, hides and leather during some recent years). However, the main constraint on manufactured exports comes from the general incentive system, which is discussed below (paras 47 ff).

(c) Distribution

44. The Government has made very considerable progress in recent years in reducing controls on the distribution of products, thereby increasing competition. For example, the share of levy cement and sugar, which has to be sold at a Government-set price to specified purchasers, has been reduced significantly. Distribution, however, is still often controlled in such a way as to insulate producers from competition. In the newsprint industry, for example, under the Newsprint Allocation policy (Nov. 1986) each newspaper is required to buy a fixed proportion of its supplies at a fixed delivered price from each of the four mills, and the remainder from the STC, the import canalizing agency. There is thus no competition between producers or from imports. The same is true for price competition between the four producers in the primary aluminum industry.

45. In the fertilizer industry, the canalization of imports and their distribution to farmers at the same subsidized selling price as domestic producers eliminates import competition. Competition between domestic producers is largely removed by the plant-specific "retention price" system, though the recent emergence of discounts by different plants selling in the same area indicates that some competition is developing despite the system. In steel, the Joint Plant Committee, a producer cartel, allocates domestic and imported steel between customers, insulating producers from consumers and both from import competition. Intermediate steel products like hot rolled coils are allocated between steel pipe producers according to a formula based on past consumption. Given quantitative controls on imports, the distribution system prevents competition in, and rationalization of, steel-using industries.

46. In sum, the Government has, during the past few years, taken a number of significant measures that are beginning to reform the industrial regulatory framework which, over three decades, had tended to establish barriers to entry, discourage growth, impede competition and adaptation, and block exit for all but small scale producers. The regulatory framework has had a major impact on market structures, firm behavior and industrial performance. Before reviewing the impact of the system and of recent changes, we examine the incentive system, another main determinant of performance. (Other critical determinants of industrial performance lying outside the regulatory and incentives framework--e.g., macro policy and infrastructure--are examined broadly in paras 136 ff.)

3. The Incentive System

47. Firms' activities and thus the allocation of resources are determined by expected relative rates of profitability and relative risk. These expectations and risks are in turn a function of the incentive system: input and output prices (as modified by external tariffs), export incentives, wages and interest rates, taxes and allowances, and various preferences and subsidies. The control system described above has, of course, a major impact on financial incentives--generally in the direction of reducing risk and increasing profitability by limiting competition--but if the present trend towards deregulation continues, the price signals given by the incentive system will come to play a greater role in firms' decisions.

(a) External Tariffs

48. Indian tariffs are high, much higher than in other industrializing countries with large internal markets and diversified industrial structures. It is difficult to say exactly how much higher because of the proliferation of tariff exemptions, as a result of which a given product can be subject to various duty rates depending on which industry or firm uses it, and for what purpose. Identical stainless steel plates, sheets and strips, for example, could be subject to a tariff ranging from 65% to 225% depending on end use. However, both average tariffs and duty collection rates are up to six times more than in other industrializing countries.

Table 2
INDIA: Mean Tariffs on Manufactured Goods in 10 Countries

	Intermediate Goods	Capital Goods	Consumer Goods	Manu- facturing Sector	Duty Collection Rates a/
<u>India</u>	<u>123.0</u>	<u>114.5</u>	<u>128.5</u>	<u>121.7</u>	<u>41.3</u>
Argentina	21.2	25.0	21.9	22.9	13.8
Bangladesh	97.9	80.5	116.1	100.8	15.0
China (PRC)	78.9	62.5	130.7	91.2	n.a.
Hungary	14.2	14.0	22.6	20.9	7.0
Mexico	23.5	23.5	32.2	24.7	6.8
Morocco	21.6	18.1	43.0	27.8	16.6
Thailand	27.8	24.8	48.5	33.5	12.5
Turkey	29.4	34.9	55.3	37.1	7.0
Yugoslavia	18.0	20.7	20.0	19.0	10.9

Source: Text Table 4.3. Note: Data refer to various recent years.

a/ Import duties collected as a percentage of value of imports.

49. Tariffs in India have gradually risen over the past decade, as have duty collection rates, which have risen from 25.8% in 1980/81 to 41.3% in 1984/85 and, in 1986/87, reached 61%. The latter is very high by international standards, but lower than nominal tariffs. This is partly because of exemptions, but also because tariffs tend to be low on goods

not produced in India, but high if there is local production capacity--in which case imports are also severely restricted by non-tariff barriers.

50. Nominal and effective protection, as measured by comparing actual domestic prices with world prices, is generally lower than would be suggested by the tariff rates. Average measured effective protection (weighted by value-added measured in world prices) is about 40%. Protection is quite bi-modal. High effective protection (over 70%) is found for sectors accounting for about 40% of manufacturing value added. Industries in this category are highly capital and power-intensive, accounting for over half of fixed capital in manufacturing, but only 18% of employment. They also have relatively high labor costs. On the other hand, sectors with low effective protection (less than 30%) account for 43% of capital, but 78% of employment. In other words, the protection system mainly benefits capital and a small minority of privileged workers, including a high proportion of public sector firms, while protection accorded to most employment is low. Measured nominal and effective protection is generally much lower than that available from tariffs, suggesting considerable tariff redundancy. Effective protection for exports is mostly lower than for domestic sales and is often negative. Export incentives have not been able to offset fully the cost disadvantage of operating in the domestic economy.

(b) Export Incentives

51. For many years the Government has recognized that exporters of manufactures need special assistance to offset the higher cost and other disadvantages of exporting from a protected and controlled domestic market. Interventions are numerous and complex, and can be classified under six broad headings: (a) special facilities to make inputs available at reduced cost; (b) subsidies on domestic raw materials; (c) facilities to make machinery and equipment available at reduced cost; (d) profits tax and credit subsidies; (e) assistance with export marketing; and (f) free trade zones and bonded manufacturing. The exchange rate has generally not been used aggressively as an instrument of export policy, though there have been periods (e.g. the mid '70s) where a substantial real effective devaluation of the currency has been associated with a significant rise in exports.

52. For at least ten years, and with renewed emphasis in the last two, these schemes have been revised and extended. Special access is allowed to duty free imports of raw materials and components, and there is also provision for the drawback of customs duties on imported raw materials and excise and other taxes on domestic materials. This is supplemented by cash compensation payments which are extended to offset other cost-raising factors such as taxes on electricity. There are also subsidy schemes for refunding to exporters the difference between the world prices and the domestic prices of locally produced steel and rubber. Aluminum and copper have recently been included in this scheme, and access is being extended to other categories of imported intermediate goods. There is also a special scheme for bonded manufacturing. Two free trade zones are in operation, and four more are being launched. Reduced profits tax and interest subsidies on export finance are also provided.

53. There is no doubt that these initiatives are having a favorable impact, as evidenced in particular by increased exports of leather goods, marine products, garments, gems and jewelry. However, in the highly protective Indian environment, the greater the export-specific support, the greater are the administrative efforts required to prevent the benefits to exporters from being diverted to the protected domestic market (as happened recently with imported duty-free raw silk). The consequent administrative burdens have been the bane of most interventions. It is even more difficult to support indirect exporters, and the limits on both import and export houses in the pursuit of the "actual user" policy makes the emergence of new exporters more difficult. For these reasons, it will be difficult to create incentives adequate to match those available to producers for the domestic market, without a thoroughgoing reform of the trade and exchange rate regime.

(c) Prices, Wages and Taxes

54. Price controls cover 65 individual items or groups of commodities including steel, coal, aluminum, fertilizer, paper, sugar, cement, drugs and petroleum products. The main objectives of price controls have been to provide concessional prices to favored groups such as government, public sector units and the poor; to provide subsidized prices to producers to encourage production of items such as fertilizer; and to control inflation by limiting the price increases which might have arisen as a result of shortages, such as in steel. Prices are usually set on a cost-plus basis, but have resulted variously in: (a) a uniform price for all plants for a given product (e.g. steel); (b) different prices for different plants for the same product depending on the age of the plant, etc. (e.g. fertilizers) and even (c) different prices for the same product from a given plant (e.g. levy and non-levy cement).

55. As might be expected, price controls have adversely affected industrial sector efficiency. They have created a situation in which plants of an uneconomically small scale can survive (paper, mini-steel); created shortages (e.g. in cement--until partial price decontrol led to a spurt in investment after 1982, paper and hydrogenated vegetable oil); removed incentives to minimize the investment cost of new plants (fertilizers); and acted as a disincentive to modernization (steel in the 1970s). The Administered Price Policy paper (August 1986) holds out the promise that plant-specific prices may be abolished.

56. Wages have shown a strong tendency to rise in the organized sector, to a level above the opportunity cost of labor in India. They rose 70-80% in real terms from 1960-1980, led by the strong upward rise in wages in public sector undertakings. This rise in wage costs in the organized sector industry has, in a wide range of industries, encouraged excessively capital-intensive techniques--capital intensive in the sense of capital employed per worker and per unit of value added. Real wages in the unorganized sector are much lower. In the textile sub-sector, for example, wages for comparable activities in the mill sector are three times those in powerlooms. Stringent labor legislation and trade union pressures (especially in the more industrially advanced states like Maharashtra and Gujarat) have pushed up wages and contributed to low labour absorption in organized manufacturing. A reversal of these trends (helped by growing exports from labor-intensive firms) could, over time, markedly

increase the elasticity of employment growth with respect to output growth, from the historical 0.5-0.6 towards unity. This would occur because of greater labor absorption by individual firms--the evidence suggests that responsiveness of employment to the real wage is high--and a shift in the composition of industrial output towards more labor intensive industries.

57. Taxes are much less of a distorting factor than in the past, when high marginal direct tax rates and slack tax enforcement encouraged evasion, and investment in trading and sterile assets such as land, rather than in manufacturing. The Long Term Fiscal Policy statement was a big step forward in this area. The industrial sector, however, is a major source of excise revenue and is subject to higher taxes than the agricultural sector. Despite the introduction and recent extension of MODVAT, levies on intermediate products and capital equipment contribute to India having a "high cost" economy. The non-uniformity of indirect taxes still distorts profitability and thus investment choices between various products. Overall, however, distortions arising from the tax system are minor compared with others in the regulatory and trade system.

(d) Scale, Location and Purchase Preferences

58. In addition to barriers to entry of medium and large firms into areas reserved for small scale industry (SSI) and into congested areas, etc., incentives are given to support SSI, to encourage firms to locate in backward areas, and to encourage purchases from small and public sector industries. Small scale industries receive excise tax concessions that now taper off as size increases. Finance on concessional terms is available--encouraging higher capital-intensity--and there has been freedom from the price and production controls which exist, for example, in the textile, cement, paper and steel industries. These factors, together with greater labor flexibility and freedom from controls, have enabled some SSI's to operate more efficiently than would otherwise be possible. At the same time, however, the threat of losing these freedoms by graduating from the small scale sector has in many cases discouraged growth and modernization.

59. Financial incentives to locate in backward areas supplement the licensing controls that direct MRTP, FERA and other large companies to disperse. Central incentives include concessional long-term loans, subsidies for fixed capital investment, transport subsidies and income tax concessions, along with state-level incentives in the form of sales tax exemptions, concessional finance and infrastructure. Freight price equalization for products like steel also insulates producers and users from location decisions. It is not clear that the results from the consequent dispersal, in terms of cost-effective development of backward areas, justify the expenditure on incentives. There is also evidence to suggest that both capital and operating costs are higher in remote locations, thus imposing a constraint on the competitiveness of the dispersed firms. The ability to influence location clearly remains, however, an important goal of policy.

60. Finally, government purchasers can give price preferences to SSI and public enterprises units (of up to 10%) as well as purchase preferences. Public enterprises also have access to capital at lower cost

than the private sector, because of directed credit and tax and write-off concessions on their debt. Both factors give an additional degree of protection against private sector competition.

4. Results

61. The dense set of controls and incentives described above has been in existence in one form or another for over three decades. Though the controls and incentives have been changed significantly in the past few years, they have had a profound effect on the structure of industry, the behavior of firms and industrial performance, as is described next. They have delivered some impressive results, but they have also left India with an industrial structure which needs to undergo very significant further changes.

62. Before examining the results of past policies, it is important to make a general point. The extreme complexity and the case-by-case nature of both the control and incentive systems have many hidden costs. They have led to a large administering bureaucracy and impose high transaction costs on the Government as well as on manufacturing firms, both in terms of the time and attention required of executives, and in the delays and uncertainties of obtaining licenses or incentives. Moreover, these transaction costs are least for established firms following established routines and highest for new firms or existing firms undertaking new initiatives. Perhaps most important, the large potential gains from successful lobbying for import or other privileges, and conversely the large potential losses which may result from successful lobbying by competitors or customers, inevitably divert the attention of industrialists from their managerial tasks of maintaining and improving the operating efficiency and general performance of their firms.

63. The transaction costs that are inherent in the system also are not symmetrical between supplying the domestic market and exporting. Whereas an import ban or a prohibitive tariff, as long as it remains in place and is not challenged by customers, protects local firms without any effort on their part, high transaction costs must generally be incurred to obtain export incentives, which are subject to complex rules and conditions, and which, once obtained, provide less protection than is available in the domestic market. It is difficult to quantify these transaction costs, but they have an effect on performance.

(a) Industrial Structure

64. Industrial value added growth was quite rapid in the 1950-65 period (almost 7% p.a.); it slowed considerably in the next two decades to 4.2% p.a.. During the past few years, perhaps in response to recent liberalization measures, industrial growth has again been accelerating. The share of manufacturing in GDP rose from 14.3% in 1966/67 to 17.8% in 1978/79 and has since remained below that level; it is well below the share in other major industrializing countries. This indicates the potential for relatively rapid growth in output and GDP share in the future. Measured by the absolute size of value added, the sector is around half as big as Brazil's or China's, two thirds the size of Australia's or Spain's, about equal to Korea's, and 20-30% larger than the manufacturing sectors of Sweden or Belgium.

65. The primacy accorded to heavy industry has produced structural changes: basic and capital goods industries, which accounted for less than 10% of manufacturing value added in 1950 and 40% in 1960, accounted for 57% two decades later. The share of the public sector, which for the two decades up to 1980 accounted for more than half of investment in manufacturing, has risen to about 20% of value added--about the same share as the small-scale sector--and is pivotal in many heavy and basic goods. The share of agro-based industries dropped from 47% in 1960 to 25% in 1984 as chemical and metal industries grew in importance.

66. Perhaps the most striking characteristic of the industrial sector is the great diversity of goods produced and the high degree of self-sufficiency--both despite the relatively small size of the market by international standards. At present, imports seem to account for only 5-10% of the total domestic consumption of manufactured goods in India, the proportion varying from zero in the case of textiles to 25% in, say, non-electrical machinery. This diversity has been attained at the expense of comparative advantage and international specialization. It has been encouraged by high product-specific protection which, together with the regulatory system, has led to production often being fragmented into plants or product lines below minimum economic scale (MES) with high costs and obsolete technology.

67. The size distribution of firms contains a few surprises. Despite the preferences given to small firms, their share appears to be about the same or less than in comparable countries, depending on the size criterion used. Despite the controls on size, the share of large firms is large and has risen. Medium-size firms seem relatively underrepresented, partly because of the limitations on the growth of smaller firms and the restrictions on subcontracting and other links with large firms. This pattern is characteristic of size distribution in the steel, automotive and textile industries, for example.

68. Market Concentration is quite high, despite the efforts made through MRTP to control large and dominant firms, in part because of the dominance of public sector firms. To a large extent, this may reflect scale economies. The top four firms accounted for more than 70% of output in 1983/84 in most machinery-producing subsectors, in intermediates such as basic metals, some synthetic fibers and newsprint. In final goods and fabricated items like steel tubes, paper, cotton and blended fabrics, the four-firm concentration ratios are usually below 30%.

69. The scale of production in many plants, e.g. in the chemical, petrochemical, synthetic fiber or electronics industries, is below world standards, although in some cases these industries have high concentration ratios. Production costs are correspondingly higher. Scales are often between a third and a thirtieth of those found elsewhere. Examples are mini-steel plants, where only one of the 135-140 plants appears to approach MES. In the production of most intermediate chemicals for synthetic yarns, where Indian plants are one third to one fifth of estimated MES, ex-factory prices in late 1985 were 70-220% above world prices. Since exports are also both modest in volume and diversified in composition, and often not competitive in price or quality, under present policies the opportunity to achieve adequate production scales through exports is also limited.

70. Within firms, the degree of product specialization tends to be low. There is often insufficient horizontal specialisation and too much vertical integration. This is characteristic in textiles, automotive components, machine tools and electronics. There are several reasons: protective trade policies have made it profitable; it has been easier under the control system to add new products rather than expand; and the product-specific licensing system has made it difficult to shift output mix in response to changing opportunities. Vertical integration was encouraged by the cascading excise tax system, and the lack of competition among potential suppliers also creates a preference for in-house production for quality reasons.

(b) Firm Behavior

71. The regulatory and incentive policies have affected not only industrial structure, but also the conduct of managers, e.g. with respect to competition and choice of technologies. The combination of regulatory and price controls has substantially decreased the degree of price competition in a number of sectors such as fertilizers and steel. They have also induced managers to adopt certain forms of anti-competitive and strategic behavior, e.g. by preempting applications by competitors for capacity or technology licenses to restrain access to markets.

72. In this way, regulatory policies as implemented reinforced the powers of domestic monopolies and cartels, especially when combined with other policies such as small scale industry reservation or public sector reservation to reduce or eliminate potential competition. This result was possible because of the basic approach to banning competing imports when "adequate" domestic supplies are available. The criterion of indigenous availability has commonly been implemented without adequate attention to the price of local products, though this may now be changing. Apart from being sheltered from international competition through tariff and non-tariff barriers, firms are also discouraged from having to meet competition overseas by the anti-export bias of the trade regime.

73. A lack of competitive behavior is found in profit levels, which are high relative to more open economies. Also, there has been little change in the market shares of large firms. In many important segments of industry such as plastic products, two and three wheeled vehicles, cables and conductors and trucks and buses, the average change in an individual firm's market share over 1974-84 was well below 5% annually. Even where the average change in market shares was higher--as in autos before the advent of Maruti--changes mainly reflected fluctuations due to production constraints on the output of the two major producers.

74. Finally, the lack of competition is also reflected in technology behaviour. R&D spending is primarily by government agencies, and is fairly low in both public and private sector firms. There has been too little competitive pressure for technological upgradation, and the opportunities for such upgradation have traditionally been constrained by policies such as indigenous angle clearance and FERA regulations.

Although there are exceptions, in key industries such as steel, telecommunications, switching equipment, cables and electronics, technologies are outdated. The symbiotic relationships that have developed between dominant producers and buyers (as in telecommunications) have also constrained the demand for technology change. This situation is changing now, however, with increased Government efforts to stimulate competition and technological improvements through technology collaboration agreements (e.g. light commercial vehicles and 2-wheelers).

(c) Industrial Performance

75. The combined effect of policies on industrial structure and company behavior as described above can be seen in various indicators of performance. For example, the average level of capacity utilization in manufacturing fell from 76% in 1970 to 66% in 1984. This decline was notable in consumer goods industries such as paper, sugar, cotton cloth and radios, in many capital goods, and also intermediates such as automobile tires and cotton yarn. Similarly, there was rising capital intensity in manufacturing: ICORs for the sector moved from 2.8 in the '50s to 4.4 in the '60s and 6.2 in the '70s--a greater shift than is accounted for by a rising share of intrinsically capital-intensive sectors in total manufacturing.

76. Perhaps the best measure of performance is the trend in factor productivity. Evidence points to rising labor productivity and capital intensity, but little if any improvement in total factor productivity (TFP). TFP in the '60s and '70s in manufacturing grew at around 1% per annum, rather lower than other developing countries, whose TFP growth ranged between 2% and 5% per annum. Thus the improved labor productivity mainly reflected the increasing capital intensity, but overall technical progress was slow. It is not surprising that industrial growth was hard to sustain.

77. The low growth rate of TFP also worsened India's export competitiveness. Export performance in manufactures has been disappointing with particularly sharp declines in textiles, garments and basic metals. Manufactured exports grew at about 1.5% in real terms from 1976/77 to 1984/85 and the share of exports in industrial output declined to less than 5%. India's manufactured exports declined from 0.6% to 0.4% of world exports from 1976 to 1983 at a time when developing countries exports of manufactures rose from 15.9% to 17.5% of world exports.

78. This performance stems in large part from the two factors already mentioned: (a) the environment of regulatory controls, fragmented capacity, high protection and lack of competition resulting in high domestic input prices; and, (b) an incentive structure (including the protection-affected exchange rate) in which the many product-specific export incentives and compensatory measures have not yet succeeded in offsetting the negative effects of domestic tax structure and the policy environment.

(d) Performance against Objectives other than Growth

79. The above sections have judged performance using growth-related measures such as output, exports and efficiency, but this is only one set

of objectives against which it can be judged. In India, in addition to growth objectives, employment, geographical distribution and self-reliance have been and remain exceedingly important objectives.

80. Employment trends have been disappointing, with growth in the organised sector being in the 2.5-3% range per annum, and the responsiveness of employment to growth in value added being modest at 0.5 to 0.6. Employment performance in the unorganized manufacturing sector was better, with value added and employment rising at 6% and 5.5% per annum respectively in the 1980s.

81. In the organized sector, trade union pressures have pushed up real wages, and stringent labor legislation has reduced flexibility in the labor market. Dismissals can be very difficult, particularly for large plants, making firms reluctant to take on additional employees. The protection of high wage industries and other policy interventions have tilted the composition of industrial output and employment towards capital-intensive, high-wage industries. A more neutral incentive system, and the absence of labor market distortions, would have led to a more labor intensive mix of products in the organized industrial sector and thus to a much higher employment growth.

82. Employment performance in small scale units was more favorable mainly because of realistic wage levels and flexible labor regulations. In other respects, the policy environment actually reduced the potential for employment generation. Some of the SSI concessions, particularly subsidized credit, encouraged excessive capital intensity, both in the choice of product and process. The policy framework which constrained the growth of small firms and export possibilities likewise constrained employment growth. Research indicates that it is doubtful whether the protection of the small-scale sector, taking into account the adverse long-run effects on output and exports, has led to significantly more employment than would have existed in the absence of such concessions.

83. Industrial decentralization has been impressive, albeit at considerable cost. There is now a significant industrial base in most regions of the country and the initial dominance of Calcutta, Bombay and Madras has disappeared. The development of infrastructure and supplies of skilled labor throughout the South, and in the North and West of the country, would have led to a wide dispersal of industry even without the push from licensing. However, the attempt to modify the location of industry to help develop backward districts and areas has not been very successful, partly because the costs to firms have been so high--project costs typically are 40-60% greater--and also because necessary expenditures on infrastructure and social amenities have been enormous. Various studies suggest that a greater impact could be obtained through investing the same additional resources in other targeted infrastructure and social development programs. Also, the stress on licensing MRTP firms to set up only in backward areas could do considerable long-run harm to productivity and export growth.

84. Great progress has been made in the achievement of self reliance. The role of foreign companies has dropped markedly, the state is in a controlling position, capacity has been built up for technological adaptation and, most important, there is managerial and technical capacity

to support the further growth of industries including those needed for defense production. However, our analysis indicates that such self reliance has been achieved at a substantial cost in terms of industrial growth rates. Government leaders have begun to contemplate using the enormous stock of expertise and skills that has been built up to enhance self-reliance through export performance, leading to an improved capacity to import and the development of a greater degree of production specialization. The recommendations below assume that this shift in the concept of self reliance, away from that of producing all goods whatever the cost, is regarded as acceptable.

85. In sum, the regulatory and incentive policy regime of the past three decades has produced some impressive results. There is a highly diversified industrial output pattern, and entrepreneurial and managerial skills have developed that are well able to carry industrialization forward. Past policies have, however, given low weight to comparative advantage and specialization, and development has been biased in the direction of capital-intensive industries rather than the labor and skill-intensive industries in which India's advantage seems to lie. The regulatory and incentive systems have protected producers, and a small group of high-wage employees, rather than consumers. They have also given low weight to use of internal competition, import competition and export rivalry as devices to guide adaptation and stimulate innovation and cost-cutting, encouraging "rent seeking" instead.

86. A growing body of analysis and empirical work in India has suggested that there are substantial static and dynamic efficiency losses when regulatory barriers are pronounced and incentives distorted. There is growing acceptance of this view in India, and in recent years a series of policy changes have been introduced, most of which are steps towards a less distorted framework for business decisions. The next section summarizes these steps and, while it is generally too early to see results, considers their likely impact.

5. Recent Reform Measures

87. In recent years, and especially in the last three, numerous changes in policy affecting the manufacturing sector have been announced, reflecting the Government's growing concern that past policies are not optimally suited for future industrial growth. It is difficult to assess the likely impact, but the direction of change has been to reduce the scope of regulatory controls and distortions in the incentive system. The changes in (a) trade controls, (b) tariffs and other taxes, (c) regulatory controls, and (d) industry-specific policies are briefly reviewed next.

(a) Trade Controls

88. Non-tariff import controls have been changed by gradually expanding the range of imports on Open General Licence (OGL) lists; shifting other goods from highly to less highly restrictive lists; making swifter and less restrictive administrative judgements; and reducing somewhat the scope of canalization. However, virtually all consumer goods remain banned except for a few commodities in short supply (e.g. edible oils.) There has been a gradual loosening of controls on raw materials and intermediate goods imports, but primarily of commodities that do not

compete with domestic production. The main exception has been imports for use by exporters. Capital goods imports have risen substantially in recent years as the emphasis on technological upgradation took hold, reflecting more the easing of administrative constraints than the shift to OGL. Domestic producers have had to face limited competition, but access to imported technology has been markedly increased.

89. Canalization has declined in importance during the 1980s. However, this is mainly because of the drop in international prices of POL, fertilizers, edible oils, non-ferrous metals and iron and steel; the 21 items decanalized in April 1985 were of minor significance. Canalization and accompanying distribution controls continue to insulate domestic producers from competition, as do the "actual user" policy, bans on imports by intermediaries, and extensions of "phased manufacturing programs". All told, the protective nature of non-tariff controls is still very significant.

(b) Tariffs and Other Taxes

90. Tariffs have generally risen over the past decade, along with auxilliary duties. The collection rate on non-POL imports has doubled from under 30% in the late 1970s to 61% in 1986/87. Average rates of nominal and effective protection made available by tariffs and by quantitative import controls are higher and remain so; the increased use of tariff exemptions has enlarged the variability of effective protection. After a sharp drop in 1984-86, import duties on project imports have recently been increased and equalized with general industrial machinery tariffs. This is a highly desirable step towards introducing more uniformity into the structure of tariffs. But the customs tariff is still principally perceived as a source of government revenue and as an instrument for responding to the lobbying pressures of domestic industries.

91. The reduction and simplification of direct tax rates, the forthcoming discontinuation of excess profits tax, the introduction and extension of MODVAT in place of cascading excises, the tapering off of excise tax concessions for small scale industry, the introduction of a uniform 30% tax on royalties and fees for technology, and improved nomenclature and administration have all improved the climate for industrial growth and reduced distortions. These measures, and others within the framework of the Long Term Fiscal Policy, have successfully introduced an element of stability into domestic tax policy - a stability not yet found in trade policies and tariffs, which remain subject to frequent and extensive product-specific changes.

92. Direct and indirect taxes on exports have been reduced in recent years by numerous exemptions, rebates and incentives. These measures, supplemented by other exemptions (e.g. from certain import controls) are all designed to offset the disincentives to exporting that have long been inherent in the high, often absolute, protection given to domestic production. Also, taking into account the slight recent downward drift of the real effective exchange rate, these measures will certainly assist exports. However, they still fall well short of putting exports on an equal basis with production for the home market.

(c) Domestic Regulatory Controls

93. Many liberalization measures have been introduced in recent years, which should have a positive effect on both output and investment behavior. Firms with assets below Rs 50 million (about \$4 million), located at least 30 miles outside urban areas, with limited foreign exchange outgo, no longer need a license. Even for larger investments, delicensing has opened 32 industry groups for entry by non-MRTP firms, and 23 for those covered by MRTP. Also, the list of industries in Appendix 1 that are open to MRTP/FERA firms has been expanded, along with those listed in Section 22A of the MRTP Act (which exempts MRTP firms from obtaining clearance). More flexibility for increasing capacity for selected products has come under provisions for "delicensing" "re-endorsement of capacity", "automatic growth", "unlimited growth", "regularization of capacity", "modernisation" and "attaining minimum economic scale (MES)" of production.

94. The impact of deregulation on output from existing investment comes mainly from reendorsement and broadbanding schemes. The former allows a firm to expand to 133% of licensed capacity once it attains 80% capacity utilization; the latter allows firms to expand into production of related items using existing equipment. For MRTP or FERA companies, these facilities are confined to "Appendix I" industries which exclude the bulk of value added by MRTP/FERA firms, and they have locational limitations. Shifts or increases in output under broadbanding require permission, and (as in the case of automobiles) it is understandable that caution is exercised where high external protection may encourage too many production proposals.

95. The impact of the decontrol measures on new investment is likely to be greater. Nevertheless, there are many qualifications. Some delicensed industries are subject to MRTP clearance; other industries subject to licensing, but are exempt from MRTP clearance. The issue of exemption from MRTP clearance is itself subject to tricky questions of "dominance" and "interconnection", and, if clearance is given, more stringent locational criteria often apply. The small scale and public sectors remain protected. However, investment intentions as indicated by licenses and registrations, as well as commitments by term lending institutions, showed a marked jump in 1986 over 1985 and 1984, so the decontrol measures seem to be having an effect.

(d) Specific Industries

96. Various statements of policy towards specific subsectors have contained elements of decontrol. In electronics, for example, the Government agreed in 1984 and 1985 to an enlarged role of the private sector in switching and transmission equipment (jointly with the public sector) and in subscriber equipment (wholly private). In 1985 the new textile policy corrected some of the biases against the mill sector - a bold move likely to cause unemployment in the power loom sector. Production flexibility was allowed for the first time between cotton and synthetic fibres, and in 1986 producers of polyester staple fibres were permitted to produce polyester filament yarn, and vice versa. In cement, partial price decontrol in 1982, allied to more liberal licensing, led to a spurt in investment which has brought about a marked drop in consumer

prices and created a buyers' market. This initiative was carried further in the 1986/87 Budget, which announced a reduction in the levy quota from 30% to 15% for new firms. Other measures promise to benefit the sugar, drug, electronics, paper and other sub-sectors.

97. The above, and other measures, have introduced additional freedom to medium and large private firms to adapt and modernize. A portion of the industrial sector is now free from the ambit of capacity licensing. Substantial progress has clearly been made in the past few years towards reducing the prevalence of controls, and for the controls that remain, efforts are being made to accelerate clearances. More liberal access to capital markets, and a surge in licences issued and registration accepted, indicate that firms are responding positively to these changes. The reforms are consistent in direction with each other, and with rare exceptions have not been reversed, so there is growing acceptance that they are here to stay.

98. The control and incentive systems remain largely intact, however, especially on imports. The freedom to exit is still overly constrained, yet such freedom is vital if firms are to be given adequate incentives to adapt to market needs, and the roles assigned to small scale, public and foreign-owned firms remain unchanged. The role of imports is still seen as a source of supplies rather than a source of ideas and competition, but there is growing acceptance of the need to increase exports. Substantial stress is given to export development through various specific policies, but there is a limit to what special export interventions can attain without greater resource mobility, firm growth and incentives for more progressive managerial conduct. We thus turn now to discuss a set of measures, which would build on those already taken, that holds out the promise of a strong and sustained supply response while also supporting the broader social objectives of Government.

C. AN APPROACH TO POLICY REFORM

1. The Goals of Policy Change

99. The basic thrust of the reforms suggested in the main report and summarized here is gradually to replace the current complex system of regulatory controls and high external protection that developed over the past 30 years or more with a system that relies more on prices (suitably modified by taxes and subsidies) and on competition (both domestic and international) to guide investment and production decisions. The reforms would continue and extend a number of initiatives already taken. The aim would be a comprehensive and coordinated policy package that would be able to realize India's potential for more rapid and equitable industrial sector growth, while supporting the basic goals that underlie the industrialization effort.

100. It is tempting to consider an ad hoc reform process that does not openly address the many assumptions about planning and the working of the industrial sector that have underlain the policy-making process in India for three decades. For example, is foreign exchange really inherently in short supply? Does it have to be rationed administratively? Does the public sector need protection from competition? Does protecting small

firms in fact generate more employment? It is helpful, however, to address such issues directly in order to develop the consensus necessary to support a sustained process of reform. Many such topics - e.g. the performance of public enterprises - are indeed now subject to public debate. Moreover, the conclusion from international and Indian experience is that an approach which is not comprehensive and well articulated, covering both external and domestic reforms, may create more problems than it solves. For example, delicensing without the threat of import competition can lead to excess capacity in industries (like automobiles) that enjoy high protection; export promotion schemes can be frustrated by administrative controls needed to prevent the diversion of benefits to the protected domestic market; and investors' response may be limited by fears that ad hoc changes could easily be reversed. There is merit in adopting a reform process that can be completed within a meaningful time horizon, is comprehensive, is not vulnerable to case by case administrative interventions, and rests upon a consensus on goals, components, sequencing and phasing.

101. The goals of policy change are assumed to be those that have driven India's industrialization effort from the beginning. Growth is sought through a reform package that aims to improve the allocation and use of resources. Social justice for the poor is normally helped by more rapid growth. The poor would also be helped by the shift that would take place away from excessively capital-intensive activities, and away from industries with a high-wage elite labor force. The same is true of the measures to support a reasonable geographic dispersal of industry, and the growth of viable firms from the small scale sector. This is not to say that changes will be painless: some high wage-earners, who have captured part of the rents generated by regulation and protection, at the expense of consumers, may suffer. So too will others during redeployment between jobs; relief during the interim must be considered. But Bank studies of reforms have shown that an accelerated rise in employment is experienced in most countries undertaking liberalization. Finally, self-reliance is sought in the growth-oriented sense that internationally competitive products will be exported in order to import - without an increased debt burden - those goods and technologies which it is less advantageous to produce domestically.

102. To minimize the possibility of creating new distortions, changes in domestic regulatory policies need to be coordinated with adjustments in trade policies, and both need to move expeditiously and predictably. The effectiveness of changes in the regulatory and trade regimes depends on the extent to which they are mutually consistent. Some imperfections in synchronization are inevitable, but tolerable if the pace of reform does not stall. Rapid import liberalization in an environment where producers are constrained in how flexibly and rapidly they can allocate and use their resources might lead to few economic gains and high social costs. Thus regulatory reform freeing producers to enter into promising areas, expand profitable operations, shift product lines and exit from shrinking markets would be necessary to enable them to export successfully and to face import competition.

103. The ideas that follow on further policy changes start with domestic regulatory and incentive policies, and go on to discuss trade policies and the economic environment for reform.

2. Domestic Industrial Policies

104. Entry and growth have been strongly influenced in the past by industrial licensing. Reforms during the past few years have eased licensing requirements, but many remain. If the other policies suggested in this report were implemented, there would seem to be no compelling reason for retaining capacity licensing, and many reasons for removing barriers to growth and adaptation. There are better tools, discussed below, to attain some of the monopoly control, locational and other goals that licensing now tries to serve.

105. It is accordingly suggested that all forms of capacity licensing for industry could be phased out completely over the medium term (the possible speed of adjustment is discussed in paras 150-151 below). In the interim, the investment size limits below which a licence is not required could be substantially raised each year. A list could be prepared of those few industries which pose security, health, safety or environmental concerns, for which a special permit would be required from Central Government. Weapons, explosives and nuclear energy are examples of industries that might require such a permit. Individual states or cities would retain the right to require firms to obtain a zoning permit for a given location.

106. The regulation of the expansion of large and/or dominant firms remains an important restraint on competition, and can prevent them from adapting so as to compete in both domestic and foreign markets. Evidence indicates that MRTP controls have often resulted in protecting the interests of large producers rather than those of consumers.

107. Accordingly it is suggested that the Government cease to use ex ante MRTP investment and production clearances to regulate firms and instead use the MRTP Act to identify and assess, and if necessary control or punish, unfair or uncompetitive business behavior and practices that harm consumers' interests. In other words, it would not be assumed that a firm that has or would attain a certain size, or share of a market, would abuse its economic power. The risk of its doing so could be controlled by the threat of import competition, as suggested below, and by the threat of prosecution if it engaged in unfair practices. Thus MRTP clearance, as a condition for entry or growth, could be phased out completely in the medium term. Meanwhile, the code of unfair practices needs to be further developed.

108. Until such time that MRTP investment and production clearances were phased out, the asset limits defining large or dominant firms, above which MRTP clearance is required, could be progressively raised to permit MRTP firms to grow at least to MES in each of their plants. Also, in the interim period, the definition of product groups within which dominance may occur might be broadened so that the "market" in question includes the relevant competitive substitutes. Furthermore, it would be beneficial if the market for the products in question were measured in terms of total output for the domestic market from all sources.

109. Interconnection of firms is a weak criterion for establishing monopolistic practices: in this interim period, interconnection would only be applied in cases where linked firms operated in the same market.

110. The overly restrictive impact of MRTTP regulations could be eased by removing entire industries from the ambit of the act, an approach already being pursued by Government by expanding the lists in "Appendix 1" and "Section 22A" of industries not subject to MRTTP (and commonly FERA) regulations. As these lists grew, it might at some point be easier to shift over to a "negative list" system where only those firms subject to MRTTP regulations would be shown. This list could gradually be reduced in scope and, in the medium term, abolished as the MRTTP Commission and staff develop more capacity to assess and punish anticompetitive behavior and unfair trade practices.

111. Given that FERA companies now number only about 100, and those in manufacturing are concentrated in export and high-technology industries, there seems to be no strong reason for the exercise of special restrictive control. They could be subject to the same diminishing need for clearances, and enjoy enhanced competition, as for MRTTP companies. The case for easier clearances for non-MRTTP FERA firms is even stronger. Foreign equity holdings of over 40% would continue to need Foreign Investment Board clearance.

112. Small-Scale Industry: There are many reasons for generously encouraging the entry of new small firms and their entrepreneurs. Such firms have strengths that flow from the inherent advantages of being small, and they should develop on the basis of these strengths. However, some subsidies (e.g. for credit) can and have encouraged non-optimal behavior such as greater-than-optimal use of capital. As the case is weak for perpetual and often absolute protection of small firms, and for an incentive framework that discourages their graduation from the SSI sector and their optimal use of resources, the incentives for small scale firms should be shifted to facilitate their entry and efficient growth.

113. This would imply that entry should be encouraged by temporary subsidies for a given firm (e.g. on credit, land, services and via income tax exemptions). However, these should taper off over fixed period of years. Gradual phasing out of excise tax concessions as firms expand is already in place and will better promote growth than the previous abrupt imposition of full tax rates upon output reaching a certain level. Of course, any such incentives carry the risk that firms will close and restart to gain the new entry benefits. Entry would not, however, be encouraged by indefinite product reservation, so products whose output is now confined to the small-scale sector would gradually be dereserved over the medium term.

114. In the interim period before dereservation was completed, growth could be encouraged by raising asset limits. During this period also, the use of reservation policy to deny expansion to existing firms outside the small sector could be discontinued. Reservation would thus at best contribute a temporary barrier to entry to facilitate adjustment of vulnerable firms, but would not be a constraint on growth. Unless the medium-sized firms producing items under SSI reservation were permitted to grow, there would be a danger of increased incidence of sickness in such firms. Entry and growth could also be encouraged by allowing freedom for small firms to integrate with larger units, e.g. in ancillary production, with large units being free to take an equity stake in small firms.

115. Industrial Location Policy: Backward area development has been one of the goals of the licensing system, and has been supported also by investment and other subsidies, and infrastructure development. It is suggested that backward areas could most efficiently be supported by replacing investment subsidies and the use of licensing controls with temporary production subsidies or excise/sales tax concessions. This would reduce the current bias in favor of capital intensive production. There is a need to ensure that inter-state competition in offering concessions is kept within bounds.

116. Infrastructure provision in backward areas has tended to be inadequate: there is a case for concentrating the provision of infrastructure initially on a limited number of growth centers - say 20-30 as suggested by the Pande Committee. Serving adequately all 246 currently designated backward areas would be virtually impossible given resource constraints. Since manufacturers derive great benefit from such infrastructure, and to make its provision self-financing, costs should be passed on to the users.

117. Locational objectives also include the avoidance of urban congestion and pollution. Rather than use licensing for this purpose, firms could be permitted to make their own decisions but within a framework of (a) local zoning, (b) charging full costs of the provision of land, power and infrastructure, (c) local taxes that reflect the full cost of provision of urban services and, (d) allowing firms freedom to move away from congested urban areas without penal taxes or requirement to provide compensation.

118. Public Sector Enterprises (PSE): There is widespread recognition of the need for better public enterprise performance in both financial and economic terms. Recent government committees chaired by L.K. Jha, M. Fazal and A. Sengupta have recommended that public enterprises should have increased managerial autonomy and accountability. We endorse these suggestions. PSEs should progressively be required to compete on a more equal basis with private sector producers and imports. Over time, this would involve the phased removal of (a) purchasing and price preferences, (b) access to capital and credit on concessional terms, and (c) protection from competition through controlled marketing arrangements. Also, increased use should be made of explicit government funding of social obligations imposed on PSEs. Finally, there is a need for time bound sub-sector restructuring programs to help PSEs compete effectively as trade and regulatory controls are eased.

119. Administered Prices: Price and distribution controls have generally had the effect of insulating both public and private producers from competition and from the need for modernization and cost reductions. Where more liberal pricing policies have been introduced (e.g. cement) there have been marked beneficial results. For competitive and well supplied markets, full or partial decontrol could be introduced immediately. Progressive price decontrol, accompanied by removal of trade and regulatory barriers could be pursued in other markets, e.g. in fertilizers. The first step would be to move to a pricing policy based on of clear economic principles. Prices need to be set so as to be consistent with movements in market demand and supply, and reasonably close to border prices where relevant. The recommendations of successive government committees to abolish freight equalization practices could also well be implemented. The phased removal of administered prices would be a logical accompaniment of moves towards a more open trade policy.

120. Taxation: Major steps have already been successfully taken to rationalize the tax structure, including the recent extension of MODVAT to virtually all final products. Further steps could include (a) gradually moving towards a comprehensive VAT system, (b) harmonizing state sales taxes, and (c) phasing out octroi taxes.

121. Adaptation and Exit: Giving freedom to companies to adapt as they see fit by measures such as the above may only have a modest effect if firms cannot adapt, by retrenchment, mergers or closure and sale of assets. These at present act as barriers to adjustment. If exit is difficult, the attractiveness of entry is correspondingly reduced. In the field of labor, the Industrial Disputes Act could be modified to provide employers with greater autonomy to manage their labor needs within guidelines for working conditions, remuneration and retrenchment compensation. Training and retraining, and food-for-work and employment guarantee schemes, could be part of the package to help ease the adjustment process. Trade union reform might move in the direction of developing the concept of lead unions for negotiations and reducing the number of unions in a given plant.

122. Adaptation can also be helped by enabling assets, including land, to be transferred more quickly. Bankruptcy and winding up procedures, which currently take up to 10 years, could be simplified. The adaptation process will be facilitated if Government continues its policy of not taking over sick units, and if rehabilitation programs avoid making it attractive for businessmen to have units declared sick (e.g. by not granting preferential access to power with deferred payments). Government actions taken in recent budgets to regularize and facilitate the payment of amounts owed to workers in sick firms could be strengthened to further ease the process of adjustment. Financial institutions and banks must likewise be encouraged to take hard decisions when problems of sickness first emerge. More strict controls on granting of additional financial assistance of chronically sick firms would reduce the incentives to stay sick. While in most cases the management of decline is a job for the firms concerned, there may be some industries in which the shedding of loss-making capacity needs to be coordinated by the Government or a public agency. Social adjustment programs may need to include training, and urban food-for-work relief.

3. Trade Policies

123. The foreign trade sector will need to play a key role in India's transition towards a more dynamic economy in three ways: First, imports of state-of-the-art capital goods provide the fastest route to modernizing the Indian economy and to improving efficiency. Second, foreign trade can be used to expose Indian producers to foreign competition, thereby complementing the Government's efforts to enhance domestic competition. Third, export growth can provide the foreign exchange needed for imports and the market for increased production of labor- and skill-intensive goods. This in turn will allow stepped-up growth while reducing the capital-output ratio. If the foreign sector is to play this role, considerable changes are needed in current import policies, and bold steps must be taken to accelerate export growth. All of this would need to be done, and can be done, in a way that does not jeopardize India's balance of payments position.

124. Trade policy reform in India should take account of the fact that its impact will be quite different on different industries, depending on their competitiveness, structure and other concurrent policy reforms. Feasible reform in Indian circumstances is likely to consist of a combination of across-the-board measures plus industry-specific adjustment programs, with attention being paid to the special circumstances of each industry. Obviously, for such an industry-by-industry approach to have any kind of coherence, it would have to work according to clearly stated policy objectives and guidelines. The adjustment programs would need to be structured and announced without delay to provide clear guidance to investors and producers.

125. Imports: It would be advisable to move away from earlier policies, which tended to offer almost unlimited protection for "indigenously available" products, and to recognise fully the role of actual or potential competition from imports as a source of discipline on the prices and costs of public and private sector domestic manufacturers.

126. The first step would logically be the removal of quantitative restrictions (QRs). They could be replaced by tariffs and/or surcharges sufficient to provide initial protection at least as high as that now available, so as to avoid imports that would disrupt the industry concerned or lead to a balance of payments crisis.

127. Thereafter, there could be a gradual reduction in the variance and average level of tariffs according to a pre-announced schedule with compensating technical adjustments in the exchange rate to the extent required. The goal might be, for example, to reduce the range of tariff rates over the medium term to a band of plus or minus say 30% around a target median value. This median value could fall from the present level of over 100% to, say, 50%, with a consequent range of 20% to 80%.

128. The removal of QRs and setting of initial and final tariffs on all goods could be undertaken in the light of a limited number of fairly broadly defined industry-by-industry reviews. Where QRs are now used, the reviews could recommend how QRs should be removed, not whether they should be removed. They could indicate by when QR removal should be complete, provide guidelines on the initial tariff protection, and indicate the eventual target tariffs and their timing. To avoid "tailor made" tariffs, all new tariffs, including replacements for QRs, could be "broad banded" (defined to cover a broad group of related products) and be set at one of five levels--say 20%, 35%, 50%, 65% or 80%. For many products, the new initial tariffs could be below current levels because of redundant tariffs; in some cases, initial tariffs might have to rise. Even goods currently subject to QRs commonly carry a tariff, and some of these may already be high enough that they could be held steady or even be reduced with little impact on the balance of payments.

129. Technology: Technology imports at present require the concurrence of the Foreign Investment Board, which reviews the import intensity of the intended processes, and the level of royalties. It is proposed that import of technology, whether in the form of equipment and machinery or knowledge, be freely allowed, with firms making their own choices on the basis of alternative specifications and prices, and in the light of the exchange rate and taxes payable.

130. Phased Manufacturing Programs (PMPs) are a form of non-tariff import barrier. Their removal would be a logical part of an overall effort to replace QRs with tariffs. Transitional arrangements for firms with existing PMPs would need to be devised. The goal would be to enable producers to make their own judgements on sources of supply in the light of their own cost-minimizing calculations.

131. Canalization of imports and exports is another non-tariff control with adverse efficiency effects. The performance of the agencies concerned has been generally poor, and further decanalization would be desirable. This could be undertaken through the process of enquiries into specific industries. Canalizing agencies could continue to trade - and might do so most effectively - but they should be open to competition from private traders on equal terms. Similarly, abolition of the actual user policy would also appear to be an important step, with phasing decided as part of the adjustment programs for major industries. The re-emergence of import and export houses would follow automatically.

132. Exports: A successful export strategy would be an essential ingredient of trade reform. A first priority would be to strengthen greatly, through appropriate policy changes, the export mentality which the Government is now trying to create. Special interventions are needed to compensate for present distortions in the domestic economy. While a lot has been done, further measures seem appropriate, e.g. to help exporters get their material inputs at world prices and quality. This would require an effective prior exemption system, complemented by a drawback system giving full rebates of duties and other indirect taxes, for direct and indirect exporters alike. Where the economic cost of appropriate domestic inputs was significantly higher than world prices, import at world prices for export manufacture rather than subsidization of high cost domestic inputs would be preferable.

133. One approach to stimulating exports might be to reaffirm the commitment to exporting by undertaking some significant changes in general incentives for exports, even if these changes might prove unpopular with certain groups. Such a move would stress that the Government considers exports to be important. An example of such a change would be the adoption of an exchange rate regime that maintained exporters' profitability even in a world of variable exchange rates. Such an approach, which has been successful in countries such as China, Colombia and Turkey, would maintain the competitiveness of Indian exports and simultaneously reduce import pressures. To complement this general policy, numerous changes in export-specific measures would be needed along the above lines to provide a "green light" treatment for exporters.

134. Even with such measures, the challenge of expanding India's exports will be considerable. The external environment today is less buoyant than in the latter part of the '70s. Growth in world trade has been curtailed by the slowdown of growth in the developed countries, which in turn has led to protectionist tendencies. Frequent and marked adjustments in exchange rates create uncertainties for exporters. Yet, while the difficulties of a more outward orientation cannot be denied, the difficulties are in no sense historically unique, and those countries which have actively participated in world trade in the past have overcome similar difficulties and have shown quite consistently higher rates of

growth than those countries, like India, which have not. Thus, given India's goals of growth and reduced poverty, the strategy suggested here, which is consistent with the Government's own strategy, seems well worth pursuing.

135. It should be noted that, in areas such as tea and other food products, the Government has been reluctant to allow exports because of concerns for domestic consumption requirements. This position is understandable, especially for goods of mass consumption whose prices are subject to major swings in world market and whose domestic production cannot be increased quickly to meet the export demand while continuing to satisfy domestic consumption requirements. In most areas, however, it should be recognized that increased exports would be provided from increased production in response to attractive export prices, thereby leaving domestic supply and prices relatively unaffected. In products where there are economies of scale, increased export production could actually lead to lower domestic prices, and would in any event lead to greater employment and income.

4. The Economic Environment for Reform

136. Macroeconomic Policies and Public Finance: Maintenance of macroeconomic stability, in particular containing the rising government deficit, will continue to be a critical element in industrial reform. In India, there are already some signs that rising public sector deficits may be spilling over into inflation and balance of payments deficits. Continuance of these trends would prejudice the reform program in numerous ways. First, aggregate demand pressure would stimulate imports and slow export growth, providing ammunition to those who say that the reforms are not working. Even if these criticisms are resisted, growing trade deficits would ultimately force the Government to cut imports sharply by reimposing protection. Second, experience elsewhere suggests that reforms are often blamed, incorrectly, for any rise in inflation, despite the fact that higher imports and greater competition actually tend to depress the price level. Finally, large government deficits will tend to absorb credit and thereby reduce the availability of funds for new lines of investment and for easing the transition to a more competitive economy. Such "crowding out" would be intensified if the Government chose to finance itself through higher inflation and restrictions on interest rates, a route which it has officially rejected in accepting the recommendations of the Chakravarty report. Cross-country studies indicate that such problems have been the principal causes of failed attempts at liberalization. For these reasons, fiscal restraint will be a necessary part of any reform package.

137. Financial Sector Policies: The reforms proposed in this report would require substantial investments in plant and equipment, both for modernizing existing factories and building new ones. A well functioning financial sector would be vital for mobilizing these resources. India is presently witnessing the emergence of a diversified financial system. In the capital market, efforts to develop the regulatory and institutional framework for stable and orderly growth would need to be intensified. New

vitality and efficiency also need to be injected into the more traditional activities of banks and financial institutions. Although the capital markets and other new sources of finance are expanding rapidly, the institutionalized system will remain the most important source of funds for the foreseeable future. The commercial banks and the development institutions need to adjust to a more open and competitive environment. Change is particularly urgent in the commercial banking sector, which suffers in varying degrees from overregulation, excessive branching, poor customer service and increasing arrears.

138. Infrastructure: Weaknesses in power and telecommunications have impeded industrial growth. Despite rapid growth of the power system, there remains a large unsatisfied demand. Estimates of the current total electricity deficit range between 6% and 10%; peaking power deficits as high as 30% are estimated for the Northern Region. Planned rationing and unplanned cuts are common, and the quality of power supply is poor in terms of voltage and frequency. The manufacturing sector resorts to self-generation for over 15% of its total power consumption, and this share continues to rise, even though its cost can easily be twice that of grid power. Since responsibility for the power sector is predominantly in the hands of the States, the Central Government needs to find a way more forcefully to induce greater efficiency and financial discipline in the State-controlled utilities. Power tariffs closer to long-run marginal costs, particularly in agriculture, would encourage power savings and more efficient use of the substantial existing investments. The reforms in industry and trade policy described above would lead to a less power-intensive pattern of output, and thus help bring supply and demand into balance. Telecommunications lines in service in 1986 met only 75% of expressed demand, and service quality is inadequate. In addition to significantly increased investments, there is a need for improving the quality of the equipment, and introducing more commercially-oriented management along the lines that the Government has recently initiated. It should also be noted that, if India is successful to increase the role of foreign trade in its economy, improved port and airport facilities, and related infrastructure, will be required to avoid bottlenecks.

139. Labor Market Policies: Industrial and trade policy reforms can be justified only if they lead to faster economic growth, increased employment opportunities and improvements in the standard of living. The evidence from liberalization programs in other countries suggests that most of the gains in employment will occur in small and medium-sized firms that currently have low effective protection, and in the service industries that support larger establishments. An increasing number of larger firms are likely to resort to using inputs from ancillary units to contain costs. These units tend to be more labor-intensive, and have lower wage costs, on average, than large industrial units with strong unions. Organized manufacturing, because of its capital intensity, would suffer most under the reforms proposed here. Because of its small share in employment, it is unlikely for the time being to offer significant additional employment opportunities, especially given its relatively high wages and restrictive employment practices. Industrial policy reform might even lead to a short-term loss of jobs in organized manufacturing as steps are taken to deal with overstaffing and the closure of plants in sick industries. Policies would need to be designed to redeploy these workers effectively; in many cases they would suffer a loss of income since their wages are much higher than average.

140. To further minimize any adverse effects of industrial policy reform on employment and, at the same time, provide employment for a labor force that grows at more than 3% a year, the Government might also consider the possibility of changing existing labor laws to ensure greater flexibility in the labor market. This would provide greater incentives for firms to employ more labor as output expands. In addition, Government policy could further improve access to primary education, a basic requirement for developing a skilled labor force. Finally, not all segments of the labor force that would be affected in industrial policy reforms can be helped through these measures. In some sub-sectors, direct intervention programs, such as employment guarantee schemes, would be essential as a temporary respite for those adversely affected by the policy reforms. Efforts to improve Government-assisted social services such as health, sanitation, housing and education also will help alleviate the conditions of the unemployed poor. Such programs would imply an increased fiscal burden at a time of overall resource constraints. However, such expenditures would deserve high priority, not only for social justice, but also because they would facilitate reforms that could generate faster growth.

D. THE IMPLICATIONS OF THE REFORMS

1. Costs and Benefits of the Reform Package

141. The strategy proposed above would be fairly radical in the Indian context - the gradual removal of most Central Government controls on industrial development and an external trade regime with significantly reduced and unified levels of protection. The controls and the protection would be replaced by indirect levers of control which would allow the Government to influence the course of development through policies affecting prices and competition, and through its own investment and current expenditure programs. These reforms would result in prices much more in line with world prices than is true today, and in a greater degree of import competition and export rivalry than the nation has ever seen. Given the degree of change proposed, it is necessary to ask what the expected costs and benefits will be.

142. These questions are easy to ask - and hard to answer. The success of any policy change depends heavily on the degree of support for the policies and on exogenous factors, such as movements in world oil prices and growth in OECD countries, over which India has no control. With all of these uncertainties, it is only possible to indicate the nature of the benefits and costs, the factors which influence their size, and steps which could be taken to reduce the potential costs. Although the macro economic picture shown in Section E below is consistent with the reforms proposed here in terms of overall GDP growth, imports, exports, etc., it is impossible to say by what percentage any of these variables would change if a certain policy were only partially implemented or dropped altogether.

143. Although measuring the cost and benefits is difficult, it is quite clear that many of the costs would be up front, while the benefits would come later. Investments for modernization and efficiency come before the higher quality, lower cost goods are produced. Workers will be retrenched to cut costs and improve productivity before increased growth generates new jobs. Imports to upgrade export industries will come before

the exports. All this means that the proposed strategy will succeed best if ways are found to finance, reduce or offset the front-end costs, and to sustain the effort to the point that the longer term benefits can be realized. Increased concessional aid could play an important role in balancing the costs and benefits of reform, thereby helping assure its success (ref para 153 ff).

144. The main benefit expected of the policies proposed here is more efficiency, which would lead to faster growth of overall GDP and per capita incomes, thus helping serve the nation's goals of growth and social justice. These benefits would not be shared equally; the paragraphs below indicate the main winners and losers from the changes in external and domestic trade policy.

145. External Trade Policy: The greatest beneficiaries from a more open economy would be the mass of Indian consumers, who would begin to get better quality goods, mainly domestically produced, at lower cost. Among producers, the beneficiaries would be those relatively efficient producers currently enjoying low or negative effective protection, especially those involved in efficient labor intensive processing of domestically produced inputs. Employment in general, and especially employment in these industries, would also be expected to benefit.

146. Those industries most likely to benefit from external trade policy reform would include, for example, selected textiles, garments, sports gear, gems and jewelry, agro-industrial products and many items from labor-intensive engineering and capital goods industries. Those industries most likely to be hurt, at least in the short run, would include producers and workers in highly protected industries, especially those heavily dependent on imported inputs, with high capital and energy intensity. Those propped up with direct and indirect subsidies and with little or no export potential would be particularly vulnerable. These industries probably would include larger passenger cars, non-ferrous basic metals, small paper mills, small tire plants, basic chemicals, small steel plants, and a number of petro-chemical based activities. Even in these industries, however, some plants might thrive under the proposed policy regime.

147. Domestic Regulatory Changes: These changes will also have net benefits for some and net costs for others. Those gaining will be firms already operating in a relatively free, competitive environment; those in all sectors (small as well as medium and large) which are currently constrained by artificial barriers to growth, product and technology choice; those which are currently tied to inefficient locations either needing to move out of crowded urban areas or needing to shift from backward to more developed areas; and those which need to close down plants and shift resources into more productive uses. Those standing to lose from the changes include firms making artificial profits or enjoying a relatively easy life behind barriers that protect them from domestic competition--barriers such as capacity licensing for entry and growth, and protection from competition by other large firms (through MRTP regulations). Also likely to lose are those taking advantage of the special financial concessions accorded "sick" companies and workers employed in protected industries at wages far in excess of what the ordinary factory worker would receive. There would also be less

employment in public administration, because the numbers needed to run the present control system far exceed the numbers needed to manage the proposed incentive framework.

2. Sequencing and Phasing of Policy Reform

148. Sequencing: As stressed above, it would be vital that changes in domestic regulatory policies and in external trade policies take place simultaneously. If domestic controls were relaxed without introducing greater competition from imported goods, a serious risk would arise of distortions in the pattern of investment. Producers might over-invest in highly protected goods that offered opportunities for quick returns, even if the economic cost of production were excessive. An example of this type of problem is already occurring in steel, where mini-steel plants are being set up to produce specialty steels that are not economic for SAIL, but at costs substantially above world market prices. Also, without the threat of external competition, there would be a tendency towards monopolization of the domestic market in products requiring large scale production; the large scale producers would drive the smaller producers out of business but, with no effective competition from imported goods, could behave as sheltered monopolists by allowing the general efficiency of the operations to fall and their costs to rise while charging excessive prices. It is also possible that capacity might be further fragmented if many small firms entered the market before investors could be found to build a plant of minimum economic size. Leaving high external protection in place would also stimulate additional investment in capital intensive activities, lowering economic efficiency and the potential for growth.

149. On the other hand, if external controls were relaxed without a relaxation of domestic controls, then domestic industry might not be able to respond appropriately in terms of changing investment patterns, product mix, technology, inputs etc. Consequently, instead of promoting efficient economic growth, such an external liberalization might damage major segments of the domestic manufacturing sector. To avoid the balance of payments problems that a number of countries have faced following the premature relaxation of controls on external capital flows, it is suggested that these be considered only at a later date; free external capital movement is not a requisite part of the reforms package proposed here.

150. Time Phasing: The pace of transition is a critical and sensitive element in any reform package. Time is needed to build new factories and modernize existing ones, find and learn new technologies, redeploy workers and assets from activities that will no longer be competitive, develop new markets (including export markets), find new sources of financing, etc. Too fast a pace could raise costs of adjustment to the point where the Government would be forced to reverse the process. On the other hand, too slow a pace would delay the benefits of the reform. Moreover, there is an interaction between the slowness of the reform and the final outcome, since a slow reform allows vested interests adversely affected by continued policy reforms to mobilize increasing support and halt the process. Also, a slow process that put off most of the costs of adjustment until the end of the programs would not be credible, and correspondingly would stimulate little response in its early stages.

151. There is little solid empirical evidence on the tradeoffs between the adjustment costs and the speed of the reforms, not in the least because the exact size of the long term benefit of the full package is not known. Other countries that have undertaken such major reforms have typically decided on a three to five year horizon. This also has been the time frame for many major programs of sectoral restructuring in developed countries, and in developing countries supported by the Bank. As mentioned above, a major part of the Government's role in the proposed program would involve devising and implementing such plans in India's public sector. All this suggests that a minimum of five years would probably be necessary to carry out the reforms, while a program of more than seven years would probably be too slow.

152. In conclusion, the success of the proposed reform program depends heavily on executing it so that the benefits are seen by the majority to outweigh the costs within a reasonable time period. An important step would be to develop a consensus on goals and means. In India, any ruling party is a coalition of groups with different interests. In this vigorous democracy, with its ample vehicles for the expression of opinion and the exercise of influence, the development of a consensus on public policy proceeds step by step and will take time. Once the process began, rapid economic growth would help success by maximising the opportunities for those who suffer in the short run from decontrol and increased competition. Sustained growth requires a well-managed balance of payments, supported by concessional aid flows, to avoid the risk to the reform of a balance of payments constraint. We turn to this next.

E. BALANCE OF PAYMENTS PROSPECTS, CAPITAL FLOWS AND CONCESSIONAL AID

153. Improved terms of trade have helped India's balance of payments prospects, but there is little room for complacency. With foreign exchange savings of about US\$2.5 billion on imported crude oil, petroleum products and fertilizers, largely because of falling prices, and export growth of about 5% in constant prices, India's (gross) international reserves rose by about US\$150 million in 1986/87. This occurred despite a rapid rise in non-oil imports, declines in net invisibles and in capital inflows of all types, and a large repayment (US\$540 million) to the IMF. Nevertheless there is reason for continued caution on the balance of payments, especially as the debt service ratio has been rising.

154. Bank projections indicate that real export growth would need to reach an average of at least 6.1% a year during the Seventh Plan period in order to maintain a viable balance of payments. This growth should be achievable if the proposed policy package begins to be adopted and despite the slow growth of exports in 1985/86. If a 6.1% p.a. growth rate is achieved, and assuming (a) some rise in imports for purposes of modernization as well as some rationalization of imports, (b) prices of crude oil and petroleum products continue to remain low, and (c) MLT disbursements pick up sharply; then (a) growth would likely be somewhat higher than the Seventh Plan target, and (b) the debt service ratio would be somewhat below 1986/87 levels by the end of the Plan.

155. The reforms suggested in this paper could be expected to bring about very fundamental structural changes in the Indian economy over time, especially with respect to the share of imports and exports in GDP. The

opening up of the economy would be a gradual process, phased so that import growth does not markedly outstrip export growth, thereby resulting in BOP problems. Exports will accelerate only gradually; however, by the mid-90s it is possible to think of exports of goods and non-factor services rising from the current 7% of GDP to around 9%, with a corresponding increase of imports relative to GDP.

156. There are also numerous downside risks for the balance of payments during the next several years: export growth may become sluggish, especially if the pace of reform slackens; crude oil prices may rise, or the quantity of oil imports may rise if explorations are unsuccessful; oilseeds imports may rise if efforts to expand production at reasonable costs are unsuccessful; MLT disbursements may continue to be sluggish. Perhaps the greatest downside risk of all is that the trend of rising government deficits will continue and spill over into rising balance of payments deficits. If any of these downside risks materialize, the balance of payments could worsen sharply. For example, a drop in real export growth, to an average of 3.2% p.a. for the Plan period, in combination with an attempt to maintain growth through aggregate demand policies, would lead to a fall of US\$1350 million in gross reserves by the end of the Seventh Plan, and leave the debt service ratio about as high as in 1986/87, even after the nearly complete amortization of the IMF loan.

157. If foreign exchange reserves were to begin to fall rapidly, as a result of any of these problems, and if there were to be no increase in concessional aid, the Government would be faced with two options: cutting imports or increasing commercial borrowings. Neither is attractive. Regarding the first option, while there is not a simple one-to-one relationship between import growth and GDP growth, such a cut in imports would probably reduce growth in the short run. Perhaps more importantly, it would signal the reversal of the current movement toward import liberalization.

158. Increased commercial borrowing is also not an attractive option for maintaining imports and avoiding a loss of international reserves. While India currently enjoys an excellent credit rating in international capital markets, its debt service ratio has risen from about 8% in 1981/82 to over 19% in 1986/87, reflecting the growing share of commercial borrowing in India's debt. Including IMF repayments and interest, the corresponding figures are 8.1% and 24.4%. In these circumstances, additional commercial borrowings, especially against the backdrop of a substantial trade deficit, would soon become difficult. Moreover, such borrowings would merely postpone and increase the problem, unless the economy's future export prospects improved. This highlights, once again, the pivotal role of export growth and the need to increase the efficiency of the economy through greater exposure to internal and external competition.

159. External assistance, because of its low cost, allows India to undertake a faster liberalization than would otherwise be possible, since the alternatives would be fewer imports or greater commercial borrowing. Eventually this strategy will translate into larger imports, faster growth, and more employment; its demonstration effects may even contribute to similar policy changes in other countries.

160. Concessional flows are also a fundamental element in anti-poverty programs. Support from donors contributes to the provision of food aid, basic services to the poor--for example, in innovative nutrition and health care programs--and provision of urban services and housing. Finally, donor support continues to play an important role in raising agricultural productivity, which raises rural incomes directly, through higher labor demand and indirectly through lower relative food prices.

161. For these reasons, and given that for the first time in three decades a significant policy reform movement is under way in the industrial sector, there is a strong case for an increased level of external assistance. The foregoing balance of payments projections assume a total external assistance package of US\$4 billion of commitments in 1987/88. This is divided into concessional funds of US\$1.9 billion, and non-concessional loans from the World Bank, bilateral agencies and other multilateral lenders of US\$2.1 billion. For 1988/89 the total package is US\$4.4 billion, divided into US\$2.1 billion concessional and US\$2.3 from the World Bank, bilateral agencies and other multilateral lenders. The Consortium members are projected to provide US\$3.3 billion of the total external assistance in 1986/87 and US\$4.0 billion in 1988/89.

Chapter 1

RECENT ECONOMIC DEVELOPMENTS

1.01 Broadly speaking, economic performance has been good in the last two years. The Seventh Plan is off to a good start and, for the 1980s as a whole, the economy seems on a higher growth path with increases in GDP averaging over 5% p.a. Indications are that the incidence of poverty has declined. During the last two years Government growth policy has aimed at increasing efficiency, since the rate of investment is already high. In the areas of taxation and industry, the response has been good. Additional measures along the same lines would further improve industrial performance in the medium run, as discussed in Chapters 3-5. Short run variations in growth continue to depend on (a) agricultural performance, although success in "drought-proofing" the sector has reduced the impact of weather fluctuations, and (b) aggregate demand pressures from the government budget. Careful control will be needed to check the rising trend in government deficits. Otherwise there are dangers of "crowding out" private investment and spillovers into higher inflation and balance of payments deficits. If these problems develop, they would imperil the drive to increase competitiveness and, ultimately, economic growth and poverty alleviation. Although the trade balance has improved, largely as a result of falling oil prices, and reserves are equivalent to over five months of imports, there is little room for complacency. Despite the improved trade balance, pressures could develop from the bunching of payments on past borrowings from the IMF and other sources, protectionism in developed countries, or an upswing in oil prices.

A. THE REAL ECONOMY

1. GDP Growth

1.02 GDP growth in 1986/87 is projected to be roughly the same as the Plan's 5% target and slightly below the 5.1% figure recorded in 1985/86. Growth was about equal to the average for the first half of the 1980s and substantially higher than in the last half of the 1970s.

Table 1.1
INDIA: GDP and Sectoral Value Added

	<u>Growth Rates (percent per annum)</u>				<u>Percent of GDP</u>	
	<u>74/75-80/81</u>	<u>80/81-84/85</u>	<u>85/86 /a</u>	<u>86/87 /b</u>	<u>74/75</u>	<u>85/86</u>
GDP(factor cost)	4.4	5.1	5.1	4.9	<u>100.0</u>	<u>100.0</u>
Agriculture	3.0	2.8	1.4	1.5	45.9	31.4
Industry	4.7	5.4	6.5	6.5	21.9	27.3
Manuf.	4.3	5.7	6.8	6.1	15.6	16.6
Services	5.9	7.4	7.7	6.9	32.2	41.3

Source: Appendix Table 2.2.

Notes: Growth rates computed between end points of periods. Periods were chosen to minimize the impact of the 1979/80 drop in agricultural output. Least squares growth rates are similar, except for agriculture where extreme fluctuations produce a large difference. From 74/75 to 79/80 GDP grew 3.9% p.a.

^a Quick estimates (Central Statistical Organisation, India).

^b World Bank Projections.

2. Sectoral Developments

1.03 Agriculture production rose slightly in 1986/87 but fell below Plan targets in some areas for the second year in a row. Foodgrain production is estimated to have increased little over 1985/86. For the third consecutive year foodgrain output was about the same as the 1983/84 peak of 152 million tons, which in turn represented a jump of 18% over 1982/83. The main explanations for this leveling off are: below-normal rainfall in many states for the third year in a row, and difficulties in extending the Green Revolution to new areas. Stocks of foodgrains nonetheless remain high as a result of four years of near-record output.

1.04 Non-foodgrains production, which had declined by about 3.0% in 1985/86, is expected to show an increase of around 2.0% in 1986/87. This is largely due to the expected increases in oilseeds, sugarcane, and fruits and vegetables. Raw jute and cotton are expected to show declines from the record production levels of 1985/86. Tea production fell by over 5% in 1986 because of poor rain and, to a lesser extent, political disturbances in West Bengal. In addition, world tea prices have declined from the high average level that prevailed between 1980 and 1984. Tea's poor performance partially offset the growth in India's other primary exports.

1.05 From a longer term perspective, agriculture's share in GDP continues to decline as planned and expected. Over the period 1974/75 to 1984/85, agriculture grew at 2.9% per year, compared to an average growth in GDP of 4.7% and a population growth of 2.2%. The declining share of agriculture reflects the well-known cross-country pattern. However, the ratio of India's agricultural growth to GDP growth, 0.62, is somewhat below the average ratio in the larger low and low-middle income economies of 0.69,¹ indicating some room for improved agricultural performance.

1.06 Agricultural growth speeded up in the mid 1970s, then slowed in the 1980s. This slowdown, together with the reduced share of agriculture in GDP, has reduced the importance of agriculture in determining the long term rate of growth. Agriculture accounted for 28% of growth in the period 1974/75 to 1980/81, but only 17% in the period 1980/81 to 1986/87. At the same time, variance in agricultural output around the trend has been reduced in the 1980s, reflecting some success in "drought-proofing" agriculture through irrigation and progress in rice cultivation in the eastern states. Despite the near-record output levels, in per capita terms foodgrain output has improved only slightly compared to the early 1960s, albeit with a smaller percentage of the labor force in agriculture. The Green Revolution has banished the spectre of widespread famine and reduced the relative prices of basic foodgrains, but much remains to be done.

1.07 Central and State governments have taken numerous actions to improve agricultural performance. These include public investment in irrigation, groundwater development, and strengthening of extension and

¹ Based on data from Peoples Republic of China, Kenya, Pakistan, Sri Lanka, Sudan, Indonesia, Turkey, and Colombia from the World Development Report, 1986.

research institutions. Efforts are also being made to increase the efficiency of the irrigation infrastructure, to improve water management, to sustain the flow of agricultural credit, and to stimulate the productivity of rainfed farming through watershed development. Policies of low taxes; subsidies for fertilizer, water, credit, and power; and generally favorable support prices have continued to stimulate production. In 1986/87 paddy and wheat procurement prices were raised by 2.8% and 3.2% respectively over 1985/86 levels. For 1987/88 the wheat price has been raised again, by 2.5%, although this represents a decline in wheat's relative price. Although these policies have stimulated agricultural growth, they are becoming increasingly costly to the treasury.

1.08 Higher agricultural output will be achieved as the efforts to extend the advances made in Punjab and Haryana to other areas and other crops bear fruit. These two states now produce over 15% of India's foodgrains on only 7% of the area under foodgrains. The successes with wheat and rice must be duplicated with other crops, particularly oilseeds, where demand is growing. To stimulate oilseed production, the Government recently provided some fiscal incentives and cut back on imports. However, wheat and rice remain more profitable because of their high yields. Since oilseeds are primarily grown in rain-fed areas, breakthroughs will be achieved primarily through improved dry-farming techniques. Other important areas for agricultural development are social forestry and anti-erosion programs of reforestation and planting of hardy grasses. In some areas, private farmers are responding to the scarcity of firewood by switching to silviculture based on rapid-growing strains such as eucalyptus. There is room for better performance even in the areas of higher agricultural productivity, by providing incentives for diversifying the fertilizer mix away from the current heavy reliance on nitrogen.

1.09 Output in mining, manufacturing, and electric power grew about 8.0% in 1986/87, down somewhat from the 8.7% rate achieved in 1985/86, according to the new index of industrial production.² Manufacturing output grew about 7%, also down from 1985/86, when growth hit its five year peak of 9.7%. For the two years as a whole, average growth is still above the Seventh Plan target for gross output of 8%.³ Mining output grew over 7.5% in 1986/87 according to the industrial production index, compared to only 4.2% in 1985/86, when coal production lagged.

² The new index shows a compound average growth of 6.8% p.a. for 81/82-85/86, versus 6.5% for the old index. The new index uses 80/81 weights, while the old index used 1970 weights. The new index also includes some different products, including some made by the small scale sector. A large difference occurs in the index for manufactures in 85/86. This largely reflects higher growth in textiles, electric machinery, leather products and miscellaneous products in the new index; the difference in weights at the two digit STIC level had only a marginal impact.

³ The Seventh Plan targets are 8% growth in real gross output and 5.5% for real value added, a large differential. For FY 1981-85, the old index of manufacturing production and real value added in manufacturing grew at similar rates. This correspondence reflects reliance on the old index of production to estimate increases in value added for much of this period. The new index will imply a larger differential until the national accounts are revised to reflect the new output index.

1.10 Electricity generation increased by about 10.5% in 1986/87 compared to 8.5% in the previous year. Drought conditions continue to hinder hydro-generation but thermal production has performed well and plant load factors are up. Despite the continued increases in generation, power shortages continue to be about 6-10% of total demand, causing loss of production and increased costs, particularly in industry. Poor performance of many utilities controlled by the states--in terms of construction, operation of plants, and distribution losses--is a key problem. Power tariffs to agriculture are being increasingly subsidized, offsetting efforts to conserve energy and develop non-conventional sources and placing the utilities in a weak financial position. Industrial tariffs, on the other hand, have been raised in real terms and appear to be close to long-run marginal costs in several states.

1.11 From a longer term perspective, the share of industry in GDP changed very little between 1974/75 and 1984/85, reflecting both low GDP growth (4.7% p.a.) and an industrial growth rate (5.0% p.a.) that was only slightly higher. Although the ratio of industrial growth to GDP growth was similar to that in the larger low income and low-middle income economies, it fell below the ratio for the low income countries over the same period. Indian manufacturing performed even worse by international standards; the share of manufacturing in value added has remained in the 15% to 17% range for some time. Cross-country studies on the composition of output generally agree that India's industrial performance has lagged.

1.12 Analyses of Indian manufacturing suggest that growth slowed in the 1970s, particularly in the first half of the decade, compared to growth up to the mid-1960s and that total factor productivity growth was poor, accounting for 15% or less of industrial growth (Ahluwalia, Goldar). Although such intertemporal comparisons are fraught with difficulties,⁴ this slowdown was fairly striking and across the board. The elasticity of employment in manufacturing with respect to value added also was not particularly high in this period, averaging about 0.6, so manufacturing employment did not grow very fast. During the first half of the 1980s, growth of value added in manufacturing increased, averaging 5.7% p.a., and employment growth appears to have been about 4.4% p.a.

1.13 In the last two years the growth of manufacturing and industry in general seem to have increased again. This faster growth was a keystone of the Seventh Plan. The Government has announced numerous measures to make manufacturing more efficient and increase competition. Despite the rise in the growth rate, the impression remains that response to the measures has been less than desired. One explanation is that manufacturing growth had been underestimated, a purely statistical

⁴ The composition of output changes significantly over time, even in narrowly defined sub-sectors. Also, growth tends to be overstated in the early stages of import substitution, because production is valued at protection-inflated prices rather than at the prices of the goods it replaces. Finally, up to 1965, Indian real national product in manufacturing was computed by applying constant value added coefficients to indices of physical output growth, while between 1968 and 1979 nominal value added in the sectors was deflated by wholesale price indices.

phenomenon that was at least partially corrected by the new index. As the new index is incorporated in the GDP figures, this problem will further diminish. However, even the new industrial index cannot capture the impact of many new activities, and small scale production remains difficult to measure. A more comprehensive picture is contained in the Annual Survey of Industry, but that is available only with a long lag--the latest available Survey is for 1982/83. Moreover, even the Survey is biased by substantial underreporting. A second, complementary, explanation is that the measure's effectiveness has been limited by delays in implementing policy decisions; the multiple objectives of the measures; the tendency to focus on specific firms and industries, rather than on the sector as a whole; and, despite improvements in cutting down red tape, the continuance of administrative delays. Finally, infrastructure bottlenecks and power outages continue to play an important role in limiting industrial growth. Since India has one of the developing world's highest ratios of generating capacity and of power output to GDP, these problems seem to be related to a power-intensive industrial structure, uneven distribution of capacity, and inefficient industrial location, as much as to the lack of power.

1.14 Some industries also have complained that slack demand has limited sales. Contraband, motivated by excise tax differentials and high protection, seems to be a particular problem in textiles. In some sectors, particularly textile mills, industrial sickness is becoming widespread. This reflects a combination of an inappropriate product mix, costs (in domestic currency) that prevent exporting of excess production, high excise taxes, and the cumulative effect of over 30 years of policies that, until recently, discouraged mill production. While attempts must be made to save economically viable units and make them internationally competitive, hard decisions also must be taken to close those beyond rehabilitation. The Government already has taken a number of steps to improve the institutional arrangements for dealing with sick firms. As discussed in Chapter 3, further efforts are necessary to improve the regulatory environment, increase competitiveness, and build a more resilient industrial sector, although this may entail some transitional costs as firms adjust to the new environment.

1.15 Rapid growth in Services--the tertiary sector--has made an important contribution to the economy's growth. In the last two years growth in value added in the service sector averaged over 7.0%, compared to overall GDP growth of about 5% p.a. Over the last few years, services have accounted for more than half of GDP growth. That relative growth rate of services is high by international standards, but is similar to the pattern of growth in India over the last ten to fifteen years.

1.16 To a large extent, the growth in services reflects the growth in public administration and defence (PAD). For example, during the last Five Year Plan the service sector grew at an average rate of 5.9% excluding PAD, versus 7.1% including PAD. Some care is necessary in interpreting the benefits of this growth pattern, as there may be some problems in measuring the real volume of PAD. In particular, the deflator for PAD does not fully reflect compensation paid to government employees for inflation and is substantially below the deflator for the rest of GDP. If the increase in real PAD were measured by the growth in PAD

employment, inflated by the rate of productivity growth in the rest of the economy, then the estimated growth of services would be nearly one percentage point less than the figure shown in the national accounts.

B. PROGRESS IN POVERTY ALLEVIATION

1.17 The percentage of population below the poverty line fell from 48.3 to 37.4, according to the Seventh Plan's comparison of consumption expenditure in the 1977/78 and 1983/84 National Sample Surveys. Although methodological issues have been raised concerning the exact size of the decline, and there are substantial year-to-year variations in rural poverty, it nonetheless seems clear that progress has been made. The Planning Commission attributes the reduction in poverty in this period both to anti-poverty interventions and overall growth, of which better agricultural performance was an important element. In regions of rapid agricultural growth, the overall demand for labor increased, contributing to higher money incomes of the poor households. At the same time, the reduction in the relative price of foodgrains raised real incomes, especially among the poor. In contrast, in the agriculturally lagging States of the eastern and central regions, the rate of decline in poverty incidence was much slower. Thus, the continued diffusion of agricultural technology towards the rainfed eastern states and the arid zones, promised in the Seventh Plan, will be crucial in attacking the main geographical concentrations of poverty. Some progress has already been made in improving rice cultivation in the eastern region. The reduction in the variation of agricultural output also has made a contribution to reducing the transitory incidence of poverty.

1.18 Emphasis also has been placed on direct intervention programs, the Integrated Rural Development Program (IRDP) in particular, as a vehicle for alleviating poverty. According to the Annual Plan, 1986/87, over 3 million beneficiaries were assisted during 1985/86 under IRDP. However, numerous evaluations of the Ministry of Rural Development and others have pointed out problems in administering IRDP, including leakages, misidentification and difficulties in reaching scheduled castes, tribes and women. In this context, it is often hypothesized that better targeting can be achieved by decentralizing the administration. Therefore Karnataka's recent changes towards democratic decentralization are worth watching. Apart from the general problem of administering poverty programs, low returns to investment have been reported in regions with poor infrastructure, suggesting a complementarity between overall growth and anti-poverty interventions. Greater attempts are thus needed to integrate direct poverty alleviation interventions with general developmental programs, so as to exploit potential demand linkages and realize improved returns on investments.

1.19 Other direct interventions have focused on employment. The high level of foodstocks has enabled the Government to expand its food for work programs. Experience in Maharashtra's Employment Guarantee Scheme suggests that poor households, especially the landless, scheduled caste households and women, can benefit from seasonal employment programs. The guarantee of employment, even for a short period, acts as a substitute for unemployment insurance and these schemes also achieve some self targeting through the unattractiveness of such work to higher income households. The Government plans to expand national employment programs, and this may

ease problems of transitional unemployment related to industrial modernization. However, the experience in Maharashtra also suggests that attention must be paid to the quality of the public works, the choice of projects, and the integration of the projects within the regional eco-system, so that employment is productive, and resources are not wasted.

1.20 Several state governments have introduced direct nutrition program to combat poverty-related malnutrition. One of the best known is the Tamil Nadu Chief Minister's Nutritious Meal Program whose coverage is reported to have reached 8.4 million children and elderly citizens. However, there is an urgent need to improve the cost-effectiveness of these programs. For example, the Tamil Nadu program now costs about US\$150 million annually or at least about US\$18 per recipient for delivering a single component--nutrition. By contrast, through effective targeting and careful monitoring, the Integrated Child Nutrition Program in nine districts in the same state has provided multiple services, including health care, immunization, nutrition supplements, and non-formal health education, and effectively combated malnutrition in early childhood and among pregnant women at an annual cost of only US\$8.40 per child or mother protected.

1.21 Although the interrelationship between poverty and social sector development is well-recognized in India, distortions remain in the spending priorities within education and health. Government expenditures on education continue to be skewed in favor of professional, scientific and technical education, despite the higher returns to rural primary education and rural non-formal education. Increased provision for elementary education was made in the 1986/87 and 1987/88 budgets, but large subsidies to higher education remain. User-charges would raise revenues that would permit even greater expenditures on primary education. Health expenditures continue to be oriented toward urban hospitals rather than controlling infant morbidity and mortality in rural areas. In sum, more could be done to meet the needs of the poor, without additional spending, through a different distribution of expenditure.

1.22 Finally, the Government's programs for modernizing the economy are bound to influence the incidence of poverty. The observed decline in poverty during the recent period when the growth rate accelerated, in contrast to the near stagnation observed in the earlier periods of slow growth, suggests that the poor will benefit to the extent these programs stimulate growth, reduce unit costs and prices, and contribute to the general efficiency of the economic system. However, there are bound to be lags in realizing the benefits of modernization and growth, and the process will inevitably involve adjustment costs. Government's response to these problems must be quick and flexible.

C. MACROECONOMIC BALANCES

1.23 India continues to invest about 25% of its GDP. This ratio has been stable for the last seven years. In 1985/86, 54% of investment was private, 46% public. India's investment ratio is substantially above the average for developing countries, though somewhat below very high investing countries' like Korea and China. Since India's growth rate is below these countries, and about average for developing countries, there appears to be room for improvements in efficiency.

1.24 Investment is largely financed by national savings. Foreign savings (the current account deficit) generally has been less than 2% of

Table 1.2
INDIA: Macroeconomic Balances
(% of GDPmp)

	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Foreign Savings (Current Account Balance)	1.7	1.9	1.7	1.4	1.6	2.0
Private Sector						
Gross Domestic Investment	13.7	12.6	12.3	13.2	13.0	13.6
Fixed Investment	10.6	10.3	9.9	10.4	10.5	11.3
Change in Stocks	3.1	2.3	2.4	2.8	2.5	2.3
Savings	19.3	17.7	18.1	19.5	20.5	20.2
Investment-Savings Gap	-5.6	-5.1	-5.8	-6.3	-7.5	-6.6
Public Sector						
Gross Domestic Investment	11.0	11.9	12.2	11.1	12.1	11.6
Fixed Investment	9.2	9.9	11.2	10.5	10.9	10.7
Change in stocks	1.8	2.1	1.0	0.6	1.2	0.9
Savings	3.6	4.9	4.7	3.4	3.0	3.1
Current Revenues	19.5	21.0	22.1	21.2	22.7	23.4
Current Expenditure	15.9	16.1	17.4	17.7	19.7	20.3
Investment-Savings Gap	7.3	7.0	7.5	7.7	9.1	8.6
Public and Private Sectors						
Total Savings	22.9	22.6	22.8	23.0	23.5	23.3
Total Investment (GDI)	24.7	24.5	24.5	24.4	25.1	25.3
Investment-Savings Gap	1.7	1.9	1.7	1.4	1.6	2.0
Memo Items:						
Share of GDI financed by foreign savings (%)	7.1	7.8	6.8	5.7	6.5	7.9
GDPmp (Rs bill. at current prices)	1274.5	1476.8	1651.4	1940.6	2143.8	2435.5

NOTES ON SOURCES:

1. Foreign savings are Bank Estimates.
2. Investment data are from National Accounts Statistics, published by CSO. Total national savings are derived residually. Public savings and current expenditure are from National Accounts Statistics, while private savings are residual.

GDP, and correspondingly financed about 6-8% of India's investment.⁵ Up to 1984/85, private sector savings increasingly exceeded private sector investment; despite a slight decline in 1985/86, the surplus was still 6.6% of GDP. This growing surplus has allowed the government to finance a growing public sector investment program with a declining rate of public sector saving (See Section F and Chapter 2 for further discussion). Private savings are increasingly passing through the financial sector; the share of financial savings--currency, deposits, shares and debentures, government debt and insurance and pension funds--rose from 45% of saving in 1979/80 to 55% by 1983/84. The most rapid growth has occurred in government debt, and shares and debentures.

D. THE EXTERNAL SECTOR

1.25 The Government views the external sector as an important element in its drive to increase efficiency, particularly in industry. Current policy aims at modernization through access to imports of new equipment and technology. The external sector also provides markets for some labor intensive industries and could complement domestic policies to increase competition by exposing some industries to foreign competition. At the same time, it is important not to overestimate the probable impact of the policies, which are targetted to produce only small shifts in macro-economic aggregates. In particular, non-oil imports and exports have averaged only about 5.8% and 4.9% of GDP, respectively, during the first half of the 1980s. If Plan targets were achieved, these variables would change by less than 0.5 percentage points of GDP by 1989/90. Moreover, the Government's ability to use the external sector in these ways depends on (a) resisting claims from groups that have benefitted excessively from inward looking policies, while providing adjustment assistance to those that are hurt by the switch to greater international competitiveness, and (b) maintaining a viable balance of payments, which underscores the importance of the export thrust and of limiting the rising government deficits.

1.26 The trade balance improved substantially in 1986/87. The deficit was about US\$5.5 billion (about 2.5% of GDP), down from US\$7.1 billion (3.6% of GDP) in 1985/86. The current account balance, which includes large net transfers to India, also improved, declining from 2.0% to 1.1% of GDP. These improvements reflect lower imports and higher exports.

1.27 Imports (net of crude petroleum exports) declined about 2% in 1986/87, to an estimated US\$15.7 billion. This decline followed a sharp rise in 1985/86. Increased imports of oil and petroleum products (26%), partly to fulfill contractual obligations; iron and steel products (7%); and capital goods (11%) accounted for about 46% of the 1985/86 rise in imports. However, over half of the import rise was scattered over a variety of products, which probably reflects the easing of import restrictions. Although the 1985/86 rise in imports largely represented a rebound from the low imports of the previous three years, it became a focal point of opposition to the Government's trade policy.

⁵ Foreign savings are by definition equal to the inverse of the current account. In the 1980s annual flows from MLT loans and IMF credits were larger than 2% of GDP but these were partially offset by outflows of other types of capital and the buildup of (gross) official reserves.

Table 1.3
INDIA: Balance of Payments Summary
 (million U.S. dollars)

	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87 (P)
Exports, f.o.b. ^a	8332	8477	8386	8667	8746	8956	10249
Imports, c.i.f. ^a	-15893	-15333	-14385	-14360	-14400	-16066	-15757
TRADE BALANCE	-7561	-6856	-5999	-5693	-5654	-7110	-5509
Net Non-factor Services	1365	1002	935	1036	1039	1514	2114
RESOURCE BALANCE	-6196	-5854	-5064	-4657	-4615	-5596	-3395
Net Factor Income ^b	615	381	-293	-526	-838	-1009	-1198
Net Current Transfers	2771	2317	2505	2570	2526	2654	2176
CURRENT BALANCE	-2810	-3156	-2852	-2614	-2927	-3951	-2417
Direct Investment	8	10	65	63	62	160	209
Official Grant Aid	643	496	399	367	453	450	369
Net M< Loans (DRS) ^c	2013	1720	2115	2204	2600	2853	2609
Capital Flows NEI ^d	-311	-1717	-1399	29	-264	1244	-79
Errors & Omissions ^e	-200	-441	210	-474	272	-	-
Net Credit from IMF ^f	312	689	1968	1306	67	-209	-540
CAPITAL BALANCE	2465	758	3357	3495	3190	4498	2568
Change in Reserves ^f (- = increase)	345	2398	-505	-881	-263	-547	-151
End-Year Reserves (Gross) ^f	6859	4461	4966	5847	6110	6657	6808

P World Bank estimates based on preliminary data.

a Excluding crude petroleum exports.

b Excludes interest on non-resident deposits.

c Includes IMF Trust Fund which is excluded under Net Credit from IMF.

d Residual item; includes non-resident deposits, reserve valuation changes, rupee trade imbalance, unrecorded military imports, etc.

e As estimated by the Government of India.

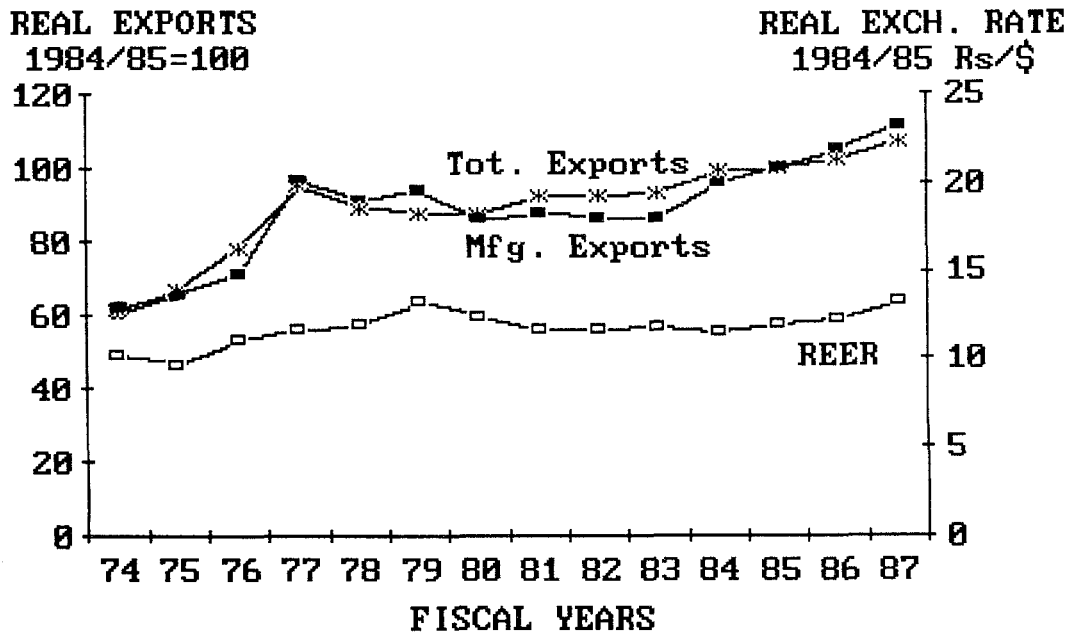
f IMF data. Reserve figures exclude gold holdings of the RBI.

1.28 The reduction in imports in 1986/87 reflects savings of about US\$2.5 billion on petroleum, petroleum products and fertilizers, largely as a result of the fall in their prices. These savings were almost completely offset by rising imports of other goods, which continued to increase much faster than GDP. In 1986/87, such imports grew about 20% in dollar terms, compared to 29% in 1985/86. As the 1986/87 trade figures became available and showed a fall in total imports, the focus of criticism of Government policy shifted from imports' overall growth to the impact of import competition on specific sectors, such as capital goods.

1.29 Exports (net of crude petroleum exports) roughly achieved Plan targets in 1986/87. Exports exceeded US\$10 billion, growing an estimated 14.4% in current prices, and about 5% in constant prices. Manufactured exports grew about 16% in current dollars and 6% in volume terms. Exports of primary products also performed well, despite reduced tea exports. If last year's export performance can be sustained, it would represent a major improvement over the 1980/81-1985/86 period when total exports grew by only 1.5% p.a. in current prices and just over 2% in constant prices. In fact real exports have grown slowly since their sharp rise after 1976 (see Fig. 1.1). Manufactured exports have performed somewhat better than total exports, largely because of growth in gems and jewelry, chemicals, and, since 1981/82, garments, which perhaps reflects the impact of promotional measures in these areas. However, exports of manufactures still grew by only about 2.9% p.a. in current prices and 3.7% p.a. in constant prices from 1980/81 to 1985/86.

Figure 1.1

**EXPORTS AND THE
REAL EXCHANGE RATE**



1.30 The Government has taken a number of measures to stimulate exports, recognizing the importance of export growth in containing the trade deficit and reducing the need for external financing. In addition, foreign markets provide an opportunity to expand production, especially industrial production, without as much additional investment as an equal volume of import substitution. The policy changes have aimed at approximating a "free trade" regime for certain exporters, paralleling the approach used by East Asian export-oriented economies. Some of the important specific measures have included:

- a) the initiation, in April 1985, of a passbook scheme for duty-free imports for exporters, which broadened the coverage of the existing advance license scheme;
- b) the liberalization, in late 1986, of the business income tax deduction, making it 4% of net foreign exchange realization plus 50% of the remaining profits from exports;
- c) the expansion of the International Price Reimbursement Scheme (IPRS) to include producers of aluminum and aluminum products as well as iron, steel and special alloy steels;
- d) reduction of interest rates to exporters from 12 to 9.5%;
- e) faster processing of export credit and duty drawbacks; and
- f) upward revision of the rates of Cash Compensatory Support (CCS) for offsetting internal taxes, from July 1, 1986.

In October/November 1986 the GOI announced another series of measures, including:

- a) extension of IPRS to raw materials for all major export sectors,
- b) permission to retain 5-10% of foreign exchange receipts for export promotion,
- c) duty-free capital goods imports for exporters in "thrust" industries,
- d) full remission of excise duties and domestic taxes, and
- e) remission of 20% of interest charges on IDBI loans, for firms exporting over 25% of output.

1.31 A real exchange rate policy that maintains export profitability is another factor in achieving a sustained, rapid growth in exports. No country has successfully raised exports over the long run without such an exchange rate regime. As shown in Fig. 1.1, India's real exchange rate⁶ improved for exporters in 1975. There was also a sharp rise in exports, particularly manufactured exports, suggesting that India's exports are indeed responsive to changes in the real exchange rate.⁷

⁶ The real exchange rate takes into account the relative movements of domestic prices in India and in the economies of its major trading partners, together with changes in the exchange rates of each country. These relative changes in prices and exchange rates are weighted according to the importance of trade with each partner country. The resulting index (1984/85=1.00) is multiplied by the 1984/85 Rs/\$ exchange rate to make the index easier to interpret. An increase indicates a real devaluation; exchange rate adjustments have more than kept pace with inflation.

⁷ This is also confirmed by statistical analysis, which indicates that over the period 1970/71-84/85 real exports responded more than proportionately to real devaluation.

Table 1.4
INDIA: Key Economic Variables

	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
INCENTIVE INDICATORS						
Real Effective Exchange Rate						
Index 1980=100	100.0	100.0	101.6	98.9	102.7	105.9
Annual change (% p.a.)		0.0	1.6	-2.7	3.8	3.1
Real Interest Rates (% p.a.)						
Short term (Treasury Bills)	-5.9	-4.6	-2.4	-4.3	-1.5	-0.2
Long term (IDBI)	-0.2	4.0	6.3	4.3	7.3	8.8
Index of real wages ^a	100.0	100.4	104.0	110.9	115.7	117.5
Prices of agr. commodities (domestic and int'l) US\$/MT						
Wheat US	168.3	154.6	132.6	137.3	140.2	128.7
India ^b	148.2	145.6	147.5	146.4	127.0	128.3
Rice Thailand	433.9	482.8	292.9	276.9	252.1	215.9
India ^b	133.0	128.8	126.7	128.0	115.3	116.0
Tea London	2230.0	2020.0	1930.0	2330.0	3460.0	1980.0
India	1902.0	1751.0	1779.0	2589.0	2819.0	2150.0
EXTERNAL TRADE INDICATORS						
Volume Index of Major Exports 1984/85=100						
Tea	107.1	100.0	91.0	90.7	100.0	100.0
Iron ore	87.9	92.8	85.0	86.6	100.0	105.7
Textiles	109.5	86.7	78.0	87.4	100.0	84.8
Readymade garments	96.0	87.8	82.1	93.9	100.0	108.9
Engineering goods	108.7	114.6	104.0	98.8	100.0	83.8
India's exports as % of:						
Exports of non-oil dev. countries	2.7	2.6	3.0	2.8	2.7	2.3
Exports of developing countries	1.4	1.4	1.7	1.8	1.8	1.6
World Exports	0.5	0.5	0.6	0.6	0.5	0.4
India's exports as % of LDCs' manufactured exports	2.8	2.8	2.8	2.3	2.1	n.a
Manufactured Exports						
Real Growth rate	1.5	-1.3	0.3	10.7	4.4	4.6
Value as % of Total Exports	66.1	67.6	68.4	69.3	71.2	72.8
Commodity Terms of Trade						
Index 1980/81=100	100.0	104.3	106.0	106.8	110.0	112.9
Annual change (% p.a.)	-27.5	4.3	1.6	0.8	3.0	2.6

^a Per capita emoluments of public sector employees at 1960/61 prices (1980/81=100)

^b Procurement prices

After 1976/77 the real exchange rate remained relatively constant until 1985/86; the ups and downs in 1978-81 mainly reflecting the fall in Indian wholesale prices while other countries experienced sharp inflation, and then the catch up in Indian inflation. Thus exchange rate movements offset the differential between Indian and external inflation over the period 1976-85. However, India actually lost competitiveness relative to the many developing countries that devalued even faster than their inflation differential (see Table 1.5). As a result, India's share of world trade has fallen. In particular, India's share of world export of manufactures fell from over 0.5% during the last half of the 1970s to under 0.4% in 1984. In 1986/87 the crawling peg is estimated to have improved the real exchange rate by roughly 8%.

1.32 The response to the export promotion measures and the improved real exchange rate has been viewed as somewhat disappointing, despite last year's performance. Aside from the normal lags in response, there are

Table 1.5
INDIA: Cross-Country Indices of Competitiveness, 1979-1986^a
 (1979=100.0)

	<u>Index</u> June 1986
<u>India Gained Against:</u>	
Japan	132.8
United States	124.8
Sri Lanka	110.2
Singapore	102.1
United Kingdom	101.6
<u>India Lost Against:</u>	
Thailand	99.0
Hong Kong	97.1
Malaysia	93.2
Bangladesh	92.2
France	90.2
Philippines	89.5
Germany	86.0
Korea	83.6
Mexico	82.4
Pakistan	80.6
Colombia	76.4
Brazil	68.5

^a The indices shown in this table are calculated on the basis of purchasing power parities. An increase in the index indicates an increase in Indian competitiveness.

Source: International Financial Statistics.

some explanations that are peculiar to India. One factor has been the time lag between the Government's announcements of policies and their implementation. During this time lag there sometimes have been hints that the announcements may not be implemented. In addition, the policies have been fairly product specific, rather than generally applicable to all exports. In particular, there has been no announcement that the exchange rate regime will be aimed at maintaining export profitability. Another factor is the difficulty in replicating a free-trade environment for exporters in the context of a highly protected economy. Without actually allowing duty free imports, this is very difficult because (a) it is difficult to compensate exporters fully for the impact of protection on their domestic inputs, particularly when much of the protection is quota based; (b) administration of the quasi-free trade environment introduces delays and costs that hinder bona fide exporters; and (c) resource pulls to export production are blunted by widespread quotas, which allow producers of import substitutes to cover higher factor costs with higher prices without losing market shares. Moreover compensation for high domestic costs can run afoul of GATT rules and lead to countervailing duties. Finally, it must be recognized that if exporters view the new incentives as primarily administrative measures, that can easily be withdrawn, they will respond cautiously. Experience in many countries has shown that a necessary condition for sustaining rapid export growth is an environment where exports are kept profitable, through a combination of favorable real exchange rates and "green light" treatment for exporters.

1.33 Invisibles traditionally have provided a substantial offset to the trade deficit, equal to about 1.5% of GDP in recent years. The positive balance on invisibles declined in 1986/87, reflecting lower workers' remittances from the Gulf and higher interest payments because of the increased reliance on non-concessional borrowing. Tourism picked up in 1986/87 and has become a major foreign exchange earner. Further major falls in workers' remittances appear unlikely, as the repatriation of less essential workers from the Gulf is nearly over and almost half of the remaining remittances come from Indian workers in OECD countries. Thus, the main determinants of future changes in invisibles will be the volume and terms of borrowings and the improvements in tourism.

1.34 The capital account remained in surplus in 1986/87 but that surplus declined sharply compared to 1985/86. While Direct Foreign Investment has been growing since 1984/85, reflecting government policy changes and the improved investment climate, it remains a small item. Disbursements of Medium and Long Term Loans (net) declined about US\$250 million. Net repayments to the IMF were up from US\$209 million in 85/86 to US\$ 540 million in 86/87. Most importantly, "other capital inflows" declined about US\$ 1.3 billion from the atypically large inflows of 1985/86. The unusual inflows in 1985/86 reflected rises in (a) 1985/86 miscellaneous inflows (up US\$ 500 million compared to 1984/85) that were probably one-time stock adjustments to the changes in government policy and (b) inflows into non-resident deposits (up an estimated US\$ 900 million compared to 1984/85) in response to better incentives.

1.35 Gross international reserves at the end of March 1987 were up US\$151 million compared to March 1986. They are now about US\$6.8 billion--equivalent to about 5 months of imports. The increase in gross reserves was much less than the improvement in the current account balance

because of the decline in the capital account surplus mentioned above. Net reserves improved more than gross reserves owing to the large IMF repayment. Despite the improvements in reserves and the current account, there is little room for complacency regarding the balance of payments. Non-oil imports are growing quite rapidly. Moreover, in the last two years overall balance of payments performance was buoyed by one-time improvements: in 1985/86 large increases in nonresident deposits and other capital inflows, and in 1986/87 sharp declines in oil prices. Finally, the 1986/87 reserve figure also was buoyed by a capital gain on the RBI's stock of foreign exchange holdings that offset the actual flow deficit in transactions measured in dollars. Barring additional favorable shocks, India's reserve position is likely to deteriorate unless exports continue to grow, borrowings are increased, or imports and growth are curtailed.

E. PRICES AND MONETARY DEVELOPMENTS

1.36 Inflation measured by the consumer price index (CPI), was about 8.4% between March 1986 and March 1987, down slightly from the 8.9% rate of the previous year. The wholesale price index (WPI) rose over 5.1%, versus 3.8% in 1985/86.

1.37 From a longer term perspective, inflation, measured by the CPI, averaged 6.2% during the period 1974/75-84/85. The WPI rose by 7.1% per year, although in the 1980s it rose much less than the CPI, largely as a result of the impact of changing relative prices of petroleum products. Narrow money (currency in the hands of the public plus deposit money) rose by 12.8% on average, slightly more than the sum of inflation in the CPI and real GDP growth. The principal factor driving narrow monetary growth, through increases in the money base, has been Reserve Bank (RBI) credit to the Government. Between 1974/75 and 1980/81, increased RBI credit to the Government accounted for about 54% of the growth in base money. Between 1980/81 and 1985/86 increased RBI credit to the Government actually exceeded the growth in reserve money.

1.38 Broad money (narrow money plus bank time deposits) has grown much faster than narrow money, increasing by an average of about 19% p.a. between 1975/76 and 1980/81 and about 16% p.a. between 1980/81 and 1984/85. India's ratio of broad money to GDP is among the upper third of the developing countries. This financial depth reflects three factors: (a) public confidence that the Government views inflation as antithetical

Table 1.6
INDIA: Inflation and the Growth of Financial Assets
(percent p.a.)

	1974/75 - 1980/81	1980/81- 1984/85	1985/86	1986/87 ^P
Inflation(CPI)	4.6	8.7	8.9	8.4
Inflation(WPI)	7.7	6.4	3.8	5.1
Narrow Money (M1)	11.8	14.3	10.4	15.1
Broad Money (M3)	19.1	16.3	15.9	18.3
<u>Memo Growth GDPfc</u>	4.4	5.1	5.1	4.9

Sources: Annex Table 6.1 and price indices for March.

^P Projection based on change February 1986 to February 1987.

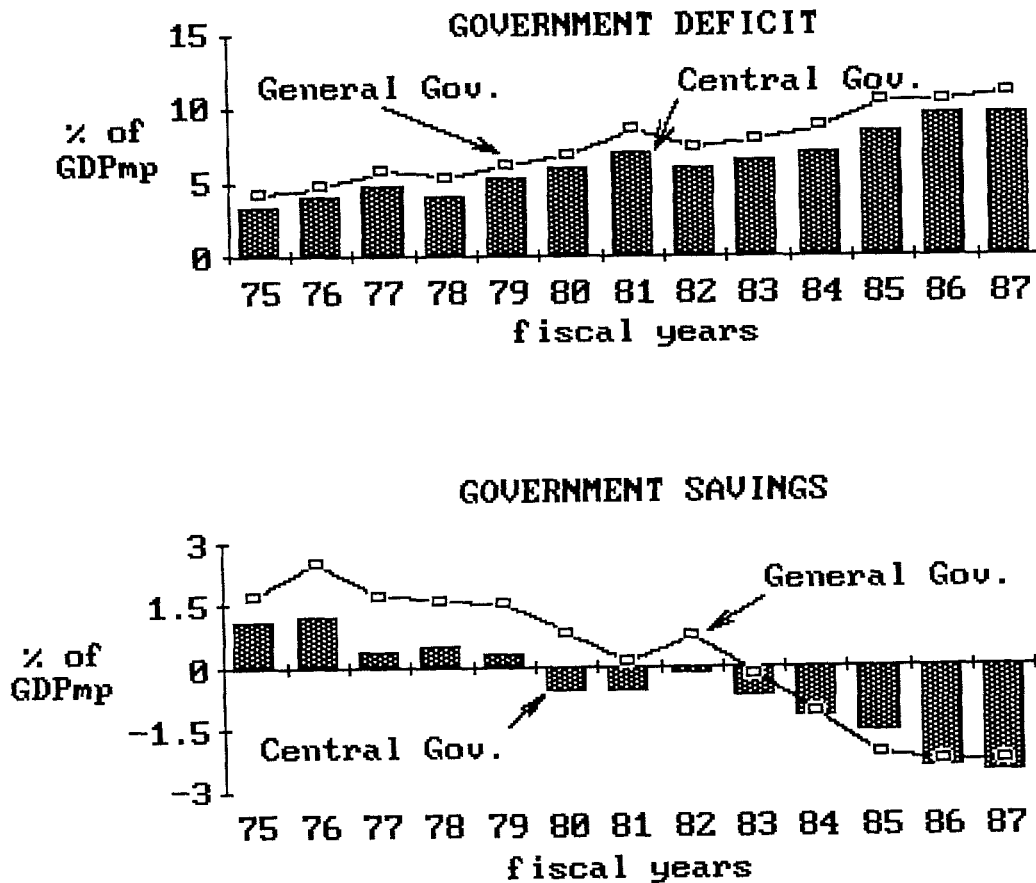
to its development objectives, (b) an interest rate policy that has kept domestic deposit rates near world rates in real terms (See Table 1.4) and (c) an expansion of bank branches.

1.39 Although the mobilization of financial savings has been successful, some stresses are developing in the financial system. Banks are forced to devote a substantial fraction of deposits to reserve and liquidity requirements (both of which were raised recently), and to forced investments. Although this provides low cost credit for the Government and preferential borrowers, it limits the funds available to non-preferential borrowers. Moreover, repayments are lagging on some of the forced investments and on some of the credits to traditional industries, and the expanded branch network involves high costs. The net effect is that non-preferential credits pay a spread of 7.5 percentage points or more over deposit rates and the volume of such credits is limited. As a result, industry has relied increasingly on capital market finance during the first half of the 1980s. However, there are indications that the capital market is becoming more expensive for private corporations. The Government and the public sector enterprises have begun to issue attractive debt instruments, particularly when their tax preferences are considered. To compete, private debentures must carry an attractive convertible feature. In the stock market, price earnings ratios have fallen substantially, implying a greater cost for pure equity funds. While the volume of issues has increased, this may simply be a temporary response to the rise in average interest costs. If rising government deficits and public enterprise borrowings continue to preempt a growing fraction of savings, then private enterprises will be subjected to rising financial costs and will lack the credit necessary to adjust to the more competitive environment. Moreover, as these stresses become more apparent, it is likely that the growth of deposits will slow, putting further stress on the system. The Government has recently reduced the ceiling rates on bank loans and non-bank instruments, and raised rates on some bank deposits, in an attempt to reduce the cost of finance and increase the banks' share. However, this measure may also affect bank profits and the availability of credit to the private sector. Its success ultimately will depend on the Government's ability to limit its financing requirements.

F. PUBLIC FINANCE

1.40 The General Government deficit (Central plus States) has risen as a percentage of GDP in the last few years. In 1986/87, the deficit was estimated at over 11% of GDP, versus an average of 8.6% of GDP in the period 1981/82 - 1984/85. The Government's saving (excluding retained profits of public enterprises) also has deteriorated. Current revenues typically exceeded current expenditures by over 1.5% of GDP during the Fifth Plan. In the Sixth Plan, saving by the General Government averaged about -0.5% of GDP, while in the first two years of the Seventh Plan current expenditures exceeded current revenues by over 2% of GDP. Although the public sector is still a net saver overall (see Table 1.2), its saving has declined in line with the decline in General Government saving. Moreover, the overall public sector's saving reflects large depreciation allowances and profits in a few public enterprises, which offset dissaving by the General Government and the majority of public enterprises.

Figure 1.2



1.41 Changes in Central Government revenues and expenditures are the main determinants of the changes in General Government deficits and saving, as shown in Figure 1.2. Central Government deficits have risen from an average of less than 6% of GDP in the period 1975/76 and 1979/80, to about 7% in the Sixth Plan and to almost 10% in 1986/87. Savings declined from about 0.5% of GDP in the period 1974/75-1978/79, to dissaving of 0.9% in the Sixth Plan and to dissaving of 2.6% of GDP in 1986/87.

1.42 Central Government revenues were buoyant in the last two years. Tax revenues have risen about 37% since 1984/85, reflecting the Government's successful implementation of a two pronged strategy of tax reform and better compliance. The rapid rise in Central Government expenditure has nonetheless outstripped the revenue increases. Current outlays have been the main factor, increasing over 50% since 1984/85. Capital expenditures of the Centre have grown more slowly, though somewhat faster than nominal GDP. The Government has maintained Plan outlays better than previous administrations, fulfilling planned expenditures, in real terms, in each of the first two years of the Seventh Plan. However,

this was achieved through reliance on the resources of public enterprises, borrowed as well as internally generated, and increased budget deficits.

1.43 Continuation of the rising trend in government deficits would prejudice the growth strategy in a variety of ways. On the financial side, increased government debt would crowd out private credit, credit that is needed to smooth the transition to a more productive and more responsive economy. If the Government chose to cover a rising deficit with market-related financing, then its rising share of bank credit and capital markets would increase the costs and decrease the availability of credit to the private sector. Some signs of such problems are already appearing, with competition from tax-free government debt keeping interest rates on corporate debentures at high real levels and making returns on equity and deposits look less attractive. Alternatively, the Government could switch to greater reliance on the RBI to finance a growing deficit. That would push up inflation and cut total real credit, putting more pressure on firms and making it even more difficult to extend additional credit to the dynamic firms. Finally, large increases in external borrowings would be unattractive because of their cost.

1.44 Rising government deficits also would threaten the export push and the gradual relaxation of controls on imports and domestic prices and production. The aggregate demand created by rising government deficits would absorb exportables, particularly manufactures and other non-traditional exports. It also would increase demand for imports. The worsening trade account would be attributed to trade liberalization, rather than to rising aggregate demand, especially since the greater availability of goods would limit inflation temporarily. Pressure would then build up for the reimposition of quantitative controls on imports. Once this was done, with or without a devaluation, internal prices would rise sharply. This would further discredit the economic reform efforts and create pressures for reimposition of domestic controls.

1.45 Control of the fiscal deficit is thus a key element in the success of the Government's program. The Government has recognized the potential problem and taken some steps to limit the growth of expenditures, including zero based budgeting and a request that each ministry reduce its 1986/87 expenditures by 5%. The 1987/88 Budget proposed a small decline in the absolute size of the deficit, which if achieved would lower the deficit by about 0.3% of GDP. However, additional measures may be necessary, since the rise in tax revenues partially reflects recovery of arrears and better compliance, which may not be repeated, and the deficit at the end of the fiscal year typically has exceeded the Budget figure in recent years. The States also will need to generate additional resources to meet Plan targets, cover the ongoing costs generated by the capital investments in their Plans, and provide for the rise in civil service salaries that will be necessary to maintain comparability with the Central Government.

Chapter 2

PUBLIC SECTOR FINANCES AND DOMESTIC RESOURCE MOBILIZATION

A. INTRODUCTION

2.01 This chapter looks at the recent developments in public sector spending and revenue, examines the factors behind India's rising deficit, and offers some ideas for raising additional revenues while improving the efficiency and equity of the fiscal system. The main conclusion is that India faces a domestic resource problem because of rapidly mounting expenditures, despite (a) successful tax policies that have almost achieved the Seventh Five Year Plan's target for tax collections as a percentage of GDP in two years, and (b) substantial increases in the oil and gas sector's contributions to public sector revenues. To deal with its resource problem, the Government will have to (a) control public spending, (b) continue its tax reforms, and (c) improve the contribution of public enterprises.

B. TRENDS IN PUBLIC SECTOR SPENDING AND REVENUES

2.02 The importance of India's public sector has risen dramatically since 1980/81. Public sector spending has risen from 26.9% of GDP in 1980/81 to 31.9% in 1985/86 according to the national accounts, which provide the best measure of the public sector's claim on the economy's resources and nets out intergovernmental transfers. According to the government budget, which is the basic instrument for controlling public spending and which includes Central and State Government spending plus the public enterprises' Plan spending, public spending rose from 29.2% of GDP to 35.2% over the same period and is estimated to have reached about 37% of GDP in 1986/87.

2.03 The period 1980/81 to 1985/86 also witnessed a major increase in public sector revenues, which rose from 19.5% of GDP to 23.4% of GDP on a national accounts basis (from 20.5% of GDP to 24.1% according to the budget). For 1986/87 all indications are that revenues have continued to grow faster than GDP. Central government tax revenues, a major element in public revenues, rose by 19% in 1985/86 and 15% in 1986/87, reflecting the success of the government's policy of tax reform combined with better compliance and higher customs revenues.

2.04 Although public sector revenues rose rapidly, particularly in the last two years, public sector expenditures rose more rapidly. The public sector deficit consequently rose, from 7.3% of GDP in 1980/81 to 8.6% of GDP in 1985/86. Similarly, the gap between budgetary outlays and revenues (including the resources of public enterprises for their plans) rose from 8.6% of GDP to 11.1% in the same period and to 12.2% in 1986/87. Table 2.1 provides a convenient vehicle for analyzing the sources of change in the public sector deficit in more detail. The data are drawn from the national accounts definitions, in order to focus on the public sector's claims on resources, but all the items have a close counterpart in budgetary concepts and thus are easily related to the government's fiscal policy instruments.¹ A three year average, centered on 1980/81, is

¹ The exception is the public enterprise surplus, which refers to the surplus on public enterprise activities, rather than just the resources of public enterprises devoted to Plan activities.

used as the basis of comparison to reduce the impact of special circumstances in any single year.

2.05 The table illustrates that the major source of the rising deficit was the decrease in public sector saving; public sector investment increased only slightly faster than GDP over the last five years. The decrease in saving was in turn a consequence of the substantial rise in current expenditure, which outstripped the rises in taxes and public sector enterprise surpluses.

Table 2.1
India: Sources of Change in the Public Sector Deficit
 (percent of GDP, National Accounts basis)

	<u>Average</u> 79/80-81/82	1985/86	Change
1. Current Expenditure	<u>16.0</u>	<u>20.3</u>	<u>4.3</u>
Interest	1.1	2.4	1.3
Subsidies	2.2	3.3	1.1
Comp. of Gov. Employees	6.4	7.3	0.9
Transfers	2.4	3.0	0.6
Other	3.9	4.3	0.4
2. Current Revenues	<u>20.4</u>	<u>23.4</u>	<u>3.0</u>
Taxes	16.4	17.7	1.3
Public Enterprise Surplus	2.9	4.4	1.5
Other	1.1	1.3	0.2
3. Public Sector Saving (2-1)	<u>4.4</u>	<u>3.1</u>	<u>-1.3</u>
4. Public Sector Investment	11.3	11.6	0.3
5 Deficit (Investment-Saving Gap)	<u>6.9</u>	<u>8.6</u>	<u>1.7</u>

Source: Appendix Table 5.1(b).

Note: Totals may not add due to rounding.

2.06 The decrease in public sector saving directly reflects the growing dissaving of the general government and, in turn, of the Central Government that was mentioned in Chapter 1. The Central Government's budgetary results showed an average saving of 0.7% of GDP in the five years preceding 1979/80, but in 1979/80 savings became negative (-0.5%) of GDP (Table 2.2). This shift was a consequence of the increased devolution of tax revenues to the States, in particular the doubling of the States' share of the Central Government's excises from 20 to 40 percent, in accord with the Seventh Finance Commission's recommendation. The Central

Table 2.2
INDIA: Central, State and General Government Finances
 (percent of GDP)

	Average	84/85	85/86	86/87
	79/80-81/82			
<u>CENTRAL GOVERNMENT</u>				
1. Current Expenditure	10.6	12.6	13.9	14.8 ^a
Non Developmental	6.5	7.6	8.2	NA
Defense	(2.8)	(3.0)	(3.1)	(3.6) ^a
Interest	(2.1)	(2.8)	(3.0)	(3.4) ^a
Other	(1.6)	(1.8)	(2.1)	NA
Developmental	2.0	2.6	2.7	NA
Grants to States	2.1	2.4	3.0	3.0 ^a
2. Current Revenue	10.1	11.0	11.4	12.2 ^a
3. Saving (2-1)	-0.5	-1.6	-2.4	-2.6 ^a
4. Capital Expenditure	5.8	6.7	7.1	7.0 ^a
5. Surplus (3-4)	-6.3	-8.3	-9.6	-9.6 ^a
<u>STATE GOVERNMENTS</u>				
6. Current Expenditure	10.9	12.6	13.1	12.5 ^b
Non Developmental	3.3	3.8	4.1	3.8 ^b
Developmental	7.0	8.1	8.1	7.8 ^b
Education	(2.5)	(2.7)	(2.8)	(2.7) ^b
Health	(1.1)	(1.3)	(1.2)	(1.1) ^b
Agriculture	(0.8)	(0.8)	(0.8)	(0.7) ^b
Other	(2.6)	(3.3)	(3.3)	(3.3) ^b
Interest to Centre	0.6	0.8	0.8	1.0 ^b
7. Current Revenue	11.9	12.2	13.2	12.7 ^b
8. Saving (7-6)	1.0	-0.4	0.1	0.2 ^b
9. Capital Expenditure	4.0	3.5	3.5	3.2 ^b
10. Surplus (8-9)	-3.0	-3.9	-3.3	-3.1 ^b
<u>GENERAL GOVERNMENT</u> ^c				
Current Expenditure	18.8	22.1	23.1	23.7 ^d
Current Revenue	19.3	20.0	20.8	21.3 ^d
Saving	0.5	-2.1	-2.3	-2.4 ^d
Capital Expenditure (Net)	8.1	8.3	8.1	8.7 ^d
Surplus	-7.6	-10.4	-10.4	-11.0 ^d

^a Revised Estimate.

^b Budget Estimate.

^c Nets out transfers between Central and State Governments.

^d World Bank Projection (based on budget estimate, updated by data in 1987/88 Budget documents of the Central Government).

Source: Appendix Tables 5.2, 5.3 and 5.4.

Government's dissaving has continued to grow since then, reaching 1.6% of GDP in 1984/85 and 2.4% and 2.6% of GDP in 1985/86 and 1986/87, respectively. All the major components of the Central Government's current spending have risen faster than GDP since the beginning of the 1980s. The increases in defence (particularly in the last two years), interest and grants to the states amounted to 0.8%, 1.3% and 0.9% of GDP between 1979/80-1980/81 and 1986/87. The 1987/88 Budget proposes a 23% increase in defense spending over 1986/87 revised spending (43% over the original 1986/87 Budget). Developmental expenditures rose about 0.7% of GDP between the beginning of the 1980s and 1985/86. Spending on education, public health, and agriculture have each risen about 0.1% of GDP, with the remainder of the rise in developmental expenditures scattered among other items.

2.07 State Government expenditures are about 16% of GDP, with about four fifths in current spending and one fifth in capital spending in each of the last two years. State revenues have been much less buoyant than current expenditures. As a result, the State Governments' saving has declined as a percentage of GDP. Increased development expenditures account for much of the rise in the States' spending, although the major items, Education, Health and Agriculture, show little increase. However the States' non-developmental expenditures show the same disturbing upward tendency as the Centre's. Increased interest payments to the Central Government have wiped out much of the increase in Central Government transfers. Although the States' overall deficit, as a percentage of GDP, is only slightly higher than at the beginning of the 1980s, this was achieved by allowing capital expenditures to decline relative to GDP. There is ample evidence that this has slowed execution of development projects in many states.

2.08 State Government finances did show an improvement in 1985/86. However the RBI's recent survey of State Government finances makes clear that this was largely due to transfer from the Central Government and that the resource mobilization of the States leaves much to be desired. Moreover current spending is likely to increase rapidly as the Fourth Pay Commission's recommendations filter down to the state level. Unless action is taken, there is little chance of achieving the States' resource mobilization targets under the Plan. Yet the recent budget announcements of Haryana, Himachal Pradesh, Mizoram, Orissa and Tripura, for example, make no provision for additional taxes. Assam, Gujarat, Karnataka, Punjab, Rajasthan and Tamil Nadu's proposals for additional tax revenue would reduce their deficits but gaps remain.

2.09 Plan spending (both current and capital) currently amounts to Rs 404 billion (14.9% of GDP), with 74.5% of it incurred by General Government out of its budgetary resources and the balance by public enterprises out of their internal and extrabudgetary resources. Central Government outlays on the Plan in 1985/86 and 1986/87 were roughly 40% of Plan targets in real terms, a much larger proportion than in any previous Five Year Plan. This was largely achieved through increasing reliance on the public sector enterprises. The Central Government has announced its intent to continue to rely heavily on public enterprises to fulfill the Plan in 1987/88.

2.10 Power accounts for the largest share of the public sector Plan spending, followed by large and medium industry, petroleum, railways, major and medium irrigation, and other sectors (see Table 2.3). Increased

Table 2.3
INDIA: Public Sector Plan Spending
 (% of GDP)

	80/81	84/85	85/86(RE)	86/87(P)
Public Sector Plan Spending	11.7	13.9	14.0	14.9
of which:				
Power	2.1	2.2	2.3	2.7
Large & Medium Industry	1.5	2.0	2.1	2.0
Petroleum	0.6	1.2	1.3	1.4
Railways	0.8	0.8	0.8	1.0
Major & Medium Irrigation	1.0	0.8	0.8	0.8
Agricultural Programs	1.7	2.0	1.9	2.0
Social Services	1.6	2.1	2.0	2.1
Other	2.4	2.8	2.8	2.9

(RE) Revised Estimates.

(P) World Bank Projections, based on budget estimates, updated by data in 1987/88 budget documents for the Central Government and its enterprises.

Source: Appendix Table 5.10.

efficiency in the use of these resources is almost certainly possible. However, this subject will not be given a detailed treatment here as Seventh Plan allocations and sectoral priorities were the focus of the Bank's 1986 Country Economic Report.

2.11 As was shown in Table 2.1, the main elements in the rise in the public sector's current expenditure are interest payments, subsidies, compensation of government employees and transfers. The next section examines some of these elements in more detail. Section D analyzes the sources of public revenues, particularly the impact of the successful on going tax reform and the role of public enterprises. Finally, Section E examines the financing of the public sector deficit.

C. PUBLIC SECTOR EXPENDITURES

2.12 Interest payments by the public sector have risen by 1.3 percentage point of GDP since the beginning of the 1980s. This reflects three elements: (a) rapid growth in government debt. The outstanding Central and State Government debt rose from 51.8% of GDP in 1980/81 to 62.4% in 1985/86, reflecting the accumulation of the growing gap between government revenues and expenditures; (b) payment of higher average interest rates on government debt--the Government continues to rely heavily on market borrowings and the rates on these borrowings are rising (for example, the interest rate on Government of India 7 year loans rose from 8% in 1984/85 to 10.2% in 1986/87); and (c) greater reliance on mobilization of resources by public enterprises in the capital market.

2.13 The recent shift to higher average interest rates on public sector debt will improve the efficiency of the financial system and reduce

the hidden burdens on savers and non-priority borrowers, as the Chakravarty Committee's Report on the Working of the Monetary System pointed out. The alternative ways of financing deficits--monetary expansion or requiring the bank system to hold low-interest government debt--are unattractive. However, this shift necessarily implies some rise in the ratios of public sector interest payments to GDP and the public sector's current expenditures to GDP until the adjustment in the composition of Government debt is completed. The question is whether the observed growth in these ratios is excessive, and a precursor of a so-called internal debt trap, where rising interest costs of domestic debt alone lead to an explosion of debt.

2.14 Such a debt trap would arise if the rate of interest on government debt exceeded the growth of nominal GDP. Then, simply "rolling over" the interest payments on a fixed amount of interest bearing debt in private hands by issuing additional bonds would imply a steadily growing ratio of government debt to GDP. While this could occur for a while, particularly if the real interest rate on government debt were increased, private portfolios would become saturated with government debt. Eventually either non-interest expenditure would have to be cut, additional taxes levied, or currency issued in order to service the debt. As this argument makes clear, India is not presently in danger from such an internal debt trap. The average interest on Government domestic borrowings (including RBI borrowings) remains less than the growth of nominal GDP, so that the internal debt can be serviced by issuing new debt.

2.15 Recent large budgetary deficits, not high and rising interest rates, have been a major cause of rising interest expenditures. Of the interest payments in 1986/87, for example, roughly 42% represents interest on the deficits incurred during only the last five years (that is, the deficits excluding interest costs of the stock of debt existing at the end of 1981/82), while 51% represents interest on the stock of debt issued between Independence and the end of 1981/82 (assuming that interest payments on that stock of debt have been financed by issuing new debt and that the interest rate was the rate prevailing during 1982/83) and only 7% represents the impact of rising interest rates on the carrying costs of the stock of debt existing at the end of 1981/82. In other words, if the non-interest deficit had been held to zero between 1981/82 and 1986/87, then government's interest costs would have been 42% lower in 1986/87 and actually would have fallen as a percentage of GDP. Thus, domestic debt is largely rising because of the imbalance between non-interest spending and revenues, not because of rollover of existing debt at higher interest rates. Continuation of this trend would eventually swamp private portfolios with government debt.

2.16 There are other problems with current trends in interest payments. First, while the average interest paid on borrowings is substantially below the growth rate of nominal GDP, this figure does not reflect the impact of tax exemptions that public sector debt enjoys. To the extent this occurs, the true cost of government borrowings exceeds the interest paid, because of the loss of tax revenue. The implicit rate paid on government debt is thus much closer to the nominal growth of GDP and the danger of falling into an internal debt trap correspondingly much greater. Second, and more important, the fall in public sector saving

implies that the Government must issue more debt to finance a given volume of investment. One way or another this additional debt tends to "crowd out" private borrowing for investment, unless additional financial savings are mobilized through higher real interest rates. (See Section D for further discussion of this issue.)

2.17 Subsidies are provided to a wide array of economic activities, including bio-gas plants, new industrial units in backward areas, controlled cloth, transport of coal, interest payable by public enterprises, export promotion and market development, domestic and imported fertilizers, food, irrigation, rural power, railways, seeds and vegetable oil. The largest subsidies at the Central Government level are those for fertilizer, food, export promotion and interest, accounting collectively to Rs 49.9 billion in 1986/87 (1.8% of GDP).

2.18 These subsidies have frequently driven a wedge between financial incentives and economic returns from various activities. Unless they are (a) explicitly offsetting major distortions, as is generally the case with the Government's fiscal assistance to exporters, for example, or (b) the best feasible way of pursuing non-economic objectives, their reduction would improve efficiency as well as help to reduce the deficit.

2.19 The fertilizer subsidy is a good example of the types of problems that can arise. The Government's fertilizer subsidy was Rs 18.9 billion (0.7% of GDP) in 1986/87, up from Rs 5.1 billion (0.4% of GDP) in 1980/81. The subsidy is derived from (a) the Fertilizer Retention Price Scheme (FRPS), which guarantees individual fertilizer producers a 12% after-tax return on net worth at 80% capacity utilization, subject to certain efficiency norms, and (b) the policy of fixing farmgate prices with little reference to either the cost of domestic production or of imports. The allocation of this subsidy between fertilizer producers and users depends on the cost of potential imports. With current low international fertilizer prices, the bulk of the subsidy accrues to producers and, among them, the more inefficient producers receive higher rates of subsidy. In addition to this subsidy, which arises from pricing policies, public sector fertilizer units incur large losses, which amounted to Rs 1.3 billion in 1985/86. Furthermore, state governments subsidize fertilizer consumption by giving rebates on the farmgate prices fixed by the Central Government.

2.20 In view of the FRPS's adverse effects on the efficiency of industrial investment and the operation of existing plants, together with the rapidly rising fiscal burden of the associated subsidy, consideration should be given to replacing it with a tariff-adjusted import parity price scheme. This scheme could be similar to that advocated by the B.B. Singh Committee but linked with international trade prices, rather than to domestic prices in selected countries. Furthermore, a strategy needs to be developed to link user prices more closely to the costs of imports to avoid unintended increases in the user subsidy if world prices rise again.

2.21 Compensation of Government Employees: Rapid increases in the number of government employees, combined with (a) revisions in their pay scales, (b) annual increments in basic pay, and (c) frequent increases in dearness allowances (35 such increases to the Central Government employees between February 1, 1980 and January 1, 1986), have boosted the wages, salaries and pensions payable to government employees--from 6.4% of GDP in

the beginning of the 1980s to 7.3% in 1985/86. Normal increases and the Central Government's acceptance of the Fourth Pay Commission's recommendations are estimated to have raised the 1986/87 wage and salary bill to as much as 7.8% of GDP. The rise will be further compounded by the likely repercussions of the Commission's recommendations on the wage and salary bills of the State Governments. On various occasions the Government has commented on the need to contain its wage and salary expenses, but no specific policies have been adopted as yet.

D. PUBLIC SECTOR REVENUES

1. Taxes

2.22 Total tax collections amounted to 16.7% of GDP in 1984/85 and rose to 17.7% of GDP in 1985/86. The Seventh Plan envisages a rise to 18.3% by 1989/90 but collections continue to exceed projections and the 1987/88 budget suggests that this target has nearly been achieved.

2.23 Numerous reforms were made in tax policy in the last two years, and many of the key proposals of the Long Term Fiscal Policy were implemented. The principal objectives of this Policy were to simplify the tax structure, establish a set of reasonable rates, improve compliance through better administration and enforcement, raise revenues, foster a more open, stable and predictable tax policy environment, and make the structure of taxes more conducive to growth and equity. The Government has taken several steps to achieve these objectives. Nonetheless, considerable room remains to further reduce distortions and improve revenues.

2.24 Indirect taxes are the mainstay of India's tax system, currently accounting for about 85% of the total tax collections. The major indirect taxes are Central excise duty, customs duty, sales tax, State excise duty, vehicle tax, stamps and registration fee, tax on goods and passenger transport, electricity duty and entertainment tax. The first two are levied by the Central Government and the remaining by State and Union Territory Governments. The Central excise duty is the largest contributor to the Central Government's tax revenues, and sales tax to those of the State and Union Territory Governments. Customs duties and excise taxes also have accounted for most of the recent rise in the revenues.

Table 2.4
INDIA: Analysis of Recent Increases in Major
Central Government Tax Revenues
(percent of increase)

	<u>Including States' Share</u>		<u>Excluding States' Share</u>	
	85/86	86/87	85/86	86/87
Customs Duties	48.0	48.3	71.7	63.7
Excise Taxes	34.8	34.1	20.4	23.2
Income Taxes	<u>17.2</u>	<u>17.6</u>	<u>7.9</u>	<u>13.1</u>
Total	100.0	100.0	100.0	100.0
<u>Memo: Total Increase (Rs billion)</u>	51.8	40.9	34.7	31.0

Source: Government of India, Receipts Budget 1987/88.

2.25 Central excise duty: Leviable on the production or manufacture of goods ranging from aerated waters to zip fasteners, the Central excise duty is the single most important source of revenue, accounting for about one-third of consolidated government tax revenues and about one-fourth of current revenues. Because of the high and varying rates involved, excise taxes are also a factor in the high cost of industrial goods and price distortions.

2.26 In line with the objectives of simplifying taxes and reducing distortions that hinder growth, the Government has taken important steps to reform the excise duty system. In 1986 it announced the introduction of a Modified Value Added Tax (MODVAT) for goods covered by 38 chapters of the Central Excise Tariff Act of 1985. The major categories of products covered included chemicals, plastics, glass and glassware, rubber products, base metals and articles of base metals, machinery and mechanical appliances and motor vehicles. As long as (a) inputs and outputs are both covered within the specified 38 chapters, and (b) the outputs are not exempt from excise, the excise and countervailing duties paid on inputs can be credited against excise duties due on final goods. Except for exports, no credit is available when final goods are exempt. Exports are exempt from excise taxes, but taxes paid on inputs to exports are refunded, serving as an export incentive (under GATT rules, rebate of domestic indirect taxes is allowed). The 1987/88 budget proposed the extension of MODVAT to all commodities other than textiles, tobacco and petroleum products.

2.27 The initial introduction of input relief under MODVAT was accompanied by upward adjustments in excise duties on final products to leave revenues unchanged. This procedure avoided significant distributional effects since effective tax rates (tax rates that take account of rates on inputs as well as outputs) were designed to be similar to previous levels. However, there were some protection enhancing effects, given the practice of levying countervailing duties on imports at rates equivalent to excise duties applicable to similar domestic goods. The recent extension of MODVAT was not accompanied by higher tax rates on final products. Measures also have been proposed to deal with some of the problems that had arisen in the administration of the tax.

2.28 The recent extension of MODVAT will facilitate restructuring of customs duties as envisaged in the Government's Long Term Fiscal Policy. Since import and excise duties are the two major determinants of effective protection, the extension also will simplify the task of undertaking much-needed reforms of import duties.

2.29 Various features of MODVAT will need attention in the further development of the tax. One aspect is the use of exemptions. An exemption is a mixed blessing under MODVAT: a product that is exempt is also denied credits for taxes paid on its inputs. An exempt product will normally pay less tax (taking account of taxes paid on inputs) than it would if it were taxable, even though no credits for taxes paid on its inputs are available. A product using an exempt product as an input, on the other hand, would bear higher taxation, since credits for taxes on inputs into the exempt product would, in the ordinary course, not be available. The Government has put in place special mechanisms to take care of this problem in selected cases, but these have added to administrative costs. Under MODVAT, therefore, it would be desirable

to use exemptions sparingly, and to tax products that the Government wishes to tax more lightly than others through concessionary rates.

2.30 The Government also could review the current regime of numerous, widely-varying excise rates, which complicates the tasks of firms and administrators. Moving closer to a full-fledged Value Added Tax system, based on only a few rates, would greatly simplify the tax system and improve economic efficiency.

2.31 Customs Duties also account for a large share of government revenues. Chapter 4 provides an extensive discussion on the impact of tariff rates and exemptions on Government revenues and efficiency. Suffice to say here that the ratio of customs duties to GDP in India is not particularly high by international standards, despite India's high nominal duties. This is because the tax base, foreign trade, is small relative to GDP. The experience of the last two years, when non-petroleum imports were allowed to rise and average tariff rates increased, suggests that a shift from license-based protection to tariff-based protection (with fewer exemptions from tariffs) would increase Government revenues.

2.32 Sales Taxes are the most important source of revenue for the State and Union Territory Governments, currently accounting for about 58% of the taxes raised by them and for 27% of their total current revenues in 1986/87. The sales tax system introduces numerous distortions. A given state will usually have a large number of different sales tax rates, which it applies to different goods according to varying criteria. Moreover, some states also levy different rates of sales tax on certain items such as electronic goods depending upon whether they are produced locally or outside the state. The result is that fairly similar goods are taxed at different rates within states as well as across states and the domestic market is fragmented, encouraging relatively small units to set up behind internal protective walls. The Central Government has condemned many of these practices, but has been unable to achieve a reduction in the distortions.

2.33 Direct Taxes. India currently levies three direct taxes on income: (a) a tax on agricultural incomes is levied by some states under the provisions of their separate agricultural income tax acts; (b) a tax on non-agricultural incomes is levied by the Central Government under the provisions of Income Tax Act of 1961; and (c) a tax on excessive corporate profits, called surtax, is levied by the Central Government under the provisions of Companies (Profits) Surtax Act of 1964. In addition, the Government levies a tax on wealth (with rising marginal rates) and a gift tax. Direct taxes amount to 2.4% of GDP, with income taxes accounting for nearly 90%.

2.34 Beginning in 1985/86 the Government has implemented a number of notable tax measures, with the objectives of increasing the efficiency and equity of the tax system and raising more revenues. These measures, which reflect recommendations contained in the Long Term Fiscal Policy, include:

- Rates of non-agricultural, non-corporate income tax have been reduced across the board. The highest marginal rate is now 50%, against over 60% earlier.
- The non-agricultural income tax rates applicable to companies have been reduced by 5 to 10 percentage points to a range of 50% to 65%.
- The surtax on "excess" profits will be discontinued for tax years ending after March 31, 1987.
- Royalties and fees for technical services paid to foreign companies will now be taxed at the uniform rate of 30%.
- The scheme of compulsory deposits by income tax payers (which amounted to an additional tax on personal incomes) has been abolished.
- The maximum wealth tax rate was reduced from 5% to 2%, the estate duty was abolished, and the limit on non-taxable gifts was raised.

In addition, numerous steps were taken to reduce administrative delays and improve compliance. Tax payers will now pay self-assessed taxes when due, with a sample of returns being scrutinized, rather than having tax officials assess their returns and issue an assessment order. Tax administration was strengthened, an amnesty program initiated and a well-publicized campaign of enforcement undertaken.

2.35 The Central Government's 1987/88 Budget contains additional proposals for further reform of direct taxes, including:

- Depreciation on blocks of assets instead of the present complex system linked to individual assets. There will be only three rates of depreciation for plant and machinery: 100%, 50%, and 33 1/3%. In most cases the result will be faster depreciation.
- Capital gains from the sale of land and buildings in urban areas will be exempt from tax, provided the gains are invested in approved relocation schemes.
- Reduction in the holding period for concessional income tax treatment of capital gains on sale of shares from 36 to 12 months.

2.36 The income tax collections from non-corporate assesseees rose from 0.9% of GDP in 1984/85 to 1% in 1985/86. Much of this increase was probably due to factors such as (a) addition of new assesseees through intensive survey work, (b) improved tax compliance by existing tax payers, and (c) improved recovery of past tax arrears. Continued efforts will be necessary to improve compliance further; otherwise the ratio of taxes to GDP will level-off. Indeed this may be happening already; the revised estimates for 1986/87 indicate non-corporate tax collections were roughly the same percentage of GDP as in 1985/86. Moreover, tax collections would weaken if the Government, for one reason or another, relaxes its measures to improve compliance.

2.37 Further steps to achieve the Long Term Fiscal Policy's objectives could be taken in three areas: (a) broadening of tax base, (b) lowering of tax rates on non-agricultural incomes, and (c) improvement in tax administration.

2.38 Broadening of Tax Base: The Indian Income Tax Act is honeycombed with exemptions that erode the tax base considerably--e.g. exemption of agricultural income, exemption of income from newly established industrial undertakings in the free trade zones, deduction for deposit with the Industrial Development Bank of India for investment in new machinery or plant, tax concession based on export turnover and profits from exports, and partial tax holiday for profits from new industrial undertakings. The most important is probably the exemption of agricultural income. The wealth tax also is subject to numerous exemptions. While many of these exemptions have laudable objectives, they reduce overall revenues. Moreover, they generate social costs: by encouraging rent seeking and expenditures on tax-avoidance strategies, they imply very different tax burdens for taxpayers with similar incomes. A number of potentially large tax payers have little or no tax liability at all.

2.39 The Government has recognized some of these problems of revenue loss. One response has been its proposals to levy a minimum tax on corporate incomes. The latest action was taken in the 1987/88 Budget, which proposes a minimum tax on 30% of book profits. Minimum taxes could also be imposed on household incomes above the exemption limit. However, these measures are mainly aimed at reducing the revenue loss and improving equity; they do not correct the distortions arising from widely different tax rates and rent seeking. Applying income taxes to agricultural incomes, for example, would significantly improve equity and efficiency while increasing the tax base and tax revenues. More generally, the objectives of the Long Term Fiscal Policy suggest that greater attention be paid to controlling and reducing the number of tax expenditures, rather than to regulating the benefits under them.

2.40 As a result of a generous exemption limit, many families with incomes above the median escape taxes. While it is probably politically unfeasible to lower the exemption limit, it should be allowed to decline in real terms via inflation, and attempts to raise it should be resisted. The impact of this raise could be cushioned by lowering the lowest tax rate.

2.41 Lowering of Tax Rates: Despite recent reductions, the statutory non-agricultural income tax rates are generally on the high side internationally. In particular, the lowest rate applicable to individual incomes (25%) seems high, although this is offset somewhat by the high exemption limit. A lower base rate would cushion the impact of becoming a taxpayer and, together with the new procedures for tax payment, probably increase the number of contributors and the taxes they pay. Consideration might also be given to further reductions in marginal tax rates on income and wealth, although such reductions would have to pay close attention to the tradeoff between increasing the taxable income base and lowering the rate.

2.42 A case also exists for rationalizing tax rates applicable to corporate profits. The current tax schedule consists of four rates: 50%,

55%, 60% and 65%, applicable to taxable profits of widely-held domestic companies, closely-held domestic non-trading and non-investment companies, closely-held domestic trading and investment companies, and foreign companies, respectively. It is not clear, for example, why closely-held domestic trading and investment companies are taxed at higher rates than, say, closely-held domestic non-trading and non-investment companies. Similarly, closely-held domestic industrial companies are taxed at higher rates than those applicable to, say, widely-held domestic trading companies. There is not a strong case for penalizing closely-held industrial companies through a higher rate of income tax. One possible reason might be that it is more difficult to assess their accounts, but this seems somewhat discriminatory in light of the Government's plans to accept most declarations at face value. The Government should continue to move toward a more simplified tax system, where rates are similar and lower, and where self assessments are basically accepted but subject to large penalties for evasion.

2.43 As regards foreign companies, the case for treating them differently rests on the ground that the dividends distributed out of profits of a foreign company operating in India are not subject to tax in the hands of its shareholders under the Indian income tax law, while the dividends distributed by a domestic company are. Equal tax treatment of foreign and domestic companies would thus amount to a discrimination against the domestic companies. While this is perfectly valid, the current rate (65%) is on the high side internationally.

2.44 Improvement in Tax Administration: Non-corporate incomes declared for tax purposes amount to only about 6% of GDP at current factor cost, whereas the National Institute of Public Finance and Policy's study Aspects of the Black Economy suggests taxable incomes may actually amount to 21%. This suggests potential for improving non-corporate income tax collections through better tax administration. The Government has already taken some important steps in this direction, including a combination of amnesties and widely-publicized punishments of tax evaders. A determined effort also has been made to reduce income tax arrears. In combination with lower rates, improved administration has significantly increased the number of tax payers and the incomes they are reporting. It also has improved the equity of the tax system.

2.45 There is a strong case for continuing the measures to make the enforcement of tax administration strong and effective. The Government needs to speed up computerization of the Income Tax Department and strengthen its management information system, enabling it to raise considerably larger resources at lower costs. When working out details of the proposed scheme of auditing a small sample of tax returns, the Government should review the experience of other developing countries, for example Colombia, where major tax reforms also took place. A notable aspect of most of the sampling schemes currently in operation is that the sample size is not uniform across all taxpayer categories but is smaller for low income taxpayers and taxpayers claiming deductions within a reasonable band, and higher for high income taxpayers and tax payers with a past record of audited returns. This stratified sampling technique will be particularly important if the Government attempts to lower the minimum tax rate and broaden the tax base at the bottom of the scale.

2. Public Enterprises Surpluses

2.46 Public Sector Enterprises (PSEs) invested the equivalent of 9% of GDP in 1985/86. In an aggregate sense this was partially financed by internal generation of funds. The public sector enterprise surplus amounted to about 4.4% of GDP in 1985/86.² The gap of 4.6% was made up by budgetary transfers and borrowings.

2.47 PSEs earned a larger total gross profit (profits after depreciation but before interest and tax) of Rs 53 billion in 1985/86, up by 14.9% compared to 1984/85. However, the rate of gross profit on capital employed, 12.3%, remains low and it declined marginally from the 12.7% rate achieved in 1984/85. Moreover, this overall rate of return is heavily influenced by the oil sector. The gross return in the non-oil sector was only 7.6%. A number of enterprises also are making losses. The Economic Survey for 1986/87 reports that the loss-making units among the Central Government's enterprises recorded losses after depreciation of Rs 16.6 billion in 1985/86, up from Rs 11.1 billion in 1984/85, and those making cash losses suffering a deterioration in cash losses from Rs 7.8 billion to Rs 10.9 billion in the same period.

2.48 The Seventh Plan and recent government policy have emphasized the need for the PSEs to earn greater surpluses in order to cover a larger fraction of their investment and to increase public sector saving. To some extent this has been done. The public enterprise surplus which averaged only 2.9% of GDP in the three years 1979/80-80/81 rose to 4.4% in 1985/86 and the gap between investment and internally generated funds fell from 6.1% of GDP to 4.6%. Nevertheless, considerable room remains to further improve the performance of public enterprises.

2.49 Table 2.5 provides a broad idea of the main sources of surplus and indicates an approach to the problem. It categorizes the Government's major enterprises into three groups. The first consists of enterprises which generate large internal resources and do not depend much on Government-supported borrowings and budgetary support to finance their Plan outlays. Prominent in this group is the oil sector, which has emerged as a major contributor to public sector funds in India. In part this reflects the Government's policy of gradually raising domestic oil prices, coupled with the decline in world oil prices over the last few years, especially in 1986. Much of this surplus can be considered equivalent to a tax on imported oil. To more accurately reflect this interpretation, the 1987/88 budget has changed the treatment of the Oil Coordination Committee's contribution to the Government from an interest-bearing capital transfer to a current revenue. In addition to this surplus, which has been transferred to the Government, the sector generates substantial internal funds from depreciation allowances and profits; together with some borrowings these finance its investment. The other companies in Group 1 generate enough internal resources to finance almost all of their investment.

² In an economic sense, the real saving is somewhat less, as depreciation allowances do not cover replacement costs.

Table 2.5
INDIA: Plan Outlay and Resource Mobilization
by Major Public Enterprises, 1986/87
 (Rs billion and % of total Plan outlay)

	Plan Outlay	Financing		Budget Support
		Internal	Borrowing	
<u>GROUP 1</u>				
Oil Sector	28.7	23.2	4.3	1.2
Indian Airlines	1.2	1.2	0	0
BHEL	0.7	0.7	0	0
Nhava Sheva Port	<u>1.3</u>	<u>1.0</u>	<u>0</u>	<u>0.3</u>
	31.8	26.1	4.3	1.5
	(19.1)	(48.6)	(12.4)	(1.9)
<u>GROUP 2</u>				
Railways	26.8	11.8	2.5	12.4
NTPC	17.2	1.9	6.5	8.9
Telecommunication	8.0	3.0	2.1	2.9
SAIL	5.4	2.3	2.8	0.4
Neyveli Lignite	<u>3.0</u>	<u>1.0</u>	<u>0.5</u>	<u>1.5</u>
	60.3	19.9	14.3	26.1
	(36.3)	(37.1)	(41.2)	(33.5)
<u>GROUP 3</u>				
Coal India	9.7	0	0	9.6
National Aluminium	4.4	0	0.4	4.1
NHPC	3.7	0	2.3	1.4
Shipping Corp.	2.4	0	2.4	0
Bharat Aluminium	<u>2.2</u>	<u>0</u>	<u>0.3</u>	<u>1.9</u>
	22.4	0	5.4	17.0
	(13.5)	(0.0)	(15.6)	(21.8)
Total Groups 1, 2 & 3	114.5	46.0	24.0	44.6
Percent of Plan Totals	(68.9)	(85.7)	(69.2)	(57.3)
Memo Item:				
<u>Plan Totals</u>	<u>166.3</u>	<u>53.7</u>	<u>34.7</u>	<u>77.9</u>

Note: Percentages shown in parentheses.

Figures may not add up due to rounding-off.

Source: Government of India, Expenditure Budget 1987/88, Vol. I.

2.50 The enterprises in the second group generate much less internal resources by way of depreciation and/or retained profits than those in the first group. They account for over one-third of the total Plan investments in the Central enterprises in 1986/87. A strategy needs to be worked out to make their performance more like those in the first group, through improvements in efficiency rather than simply raising prices. The enterprises in the third group do not generate any internal resources. This suggests that their financial performance is so poor that they are not even able to provide for depreciation on their assets. Firms of this type represent a major resource problem for the Government since all of their investment must be financed by current budget support, or by borrowings that would represent future budget support unless performance is improved dramatically. Moreover, some firms of this type are making cash losses, which require budget support for current operations as well as investment. The objective is to move such firms into Group 2. Moreover, the table illustrates that the overall resource mobilization problems are concentrated in relatively few enterprises. The ten enterprises listed in Groups 2 and 3 account for 55.3% of budget support for investment. Concentrating on improving their resource mobilization performance would reduce the needs for budgetary support sharply.

2.51 The Government of India has recognized the difficulties in improving public enterprises' performance. As a first step it has initiated an open debate on what needs to be done. As part of this debate, the Government has issued a document entitled Administered Price Policy - A Discussion Paper (August 1986). In the meantime, the Government has (a) decided to write off the accumulated losses of some public enterprises (e.g. Jessop and Company Limited and Bharat Pumps and Compressors Limited), (b) decided to reduce/eliminate overmanning in selected public enterprises (e.g. National Textile Corporation), and (c) announced the preparation of a White Paper regarding the role of the public sector enterprises and the Government. These steps are all highly commendable and are consistent with recommendations made by a series of high level committees on public enterprises reform including those chaired by L.K. Jha, M. Fazal and A. Sengupta. In addition the following steps could be taken:

- a) extension of the idea of Memorandum of Understanding, used in SAIL, NTPC and the Railways, to cover additional enterprises;³
- b) institution of a special management cadre that will provide personnel who understand the needs of public sector enterprises and provide continuity of service;
- c) relaxation and redrafting of approval procedures so that timely implementation of projects is possible, and time and cost overruns can be avoided; and
- d) initiation of capital restructuring in loss-making enterprises.

³ A memorandum of understanding between the Government and a public enterprise typically contains the performance targets for the enterprise during a specified period and identifies the obligation of the Government to provide the necessary support by increased delegation of powers and quick clearance of proposals.

3. Cost Recovery

2.52 Agriculturally-Oriented Projects: A striking feature of many agricultural projects is their under-recovery of costs, with the result that they run serious losses. Losses on commercial irrigation projects alone amounted to Rs 7.8 billion (0.3% of GDP) according to 1986/87 budget estimates. State Electricity Boards also are doing poorly financially, with their losses amounting to Rs 15.8 billion (0.6% of GDP) in 1986/87. The losses are largely due to substantial concessions in power tariff for agricultural consumers. Generally speaking, the tendency to introduce distributional considerations into agricultural activities involving government expenditures has become pervasive, with the result that it is difficult to identify which groups are being subsidized. Increases in water charges, canal lining charges, credit recovery and interest rates, and electrical tariffs for agriculture would not only raise public revenues, but would also promote greater efficiency in resource use.

2.53 Education: Public spending on education currently amounts to Rs 85 billion (3.1% of GDP), with most of it (90%) incurred by State and Union Territory Governments. A good part of this spending (48% in the State of Tamil Nadu, for example) is on higher and secondary education. Again taking Tamil Nadu as an example, the per student subsidy in pre-university and higher states of education is 22.5 times that in primary education, and in secondary education, 2.5 times higher (Madras Institute of Development Studies). Bank estimates suggest that the returns to investment are roughly 13-15% in higher education against 24% from investment in primary education. Moreover, the high public subsidization of secondary and higher education boosts the demand for it, which primarily benefits the more affluent classes. A strategy needs to be worked out for (a) gradually recovering more of the public cost of secondary and higher education, (b) developing a credit market for the provision of widely available student loans, together with selective scholarships to talented students from poor families, and (c) reallocating at least part of the fiscal resources thus raised to activities (e.g. operation and maintenance of existing assets, rural drinking water supply program, primary education and health, and agricultural research and extension services) where the social returns are relatively high.

E. FINANCING THE DEFICIT

2.54 The public sector relies on four main sources to finance its deficit (investment-savings gap): the external sector and, within the economy, the RBI, domestic commercial banks, and households and corporations directly. Table 2.6 provides a breakdown of these sources for the recent years and the average for the three years 1979/80-81/82.

Table 2.6
INDIA: Financing the Public Sector Deficit
 (Deficit on National Accounts Basis, percent of GDPmp)

	<u>Average</u>			
	79/80-81/82	84/85	85/86 /a	86/87
Public Sector Deficit (Investment-Savings Gap)	<u>6.9</u>	<u>9.1</u>	<u>8.6</u>	NA
Financed by:				
External Resources	<u>1.2</u>	<u>1.4</u>	<u>1.4</u>	NA
Internal Resources	<u>5.7</u>	<u>7.7</u>	<u>7.1</u>	NA
RBI Credit to Gov.	2.9	3.5	1.8	3.5 ^b
Comm. Bank Credit to Gov.	1.0	1.0	1.5	0.8 ^b
Residual (Bank Credit to Public Enterprises and Household and Priv. Corporate Purchases of Public Sector Debt)	<u>1.8</u>	<u>3.2</u>	<u>3.8</u>	NA

^a Quick estimates.

^b Estimated (based on February 1987 data).

Source: Appendix Table 5.1(b) and Economic Survey 1986/87.

The main conclusions to be drawn from the Table are:

-almost all of the increased deficit has been financed internally, a conclusion that appears to hold for 1986/87 as well, based on budget data for the Central Government;

-non-bank instruments (and bank lending to PSEs) have provided most of the financing for the rise in the deficit.

-the Government's demand for bank credit is up compared to the beginning of the 1980s and, except for 1985/86, greater reliance has been placed on RBI lending.

2.55 Has the rising public sector deficit "crowded-out" private credit? Not by 1985/86. Although the deficit rose sharply between the turn of the decade and 1985/86, the demand for financial assets was stimulated by: (a) the development of new, high yielding financial investments, such as convertible debentures, and the liberalization of capital markets; (b) the tapping of small saving by the Government; and (c) rising real rates on deposits, that kept M3 growing faster than GDP. As a result, private savings increased as a percentage of GDP and a rising percentage went into financial assets. This made it possible to finance the rising deficit without greatly curtailing resources available to the private sector. Private investment remained high as a percentage of GDP (see Table 1.2). Bank credit to the commercial sector remained constant as a percentage of GDP, although it must be recalled that this includes bank loans to PSE and thus overstates the availability of funds to the private sector.

Table 2.7
INDIA: Indicators of Saving in Some Major Financial Assets
 (% of GDP)

	<u>Average</u>			
	<u>79/80-81/82</u>	84/85	85/86	86/87
Change in M3 ^a	6.0	7.6	6.7	7.4
New Capital Market Issues	0.2	0.6	1.1	NA
<u>Change in Gov. Small Savings</u>	<u>0.9</u>	<u>1.7</u>	<u>2.0</u>	<u>1.9</u>

^a Includes Public Sector Deposits.

Sources: Appendix Tables 5.3, 6.1 and Controller of Capital Issues.

2.56 In 1986/87, however, some signs of crowding out appeared in the face of a continued large gap between budgetary outlays and revenues and the corresponding requirements for public sector finance. Although bank deposits continued to increase faster than GDP, the Government has relied increasingly on RBI credit for finance. An increasing share of net bank credit also has gone to the Government. Net bank credit to the Government grew over 20%, while bank credit to private and public enterprises rose by only 13%. In addition, private firms have found new equity issues a high cost source of funds because of low price earnings ratio. To raise funds they were forced to offer increasingly attractive terms on convertible debentures, in order to compete with the increased bond offerings of public enterprises. Public enterprise bond issues have risen dramatically, reaching Rs 13.6 billion (0.5% of GDP) in 1986/87, up from Rs 3.2 billion in 1985/86 (0.1% of GDP). For 1987/88 the Government has announced plans to increase public sector bond issues to Rs 15 billion.

2.57 Making public enterprises fend for themselves by raising resources through direct market borrowing is certainly a move in the right direction, provided they respond to the higher cost of capital by improving efficiency. There is however one questionable aspect of this development: The interest income from public enterprise bonds qualifies for generous tax benefits whereas that from bonds issued by private enterprises does not, thereby making the former more attractive. This will divert capital resources from private sector to public enterprises, while at the same time creating an implicit loss of tax revenue. In fact, the implicit returns are so good--equivalent to about 24% before taxes if the maximum wealth and income taxes are taken into account--that they may divert private sector firms' retained earnings from reinvestment.

Chapter 3

INDIA'S INDUSTRIAL REGULATORY POLICIES

A. INTRODUCTION

3.01 Industry has played a central role in India's development effort since Independence. Agriculture has always been important, given its contributions to employment, output and basic food security, but industry has enjoyed a special position as the sector that would lead India into the modern world, reduce its economic dependence on other countries, and generate the higher incomes needed to eliminate poverty.

3.02 Fundamental Goals: These aspirations for industry are firmly rooted in the nation's most basic goals--economic growth, self-reliance and social justice. During the early 1950s, a framework of trade and regulatory policies was established by the Indian Government for the industrial sector with these goals in mind. The policies emphasized four main themes that continue today: (a) the promotion of heavy industry with an emphasis on the public sector, reflecting the belief that the State should play a major role in India's economic development; (b) a quest for economic self-reliance, which translated into broad efforts at import substitution and restrictions on imports of foreign technology to promote indigenous innovation; (c) subsidies to and protection of the small-scale sector, including reserving the production of many goods for small firms; and (d) balanced regional development.

3.03 Policy Framework: The system of trade and industrial regulations has undergone significant changes in recent years. The system originated with the import controls introduced during the Second World War. These controls subsequently became a permanent instrument of centrally planned industrial development for achieving self-reliance, a term then taken to mean producing domestically as many of the country's needs as possible. The underlying assumption was that the nation faced a more or less permanent foreign exchange shortage that was not amenable to acceptable policy changes, and that restricting imports would save foreign exchange and stimulate domestic output and innovation. With import competition closed off, it was considered necessary to regulate domestic industry in the then small and protected market, to avoid obvious risks such as monopolistic behavior by large firms. In the belief that domestic markets were poorly developed and could not be relied on to operate efficiently, resources were allocated according to detailed regulations, often involving complicated and discretionary administrative procedures. The Government also used regulations to allocate resources to subsectors whose output was intended to replace the most costly and visible imports, largely capital and consumer goods. Later, detailed regulations, especially licensing, were used to control capacity, with the aim of avoiding excess investment in protected fields and dispersing industry throughout the country. Until very recently, these licenses restricted firms to narrowly specified lines of production.

3.04 Results: India's trade and industrial regulatory policies have had a pervasive role in shaping the development of the sector since Independence. They have produced a diverse industrial structure and

reduced imports. However, overall capital intensity of the sector has risen sharply, technology is often outmoded, production is commonly fragmented into plants below minimum economic scale, and many of the goods produced do not match world market standards for price and quality. The system of protection tended to establish import controls and tariffs on a "cost plus" basis, at whatever level would make foreign goods more expensive than the roughly comparable domestic ones, often with little regard for costs, quality, or economies of scale and specialization. Protection from foreign competition was not, however, the only reason why firms were slow to reduce costs and improve production methods, design, and quality. The industrial regulatory system reduced domestic competition and limited the ability of firms to improve their performance. Firms had limited flexibility in choosing plant size, altering product lines, reducing the workforce, selecting a location, and making many other choices that are taken for granted in other countries. In addition, inadequate infrastructure, particularly power and telecommunications, has limited the growth of manufacturing.

3.05 The problems of the manufacturing sector have been compounded by its having become major source of government revenue, through a combination of excise and other indirect taxes on its output and tariffs on its imported inputs. Consequently, many efficient producers have high selling prices, compared to world prices, due to the high prices they pay for their principal intermediate and raw materials. These high input costs have slowed the growth of labor-intensive downstream industries by raising their domestic prices and inhibiting the development of exports. For example, the high cost of domestic steel made it very difficult for domestic producers of metal products to export until the recent implementation of compensatory measures. Another consequence of the "made to measure" approach to protection in this labor abundant and capital scarce country is that many capital-intensive industries have developed. Moreover, many of these industries are also indirectly capital-intensive through their heavy use of electricity. The net outcome thus has been to preempt national savings that could have been more efficiently used elsewhere.

3.06 Over the long term, the growth of the manufacturing sector and its generation of employment have been below the hopes of policy makers. The share of industry in GDP has been roughly constant and the manufacturing sector remains small by international standards: measured by value added it is only about half the size of Brazil's, two thirds the size of Australia's, about equal to Korea's and Argentina's and only twenty to thirty percent larger than the manufacturing sectors of Sweden and Belgium. Even so, domestic markets are now larger and more varied than in the early 1950s when many of the trade and regulatory policies were set up, and there are many entrepreneurs who are well able to respond to appropriate production incentives and to the removal of constraints on competition. Indian firms are capable of designing, adapting and managing more advanced technology, and of responding to growing and shifting domestic demand patterns. In these circumstances, the continuation of the cumbersome, intricate, and rigid system of trade and industrial regulations would act as a constraint on firm behavior, sheltering them

from competition, and limiting their ability to produce more, better or different goods and to respond to competition by reducing costs.

3.07 Recent Developments: In recent years, the Government has recognized these problems and made a number of important changes in the domestic regulatory environment, permitting increased competition and enabling firms to alter their operations with more flexibility. Among the changes were: (a) delicensing of various product groups, including 25 industries and 82 pharmaceutical products in 1985; (b) easing of licensing requirements for additional capacity, and reendorsement of licensed capacity; (c) "broad banding" of production in certain industries, i.e. allowing licensed capacity to be used for production of similar products; (d) higher minimum asset sizes before firms are subject to the Monopolies and Restrictive Trade Practices Act, and before firms become ineligible for small scale benefits; (e) expansion of the list of industries open to entry or expansion by large or dominant firms; (f) partial rationalization of the list of products reserved for small scale industry; (g) gradual rather than abrupt phase-out of tax concessions for small scale firms; (h) encouragement of capacity growth based on minimum economic scale (MES) licenses; (i) relaxation of controls over foreign collaborations; and (j) a more efficient tax system, including the introduction of a Modified Value Added Tax (MODVAT). In addition, the administration of controls has been streamlined and greater emphasis has been placed on competition and efficiency in granting licenses. In the external trade policy area, restrictions have been eased on capital goods imports to encourage technological modernization, and the importance of export growth has been recognized, both as a means of generating foreign exchange for essential imports and as a way to limit the need for external borrowing. Existing export promotion schemes have been improved administratively and new measures announced to encourage exports from certain subsectors.

3.08 These measures have, however, a number of limitations. There are exceptions to their application: large or foreign firms often do not fully benefit, and small-scale and public sector reservations persist. Some of the reforms also have the potential for creating new distortions. For example, the recent steps to take MES into account in granting capacity licenses may reduce competition if no new licenses in a subsector are granted until existing firms reach MES. Finally, the process of policy change often involves lags and uncertainty between announcement and implementation. This deters investors and allows for the introduction of case-by-case exceptions during the intervening public debate.

3.09 Industrial performance has nonetheless improved in recent years, partly in response to these changes in the policy framework. India's industrial sector now seems to have progressed to the point where the further loosening of regulatory constraints and the infusion of competitive incentives are essential if industry is to be a driving force for economic growth. This chapter examines the domestic regulatory policies in light of their effect on entry, growth, adaptation and exit of firms (Section B), analyzes the impact of the industrial policies on industrial structure, firm behavior, and the sector's overall performance (Section C) and then suggests an approach to relieving the domestic regulatory constraints and increasing competitiveness, including the sequencing and timing of the changes (Section D).

3.10 India's external trade policies are closely related to the nation's domestic regulatory policies. Chapter 4 explains the ways in which the potential foreign competition to India's producers--both import competition and export rivalry--is altered by trade policies and suggests an approach to reform of trade policy. Finally, Chapter 5 looks at the coordination, sequencing and costs and benefits of possible approaches to policy reform, and the role of external capital flows in the reform process.

B. DOMESTIC REGULATORY POLICIES

1. Entry and Growth

3.11 Nine main types of policies have affected the entry and growth of firms: capacity licensing, foreign investment control, technology licensing, control of large or dominant firms, small-scale industry policies, location policies, public enterprise preferences, administered prices, and taxation. Policies and procedures in the areas of labor, takeovers or mergers, bankruptcy and winding-up are considered later in this section, in the context of adaptation and exit.

3.12 Capacity Licensing: The protection of domestic industry from foreign competition created the risk of excessive entry into industrial subsectors and of pervasive underutilization of capacity. This risk, together with the belief that the State should play a decisive role in the nation's pattern of development, led the Government to introduce licensing for entry and production levels, by firm and product. Through capacity licensing, the Government attempted to match capacity growth with demand and national priorities and to control the allocation of capacity among firms and locations. Under the Industries (Development and Regulation) Act of 1951 (IDRA), prior approval by the licensing authorities was required to (a) establish a new manufacturing unit, (b) expand output by more than 5% a year or 25% over five years, (c) manufacture a new product in an existing plant, or (d) relocate a plant.

3.13 In recent years, a number of exemptions and relaxations of the licensing requirements have been introduced to promote growth and competition generally and to stimulate selected product groups and subsectors. Firms with fixed assets below Rs 50 million (about US\$4 million) do not need a capacity license provided they are located at least 30 miles outside urban areas and their annual foreign exchange outflow does not exceed Rs 7.5 million (about US\$600,000). More flexibility for increasing capacity has been permitted under provisions for "automatic growth", "unlimited growth", "regularization of capacity", "re-endorsement of capacity", "modernization", and attaining "minimum economic scale" of production. Various product groups have been completely delicensed, and provisions for expansion have been eased for others. However, in spite of these relaxations, the system of capacity licensing continues to act as a significant barrier to entry and growth. Even where relaxations of capacity licensing have been allowed, restrictions often apply on location, access to foreign exchange, additional investment and export obligations.

3.14 The licensing system has discouraged potential investors, dampened the overall growth of industrial investment, and inhibited the

ability of firms to take advantage of economies of scale, technological progress and product specialization. Over 1981-1985, only 43% of license applications were approved, and some of these were applications made to pre-empt entry or expansion by competitors. Such licenses are usually not converted into installed capacity very quickly. As the most common reason for rejecting a license application was the existence of "adequate capacity" and as it is often assumed that all sanctioned capacity is fully utilized when license applications are processed, the presence of such unutilized licenses has tended to maintain a seller's market. In some cases, such as the cement industry, past efforts to balance supply with demand by licensing led to alternating periods of scarcity and excess capacity, because market demand was not well anticipated by licensing authorities. In the early 1980s, partial price decontrol and a substantial increase in licensed capacity for cement production improved the sector's performance markedly.

3.15 Time consuming procedures in processing license applications also have deterred entry and growth. Between 1982 and 1985, fewer than half of the applications for capacity licenses were decided within the stipulated three months of submission, and a third required more than six months. There is evidence, however, that time lags were reduced during this period, and further reduced since then.

3.16 Restrictions on expansion and on producing new articles appear to have been greater than those on entry. Thus licensing also has functioned as a barrier to growth, limiting specialization and the exploitation of scale economies. Realizing the bias towards "newness", firms tended to apply for licenses to build a new plant and produce a new product rather than expand and specialize, resulting in excessive diversification and industrial fragmentation. Again the recent administration of licenses has tended to correct this problem.

3.17 Foreign Investment Control: Official policy encouraged foreign investment and technology, to supplement domestic savings in the late 1950s, and to bridge technological gaps in the economy in the 1960s. A policy shift began in the mid-sixties as the country opted for highly selective purchase of technology and minority foreign participation in equity. The Foreign Investment Board was set up in 1968 to scrutinize and approve foreign collaborations. Lists indicated the banned and favored sectors for technical collaboration. Royalty rates and fees were prescribed for outright purchase of technology, and separate policies pursued the "Indianization" of management and the dilution of foreign equity shareholding. The enactment of the Foreign Exchange Regulation Act (FERA) 1973 tightened equity shareholding policy, bringing down foreign equity to a maximum of 40%, except that a higher controlling interest was allowed in export oriented and high tech companies.

3.18 The argument for reduced foreign shareholding under FERA was to limit the foreign exchange drain in the form of repatriation of dividends. However, new foreign investment declined and the erstwhile subsidiaries with minority equity status received a reduced flow of technology from parent companies and had to enter into collaborations for relatively minor technology transfers. Thus there was not much improvement in the balance of payments: royalty and technical fees increased, dividend levels remained relatively constant, and new investment fell.

3.19 In the early eighties, policy shifted again. Direct foreign investment was encouraged from OPEC countries and non-resident Indians on a freely repatriable basis in order to supplement domestic savings. At the same time, foreign investment policy was liberalized, and there was a spurt in approvals of technical and financial collaborations, which increased from 389 in 1981 to 1,024 in 1985.

3.20 Technology Licensing: Technological obsolescence, reflected in low total factor productivity, high costs and inferior quality, is acknowledged as a major deterrent to competitiveness of India's manufacturing industry. Upgrading technology has therefore emerged as a major issue. The white paper on Technology Policy (January 1984) reiterates the importance of technology and the need to support domestic technology development, as well as to import up-to-date foreign technology and assimilate it at the shop floor level.

3.21 The poor state of technology development is evident in almost all sectors of manufacturing, but more so in some of the traditional industries such as textiles, sugar, and paper which are characterized by high energy intensity and a marked decline in TFP. In the steel sector, the public sector plants employ technology that is at least three decades old, and the Indian Iron and Steel Company (IISCO) plant uses a duplex Bessemer process from the last century. Despite major progress over the past decade, nearly 35% of India's cement capacity is still in wet process plants--a technology that is both expensive and energy intensive.

3.22 Domestic policies also have adversely affected technological progress. Licensing has fragmented capacity, which discouraged investment in more modern larger scale technology. The delays in granting licenses for collaborations and capital goods imports have also been a problem. Until recently, restrictive licensing of new articles discouraged innovative R&D. To some degree, slow technological change also can be explained by the perception of policy makers that new technology and the scrapping of certain product lines or plants could have adverse employment effects. For example, Indian Telephone Industry (ITI) Ltd still manufactures Strowger crossbar switching equipment that became outdated over 10 years ago with the developments of electronic switching system technology. The cost of protecting the employment of some 18,000 persons in the ITI plant (plus workers in ancillary suppliers), in terms of inadequate phone services for the nation, is certainly very high.

3.23 Foreign investment and collaboration policies, which have encouraged minority participation and outright purchase of technology --often at unrealistically low rates of royalty and technical fees-- reduced the volume and quality of technology inflow. Technology vendors have generally sought a controlling equity stake or must be given sufficiently attractive payment terms to part with the latest knowhow.

3.24 Although the limited influx of high technology partially reflects export restrictions in industrialized countries, India's trade policy and efforts to conserve foreign exchange have also contributed to technology

deficiencies. The ban on consumer goods imports eliminated the pressure of foreign competition to modernize and upgrade quality, while the protection of the domestic capital goods sector has had negative effects on the technology of investment goods. At the same time, the high profitability of the sheltered domestic market and the limitations on the policy actions designed to correct the inherent anti-export bias have contributed to industry's lack of exposure to the changing world technological standards. Other negative aspects of trade policy relate to restrictions on the use of foreign exchange for modernization purposes and to the problem of absorption of heterogeneous technology within a plant, a problem associated with capital goods import under diverse lines of credit from foreign sources including bilateral aid programs.

3.25 Control of Large or Dominant Firms: The Monopolies and Restrictive Trade Practices Act (MRTP) provides an additional vehicle for controlling large firms. The Act has three major objectives: (a) to curb the concentration of economic power used "to the common detriment"; (b) to prevent practices that restrict competition; and (c) to control unfair trade practices. Under the Act, so called MRTP firms are prohibited from entering or expanding in all areas except: (a) those industries listed in Appendix I of IDRA, where an MRTP clearance from the Government is usually required in addition to the capacity license described above (paras 3.12 and 3.13); and (b) those industries listed in Section 22A (Industries of Highest National Priority) which do not require MRTP clearance but do require a capacity license. MRTP firms were originally defined as enterprises or interconnected firms¹ that had assets of Rs 200 million or more or a dominant market share (33% or more). The definition of dominance was tightened in 1984 (to 25%). In 1985 the MRTP asset limit was raised to Rs 1 billion, but 1,100 firms still come under the purview of the Act. Even within the economic sphere permitted to MRTP companies (Appendix I of IDRA), the MRTP clearance procedure has been more restrictive than the procedure for companies in general. Between 1982 and 1984 the approval rate of industrial license applications involving MRTP clearances (25%) was roughly half that of companies in general (40-50%), and the processing time was usually longer. Less than half of all applications by MRTP companies were decided within one year and many took two or more years.

3.26 Large firms thus faced additional barriers to entering new lines or expanding. In addition, the MRTP limitations on entry and expansion of large firms prevented them from increasing competition in markets characterized by high concentration and excess profits. Thus, the restrictions on large firms under the MRTP Act paradoxically protected firms dominant in their markets when the Act was implemented.

3.27 Restrictions on MRTP (and FERA) firms were considerably reduced after 1980 by the enlargement of the Appendix I list of industries, the creation of Section 22A, the increase in the minimum asset size of companies subject to MRTP to Rs 1 billion, and the recent delicensing of

¹ Interconnected firms are those under joint management or controlling at least 25% of the management of another.

Table 3.1
INDIA: Number of Cases under MRTP

	1981	1982	1983	1984	1985	1986
<u>Substantial Expansion</u>						
Total Under Consideration	215	204	197	234	190	99
Approved during year	73	71	42	79	89	30
Rejected during year	31	26	45	28	27	11
<u>New Undertakings</u>						
Total Under Consideration	295	304	281	342	456	399
Approved during year	70	89	48	52	195	129
Rejected during year	44	57	57	50	75	84

Source: Derived from Annual Reports of the Department of Company Affairs.

some industries for MRTP clearance. Moreover, there has been an increase in the approval rate, to about 40%, and a speedup in decision making. Nonetheless, the Act continues to restrain competition because of the narrow interpretation of dominance and the broad interpretation of interconnection.

3.28 Small-Scale Industry: The principal objectives of small-scale industry policy are to encourage employment on the presumption that small-scale firms are more labor intensive than larger firms and to encourage entry of new entrepreneurs into the industrial sector. Assistance to the small scale industry has come in many forms: (a) reservation of products for exclusive production in the small sector; (b) restrictions on the growth of output and capacity in the large sector producing SSI reservation items; (c) concessional credit from the banking system and facilities for purchase of machinery; (d) preferential excise and sales tax rates and exemption from corporate tax; (e) exemption from many labor regulations; (f) exemption from licensing; (g) infrastructure support through industrial estates, training institutions, and District Industrial Centres to provide managerial and technical guidance; (h) preferential access to raw materials (domestic and imported); and (i) purchase support through government procurement and price preference for SSI products. Small scale industry for product reservation purposes is defined as firms with investment in machinery and equipment not exceeding Rs 3.5 million (US\$272,000), or Rs 4.5 million (US\$350,000) in the case of an ancillary firm.

3.29 In 1977/78, the number of products reserved for exclusive production by small-scale firms was increased dramatically, from 66 to over 800. Other products were added later and in recent years some products have been dereserved, so the list currently numbers 863 items. The implicit assumption of the past reservation policy seems to have been that whatever can be made by small-scale firms should be produced only by them. Larger firms manufacturing an item at the time it was reserved for small-scale industry have not been permitted to expand in that line; new firms have not been allowed to produce reserved products if their assets exceed the specified limits unless they export at least 75% of their output. Thus, small firms have enjoyed protection from competition from medium-sized and large firms in the manufacture of reserved products. At the same time, small firms cannot grow beyond a certain size if they wish to continue production of a reserved product.

3.30 Although many reserved products are critical intermediates for the production of final goods, large buyers cannot use the threat of producing these intermediates themselves to induce small-scale suppliers to upgrade product quality to meet their specifications. Moreover, in some areas reserved for small-scale firms, particularly in engineering goods, the asset limit prevents small manufacturers from installing modern, high quality equipment and machinery, and the low levels of turnover do not allow the accumulation of sufficient resources to support the research and development expenditure needed to improve product quality and reduce cost. The result is, in many cases, poor product quality, lack of standardization and quality control, and technological obsolescence.

3.31 In the past, the tax benefits enjoyed by small-scale firms also were a limit to expansion. Prior to 1985, all excise tax concessions were cut off abruptly when turnover exceeded Rs 2.5 million per year, which led many dynamic small scale firms to split up to keep their excise tax exemptions. In the 1985 budget, the zero excise tax level was raised to Rs 7.5 million, with tax rates rising with turnover in the range Rs 7.5 million to Rs 15 million. This approach was continued under the MODVAT scheme introduced in 1986. An SSI unit would cease to enjoy tax concessions only when output exceeded Rs 15 million. This phased system of concessions has reduced the problems of SSI tax policy.

3.32 Small firms also enjoy greater flexibility in labor relations. Labor legislation makes it difficult for medium and large-scale industrial concerns to cease operations, discontinue product lines, liquidate, and shed labor. Many small firms, however, have been exempt from such regulations, since they can lay off workers or close operations without government approval, provided they have no outstanding credit from the financial system. Further, firms with 20 or fewer employees and no power machinery (or with power machinery and 10 or fewer employees) do not have to register under the Factories Act and are effectively exempt from both minimum wage and employee benefit payments. The combination of lower labor costs and tax concessions have contributed to the phenomena of a rapidly growing small-scale sector and a "sick" medium and large sector in the paper and textile industries.

3.33 Small scale firms have a number of inherent advantages over large firms which need to be maintained and strengthened. However, policies often have created inducements for firms to stay small rather than to grow, modernize and specialize, even when production was not subject to reservation. For products in which scale economies are important, the policy of reservation has limited the scales of production to suboptimal levels. By preventing or inhibiting growth beyond the asset and turnover limits and by eliminating potential competition from medium-size and large firms, small-scale enterprise policies have lessened the pressure for small firms to improve technology, update production techniques, introduce modern product designs and reduce costs. Limitations on linkages with large firms have also impeded technological upgrading. Although data indicate small scale firms played a major role in the growth of employment and value added, the success of India's small scale industry promotion policy in terms of its key objectives--the expansion of employment and entrepreneurship--is hard to measure, for there is no way of knowing what would have happened had a different set of policies been pursued. This issue is examined further in Section C below.

3.34 Industrial Location Policies: The geographic dispersal of industry to provide regional balance in growth and employment has long been a policy goal of Government. The policy instruments used to accomplish this have varied over time. During the 1950s and 1960s, the focus was on locating public sector undertakings in less developed states, providing economic infrastructure, and ensuring uniform prices for basic inputs like steel and cement nationwide. Public sector investment still plays such a role to a certain extent.

3.35 In the 1970s, policy shifted from development of backward states to development of backward regions, irrespective of states. Additional financial incentives (capital subsidy, interest rate concessions, transport subsidy and tax concessions) were introduced to attract industries to such regions. Two hundred forty six districts or areas were classified as backward, covering more than 70% of the nation's area and about 60% of the population. In the 1980s, fiscal incentives were supplemented by licensing policies to direct MRTP companies, large houses and companies with substantial foreign ownership to locate in backward areas. Increasing attention was given to diverting industries from existing urban centers because of concerns about urban congestion and pollution.

3.36 The Central Government incentives for backward districts include (a) concessional long-term investment loans from the term lending institutions, (b) subsidies for fixed capital investment, (c) subsidies on transport costs to units in hilly and inaccessible states and districts, and (d) income tax concessions. The 1987/88 Budget further encouraged industrial relocation by exempting profits on the sale of urban business from capital gains tax, provided these profits are reinvested in approved areas. In addition, there are state-level incentives including sales tax exemptions, concessional finance, and priority access to infrastructural facilities.

3.37 The accelerated industrial development in poorer states such as Karnataka, Tamil Nadu, and Gujarat in the 1960s, and in Rajasthan, Andhra Pradesh, Uttar Pradesh, Madhya Pradesh, Haryana and Punjab during the 1970s indicates some success in geographically dispersing industrial development. However, to some extent this dispersion simply reflects the natural response of industry to the spread of infrastructure, and the consequent lowering of costs of production in backward areas, rather than the impact of location policy.

3.38 There also are some inconsistencies in location policies. An important issue is Central, State, and Municipal regulations that are designed to preserve existing jobs and employment levels. They impose constraints on relocation despite the fact that dispersion would reduce urban congestion. Such regulations have prevented some large units in Bombay and Delhi, for example, from shifting to less developed areas. In particular, State and Municipal controls on closing plants are often the main barrier to industrial decentralization.

3.39 Public Sector Enterprise Preferences: Planned public sector dominance of key infrastructure and basic industries--public sector control of the "commanding heights" of the economy--has been an integral part of India's development strategy. Certain sectors (e.g. railways, telecommunications, air transport) and selected industries (e.g.,

defense) were reserved for the public sector. Public sector enterprises were given preference for licenses in other industries including steel, capital goods and oil refineries. Total investment in the Central Government public sector enterprises (PSEs) rose from Rs 9.53 billion in 48 units in 1960/61 to Rs 503 billion in 225 undertakings as of 1 April 1986. The share of public sector in total manufacturing GDP went up from 7% in 1960/61 to 31% in 1983/84. Its share in gross investment in industry was 41.8% in the Sixth Plan and is expected to be 40.6% in the Seventh Plan.

3.40 In addition to reservation and preferences in licensing, public sector enterprises enjoy low financial costs due to equity capital contributions from the Government and the privilege of issuing tax exempt bonds. They also enjoy purchase and price preferences when competing for government procurement. Given the unwillingness of Government to close sick public sector units, public units ultimately have access to budgetary funds, which reduces pressures to minimise costs and to charge appropriate prices for their products. However, public enterprises also have been burdened to a greater degree than private industry with social objectives, including employment generation and the development of backward areas, and with a lack of managerial autonomy.

3.41 The net impact of the special PSE preferences and the additional burdens which have been placed on them varies from unit to unit. However, the overall financial performance of public enterprises has been poor. In a comparison of the rates of capacity utilization and profitability ratios in selected industries where both public and private firms operate, the performance of private sector units generally has been better than that of public sector units. In 1983/84, 95% of the Rs 21.2 billion of public enterprise profits came from the oil sector, indicating an exceptionally poor performance from the non-oil public enterprise units. The Seventh Plan has emphasized that improved PSE performance was vital for meeting financing targets of the Seventh Plan, which means that major efforts are needed to upgrade their financial (and physical) performance.

3.42 Administered Prices: Prices of 65 individual or groups of commodities (including steel, fertilizer, paper, sugar, cement, drugs and petroleum products) are currently administered by Government. The main objectives of administered price policy have been to provide concessional prices to favored groups such as government, public sector units and the poor; to provide subsidies through the pricing mechanism to encourage production of items such as fertilizer; and to control inflation by limiting price increases that might have arisen as result of shortages of items such as steel.

3.43 Prices of controlled products are set by the concerned Ministry, based on recommendations of the Bureau of Industrial Costs and Prices (BICP) and various industry-specific committees (e.g. the Fertilizer Industry Coordination Committee for fertilizer and the Joint Plant Committee for steel). Prices are usually set on a cost-plus basis, taking into account theoretical technical norms and input-output coefficients, and have sought to provide a 'reasonable' return on capital at acceptable rates of capacity utilization. However, the application of these principles varies from industry to industry and has resulted variously in: (a) a uniform price for all plants for a given product (e.g., steel);

(b) different prices for different plants for the same product depending on age of plant, etc. (e.g., fertilizer), and even (c) different prices for the same product from a given plant (e.g., levy and non-levy cement).

3.44 In the case of urea fertilizer, the ex-factory price is fixed on a plant-specific basis. To encourage investment, ensure continued production by high-cost units and prevent low-cost firms from making "excess" profits, prices were set to provide each plant with an after-tax rate of return of 12% on net worth at 80% capacity utilization, subject to certain productivity norms. As a result, retention prices for urea fertilizer currently range from Rs 1,704 to Rs 4,738 per material ton and are not linked to world prices.

3.45 In various sectors firms are required to sell a certain fraction of their output to the Government at controlled prices. For example, 20-25% of the output of large paper firms must be white printing paper that is sold to educational institutions at Rs 6,400/ton. Sugar mills have had to supply 50% (65% earlier) of their output to the GOI at levy prices for distribution in "Fair Price" shops. Cement plants are subject to varying rates of compulsory sales at levy prices, ranging up to 50% (formerly 60%) of output with an average for the industry of about 40%. Levy prices have varied from 15-50% below the domestic free market price in these sectors.

3.46 As might be expected, price controls have adversely affected industrial sector efficiency and growth. Shortages have emerged from time to time in consumer goods industries like paper and hydrogenated vegetable oil (vanaspati) which were subject to price controls. There were substantial shortages in the supply of cement until rapid investment followed the partial decontrol of prices in 1982. Suppressed increases in steel price during the late 1960s and 1970s reduced internal resource generation, contributing to the lack of modernization and the sector's present low efficiency and technological backwardness. The steel industry currently could barely cover variable costs if it had to compete against duty-free imports. Price controls also have created a bias towards plants of uneconomically small scale in several sectors. The recent expansion of capacity in the paper industry, for example, has been predominantly confined to small units of less than minimum efficient size that are not subject to price controls.

3.47 By ensuring a given return on the historical cost of investment, the plant-specific Fertilizer Retention Price Scheme has removed the market pressure for minimizing the cost of new plants. To ensure high apparent levels of capacity utilization, some plants are reportedly being engineered for 1500 tons per day but only rated at 1350 tons per day. The Government has argued that older inefficient fertilizer plants and newly built ones need higher prices than those which have largely written down their capital but are still efficient. However, lower prices for efficient producers may provide inadequate resources for plant maintenance and replacement and hence may contribute to falling efficiency.

3.48 Concerned about the impact of administered prices on inflation, public sector enterprise resources and industrial growth, the Government issued a paper on Administered Price Policy in August 1986. The paper recommends abolishing plant-specific, cost-plus "retention pricing", and

supports better cost recovery for public enterprises. However, it seems to place undue faith in the ability of administrators to calculate long-run marginal cost, gives too little attention to the role of demand in determining prices, and gives inadequate weight to the role that international prices might play in establishing domestic prices.

3.49 Taxation: The level and incidence of direct and indirect taxation has had a detrimental effect on entrepreneurial behavior and incentives, and thereby the efficiency of industrialization. In the past, high marginal direct tax rates encouraged tax evasion and discouraged risky and innovative manufacturing efforts by entrepreneurs. In conjunction with incomplete enforcement, the tax rates encouraged trading activities and investment in sterile assets (such as real estate and gold) in preference to manufacturing. The lower direct tax rates that were suggested in the Long Term Fiscal Policy and introduced in the 1985/86 Budget lessened these problems substantially.

3.50 The excise tax situation improved substantially with the introduction and recent expansion of the modified value added tax (MODVAT). Nonetheless, high indirect levies (especially excise and sales taxes) have contributed to India's "high cost" economy, and hamper exports. However, the GOI has been reluctant to find other revenue sources. Efforts to compensate exporters for the costs of these taxes have been handicapped by difficulties in accurately identifying them (they vary widely and, until the introduction of MODVAT, were cascading). The excise tax on steel, for example, affects the competitiveness of all engineering users. The cascading nature of these taxes also encouraged vertical integration and discouraged product specialization and efforts to reach economies of scale. The non-uniformity of indirect taxes still distorts profitability and thus investment choices between various products. For example, the GOI has used excise tax concessions to give incentives to certain classes of producers of a given product (e.g., small-scale producers of cement, steel and air conditioners). Finally, state sales taxes and octroi have fragmented production by acting as a barrier to trade between states and increasing transport costs.

3.51 During the last two years, the Government has taken several initiatives to lower and rationalize the tax structure. Among other things income tax rates have been reduced, the compulsory deposit scheme abolished, a uniform 30% tax imposed on royalties and technical fees paid to foreign companies, and the surtax on excess profits is to be discontinued on 1987/88 earnings. And as noted above, the Government extended MODVAT to virtually all categories in the 1987/88 Budget.

2. Adaptation and Exit

3.52 Industrial Sickness: The incentive framework and government regulations have reduced the Indian firms' adaptability to changing markets. One manifestation of this is that, as of December 1985, there were about 120,000 "sick" industrial units according to the RBI, which defines a sick unit as one that incurred losses in the previous year, is expected to incur losses in the current and following years, has a debt equity ratio of less than 1:1 (i.e. has eroded its net worth) and has

existed for at least seven years. The number of sick units increased by 50% between 1983 and 1985. Total outstanding bank credit to these units amounted to Rs 38 billion, roughly 17% of all outstanding bank credit to industry and about 1.6% of GDP. The widespread incidence of industrial sickness is due primarily to the lack of incentive or opportunity for timely response to difficulties and adaptation to market forces.

3.53 In contrast with India, the policy environment in many industrializing countries (e.g., Brazil, Korea) encourages firms to "cut losses", and adjust to mistakes in a timely fashion by changing or diversifying their products or their methods and, in the extreme, closing down, selling off assets and allowing investors to allocate resources to more productive uses.

3.54 Without greater flexibility to adapt and, in extreme cases, to exit, the impact of a relaxation of entry and growth constraints would be limited and fraught with the danger of leading to an even larger group of financially non-viable production units. Policy-induced barriers to adaptation and exit are also deterrents to entry, to the extent that they convert investment outlays that would otherwise be recoverable into sunk costs. This reduces the expected rate of return on investment and thereby lowers investment activity. Finally, by increasing the number of "sick units," these barriers to adaptation impose an increasing burden on financial institutions and thereby inhibit the efficient use of the nation's capital resources.

3.55 Impediments to Adaptation: The process of adaptation to market pressures has been impeded by the regulatory framework. Exit is restricted by industrial and financial regulations that seek to conserve assets and protect existing employment in an environment characterized by capital scarcity and high levels of unemployment. Firms have not been free to respond to financial difficulties in a timely fashion. Moreover, existing provisions favoring sick industries have lessened the financial incentives for adaptation. At the same time, some regulation is necessary to ensure that workers' contractual benefits and pensions are paid.

3.56 The most binding restrictions on actual closure or exit pertain to the retrenchment of labor. Under the 1984 amendment of the Industrial Disputes Act, any unit with more than 100 employees must obtain government permission to dismiss workers or cease operations. "Financial difficulty" is explicitly excluded as a legitimate basis for applications to dismiss workers. Permission to retrench labor is rarely granted, and entrepreneurs have been faced with either continuing operating loss-making units, breaking the law by closing down, or negotiating an agreement for voluntary separation with compensation. Since these regulations affect primarily larger firms, where wage rates tend to be well in excess of those in the unorganized sector, the net effect is to protect relatively privileged workers and to encourage greater capital intensity in the organized sector.

3.57 The Industrial Disputes Act also has made entrepreneurs more conservative in their employment and investment decisions, and has reduced worker incentives. The law cannot be circumvented by hiring temporary contract employees rather than permanent workers since union consent is required for temporary contract employment. Moreover, temporary employment is only legal if the work is judged to be temporary (under the

Contract Labor Regulation and Abolition Act of 1970). Faced with such restrictions, employers have tended to choose more capital-intensive production techniques and to avoid investing in products that have irregular or unpredictable demand patterns. While the concern for employment preservation in an economy with so much underemployment is understandable, the long-term effect of highly restrictive job security legislation is to reduce labor absorption in the organized sector.

3.58 Adaptation to changing conditions by transferring assets, selling land, arranging mergers or takeovers is very time consuming and closely controlled by government regulation. Section 372 of the Companies Act, for example, requires Central Government approval before a company can agree to more than a prescribed percentage (generally 10%) of its shares being purchased by any other single firm or individual. Only the simplest of voluntary takeovers can be completed in less than six months. Other takeovers or mergers are supervised by the High Court(s) in the state(s) concerned and generally take more than three years. Large land sales in major cities are subject to local government approval and are seldom authorized, especially in Bombay and Delhi.

3.59 Although current provisions for the transfer of assets are limiting in all cases, they are most binding in combination with other regulations, particularly the MRTTP Act and small-scale reservations. Generally speaking, the Central Government's Company Law Board is unlikely to approve an amalgamation or merger which involves, or would result in, an MRTTP company. Similarly, the SSI reservation theoretically precludes units producing these items being merged with, or being taken over by, larger scale firms.

3.60 Bankruptcy and winding up provisions are protracted. Following receipt of a petition for winding up, the High Court generally takes several years to pass an order to wind up a company. The actual process of winding up and final dissolution normally takes at least another three years. Only 254 private companies officially closed in 1983/84, about 0.3% of the total number of sick units, and their average paid-up capital was only Rs 0.25 million. Thus not only is closure rare, but it is basically only achieved by small firms.

3.61 The lack of pressure on financial institutions and commercial banks to maintain healthy loan portfolios with timely repayments has become another impediment to timely adjustment. There is no obligatory downgrading of loans for which servicing is not current. Moreover, Government implicitly encourages banks to provide extended credit to firms whose solvency is at risk.

3.62 Concessions granted as part of rehabilitation packages, for example on credit and preferential access to inputs and power, have lessened incentives for independent timely adjustment to difficulties and thereby aggravated the problem. Finally, the traditional practice of nationalizing large sick industrial units to prevent their closure also has constituted an impediment to early adjustment. The latter problem was lessened recently as the current Central Government's policy is not to take over sick industrial units.

3.63 There are three important initiatives to ease impediments to adjustment for sick industries: tax concessions to help mergers, the

Industrial Reconstruction Bank of India (IRBI), and, very recently, the Sick Industrial Companies (Special Provision) Bill (1986). In 1977, tax concessions were made to allow anyone taking over a sick unit to carry forward and set off accumulated losses and unabsorbed depreciation against their own tax liabilities. The success of this provision has continued to be limited by the cumbersome and time consuming procedures for obtaining approval. To circumvent this approval process, some companies have arranged reverse mergers, i.e., a merger where the sick unit takes over the healthy unit.

3.64 The Industrial Reconstruction Bank of India (IRBI) was setup in 1984 to be the principal credit and reconstruction agency for the revival of sick units.² It was given wide powers to take over the management of sick units, lease them, expedite amalgamation, sell them and prepare reconstruction schemes. The IRBI has helped restructure some 90 units involving loans totalling about US\$80 million in 1985/86, but it is too early to assess its longer term success.

3.65 The Sick Industrial Companies (Special Provisions) Bill (1986) created a special Board for Financial Industrial Restructuring, with powers to override a number of the existing regulations that impede the quick restructuring, sale and foreclosure of units once they are declared sick. As the Board was only appointed in January 1987, it is too early to assess the success of this initiative. The Bill also contains a new initiative in the area of early warning, which requires the management of units that have experienced a 50% loss in net worth to bring it to the attention of shareholders, thereby providing shareholders with an opportunity to take appropriate remedial action.

3.66 The problem with existing initiatives is that they do not address the basic problem of providing flexibility and incentives for firms to respond when the initial difficulties are encountered. Government policies have largely focused on "rehabilitation" of firms in financial difficulty, in an effort to maintain existing employment and avoid the "wastage" of capital, without sufficient regard to the opportunity cost of resources allocated to the rehabilitation effort and the dynamic impact of efficient resource mobility on employment creation. Only after a unit has been declared sick have provisions been made to overcome some of the policy-induced impediments to adaptation. The normal early responses used in other countries are frequently delayed by multiple regulations. Incentives remain for poorly performing firms to "go sick." Changes to relax these basic problems would be necessary if India's industrial structure is to become more flexible and respond more quickly both to problems and opportunities.

C. IMPACT OF INDUSTRY POLICY

3.67 This section provides evidence of the impact of trade and regulatory policies on (a) industrial structure, (b) firm behavior and (c) industrial performance.

² The IRBI was based on the earlier Industrial Reconstruction Corporation of India, that also had dealt with sick units.

1. Industrial Structure

3.68 Past policies on industrial structure have affected (a) the structure of production, (b) the size distribution of firms, (c) the scale of production, (d) market concentration ratios, (e) overall product diversity and degree of import substitution, (f) product specialization at the firm level, and (g) the geographic dispersion of industry.

3.69 Structure of Production: The goals of heavy industrialization and import substitution appear to have been achieved. Basic and capital goods production have risen relative to intermediate and non-durable consumer goods. Fertilizer imports were replaced by feedstock imports, POL products by crude petroleum, etc. Evidence of the backward integration of industry in India is also seen in the rising imports of intermediate products after the sixties. However, this was achieved at some cost in terms of growing capital-intensity and slow growth of employment, as discussed below in Section 3.

3.70 The input-based classification of the Index of Industrial Production prepared by the Reserve Bank of India shows that the share of agro-based industries has been reduced markedly--from 47% in 1960 to 34% in 1970 and 25% in 1984 (Table 3.2). In part, this was due to the growth in chemical and metal based industries, and in part to the increasing use of synthetic substitutes--as in textiles and rubber. However, specific industries such as sugar, tea, edible oils, flour processing and cotton textiles remain vulnerable to cyclical fluctuations in agricultural output, linked to the performance of the agricultural sector.

3.71 Size Distribution of Firms: The regulatory policies created differential barriers to entry, growth and exit for different sizes of firms. These barriers were higher for medium and large firms and substantially lower for small ones. There has also been a bias against

Table 3.2
INDIA: Changing Structure of Production
(percent)

	1960	1970	1980	1984
<u>Use-Based</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Basic Industries	26.8	32.3	35.3	40.4
Capital Goods	12.9	15.7	17.6	16.6
Intermediate Goods	24.3	20.9	19.6	17.8
Consumer Goods	36.0	31.0	28.0	25.6
<u>Input-Based</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Agro Based	47.3	33.7	28.0	24.5
Metal Based	17.1	21.9	23.6	22.2
Chemical Based	9.6	12.9	15.3	16.3
Multiple Input				
Sources	26.0	31.5	33.1	37.0

Source: Derived from RBI classification of the Index of Industrial Production. Note: in the Input-Based section, the predominant input is used for classification purposes.

the graduation of firms from the small scale sector, a bias created by excise tax concessions, concessional credit, freedom from certain licensing controls and more freedom with respect to dismissal of workers and wage policy that SSI units enjoy. This bias has tended to reduce the passage of firms into the middle size range, which may help to explain the relatively smaller and somewhat declining share of output and value added coming from firms in the 50-500 worker category (Table 3.3). A further factor limiting the development of middle-size firms is the inadequate system of sub-contracting and other linkages between large and small scale firms, linkages which in countries like Japan have been a powerful factor contributing to the development of small firms.

3.72 In 1982/83, firms employing less than 50 or over 500 workers accounted for 70.2% of total manufacturing output and 76.1% of value added (Table 3.3). The shares of larger firms in output and value added rose from 55.1 to 57.5% and 67.5 to 68.4%, respectively, with the share of largest firms increasing the most. In fact, in comparison with several industrializing and industrialized nations, India has relatively large establishments. The share of producers in the smallest category and those employing between 50 to 500 workers declined somewhat. The declining share of small scale firms in output or value added also shows up when ASI firm level data are grouped by size of capital stock, although such comparisons are complicated by difficulties in defining a comparable real firm size in terms of capital.

Table 3.3
INDIA: Manufacturing Output and Value Added by Firm Size

Firm Size (Number of Workers)	Output		Value Added	
	1975/76	1982/83	1975/76	1982/83
0-49	14.1%	12.7%	8.2%	7.7%
50-99	7.3	7.1	5.0	4.9
100-199	8.2	7.7	6.8	6.3
200-499	15.3	15.0	12.5	12.7
500-999	13.7	13.0	15.4	14.0
1,000-1,999	16.6	15.5	18.5	14.7
2,000-4,999	13.4	12.7	16.7	14.8
5,000 and above	11.4	16.3	16.9	24.9

Source: Annual Survey of Industries, 1975/76 and 1982/83.

3.73 Despite the considerable preferences given to small scale industry in India, firms with 5-33 workers account in India for a smaller share of firms than in many other countries (see Table 3.4). However, among the countries shown in Table 3.4, India is second only to Japan if "small" is extended to include firms with up to 75 workers (Japan has also made a major effort to develop small scale industry).

Table 3.4

INDIA: Size Distribution of Industrial Enterprises
(in percent)

Firm Size (workers)	UK (1979)	US (1977)	Japan (1972)	S.Korea (1981)	India (1977)	China (1982)
5-33	65.5	56.4	80.2	70.7	51.7	59.2
33-75	15.8	20.3	10.7	14.4	35.3	19.5
75-189	10.8	12.4	6.1	9.2	7.8	12.2
189-243	1.5	3.8	0.8	1.5	0.8	8.5
243+	6.9	7.1	2.1	4.3	4.4	0.6

Source: World Bank Staff estimates.

3.74 At the subsectoral level, many industries in India have a mix of both very large and numerous small firms, often with relatively few intermediate-size firms. In textiles, for example, spinning is dominated by large pure spinning units and composite (integrated) mills. Weaving, on the other hand, takes place in both the large composite mills and in highly decentralized small units; there is a virtual absence of medium-size firms.

3.75 Cross-country and Indian experience indicates that medium-size firms often enjoy better labor relations and higher labor productivity than large firms, higher overall total factor productivity, and respond more effectively to changing technological and market requirements. Thus, measures that reduce artificial incentives for vertical integration and that encourage large firms to "buy out" parts, components, and services would stimulate the development of medium and small units, resulting in faster technological progress and a more efficient overall pattern of industrial growth. A major part of the increased efficiency would result from increased specialization. The automotive industry, for example, is characterized by substantial economies of scale. However, today in India component manufacture takes place predominantly in both very small firms and large MRTP/FERA houses. The result is an excessive degree of plant fragmentation, an insufficient extent of both horizontal and vertical interfirm division of labor, and the loss of economies of scale and of specialization. Better ancillary relationships integrating the activities of large and smaller firms would help overcome these problems.

3.76 Production Scale: Another important effect of India's regulatory policies has been to constrain plant size; even large firms are often made up of many small productive units. Production costs are thus higher than could be achieved with plants of minimum efficient scale (MES). Licensing constraints on plant size for firms of all sizes, the encouragement of small-scale entry in industries with significant scale economies, and the

limited size of a domestic market protected by high trade barriers, have led to the proliferation of plants with less than economic scales of production. In addition, public sector enterprises were often encouraged to expand output by building additional (although not necessarily economic) plants in "backward" areas. Although MES criteria have now become an important consideration in the licensing process and the largest plants in many industries, including cement, nitrogenous fertilizers and steel, are now being built to conform with minimum efficient scales, the average plant size of existing Indian companies is small relative to international standards in such major sectors as steel, automobiles, chemicals, aluminum and paper.

3.77 The uneconomic fragmentation of capacity is well illustrated by the nylon filament yarn industry. Three plants were established in 1962 at a time when total demand was much less than the capacity of a single MES plant; two more were established in 1969, and three more in 1972-74. By 1974, 8 small plants owned by 8 separate companies were competing in a market that was barely large enough to accommodate a single MES plant. In 1985 there were 11 firms with 11 plants having capacities ranging between 500 and 5,000 t.p.a. and supplying a total demand of about 34,000 t.p.a. The average plant size of 3,100 t.p.a. was only one quarter of the average capacity of nylon plants in Taiwan (12,700 t.p.a.) and one-tenth of the average plant size in Korea (33,800 t.p.a.). In 1986 the Government announced a minimum scale of new nylon plants of 12,000 t.p.a.; this would imply three rather than eleven plants to supply the current domestic market.

3.78 Another example of suboptimally scaled plants, which are nevertheless profitable in India because of high protection, is provided by the plants producing intermediate chemicals for synthetic fibers and yarns. Most of such plants in Korea and Taiwan were installed at about the same time as the Indian plants, but they are several times larger. The Indian plants are one-half to one-fifth of estimated MES. In November/ December 1985 the Indian firms were selling at ex-factory prices estimated at 70-220% in excess of world prices, and the nominal protection available from tariffs was generally higher still.

3.79 The Indian mini-steel plants, which account for almost one third of India's total steel production, are characterized by high protection, which allows inefficient production from plants of suboptimal scale. Such plants enjoy protection which is higher than for SAIL, IISO and TISCO, and very high in absolute terms. Because their prices are uncontrolled, they are not subject to the various levies imposed on the output of the integrated steel producers, and they pay a lower rate of excise duty. The MES scale for an electric arc furnace is probably on the order of 50 to 100 tons charge capacity per day, but only one Indian mini steel firm has a furnace approaching this size. About 135 to 140 other mini-steel producers have much smaller furnaces, mostly of about 5-15 t.p.d. capacity. Suboptimal scale is a major factor in their high processing costs, although other factors contribute, notably old technologies which are extremely inefficient in their use of electricity, combined with shortages and unreliable supply of power.

3.80 Market Concentration: Although many Indian plants are small by world standards, production is concentrated in only a few firms in many industries. This is true despite considerable efforts through provisions of MRTP to control large and dominant firms and probably reflects the small size of the domestic market. For example, in most machinery-producing sub-sectors such as those producing machinery for pulp and paper, earthmoving, packaging, printing and cement, the top four firms accounted for 70% or more of output in 1983/84. The concentration ratios have been similarly high in intermediates, such as basic metals (aluminum, saleable steel, pig iron, etc.), synthetic fibers (acrylic fiber, high and low density polyethylene, etc.) and paper products (newsprint and cardboard). Concentration ratios are typically lower in final goods and fabricated items (such as steel ingots, steel pipes and tubes, plywood products, processed fruits, cotton and blended fabrics, and paper), with four-firm concentration ratios generally not exceeding 30%.

3.81 These differences in concentration ratios are probably attributable to the variance of scale requirements for different products relative to their domestic market. However, to some extent they also reflect regulatory policies that attempt to assign production of certain goods to different size classes of firms. Licensing policies have permitted the establishment of relatively few firms for the production of basic and intermediate goods (although many of the plants are still small relative to international efficiency standards). Production of more processed or fabricated products has often been reserved in whole or in part for small scale firms.

3.82 Concentration in India is also high relative to other countries. For instance, it is striking that 55% of industrial segments in India had four-firm concentration ratios in the 80-100% range, while in Japan only 9% of segments had reached this degree of concentration. In addition, whereas 17% of Indian industry segments exhibited relatively low levels of concentration (between 0 and 39%), in Japan the majority (over 58%) were in this category. The relatively low degree of concentration in Japan is a reflection of the size and growth rates of the Japanese domestic market and the significant share of exports in total output in many industries. These characteristics have been instrumental in supporting the existence of very large and small firms without leading to excessive concentration or fragmented capacity.

3.83 It is important to stress that the problem is not necessarily of a few firms dominating a significant proportion of individual markets. In view of the relatively small size of the domestic market, the predominance of few producers might be quite justified on scale considerations. The issue is not so much the degree of concentration, but the extent of protection from competition that most firms enjoy. Improved industrial performance necessarily involves the removal of regulatory barriers to growth and competition, in order to stimulate firm mobility and expansion, in both relatively concentrated and atomized markets. It also involves using international competition to control the behavior of firms in industries where economies of scale imply a limited number of domestic producers.

3.84 Product Diversity: India produces a wide range of products and is self-sufficient in many areas, a reflection of its self reliance-import substitution strategy. India has become self-sufficient in many engineering and chemical products and has reduced its imports of fertilizer and crude petroleum. Other areas of import substitution have been iron and steel, and paper and paper board. Efficient import substitution in some areas helped the country to diversify exports of non-traditional manufactured goods. Engineering exports, for example, now account for 10-12% of total exports. In the past decade, however, the country has resumed significant imports of many items, on account of rising domestic consumption requirements and supply constraints (ref. Table 3.5) and lost export competitiveness. The high costs of the import substitution strategy, in terms of growth, capital utilization, and employment are discussed below, in Section 3.

Table 3.5
INDIA: Share of Imports to Domestic Availability
(percentage)

	1960/61	1965/66	1970/71	1975/76	1980/81	1984/85
Edible Oils	1.7	2.8	3.8	2.1	43.1	25.5 /a
Fertilizers	na	52.6	27.9	56.5	50.0	44.1
Crude Petroleum	na	na	63.6	61.1	62.9	20.5
POL	na	na	3.9	8.7	22.6	15.0
Iron & Steel	35.7	16.7	13.4	7.6	24.5	22.1
Newsprint	76.0	73.9	83.8	65.6 /b	84.5	55.2 /a
Paper & Board	7.4	4.5	1.4	1.9	na	14.8

Source: Compiled from Government statistics on industrial production and imports.

/a Relates to 1983/84.

/b Relates to 1976/77.

3.85 Product Specialization: The structure of production in many subsectors is characterized by an inappropriate product mix, at the firm as well as the subsector level. Often, too many types of products are produced locally, in view of the small size of the domestic market and the lack of exports, and an excessive proportion of inputs are manufactured within a firm.

3.86 There are several reasons for the insufficient degree of specialization. First, highly protective trade policies designed to encourage self-sufficiency have meant that any item that could be produced in India would achieve reasonable levels of financial profitability. Second, a number of firms manufacture intermediate inputs for in-house consumption to ensure product quality,³ even though buying from external sources would be more economical. Third, cascading excise taxes

³ This is prevented if the product is reserved for SSI.

encouraged in-house production of inputs. Finally, the dominance criterion has often meant it was easier to obtain a license for new product lines than for expansion within the same product category. This has stimulated excessive horizontal diversification in the machine tools, electronics and other subsectors.

3.87 Once a firm has chosen a given line of product specialization, it is often very hard for it to change in response to consumer demand, international competition, changing technologies, etc., and there is often little incentive to do so. For many product categories, product-specific industrial licenses have prevented firms from shifting output mix. In addition, the often stringent allocation of capacity licenses in accordance with domestic demand projections has led to shortages and motivated firms to seek licenses for a broad range of products, both to achieve plant-level economies of scale and as a strategic measure to block the entry of potential competitors. The result in the automotive components sector, for example, has been a lack of horizontal specialization and a production range in most component manufacturing firms that is costly in terms of product-specific scale economies.

3.88 In the textiles and garment industries, organized spinning and weaving firms have been required to produce specified amounts of low quality yarn and fabric. Garment manufacturers have not achieved scales that would allow for mass production of standard export items. In textiles, producers have been unable to shift to synthetic fabrics and yarns because of restrictive licensing policies regarding the production of synthetic fabrics. Since domestic demand has shifted towards synthetics, incumbent cotton textile manufacturers have experienced slow growth. While many textile mills have been unable to maintain profitability because of constraints on product mix, domestic synthetic manufacturers have been able to exploit a protected and profitable oligopolistic market.

3.89 In a number of industries, output and price controls, product-specific industrial licenses and other regulatory policies have led to a product mix that was inconsistent with consumer demand. In cement, for example, levy prices failed to differentiate adequately between ordinary Portland cement relative to high quality, Prime Portland cement. Since the government-mandated price difference between the two types of cement was inadequate to cover differences in production costs, manufacturers increasingly concentrated on the cheaper varieties, even though this was not necessarily consistent with market demand.

3.90 Geographic Dispersion: At the time of Independence, 70% of industrial units and employment were in India's three major port cities-- Bombay, Calcutta and Madras. The Central and State Governments' efforts to reduce the concentration of industrial development, and the extension of infrastructure, have resulted in considerable dispersal of industrial establishments. However, various studies have shown that projects in backwards areas often have higher investment costs, capital output ratios and fixed costs per employee than those in developed zones. Average cost differentials for similar scales of projects range between 10% and 100%, as shown in Table 3.6. There are no estimates of the total subsidies to firms that are offsetting these cost differentials, but partial evidence suggests they are significant. Between 1980/81 and 1985/86, the cost of

the Central Subsidy for capital investment increased from Rs 310 million to Rs 1,100 million. In addition, income tax concessions were made to many of the firms locating in backwards areas.

3.91 Firms are often attracted to locations away from relatively crowded urban areas where union pressures are less. The lower costs often can offset the higher costs associated with providing worker housing and other social amenities. However, larger plants locating in relatively backward areas often find their effective labor costs increased by the reduced flexibility which firms in these areas have to adjust their labor force. Experience has shown that it is far easier to obtain voluntary retrenchment agreements, for example, in urban areas where employment opportunities are relatively abundant than in backward areas where the plant locating may be one of few, if not the only one, offering employment at such attractive wages. The problem becomes worse as the plant size increases relative to other industrial activity in the area. Thus inducing large scale firms into backward areas could create future problems of adaptation.

Table 3.6
INDIA: Difference in Project Costs Between Backward and Non-Backward Areas for Selected Industries

Capacity of Industry	Installed Capacity (000 tons)	Project Cost		Difference in Costs	
		Backward (Rs mls)	Non-Backward (Rs mls)	(Rs mls)	(%)
Rubber	21	96.9	70.0	26.9	38.4
Chemicals	2	109.7	70.0	39.7	56.7
Chemicals	30	226.0	162.5	63.5	39.1
Chemicals	7	117.0	56.7	60.3	106.3
Cement	100	770.0	700.0	70.0	10.0
Engineering	11	61.8	50.0	11.8	23.6

Source: Information collected from Madhya Pradesh Audyogik Vikas Nigam Ltd., M.P. - Prospective Industrial Project Profiles Compilation, 1982, and from Commerce Research Bureau.

2. Firm Behavior

3.92 In addition to the structural impact of regulatory and trade policies discussed above, these policies also have affected firm behavior adversely, particularly with regard to competition and technology.

3.93 Competition: Various regulatory policies have contributed to reduced competition. The combination of licensing restrictions and price controls has decreased the degree of price competition in a number of sectors substantially, including fertilizers and steel. Regulatory policies have induced management to adopt certain forms of anti-competitive and strategic behavior, particularly as regards preemptive capacity and technology licensing. Firms have sought to deter entry and expansion by competitors by blocking applications or applying for licenses they do not intend to use. Firms have also sought to restrain access to

markets by preemptive technology licensing and by appealing to the indigenous angle clearance with arguments that if the technology is already available in India to at least one producer, there is no need to issue further licenses.

3.94 MRTP restrictions have tended to protect some large firms from other large producers who could actually threaten their market position. Small units, on the other hand, although largely free from restrictions, have not generally had the resources to challenge large incumbents. Conversely, reservation and other policies have protected small firms from competition by larger units. Also, both large and small firms have been sheltered from international competition through tariff and non-tariff barriers and by the anti-export bias of the trade regime.

3.95 One indication of the degree of market competition among large firms is the change in their market shares. In many important segments of Indian industry, such as plastic products, two and three wheel vehicles, cables and conductors, and trucks and buses, the average change in an individual firm's market share over 1974-84 was well below 5% annually. Since most of these segments are characterized by high four-firm concentration ratios, these changes are relatively small, denoting the absence of significant competitive activity. Even in cases where the average change in market shares was high, as with autos, this does not necessarily reflect competitive behavior. Excess demand in the auto segment ensured that the two main car producers could sell all their output. Changes in market shares over this period simply reflected changes in the constrained output levels of individual firms.

3.96 There are other indications of weak competitive activity. Although entry by small units has been encouraged to counter the market power of larger firms, this has usually failed to provide effective competition. For example, in the paper subsector, where incentives for entry by small producers have led to a proliferation of plants far below optimal economic scales, the smaller units have been incapable of competing with the larger plants. Lack of captive power sources and chemical recovery facilities, the inability to obtain raw materials reliably, and an insufficiently trained management have led to low levels of capacity utilization, poor profitability and industrial "sickness."

3.97 Although small producers cannot compete effectively with large firms in many subsectors, they are protected from competition from those firms through small-scale reservation and other policies. This is seen in electronics, where reservation of some consumer electronic products for small-scale producers shelters these firms from competition by larger units with superior technological and marketing skills.

3.98 In addition to the overall limits on competition, some producers enjoy more or less captive markets. In some subsectors, the Government is the main or sole buyer, and some symbiotic relationships have developed between producer and procurement agency (as in telecommunications). More often, captivity is a result of various policy-determined barriers to mobility, growth and competition and generates significant economic rents. From the point of view of industrial performance, the issue here is that managers perceive the Indian market as captive and act accordingly. This attitude shows up, for example, in the lack of intensity in technological efforts and in the managers' market conduct.

3.99 Technology: Protection from external market forces--import competition or export rivalry--and from internal competition has fostered conservative technological behavior. The majority of research and development spending in India is conducted by the State and Central Governments (accounting for about 85% of research and development expenditure), and research intensities (defined as the ratio of research and development expenditure to sales revenue) are fairly low in both public and private sector firms.

3.100 Although there are significant exceptions (as in the non-electric machinery industries), conservative technological behavior is fairly widespread. In the steel industry, the public sector plants essentially employ technologies that are three decades old. The telecommunications industry, which is dominated by public sector enterprises, is also behind world standards. ITI is one of the few remaining producers of first and second generation switching equipment, whereas fourth generation digital electronic technology dominates world sales. Hindustan Conductors Ltd. is behind most firms in other countries in converting from paper-insulated, dry-core cables to plastic-insulated, jelly-filled cables. The lag in technological progress is most evident in the electronics industry, where the international technological frontier has shifted rapidly. Many segments of the Indian electronics industry are still in the infant stage. The constraints on foreign technology and equity, in conjunction with the emphasis on self-sufficiency and indigenous technology development have contributed to the fact that India's electronics industry lags behind advances in international technology. Moreover, the detailed phased manufacturing programs which require assembly plants to gradually carryout import substitution within existing technologies will tend to perpetuate the lag--such programs are linked to an existing technology while technology in the rest of the world continues to advance.

3. Industrial Performance

3.101 India's industrial sector, while performing well in some respects, has not been as dynamic as that of other major Asian countries, has not realized its potential, and has not lived up to the hopes and expectations of the country's policymakers. In addition, India's manufactures seem to have lost their competitiveness in export markets (see Chapter 1). Although a variety of factors have been responsible for this performance, to a significant extent it reflects the domestic regulatory policies and their interaction with trade policies. The impact of these policies can be seen in the growth and structural change of industry, its employment generation, and its overall economic efficiency as discussed below. The link between the decline in international competitiveness and the policy environment is discussed in Chapter 4.

3.102 Industrial Growth and Structural Change: Industrial output grew relatively rapidly between 1950 and 1965, then slowed down between 1965 and 1980, particularly between 1965 and 1975. From 1966 to 1980, manufacturing growth rates in India were below the average for developing countries. The growth of manufacturing rose in the first half of the 1980s and increased still further in the last two years.

3.103 It has been observed that in the process of development, countries often go through two stages of structural change. In the first

phase, agriculture's share of GDP falls and manufacturing output rises. In the second, the share of agriculture continues to fall, but that of industrial output in GDP, after reaching the 25-35% plateau also starts to decline as the share of services increases. During the last twenty years, India did experience such a compositional shift of GDP away from agriculture and into industry and services. However, while the share of services rose from 32% in the mid 1960s to 40% in the early 1980s, the share of manufacturing in GDP at factor cost increased only from 14% in the mid 1960s to about 17% in the mid-1980s. Thus the sector still has the potential for rapid growth and increasing its share of GDP, particularly in light of the structural composition of GDP in other developing countries.

Table 3.7
INDIA: Structural Changes in GDP, 1966-83
(% of GDP)

	India	China	Brazil	S. Korea	Developing Countries	World
Agriculture						
1966	47.8	37.5	15.9	34.9	28.6	9.4
1978	38.6	29.8	14.0	20.2	21.4	7.2
1983	35.6	35.3	13.4	13.9	20.8	6.4
Mining						
1966	1.0	4.4	0.8	1.9	4.7	2.5
1978	1.4	5.5	0.7	1.4	6.2	3.5
1983	2.9	6.7	1.2	1.4	7.8	4.6
Manufacturing						
1966	14.3	30.3	27.2	18.6	21.1	27.9
1978	15.9	37.5	27.5	27.8	22.2	25.6
1983	16.7	32.5	27.2	27.4	20.6	23.0
Construction						
1966	5.1	3.2	5.4	3.7	4.5	5.8
1978	5.3	3.7	5.8	7.9	5.9	6.4
1983	5.0	4.6	4.4	8.4	5.7	5.6
Services						
1966	31.7	24.5	50.8	41.0	44.1	54.4
1978	37.7	23.6	52.0	42.7	44.3	57.3
1983	40.0	20.9	53.8	48.9	45.1	60.3

Source: World Bank INDSP data base. Data for India updated to conform with NDO data base.

3.104 Employment: Over the two decades from 1960 to 1980, employment in manufacturing grew at an average annual rate of only 3%, only slightly above the population growth rate. This rate of labor force absorption was much lower than has been achieved in other Asian economies: for example, from 1960 to 1970, the industrial labor forces in Pakistan, South Korea and Thailand grew at average annual rates of 9.0%, 10.8% and 6.0%,

respectively. During the Sixth Plan period (1980/81-1984/85), the average growth rate of employment in Indian manufacturing improved from 3% to 4.4% p.a., largely reflecting the rising growth of output. Employment grew 5.5% p.a. in the modern small scale industry and "unorganized" sector (household establishments and those with fewer than ten workers and power, or fewer than twenty workers and no power). Employment in the organized sector grew at only 2.5% p.a. over this period, despite an increase in the output growth rate of the sector.

3.105 The disappointing growth of employment in manufacturing is in part attributable to the less than satisfactory growth of Indian industry, which in turn partially reflects the policy-induced problems outlined above. In addition, the ratio between employment generation and the growth of output remains less than might be expected. This reflects two elements: the pattern of industrial growth and the labor policy framework.

3.106 Across industries, the past emphasis on growth of the more capital intensive subsectors also implied a correspondingly slower growth of employment per unit of investment. Put another way, if the same investment had been made in more labor-intensive industries, which would have involved more reliance on international trade to meet the growing demands of the economy, employment would have grown faster.

3.107 Within industries, the employment policy framework has been only partially successful. India's industrial employment policy has generally aimed at protecting as well as expanding employment. In the traditional industries, employment protection involved physical controls, such as specifying the use of manually operated equipment like handlooms, and in modern sectors it involved labor regulations and restrictions on exit. Employment expansion involved policies related to small scale industries, backward area development, and entry. However, recent work suggests that these policies contributed to slower growth, higher costs, lower efficiencies and restricted competition, and that they involved unintended adverse employment effects (Little, Mazumdar, and Page). Rigidities in the labor market have caused real wages in the organized sector to rise over the last two decades, both in absolute terms and relative to wages in the unorganized sector. This has encouraged the use of capital-intensive techniques in organized industry. In the unorganized industrial sector, while wage levels are lower, there is a general lack of resources needed to expand and generate jobs. At the same time, the access of some firms in this sector to subsidized long-term credit for capital investment has discouraged their use of labor, reducing the employment generating capacity of the sector (Sandesara). In addition, the job security legislation has preserved existing jobs but discouraged the growth of employment. Employers have reacted to the stringent labor laws by limiting hiring, even when demand conditions favor expansion; hiring casual workers during upswings when possible; varying hours worked rather than number of employees; and favoring capital-intensive production techniques.

3.108 The extra employment generated by reservation and subsidy policies in small-scale industry has not always been economically efficient and has probably involved a loss of output due to the policy-induced choice of techniques. The Government has forced the production of some goods to remain in the small-scale sector, and provided

incentives to small units that act as disincentives to their growing by facing them with a costly loss of tax breaks and other benefits if they do. These policies, however, now seem to be changing, encouraging larger scales of production that can generate unit cost savings and create more employment with the same investment resources.

3.109 The textile sector shows some symptoms of these problems. The policy of reservation for SSI has restricted new capacity in the medium and large scale sectors. The Government's protection of the traditional handloom sector, which began in the early fifties, was achieved via reservation of spheres of production and physical control over the expansion of the mill sector. At the same time, the mill sector was burdened with much higher excise taxes. The outcome was different from that originally intended. Cloth output from cotton mills fell substantially. However, the gains accrued not to the handlooms, but to the powerlooms. In fact, the handloom sector suffered from low labor productivity and high labor costs, which rendered it uncompetitive despite protection. Employment in the powerloom sector no doubt increased, but not without a cost to the economy in terms of stagnation of technology, the inability of the mill sector to take advantage of the worldwide growth of man-made fabrics in the export markets, and the loss of potential output and employment because the mill sector was not allowed to expand and in fact fell sick in many areas. The Textile Policy announced recently may help resolve some of these problems.

3.110 Economic Efficiency: Over the past 40 years Indian manufacturing has achieved major structural shifts and import substitution. However, this was accompanied by rising capital intensity. ICORs in manufacturing moved from 2.8 in the fifties to 4.4 in the sixties, and 6.2 in the seventies (Brahmananda, 1982). Sharp variations in ICORs exist between sub-sectors, with the highest ICORs in industries where (a) import substitution has taken place in the absence of natural comparative advantage, and (b) underutilization of capacity, technological obsolescence, and diminishing returns are evident (Chitale, Goldar). The poor or declining efficiency of manufacturing can be related to insufficient attention to optimal resource allocation. Regional dispersal policies, excess capacity creation, and fragmentation into units of uneconomic size were other factors. Overall efficiency has also been influenced by rising input costs of materials and services from public sector units (e.g. high cost steel), labor behavior and managerial problems.

3.111 The rising capital intensity reflected both the structural shift toward basic and capital goods, which are capital intensive, and the growth of factor productivity. Evidence points to rising labor productivity but to only a small improvement in total factor productivity. The apparent increase in labor productivity thus seems to be largely the outcome of the rising capital intensity, not an overall improvement in the efficiency of factor use. Analysis of productivity trends in the sixties and seventies indicate a total factor productivity (TFP) growth in manufacturing of around 1% p.a between 1965 and 1980 (Ahluwalia, Goldar), although in the 1980s performance seems to have

improved. This long run performance was below the performance of many other developed and developing countries, where growth of TFP typically averaged between 2% and 5% p.a. (Chenery, et. al.). This slow growth of TFP, together with the rising trend in capital intensity, clearly made it hard to sustain industrial growth. The slow growth of TFP also worsened India's competitiveness in the world market and represented an impediment to improved export performance. However, the increased growth rate of value added in manufacturing in the 1980s suggests some improvement in these areas.

3.112 The slow growth of total factor productivity in manufacturing was not simply a reflection of shifts in industrial structure. Within the manufacturing sector, industries accounting for about 50% of value added in manufacturing experienced declines in total factor productivity. Thus there were significant problems within individual subsectors related to regulatory and trade policies. First, technical efficiency was affected by an excessive degree of fragmentation and insufficient specialization. These structural deficiencies precluded firms from realizing available economies of scale and accumulating significant technological capabilities. Second, trade restrictions and regulatory barriers to mobility slowed down structural change within firms and industries, with an adverse impact on allocative efficiency. Third, the quality of management suffered in an environment characterized by protection from competition and captive markets. Weak managerial conduct was revealed by low levels of capacity utilization and a slow technological change. These technical, allocative and other inefficiencies are difficult to disentangle. However, their joint effect may be observed in the low rates of capacity utilization and productivity growth, and in the high cost structures of Indian industry, with the consequent loss of international competitiveness.

3.113 Low capacity utilization may result from many factors, including weak demand, but in the case of Indian manufacturing, several policy-related causes can also be identified. RBI estimates show that the average level of capacity utilization in manufacturing fell from 76% in 1970 to 66% in 1984. The situation was worst in the traditional consumer goods industries such as paper, sugar, cotton cloth and radio receivers, but excess capacity is also notable in some intermediate goods such as automobile tires and cotton yarn. Transport equipment performed well, while capacity utilization in steel, aluminum, ball and roller bearings, storage batteries and dry cells, power transformers and electric motors, among others, has stagnated or declined. The observed underutilization seems in many cases to be related to problems with infrastructural services, managerial inefficiency and the implementation of price controls. Prices in controlled industries, in particular, often were set below levels that ensured adequate profits, and firms responded by curtailing investments, including those for debottlenecking and balancing, a pattern of response that has reduced capacity utilization.

D. AN APPROACH TO INDUSTRIAL REGULATORY POLICY REFORM

3.114 There is increasing recognition in India that the elaborate structure of industrial regulation, built up over nearly 40 years, has not achieved the objectives of growth, equity and self sufficiency to the hoped-for degree. Although a broad industrial structure has emerged, it

was built at considerable cost in terms of static and dynamic efficiency. As these cases have become apparent, a momentum for reform of the industrial regulatory system has developed, especially since 1984.

3.115 Recent policy changes have generally been directed towards promoting growth and efficiency, adopting a more selective approach to public sector investment and progressively replacing physical controls and direct intervention with fiscal and financial instruments. Setting the basis for these changes, the Seventh Plan had, as a central theme, the improvement of productivity and capacity utilization, and the technological upgrading of the economy. To achieve these objectives, the Plan called for a "substantial degree of competition" and a progressive shift toward a "system of [financial] incentives." Technological dynamism, in particular, was viewed as requiring "the stimulus of a competitive environment with both domestic and international pressures on firms to improve technology." Numerous measures have since been taken to allow firms greater freedom to enter new markets, upgrade their technology and expand their output. Positive responses can be observed in the recent higher growth rates of industry, particularly in subsectors where the regulatory changes were introduced a few years ago and firms have had the time to respond (e.g. cement).

3.116 A deepening and broadening of these recent initiatives would further increase competition and industrial flexibility, thereby sustaining and further raising the growth rates of manufacturing. To this end, it is desirable that the Government conceptualize and implement an integrated program of further changes in the regulatory structure and incentives. This section discusses one set of measures, instruments and procedures that could contribute to a more efficient manufacturing sector and thereby help attain the Government's major industrial policy objectives.

3.117 The effectiveness of such regulatory reform will depend on its scope. A policy emphasizing dynamism and flexibility in the operation of industrial firms, thereby increasing technical, allocative and managerial efficiency must involve increased reliance on competitiveness, as emphasized in the Plan. This would ideally include three complementary and mutually reinforcing parts: encouraging internal competition, promoting export rivalry, and exposing domestic industry to import competition. Though the pace and degree to which such competition is introduced may vary, the present size of the barriers to competition are such that substantial and rapid further rationalization of both regulatory and trade policy seems necessary.

3.118 To reduce the possibility of distortions, changes in regulatory policies would need to be coordinated with adjustments in trade policies. The effectiveness of changes in the regulatory and trade regime depend on the extent to which they are mutually consistent. Rapid import liberalization in an environment that constrained the flexibility and rapidity with which producers can allocate and use their resources would reduce economic gains and raise social costs. Regulatory reforms, freeing manufacturers to enter promising areas, expand profitable operations, shift product lines, and exit from shrinking markets, are necessary if producers are to face import competition effectively and export successfully.

3.119 Similarly, domestic regulatory reforms will yield the largest gains if economic and financial incentives are aligned. This will entail changes in the nation's external trade policies. The present import barriers often set up major divergencies between financial and economic incentives. Hence, investments are not always directed to the most economically and socially profitable activities. In this environment, easing of domestic entry barriers might lead to excessive entry, as well as fragmented and inefficient production structures, especially in industries with high protection. Reducing barriers to potential imports also would promote intra-industry specialization and increase contestability of markets. Otherwise, economies of scale and the relatively small Indian market for many products would make it possible for one or a few firms to attain dominant positions in many markets. As discussed in the next two Chapters, the suggested coordination of domestic trade policy reforms would involve bringing domestic and border prices of tradeable goods closer together, through a systematic and progressive move from non-tariff import barriers to a tariff-based trade regime providing more uniform and, eventually, more moderate levels of protection. The steps in this process should be announced well in advance of their application so that firms have sufficient time to make the appropriate adjustments.

3.120 Relaxation of controls on internal competition and encouraging greater resource mobility, firm growth, and more progressive managerial conduct would also be needed to assure positive results from efforts to promote export rivalry. Internal regulatory reform would enhance the effectiveness of export promotion measures by allowing efficient firms to grow rapidly to internationally efficient scales. Further, increased domestic competition would serve to lower the relative profitability of the domestic market, thus diminishing the anti-export bias inherent in the current trade regime.

1. Entry and Growth

3.121 This section outlines some measures that would elicit a strong and sustainable supply response and more competitive behavior from industry, while being consistent with the broader social objectives of Government.

3.122 Industrial Licensing: In the last two years the Government has taken a number of important steps to relax licensing constraints. Although the new measures include some partially offsetting constraints, their general direction is clear and their impact has been positive. The suggestions made in this section are consistent with and extend these initiatives. Their aim is to further improve industrial performance, by increasing domestic competition and by further removing barriers to entry, growth, choice of product mix, and attainment of efficient size.

3.123 It is suggested that, over the medium term, say five to seven years, all forms of Central Government licensing of industrial capacity be phased out. This would include licensing with respect to both entry and growth. In view of the possibility that delicensing in the context of high and diverse rates of protection could lead to excessive entry and fragmentation of capacity, it is suggested that this phasing out be coordinated with parallel reforms in import and exchange rate policy, as discussed in Chapters 4 and 5. Such a program would promote competition

for market shares, encourage capital stretching and investments in modernization (that might require large discrete increases in capacity), allow for and stimulate the establishment of minimum-efficient-scale plants, and facilitate the introduction of different products, inputs and technologies. Decisions concerning investment, technology and production would be made by industrial firms in response to financial incentives and market opportunities. Lending institutions, as financial intermediaries, would appraise investments from the perspective of repayment capacity and loan security. The above analysis indicates that, with appropriate external and domestic policies for the entry, growth, competition, and exit of firms, there is no compelling reason for maintaining capacity licensing as it exists today. Other, more efficient means exist to achieve the efficient allocation and use of scarce capital, the expansion of priority sectors, and the decentralization of industry.

3.124 One way of phasing out industrial licensing would be to progressively raise the investment size limits below which an industrial license would no longer be required. This would involve annual increases in the investment size subject to licensing, so that within the medium term, the limit only would be binding for the very largest investments. At that point the current licensing requirement could be dropped altogether, although very large projects, in which the Government is effectively a partner because of infrastructure requirements or borrowing guarantees, would continue to be scrutinized by the relevant government agencies. This process could begin fairly soon as the last adjustment in the licensing threshold was in 1981. During the transition period, the administration of licensing should continue to act favorably on requests by firms to reach minimum efficient scale. Moreover, the process of delicensing individual industries could be continued in products with low effective protection or facing competitive, well supplied markets, with little risk of inefficient investment.

3.125 Although capacity licensing would no longer be generally required by the Central Government, states and cities would have the right to require firms to obtain a zoning permit before a factory could be set up or expanded in a given location. This would provide control over industries characterized by large health, safety or environmental risks. In addition, the Central Government would retain control over investments in a very small list of industries (for example, weapons, explosives, and nuclear energy), which would require a special "public interest" permit from the Central Government.

3.126 These suggestions are also applicable to technology licensing. To facilitate import of technology in the form of equipment and machinery, most capital goods should be shifted to the Open General License category and subjected to a uniform tariff that provides a reasonable level of protection for domestic producers, which is the trend of current policy. This approach would allow firms a relatively free choice of technology on the basis of specifications and price. Firms also would be allowed to independently contract process or product technology. Direct foreign equity participation in Indian firms could continue to require scrutiny for levels exceeding a specified share, say 40%, but could be delicensed otherwise.

3.127 These proposals represent an extension of the recent policy measures and are fully consistent with the spirit of the Narasimham

Committee report, which suggested moving from physical to financial controls. The package would free the vast majority of investments from the complications, delays and costs associated with the present system, while increasingly subjecting firms to the controls and discipline imposed by market competition, both from other domestic producers and from potential imports. This would help assure that investments in general would not take place in: (a) products where capacity was already excessive, (b) plants that were below minimum economic scale, (c) plants that were excessively capital intensive and thus not competitive in a capital scarce economy, or (d) plants that depended excessively on imported technology and inputs and thus would not be competitive in an environment where foreign exchange had to be obtained at prices reflecting its true economic value. On the other hand, the proposed policy environment would encourage plants that made optimal use of India's abundant labor force, thereby stimulating employment, and of the nation's raw material endowment. Plants would be encouraged by lower cost labor to locate outside major urban areas, an incentive that could be increased by restricted issuance of zoning permits for urban locations and by providing industrial infrastructure facilities in other locations (see paras 3.135 to 3.138).

3.128 Regulation of Large and Dominant Firms: The MRTP Act has not been particularly effective in attaining its main objectives--to curb the concentration of economic power, to prevent restrictive competitive practices and to control unfair trade practices--because of its focus on asset size and market shares. In fact, it has sometimes restricted competition rather than stimulated it. Since March 1985, the Government has taken a number of measures to rationalize the MRTP Act, including raising the asset threshold under which a firm becomes subject to MRTP and increasing the number of industries into which MRTP companies can expand, although this increase is subject to some caveats. In addition, administrative procedures have been speeded up and the MRTP Board has examined a number of cases of uncompetitive behavior. The following suggestions are designed to expand these recent initiatives, correcting some of the distortions that have arisen as a consequence of the MRTP Act and refocussing it on its original goals. They complement and reinforce the proposed changes in licensing policies by allowing firms greater liberty to expand operations, shift product lines and compete more freely and effectively.

3.129 The underlying approach is a shift in focus from attempting to control the structure of markets to regulating and punishing uncompetitive and unfair practices that harm consumers. As long as firm growth and mobility are not restricted and there is effective competition in the market, either actual or potential, then size or concentration alone should not be the object of regulation. In other words, it would not be assumed that a firm with a given size or share of the market will abuse its economic power; rather economic power would be controlled by the threat of competition, domestic and international, and by the threat of prosecution for unfair practices.

3.130 It is thus suggested that MRTP clearance, as a condition for entry or growth, be phased out completely over the medium term, that the MRTP board step up its surveillance of anti-competitive and anti-consumer behavior, and that the code of unfair practices be further developed and its penalties strengthened. The phasing out could be done by substantial

annual increases in the asset threshold which defines the firms requiring MRTTP investment clearance. In this way, size alone would become less of a criterion for restricting growth. For similar reasons, in the interim period (a) the definition of a market for purposes of assessing dominance could be expanded beyond the narrow nomenclature of licenses, that now prevails; and (b) interconnection between firms would be invoked as a criterion for establishing economic power only in cases where the linked firms operate in the same market.

3.131 A complementary, interim measure would be to extend the lists of industries in which MRTTP firms can enter or expand. A further measure along these lines would involve switching from the current list of products where MRTTP firms do not need MRTTP clearances for investment (Section 22A) to a limited list of products that would be the only ones requiring MRTTP clearance. This switch from a "positive" list specifying the allowed areas for investment to a "negative" list of those not allowed without MRTTP clearance would help make transparent the criteria by which products are subjected to the Act and thus reduce discretionary decision-making. Over time, the list of products subject to MRTTP clearance could be progressively reduced, and the focus of regulatory concern be shifted from controlling the structure of the industry, through curbs on entry and expansion, to restricting anti-competitive behavior and unfair trade practices.

3.132 Given that FERA companies now number only about 100, of which fewer than half are in manufacturing, and are concentrated in export and high-technology industries, there seems to be no strong reason for exercising special restrictive controls. They could be subject to the same diminishing need for clearances and to the same enhanced competition as MRTTP companies. The case for easier clearances for non-MRTTP FERA companies is especially strong. Foreign equity holdings of over 40% would continue to need Foreign Investment Board clearance and foreign banks would still remain subject to RBI supervision and control.

3.133 Small-Scale Industry: There are numerous reasons for encouraging the entry of small scale firms and their entrepreneurs. Such firms have strengths that flow from the inherent advantages of being small and they should be allowed to develop on the basis of these strengths. Although small-scale policies have successfully promoted entry of new entrepreneurs, they also have heightened the barriers to and reduced the incentives for growth, specialization and modernization. Small firms producing reserved items have been prevented from growing. In non-reserved products, they are encouraged to remain small to avail themselves of significant benefits, which include lower wages, fewer restrictions on shedding manpower and closing unprofitable operations, lower excise taxes, and easier avoidance of corporate income tax. Credit subsidies have encouraged over-investment by those firms lucky enough to have access to credit.

3.134 Small-scale industry policies should continue to promote entry, but the structure of incentives might be shifted to facilitate more efficient growth of small-scale firms and to promote improvements in their product quality and factor productivity. This would involve: (a) Continuing to encourage entry by temporary subsidies for a given firm, but tapering off the benefits over time, say within a five year period. Of course such incentives carry the risk that firms might close and restart to gain the entry benefits, but that is a cost that would have to be borne

in order to subsidize entrepreneurial development. The gradual phase-in of excise tax liability as firm size increases, as announced in the 1986 Budget, also will help promote growth; firms are now not abruptly subjected to losing their tax exemption once their output reaches a certain level. (b) Progressively reducing and eventually eliminating the list of products reserved for small scale production. The Ministry of Industry has already begun dereservation of some products in which small scale firms are particularly inefficient, and this process should continue. Dereservation could also be done in areas where small scale production is efficient and economies of scale provide no advantage to large firms. (c) Allowing small and large units to integrate their activities more fully, thus stimulating sub-contracting arrangements, the transfer of technology and managerial skills, and furthering specialization and growth (a practice already present defacto that makes a considerable contribution to SSI growth--see Goyal, Rao and Kumar). This might involve the large units taking a minority equity position in the small ones. One of the principal arguments against such integration, that it is mainly a tax avoidance measure by large firms, would be diminished by the proposed reduction in subsidies to small scale firms. (d) Increasing the availability of credit to small firms, but also increasing its cost, thereby reducing the incentives to excessive capital-intensity.

3.135 Industrial Location Policy: The success of efforts to achieve a wider geographic distribution of industrial development and generate employment opportunities in backward areas has been limited by: (a) inadequate infrastructure facilities; (b) investment subsidies resulting in excessively capital-intensive industries in backward areas; (c) the inability of licensing controls used for directing investment to backward areas to select units for which the cost disadvantage is relatively small; and (d) policies that prevent or restrict firms from moving from urban areas. The following suggestions are designed to reduce these problems and foster industrial development outside major metropolitan centers in a more cost effective way.

3.136 As suggested by the Pande Committee, the provision of infrastructure should be focused on a limited number growth centers (say 20-30). This would concentrate the limited resources that are available for providing water supply, transport, power, telecommunications and education and thereby lower the cost disadvantage for industries located in selected backward areas. Any attempt to provide the infrastructure necessary to reduce the cost disadvantage for all 246 currently designated backward areas, covering 70% of the country, would inevitably fail to achieve quick results anywhere.

3.137 Investment subsidies and the use of licensing to direct industries to backward areas could be replaced by direct production subsidies or concessions on excise or sales tax. The removal of investment subsidies would reduce the current bias in favor of capital-intensive production. Moving to a uniform indirect tax or subsidy incentive for industries located in backward areas would result in the voluntary location of those industries for which the disadvantage of being in backward areas was the smallest. Hence the overall pattern of industry would be more efficient than under the current system. Relieving MRTTP firms of the requirement to locate in backward areas in exchange for tax or subsidy incentives would be part of this change. The replacement of licensing with fiscal incentives is also consistent with the suggestions

already advanced to reduce the scope of industrial licensing. As licensing was phased out, it would not be available as an instrument for directing industry to backward areas. Implementation of Government's announced intent to phase out freight equalization would also contribute to a more efficient pattern of industrial location.

3.138 National location policy is also concerned that urban areas should not become overly congested or be the site of environmentally hazardous plants. Measures that do not involve licensing or fiscal costs could contribute to this objective. For example, zoning regulations at the local level could be used to prevent the establishment of certain types of firms or those above a certain size in inappropriate (urban) locations. Charges for the full cost of urban services such as power, water and drainage, and land taxes high enough to reflect the costs of congestion, pollution, etc., also would help to deter over-concentration and Indian municipalities are gradually moving in this direction. The exit of factories from congested urban areas, so that the land can be converted to higher value uses, could be encouraged by the following policy options: (a) allow factories to move if they will set up worker housing and other social amenities at the new site, and (b) reduce capital gains taxes on firms that move outside the urban area. The Central Government's 1987/88 Budget is a major step in this direction; it has proposed exempting all such gains provided they are reinvested in an approved area. However, it must also be recognized that some State and City Governments often do not favor such relocations and may take action to offset the Central Government's policies of industrial dispersion.

3.139 Public Sector Enterprises: An increase in the efficiency of public sector enterprises (PSEs) is needed to increase the efficiency of the industrial sector, to improve competition with imports and within the industrial sector, and to reduce the fiscal burden on the Government. Recent Government committees chaired by L.K. Jha, M. Fazal and A. Sengupta have recognized that, in order to increase their efficiency, PSEs should be given more autonomy and freedom in their decision making and day-to-day management in areas such as pricing, marketing and technology development. The following suggestions would help accomplish this: (a) appoint competent executives at the top level and give them a reasonable term provided performance targets are met; (b) reduce the bureaucratic and political interference in the working of PSEs, perhaps through Memoranda of Understanding as has been done in the cases of NTPC, SAIL, and the Railways; (c) make procedures for approval of PSE investments less subject to minor bureaucratic intervention by increasing limits on the amounts which PSEs can spend on their own, provided the investment projects are already included in an approved 5-year or annual plan; and; (d) increase the incentives, autonomy and accountability of public sector managers (Ghosh, 1987).

3.140 PSEs should progressively be required to compete on a more equal basis with private sector units. In addition to the increased autonomy and accountability for management mentioned above, this would involve the concurrent phased removal of (a) purchasing and price preferences and (b) access to capital and credit on concessional terms (both Plan funds and tax exempt bond issues). Additional social obligations in terms of employment and location currently imposed on public sector units could be limited and PSE would be compensated for assuming them. These measures

could be implemented only in a very carefully phased manner, with appropriate transitional measures to assist affected workers. Steps would also need to be taken to wind up terminally sick public sector units, just as is recommended be done with such units in the private sector.

3.141 Administered Prices: Price and distribution controls, originally designed as a means of allocating goods on a priority basis and minimizing the impact of short-term supply shortfalls, have often had adverse long-term effects, insulating firms from competition or working as a disincentive to modernization. In some cases, prices have been set below the levels that would provide adequate profits, and firms have responded by curtailing investment and neglecting maintenance, thereby exacerbating supply shortages.

3.142 In recognition of the problems brought on by price controls, the Government has examined the question in a White Paper and introduced more liberal pricing policies in a few sectors (e.g., cement), with beneficial results. However, a comprehensive and clearly formulated pricing policy for industry is still absent and prices in many key sectors of the economy continue to be set by the Government. Unless prices can equilibrate demand and supply, and unless there is greater competition (actual or potential), the adverse effects on industrial structure and performance of administered prices will continue.

3.143 In those competitive and well supplied markets where administered prices continue to prevail, full or partial decontrol could be introduced immediately. In less competitive markets, progressive price decontrol would necessarily be accompanied by the removal of regulatory barriers to mobility, expansion and competition, and by a reduction in trade barriers. Otherwise, sheltered incumbent firms could benefit from price decontrol by exercising their monopoly power at the expense of consumers. For these markets, the first step would involve developing a pricing policy that established clearer economic principles to direct government agencies in setting controls. Generally speaking, pricing formulas should be transparent to producers; frequently monitored and reviewed; uniform for specific products at the plant level, regardless of the age of plant and technology; consistent with movements in market demand and supply; and moderately close to border prices.

3.144 Taxation: The Government has taken major steps to lower rates and rationalize the tax structure over the last two years, including the recent extension of MODVAT to virtually all products. These changes should make a major contribution to a more rational pricing structure for industrial products, an essential element in any policy environment based on more effective price competition between domestic producers and foreign goods. Additional steps could be taken based on progress already made. These would include (a) gradually moving towards a more comprehensive system of value added taxes within the economy, (b) harmonizing state sales tax, and (c) phasing out octroi taxes (charges imposed by localities on passing commercial vehicles).

3.145 A clear distinction is also needed between differential taxation to favor investment in selected activities and taxation of luxury consumption. While the latter is understandable, in fact desirable, especially in a country like India with wide disparities in income levels

and an objective of social justice, the former distorts production patterns and encourages tax evasion. Excise tax rates need to be progressively rationalized (their variance reduced) to achieve a more neutral tax structure as MODVAT is extended. This should be co-ordinated with rationalization of import taxes to bring financial and economic profitability closer together.

2. Adaptation and Exit

3.146 The current framework of incentives and regulations provides firms with insufficient flexibility to adjust to problems and insufficient encouragement to wind up operations if they have lost their net worth. Policy has often focussed on preserving employment. The normal responses of firms in other countries--to adjust the labor force, change products, upgrade technology or, in the extreme, close--are unattractive or difficult in India. Existing measures such as tax concessions to help mergers, the IRBI, and the Sick Industrial Companies Bill are largely confined to companies that are classified as "sick" and have lost their entire net worth, an exception being the "early warning" system in the Sick Industries Bill. Moreover, many of the impediments to adjustment arise at the state or city level.

3.147 In the long run, the creation of new employment opportunities (both direct and indirect) through more rapid industrial development will be much more important than the preservation of existing employment in "sick industries." Hence labor and employment policies should be less defensive--facilitating employment creation rather than focussing on employment preservation. At the same time, however, it must be recognized that employment issues face many other countries and there are no easy answers.

3.148 The suggestions made here are designed to increase the speed and extent of adaptation of firms, thus increasing industrial efficiency and reducing the incidence of "sickness." In most cases this can best be achieved by increasing the flexibility and incentives for firms to adapt independently. In the rare circumstances when Government directs the adjustment process, the focus should be on adapting quickly to market forces, not on preserving existing inefficient production arrangements. Furthermore, such interventions would generally be more efficient at the industry or subsector level, as is done in other countries, than at the enterprise level.

3.149 The policy suggestions offered above in the areas of licensing, MRTP, small scale preferences and pricing would have an important effect on the flexibility of firms and hence are part of an overall program to address this problem. This section is restricted to the additional areas of labor, asset transfer, amalgamation, financial restructuring and bankruptcy. Among the options listed below, those related to asset transfer probably would be easier to implement than those directly affecting employment. Furthermore, asset transfer, to the extent that it would result in larger consolidated firm, may ease the adjustment problem since within larger units there are greater opportunities to redeploy labor that might otherwise be redundant in a smaller firm.

3.150 The Industrial Disputes Act could be modified to provide greater autonomy for adjusting labor within guidelines for working conditions, remuneration and retrenchment compensation. This compensation could encompass cash, health coverage and retraining. Concurrent efforts could be made to increase the mobility of employees, thereby facilitating the acceptance of more rapid employment turnover. Government funding of retraining and the provision of information concerning employment opportunities could help such efforts, but to be effective they would have to be linked with specific skills demanded by employers and with employment opportunities. Food-for-work and employment guarantee schemes for those affected by retrenchment during industrial restructuring could also help ease the costs of adjustment among the poorest groups.

3.151 To facilitate more effective communication between management and workers, it is suggested that the minimum registration requirements for unions could be re-expressed as a percentage of the workforce (say 20%) and that the concept of lead unions could be developed so that there is a single voice for workers in negotiations. This would reduce the current difficulties that arise from multiple unions and the uncertainties that arise from small fractions of the workforce having the power to disrupt entire factories.

3.152 Transferring assets between alternative uses could be simplified and achieved much more quickly. Takeovers, mergers or share purchases that do not involve other regulations such as MRTP could be freed from government and court intervention. As MRTP controls become focused more on behavior, the means and skills of large firms could be freed to help by taking over struggling units. Greater flexibility to liquidate wealth held as land and to relocate manufacturing activities should be provided, which would involve policy changes by State and Local Governments, as well as the Center. While Government would continue to tax capital gains, it could restore the freedom to buy and sell land within explicit guidelines.

3.153 Bankruptcy and winding-up procedures that currently take up to 10 years to complete could be simplified and executed more quickly so that non-viable units are wound up in a much more timely fashion. In general, there needs to be a readiness to "cut losses" and transfer usable resources to other activities when a mistake has been made or when markets disappear.

3.154 Incentives for the early adaptation by firms could be improved in three ways: (a) hold fast to the recent commitment not to nationalize sick units; (b) increase the costs to financial institutions and commercial banks of having non-performing loans in their loan portfolios; and (c) reduce the concessions granted to sick industries. The current Government policy of not taking over sick units provides a clear signal to investors, financial institutions and commercial banks that the Government is not a lender of last resort, and encourages firms to take hard decisions when difficulties first emerge. Commercial bank's information and monitoring systems could also be improved to facilitate more timely action on questionable assets and to make each bank's portfolio more transparent. Revision of the Reserve Bank's guidelines could then require commercial banks to shift non-performing loans into a risky asset category and to set aside reserves to cover possible losses. Finally rehabilitation programs

need to avoid concessions that provide incentives to have units declared "sick." Directing concessional credit to sick units, and granting preferential access to power with deferred payments, are two examples of such concessions.

3.155 When coordination of decisions regarding exit of a multiplicity of economic agents is involved, such as in the case of reductions and consolidation of capacity for depressed or declining industries, government intervention might be advisable. In the absence of timely contraction, the Government might be eventually compelled to effect a more costly intervention to avoid massive disruptions in the industry. The Government should devise policy instruments and institutional arrangements to manage and coordinate the shedding of loss making capacity in declining industries where producers have relatively similar cost structures. However, such efforts would need to be confined to subsectors where efficient marginal market-induced reductions in capacity are not likely to occur. One such situation is where each producer avoids reducing capacity in the expectation that profitability will be restored as others reduce their capacity.

3. Conclusions on Industrial Policy Reform

3.156 Recent changes in regulatory policy have begun to ease the constraints that developed since Independence; constraints that impeded entry, growth, adaptation, and exit of firms and were a major factor in the unsatisfactory performance of industry during much of the last twenty years. These changes have contributed to the recent increase in industrial growth rates. A broadened and expanded reform program would yield further benefits. Such a program would involve relaxation of barriers to entry, expansion and exit and would encourage greater competition, technological change and labor absorption.

3.157 Domestic regulatory reform would yield the greatest benefits if complemented by trade reform measures to allow increased import competition and stimulate expanded industrial exports. Such trade policy reform is the subject of the following chapter. Ultimately, it will be these three dimensions of competition--internal, import and export rivalry--that will help bring sustained improvement to industrial performance in India.

Chapter 4

EXTERNAL POLICIES AND COMPETITION

A. INTRODUCTION

4.01 As pointed out in Chapter 3, India's import substitution policies have been pursued in accordance with the broad objective of self-reliant development and have succeeded in creating a diverse industrial structure and a high degree of self-sufficiency. At the same time the accompanying controls over import and exports and the protection of domestic industries have allowed the Government to pursue a variety of non-economic objectives through its industrial and other policies. The fact that these policies would involve some compromise with the objective of economic efficiency and growth has always been recognized, but in recent years there has been much more serious questioning than in the past as to whether the gains in terms of other objectives have warranted the costs in terms of economic efficiency. In particular it is widely recognized that the indiscriminate "cost-plus" nature of protection, combined with domestic regulatory policies, public enterprise inefficiency, and high indirect taxes have meant that a substantial number of manufacturing sectors have high production costs and prices. It is also commonly accepted that there is a general problem of poor quality and technological backwardness which besets even low cost sectors that have a comparative advantage in international terms.

4.02 India's extensive import substitution has reduced imports of the substituted products, but demand has increased for imported intermediate raw materials not domestically produced or not produced in sufficient quantities, and for imported capital equipment and technology. During the 1960s and the first half of the 1970s, the latter demand was suppressed by extensive import substitution in the capital goods industries and attempts to indigenise R&D in a wide range of industries. By the mid 1970s, however, the resulting obsolescence of the capital stock and technology of many industries (including industries with inherent comparative advantage and export capabilities such as garments and leather goods) was becoming apparent, and thereafter there has been a steady liberalization of imports of capital equipment and of technology. For some industries this liberalization was achieved by expansion of the Open General License (OGL) lists of machinery and equipment which can be imported without a license, but for the most part it has been by more liberal administration of the discretionary import controls, which have remained in place and continue to protect domestic capital goods producers. Likewise, although imports of intermediate raw materials have also been liberalized and have been increasing at a faster rate than manufacturing production, a large part of these imports (e.g. rough diamonds, metalliferous ores and scrap) are not competitive with domestic manufacturing production. Quantitative import controls, other non-tariff barriers and high tariffs, have insulated all except a few domestic industries from any serious import competition. Furthermore, import competition for consumer goods industries (including new industries such as consumer electronic products) is prevented by the continuing ban on imports of all except a few consumer goods.

4.03 From an early stage the high costs of many locally produced intermediate inputs and the protection of the domestic market were recognized to be a serious impediments to manufactured exports. In the early 1960s a number of generous offsetting export incentives were introduced, but their scope was substantially reduced at the time of the 1966 devaluation. Nevertheless exports, including manufactured exports, grew at relatively fast rate during the 1970s, mainly as a result of a sustained improvement in the real exchange rate for exports between 1974 and 1978 (see Figure 1.1 in Chapter 1). In the late 1970s, coinciding with a levelling off the real exchange rate, export growth slowed down. This created a renewed interest in export incentives which has continued during the 1980s. Measures to broaden existing schemes and new incentives and institutions have been introduced. Despite this, overall export performance continues to be disappointing except for a few manufactured exports, notably garments and diamonds. This performance during the 1980s reflects the continuing superior profitability and security of the domestic market which the export incentives do not offset. The impact of the export incentives and facilities is also reduced by the need to surround them with complex and onerous controls, to prevent the diversion of imported raw materials, equipment and credit intended for exports to production for the domestic market or for direct domestic resale.

4.04 During the last ten years, the economic costs of India's trade protection regime have been a consistent theme in public discussions and also in the recommendations of official committees and policy statements which have been influential in Indian thinking on trade policy reform, notably the Alexander (1977), Hussain (1984) and Narasimham (1985) committees and in the statement of the Seventh Five Year Plan document on trade policy (1985). These have emphasized two major points: first, the need to devise efficient mechanisms for making exports less costly and more profitable; and second, the desirability of moving away from the highly discretionary system of quantitative import controls to a protective system based on tariffs. In 1985 the latter argument was made more explicit in the government's Long Term Fiscal Policy statement, which envisages the eventual removal of import licensing from all imports except consumer goods, and proposes that five basic rates should replace the present complex tariff structure.

4.05 These views, combined with concerns about modernization and export performance, have led to a number of policy changes during the past ten years, especially after the present government came to power in November 1984. Notable among these are: increases in the scope and level of export incentives and continuing efforts to streamline their administration; the relaxation of import controls by the expansion of OGL lists and by more permissive administration of the controls; the removal of export taxes on certain primary commodities; and the removal or relaxation of domestic licensing and other controls from selected manufacturing industries with the objective, among others, of making these industries more internationally competitive. Although these continuing efforts have liberalized the trade regime in some important ways, the changes that have so far been made are still quite small by comparison

with what would be needed if full advantage were to be taken of India's considerable potential for much faster economic growth. The basic system, its administrative apparatus and associated distortions and economic costs remain intact. Perhaps most fundamentally, the concept of a neutral trade regime which would allow India to reap the economic benefits of specialization of production in line with comparative advantage, although recognized to some degree by the official committee report and by the Seventh Plan document, is almost entirely missing from public discussions of trade policy issues, as is acceptance of the idea of import competition for domestic industries. Instead, the dominant view, modified only recently in a few cases, is still that if a good can be produced in India, then it should be sheltered from import competition irrespective of its cost of production.

4.06 In order to increase the efficiency of Indian industry and to speed up the growth of output, exports and employment in manufacturing, it would be necessary to complement reforms of domestic policies with much more thoroughgoing reforms of trade policies than have been attempted so far. In line with the various committees on trade policies, the Seventh Plan document and the Long Term Fiscal Policy statement, this chapter argues that the fundamental reform that is needed is the removal of quantitative import controls and their replacement by a greatly simplified and more uniform set of tariffs as the key instrument of protection policy. The liberalization of import controls and the steady increase in the general level of tariffs which has occurred during the past nine or so years has made some progress towards achieving this objective. But this progress has been limited and slow principally because recommendations and statements of general intention on the subject have not been supplemented by a coherent strategy or effective policy guidelines. For example, there appears to be no general consensus on whether there should be any upper limit to the excess of domestic costs and prices over world prices. Correspondingly, there are no guidelines as to what such an upper limit should be or as regards the maximum effective protection which should be made available by the level and structure of tariffs. In their absence, day-to-day decisions on import licenses and tariffs have understandably continued to rely principally on established precedents and criteria, and largely to reflect protectionist lobbying interests. Accordingly, drawing on the experiences of other countries, the chapter describes a possible approach to reform which broadly consists of:

- The systematic removal of quantitative import restrictions (QRs) on manufacturing goods within a pre-announced period of (say) two years.
- The announcement of a greatly simplified tariff structure with most tariffs falling within a range of about 30% to 70%, a maximum of about 80% and a minimum of about 20%.
- The use of temporary tariff surcharges to initially give industries which are reviewed roughly the same level of effective protection that they have with QRs and the present tariffs. These surcharges would however decline over a predetermined period (say five years) until they are consistent with the general pre-announced tariff structure.

- Changes in tariffs which increase the effective protection of a number of at present relatively disprotected industries.
- For important key industries implementation of these policies in a series of industry-by-industry reviews which would also make recommendations on what policies should be followed if substantial industrial restructuring were likely to be required.
- Determined and continuing efforts to broaden, simplify and increase the efficiency of export incentives and institutions.
- Compensating technical adjustments in the exchange rate to the extent required, which would partially offset reductions in import substitute protection of some industries, while increasing the relative profitability of exports and helping to maintain balance of payments equilibrium during the reform process.

4.07 Section B of this chapter describes the salient features of the present import regime and analyses some recent trends. Section C discusses export policies and incentives. Section D presents some rough estimates of the structure and level of nominal and effective protection of manufacturing industry. Sections E and F then discuss the impact of the trade regime on the performance of the manufacturing sector. Finally, section G discusses various aspects of policy reform, including issues to do with sequencing and time phasing and some of the special problems which reforms would involve in India.

4.08 In the rest of this chapter the effects of the trade regime on the levels and variability of incentives for manufacturing production are frequently discussed in terms of the nominal protection of the finished products and material inputs, and of the effective protection of processing margins (value added). These concepts are alternatively referred to as nominal and effective protection rates or nominal and effective protection coefficients (NPCs and EPCs). A nominal protection coefficient is the ratio of the domestic price of a good to its world price, while an effective protection coefficient is the ratio of the value added in producing the good to value added measured in world prices. Thus an NPC of 2.10 corresponds to nominal protection of 110% and means that the domestic price exceeds the world price by 110%. An EPC for a product of 1.45 corresponds to effective protection of 45%, indicating that the combined effects of nominal protection of material inputs and of the finished product has raised the processing margin 45% in excess of what it would be if the finished product and all the materials inputs were traded at world prices. Indian tariffs are often redundant in the sense that domestic prices of many products are well below the levels they could in theory reach if local firms were to take full advantage of the protective margin afforded by tariffs. The chapter therefore distinguishes available nominal and effective protection (i.e. available from tariffs) and realized, implicit or measured nominal and effective protection, which is estimated by comparing actual domestic prices with world prices. Finally, because domestic indirect taxes impinge differently on producers and users of a given product, a distinction is also made between producer and user nominal protection. Because nominal and effective protection are not just theoretical concepts but of crucial practical importance, and are often misunderstood, in Annex 4.1 they are briefly explained and illustrated with some Indian examples.

B. THE IMPORT REGIME: DESCRIPTION AND RECENT DEVELOPMENTS

4.09 This section presents a brief description of and recent developments in India's trade policies and institutions, as they impinge on manufacturing, considering in turn non-tariff protection, trends in non-tariff import controls, tariffs, trends in tariffs and the role of indirect taxes.

(a) Non-Tariff Protection

4.10 Non-tariff controls have been and remain the principal means of regulating imports and protecting local industries. These controls include the import licensing system, canalization, the "actual user" policy, phased manufacturing programs that provide for progressive import substitution, industrial licensing, and government purchase preferences given to domestic producers.

4.11 The import licensing system divides imports into three broad categories: (i) consumer goods, (ii) capital goods; and (iii) intermediate raw materials, components, spare parts and supplies. Imports of consumer goods are generally banned, except for imports by canalizing agencies of a few products that the Government judges to be essential and which are not produced locally or in sufficient quantities (e.g., edible oils, certain drugs and medicines, kerosene, and foodgrains until about 1984)¹. Capital goods are divided into a "restricted" category and an "Open General License" (OGL) category². OGL capital goods can be imported without a license provided that the importing firm is the "actual user" of the equipment, and provided that the resulting change in productive capacity is compatible with the domestic industrial licensing discussed in the previous chapter. However, an import license is required for items on the restricted list, and also for any item not on the OGL list, even if it is not on the restricted list. Finally, intermediate goods imports are divided into Banned, Restricted and Limited Permissible categories, plus an OGL category. In principle, intermediate goods that are not on the first three lists, nor on the separate lists of canalized items, can be imported without a license. In practice, the system has not functioned according to this apparent "negative list" principle, mainly because the lists of controlled items include a number of very broad catch-all categories e.g., all consumer goods in SKD condition, all woollen textiles, all synthetic fabrics, all electronic items "except those on OGL". Consequently, OGL status for intermediate goods has been limited to items included in the OGL lists, for practical purposes. As with capital goods, the importer of an OGL intermediate input has to demonstrate to Customs that he is the "actual user", but subject to this there is no limit on the quantity that he can import.

¹ About the only legally permitted private imports of consumer goods occur under the baggage rules for air and ship passengers (especially Indians returning from jobs in foreign countries.)

² Until 1985 the various lists were published in the April Import and Export Policy. To promote stability, the April 1985 book was issued to cover the three-year period 1985-88. However, large numbers of changes in policies and licensing categories continue to be made and a revised book was issued in October 1986. A further 200 changes had been made by March 1987.

4.12 The import licensing system is discretionary in many senses. Each application to import is treated on a case-by-case basis. In each decision, the "sponsoring agency"³ of each firm must certify that the import is "essential" and give an "indigenous angle clearance", which means that a product of satisfactory specifications and quality cannot be supplied in a reasonable time by an Indian firm. The cost of the domestic alternative is generally not considered in the decision. The value of raw material and capital goods import licenses are related to the production of the firm, and to the capacity approved by the industrial licensing authorities. There are no preannounced import quotas or predetermined foreign exchange limits for individual products or industries, although changing foreign exchange availability is reflected in periodic changes in the various lists, especially movements of items to or from the OGL lists, and in the administrative ease of obtaining import licenses. In sum, import licenses are generally allocated in a non-price, administratively ad hoc manner.

4.13 The 16 canalizing agencies are another means through which the Government exercises control over imports. These organizations are designated as the sole importers of products listed in the Import-Export Policy. The most important canalized products are: crude oil and petroleum products (by the Indian Oil Corporation); iron and steel, non-ferrous metals and fertilizers (by the Minerals and Metals Trading Corporation); edible oils, natural rubber, newsprint cement and sugar (by the State Trading Corporation); scrap metal (by the Metal Scrap Trading Corporation). Cereal and cotton imports (canalized by the Food Corporation of India and the Cotton Corporation of India respectively) used to be important canalized imports but have now disappeared with the emergence of exportable surpluses. A number of other products with lower import volumes are also canalized, including specified chemicals, synthetic yarns, electronic products and drugs. The canalizing agencies' control over these imports is nevertheless important for the domestic industries producing the same products or using them as inputs.

4.14 At present, canalized imports account for about half of total imports including petroleum oil and lubricants (POL). Non-POL canalized imports account for about one-fifth of total non-POL imports. In addition, a number of export commodities are canalized; these account for about 11% of total exports. They include wheat, cotton, rice, sugar, salt, castor oil, iron ore, manganese ore, chrome ore, barites and bauxite.

4.15 Policies on the importing, pricing and distribution of the most important canalized products are determined and supervised by the concerned ministries or departments and others by two committees chaired by the Chief Controller of Imports and Exports. The activities of the agencies are an integral part of the system of non-tariff discretionary controls over imports, and subject to the same conflicting objectives and pressures that impinge on the import licensing system.

4.16 There are a number of additional non-tariff barriers that restrict the free flow of imports, or would be restrictive if imports were -----

³ All Indian firms (private and public) are linked to a government "sponsoring agency." Unless a particular ministry or department is responsible (e.g., Ministry of Steel and Mines, Ministry of Textiles, or Department of Chemicals and Petrochemicals), the Directorate General of Technical Development (DGTD) in the Department of Industrial Development (Ministry of Industry) is the sponsoring agency.

not already blocked or impeded by import licensing, canalization or prohibitively high tariffs. Possibly the most important is the "actual user" policy, which disallows imports for resale by excluding intermediaries from importing. This policy was phased in during the 1970s and became complete in April 1977 with the abolition of the category of "Established Importers" who were eligible for import licences. It is a logical outcome of the desire to control imports⁴, to prevent private traders benefiting from the scarcity premia that are inherent in the licensing regime, and to enforce the criterion of "essentiality" in deciding on applications for import licenses⁵.

4.17 The "actual user" policy would prevent most imports of consumer goods even if the present ban were lifted. As regards raw materials and components, special import licenses may be issued to allow canalizing agencies and certain recognized private export and trading houses to import raw materials and components in bulk for resale to manufacturing firms. In addition private intermediaries are able to legally bypass these rules to some extent by acting as agents and combining the import licenses of a number of firms, or by buying and combining the replenishment licenses (see para 4.52) obtained by exporters. Nevertheless, the "actual user" policy greatly restricts imports of capital equipment and intermediate goods by small and medium firms, and even by large firms when the quantities required are small, owing to the high transaction costs of importing on a small scale and the severe constraints on the means by which imports can be legally undertaken by intermediaries. Thus, tires have been on OGL since 1978, but there have been no imports, in part because of very high tariffs (140%), but also because none of the larger firms in the replacement market (truck owners, bus companies, etc.) qualify as "Actual Users (Industrial)", while imports by car and truck manufacturing firms are prevented by "Phased Manufacturing Programs", which require that they purchase Indian-made tires. Even with lower tariffs, competitive imports of tires could only occur if fairly large scale tire dealers or the tire manufacturers were permitted to import.

4.18 Phased Manufacturing Programs (PMPs) and their accompanying "List Attestation" procedures are another non-tariff barrier. Under a PMP the concerned firm agrees to progressively replace imported materials, parts and components with materials, parts and components produced in-house or by other Indian firms. The programs typically accompany industrial licenses in a wide range of industries involving assembly of parts and components (notably the vehicle, machinery and electronics industries). In order to ensure implementation of the agreements, the import of all such parts and components requires prior clearance by the sponsoring authority for the industry, which attests that the imports are not included in the list of products that should be locally sourced under the PMP. These agreements and procedures therefore amount to a separate set of quantitative import controls which apply to many intermediate products, including those which appear on OGL lists, and which in theory are importable without restriction. Moreover, the controls remain indefinitely, since once the required level of indigenization is achieved,

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⁴ Cheating by intermediaries is more difficult to control than cheating by manufacturers, who have fixed assets and known locations.

⁵ By definition, an intermediary importing for resale will find it difficult to substantiate that the import is "essential."

surveillance continues to ensure that firms do not reduce the agreed indigenization levels. Although PMPs in some industries (e.g. the car industry) are less restrictive than earlier policies requiring more or less complete indigenization, they are being used with increasing frequency, especially in new industries such as electronics and as an accompaniment to the modernizing investments in the vehicle, vehicle component and machinery industries. In early 1987 it was also announced that PMPs would be extended to the drug industry. PMPs are thus an important new development which is running counter to the general trend toward easing restrictions on imports of intermediate inputs.

4.19 Various aspects of the industrial regulatory system also constitute significant actual or potential non-tariff barriers. Applications for industrial licences for new or expanded capacity must be cleared by the Capital Goods Committee, which scrutinizes the foreign exchange content of the investment and may reject applications involving what it regards as excessive foreign exchange outlay or may require local sourcing of particular machinery and equipment items. In principle, this may be done regardless of whether the items concerned appear on OGL lists, so the CG committee is in effect another discretionary non-tariff line-of-defense that protects the machinery and engineering industries against competing imports. The capital goods industries are also protected by technology import policies, under which the allocation of foreign exchange to pay the royalties and license fees is subject to case-by-case administrative review. Since technology licenses from foreign firms are often linked to capital good imports, this process constitutes a non-tariff barrier to importing the capital goods as well as the technology. The reservation of particular products for exclusive production by small scale firms is also an indirect import barrier, in the sense that import competition probably would not be allowed while disallowing competition by medium and large Indian firms.

4.20 Finally, in India as in other countries, government purchases give preference to domestic firms. A price preference equivalent to 25% of the c.i.f. price of imports plus duties and port charges is given to domestic suppliers by the Directorate General of Supplies and Disposals, (DGS&D), which buys supplies (currently about US\$ 2.5 billion annually) for the Central Government and substantial amounts on behalf of state governments and state enterprises. Since Indian tariffs are high, this is equivalent to a substantial margin on c.i.f. prices. For example, with a 100% tariff, the DGS&D's preferential margin is equivalent to 50% of the c.i.f. price, and the domestic suppliers could afford to quote up to 150% in excess of the c.i.f. price.

(b) Trends in Non-Tariff Import Controls

4.21 The present system of quantitative controls over imports has been in place since 1956. Since then there have been periods in which controls were alternatively tightened (e.g., 1956-62, 1968-74) or relaxed (e.g. 1966-68), largely in response to the state of foreign exchange reserves.

The period beginning with the Import Export policy of 1977/78 to the present falls in the "relaxation" category, with the exception of 1980/81, when controls were tightened. The available trade and import license statistics, do not, however, permit a detailed and reliable quantitative analysis of the nature and extent of the import liberalization which may have occurred.⁶ The following broad assessment is therefore tentative.

4.22 As regards consumer goods, there has been no change in the basic policy of banning all imports, with a few special exceptions which are canalized. Furthermore the two important trade policy committee reports (Alexander Committee 1978, Hussain Committee 1985), and the 1985 Long Term Fiscal Policy statement all recommended retaining the ban on imports of consumer goods.

4.23 As regards capital goods, beginning in 1976 there has been a steady increase in the number of items on the OGL list, from 79 in 1976 (when the list was first introduced) to 987 in October 1986 (Table T.A 4.1). Most of these changes were made to allow particular domestic industries (including a number of export industries) to modernize, and OGL status was usually accompanied by reduced customs tariff rates ("exemptions"). However, most of the machinery put on OGL was not produced in India, so there was little immediate resulting direct competition for the established product lines of Indian machinery industries. For example, in early 1987 the 15 OGL textile items were mostly new or highly specialized machines (e.g. air jet and water jet looms) which were not locally produced: importing the great majority of textile machinery and equipment remained restricted. An exception is the machine tool industry, where OGL imports of a fairly wide range of domestically produced machines have been allowed, and where newer more advanced machines not produced in India and imported under OGL, have competed with the established product lines of the Indian producers.

4.24 The main impact of imports on the domestic capital equipment industries in recent years appears to have come not from increases in the OGL lists, but from reduced stringency in the licensing of imports of the large majority of machinery and equipment items which remain subject to discretionary controls. In this regard, the global tender and the project import policies are potentially of special importance. The "global tender" policy, introduced in 1978, allows 13 industries (which include most of the large Indian capital intensive industries such as fertilizers, electric power, petroleum exploration and production, petrochemicals, sugar, cement) to call worldwide tenders for capital goods, which are decided on the basis of c.i.f. import prices plus tariffs versus Indian bids, irrespective of whether import bans, licensing or indigenization requirements would otherwise protect the Indian suppliers. Moreover, the Indian tenderers can import raw materials and components regardless of any import restriction or indigenization requirement which would otherwise apply at an import duty rate which does not exceed the rate on capital goods. In practice, however, this global tendering policy has not been widely used. Apart from international competitive bidding required by the World Bank for projects which it finances (which gives a 15% margin of preference to domestic suppliers), the tendency has rather been to confine global tendering to those components of a project which the Government

⁶ The latest available detailed trade statistics are for 1983/84. There is some incomplete data on the values of import licenses issued, but no data either on actual imports under various licensing categories or on the value of OGL imports, except for some estimates of the latter relating to 1980/81 and 1981/82.

decides cannot be satisfactorily supplied by local firms. This has generally been done in the context of the project import policy. Under this policy, which is formally an "exemption" provision of the customs tariff (see para 4.39 below), imports of machinery and equipment for industrial and other projects are allowed at reduced import duty rates, provided that the list of equipment proposed to be imported is first approved by the relevant sponsoring agency and import licenses are issued. Particularly since the March 1985 budget when import duties applied to project imports were drastically reduced, increased approvals of imports under this facility combined with the reduced import duties appear to have increased import competition for local engineering industries, especially firms supplying heavy equipment such as reactors, boilers, generators etc. to the fertilizer and power industries. In 1985/86, project imports amounted to 10.7% of total Indian imports, and to 69% of total imports of machinery, equivalent to about 15% of the value of production of the capital goods industries. However, these imports are at the discretion of the licensing authorities, and the present apparently fairly liberal approvals of import applications could easily be reversed. Customs duties on machinery imported for projects were substantially increased in the March 1987 Budget.

4.25 As regards intermediate raw materials, as with capital goods, since about 1977 there has been a steady increase in the number of products on the OGL lists and an absolute decline in the number of items on the various banned and restricted lists. However, it is difficult to assess to what extent these additions to and subtractions from the various lists represent trends in the degree of restrictiveness or otherwise of import controls, especially since the 1978/79 policy changes which supposedly converted the banned, canalized, and restricted lists from being positive to negative lists (see para 4.11). Furthermore, for obvious reasons, simply counting items on lists gives no indication of the importance of the products involved; for example, changes in product definitions may mean that a reduction in the number of items on (say) the restricted list may actually indicate greater restrictiveness if a broad definition replaces a non-exhaustive list of sub-products with particular specifications. Despite these difficulties, most informed commentaries on the trends in import policies agree that some loosening of raw material controls has occurred in each year beginning with the 1977/78 policy, except in 1980/81 when controls were tightened. However, more than was the case with capital goods, the main thrust of these policy changes has been to ease the supply situation of important non-competitive inputs used by domestic industries. This intention was explicit in the major revamping of the control system in 1978/79 following the Alexander Committee report, in which it was intended that most of the items put in the OGL category were either not made in India or were not likely to be made for the coming three years. This intention is also apparent from the fact that in each year since 1978/79 varying numbers of items have been removed from the OGL to the various restricted lists on the ground that domestic products were available. Consequently, the liberalizing trend in raw material import licensing policies has not led to much direct import competition for the established product lines of domestic industries, even though some of the "non-competing" materials or components imported under OGL may substitute in varying degrees for local products and hence

indirectly exert some competitive pressure. Such imports are also of course a potential constraint on the commencement of domestic production of the same products, but this is modified by the continuing tendency to remove items from the OGL lists once local production gets started. Furthermore, the improved accessibility and generally lower cost of intermediate inputs resulting from the expansion of OGL status increases the effective protection of the user industries, since the final products generally remain protected by import licensing. This is all the more the case, when, as is typical, OGL conditions for non-competing material inputs are accompanied by special tariff exemptions (see para 4.39). For example, this combination of policies is currently giving excessively high levels of effective protection for a wide range of electronic products and components.

4.26 Another potential source of import competition for domestic producers of intermediate goods are imports by exporters of products which are otherwise restricted or canalized. As explained in section C below, such imports are allowed when the intermediate materials are incorporated in exported finished products, in addition to which some materials imported under special transferable "replenishment" (REP) licenses issued to exporters can be used to produce products sold domestically. Imports of otherwise restricted intermediate products under REP licenses have given the import control system a highly desirable degree of flexibility by reducing the incidence and severity of scarcities resulting from rigidities and mistakes in the administration of import licensing. However, the value of such imports of course depends on the level of manufactured exports, which have grown quite slowly in recent years. Consequently, since 1980/81 the share of these imports in total non-POL imports has remained about the same (Table 4.1). Allowing for the fact that almost half of the value of imports under export-related import licenses are rough diamonds, while others are agricultural raw materials such as natural rubber, the potential competition from this source for local producers of industrial intermediate goods is probably equivalent to less than 10% of total non-POL imports.

4.27 Apart from licensing, the other major source of direct government control over imports is through the canalizing agencies. The share of canalized products in total imports has declined substantially since 1981, from about 67% in 1980/81 to about 50% in 1985/86 (Table T.A. 4.2--at the end of the Statistical Appendix in Vol. III), and imports of canalized non-POL products have declined from about 44% to roughly 22% of total non-POL imports during the same period. This fall in the shares of canalized imports was not, however, a reflection of decanalization. It was almost entirely due to a combination of (a) increased domestic crude oil production and lower POL imports; (b) the disappearance of grain and cotton imports referred to earlier; and (c) very large decreases during the 1980s in the international prices of some of the principal canalized imports, especially fertilizers, edible oils, non-ferrous metals and iron and steel. Twenty one items decanalized in April 1985 were mostly of minor significance, both in relation to imports and to domestic production.

Table 4.1
INDIA: Shares in Imports of Value of Less-Discretionary Import Licenses Issued and OGL Imports

Year	<u>% Share of Total Imports</u>				<u>% Share of Total Imports excluding POL</u>			
	Export Related Licences	Automatic Licences	OGL Imports	Total	Export Related Licences	Automatic Licences	OGL Imports	Total
1980/81	11.3	5.9	6.5	23.7	19.5	10.2	11.3	41.0
1981/82	12.9	8.4	7.9	29.7	20.9	13.5	12.7	47.1
1982/83	13.7	7.9	..	..	22.6	13.0	..	..
1983/84	14.5	8.2	..	..	21.0	11.8	..	..
1984/85	16.2	..	..	..	21.7	..	..	..
1985/86	14.4	..	..	..	19.3	..	..	..

Notes & Sources:

Import data from Economic Survey 1985-86 and Trade Statistics (March 1984 issue). Data on value of licences and OGL imports supplied by GOI. Note that the value of licences issued is not the same as actual imports under the licence during the year because of normal lags and changes in plans. The estimate for OGL imports does not include import of OGL items which are canalized, but does include imports by Free Trade Zones and 100% export oriented units. The data in the table is not necessarily consistent with the information on imports of canalized items given in Tables T.A. 4.2 and 4.3 since the two categories overlap, i.e. canalized items can be imported by manufacturers under export related licenses, while some licenses and OGL imports relate to imports by canalizing agencies.

4.28 In order to make a satisfactory evaluation of the extent to which the licensing system has been liberalized during the past ten years, the crucial information required is the value of OGL imports with a breakdown of these imports into products competing and not competing with domestic production. However, the only available estimates of OGL imports are for 1981 and 1982, when they were respectively 6.5% and 7.9% of total imports and 11.3% and 12.7% of non-POL imports. In Table 4.1 these estimates have been combined with the values of export-related and automatic import

licenses issued,⁷ to give a rough indication of the volume of imports which were not subject to order-by-order discretionary import controls. In 1981 and 1982 it can be seen that these amounted to 23.7% and 29.7% of total imports, and 41.0% and 47.1% of total non-POL imports respectively. As noted previously, since 1982 there has been a slight decline in the share of export-related licenses, in addition to which automatic licenses were abolished in the 1985/86 import policy, with about 90% of the items being transferred to the OGL list and 10% to the limited permissible list. The net effect of these actions, together with the continuing additions to the OGL lists of capital and intermediate goods, has probably further increased less-discretionary imports thus defined, but the extent cannot be quantified owing to the absence on any data on OGL imports since 1981/82.

4.29 Although the percentage of less-discretionary imports to total non-POL imports of approximately 47% in 1981/82 may seem high, it would be a mistake to interpret this as an indication of the value of imports in direct restriction-free competition with Indian manufacturers. In fact the share of truly unrestricted imports directly competitive with domestic manufactured products was probably confined to a small part of OGL imports, probably equivalent to five percent or less of total non-POL imports. First, as already noted, most of the products on the OGL lists and at least half the value of those imported under the export-related licenses, are not directly competitive with local manufactured products. Second, REP and imprest licenses, which are the largest component of the export-related import licenses, and which allow the imports of otherwise restricted and canalized items, in the case of REP licenses typically sell for premiums in the domestic market, indicating that the licensing controls are binding since buyers are willing to pay prices in excess of the duty-inclusive cost of these imports. Third, another portion of the export-related licenses are duty-free and are tied to the production of exports, the same locally produced materials typically selling for much higher prices when sold domestically. Fourth, automatic licenses have been classified as "less-discretionary" only in the limited sense that once permission to import these restricted materials was obtained, renewal of the import was facilitated by basing it on production and imports approved in previous years. For reasons given earlier, the share of unrestricted competitive imports has probably increased since 1981/82, but in all probability remains extremely low. This impression is partially confirmed by a 1986 survey of 32 firms in the engineering industry which according to public discussion in India was subject to intense import competition during this period. With only a few exceptions (notably some machine tool producers), these firms said that none of their products were subject to competition from OGL imports, even though many were affected by more intense competition from other domestic producers, and some by imports under the discretionary import procedures for new and expansion projects.

⁷Automatic licenses provided the annual requirements of specified non-OGL raw materials of manufacturing firms. They were issued annually on the basis of past consumption so that firms would not need to apply for a separate license for each import order.

4.30 That the trade control system has permitted a relatively low share of unrestricted competitive manufactured imports is also apparent from a study of 132 products produced in 1980/81 by firms reporting to DGTD. These products, which accounted for about 30% of total ASI manufacturing production of internationally tradeable products, were classified according to their import licensing status in 1980/81. The results were as follows:

<u>Licensing Status</u>	<u>% Share of Production</u>
Non-permissible	27.2
Limited permissible	23.8
Canalized	18.9
Automatic permissible	16.2
OGL	14.0
Total	<u>100.0</u>

In the light of the previous discussion, the share of production in that year apparently subject to OGL import competition may seem high, but this must be qualified by noting that the proportion of DGTD products with OGL import conditions was likely to have been much higher than for a manufacturing as a whole because there were practically no OGL products in the case of major industries reporting to other sponsoring agencies, notably textiles, fertilizers, steel, and petroleum products.

4.31 A similar general point also comes out clearly if manufactured imports are compared with the value of production of the corresponding manufacturing sectors. In 1982, the percentage of the total of such imports to total production was 13.6% (Table 4.2), but of the 11 sectors with import ratios exceeding 10%, all or most imports in 8 were fully or predominantly canalized (cement and plaster, edible oils and fats, paper and paper products, fertilizers and pesticides, iron and steel, ferro alloys, non-ferrous metals and refined petroleum products). Leaving out the basically canalized imports relating to these sectors, the remaining imports were less than 10% of the industrial production of the corresponding sectors and were heavily concentrated in the machinery, chemicals and a residual set of miscellaneous industries. In a number of large sectors, including leather footwear, glass and glasswear, processed foods, drinks and tobacco products, wood and wood products, rubber products, textiles and garments, imports were negligible.

(c) Tariffs

4.32 The Indian tariff consists of: (a) basic customs duties, mostly ad valorem, applied to the c.i.f. price of the import; (b) an auxiliary duty applied to the c.i.f. price; (c) "additional" ("countervailing") duties equivalent to excise taxes imposed on locally produced products, applied to the c.i.f. price plus the basic customs duty and auxiliary duty. The basic ad valorem duties range from zero to 300%; the general auxiliary duty is 40%, but with simplified exemptions introduced in the 1985/86 budget, can be reduced to 25% or zero. At first glance the tariff schedule appears very simple, with quite uniform basic customs duties in individual chapters and a desirable degree of transparency owing to relatively few specific duties⁸. In practice, tariff-based protection

⁸ For example, of 294 6 digit tariff positions in Chapter 29 (organic chemicals), for 279 the tariff (basic plus auxiliary) is 140%, for 8 it is 190%, for 4 it is 100%, and there are only 31 specific duties.

Table 4.2

INDIA: Imports Competitive with Manufacturing Sectors
Producing Internationally Tradeable Products, 1982

<u>Product</u>	<u>Imports c.i.f. Rs Million</u>	<u>Value of output Rs.Million</u>	<u>Imports as % of output</u>
Leather footwear	--	1,459	0.0
Metal Products	1,155	16,522	7.0
Glass and glassware	186	12,565	1.5
Cement and plaster	730	6,957	10.4
Edible oils and fats	6,880	23,516	29.2
Processed foods	1,967	70,468	2.8
Drinks and tobacco products	11	13,637	0.1
Wood & wood products	20	3,367	0.6
Paper & paper products	2,454	12,565	19.5
Rubber products	222	13,127	1.7
Fertiliser & pesticides	5,236	28,078	18.6
Chemicals	8,003	70,324	11.3
Iron & steel	11,902	81,053	14.7
Ferro alloys	133	1,195	11.1
Non-ferrous metals	3,971	10,185	33.8
Textiles	967	90,742	1.1
Garments	2	6,582	0.0
Machinery	19,807	124,167	16.0
Refined petroleum products	14,532	53,703	27.1
All other (residual)	12,340	27,370	45.1
Total	<u>90,518</u>	<u>667,582</u>	<u>13.6</u>

is complex in the extreme, owing to the large number of "exemptions" (zero or reduced rates) that must be traced separately for all three components. The 1987/88 budget also introduced specific duties for a number of important steel and chemical products.

4.33 It is difficult to generalize about the level and structure of Indian tariffs because of the proliferation of exemptions. However, the general level of duties is undoubtedly extremely high in absolute terms before allowing for exemptions. Counting only the basic and auxiliary duties and leaving out countervailing and specific duties, the unweighted average tariff for all BTN positions in 1986 was 137.6%, with 59% of all tariffs clustered in a range of between 120% and 140%, 8.5% exceeding 200%, and only 2.4% less than 60% (see Table T.A. 4.4). Allowing for the minority of exemptions that can be quantified reduces average tariffs somewhat, (123.6% for all BTN positions, and 121.7% for manufactured products) but they are still high.

4.34 Indian tariffs are much higher than tariffs in other developing countries. In a sample of 10 countries including a number with relatively large internal markets and diversified industrial structures, such as China, Mexico and Turkey, India had by far the highest average tariff on manufactured goods (Table 4.3). Except for China and Bangladesh, the other seven countries had mean tariffs of less than 40% and 30%. Average Indian tariffs were also clearly higher than in the other countries when intermediate, capital and consumer goods were distinguished. In particular, the mean Indian tariff for intermediate goods was about 25 percentage points above the next highest (Bangladesh.)

Table 4.3

INDIA: Cross Country Comparisons of Tariffs on Manufactured Goods
Unweighted Mean and Standard Deviation of Tariffs and Duty Collection
Rates
(% ad valorem)

	Intermediate Goods		Capital Goods		Consumer Goods		Manufacturing Sector		Import Duty Collection Rates
	Mean	Std.Dev	Mean	Std.Dev	Mean	Std.Dev	Mean	Std.Dev	
Argentina	21.2	15.3	25.0	12.6	21.9	8.0	22.9	14.3	13.8
Bangladesh	97.9	60.0	80.5	18.1	116.1	82.0	100.8	67.3	15.0
China (PRC)	78.9	55.7	62.5	47.8	130.7	66.9	91.2	63.4	n.a.
Hungary	14.2	27.3	14.0	51.4	22.6	17.5	20.9	15.0	7.0
India	123.0	46.8	114.5	54.8	128.5	32.6	121.7	46.6	41.3
Mexico	23.5	16.3	23.5	17.3	32.2	26.4	24.7	19.0	6.8
Morocco	21.6	16.9	18.1	12.0	43.0	20.5	27.8	20.4	16.6
Thailand	27.8	20.4	24.8	16.2	48.5	38.7	33.5	28.6	12.5
Turkey	29.4	25.0	34.9	18.3	55.3	40.6	37.1	30.9	7.0
Yugoslavia	18.0	4.9	20.7	4.2	20.0	6.4	19.0	5.5	10.9

Sources and Notes: World Bank SINTIAL Country Tariff files. The Indian tariffs are for 1986. They allow for quantifiable exemptions but do not include specific or countervailing duties. The import duty collection rates are from Table T.A. 4.6 and include all import duties, including countervailing duties in the case of India.

4.35 Weighted by imports, however, average tariffs are considerably lower. For ten manufacturing sectors in 1986, the import-weighted tariff with quantifiable exemptions was 90.7% (Table 4.4). This tendency also shows up clearly when unweighted tariffs are compared with import duties collected as a percentage of imports. In 1984/85 the duty collection rate on total imports (including countervailing and specific duties) was 41.3% and on non-POL imports it was 57.3% (Table 4.5). Excluding edible oils, fertilizers and precious stones, in addition to POL imports (all of which were subject to low tariffs or were exempt), the average duty collection rate on all other imports was 78.9%, and about 82% if adjusted for duty free imports used as inputs into exports (Table T.A. 4.5). These differences point up the "made to measure" nature of Indian import licensing and tariff policies, under which imports of products not made in India, are allowed (often under OGL) and lower tariffs charged, whereas imports are typically blocked or restricted and high tariffs maintained if there is local production capacity. Nonetheless, duty collection rates are extremely high by international standards. For example, comparing India with eight of the other countries listed in Table 4.3, the Indian

Table 4.4
INDIA: Average Customs Tariff Rates for Manufacturing Sectors in 1986

Manufacturing Sectors	Weighted by 1983/84 imports (c.i.f. prices)	
	Without exemptions	With quantifiable exemptions
Food beverage and tobacco	231.4	168.2
Textiles and leather	155.1	146.7
Wood products	79.0	48.3
Paper and printing	114.3	99.1
Chemicals	127.5	114.1
Refined petroleum products	140.0	0.0
Non-metallic minerals	135.6	120.0
Basic metals	171.6	143.6
Machinery & metal products	134.8	122.8
Other	110.4	100.1
Average	<u>147.0</u>	<u>90.7</u>

Source: SINTIAL File.

Notes: "Average Customs Rates" are the sum of the ad valorem basic and auxiliary duties and do not include countervailing (additional) duties. They also do not include the (relatively few) specific duties. Only about 30-40% of exemptions could be quantified, i.e. associated with reduced tariff rates for particular BTN (Brussell Tariff Nomenclature) products.

duty collection rate of 41.3% in 1984/85 was two and half time the next highest rate (16.6% in Morocco) and four times the simple average (10.8%) of the rates in the eight countries (Table T.A. 4.3). Despite this, relative to GDP, the customs duty collected in India was not proportionately higher than in the other countries because of the low share of Indian imports in GDP. Indeed the customs to GDP ratio in India was less than in Morocco and about equal to the ratios in Bangladesh and Thailand.

4.36 The large differences between import duty collection rates and average tariffs also indicate the importance of non-quantifiable exemptions. On imports in 46 categories (accounting for approximately 95% of total imports) in 1983/84, the import-weighted average import duty rate with quantifiable exemptions was approximately 80%, whereas actual collections were only 31% of the same imports. Similar (and mostly large) differences exist between average duties and collection rates for all except two of the commodity groups distinguished. If specific duties and countervailing duties had been included in the average tariffs, the excess of rates of duty over collection rates would be even much greater.

4.37 In many countries, tariffs tend to increase with the degree of processing, with the result that the effective protection available from tariffs is generally higher than the nominal protection to output. The available effective tariff protection thus tends to increase with the various stages in the processing chain. Before exemptions, Indian tariffs are also escalated but less than in many other developing countries. This can be seen from the following total-supply-weighted average basic customs tariffs for 1982.

	<u>Percent</u>
19 Primary product sectors	41.7
6 Semi-processed product sectors	65.5
53 Processed/finished product sectors	86.4

Moreover in 1986 unweighted average tariffs (basic plus auxiliary duties with quantifiable exemptions) for intermediate goods (123.1%) and for consumer goods (128.5%) were about the same, while average tariffs for capital goods (114.5%) were only slightly lower, in marked contrast to some developing countries where tariffs on intermediate and capital goods are considerably lower than tariffs on consumer goods. Thus, if the basic customs and auxiliary import duties were the sole determinants of nominal protection, then the extreme escalation of effective protection and conversely the relative disprotection of activities for which input tariffs are higher than output tariffs would be less of a problem in India than elsewhere.

4.38 There does, however, seem to be a fairly high incidence of both reverse and positive tariff escalation, despite the apparently moderate escalation of tariffs along product chains. In particular, many of tariff exemptions have undoubtedly been escalation-increasing on balance, e.g.

in the electronics, vehicle and chemical industries. In addition, reverse escalation (industries with markedly higher nominal tariff protection on their inputs than on their outputs) is particularly likely to occur when countervailing duty and excise duties on inputs are not rebatable and sales taxes are high, as discussed later.⁹

4.39 Many exemptions (about 30-40%) apply to all imports coming under particular BTN tariff positions, and have been quantified in analysing the structure and level of tariffs. The majority of exemptions are, however, introduced to enable particular industries or even individual firms to obtain their intermediate inputs or capital equipment at lower cost, e.g., exemptions introduced in 1979 and again in 1985 for items used in the leather industry; in 1983, 1984 and 1987 for materials components and parts used in the electronics industry; in 1983 and 1984 for components used in the assembly of fuel efficient vehicles. Other typical examples are ball and roller bearings of particular specifications, ammonia and phosphoric acid when used for fertilizer production, and stainless steel of different specifications when used for specified purposes. A particularly important set of exemptions provides for reduced duties on imports of machinery and equipment required for projects, defined as "the setting up... or substantial expansion" of industrial and specified other plants. Between March 1985 and March 1987, these duties (including countervailing duties) were zero for fertilizer projects, 25% for power projects, and 55% for other projects. In the 1987/88 Budget, the tariff on fertilizer equipment was increased to 15%, and the tariff on equipment for general projects was increased to 85%, while tariffs on most general industrial machines were brought down to 85%. These changes introduced an important and highly desirable element of uniformity into machinery and equipment tariffs, even though imports of machinery not subject to the general industrial machinery rate of 85% are subject to tariffs which can vary (partly depending on other exemptions) from about 15% to over 240% before adding countervailing duty.

4.40 As a result of such specific exemptions, the identical product is frequently subject to widely varying import duty rates according to which firm or industry uses it, and for which purpose. This potentially generates large rents for the recipients of the exemptions. It also opens up profitable opportunities for reselling products imported with low duties to buyers who can only import at high duties or must buy in the local market at protection-inflated prices. Detailed controls and checks are required to prevent this kind of arbitrage and ensure that the imports at concessional tariff rates are actually and fully used for the special purposes for which the concessions were granted. Why such controls are needed can be seen from the example of stainless steel tariffs given in Annex 4.2.

⁹ Some important recent exemptions, notably the 1985 exemptions related to fertilizer supply and power generating equipment, have in some cases forced local firms to compete with imports over reduced or even zero tariffs, while paying for higher protection on their own inputs.

4.41 For this reason the administration of the customs tariff relies to a large degree on the import licensing controls and the "actual user" policy¹⁰, and in addition involves special administrative quantitative controls of its own. For example, under the provision for duty concessions for importing components of fuel efficient vehicles, the exemption notification provides for administrative approval of the components to be imported, surveillance of how they are used, and fuel efficiency tests. Likewise, approval of the machinery to be imported, import licenses and subsequent surveillance are required for project imports at concessional rates. Other exemptions provide for prior approval of the imports by DGTD or some other government authority, supervision of the manufacturing process by a customs official or some other means of checking on the use of the material, and for a bond to guarantee payments of the difference between the preferential and the normal customs duties if the material is not used in the required manner.

(d) Trends in Tariffs

4.42 Over the past ten years, the general level of tariffs has increased, although the existence of and changes in exemptions makes quantification difficult. A comparison of 46 chapters of the Tariff Schedule in 1977 and 1982 found that the average schedule tariff (basic plus auxiliary) increased in every case when weighted by imports, and in every case except one taking simple averages of those items for which there were imports in both years. For most chapters the increases were between 10 and 20 percentage points, and in several the average increase was about 30 percentage points. The principal reason for these across-the-board increases were increases of 15 percentage points in the standard auxiliary duty rates. There were also some large increases in a number of basic customs duties. This trend continued in the 1983, 1984, and 1986 budgets, with auxiliary duties increasing in two steps by a further 10 percentage points, bringing the standard maximum rate to 40% compared with 15% in 1979. In addition, basic customs tariffs continued to rise for a number of important product groups, including chemicals, synthetic fibers and non-ferrous metals.

4.43 Over the period, there was also a steady increase in the number of products subject to reduced duties under exemptions, but except in the 1985 budget, it seems unlikely that the general tariff-reducing impact of these new exemptions outweighed the increases in general rates, especially in the auxiliary duties. In fact, except for imports which were totally exempt from auxiliary duties, increases in auxiliary duties were automatically applied to partially exempt imports. Consequently the customs duties applied to imports subject to exemptions have been increasing along with the general level of import duties.

4.44 Corresponding to the tariff increases which have occurred over the past ten years, there has been a very large increase in average duty collection rates, which on total imports more than doubled, increasing from 23.3% in 1977/78 to 60.6% in 1986/87 (Table 4.5). The increase has been particularly dramatic since 1984/85, in part because of a big increase in the incidence of specific duties on crude oil imported at much lower prices. However, collection rates on non-POL imports also increased very substantially, and in 1986/87 were more than double their level during the second half of the 1970s.

¹⁰For example, a firm which illegally resells its concessional imports would be breaking the actual user policy and would be penalized accordingly.

Table 4.5

INDIA: Import Duty Collection Rates
(percent)

	<u>Import Duty Collection rates for</u>			
	<u>Total Imports</u>	<u>Petroleum oil products & lubricants (POL) imports</u>	<u>Total minus POL imports</u>	<u>POL imports as % of total imports</u>
1974/75	25.9	8.2	32.0	25.6
1975/76	23.7	10.5	27.7	23.3
1976/77	26.2	8.4	33.1	27.8
1977/78	23.3	7.4	28.9	25.7
1978/79	30.9	11.3	37.3	24.6
1979/80	29.6	6.5	42.8	36.2
1980/81	25.8	6.9	39.5	41.9
1981/82	30.7	5.5	46.3	38.2
1982/83	34.8	4.6	52.6	38.9
1983/84	34.4	4.5	47.7	30.6
1984/85	41.3	6.5	57.3	31.5
1985/86	48.5	18.7	58.5	25.3
1986/87	60.6	45.2	62.9	13.0

Note: Imports are Rupee values in c.i.f. prices.

4.45 Although the rising average level of tariffs since 1978 has been accompanied by a steady increase in products under OGL, it should not be interpreted as an upward adjustment of tariffs on imports freed from licensing, in order to maintain protection of competing domestic industries. As mentioned before, most items (especially machinery) moved to the OGL lists were not produced in India, and these also were the products to which many of the tariff reductions were applied, the purpose being to reduce their costs and encourage the modernization and development of the industries which use them. The great majority of products on which tariff levels increased were not on OGL and were and remain protected by import licensing controls.¹¹ The principal purpose of the tariff increases was to produce increased tariff revenue from imports, but in addition it has had the effect of reducing the excess demand for imports, often to zero in the many instances of redundant tariffs, thereby relieving the pressure on the import licensing system in allocating foreign exchange. At the same time the quota rents of importing firms have tended to fall, unless they benefit from special tariff exemptions. The increase in the average level of tariffs therefore provides an improved starting point if the Government were to adopt a more general policy of removing quantitative import controls.

4.46 On the other hand it is not surprising that the increased tariffs have led to increased pressures for special exemptions by user

¹¹ The exceptions are some machine tools, pesticides, and chemicals.

industries which, when granted, have created new potential sources of quota rents and new administrative controls. Moreover, the higher general level of tariffs and the greater importance of exemptions have increased the degree and incidence of positively escalated tariffs. The trend away from tariff uniformity has also increased the incidence of negative tariff escalation, especially if allowance is made for products not produced in India and which are subject to low or negative effective protection, due to low or moderate tariffs on their output under exemptions, but higher tariffs on their inputs. More generally, the increased general level of tariffs and the greater dispersion resulting from exemptions has increased the variability of available effective protection and has correspondingly increased the inefficiency with which the tariff system allocates resources, and to this extent would increase the difficulty of moving to a more uniform system of protection.

(e) The Role of Domestic Indirect Taxes in the Trade Regime

4.47 Domestic indirect taxes--notably excise taxes, sales tax and octroi--also affect the nominal protection that is available to local producers, and the nominal protection faced by buyers, including manufacturing firms for their raw material and other inputs, and for their capital equipment.

4.48 Countervailing duties, which are the same as the corresponding domestic excise duties, are mostly within a range of about zero to 30%. However, there are a number of considerably higher ad valorem rates as well as many specific rates, some of which are equivalent to very high ad valorem rates, (e.g. on synthetic fibers and yarns, tires, air conditioners). As noted in Chapter 3, most of excisable goods are subject to MODVAT, which also applies to the countervailing duty component of import duties. There is both a central government sales tax, which applies to interstate sales, and state sales taxes which apply to intrastate sales and vary between states (nearly all sales taxes are ad valorem). As regards raw materials and intermediate goods used in manufacturing, most central and state sales tax rates are about 4%, but sales taxes on finished products (including industrial machinery), and their components tend to be higher (e.g., rates of 6, 8, 10, and 15 are common). Likewise, octroi taxes levied on goods carried by commercial vehicles vary according to the product and the municipality which imposes them, but are most frequently about 2%.

4.49 For an import competing manufacturer, the net protective effect of customs duties and indirect taxes varies according to whether he is a seller of the product in question or uses it as an intermediate input. The interactions between customs duties and indirect taxes are quite complex; the outcomes for some typical rates are given in Table 4.7, which brings out the following major points:

- Without the MODVAT offset, user nominal protection (i.e. the effective cost of an input compared to what the cost would be without any intervening customs duties or indirect taxes) is higher (and can be considerably higher) than the import duty rate (customs plus auxiliary duty). This is because the countervailing duty and octroi are charged on top of the

duty-paid price of the import and so the incidence with respect to the c.i.f. price is magnified. In the example, with customs duties of 140%, the 20% countervailing duty is equivalent to 48% of the c.i.f. price, and octroi of 2% is equivalent to a non-negligible 4.8% of the c.i.f. price. The combined effect is to increase the cost to the buyer by approximately 186% of the landed duty free price.

- With MODVAT, the user nominal protection rate is lower and generally quite close to the import duty rate.
- Because of domestic sales taxes, the available nominal protection of import-competing producers of intermediate inputs and capital goods is less than customs tariffs. This is because no sales tax is paid by purchasing firms which import on their own account, where it has to be paid by Indian manufacturers competing with these imports. Because the sales tax is related to domestic prices, it is generally higher in relation to c.i.f. prices. For example, if the domestic price (inclusive of excise) is 150% above the c.i.f. price, a 4% sales tax is equivalent to 10% of the c.i.f. price, and a 10% sales tax is equivalent to 25% of the c.i.f. price.

Table 4.6
INDIA: Illustrations of Combined Effects of Customs Duties and Indirect Taxes on Nominal Protection

	Customs duties (basic plus auxiliary %)	Customs and countervailing duties (%)	Nominal Protection (%)	
			Without Modvat	With Modvat
<u>Example 1</u>				
Producers	30	-	23	23
Users	-	56	57	32
<u>Example 2</u>				
Producers	60	-	51	50
Users	-	92	92	61
<u>Example 3</u>				
Producers	100	-	88	87
Users	-	144	139	101
<u>Example 4</u>				
Producers	140	-	125	124
Users	-	188	186	140

Notes: How these nominal protection rates are calculated is shown in the example worked through in Table T.A. 4.7. In all four examples the following indirect tax rates are assumed: Countervailing (=excise), 20%; sales tax, 4%; octroi, 2%. Unloading and customs clearance is assumed to be 4% of the c.i.f. price. To simplify, delivery costs from the port and from local manufacturers to the buyer (assumed to be another factory purchasing an intermediate raw material) are ignored. Nominal protection is the percentage excess of the domestic price over the l.d.f. (landed duty free) price.

- For consumer goods or other goods, which in other countries would normally be imported by an intermediary, available producer nominal protection would be about the same as customs duties. Under present sales tax laws, the importer would be subject to sales tax and hence the competing local manufacturer would be at no disadvantage. However, as noted previously, imports of most consumer goods are banned, and imports by intermediaries (except by canalizing agencies) are also not allowed.
- If MODVAT does not apply, user nominal protection for a particular good is generally considerably higher than producer nominal protection. This is especially true of capital equipment, for which there is no MODVAT credit, and which often carries relatively high rates of sales tax (e.g. 8-10%).
- If MODVAT applies, user nominal protection for a particular good is still generally somewhat higher than producer nominal protection because of sales tax. The introduction and extension of MODVAT nevertheless represents a major rationalization of the tariff system by eliminating most of the large gap which would otherwise exist.

C. EXPORT POLICIES AND INCENTIVES

4.50 As with imports, exports are subject to a licensing regime which is intended to serve a variety of purposes. A number of primary and some manufactured products have been subject to export restrictions of varying intensity in order to keep domestic prices below world prices. The export controls are also used to implement canalization of some exports, to regulate exports of products subject to quotas in importing countries, to enforce minimum export prices, to help control underinvoicing, to reinforce health and quality inspection of exports, and more generally (as is the case with import controls) to support a variety of domestic regulatory controls. However, the main thrust of export policies has been to promote, not restrict exports. Accordingly, with a few exceptions (e.g. cotton, cotton yarn, tea, hides and leather) in recent years, export licensing has not been a serious deterrent to exports, especially manufactured exports. Furthermore, starting in 1976, export taxes which previously applied to 25 commodities have steadily removed and now apply to only three. In addition, for many years the Government has recognized that manufacturers would not export on any significant scale to the highly competitive world markets without special assistance to offset the higher cost and other disadvantages of operating in the protected and controlled domestic market. Accordingly, a wide variety of export incentives and institutions have been established.

4.51 The Indian interventions on behalf of manufactured exports, which probably are more numerous and more complex than in any other country, can be classified under six broad headings: (a) special facilities to make the material inputs needed by exporters available, and at reduced cost; (b) free trade zones and bonded manufacturing; (c) subsidies on domestic raw materials; (d) facilities for making the required machinery and equipment available, and at reduced cost; (e) incentives for and assistance with export marketing; (f) profit tax and credit subsidies. For at least ten years, and with renewed emphasis since 1985, the Government has been

increasing and extending these incentives and attempting to improve the efficiency of their administration in order to raise the growth of manufactured exports.

4.52 Special Facilities for Material Inputs: Availability and prompt delivery of the kinds and qualities of raw materials needed, at competitive prices, is a key requirement for successful exporting. All countries that export manufactured goods operate special mechanisms to achieve these ends, at the very minimum to ensure that inputs going into exports are not loaded with domestic indirect taxes. In an economy such as India with import controls and high tariffs, both the availability and price of intermediate inputs are serious problems. The earliest and still the principal method of dealing with this problem in India is special import licenses for exporters (known as replenishment (REP) and imprest licenses), combined with duty drawback and cash compensation. The REP and imprest licenses allow the exporter to import certain restricted raw materials and components, up to specified percentages of specified exports. The imports pay normal customs duties, but refunds can be claimed through the duty drawback scheme. Imprest licenses are issued on the basis of export contracts or on past export performance, and the materials must actually be used in the exports. REP licenses are issued against actual exports after they have taken place, and to the extent that imported materials are not required, the REP entitlement can be legally sold on the open market. During the 1970s, because of the price-increasing effects of import controls and foreign exchange rationing, REP licenses often could be sold at high prices ("premiums"). These constituted a substantial export incentive, provided the materials incorporated in the exports actually could be obtained at reasonable cost. During the 1980s, REP premia have declined substantially, probably due to the steadily increasing level of customs duties but also because of some relaxation of the severity of import controls and the increased domestic production of some materials.

4.53 In addition to the refund of customs duties on imported materials, the drawback scheme also allows for refunds of excise, sales and other indirect taxes included in the cost of domestically purchased raw materials. This is supplemented by the Cash Compensatory Support (CCS) scheme, which in principle compensates the exporter for other domestic taxes, such as, for example, excise duties and sales taxes included in the cost of electricity. Cash Compensation involves the largest single direct budgetary outlay in support of exports.

4.54 A problem with imports under REP or imprest licenses followed by drawback is that, given the high levels of many Indian customs duties, exporters tie up considerable working capital, especially if there is any delay in obtaining the drawback refund. To reduce this problem, schemes were introduced for duty free imports of raw materials. The earliest of these schemes is a provision for duty-free (but not transferable) replenishment licenses for a small list of exports and associated raw materials. The most important, however, is the advance licensing scheme introduced in 1978, under which specified materials can be imported duty free on the basis of export orders. In order to streamline advance licensing procedures, a new Import-Export Passbook Scheme was announced in

April 1985, but as of early 1987 the scheme was still encountering teething problems and was not widely used. In March 1987 a series of changes in this scheme were announced which were intended to broaden it and increase its flexibility, thereby making it more useful for exporters. Finally, there is a scheme under which "Special Imprest" licenses are available for duty free imports of raw materials by Indian firms supplying projects in India subject to international competitive bidding (e.g. World Bank financed projects).

4.55 In 1985/86 export-related import licences issued¹² amounted to 19.3% of non-POL imports and 27.5% of non-POL exports. About 45% of the total value of these licenses in recent years have been for the import of gems and jewelry, mainly rough diamonds for the diamond export trade; the remainder are equivalent to about 14% of exports excluding POL and jewelry exports. Although duty free import licenses would appear to be more attractive to exporters than dutiable licences cum drawback, the use of duty free licenses has grown quite slowly since their introduction in 1976, and in 1986 they accounted for only about 18% of the value of total export-related licenses issued. The balance was accounted for by REP licenses (52%), impost licenses (27%) and "additional" (special dutiable) licenses issued to trading houses and export houses-(4%). In part the slow growth in duty free licenses reflects the flexibility of REP licenses, improvements in drawback administration and reduced delays in receiving refunds.

Table 4.7
INDIA: Values of Export Related Licences Issued
(Rs. billion)

	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Advance (duty exempt)	1.3	3.1	2.8	2.5	4.1	4.4
Special impost (duty exempt)	..	..	..	0.1	3.0	3.7
Impost	..	..	4.3	8.4	6.8	6.6
Additional	..	..	..	1.8	1.2	1.0
Replenishment (REP)	..	..	..	10.1	12.8	12.8
Total	<u>14.2</u>	<u>17.6</u>	<u>19.6</u>	<u>22.9</u>	<u>27.9</u>	<u>28.5</u>
of which for gems & jewelry	4.7	6.1	7.9	10.5	11.5	..
Total excl.gems & jewelry	<u>9.5</u>	<u>11.5</u>	<u>11.7</u>	<u>12.4</u>	<u>16.4</u>	<u>..</u>

4.56 There are serious limitations in the scope and effectiveness of the schemes described so far. In part these are due to the controls imposed to prevent illegal resale or diversion when materials which are scarce and expensive in the domestic economy can be imported free of all customs duties. However, even with the present protected and controlled environment, it should be possible to introduce substantial improvements.

¹²Excluding "special impost" licences which are related to the supply of domestic projects, not exports.

4.57 Under the duty-free schemes, some imported inputs are not allowed to exporters or are available only with expensive bank guarantees. Procedures connected with Advance Licenses are slow and cumbersome and tend to be expensive for firms to use. The inability to obtain imported inputs through middlemen with bonded warehouses makes importing impractical and overly expensive for a great many exporters, especially the smaller firms. Only the schemes based on past performance are meant to provide automatic access to imported inputs and they are limited to particular categories of established exporters. Until March 1987, the Pass Book Scheme was experiencing start-up problems; it only covered manufacturers who had exported the same product for at least three years and thus did not cover other important groups of exporters. Small and new exporters remained poorly served. So were Trading Houses and other merchant exporters, as well as established manufacturer-exporters diversifying into different export products and exporters trying to expand rapidly on the basis of buyers' orders. Most important of all, most indirect exporters (such as suppliers of inputs and final products and subcontractors to exporters) were not covered at all. The changes announced in the advance licensing and Pass Book Schemes in February and March 1987 were intended to reduce some of these deficiencies, but how effective they will be remains to be seen.

4.58 The duty drawback (DD) and cash compensatory support schemes (CCS) are deficient as well. Some aspects of their procedures and administration are generally slow, cumbersome and involve expenses by exporters. Duty drawback based on an individual firm's own coefficients (Brand Rate, Special Brand Rate), including establishment of the rates, can take up to three years. Duty drawback at present does little to offset high prices brought about by protection. Many manufactured products, most of them intermediate goods, do not qualify for any CCS at all. For some others, the actual level of rebate provided falls short of ensuring a full rebate of duties and indirect taxes paid, especially if taxes on inputs into inputs are taken into account. As a net result of these various schemes, while some direct exporters have access to some inputs at something close to world prices and quality, in general, coverage of exporters and inputs is far from complete or automatic, and for many inputs, competitive world prices and quality are not obtained.

4.59 Free Trade Zones and Bonded Manufacturing: In addition to the various special import licenses available to exporters, the Government also makes use of free trade zones (FTZs) and bonded manufacturing. So far, there are two FTZs in operation (established in the early 1960s and early 1970s) and four more are being launched. The bonded manufacturing scheme (known as the "100% Export Oriented Unit" (EOU) scheme) was introduced in 1981 and as with FTZs, the EOUs (manufacturing firms operating all or part of their factory under customs supervision) are treated as operating outside the domestic tariff area, and hence have the right to import all their requirements (including capital goods and spare parts as well as raw materials) free of import licensing controls and import duties. However, significant deficiencies are preventing the achievement of the export potential offered by the bonded export-oriented units (EOUs) and the FTZs. The EOUs are hindered by an onerous and obsolete customs control system, by excessive and unnecessary bonding

requirements, and by excessive regulatory restrictions on their flexibility. The FTZs to a lesser extent are also subject to complex procedures and paperwork, and are burdened with competing objectives. The restricted incentive package and under-funded, decentralized promotion have resulted in few foreign firms locating in the zones.

4.60 Subsidies on Domestic Raw Materials: There are also schemes for refunding to exporters the difference between the domestic and world prices of Indian materials. The most important is the International Price Reimbursement Scheme for steel (IPRS) which was introduced in 1981 and is financed by a charge added to the controlled prices of basic steel products. In 1986 this scheme was extended from basic steel products to alloy steels. There is also a similar subsidy scheme for natural rubber administered by the Rubber Board, which controls domestic rubber prices at about 80% to 100% above world prices. In 1986 it was announced that reimbursement schemes would be also developed for other important raw materials, such as aluminum and copper. Aside from basic steel products and reasonably homogenous commodities such as aluminum ingots, for which domestic prices are fixed by the Government and international prices are reasonably well known, calculating and varying the subsidy so as not to substantially over or under-compensate exporters is likely to be a serious problem with other products. Prices at which transactions actually take place can be extremely difficult to discover, especially world prices. Furthermore, prices often vary between customers and fluctuate over time in both the domestic and the international markets.¹³ More seriously, if the local raw materials have high production costs as well as high selling prices, and are not being imported, there is a danger that the subsidy will stimulate exports of products that use them at an overall economic loss to the economy.

4.61 Availability of and Reduced Tariffs on Machinery and Equipment: As mentioned previously, the liberalization of imports of capital goods and associated tariff reductions since 1976 has been to a large extent aimed at making specialized and up to date machines available and less expensive for export oriented industries such as the leather, garment, hosiery, seafood, woollen textile and diamond processing industries. In 1986 the Government announced that it would continue to pursue and broaden this policy by applying it (together with other preferential policies) to a range of "thrust industries", i.e. industries which the Government believed to have export potential. An obvious problem with the further extension of OGL status and reduced tariffs for machinery and equipment is the resulting low or negative effective protection of domestic machinery industries, as well as all the problems discussed earlier associated with exemptions giving different tariffs for the same or similar equipment according to the industry in which it is used. On the other hand, export industries may find it difficult to compete if they are burdened with inappropriate and/or expensive equipment, especially since the 1987/88 Budget which increased the duties on machinery for general industrial projects from 55% to 85%. This policy dilemma is discussed in the concluding section of this chapter.

¹³ During most of 1985 and 1986 the natural rubber subsidy was inadequate and exporters preferred to import under advance licenses rather than buy local rubber. On the other hand, the IPRS scheme for alloy steels, for which the subsidy is based on the difference between estimated world prices and SAIL's prices, was over-compensating exporters buying alloy steel from mini-steel producers at lower prices than SAIL's.

4.62 Export Marketing: From an early stage the Government has recognized that marketing of exports is generally more difficult task than selling in the domestic market. One aspect of this is that most small and medium firms, and even many firms which are large by Indian standards, cannot effectively carry on their international transactions on their own account but need to depend on specialized intermediaries. Accordingly an exception has been made for exporters as regards the more general policies which prevent private intermediaries from participating in import and export trade, by allowing (subject to detailed controls) the existence of export houses (since 1960), and since 1981 by encouraging (in emulation of Japan and Korea) the development of larger trading houses. In addition a special "Blanket Permit Scheme" is designed to ease the access of exporters (including export and trading houses) to foreign exchange needed for travel, agency commissions and similar expenses. In 1986 an experimental Export Marketing Fund was established; this makes grants (including foreign exchange) to firms which can demonstrate they are adopting a planned, systematic approach to export marketing. There are also a number of institutions responsible to the Ministry of Commerce which provide marketing and other services to exporters, namely 18 industry-specific Export Promotion Councils (EPCs); the Trade Development Authority (TDA); the Indian Institute of Foreign Trade (IIFT); and the Federation of Indian Export Organizations (FIEO). In order to prevent inferior quality exports, about 950 products are subject to compulsory pre-shipment inspection by five regional export inspection agencies controlled by the Export Inspection Council (EIC) established in 1963.

4.63 The policies and institutions described above have undoubtedly diminished some impediments to the marketing of Indian manufactured exports (especially foreign exchange controls and policies that would otherwise prevent imports and exports by private intermediaries). However, as with other export facilities, the impact on exports has been diminished by extremely detailed conditions and controls and the delay-prone procedures imposed on the export and trading houses to prevent misuse (especially illegal resale of imported materials), and on export firms requiring foreign exchange (to prevent illegal transfers of funds). Support for export marketing has concentrated on centrally provided services with assistances for marketing by individual firms being minimal. Furthermore, the Export Promotion Councils and the other general marketing support institutions have fundamental weaknesses inherent in their mandates, staffing and organization, and with almost no exceptions, they pursue other objectives more than marketing. A recent study of the compulsory export inspection system, which attempts to impose standards from outside, found that it was not only ineffective in preventing substandard exports and in improving quality, but counterproductive, by adding to costs (there is an inspection charge) and worsening shipment delays and uncertainties.

4.64 Profit Tax and Credit Subsidies: Exporters have received, in one form or another, profit tax concession since the early 1960s. At present, following several changes over the past two years, a relatively generous rebate is in place which, provided the firm in question is profitable,

can reach the equivalent of 3-4% of the f.o.b. value of exports¹⁴ depending on the share of imported inputs in exports and the overall profitability of the firm. There are also provisions for preferential preshipment and postshipment credit at 9 1/2%, both for up to 180 days. The value in relation to f.o.b. prices varies with the period for which the credits are required: for typical credit periods of 90 days on both pre and postshipment credit, the total working capital subsidy is equivalent to roughly 3.6% of f.o.b. prices, and would be about 7.2% if each were used for the maximum period of 180 days. For exports of capital goods and project exports, subsidised term financing (in excess of 180 days) is available from the Export-Import Bank. Export credit guarantees for banks and credit insurance for exporters is available from the Export Credit Guarantee Corporation. Until recently there were no systematic credit subsidies or preferences for exporters as regards term financing. However in November 1986 a new scheme was announced which gives a 20% interest rebate on long term loans to firms exporting more than 25% of their output.

4.65 Many exporters are well served by the system of export finance, but there are important gaps. Credit coverage is usually limited to all or part of the cost of physical inputs; collateral requirements discourage new exporters; indirect exporters are poorly covered; working capital credit limits for firms are overly restrictive; and the preshipment guarantee is not very effective in improving exporter access to credit. This is in part due to problems in the management and staffing of the nationalized banks, aggravated by the inappropriateness of lending guidelines such as the working capital norms ("Tandon/Chore norms"), and by delays resulting from the rules under which credit above specified limits has to be approved by the RBI. The subsidized interest rates for exporters also make lending for exports less profitable and more risky to banks than normal lending. At the same time the potential gains from fraudulent applications and diversion of credit increase the need for screening of and hence delays in bona fide loan applications, especially applications for preshipment finance. Since prompt access to adequate export credit is essential, it is not clear to what extent the subsidized interest rates have provided a net benefit to exporters.

4.66 Recent Policy Changes: In the last two years, the Government has acted to increase export incentives. As noted previously, amendments in 1986 to the business income tax increased the profit tax exemption for exports. Large investments are now being allowed in products reserved for the small-scale sector, subject to an obligation of exporting 75% of output within three years of the first commercial sales. As mentioned above, the Import-Export Pass Book and advance licensing schemes have been much improved. Drawback has been made faster. Interest rates on export credit have been reduced from 12% to 9.5% and the period of preshipment credit has been extended to 180 days for all exports compared to 90 days for a majority before this change. Steps have also been taken to help promising industries. For example, rough diamonds can be imported by exporters free of duty, and duties on machinery for use in diamond cutting

¹⁴ The provision allows firms to deduct from taxable profits 4% of "net foreign exchange earnings" (defined as f.o.b. value of exports minus the c.i.f. value of imported raw materials) plus 50% of the residual share of pre-tax profits attributable to exports. Higher domestic profits will increase the amount of the tax saving under this provision.

and polishing have been reduced; leather can now be imported on Open General License free of duty; assistance is being given to project (plant and construction) exporters for preparing submissions for international bidding; consultant firms are to be assisted in setting up offices abroad.

4.67 In October 1986 a Cabinet Committee on Exports, headed by the Prime Minister, announced important new policy decisions designed to address some of the problems that have hampered exports. Of particular significance were the decisions to: (a) allow the duty-free or low duty import of capital goods in identified "thrust" industries with good export growth prospects; (b) extend to all major export subsectors the facility already available to engineering products for supply of domestic raw materials at international prices; and (c) allow exporters to retain 5% to 10% of their foreign exchange earnings for export promotion activities. In addition, a decision has been taken in principle to remit excise duties and other indirect taxes on exports. Finally, the interest rate rebate of 20% on new (term) loans referred to above was implemented in February 1987. None of these measures are ideal, and involve costs in terms of other desirable policy reforms, but the incentive and signalling effects in favor of exports are unmistakable. These and other recent decisions give an impression of greater energy, determination, and commitment to exports than India has witnessed before.

4.68 There is evidence that these initiatives are having a favorable impact, as evidenced in particular by the increased exports of leather goods, marine products, garments, gems and jewelry. Nevertheless, the new measures, together with existing schemes, do not appear to be sufficient to permanently overcome the past stagnation of exports and to generate the much more rapid growth of manufactured exports that should be feasible given India's diversified industrial base and endowment of skilled and unskilled manpower. Many schemes are outdated, hard to administer and have yielded disappointing results. The fear that the attraction of the highly protected domestic market would induce abuses of export incentives still leads to the adoption of complex mechanisms with restrictions, including bank guarantees or export bonds, designed to prevent the illegal diversion of inputs imported duty-free by exporters. To a significant extent potential exporters still face significantly higher costs than their competitors. Indirect exporters are poorly covered by existing schemes and as a result face even higher costs than direct exporters, particularly because of their lack of access to material inputs at world prices.

D. EVIDENCE ON THE LEVEL AND INCIDENCE OF PROTECTION

4.69 Quantification of the level and structure of protection in India must rely on direct comparisons of domestic and world prices because of the dominant role of quantitative import controls and the many prohibitive tariffs. The inherent difficulty of such comparisons is compounded in India by the fact that many products have no direct counterparts in other countries, in part because of their adaptation to peculiar Indian conditions, but also because of long isolation from international competition and technological developments. Nevertheless some approximate idea of the de facto level and incidence of protection, as distinct from purely theoretical measures of protection that could be derived by combining tariffs with an input-output table, is important as an empirical background to and a perspective on industry and industrial policies.

4.70 There is, however, an important caveat in interpreting and using these estimates of the structure of measured or implicit protection. This is that potential or available protection will be higher than measured protection when it is based on licensing and prohibitive tariffs, whereas the two will be the same when they are based on binding tariffs. This is because the certainty provided by a licensing regime also provides whatever protection is necessary to restrict imports to the given level, independent of real changes in the economy. In contrast, a binding tariff permits changes in imports in response to real changes in the economy and maintains the initial level of measured protection. That is, with a fixed volume of licensed imports, domestic prices rise and fall relative to world prices, while with tariff-based protection relative prices are fixed and the volume of imports adjusts. For example, an attempt to change relative prices so as to channel additional resources to exports from import substituting industries will bid up domestic prices, leading to higher measured protection, and may produce no additional exports, if imports are constrained by a fixed volume of licenses.

4.71 Table 4.8 presents a comparison of manufacturing subsectors with high, moderate and low protection for their outputs, their inputs, and their value added (effective protection),¹⁷ which is the relevant variable for analyzing the impact of protection. This comparison highlights a number of important points:

- Protection seems to be bimodal. In terms of shares of gross value added, effective protection (EP) is "high" (above 70%) for 39% of manufacturing, "moderate" (30% to 70%)¹⁸ for only about 6%, and "low" (less than 30%) for about 55%.
- Effective protection and capital intensity are positively related. The high EP sectors are about three times as capital intensive as the moderate EP sectors, and about five times as capital intensive as the low EP sectors. Correspondingly, over half the fixed capital in manufacturing is found in the high EP sectors, but only 18.5% of employment. On the other hand 43% of fixed capital and 78% of employment is in the low EP sectors.
- The average annual wage of people employed in the high protection sectors is approximately 70% higher than the average annual wage of people employed in the low protection sectors. Thus, protection principally benefits capital and a small minority of privileged workers, while directly or indirectly imposing higher

¹⁷ Low protection was defined as 30% or less, including negative effective protection, moderate as 30-70%, and high as over 70%. The classification of protection of outputs and inputs and thus of effective protection was based on ongoing research and informed estimates. Table T.A 4.8 which is the basis for Table 4.8, distinguishes 59 manufacturing subsectors that correspond to the three digit subsectors in the Annual Survey of Industry which produce internationally tradeable goods.

¹⁸ This also means that variations in the definition of high, medium and low protection would not change the results very much.

Table 4.8

INDIA: Approximate Nominal and Effective Protection
of Manufacturing Industries

Protection Category	No. of sectors	% Share Fixed C	% Share Persons	% Share Output	% Share Gross VA	000 KWH/ Rs 000 of Gross VA	Fixed Cap. per Person (Rs 000)	Gross VA/ Value of output %	000 KWH/ Rs 000 of output	Average Wage Rs 000
Nominal, Inputs										
H	28	32.7	31.4	36.1	39.9	952.5	33.3	42.2	401.5	14.78
M	8	9.6	9.1	10.5	9.4	1919.6	33.8	34.2	656.4	10.85
L	20	57.5	59.0	53.2	50.4	1704.6	31.3	36.1	615.1	8.78
?	3	0.2	0.4	0.3	0.3	489.8	15.7	42.0	205.9	9.78
		100.0	100.0	100.0	100.0	1420.8	32.1	38.1	541.2	10.86
Nominal, Outputs										
H	27	34.8	19.8	31.5	33.0	1846.4	56.4	39.9	736.4	14.50
M	13	44.0	27.8	39.5	39.1	1002.7	50.8	37.7	378.1	14.93
L	16	21.0	52.0	28.7	27.6	1515.8	12.9	36.6	555.1	7.30
?	3	0.2	0.4	0.3	0.3	489.8	15.7	42.0	205.9	9.78
		100.0	100.0	100.0	100.0	1420.8	32.1	38.1	541.2	10.86
Effective										
H	21	53.2	18.5	41.1	39.0	1932.5	92.5	36.2	698.8	15.83
M	5	3.5	3.4	5.6	5.8	737.7	32.4	39.2	289.4	18.04
L	30	43.1	77.7	53.0	54.9	1133.8	17.8	39.5	447.3	9.36
?	3	0.2	0.4	0.3	0.3	489.8	15.7	42.0	205.9	9.78
		100.0	100.0	100.0	100.0	1420.8	32.1	38.1	541.2	10.86

	<u>Nominal Protection Category</u>			<u>Total</u>
	<u>H</u>	<u>M</u>	<u>L</u>	
(H) High Effective Protection				
% Share of Output	53.5	46.5	0.0	100.0
% Share of Inputs	21.5	17.3	61.2	100.0
(M) Moderate Effective Protection				
% Share of Output	100.0	0.0	0.0	100.0
% Share of Inputs	100.0	0.0	0.0	100.0
(L) Low Effective Protection				
% Share of Output	7.3	38.5	54.2	100.0
% Share of Inputs	36.8	7.3	55.9	100.0

Sources & Notes: The ranges of nominal and effective protection are defined as follows:
 High (H), above 70%; Moderate (M), 30%-70%; Low (L), less than 30% (incl. negative)
 No protection estimates could be made for the sectors designated ?
 The capital, employment, value added and power consumption data are from the latest available Annual Survey of Industries (ASI), 1983. For further details, see Table T.A. 4.8.

- prices on the rest of the economy. A high proportion of the output of these high EP sectors is accounted for by public sector firms.
- The sectors with high effective protection also use much more electricity on average. Measured in terms of KWH per unit of value added, they are 160% more power intensive than the moderate EP sectors, and 70% more power intensive than the low EP sectors. This also implies an even greater differential between the capital intensity of the sectors with high and low protection when indirect use of capital is included, because electricity generation and distribution is very capital intensive.
- The high EP sectors have moderate or high nominal protection on their output, but about 60% of their inputs have low nominal protection. Most industries producing basic intermediate materials fall in this high EP category (e.g. chemicals, petrochemicals, synthetic resins, fibers and plastics, non-ferrous metals, steel etc.) Their low input protection is partly explained by the low prices (relative to world prices) that they pay for primary materials such as coal, iron ore and bauxite.
- The nominal protection of industries processing basic intermediate manufactured materials tends to be high or moderate, but their effective protection tends to be lower due to the high nominal protection of these basic materials. In the case of the moderate EP category, output nominal protection is high, but input nominal protection is estimated to be higher still, with the result that effective protection is moderate.
- In the low EP category, some 38.5% of output has moderate output nominal protection and 7.3% has high nominal protection, but effective protection is low in each sector because of higher input protection.

4.72 Rough estimates of the weighted average levels of protection for manufacturing can be derived from Table 4.8 by applying the middle value of the estimated protection ranges.¹⁹ For effective protection the estimates are:

<u>Weight</u>	<u>EPC</u>
World value-added	1.40
Domestic value-added	1.46
Fixed capital	1.62
Employment	1.32

For nominal input and output protection the estimates are:

Tradeable inputs	1.40
Outputs	1.50

¹⁹ For the high, moderate and low protection categories, the middle protection coefficients are 2.00, 1.50 and 1.15.

Again the high protection accorded capital and the low protection accorded employment stand out. It is also notable that the estimates of implicit nominal protection are well below the tariffs, which mostly exceed 100%. Consequently the effective protection available from tariffs is much higher than these estimates of measured or implicit effective protection.

4.73 As regards nominal protection of tradeable inputs and outputs, there is a particularly high level and incidence of tariff redundancy in the case of primary inputs such as cotton and iron ore. On the other hand, basic intermediate manufactured inputs such as chemicals, synthetic fibers, etc. tend to have high implicit (i.e. price comparison) protection which in a number of cases exceeds available tariff protection, and the incidence and level of tariff redundancy is less. Competitive conditions in many of the more labor intensive industries processing basic manufactured materials to make components and parts (e.g. vehicle components) or final consumer goods (e.g. bicycles) leads to moderate or even low implicit nominal protection on their outputs, and considerable tariff redundancy.

4.74 The rough estimate that average effective protection of Indian manufacturing (weighted by world value added) probably lies somewhere near 40% seems inconsistent with some expectations that the Indian import controls and high tariffs would have generated high measured protection. However, the estimates become more plausible when the high weight of large, labor intensive industries such as food processing, textiles and garments is taken into account. Indeed, since the ASI data do not generally include small scale and artisanal activities, most of which (e.g. handlooms, powerlooms, garment making) are concentrated in low effective protection sectors, averaging effective protection by the ASI weights considerably overstates average effective protection for manufacturing as a whole ²⁰.

4.75 It is important, however, not to interpret this average level of measured effective protection, which is moderate by developing country standards, as implying that little adjustment would be required by Indian industry if import licensing were eased substantially. The import licensing regime has isolated local industry from process and product innovations in international industry, especially because it was accompanied by restrictions on the import of technology and on direct investment by foreign firms. Consequently, even Indian industries with low measured protection and an apparent comparative advantage (for example, industries such as food processing, textiles, garments, leather and fur products, and various engineering industries) probably would need to make significant adjustments in output mix and input use if the licensing regime were replaced by tariffs set to achieve merely the pre-reform levels of measured effective protection. If the aim were to maintain imports at about the pre-reform level and allow the adjustment of local industries to take place over a longer time period, then initial tariffs, and protection through the exchange rate, would need to be somewhat higher than the estimates of price differentials presented here. Despite this, because tariff redundancy is so substantial and widespread, there remains considerable scope for tariff reductions which would not greatly disturb production.

²⁰ Even though the EPs of small scale and artisanal sectors would tend to be higher than the EPs of the modern sectors of the same industries due to tax exemptions and evasion.

4.76 For reasons discussed in elsewhere, Indian exports generally face negative effective protection even taking into account all the incentives. Incentives generally have not fully offset the cost disadvantage of firms operating in the domestic economy. As a result, even using all available export incentives, the processing margins available from exporting are mostly less than processing margins under free-trade, let alone from import substituting production. This can be seen from estimates made by the Industrial Credit and Investment Corporation of India (ICICI) of effective protection in 1980/81 of 51 exporting firms (Table 4.9). In 11 of the 14 industries the effective protection coefficient (EPC) for domestic sales exceeded the EPC for export sales, in most cases by a substantial margin. Overall, the unweighted average export EPC was 0.74, indicating that the export incentives used by the sample firms (advance licenses, REP licenses, duty drawback, cash compensation etc.) did not fully offset input protection and domestic taxes, with the result that the processing margins on exports were 26% less than they would have been under free trade. By contrast, unweighted average domestic effective protection was 104% (EPC=2.04), indicating that the combined effects of import controls and tariffs affecting these firms' inputs and their outputs, was such that their processing margins on domestic sales were on average double the average free trade processing margins.

4.77 Evidence of the contrast between profits from exports compared to those in the domestic market can also be found in data analyzed by ICICI based on the same study of a sample of 81 private companies in 1979/80 and 1980/81, together with comparable sample studies in 1974/75 (60 firms). Most of the firms--62 of 81 in 1979/80 and 1980/81--were in engineering industries and the rest in five other industries headed by textiles. Table 4.10 summarizes average gross profit margins in each market along with the profit differential of domestic sales over exports. Profits from exports were strongly negative before incentives, primarily duty drawback (DD) and compensatory cash support (CCS). Even after these offsets, gross profitability of exports was only about 5% of sales from 1979 on, compared to 12%-14% profits on domestic sales. This is before depreciation and interest. At a more disaggregated level, in 1980/81 only 6 of 18 product groups had positive gross profits for exporters after compensatory incentives, while gross profits as a proportion of domestic sales ranged from 9.2% up to 37.10%, with 3 groups well over 20%. Just 3 of 18 product groups had higher profits for exporters, in two cases apparently because of profitable exports to the USSR.

4.78 A further conclusion emerging from the ICICI analysis is that for a number of industries, while export sales with export incentives did not cover full production costs, they nevertheless contributed to total profits by covering short run variable production costs. This would tend to cause industrial firms to undertake only marginal exports with capacity not used for supplying the domestic market, but would not justify new investment aimed entirely or principally at export markets. This helps to explain why exports have represented only a small and declining share of India's manufacturing output.

Table 4.9
INDIA: Effective Rate of Protection:
Exporting Companies-1980/81

Rank	Product Group	No. of Companies	<u>Effective Protection Coefficients</u>	
			Export Sales	Domestic Sales
1.	Castings & Forgings	4	-1.83/a	4.24
2.	Wire Ropes	2	0.30	2.03
3.	Dyes	1	0.32	5.69
4.	Ferro Alloys	1	0.51	5.81
5.	Switchgears	1	0.54	1.01
6.	Auto Ancillaries	8	0.78	0.84
7.	Steel Tubes & Pipes	4	0.81	0.80
8.	Hand Tools	2	0.82	1.54
9.	Textiles	8	0.82	1.65
10.	Textile Machinery	3	0.88	2.01
11.	Machine Tools	5	0.97	1.09
12.	Cables	5	1.03	0.89
13.	Commercial Vehicles	3	1.29	1.08
14.	Ceramics	4	1.32	1.35
	Average (unweighted)	51	0.74	2.04

/a Value added at "market price" (f.o.b. value of sales plus incentives) negative in case of three companies.

Sources and Notes: The ranking is according to EPC on export sales, from low to higher effective protection. The table is a slightly modified version of Table 4.1 in Export Performance of ICICI Financed Companies, 1978/79 to 1980/81, (ICICI October 1985.) (The results for one company producing sheet glass appear to be an aberration and have been excluded.)

Table 4.10
INDIA: Gross Profit Margins of Exports and Domestic Sales

	1974/75	1979/80	1980/81
<u>Gross Profit Margins on Sales % /a</u>			
<u>Domestic Sales</u>	14.6	12.4	13.9
<u>Exports: Without Compensation</u>	-3.0	-12.7	-11.2
With Compensation	12.4	5.4	4.9
<u>Profit Differential of Domestic Sales Over Exports</u>			
Without Incentives	17.6	25.1	25.2
With Incentives	2.2	7.0	9.0

/a Before Depreciation, Interest and Tax.

Source: ICICI, Export Performance of ICICI Financed Companies-1972/73 to 1974/75 and 1978/79 to 1980/81.

4.79 As already discussed, the Government has been adding new export incentive schemes during the 1980s, and with special emphasis since early 1985. The measures have extended the scope of existing schemes, and have attempted to improve their administration. EPC estimates for 1986 for a limited number of exported products (Table 4.11) suggest, however, that the net impact of the changes had been marginal and that export protection still tended to be negative or, if positive, still considerably less than effective protection for the same products in the domestic market.

Table 4.11

INDIA: Domestic and Export Effective Protection for Selected
Exported Products, End-1986

	EPC Domestic Sales	EPC Export Sales	Export Incentives Used
Ceiling Fans	1.20	0.81	Drawback; CCS; REP premium; preshipment credit; profit tax deduction.
Typewriters	2.17	0.84	Drawback (brand rate); pre- shipment credit; profit tax deduction.
Hand Tools	0.99	1.08	Drawback; CCS; REP premium; preshipment credit; postshipment credit; IPRS benefit.
Truck Tires	2.43	1.44	Advance license; draw-back (brand-rate); CCS; preshipment credit; post shipment credit; profit tax deduction.
Dyes	4.89	0.64	Drawback (industry rate); CCS; pre-shipment credit; post shipment credit; REP premium.

Notes: These estimates are based on World Bank research using firm-level data. The nominal protection estimates for finished products and inputs, from which the EPCs reported in the table are derived, are all based on comparisons of domestic and world prices. The estimate for hand tools assumes that the refund for domestically purchased carbon steel exactly reimburses the difference between the domestic and the world price. The EPC on exports could be greater or less than this estimate depending on the actual relation of the subsidy to this price difference.

E. IMPACT ON INDUSTRIAL PERFORMANCE

4.80 The effects of the Indian protective system on the performance of manufacturing industry have been discussed in Chapter 3 and previously in this chapter; many of these effects are well recognized in India. Accordingly, this section merely brings together and briefly summarizes some principal aspects.

4.81 First, while the protective regime has succeeded in creating an extremely comprehensive industrial base, it has done so by ignoring considerations of comparative advantage and international specialization and in particular has permitted the establishment and growth of a number of highly capital intensive industries in which India would not appear to have a comparative advantage and which have and continue to absorb a disproportionate share of national savings. Consequently, industrial development has been much more capital intensive than the more labor and probably skill intensive pattern which would have occurred under a more neutral incentive regime.

4.82 Second, despite continuing efforts over many years to improve export incentives, the protection available in and the security of the domestic market, have consistently proved more attractive to business firms than the lower profits and higher risks of competitive export markets.

4.83 Third, the extreme complexity and case-by-case nature of both the import licensing and tariff systems, has required the establishment of a large administering bureaucracy and imposes high transaction costs on the Government and manufacturing firms, both in terms of the time and attention of executives and in terms of the delays and uncertainties of obtaining licenses or tariff privileges. Moreover, these transaction costs are least for established firms following established routines and highest for new firms or established firms undertaking new initiatives. Perhaps most important, the large potential gains from successful lobbying for import or other privileges, and conversely the large potential losses which may result from successful lobbying by competitors or customers, inevitably and understandably divert the attention of industrial managers from their strictly managerial tasks of maintaining and improving the operating efficiency and general performance of their firms.

4.84 Fourth, the transaction costs which are inherent in the system are not symmetric as between supplying the domestic market and exporting. An import ban or a prohibitive tariff, as long as it remains in place and is not challenged by customers, protects local firms without any effort on their part; however, high transaction costs must generally be incurred to obtain export incentives, each of which is subject to complex rules and conditions, and which, once obtained, will almost always amount to much less financially than domestic protection.

4.85 Fifth, uncertainties, delays and mistakes in the decisions on the licensing of imports frequently lead to disruptions in investment and production programs, and even to plant closures. These uncertainties in

turn lead many Indian firms to hold much larger inventories of raw materials than they would if these raw materials could be freely imported.

4.86 Sixth, the performance of the canalizing agencies as importers is quite poor. The reasons for this include lack of autonomy and continuity in their management, their staffing, and their role in supporting a complex of interventions in the industries which they are associated. A recent study of the import canalization of six major commodities (edible oils, newsprint, natural rubber, steel scrap and sponge iron, iron and steel, and non-ferrous metals) indicated that most large canalization customers felt that they could do significantly better in terms of price, delivery and service by buying directly on their own account. These opinions were not purely theoretical, since a number of the firms were actually directly importing a part of their requirements of the same or similar products under special arrangements such as advance licenses. Smaller customers on the whole thought that the services of the canalizing agencies were "tolerable" and preferred to buy through them rather than on their own account, but this was against a background in which the alternative of importing through private intermediaries is prohibited.

4.87 Seventh, as discussed in Chapter 3, excessive and open-ended protection ²¹ has permitted the existence in a number of industries of plants which are far too small to take advantage of economies of scale. Such uneconomic fragmentation of capacity would not be possible in a system with import competition over moderate tariffs.

4.88 Finally, the protective system has reinforced the power of domestic monopolies and cartels. Because this point is important and not well recognized, it is elaborated in the next section.

F. PROTECTION AND CARTEL AND MONOPOLY BEHAVIOR.

4.89 As discussed in Chapter 3, the degree of industrial concentration in India is high. To a large extent, high plant and high firm concentration is inevitable and desirable in many industries, given the small size of domestic markets in relation to production levels required for economies of scale. Indeed, in a large number of industries production is fragmented between too many suboptimal scale plants, and efficient production would require more, not less concentrated market structures. But high concentration increases the likelihood that firms will be able to coordinate their pricing and other policies, and achieve high or at least satisfactory rates of return without much effort to reduce costs, or to improve quality and technology. Hence, as argued in Chapter 3, it is most important that domestic regulatory policies do not hinder--as they have tended to do in India--the threat of entry by new firms, diversification and specialization of product lines, and the general ability of firms to adopt flexible and mobile competitive policies. In the case of inevitably concentrated industries, however, import competition (or the threat of it) over low or moderate tariffs could be a particularly salutary spur to competitive cost minimizing and progressive behavior. Provided the tariff levels are reasonably stable

²¹ Estimates of the protection of these industries are given in T.A. 4.9 and 4.10.

stable over time and are not subject to frequent changes in response to lobbying pressures, local industries will find themselves in competition with the rest of the world and with any monopoly power limited to the degree of discretion which the structure of tariffs makes available to them. In such cases even firms which are the sole Indian producers would be obliged to keep their prices in line with world prices as mediated by tariffs, and to manage their product, technology, investment location, marketing and other policies so as to stay ahead of or at least keep up with developments in the world industry. From this point of view import competition can be by far the most effective form of monopoly control, by in effect eliminating or drastically reducing the degree of monopoly power.

4.90 In practice, rather than controlling or limiting the discretionary powers of domestic monopolies and cartels, Indian import policies have reinforced this power and have sometimes combined with regulatory and other domestic policies to reduce or eliminate potential sources of competition. This result has followed from the basic approach to quantitative import controls, which has been to ban all competing imports when "adequate" domestic supplies are available, or to allow imports only to the extent that indigenous producers cannot meet domestic demand. As noted earlier, the criterion of "indigenous availability" has been implemented regardless of the selling price of local products. Likewise, the basic "cost-plus" approach to setting import duties has allowed firms successfully to lobby for higher import duties if they feel threatened by imports which are not subject to quantitative controls, or which may be allowed if the severity of import licensing is relaxed. In the case of consumer good products, for which all imports are banned, highly concentrated industries such as the car and the three-wheeler and two-wheeler industries have not faced any import competition, even in situations of domestic scarcity with long waiting lists for their products.

4.91 In a number of very important industries, more or less complete and direct Government control of imports has been achieved by canalization using the government trading organizations. In these industries, import canalization is an essential adjunct to regulatory controls which have deliberately eliminated all or most forms of competition and replaced them with detailed and complex administrative controls over nearly all aspects of these industries' activities. Probably the clearest case is the petroleum and petroleum products industry, in which all prices and margins are determined administratively and imports, which are canalized through the Indian Oil Corporation, have no competitive role. Likewise, in the fertilizer industry, imports are canalized through the Minerals and Metals Trading Corporation (MMTC) and are distributed to farmers at prices identical to the administratively determined and subsidised selling prices of the domestic fertilizer producers. In this industry, centralized control of fertilizer imports is an integral part of the system of controls under which competition between fertilizer firms is largely eliminated by guaranteeing "retention prices" based on the production costs of individual plants, with the differences between selling prices to farmers and the retention prices of plants being made up by subsidies. Again, in the steel industry, most imports competitive with the products

of the three integrated steel producers are canalized through the MMTC²² which imports only after consultation with the Iron and Steel Controller. The Iron and Steel Controller is a Joint Secretary in the Ministry of Steel and Mines and presides over the Joint Plant Committee (JPC)²³, a producer organization which fixes identical freight equalised prices for steel products and allocates supplies to customers. The effect of this cartel-like arrangement, which is supplemented by government control of new investment, has created considerable cross subsidization between different steel products (mainly in the interests of large government consumers such as the railways) while protecting the least efficient producer (the government firm IISCO) from competition and giving the most efficient (the private sector firm TISCO) a relatively sheltered and profitable existence.

4.92 Another example is the edible oils industry, where imports of both crude and refined oils are canalized through the State Trading Corporation (STC) and are an instrument of government control over the edible oil processing (vanaspati) industry. By its imports of refined oils for sale through the public distribution system, the STC is able to influence the selling prices of the vanaspati producers. At the same time it allocates imported crude oils to them in accordance with past consumption at prices well below the domestic open market prices at which the manufacturers would need to purchase requirements in excess of the supply from the STC. In these circumstances new firms will not enter the industry and established firms will not find it profitable to make new investments for expansion, unless they can negotiate an increased supply of lower priced imported oil. Given the Government's reluctance to use foreign exchange for increased edible oil imports, this will of necessity mean reducing quotas of other vanaspati manufacturers or reducing imports of refined oils for the public distribution system, both of which measures which would meet strong resistance. Thus, the canalized control of edible oil imports has effectively become a means of restricting competition in the vanaspati industry, over and above the industrial licensing controls. Canalization of imports (through the STC) is also an essential component of the Newsprint Allocation policy, the effect of which is to eliminate competition between the four Indian newsprint mills, and between the mills and imports. Under the present (November 1986) policy, each newspaper is obliged to buy a fixed percentage of its requirements from the four Indian mills and the remainder from the STC. The indigenous component is further subdivided between the four newsprint mills in fixed proportions, with a fixed delivered price. Likewise, prices are fixed for STC's imported newsprint, with discounts for smaller newspapers, but these prices are all well below domestic prices, even without allowing for the superior quality of the imported newsprint. In this way the newsprint policy also restricts competition in the newspaper industry by providing lower prices

²² Until April 1986 these imports were canalized through SAIL, (Steel Authority of India Ltd.) the public sector integrated steel producer.

²³ The JPC consists of the Iron and Steel Controller plus representatives of steel producers and the railways.

to small newspapers and preventing the large newspapers from taking advantage of economies of large scale purchasing, which would otherwise enable them to obtain their newsprint at lower cost than their smaller competitors. A final example is the aluminum industry, in which price competition between the four firms producing primary aluminum is eliminated by ex-factory prices fixed by the Aluminum Controller (currently at about 30% above world prices.) Imports are in turn canalized by the MMTC, which sells at slightly above the identical controlled price followed by the local producers, regardless of fluctuations in world prices.

4.93 As pointed out already, the allocation of limited supplies of important raw materials can inhibit or in extreme cases prevent competition between firms in downstream industries using these raw materials. This was a major factor inhibiting competition during the 1970s, especially in the steel-using industries. Until about 1980 most Indian steel prices were controlled at levels lower than world prices despite continuing shortages in the domestic market and restricted availability of imported steel which (including import duties) cost local consumers much more than domestic steel. In this situation, despite the development of widespread blackmarkets in steel and the associated growth of the mini-steel industry, controlled allocation of steel, usually according to formulas based on past consumption, was a serious deterrent to the expansion of efficient steel consuming firms. Since 1980 domestic steel prices have increased while international prices have fallen so that domestic producer prices now exceed international prices. However, because of high duties on imported steel (now 100% on most steel products plus specific countervailing duties equivalent to another 10-20% of c.i.f. prices) and the JPC-controlled prices of domestic steels, the prices paid by users for most imported steels still considerably exceed the prices paid when the same steels are obtained from domestic suppliers. Estimates of these differences as of 1985 are given in Table 4.12, distinguishing the cost to users in a port location (such as Bombay) and the cost in an inland destination (such as Delhi). It can be seen that except for galvanised (GP) sheets, the estimated cost of the imports exceeded the local price in each case, with larger differences (some over 50%) in the inland location due to freight equalization on the local steel and inland transport costs on the imported steels.

4.94 The effect of this situation on competition in steel using industries is well illustrated by the case of steel pipe industry. This industry has considerable and persistent excess capacity, while most plants are well below MES and are insufficiently specialised. With more competition it is generally agreed that the industry would be rationalized and a number of plants would close. However, this kind of competition has not developed, principally because of a more or less permanent shortage of hot rolled steel coils supplied by SAIL (which is the sole Indian supplier) and the allocation of the SAIL quota between all producers according to formulas based on past consumption. On the other hand, inclusive of duties, imported hot rolled coils (some categories canalized

by the MMTC and others restricted) are much more expensive than SAIL's coils, and it does not pay to expand output aggressively if the incremental output must rely on them²⁴. Consequently, the state of competition and profitability in this industry is inversely related to the supply of hot rolled coils from SAIL. When the coil supply increases, firms attempt to get higher profits on a bigger turnover by lowering prices, and profits tend to fall. On the other hand, when SAIL coils are

Table 4.12

INDIA: Steel User Prices of Domestic and Imported Products, 1985
(Rs/ton)

	Import price l.d.f./ <u>a</u>	Import Price		Domestic price f.o.r./ <u>d</u>	% Excess of import price over domestic price (%)	
		Import price l.d.p./ <u>b</u>	Price inland location/ <u>c</u>		Port location/ <u>e</u>	Inland location/ <u>f</u>
Slab	2856	5739	6339	4040	42	57
Billet	2889	5802	6402	4200	38	52
Round	3407	6475	7075	4900	32	44
Equal Angle	3504	6655	7255	6050	10	20
Joist	3504	6655	7255	6140	8	18
Wire Rod	3602	6829	7429	5150	33	44
HR Coil	3569	7238	7837	6190	17	27
HR Sheet	4179	8405	9005	6520	29	38
Light Plate	4179	7113	7713	6360	12	21
Heavy Plate	4179	7113	7713	6880	3	12
CR Coil	4153	8570	9170	8000	7	15
CR Sheet	4153	8570	9170	8070	6	14
GP Sheet	4873	9709	10309	11000	-12	-9

/a l.d.f. means "landed duty free." It is the estimated c.i.f. prices ex-Europe in 1985 plus 4% of c.i.f. (MMTC service charge) plus estimated port and landing charges of Rs 100/ton. Source: Steel Sector Strategy Report, 1986.

/b l.d.p. means "landed duty paid" (including basic auxiliary and countervailing duty.) The duties used are those applicable in 1984/85.

/c Estimated by adding Rs 600/ton to l.d.p. price. This is the approximate road freight on steel to the Delhi region.

/d f.o.r. means "free on rail" prices to consumers as fixed by the Joint Plant Committee in 1985. Because of freight equalization these prices are effective delivered prices to all steel consumers regardless of their location.

/e Excess of import price l.d.p. over f.o.r. price.

/f Excess of import price at inland location over f.o.r. price.

²⁴ Imported coils are mainly used for pipes for which the required types of steel coils are not available from SAIL, or to fill in gaps (often resulting from delivery shortfalls by SAIL.) In October 1986 imported coils cost firms in the Delhi region about 21% more than SAIL's coils, while in Bombay the excess was about 13%.

in short supply, output declines, and prices and profits increase. Because they can share in SAIL's quota and buy inferior grades of coil on the open market, a number of small high cost firms producing inferior quality pipes typically open up when coils are in short supply, and cease production when the coil supply and competition increase. Evidently, this situation could not continue to exist if there were not quantitative controls on imports of coils, and if the redundant tariffs were reduced in order to eliminate the discrepancy between prices of imports and SAIL's prices. In that event allocation of supplies by the JPC would be ineffective since all firms would have the option of importing coils at about the same cost to them as the local coils. More general reforms along these lines would greatly weaken the cartel-like arrangements in the basic steel industry while simultaneously promoting competition in and the rationalization of steel-using industries such as pipes and tubes. None of this would necessarily involve much of an increase in steel imports.

G. POLICY OPTIONS

1. General Considerations

4.95 In India, as in other countries, trade policy is a contentious subject. Even those who agree that reform is needed are by no means unanimous on the desirable extent and nature of the reforms, or the appropriate strategy and tactics. Nevertheless, judging by policy statements and the general direction of trade policy changes over the past 10 years, there seems to be agreement on the following four propositions:

- Export incentives, mechanisms and institutions for manufactured exports need to be broadened and made more efficient and flexible.
- Quantitative restrictions (QRs) have many undesirable aspects and should be reduced.
- Tariffs should not be too high.
- The exchange rate should be managed in such a way that exports remain profitable and balance of payments difficulties do not abort the liberalization process.

4.96 Of these four propositions, there is most unanimity and the least opposition to export incentives, which are not an obvious immediate threat to any interest group. There is less unanimity on QR removal and tariff reforms, which have implications for a variety of other policies, are perceived as a threat to protected industries, and attract considerable opposition for ideological and other reasons. Nevertheless, both are fundamental and have been a consistent theme in public discussions, in the recommendations of the official committees which have been influential in Indian thinking on trade policy reform, namely the Alexander (1977), Hussain (1984) and Narasimham (1985) Committees, and in the discussion of trade policy in the Seventh Five Year Plan document. In 1985, the Long Term Fiscal Policy statement explicitly envisaged eventual removal of QRs from all imports except consumer goods, and proposed a simpler customs tariff consisting of five basic rates instead of the present highly complex structure. Support for QR removal and tariff reform is also

derived from increasing awareness in recent years of the connections between quantitative controls, high tariffs, smuggling, corruption and the black economy. However, while there is a general agreement on the relevance of the exchange rate for exports, Indian discussions seldom recognize that exchange rate adjustment is a substitute for export incentives on the one hand and import controls and tariffs on the other, and therefore is fundamental in considering options for trade policy reform.

4.97 In recent years considerable attention has been paid to export policies, with some success. But as discussed previously, there has been less progress in liberalizing and rationalizing the QR and tariff systems. On the one hand the expansion of the OGL lists, more relaxed administration of imports subject to licensing, increased imports under transferable REP licenses, and selective tariff reductions, have undoubtedly improved the access of local manufacturing industries to capital equipment and intermediate material inputs needed for modernization and expansion. On the other hand, most of the liberalizations of QRs and the tariff reductions have applied to equipment and materials not produced in India, while import controls have been maintained when there is domestic production. There has also been a steady and substantial increase in the general level of tariffs over the past nine years. This has had the desirable effect of reducing the demand for imports and hence the pressure on the import licensing system in allocating foreign exchange. However, the associated increase in tariff and QR exemptions for material inputs and capital equipment has probably increased the variability of the effective protection available from the regime. As a result, many well-recognized distortions and inefficiencies of import substitution industries have continued. In addition, export policy reforms have not had the impact that had been hoped for, owing to the continued pull of the high protection available in the domestic markets for most manufactured goods, and to the restrictions and controls which have been imposed on the export incentives schemes in order to prevent the diversion of duty free raw materials, preferential credit and other export benefits to the domestic economy. Moreover, the increase in export incentives since the late 1970s has been small compared to the substantial increase in import duties. The increase in the overall import duty collection rate from about 25% to about 60% in 1986/87 is equivalent to a one-sided nominal rupee devaluation which has increased the rupee cost of imports by about 28% while increasing the return from exports by much less--probably on average only a few percentage points. Together with the continuation of quantitative import controls, the resulting continued compression of imports has supported the exchange rate at a level that discourages the growth of both manufactured and primary exports.

4.98 One reason for the Government's failure so far to deal effectively with QR and tariff reform is the attractiveness of what may be called the Korean "export first, liberalize imports later" model of development. As understood by many Indians, the lesson of this experience is that after the reforms of 1962, Korea was able to rapidly expand manufactured exports, which were cross-subsidized by a variety of ad hoc, discretionary export incentives and by high, import control-assured

protection in the domestic market. According to this perception, only when Korean industry had become efficient and competitive in the 1980s was a beginning made on the liberalization of import controls. In several respects, this is a serious misinterpretation of the Korean experience, which makes its relevance as a model for India highly doubtful. First, in contrast to India, in Korea (for most industries for most of the time) exporting was equally or more profitable than supplying the domestic market. Despite the presence of import bans and controls, this situation was brought about by a system of automatically available (not discretionary) across-the-board export incentives, combined with management of the exchange rate in such a way as to ensure the profitability of exports, plus severe competition in the domestic market between firms that were directly or indirectly exporting large shares of their total output profitably, firms that were not inhibited by controls and shortages such as those existing in India. Second, again in contrast to India, the overriding criterion in decisions on the establishment and expansion of Korean industries was that, subject only to normal export incentives, they could be profitable while supplying most or large parts of their output to export markets, and in the case of manufacturers of basic intermediate materials, while both exporting directly and supplying Korean exporters of final goods under free trade conditions.

4.99 There are many lessons in the Korean experience for developing countries including India, particularly as regards exchange rate management, the automaticity and across-the-board nature of export incentives, and criteria for investment decisions but, in the Indian context, delaying the removal of QRs and the reform of tariffs is not one of them. For one thing, given the present very small share of manufactured exports in GDP (about 4%) it is not likely that export orientation and competitiveness alone could significantly affect the domestic economy and reorient business and government away from unproductive rent seeking to productive activities, as happened with the Korean reforms of the early 1960s. On the other hand, production of protected tradeables is a large part of the GDP and import policy reforms allowing potential import competition, even without large imports, could make a major contribution to improved efficiency, improved inter-industry resource allocation and to the reduction of wasteful activities associated with the present licensing and tariff system. Second, if domestic deregulation precedes import liberalization or is undertaken against a background of only vague stated intentions of import competition in the indefinite future, there is danger that new investment will be encouraged in industries which would not be competitive once import competition started, which would make the eventual process of trade reform more difficult. Finally, as emphasized previously, the generally high levels of nominal and effective protection that the present import regime make available, together with its extreme complexity, greatly complicates the design and administration of export incentives and reduces their effectiveness. Reform and rationalization of the import regime, and in

particular the removal of quantitative controls combined with appropriate exchange rate management, is therefore of crucial importance for reasonably fast growth of manufactured exports.

4.100 A second factor that has stood in the way of QR and tariff reform is the widespread belief that easing of these policies would inevitably involve the expansion of imports and should therefore only proceed to the extent that the balance of payments situation allows increased imports. However, rationalization and simplification of the import regime--meaning basically the replacement of QRs by a much simplified and more uniform tariff structure--does not in itself have any particular implications for the aggregate level of imports or for the balance of trade even though it would involve changes in the proportions of different kinds of imports. Compared with the present QR and tariff regime, at a given exchange rate, the total level of imports under a tariff-based regime could be higher, about the same, or lower, depending on the level and structure of the new set of tariffs. With simplified and more effective export incentives in place and appropriate management of the exchange rate, a faster rate of growth of exports would permit reductions in the general level of tariffs and a corresponding increase in the rate of growth of imports.

4.101 In addition to doubts about the appropriate timing of import liberalization and worries about the balance of payments, QR and tariff reform is made much more difficult by the fact that trade policies have been used in support of a variety of objectives and policies other than economic efficiency and growth. For example, industrial licensing and the planning of industrial capacities, the policies of reserving lists of products for sole production by small scale firms, the promotion of industrialization in backward areas, freight equalization and levy prices for a number of commodities would be difficult to reconcile with a regime in which there is actual or potential competition from imports, subject only to moderate tariff protection.

2. An Approach to Reforming Import Policies

4.102 Considerable progress has been made in broadening and improving export incentives, but for the reasons enumerated above, general statements of intention on import policies (such as those in the statement of Long Term Fiscal Policy) have not so far been supplemented by a coherent strategy for achieving these general objectives. Even though recent measures have introduced more uniform machinery tariffs, generally speaking, in the absence of policy guidelines, day-to-day decisions on QRs and tariffs have understandably continued to rely on established precedents and criteria. They largely reflect the outcome of the Government's need for revenue and the conflicting lobbying pressures of industries and large buyers pressing for less protection of the capital equipment and intermediate goods which they use, and the same or higher protection of the goods which they produce.

4.103 The content and explicitness of a set of policy objectives and guidelines would need to be decided by the Government in the light of many considerations. However, if there were to be some real impact on the

present trade regime, it would be necessary to clearly establish the principle that unlimited protection would not be given for "indigenously available" products, and to explicitly recognize the role of actual or potential competition from imports as a discipline on the prices and costs of domestic manufacturers. This would need to be supplemented by policies and guidelines on the replacement of quantitative import controls by tariffs, on the level and structure of tariffs, on the time phasing and priorities of reform, and on the administrative means for undertaking it, and on industry restructuring where it is required. What follows is a discussion of issues that are likely to come up if the Government were to develop such a set of policy guidelines.

4.104 The removal of QRs is of basic importance and would need to be announced as a fundamental objective of such a reform program. As regards actually implementing their removal, given the long history of import licensing and the strongly entrenched beliefs and interests involved, international experience suggests that there is much to be said for acting quickly and decisively. On the other hand the interrelations between import controls, tariffs and domestic policies are extremely complex in some industries, and in these cases some time would be required to devise an appropriate set of transitional policies (notably the level and rate of decline of tariff surcharges). In some industries consideration would also need to be given to and recommendations made on appropriate policies towards efficient restructuring. Accordingly, with this in view the process of removing QRs and replacing them with tariffs for the whole manufacturing sector might need to be undertaken during a one to two year period, during which a number of key industries would be subject to special policy reviews. For these reviews to be effective, firm guidelines would be needed as to the maximum period by which QR removal should be complete, and exceptional circumstances (e.g. SSI reservation) in which QR removal might be delayed. Likewise, since tariffs would replace QRs as the basic protective mechanism, guidelines regarding the transition to tariffs and the level and structure of tariffs would also be essential. Auctioning of import licenses could be considered as a possible way of managing the transition from QR to tariff protection.

4.105 Without QRs, tariffs would become the sole instrument of import protection policies. To enable firms to reduce uncertainty and to enable them to plan their investments and other policies, there would be much to be said for issuing the new revised customs tariff at the beginning of the reform program. With this available, firms would know where they would stand at the end of the transition period as regards tariffs protecting their finished products and tariffs on their inputs and capital equipment. For a fairly extensive range of products (especially products at present having negative or low measured effective protection) the new tariffs could be applied immediately, but for others they could be phased in by applying temporary tariff surcharges which would be set initially so as to give roughly the same effective protection as the quantitative import controls. The tariff surcharges would then decline to zero during predetermined periods, which should be short enough (say five years after the end of the QR removal phase) to deter substantial new investments or other counterproductive business policies dependent for their profitability on the temporary surcharges.

4.106. As regards the level and structure of tariffs the Long Term Fiscal Policy (LTPF) statement proposed that the present highly complex structure of import duties be replaced by a much simpler structure consisting of five basic rates which would increase with the degree of processing of the product, i.e. apart from zero or low duties on essential consumer goods, "universal intermediates" would be subject to the lowest rate, other more specific raw materials to higher rates, and components and capital goods to a still higher rate. Duties on imports of non-essential consumer goods would presumably be at the highest rates, but are not mentioned, because it was proposed that no such imports would be allowed. The LTPF gives no economic reasons for recommending the retention of import bans on consumer goods and deliberately escalating tariffs according to the degree of processing, both of which are undesirable. Even so, adoption of this proposal or something like it would represent a major improvement on the present customs tariff. But to be effective in the context of a general reform of the kind being discussed, policy decisions on the levels of tariffs and the various guiding principals and modalities would be needed. By way of illustration, a set of tariff criteria adapted to Indian conditions from tariff reform programs in other countries is outlined below. While these criteria are by no means optimal in any long run sense, they would nevertheless represent a major improvement on present policies.²⁵

- a) No tariffs would exceed about 80% except for temporary surcharges.
- b) Tariffs would generally be more than 20%, and except for inputs into exports, no imports should be completely exempt from tariffs.
- c) Most tariffs would fall within a range of about 30% to 70%, with a medium value of about 50%, compared with the present median of over 100%. To avoid "tailor made" tariffs, they could be "broad banded" as far as possible, say at the two or three digit HSC/BTN level, with a limited number of tariff rates at ten or at most five percentage intervals within this band. Because of the large number of redundant tariffs at present, the new average level of protective tariffs would nevertheless exceed the present estimated average difference between domestic and world prices of Indian manufactured products. After adding countervailing duties, it would be roughly equal to the present import duty collection rate.
- d) Except for exporters, the tariff applied to a product would be the same regardless of who imports it or for what purpose. There would be no exemptions or partial exemptions for particular industries or firms.
- e) Tariffs would be the same regardless of whether an item is locally produced or imported. They would not be reduced because a particular item is not currently produced in the country, or increased when local production commences.

²⁵ In this and the following discussion the tariff rates referred to are the present protective duties, i.e. the basic customs duty plus auxiliary duty. The "additional" or "compensatory" duty, which is the equivalent of domestic excise duties, would be applied on top of these rates.

- f) Similar materials and products would be subject to the same or similar tariff rates as far as possible.
- g) In general tariff rates would not systematically increase with the degree of processing, except that some escalation may be justified if nominal protection of a product at the beginning of a processing chain is constrained at a low level.
- h) In setting tariffs, the resulting available effective protection rates for local production would not exceed about 80% and would not be less than about 20%.
- i) Except for temporary transitional measures, "made to measure" tariffs designed to accommodate the costs of domestic firms would be avoided.
- j) As QRs are removed, and if existing implicit nominal protection of the product exceeds the tariffs established in accordance with these guidelines, temporary additional protection could be given by a tariff surcharge. The surcharge could decline to zero in steps over a predetermined period, e.g. 5 years.
- k) Similar temporary declining surcharges could be instituted if established firms are protected by tariffs in excess of the guidelines.
- l) If tariff surcharges or QRs applied to important material inputs used by an industry are such that these have nominal protection in excess of the guidelines, special compensatory tariff surcharges could be applied on top of the recommended normal tariff for the industry's finished products. These would be reduced and eventually eliminated as the input tariffs are brought within the guidelines.
- m) If important material inputs into a product are supplied with nominal protection below the guidelines, tariffs could be set at the lower end or in exceptional cases below the guideline range in order to avoid giving excessively high effective protection to the finished product. Such tariffs may need to be reviewed if the nominal protection on the inputs in question subsequently increases.

4.107 Reforms on the above lines would involve substantial reductions of existing high and largely redundant tariffs and a much more uniform structure of tariffs. The average available effective protection probably would somewhat exceed the rough estimates of the present average realized effective protection of manufacturing presented earlier. Thus, by the end of about five years when the new tariff would become fully effective, there would be a realignment of the structure of protection, not a reduction in its average level. Broadly speaking, effective protection and hence the incentives for growth and development would increase for the industries which at present have relatively low protection and which account for about 78% of manufacturing employment (and more if small scale and informal sector manufacturing is included), while effective protection would fall for predominantly capital intensive industries accounting for about 19% of manufacturing employment. Overall, such a protective

structure could therefore be expected to generate a much more labor intensive pattern of manufacturing development than at present. While increases in prices and nominal protection of some low protection industries could be expected, this would be offset by falling prices and nominal protection of other low protection industries resulting from reductions in the prices of their basic intermediate material inputs. Contraction or slower expansion of the (largely public sector) highly protected capital intensive industries would also free up national savings for investment elsewhere, as well as relieving the pressure of demand on, and capital requirements for, electricity supply.

4.108 A general move to the use of tariffs instead of import licensing to protect local industry would require the development of policy guidelines on a variety of other non-tariff barriers to imports. In this regard, it would be highly desirable to cease applying Phased Manufacturing Programs and the accompanying "List Attestation Procedures" to new and expansion projects, and to instead rely on the achievement of efficient levels of indigenization ensured by firms' own cost minimizing decisions taken in the light of the possibility of QR-free imports of raw materials parts and components over moderate tariffs. However, in the meantime, the existence of PMP agreements with many individual firms poses obvious problems, particularly since the firms concerned and/or their suppliers may have made investments in anticipation of the continuation of the PMPs (a situation not unlike that facing firms in general which have made investment decisions on the basis of protection offered by other tariff and non-tariff mechanisms). Given this, firms with PMPs would need transitional arrangements to be worked out which take account of the circumstances and recommended future trade policy environment of each industry.

4.109 Likewise, it would also be important to remove restrictions on the import of machinery, equipment and components which are on OGL lists through industrial licensing procedures and in particular the clearance of new investment proposals by the Capital Goods Committee and subsequent financing by the development banks. Present rules restricting the import of second hand machinery and equipment, even when these are on OGL lists, would also need to be abandoned.

4.110 Canalization of imports and exports is an integral part of the system of quantitative trade controls, and any general policy of removing these controls logically implies decanalization. Decanalization would also be desirable in the light of the generally poor or mediocre performance of the canalizing agencies as importers. As with import licensing, this could be undertaken in the process of enquiries on individual industries involving products imported and exported by these agencies, although some across-the-board decanalization would also be feasible. Decanalization would be facilitated and made more acceptable by the removal of QRs and tariff reforms, which reduce the potential quota rents in importing. The terms of trade effects that may result from India's large share in the world markets of a few commodities (e.g. edible oils and fertilizers) could easily be captured without canalization by imposing appropriate tariffs. If prices and expenses are indeed lower with bulk buying, importing intermediaries operating in a competitive environment would presumably expand to take advantage of them. Progressive decanalization would, however, not preclude the state trading enterprises from continuing in business in competition with private importers and exporters, provided that such competition were on equal

terms and in particular not cross-subsidized by any remaining canalized activities. Given their extensive experience of international commerce and sufficient operating and financial autonomy, the canalizing agencies might be able to develop into large scale, aggressive trading companies along the lines of the Japanese and Korean trading houses.

4.111 The "actual user" policy is also intimately connected with the present QR system and the proliferation of special tariff exemptions; its elimination would be essential if import competition over tariffs were to replace the present regime. This could be done for most OGL products in an across-the-board manner, or for particular products in the context of the review of individual industries, especially if accompanying tariff reforms (notably the removal of different tariff rates for the same or closely substitutable products) eliminate or reduce the possibilities for arbitrage profits by importers. Cutting back the scope of the "actual user" requirement could easily be accommodated by adding the products concerned to the present very short list of products importable by traders contained in the Import-Export policy (Appendix 6, List B, part 3). Eventually, with most products included in this list, the "actual user" policy itself could formally be abolished.

4.112 Trade policy reform, and specifically the removal of import bans, is an obvious problem for small scale industry reservation, even though a policy of allowing competitive imports across tariffs would be a salutary means of imposing some competitive discipline on local small scale producers regarding both quality and the extent to which their costs and prices can exceed world levels. But in practice, it would be difficult to justify allowing competition from foreign firms (even though disadvantaged by tariffs) while disallowing competition by medium and larger Indian firms. Hence import competition in such cases would probably need to be coordinated with the removal of the products in question from the SSI reservation lists or the replacement of physical reservations by tax preferences.

4.113 The economic case for the abandonment of QRs on consumer goods is if anything even stronger than in the case of intermediate and capital goods. It is consumers who would directly benefit, and the resulting pressures for lower costs, improved quality, marketing and service will be transmitted quickly to the suppliers of materials, components, equipment and services of the Indian consumer good producers. Despite these benefits to consumers there is a widespread conviction that consumer goods imports should continue to be banned. Apart from the obvious interests of the protected industries, this attitude is tied up with worries about conspicuous consumption of imported luxury goods (the Mercedes-scotch whisky syndrome), concerns about "unfair" competition based on heavy advertising of imported brands, the presence of small scale firms in a number of consumer good industries, and the feeling that consumer goods imports will mainly cater to higher income groups and involve "wasteful" outlays of foreign exchange. A serious problem, however, is that import bans give unlimited protection to domestic consumer good industries, including those producing luxuries, while at the same time inducing large scale smuggling of a number of products (notably synthetic fabrics) on which the Government collects no import duties or other taxes.

4.114 One way of dealing with these concerns would be to allow imports but to subject both domestic and imported "luxury" consumer goods to high indirect taxes. This would deter consumption, increase government

revenue, and redistribute income to the extent that high income groups continue to buy heavily taxed products. A more conservative approach would be to consider consumer good QRs in the context of enquiries into individual consumer good industries (and related final good industries such as plumbing items and electrical fittings for buildings, for example). For a wide range of industries, it should be possible to phase out QRs, particularly if most of the general concerns mentioned above do not apply e.g. if the good is not an obvious luxury, if brand identification and advertising are not of major importance, and if SSI participation is not a special concern. The case for import liberalization will be stronger if the domestic industry has a concentrated market structure so that imports would be able to impose competitive discipline and remove or reduce the apparent need for onerous and generally clumsy price controls and/or MRTP interventions.

4.115 Government purchase preferences would also need to be reconsidered in the context of QR and tariff reform. Even though other governments give such preferences, the case for doing so is not at all clear if appropriate levels of protection for local industries have already been determined by setting appropriate tariffs. In any event the 25 percent preference given by DGS&D is well above preferences in other countries, and is much higher in relation to c.i.f. prices when allowance is made for the generally much higher levels of Indian tariffs and indirect taxes.

3. An Approach to Reforming Export Policies

4.116 Trade policy reform would also need to involve a comprehensive strategy for exports. Such a strategy would require simultaneous action on a number of fronts. Economy-wide adjustments would be pursued vigorously to redress the imbalances and impediments to exports created by the existing policy regime, while an interrelated series of export-specific measures is implemented to compensate for the anti-export bias of the regime and to provide the type of institutional support given by all countries that export in a major way. The effectiveness and efficiency of export-promoting and compensatory measures would be facilitated by the kinds of reforms already discussed in the exchange rate and protective regime and, at the same time, the additional exports generated by the export measures would facilitate the continuing reform of import policies.

4.117 While export-specific measures may be able to give a strong initial boost to exports, they are not likely to achieve sustained success without a fundamental change in the overall import policies. What is needed is a greatly simplified and more neutral trade and exchange-rate regime, which is less biased against exports and which, together with improvements in the regulatory environment, fosters greater competition and efficiency. Without major efforts in these areas, excessive rewards in the domestic market will limit many firms' interest in developing exports other than as a sideline, high domestic costs will keep many promising exports uncompetitive, and the gains from diversion of raw materials and credit to the domestic market will inevitably limit the effectiveness of export incentives.

4.118 The basic objective of export-specific measures is to help overcome the serious disadvantages and constraints Indian exporters face and thereby enable them to compete more effectively with their competitors

abroad. To a significant extent, the economy-wide measures discussed above will reduce the handicaps of Indian exporters. However, the impact of broader reforms will take time to be felt, and they would not, even when fully implemented, provide exporters with a completely free trade environment.

4.119 Experience in other developing countries indicates that for export policies to be effective, the first and foremost requirement is a change of attitude throughout the government, giving exports permanent high priority. The first priority of the Government is then to create and diffuse within the industrial sector and among public officials at all levels an export mentality, to signal clearly the importance attached to accelerating the flow of exports, and to set up within the administration efficient mechanisms for improving, implementing and monitoring export-specific measures. It is important that Government view itself as being in partnership with the private and public corporate sectors, assisting private and public firms to respond to export incentives. This has been a common theme of the export successes not only in East Asia, but also in countries like Turkey and Brazil.

4.120 Measures that help exporters get their material inputs at world prices and quality merit highest priority. In this regard, a major task is to improve the existing compensatory and exemption systems by making them more automatic and increasing their coverage. All inputs and classes of exporters, eventually including indirect exporters, would be covered; administration would be streamlined so that unnecessary paper work, costly delays and duplication of efforts are eliminated. Procedures for estimating technical coefficients would be improved so that compensation or exemption fully covers all inputs required and all duties and indirect taxes paid. These systems will have to carry the major burden for the foreseeable future of getting inputs to exporters at competitive prices; as such, their effectiveness will be crucial to the whole export effort. The basic strategy would have two main elements: An effective prior exemption system to ensure exporters' access to most imported inputs on a duty and tax-free basis, complemented by an effective system of compensation to rebate duties and other indirect taxes for inputs sourced in India or for inputs whose import is not practical under the prior exemption system.

4.121 Dependable, swift access to modern imported machinery and spare parts, is of critical importance to facilitate quick modernization and technical upgrading of exporting industries, as well as achievement of quality standards and competitive costs matching the requirements of industrialized countries' markets. This is recognized in the October 1986 announcement by the Government that duty-free and low-duty capital goods will be provided to selected exporting industries.

4.122 However, as noted previously, such a policy involves a dilemma, in that it disprotects domestic capital goods industries which must generally pay high prices for their raw material inputs, and introduces a new ad hoc, discriminatory element into trade policies, since the capital goods received over low tariffs by the selected industries will in general also be used to produce for the domestic market. In addition, the same or similar capital goods imported by other industries would be subject to much higher tariffs, thus conflicting with the objective of a much simpler

and more uniform tariff structure and the removal of administrative controls necessitated by the present tariff exemptions. Consequently, this measure would need to be limited to investments meeting specific predetermined criteria. Specifically it is suggested that (a) zero duties and indirect taxes on capital goods and spare parts be provided for investment projects of, say, Rs 20 million or more with at least 50% of the output to be exported; and (b) reduced rates of duty and indirect taxes be provided on capital goods and spares for investments meeting half the above criteria (investment of Rs 10 million or more with at least 25% of the output exported). The reduced rate might be 40% or one-third of the full rate, whichever is higher. Duty relief along lines such as these would be subject to periodic ex post monitoring of progress of the investment and its export performance. In case of failure, the investors would be required to pay the unpaid duties. Relief for exporting firms not meeting these criteria and paying normal tariffs on their capital equipment could be achieved by a payment separate from but similar to CCS.

4.123 As with other export-specific measures, the provision of special export credit facilities involves a trade-off between offsetting incentives which are biased against exporters, and introducing distortions into the capital markets which may impede desirable capital market reforms. The problem of providing and administering special credit facilities for exporters are especially acute if the exchange rate and other aspects of the general policy environment do not make exporting a particularly profitable activity. Hence general policy reforms which increase the profitability of exporting would also facilitate the access of exporters to adequate credit, while reducing arbitrage opportunities and the screening and administrative costs involved in controlling them.

4.124 Nevertheless, there are important gaps and deficiencies in the present Indian export credit system, and while recognizing the above problems, a number improvements can be suggested. First, efforts could be made to improve the access of indirect exporters to credit, perhaps through the use of domestic letters of credit. Second, the system of export credit would cover all exporters based on either past performance (as is already the case in a few products) or confirmed orders (now the basis in other products), giving most exporters a choice where none exists now. Third, the preshipment loan coverage would be increased to cover 100% of the cost of domestic and imported inputs, and eventually, to include half or more of the value added involved in manufacturing the product (payroll, capital and overhead expenses, etc.). Fourth, export credit in response to orders would be made available based on reliable letters of credit and not be limited by standard working capital credit norms and limits for individual firms. Fifth, preshipment export credit would be shielded in one way or another from credit "crunches" caused by balance of payments difficulties and restrictive monetary policy. Finally, the preshipment guarantees of the Export Credit Guarantee Corporation would need to be strengthened to ensure wider access to credit, especially on the part of new and small exporters.

4.125 With few exceptions, export marketing and related product design are inadequately developed. If export growth is to be accelerated, a much more active marketing and design effort focussed on developed market

economies will be necessary. Although centrally-provided support services are important, the key to success will be in the quality and extent of marketing by individual firms: this is where the major effort would now be concentrated. Central services also require reform.

4.126 The Government announced a 5% to 10% foreign exchange retention scheme for export promotion and marketing in October 1986. For maximum effectiveness, such a scheme would be applied so as to cover all foreign exchange requirements, except imports of goods, thereby relieving exporters of their many headaches caused by foreign exchange restrictions.

4.127 The present system of quality control and inspection could be phased out, as recommended by the Hussain Report, and replaced by a program of positive measures to encourage exporters to upgrade export quality voluntarily for the increased profits that this can bring.

4.128 Regulations inhibiting work force reductions can severely impede the adaptation of the industrial structure to evolving circumstances. Exporters, more than other employers, require flexibility to adjust their work forces to changing needs, especially since their orders tend to fluctuate sharply in size and products required, and productivity improvements are needed to stay competitive. Thus labor legislation could be amended to give export entrepreneurs greater freedom to adjust their work forces or even close plants in exchange for reasonable worker compensation.

4.129 Infrastructure deficiencies are recognized to be a major source of weakness in India's industrial performance. Indian exporters have indicated that the most troublesome infrastructural problems they face are the unavailability of reliable, competitively priced communications, power, and transport. While a general solution to these infrastructure problems is many years off, the needs of exports call for special efforts on at least four fronts. First, investment would be directed more than at present into export-oriented facilities. Second, steps would be taken to improve domestic and long-distance air freight services. Third, special measures would be taken to give exporters--particularly the more efficient and successful ones--high priority and quick service in the immediate allocation of infrastructure services presently available. Fourth, exporters would be allowed to locate plants in cities and urban areas where infrastructure is already available provided that no significant social costs, such as pollution, are involved.

4. Aspects of Implementation

4.130 For substantive reforms to be carried through, experience in other countries suggests that the time period over which the reforms would be implemented should not be too long (say five years) and that the basic policies, guidelines and time phasing should be publicly announced in advance. Otherwise new investments and changes in other policies which are incompatible with the thrust of the reform program are likely to take place. In India, because of the complexity of both the trade related and domestic controls, their variation from industry to industry, and the probable need for restructuring in a number of important industries, the foregoing discussion has suggested that the removal of QRs and their

replacement by tariffs and temporary tariff surcharges might have to be done over a one to two year period, during which reviews of important industries would be undertaken. It was also suggested that a period of up to five years could be allowed for tariff surcharges to disappear and for the new import tariff to become fully effective. The danger of this, rather than a more drastic across-the-board reform, is that it would leave the basic structure of the protection system and the administering bureaucracy in place and would provide ample opportunities for obstruction and delay by the many interest groups opposed to change. Hence, if policy reforms were to be implemented in a way that would have a significant impact, extremely determined and continuing support from the highest levels in the Government would be needed. This also implies that individual industry enquiries would have to be completed expeditiously, which in turn emphasizes that they would have to be undertaken within the constraints of tight time and policy guidelines. Likewise, sufficient resources would need to be provided to manage a number of enquiries simultaneously. Experience in some countries also suggests that there are advantages in making the proceedings, evidence and reports of such enquiries public in order to lessen and perhaps bypass the many opportunities for lobby-group pressures when studies and recommendations are made in secret within the administration.

4.131 Many factors would of course influence decisions as to which industries would be subject to special enquiries and the order in which the enquiries would be undertaken. Some relevant but not necessarily mutually consistent considerations are:

- The desirability of tackling some of the most difficult "eyesores" early on while the reform program has its initial momentum.
- The desirability of giving priority to reviewing the major Indian industries producing basic raw materials which have high production costs and high protection. Successful policy reform which succeeds in bringing down nominal protection on such products should greatly facilitate policy reforms affecting downstream products.
- The desirability of reviewing some disprotected and underprotected industries at an early stage in order to demonstrate that the reform process involves increases as well as decreases in protection and incentives.

4.132 As emphasized previously, the proposed reform process could be accompanied by more general across-the-board type reforms where these are feasible and acceptable. These could include, for example, discontinuing phased manufacturing programs for new projects, and a general expansion of the list of products to which "actual user" conditions do not apply. It also may be possible, reasonably early in such a liberalization process, to adopt "negative list" principles: i.e., all items not on restricted lists would be freely importable, while all items not listed as being confined to imports by "actual users" would be freely importable by anyone.

4.133 As emphasized elsewhere, a crucial element in a liberalization process would be judicious management of the exchange rate accompanied by

appropriate monetary and fiscal policies. Efforts to broaden, simplify and improve export incentives and institutions would also need to continue. Otherwise, balance of trade deficits could stop or reverse the reform program. However, the proposed policy guidelines allow for phasing in the new tariffs over a number of years, and would involve tariff increases as well as decreases. A reform program along these lines therefore need not lead to sudden surges of imports, and could allow time for exports to respond to exchange rate adjustments and to the reforms of the trade policy regime.

4.134 Trade policy reforms and particularly reforms of import and tariff policies on the lines proposed, would eventually have an important impact on many aspects of the domestic policy environments of Indian industries. Trade policy reforms would therefore need to be coordinated with reforms of domestic policies affecting the industries which are reviewed, including industrial licensing, small scale industry policies, price controls, location policies, MRTP and FERA.

4.135 With the kind of import policy reforms being proposed a number of industries would probably need to be substantially restructured. For restructuring to take place in an economically efficient manner, accompanying reforms of domestic policies which would allow the industry sufficient flexibility to adjust would be of special importance. In addition, the experience of countries like Japan suggests that in some cases positive adjustment programs involving a government role in easing the financial burdens on firms and workers while speeding up the adjustment process may be preferable to more drawn out, initially market determined processes of adjustment. The problem with the latter is that market forces may not be allowed to work for very long without building up pressures which lead to the introduction of ad hoc and essentially counterproductive government measures which may slow down or even abort necessary adjustments and even the initial policy reforms themselves. Even though positive adjustment programs are likely to be suboptimal compared to purely market determined adjustment, and mistakes may be made, they still may be preferable to such a scenario. However, it would be important to ensure that the basic objective of such programs (which may involve closing high cost or obsolete capacity, mergers, relocation of plants, etc.) is to produce a new industry structure similar to the structure that would result if (subject to the new policy regime) market forces were allowed to operate without serious hindrance.

4.136 The removal of QRs and the implementation of a new tariff along the lines proposed would obviously affect government revenue. However, in both the short and long run the net effect is likely to be positive for the following reasons. First, the tariff reform proposed involves increases as well as decreases, leaving average tariffs about the same as they are now if all tariff exemptions are allowed for. Hence, if total imports were to remain about the same, customs revenues would also be unchanged. However, if as intended the reforms help to engender more efficient production and faster economic growth, the base for both domestic and trade taxes will increase. If, as would be expected, exports and imports grow faster than GDP, there would be an additional source of increased government revenue, since under the proposed reforms export incentives are at present and would remain much lower than import tariffs. Furthermore, increased revenue can be expected insofar as tariff

reductions on certain items with currently high or very high customs tariffs divert smuggled imports to legal channels. Finally, there will be a short run revenue gain insofar as the proposed temporary tariff surcharges capture quota rents that now go to importing firms.

4.137 India's trade statistics are generated with a long lag and are highly unsatisfactory for policy-making purposes. Adequate and timely trade statistics would become even more important for monitoring progress and to inform policy decision in the kind of trade reform program that has been proposed. Although recent steps to computerize the tabulation and processing of trade data are expected to lead to more statistics becoming available within a year, additional steps are needed to further streamline the generation of data. The needed steps include greater and closer coordination and integration between the Directorate General of Commercial Intelligence and Statistics (DGCIS) and Customs to computerize the work, and steps to bring users, policy-makers and special advisers into the design of the statistical tables to be presented.

Nominal and Effective Protection

The effects of any trade policy regime on the levels and variability of incentives for domestic productive activities are normally discussed and can be measured by using the concept of effective protection to value added. Effective protection is the difference between the observed processing margin of an activity, and what that processing margin would be if the finished product were sold at the world price and all the material inputs were bought at world prices. This can be illustrated by assuming that a machine made in India sells for Rs 185 while the required material inputs cost Rs 90 so that the value added or processing margin is Rs 95 per machine.

	In actual prices (Rs)	In world prices (Rs)	Protection
Exfactory price	185	100	NPC=1.85(85%)
Cost of material inputs per machine	90	60	NPC=1.50(50%)
Value Added	95	40	EPC=2.38(138%)

With no import duties or other protection, the machine would sell for Rs 100, the material inputs would cost Rs 60, and the value added or processing margin would be Rs 40 per machine. Consequently, the combination of the nominal protection of the machine (85%) and of the nominal protection of the material inputs (50%) has raised the value added from Rs 40 to Rs 95, or by $(95-40)100/40=138\%$. This is known as the effective protection rate (EPR) and means that the processing margin (labor, capital and other costs plus profit) has been increased by 138% compared with a no-protection situation. The nominal and effective protection rates can alternatively be expressed as coefficients i.e. the nominal protection coefficient (NPC) of the machine ($185/100=1.85$) combined with the NPC of the material inputs ($90/60 = 1.50$) gives an effective protection coefficient (EPC) of $95/40 = 2.38$.

Effective protection depends on the nominal protection of both the finished product and of the material inputs. If the nominal protection of the machine were to remain at 85% (NPC=1.85) while the nominal protection for the material inputs were to vary from 30% to 160%, the effective protection would vary as follows:

Average input NPC	Corresponding EPC	Average input NPC	Corresponding EPC
1.30----->	2.69	2.00----->	1.50
1.50----->	2.38	2.20----->	1.33
1.70----->	2.08	2.42----->	1.00
1.85----->	1.85	2.60----->	0.73

When the average input NPC is 1.30, 1.50 or 1.70 the EPC is greater than the nominal protection of the machine. This is known as positive escalation. When the input NPC is 1.85 and is equal to the NPC of the machine, the EPC is also 1.85. When the input NPC exceeds the finished product NPC, however, the EPC is less than 1.85. This is known as negative escalation.

When EPCs exceed 1.00, this is sometimes referred to a positive effective protection, while EPCs below 1.00 are referred to as negative effective protection. Thus the EPC of 0.73 is equivalent to an EPR of minus 27%, indicating that the 160% protection of the inputs has more than offset the effect of the 85% protection of the machine, so that the processing margin is 27% less than it would be without any protection on either the machine or the inputs.

Effective protection for exports is conceptually the same as effective protection for import substitute production. In the Indian free trade zones firms sell and buy at world prices and hence their effective protection is zero (EPC=1.00). Firms which export from the domestic tariff area, will usually have negative effective protection (EPC<1.00) unless the export incentives they receive more than offset the excess cost (over world prices) of their material inputs.

An Example of Tariff Exemptions: Stainless Steel

Before exemptions, the general rate of import duty on stainless steel is 340% (300% basic plus 40% auxiliary) plus countervailing duty varying from Rs 365 to Rs 715 per ton. However between 1981 and 1986 a series of 7 exemption notifications created the following duties (basic plus auxiliary) according to the kind of stainless steel and the use to which it is put. New exemptions for new uses of stainless steel were announced in the 1987/88 budget, but are not taken into account below.

<u>Stainless Steel Plates, Sheets and Strips</u>	<u>Tariff Rate</u>
1. Of 16 "Birmingham Gauge" (BG) thickness or more when used to manufacture equipment for 10 specified industries	65%
2. Of 16 BG thickness or more when used to manufacture 12 specified equipments or components	65%
3. Strip of prescribed specifications for use in the manufacture of tubes for electrical heating elements	100%
4. Strips 30 BG or thinner when used for razor blades fountain pen nibs and watch straps	145%
5. All other plates, sheets and strips	225%
<u>Stainless Steel Bars, Rods and Wires</u>	
6. Cross sectional dimension less than 10 mm	100%
7. Cross sectional dimension 10mm or more	190%
<u>Hotrolled Stainless Steel Coils</u>	
8. Imported for cold rolling to manufacture plates sheets or strip greater than 16 BG thickness which used to manufacture equipment for 10 specified industries or 16 specified equipments or components (as in (1) and (2))	65%
9. Imported for cold rolling to manufacture items other than those mentioned in (8)	90%
10. <u>Stainless Steel Melting Scrap</u>	30%
11. <u>All imports of stainless steel not elsewhere specified in (e.g. ingots, angles, shapes)</u>	340%.

This very diverse structure of import duties clearly reflects successful lobbying by some user industries (e.g., petrochemicals, fertilizers, synthetic detergents) which benefit from the lower rates, and by the Indian stainless steel industry itself, which has succeeded in retaining extremely high import duty rates on some outputs while benefiting from the low rate of import duty (by Indian standards) on its principal input (stainless steel scrap.) But it is obvious that such very large differences in import duties would not achieve their purpose without detailed direct controls over imports (stainless steel items are either on the restricted or limited permissible lists) and over the use to which the imports are put. For example, without controls, all plates sheets and strip of 16 BG or more would be imported at the 65% tariff and none at the 225% tariff, and the domestic price level would be driven down approximately to the c.i.f. price plus 65%. At the same time, to the extent that controls over imports and their use are successful in creating a domestic price structure similar to the structure of tariffs, many obvious economic costs and inefficiencies are likely to ensue. These include incentives for inefficient substitution (e.g. the use of bars and wires of less than 10mm when bars or wires of larger diameter would be more appropriate), costs incurred by firms in attempting to divert or illegally sell steel imported at preferential rates, administrative costs to the government of attempting to suppress this activity, and perhaps most important, inefficient high cost production of stainless steel sheltered by the high effective protection which the protective system makes available.

Chapter 5

INDUSTRIAL POLICY REFORM, ECONOMIC GROWTH AND EXTERNAL CAPITAL REQUIREMENTS

5.01 India's industrial policies have had a large measure of success in accomplishing some of the country's fundamental development objectives. High protection of domestic producers, large scale government investment, and widespread controls and incentives have interacted to encourage the development of a sector that produces a broad variety of products, that is increasingly regionally dispersed, and that has given the country considerable self-reliance. Nevertheless, this policy framework has carried with it some important costs: output growth, productivity increase and employment expansion have been below the hopes and expectations of the nation's policymakers; many of the products of Indian industry do not approach international standards for price, quality and reliability; and technology has lagged behind the rapidly advancing world frontier.

5.02 There has been increasing recognition of the limitations of current policies and the potential benefits of reforms aimed at increasing productivity and competitiveness. The Seventh Plan emphasizes productivity improvement and technology upgrading within industry. It calls for a "substantial degree of competition" and a progressive shift from physical controls and direct interventions to fiscal and financial instruments. A significant number of policy changes have already been introduced to stimulate firms to enter new markets, upgrade technology and expand output. Moreover, the more liberal and expeditious administration of existing regulations has facilitated industrial investment and modernization, and has increased actual and potential competition. A deepening and broadening of these reforms, including reforms of trade policy, would help sustain the higher growth rates of manufacturing achieved during 1985/86 and 1986/87 and contribute to India's potential for realizing even higher rates of growth.

5.03 The strategy suggested in this report for trade and industry policy reform, building on the initiatives already taken, is summarized briefly in Part A, Sections 1 through 3. The coordination of reform, its sequencing and timing, the macroeconomic and financial sector framework for reform, and the likely benefits and costs of reform are discussed in Part A, Sections 4 through 8. This is followed by an analysis of the prospects for the growth of the Indian economy in the light of such a reform, the risks associated with reform, and a discussion of the role of the international community in supporting the reform with increased capital flows.

A. AN APPROACH TO POLICY REFORM

1. Strategy

5.04 The strategy suggested here calls for a gradual shift away from the existing complex system of domestic regulatory controls and quantitative restrictions on trade, towards greater reliance on prices, suitably modified by taxes and subsidies, and on competition, domestic and

international, to guide investment and production decisions. This is consistent with the spirit of the Seventh Plan and the recommendations of numerous government commissions; it would build on initiatives recently taken. Its basic goal would be the creation of an environment that fosters efficient resource allocation as well as flexible and market-responsive firm behavior. This would result in higher growth, an increase in employment, a greater supply of better quality and lower priced goods for the domestic market, and larger foreign exchange earnings.

5.05 The effectiveness of policy reform will depend on its scope, internal consistency and timing. The program for implementing the strategy would involve concurrent changes in domestic regulations and trade policy to encourage internal competition, promote export rivalry and gradually expose domestic industry to import competition. Substantial rationalization of both regulatory and trade policy will be necessary to reduce the present barriers to domestic and international competition.

2. Domestic Industrial Policies

5.06 Industrial Licensing: The Government has used industrial licensing to achieve a variety of objectives, including the expansion of priority industries, the decentralization of plant location to "backward" regions, and the conservation of scarce resources by ensuring a physical balance between domestic supply and demand. However, the system of licensing has not been entirely successful in achieving these objectives and has imposed high costs in terms of static and dynamic efficiency losses.

5.07 It is suggested, therefore, that all forms of capacity licensing for industry be phased out completely over the medium term. This could be done by progressively raising the investment size limits below which a license is not required. Industries facing low effective protection or competitive markets could be completely delicensed in the short run. Special permits would still be required for those few industries that pose large security or environmental concerns, such as weapons, explosives, and nuclear power. Cities and states would retain the use of zoning to control congestion and pollution. Large investments, in which the Government is effectively a partner because of infrastructure investments or borrowing guarantees, would still be scrutinized by the concerned ministries. The focus of decisions on investment and technology choice would thus gradually shift to the industrial firms, with additional scrutiny coming from lending institutions appraising investments from the perspective of loan security and repayment capacity. The pattern of investment would, however, continue to be influenced by fiscal incentives and subsidies.

5.08 Regulation of large or dominant firms should be aimed at identifying and restricting unfair or anti-competitive business practices that harm consumers' interests. In other words, it should not be assumed that a firm that has or would attain a certain size or share of a market would abuse its economic power. Rather, the risk of its doing so should be controlled by the threat of competition, foreign and domestic, and by the threat of prosecution if it engages in unfair practices.

5.09 It accordingly is suggested that MRTP clearance, as a condition for entry or growth, be phased out completely over the medium term; that the emphasis of the MRTP commission be shifted to regulating and punishing anti-competitive practices; and that the code of unfair practices be strengthened. In the interim, the phasing out could be done by progressively raising the asset limits defining large or dominant firms and above which MRTP clearance is required. Also, in the interim, the criterion for dominance could be eased by broadening the definition of markets. It is also suggested that interconnection be applied only in cases where linked firms operate in the same broadly defined market, as "interconnection" is a weak criterion for establishing the likelihood of firms engaging in monopolistic practices.

5.10 A complementary interim measure would be to expand the lists of industries in which MRTP can enter or expand. A further suggestion to clarify and ease the administration of MRTP would be to switch from the current system, which limits entry and growth of MRTP firms to a short list of industries, to a system that generally permits investment or expansion by MRTP firms except in explicitly reserved sectors. All other industries (except goods reserved for the small-scale sector) would be open to investment by large or dominant firms. The number of industries on the restricted list could be reduced, eventually to none, as the MRTP Commission and staff developed more capacity to assess and punish anti-competitive behavior and unfair trade practices.

5.11 Small-Scale Industry: There are many reasons for generously encouraging the entry of new small firms. However, the case is weak for perpetual and absolute protection of small firms and for measures that discourage their optimal growth. Policies protecting small-scale industries have heightened the barriers to and reduced the incentives for growth, specialization and modernization. It is therefore suggested that incentives for small-scale firms be modified to facilitate their efficient growth as well as to promote entry. Time-limited subsidies and tax exemptions would be the main instruments of promotion. Entry would, however, not be encouraged by permanent reservation of products for SSI; rather, greater competition and incentives to modernization would be used to stimulate efficient growth.

5.12 The dereservation of products might take place gradually, with products in which SSI is not performing efficiently deregulated first. It is also suggested that the asset limits on firms producing reserved items be progressively raised to facilitate their growth, and that they be allowed to integrate their activities with large units. Large units would be permitted to take a minority equity stake in small ones, thus stimulating subcontracting arrangements, transfer of technology and managerial skills, and further specialization.

5.13 Subsidized credit and income tax exemptions currently provided to small-scale firms would be temporary, available for, say, five years to a given firm. The recently modified excise tax exemption system would become the main source of assistance to small-scale industry. Gradual phasing in of excise taxes as firms expand is already in place. This better promotes growth than the previous system, which called for imposition of the full excise tax when output reached a certain threshold.

5.14 Industrial Location Policy: The licensing system, subsidies for investment, tax concessions, preferential and subsidized credit and infrastructure development have all been used to achieve greater regional disperion of industrial development. However, the development of backward areas could be encouraged more efficiently by replacing these subsidies and controls with direct production subsidies and/or excise and sales tax concessions, and by providing better infrastructure. The removal of backward area investment and credit subsidies would reduce the current bias in favor of capital-intensive production. A move from directed licensing to automatic fiscal incentives for industries located in backward areas also would result in a more efficient pattern of industrial development, as the firms choosing to set up in backward areas would be those least disadvantaged by doing so.

5.15 As infrastructure in backward areas has been inadequate and too thinly spread, there is a case for initially concentrating efforts to provide or improve infrastructure in a limited number of growth centers (the 20-30 as suggested by the Pande Committee, rather than the 246 currently designated backward areas).

5.16 Locational objectives also include the avoidance of urban congestion and pollution. Rather than use licensing for this purpose, a system of land use zoning could be developed and firms could be permitted to make their own decisions, but within a framework of (a) charges reflecting the full costs of the provision of land, power and infrastructure, (b) local taxes that reflect the full cost of provision of urban services congestion and pollution, and (c) freedom to move away from congested urban areas without tax penalties.

5.17 Public Sector Enterprise (PSE): There is widespread recognition of the need to improve the economic and financial performance of public enterprises, and the Government has recently commissioned a White Paper on Public Enterprises. Committees chaired by L.K. Jha, M. Fazal and A. Sengupta have recommended that public enterprises should have increased managerial autonomy and accountability. In addition, PSEs could progressively be required to compete on a more equal basis with private sector producers and imports. This would involve the phased elimination of purchasing and price preferences, access to capital and credit on concessional terms, and protection from competition through controlled marketing arrangements. Also, social obligations imposed on PSEs would be financed by an explicit allocation of Government funds.

5.18 Administered Prices: Price and distribution controls have been applied in a manner that has insulated both public and private producers from competition and the need for modernization and cost reduction. Where greater freedom has been given to firms to set prices (e.g. cement), the results have been beneficial.

5.19 Progressive price decontrol, accompanied by removal of regulatory barriers, would be desirable. In markets that are competitive and well supplied, full or partial decontrol of prices could be introduced immediately. For products whose prices are not immediately decontrolled, it is suggested that pricing policy be based on clear economic principles: ex works prices ought to be uniform for specific products, regardless of

past or current production costs; be frequently monitored and reviewed; and remain moderately close to long-run border prices for tradeable goods or be linked to long-run marginal cost for non-tradeable goods. It would also be desirable to implement the recommendation of numerous government committees to abolish freight price equalization practices, so that the prices of goods in different geographic locations reflect the cost of delivery.

5.20 Taxation: The introduction and recent extension of the modified value added tax, together with the reduction in direct tax rates, have lessened the detrimental effects of direct and indirect taxation on entrepreneurial behavior and industrial efficiency. To extend these gains, it is suggested that a clearer distinction be made between differential taxation to favor investment in selected activities and taxation to discourage consumption (e.g. of luxury goods), and that production tax rates be made more uniform. Efforts are also needed to unify sales taxes and remove the octroi taxes; these have contributed to fragmentation of production by acting as a barrier to interstate trade.

5.21 Adaptation and Exit: Giving companies greater freedom to make investments, enter new lines of production, and expand, as is suggested above, may have only a modest effect if firms are not concurrently given greater freedom to adapt to market forces by retrenchment, merger, or closure and sale of assets.

5.22 In the field of labor, the Industrial Disputes Act could be modified to provide employers with greater autonomy to manage the size of their labor forces, within firm guidelines for working conditions, remuneration and retrenchment compensation. Trade union reform in the direction of developing the concept of lead unions for negotiations and achieving a reduction in the number of unions in each plant would assist constructive labor relations.

5.23 Timely adaptation would also be facilitated by permitting assets, including land, to be transferred more quickly. Bankruptcy and winding-up procedures that currently take up to ten years could be simplified. The Government should continue its policy of not taking over sick units, and rehabilitation programs ought not make it attractive for businessmen to have units declared sick (e.g. preferential access to power with deferred payments, and credit at concessional interest rates should not be granted). Financial institutions and banks must be encouraged to take hard decisions, including restructuring and management changes when financial difficulties first emerge. While in most cases the management of decline is a job for the concerned firms and financial intermediaries, there may be some industries in which the shedding of loss-making lines needs to be coordinated by a public agency. Training, retraining, and food-for-work and employment guarantee schemes could be part of the package to help ease the adjustment process.

3. Trade Policies

5.24 Foreign trade will play a key role in India's transition towards a more dynamic economy. Imports of state-of-the-art capital goods provide the fastest route to modernizing the Indian economy and improving efficiency. Exports must grow to provide the foreign exchange for imports

and the market for increased production of labor and skill-intensive goods. Foreign trade can, over time, be used to expose Indian producers to foreign competition, thereby complementing the Government's efforts to enhance domestic competition. In its 1985 Export Import Policy the Government took numerous steps to improve export incentives and rationalize import restrictions. There are some indications that tariffs are playing a larger role and quantitative restrictions a smaller one in limiting imports. The administration of QRs has also eased. On the export side, numerous measures were taken between October 1986 and April 1987 to improve incentives. Finally, the 1987/88 Budget unified tariffs on many capital goods. Despite these changes, numerous additional reforms are needed to increase the competitiveness of Indian exports and, over time, to rationalize and reduce the level of import protection.

5.25 Exports: A comprehensive strategy to attain and sustain higher export growth rates would require additional, simultaneous action on many fronts. Economy-wide adjustments would be pursued vigorously to re-orient the trade regime toward exports, while an interrelated series of export specific measures is implemented to compensate for the anti-export bias of the existing trade regime and provide the type of institutional support that is available to exporters in the outward-oriented developing countries. Both types of measures are needed--the general measures to reverse the profit differentials in favor of domestic sales that currently limit firms' interest in exporting, and the export-specific measures to provide support while the general measures take effect and to guarantee exporters a free trade environment over the longer term.

5.26 One approach might be for the Government to reaffirm its commitment to exports by adopting an exchange rate regime that maintains exporters' profitability. Such an approach has been successful in several countries, including Colombia and Turkey. Reform of import control policies also would encourage exporting. To complement the general policies, numerous changes in export specific measures would be needed to provide a "green light" treatment for exporters. These changes could include: (a) a more effective system of compensation for rebating import duties and indirect taxes; (b) improved access to ample credit; (c) improvements in the system of domestic letters of credit, including its expansion to serve as a vehicle for indirect exporters' access to free trade status; and (d) greater efforts in design and marketing, focussed on developed country markets.

5.27 Imports: The review of India's trade regime in this report reveals that it has widely varying effects on different industries. Although the average rate of measured effective protection is much less than the very high average tariffs, there is a wide dispersion of effective protection. Some industries benefit from extremely high protection, while others are disprotected. In general, the highest levels of protection are enjoyed by extremely energy- and capital-intensive industries.

5.28 The objectives of the suggested reform of the import control regime would be to eliminate the potential for nearly unlimited protection implied by quotas and to reduce the existing dispersion of protection. Overall the system would become simpler, more transparent and less discretionary. Import competition, over moderate tariffs, would gradually

be used to place ceilings on the cost-price structure of domestic industry to which it would have to adjust over time, with Government assistance. This would provide a framework for industrial restructuring that would lead to faster growth, based on labor-intensive, energy-efficient industries; reduced costs of key intermediate goods; and a more dynamic export sector, as a result of the possibility of simplifying the export specific measures that offset the effects of protection of domestic industry.

5.29 The suggested strategy for reforming import controls would involve a move from the current system of managed, direct import controls to a system of tariff based protection. The goal would be a set of tariffs falling into a narrower range than currently, say 20-80%, but with an average level that provides roughly the current average level of measured effective protection. Technical adjustments in the exchange rate would be made to the extent required to maintain external balance.

5.30 Successful implementation of such a strategy would require a firm and credible commitment to import policy reform at the outset of the process. The detailed measures would, however, have to take account of the fact that their impact would be different on different industries, depending on the existing degree of competitiveness, the structure of the industries, and on parallel domestic policy reforms. The best approach to trade reform in the Indian context is thus likely to consist of a combination of phased across-the-board changes in tariff levels, complemented by industry-by-industry reviews and restructuring programs. These reviews and restructuring programs would be completed quickly and be limited to (a) key sectors currently enjoying high levels of effective protection, and (b) those that are likely to have problems adjusting. The guidelines for these enquiries would preclude questions of whether there should be a move from the current system to tariff-based protection, and whether the tariff should lie within the target range. Instead, the enquiries would concentrate on the determination of the interim and final levels of tariff protection, and on the development of restructuring programs. For each key industrial segment, target levels of protection would be determined, along with the timing and mechanisms for removing current direct import controls and bringing tariffs within the target range. Transitional arrangements for industries with phased manufacturing plans, quantitative input controls and/or relatively high tariffs would also be worked out. Bringing tariffs down to their final levels would be gradual and, in the key industries most adversely affected, linked to implementation of restructuring programs. However, new tariffs for industries that currently have low levels of effective protection could be applied immediately.

4. Coordination of Reform

5.31 There are several important ways in which policy reforms need to be coordinated. It is vital that implementation of domestic regulatory reform and the recommended external trade policies take place over the same period of time, so that firms face new incentives to grow and to become more efficient, while the constraints on their doing so are removed. If domestic controls were relaxed without introducing greater competition from imported goods, there would be a risk that distortions in the pattern of investment would arise. Producers might over-invest in highly protected goods that offered opportunities for high returns, even

if the economic cost of production were excessive. This type of problem is already occurring in steel, where mini-steel plants are being set up to produce speciality steel at costs substantially above world market prices. If external controls were relaxed without reducing domestic controls, then Indian industry would find it difficult to respond appropriately to foreign competition by changing investment patterns, product mix, technology, or inputs. Instead of efficient economic growth, such an opening to external competition could have adverse effects on some segments of the domestic manufacturing sector. This would quickly create pressure for reversing the policy reforms.

5.32 The easing of barriers to entry and growth needs to be accompanied by the relaxation of limitations on adaptation and exit. Unless this is done, producers will not have the flexibility needed to respond to changing market conditions by, for example, shedding old product lines, restructuring, or consolidating operations, and will be reluctant to enter new lines of business. Freer entry without increased flexibility to adapt or exit could lead to an even greater degree of capacity fragmentation, a major cause of present inefficiencies. Moreover, managerial or efficiency gains from increases in competition will remain limited while survival is assured.

5. Sequencing

5.33 The experience of other countries forcefully demonstrates that the success of policy reform programs that move from direct controls on investment, production and trade to indirect policies relying more heavily on market incentives and discipline will be much greater if the initial policy actions are bold. An initial major shift in policy is required to ensure that the commitment to new policy is persuasive and thus yields the desired structural changes in investment and production. Moreover, without a relatively rapid expansion of efficient industries, the needed support for ongoing reform is unlikely to be forthcoming and resistance may increase. In particular, if exports do not expand quickly, then there is likely to be growing resistance to any general reduction in import protection.

5.34 In view of such concerns, the first stage of reform would ideally include export promotion (along the lines spelled out above), further relaxation of domestic regulations, and the establishment of guidelines for general import policy reform. The export promotion measures and generalized incentives would improve foreign exchange earnings and ease the transition away from quantitative restrictions on imports. They would also encourage firms to meet international quality and price standards and foster the more aggressive management required to respond to market shifts. These benefits would come at relatively low cost, as they would not imply any loss of domestic output or employment.

5.35 Concurrent further relaxation of domestic regulations on investment and employment would provide industry with increased flexibility to respond to export opportunities, increase domestic competition and hence incentives for productivity improvements, and help reduce the current disparity in profitability between the domestic and export markets. These changes would be along the lines currently endorsed by the Government, and should probably include further selective

delicensing and broadbanding, the lifting of small-scale reservations for a significant number of items, and the adoption of a clearer set of economic guidelines for administered prices. Delicensing of investment and choice of product line would allow firms to reach the scale of production, degree of specialization, and market responsiveness needed to compete with international standards. It would permit entrepreneurs to move rapidly into new market niches created by shifting demand, technology, and resource patterns.

5.36 The early establishment of guidelines for import policy reform would be necessary to avoid inefficient additional investment in highly protected activities. Import policy reform probably should emphasize intermediate and capital goods and the removal of glaring anomalies in protection more generally. The suggested strategy for reforming import controls would involve two elements: first, a move from the current system of managed, direct import controls to a system of protection based on high import tariffs alone; and, second, a gradual reduction in both the variance and average level of tariffs. For most products, because of redundant tariffs, the initial tariffs could be set below current levels and still provide an equivalent amount of protection. However, in some cases, tariffs would have to rise initially. The suggested goal would be for a system of tariff-only protection, with all tariffs falling into a narrower band than currently, say 20-80%, and with an average tariff level that provides about the current average level of measured effective protection. Gradual reduction of import protection could be made as warranted by improved export performance. The reduction in the variance of tariffs would tend to bring down the prices of many intermediate goods and thereby facilitate general reductions in protection. Reductions in protection on final consumer goods might need to be accompanied by the introduction of higher consumption taxes on luxury goods, if the objective is to discourage their consumption in general and not just their import. Imports of goods deemed socially unacceptable, due to health or military reasons, for example, could continue to be banned.

5.37 Rationalizing merger, bankruptcy, and exit policies would also be part of this phase but, as with import policy reforms, a clear early commitment to this change would be useful. Adaptation and exit changes, as outlined above, would enable firms with the required managerial, financial, technical and physical resources to take over units that could be made viable, stop the current drain of resources into hopelessly bankrupt, obsolete, and unproductive companies, and reduce the cost of failure when going into business or trying out new techniques and designs.

6. Timing

5.38 The pace of transition is a critical and sensitive element in any reform package. Time is needed to build new factories and modernize existing ones, find and learn new technologies, redeploy workers and assets from activities that will no longer be competitive, develop new markets (including export markets), and find new sources of financing. Too fast a pace would raise the costs of adjustment to the point where the Government might be forced to reverse the process, while too slow a pace would delay the benefits of the reform and give rise to resistance to further reforms.

5.39 There is little solid evidence on the tradeoff between the adjustment costs and the speed of the proposed reform, not in the least because the exact size of the long term benefits of the full package is not known. Other countries that have undertaken major reforms or programs of sectoral restructuring have typically decided on a three to five year horizon. As mentioned above, a major part of the Government's role in the proposed program will involve devising and implementing firm and subsector level restructuring plans in India's public sector. All this suggests that a minimum of five years would probably be necessary to carry out the reforms, while a program of more than seven years would probably be too slow.

7. The Macroeconomic and Financial Sector Framework

5.40 The experience of other countries shows that macroeconomic stability, in particular the containing of government deficits, is crucial for any successful program of trade and industrial policy reforms. Excessive aggregate demand, resulting from government deficits, would stimulate imports, suppress exports, and generate inflationary pressures. Growing trade deficits resulting from excess demand would eventually require the Government to cut imports sharply by reimposing restrictions, and inflation would generate pressures for price controls. Large government deficits would also tend to absorb credit and thereby reduce the availability of funds for new investments required by the restructuring of industry and the opening up of new opportunities. Experience also indicates that allowing exchange rates to become overvalued as domestic inflation accelerates has been one of the principal causes of failed attempts at rationalizing trade policy. Hence, fiscal restraint and exchange rate management which avoids overvaluation will be important parts of any successful reform package.

5.41 Regulatory changes need to be coordinated with changes in financial sector policies and practices. Greater freedom for lending institutions to operate more efficiently as financial intermediaries is necessary if financial incentives are to be effective in allocating investable funds. As direct government controls on investment and production are relaxed, potential investors will need to hone their managerial skills to exploit opportunities offered by a changed environment. Financial institutions and banks will need to improve their loan appraisal capacity and to be freed from the limitations of directed credit requirements and differential interest rates. Also needed are further efforts, such as those undertaken recently by the Industrial Development Bank of India, to strengthen the capacity of banks to assess market prospects as part of project appraisal.

8. Likely Benefits and Costs of the Reform Package

5.42 Although the long run effects of these reforms would be positive in terms of growth, employment productivity, and average income, the shift to a more efficient and productive industrial sector would not be costless. However, the adjustment costs implied by the reforms proposed in this report should not be overestimated. India has many industries that are already internationally competitive in economic terms. With the changes proposed here, subsectors such as the parts of the capital and engineering goods industries that currently have little or no effective

protection will find it much easier to compete domestically and internationally. It is inefficient industries, currently sheltered by import protection, that would have a difficult time as reforms are implemented; even in these industries, however, there may be many cases where existing plants can become competitive through upgrading. On the labor side, total employment in manufacturing is likely to rise, particularly if labor legislation inhibiting redeployment is eased. The adjustment problems will be centered on a relatively small number of highly paid workers, largely in the public sector and in inefficient, highly protected industries.

5.43 In reviewing the probable net benefits of reform, it is only possible to indicate the nature of benefits and costs, where their incidence is likely to be greatest, and steps which could be taken to mitigate the potential costs. It is not possible to be precise about the magnitude of such benefits or costs, much less of the gains and losses for specific subsectors, regions or employment groups.

5.44 The main benefit expected of the policies proposed here is greater efficiency, which would lead to faster growth of overall GDP and per capita incomes, thus helping serve the nation's goals of growth and social justice. Over time there would be more employment, because of relatively faster growth in labor intensive industries and more employment in related service activities. The suggested strategy would provide a better basis for increasing employment and alleviating poverty than does the current complex set of trade and industrial controls. Indian consumers would also benefit from the availability of better quality goods at lower costs.

5.45 The benefits of the type already visible in the cases of cement and two-wheel vehicles would be more widespread. When pricing policy was reformed and licensing relaxed for the cement industry, competition increased, productivity rose, and production capacity expanded rapidly. In the case of two-wheel vehicles, relaxation of capacity licensing requirements and easing of restrictions on technical collaboration with foreign firms has resulted in a rapid expansion of capacity by large, relatively efficient producers. The largest scooter manufacturer is currently tripling its capacity. These large producers are already competitive at world prices. Prior to the recent relaxation of domestic regulations, attempts by large relatively efficient producers to expand to meet rapidly growing demand for low-cost transport had been thwarted by capacity licensing requirements. As a result, the industry was characterized by large, relatively efficient producers coexisting with small, less efficient producers, while substantial unsatisfied demand persisted.

5.46 Aligning financial incentives more closely with world prices and concurrently increasing competition and the autonomy industrialists have to respond to market opportunities and forces would yield a more efficient industrial structure and increase industrial productivity. Relatively efficient subsectors and industrial units would expand, while those which cannot be competitive at world prices plus reasonable tariff protection would not. They might contract as industry becomes more specialized in activities where India has a competitive advantage. Hence, the pattern of investment would yield higher average returns per rupee invested and

industrial technology will be upgraded. The incremental capital-output ratio, which has been so high in recent years, would fall as a smaller share of investment goes to highly capital-intensive industries. The suggested reduction of subsidies and allocation of investable funds at concessional rates of interest to selected groups such as "sick" industries would also increase the availability of funds for more productive investment. Much of the funds currently needed to sustain non-viable producers, for example, would be available for investment elsewhere.

5.47 Relatively efficient producers and industries currently receiving low or negative effective protection are likely to benefit from the reforms and to expand. Efficient labor intensive processing of domestically produced inputs is especially likely to grow. Industries most likely to benefit include, for example, selected textile and garments, sports gear, agro-industrial products, and many labor-intensive engineering and capital goods activities. Also likely to gain are firms currently constrained by artificial barriers to growth, product and technology choice, tied to inefficient locations and needing to move out of congested urban areas or from backward to more developed areas, or those needing to close down plants and shift resources to more productive uses.

5.48 Those most likely to be hurt, at least in the short run, include producers and workers in industries or units that are highly protected. Activities supported by direct or indirect subsidies and with little or no export potential or possibilities for quickly becoming competitive would be particularly vulnerable. These industries probably include passenger vehicles, non-ferrous basic metals, small paper mills, small tire plants, basic chemicals, small steel plants and a number of petrochemical based activities. Firms making artificially high profits behind barriers that shield them from domestic competition, such as capacity licensing and the regulation of large and dominant firms, are also likely to lose when policy reform occurs. So are those taking advantage of concessions currently accorded "sick" industries.

5.49 As experience in other countries has shown, such industrial producers, accustomed to operating within a weakly competitive environment, are not always capable of switching their behavior to withstand competition, and may end up closing. The cost of restructuring, whether it involves replacing equipment, introducing new techniques, developing differentiable products and effective marketing, or reducing the workforce, may be too great for some firms. This is especially true of firms in older subsectors that have been protected from competition for so long that their production methods are out of date. Restructuring programs would have to be developed for these industries. In some cases this might involve dismantling the productive unit, sale of physical capital, transfer of land holdings, and retrenchment of workers.

5.50 Costs are involved even in less extreme cases, where some retooling, new skills, reorganization of management, and infusion of working capital would suffice to bring the firms to competitive standards. In these cases, most of the costs and benefits accrue to the same firm, and the trade-offs are easily measurable. In the older industries, where subsectoral restructuring is called for, including closures and laying off workers, the costs are highly visible and

measurable, but the benefits may accrue to different social groups or economic units. In these cases, the Government may wish to transfer resources to mitigate the costs felt by certain regions or employment groups.

5.51 As a consequence of the change in the pattern of investment, employment can be expected to expand. The allocation of a larger share of investment to relatively labor-intensive activities would naturally create more employment opportunities for a given amount of investment. The evidence from reform programs in other countries suggests that most of the gains in employment will occur in small and medium sized firms that currently have low effective protection and in the service industries that support larger establishments. An increasing number of larger firms are likely to resort to using inputs from ancillary units to contain costs; these units tend to be more labor-intensive, and have lower wage costs, on average, than large industrial units with strong unions. Because of its small current share in total employment and its capital intensity, the organized part of the manufacturing sector, which would suffer most under the reforms proposed here, is unlikely to offer significant additional employment opportunities, especially given its relatively high wages and restrictive employment practices. On the contrary, industrial policy reform may lead to a short term loss of jobs in organized manufacturing as steps are taken to deal with overstaffing and the closure of plants in sick industries. Policies must be designed to effectively redeploy these workers; in many cases they will suffer a loss of income since their wages were much higher than average because of protection.

5.52 To further minimize any adverse effects of industrial policy reform on employment and, at the same time, provide employment for a labor force that grows at more than 3% a year, the Government also will need to change existing labor laws to ensure greater flexibility in the labor market. This will provide greater incentives for firms to employ more labor as output expands. In addition, Government policy could further improve access to primary education, a basic requirement for developing a skilled labor force. Finally, not all segments of the labor force that will be affected by industrial policy reforms can be helped through these measures. In some sub-sectors, direct intervention programs, such as employment guarantee schemes, would be essential as a temporary respite for adversely affected by the policy reforms. Efforts to improve and target Government assisted social service such as health, sanitation, housing and education also would help alleviate the conditions of the unemployed poor.

B. GROWTH PROSPECTS, THE BALANCE OF PAYMENTS AND REQUIREMENTS FOR EXTERNAL ASSISTANCE

5.53 If the majority of Indians are to experience significant increases in their standards of living, if the increase in the labor force is to be productively enlarged and if the number of people living in absolute poverty is to be gradually reduced, then the 5% growth of GDP targeted in the Seventh Plan and achieved over the last several years must be sustained, if not increased.

5.54 Because India has already attained relatively high savings and investment levels for a developing country, accelerated growth of the economy must rely on increasingly efficient resource use. Foreign trade will play an important role in this process. Greater access to imports of equipment and technology will be required by a rapidly modernizing economy. Imports of key intermediate goods and raw materials will have to rise as domestic output increases. Moreover, exposing domestic producers to import competition and encouraging them to compete in foreign markets will play an important role in ensuring increased efficiency.

5.55 For the target rates of growth for GDP to be met in the Seventh Plan period and beyond, total imports (and by extension, exports) must grow faster than GDP. Although import levels will, in a general sense, be linked to GDP growth and investment levels, measures designed to provide appropriate levels and structures of prices and to increase the competitive pressures on domestic producers (including trade policy reform and exchange rate management) can induce a better allocation of imports and reduce the apparent import elasticity of the economy. Nevertheless, total imports will probably have to grow by about 6.5% per annum in volume terms through the Eighth Plan period. During the next few years, imports of raw materials and intermediate goods may rise somewhat more slowly than GDP because of accumulated stocks of petroleum and fertilizers, but this will be more than offset by the need for a rapid growth of capital goods imports. Given the current prospects of import prices, the dollar value of imports is projected to rise from US\$15.7 billion in 1986/87 to US\$22.1 billion by 1989/90 and US\$36.0 billion by 1994/95.

5.56 Aside from the need for higher levels of imports, there are other potential stresses on India's balance of payments prospects. First, debt service obligations (including repayments to the IMF, which total about US\$4.0 billion over 1987/88-1994/95), and the general hardening of terms on new debt, will greatly limit the country's room to maneuver. Second, the future evolution of the country's international terms of trade, which depend heavily on oil price movements, is uncertain. While India has benefited in recent years from the sharp drop in oil prices, some reversal seems certain. Third, the prospects for workers' remittances and non-resident deposits are somewhat clouded.

5.57 All this points to the need for India to accelerate the rate of growth of its exports if its GDP growth target is to be achieved. But increasing exports has benefits for the domestic economy beyond merely making higher levels of imports possible. If exports are growing rapidly, it means that Indian producers are increasing their competitiveness in international markets and becoming more efficient. Successful rivalry for foreign markets requires managers and workers to become more concerned about costs and quality standards.

5.58 India is, however, attempting to accelerate its export growth at a time when the international situation is less than propitious. World economic growth and increases in international trade have slowed, and

protectionist pressures may develop. Problems on the trade side are being compounded by unstable capital markets and wide swings in exchange rates. While this situation is different from the buoyancy that prevailed during much of the 1970s and early 1980s, the task before India is difficult, but not impossible. The targeted growth rates are relatively modest--6% per year in real terms. The main impetus for growth of India's GDP has been and will remain the domestic market. Foreign trade will continue to play a supporting, strategic role. Export production per se, is not expected to generate major increases in sectoral or overall output and employment, although better performance would, of course, yield larger benefits. Moreover, India's present exports are a miniscule part of world trade, and even significant increases in the country's export volumes would hardly be noticed overall. What India requires of the international community is, therefore, not only increased concessional aid to act as a safety net for its reforms, but continued resistance to protectionist pressures.

5.59 India's balance of payments current account deficit, which has consistently been below 2% of GDP is extraordinarily small by international standards. It is much less, for instance than Korea's current account deficits, which averaged about 6% of GDP. during its period of rapid growth. Nevertheless, India cannot hope to meet all its external capital requirements with concessional assistance; concessional aid flows to the country have been very low in per capita terms, and the prospect for dramatic increases is not bright. India will therefore have to rely on a combination of concessional and non-concessional capital inflows (both public and private). The Government will have to manage its external borrowing carefully to ensure an appropriate cost and term structure of debt.

5.60 The amount that India may prudently borrow from external sources is a function of the average terms of borrowing, the probable growth of exports and a target range for the debt service ratio. The amount of borrowing that will be necessary will be determined by the import requirements necessary to fulfill the GDP growth objectives, the expected growth of exports and other receipts, and the current level and term structure of debt outstanding. Given India's current situation, as a rule of thumb, exports should cover between 70% and 75% of imports. The current account deficit to GDP ratio should remain at about 1.5%, and the debt service ratio should remain within a maximum of about 25%.

C. BALANCE OF PAYMENTS PROSPECTS

5.61 Although improved terms of trade have provided some breathing space, the long-term prospects for India's balance of payments provide little room for complacency. The base case scenario illustrates that the real growth of exports should reach at least 6% p.a. during the Seventh Plan period in order to maintain a viable balance of payments. This would imply a growing but manageable deficit in the resource balance (goods and non-factor services) of US\$4.3 billion in 1987/88, US\$4.7 billion in 1989/90 and to US\$6.1 billion in 1994/95. This deficit would be partially offset in the early years by current transfer receipts, which amount to US\$2.2 billion in 1986/87, and which are expected to remain at that level throughout the Seventh and Eighth Plan periods. In the

Table 5.1
INDIA : Balance of Payments, 1984/85-1994/95
(US\$ Million at current prices)

		1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93	1993/94	1994/95
Exports	1	12135	13194	15675	16895	19499	21948	23406	26073	29084	32458	36254
Merchandise /a	2	8746	8956	10249	10984	12633	14196	15199	16949	18935	21160	23670
Non-factor Services	3	3389	4238	5427	5912	6866	7752	8207	9123	10149	11297	12584
Imports	4	-16750	-18791	-19070	-21166	-23842	-26638	-28811	-31609	-34785	-38500	-42396
Merchandise /a	5	-14400	-16066	-15757	-17590	-19737	-22068	-24134	-26577	-29353	-32605	-36036
Non-factor Services	6	-2350	-2725	-3313	-3576	-4105	-4570	-4678	-5032	-5432	-5895	-6360
RESOURCE BALANCE	7	-4615	-5596	-3395	-4270	-4343	-4691	-5405	-5536	-5701	-6043	-6142
Net Factor Income	8	-838	-1009	-1198	-1231	-1195	-1230	-1408	-1578	-1785	-2025	-2212
Factor Receipts	9	493	515	499	511	524	564	597	563	508	565	632
Factor Payments /b	10	-1331	-1524	-1697	-1741	-1719	-1794	-2005	-2142	-2293	-2590	-2845
(M< Interest Paid)	11	-904	-1066	-1266	-1367	-1397	-1533	-1797	-1965	-2138	-2445	-2701
Net Current Transfers	12	2526	2654	2176	2175	2173	2172	2173	2172	2171	2170	2169
Transfer receipts	13	2542	2674	2200	2200	2200	2200	2200	2200	2200	2200	2200
Transfer Payments	14	-16	-20	-24	-25	-27	-28	-27	-28	-29	-30	-31
CURRENT BALANCE	15	-2927	-3951	-2417	-3326	-3365	-3749	-4641	-4943	-5316	-5898	-6185
Direct Investment	16	62	160	209	233	274	311	334	375	422	475	534
Official Grant Aid	17	453	450	369	237	368	381	391	395	398	407	416
Net M< loans (DRS)	18	2600	2853	2609	3470	3860	3980	3707	3549	5287	5810	6030
Disbursements	19	3687	4586	4983	5875	6280	6442	6714	6822	9007	10128	11017
Repayments	20	-1087	-1733	-2374	-2405	-2420	-2463	-3007	-3273	-3720	-4318	-4987
Net credit from IMF	22	67	-209	-540	-845	-965	-817	-563	-406	-286	-115	-10
Disbursements	23	201	-	-	-	-	-	-	-	-	-	-
Repayments	24	-134	-209	-540	-845	-965	-817	-563	-406	-286	-115	-10
Capital flows NEI	26	-264	1244	-79	409	365	331	323	291	256	218	178
Non-Resident Deposits	31	210	1175	1255	800	800	800	800	800	800	800	800
Others /c	52	-474	69	-1334	-391	-435	-469	-477	-509	-544	-582	-622
Errors & Omissions /d	27	272	-	-	-	-	-	-	-	-	-	-
Change in Reserves /e	28	-263	-547	-151	-178	-535	-438	450	739	-761	-897	-962
(- = increase)												
End-Year Reserves (Gross)/e	29	6110	6657	6808	6986	7521	7959	7510	6771	7532	8429	9391
Memo Items :												
Debt Service Ratio (%)	50	16.5	20.5	24.4	24.8	22.4	20.0	20.8	19.7	19.4	19.5	19.7
Current Acc Deficit/GDPop	151	1.6	2.0	1.1	1.4	1.3	1.3	1.6	1.6	1.6	1.6	1.6

/a Net of crude petroleum exports.

/b Includes IMF interest; Excludes interest on Non-Res Deposits.

/c Residual Item; Includes reserve valuation changes.

/d As estimated by Government of India.

/e Excluding Gold.

meantime, net factor payments are expected to increase from the current level of US\$1.2 billion to US\$2.2 billion in 1994/95. This is largely due to the increase in interest paid on medium and long-term debt, which is expected to rise from US\$1.1 billion in 1985/86 to US\$1.5 billion in 1989/90 and US\$2.7 billion in 1994/95. This results in a current account deficit that grows from US\$2.4 billion in 1986/87 to US\$3.7 billion in 1989/90 and US\$6.2 billion in 1994/95.

5.62 Total debt servicing, which accounted for US\$2.5 billion in 1984/85 and US\$3.4 billion in 1985/86 is expected to grow to US\$4.9 billion in 1989/90 and US\$7.7 billion in 1994/95. Much of the increase during the latter half of the 1980s is due to India's repayments to the IMF.

D. EXTERNAL FINANCING REQUIREMENTS

5.63 In summary, India's gross external capital requirements will increase in the second half of the Seventh Plan period and can be expected to be considerably larger in the Eighth Plan period than in the Seventh. While the trade deficit would be somewhat smaller in both the Seventh and Eighth Plan periods than in the Sixth, the current account deficit would increase to about US\$16.8 billion in the Seventh Plan period and US\$27.0 billion in the Eighth. This reflects rising net factor payments (largely interest) and a leveling off of remittances. Amortization (including the scheduled IMF repurchases), which amounted to US\$4.7 billion in the Sixth Plan, would rise to US\$14.8 billion in the Seventh and US\$20.7 billion in the Eighth. Taking into account other capital outflows and increase in reserves needed to keep import coverage at three months, gross capital requirements would rise from US\$23.6 billion in the Sixth Plan period to US\$36.0 billion in the Seventh and US\$51.8 billion in the Eighth. While both the absolute size of the financing required and the increases appear quite large, they can be financed through a combination of direct foreign investment, non-concessional borrowing and concessional assistance without compromising India's creditworthiness.

5.64 Foreign Direct Investment: While it is unlikely that investment capital could provide a major inflow of foreign exchange, it does offer some advantages. Foreign direct investment and joint ventures provide risk capital that does not raise debt levels and debt service payments. In fact, experience in other countries indicates that, if the investment climate remains attractive, only a small part of profits are actually remitted, the bulk being reinvested. Perhaps more important, it provides Indian companies with access to foreign technology, state-of-the-art management techniques and foreign markets. Equity participation is frequently a condition for foreign investors to enter into joint ventures, particularly those that involve the transfer of state-of-the-art technology, since foreign joint venture partners tend to be reluctant to provide access to such technology without some management control over its use. There has been a promising change in the Government's attitude towards foreign direct investment in recent years and interest of foreign investors in India has increased dramatically over the past few years. This is an indication of the growing attractiveness of the Indian market, which is estimated to have 50-60 million potential buyers of modern industrial consumer products. However, if the role of foreign direct

investment is to increase significantly, then the Government will need to review its current policies affecting foreign direct investment and take steps to remove the remaining barriers to joint ventures and to the flow of risk capital into India. The revision of FERA in particular should be given careful consideration. Adoption of the export promotion program should encourage foreign investors to consider India as a base for exporting.

5.65 Increasing Non-Concessional Borrowing: The balance of payments projections show that a growing share of India's foreign exchange needs will have to be met through non-concessional borrowing and in particular commercial borrowing. In fact, recent years have already seen a departure from India's traditionally very conservative approach to foreign borrowing, which relied heavily on bilateral and multilateral concessional assistance.

5.66 Throughout the 1960s and 1970s, capital inflows were tightly controlled, and when gross foreign exchange reserves decline substantially, the Government tended to restrict imports and sacrifice growth, rather than accumulate high-cost debt. The foreign borrowing that did take place was mainly on concessional terms. In 1979/80, less than 1% of India's debt outstanding was owed to private financial institutions. In order to permit an acceleration of economic growth, the Government has eased its limitations on foreign borrowing in recent years. As a result, foreign commercial loans accounted for 40% of India's total foreign loan commitments and 50% of disbursements in 1985/86. By the end of 1986/87 about 22% of India's total debt outstanding was owed to private creditors.

5.67 In the base case scenario, commercial borrowing commitments would increase from US\$8.3 billion under the Sixth Plan, to US\$13.9 billion and US\$24.3 billion under the Seventh and Eighth Plans respectively. The Government will therefore need to continue to evolve and fine tune its borrowing techniques, particularly the tapping of new markets and the use of a wider range of financing instruments. More specifically, in order to gain wider access to international financial markets for the levels of borrowing India is likely to need, and still obtain favorable terms, it will need to (a) establish a presence in various markets by diversifying its sources of borrowing (by currency, instrument and market), (a) emphasize borrowing in capital markets rather than choosing loan syndications, (c) maintain a balanced maturity structure of its debt, in particular through controlling the short term portion of its debt and by maintaining a balance between debt at floating and fixed rates.

5.68 The Need for Concessional Aid: Concessional aid will play an increasingly important role in the years ahead. First, in order for the debt service on commercial borrowing to remain manageable and given the likely magnitude of external capital requirements, it will be necessary for concessional aid to grow by 5% per annum in real terms for the rest of the Seventh Plan. In addition, although higher commitment levels would have an immediate psychological impact by assuring the Government of the support of the international community for its reform effects, the financial impact would not be felt for a number of years. Therefore, faster disbursing loans are needed. Second, a real increase in the growth of concessional aid would assist Government efforts to raise living standards of India's poor. The majority of India's population continues

to survive on the narrowest of margins. The low cost of concessional aid allows the Government to provide support for programs that benefit the poor directly and thus have high social returns, without depriving the economy of the investment funds needed to sustain economic growth. It would also permit it to continue to pursue economic policy options that may entail considerable risks. In a sense, the availability of concessional aid will allow the Government to implement policy changes with the benefit of an economic "safety net".

5.69 Finally, as indicated above, the new approach to trade policy recommended in this report entails some risks. An unforeseen increase in the need to borrow commercially at a time when the results of the economic policy changes are still uncertain may prompt the Government to restrict imports, slowing its effort to modernize the economy, and thus, slowing economic growth. Unexpected developments such as poor crops or sharp swings in the international terms of trade can affect the availability of foreign exchange. Increased concessional aid, especially if rapidly disbursing, would provide the cushion that India needs during this critical phase of transition and would allow India greater freedom to control the level of imports using macroeconomic tools (monetary, fiscal, and exchange rate policy) and the price system, rather than by administrative fiat.

5.70 Thus, in addition to its usual role of providing support for programs which benefit the poor directly, concessional aid can play an additional role by providing support during this period of uncertainty associated with policy reform. For these reasons, it is important that that concessional commitments be increased by at least 5% per year in real terms in 1987/88 and 1988/89. Specifically, this would entail raising commitments on concessional aid from nearly US\$1.8 billion in 1986/87 to somewhat over US\$2.0 billion over the next two years.

E. RISKS AND CREDITWORTHINESS

5.71 The blend of external financing recommended above should enable India's debt service obligations to remain within prudent and manageable bounds. In the base case scenario, debt service ratios, including IMF repayments and service charges, are projected to rise from 20% in 1985/86 to 25% in the following two years, and then decline to below 20% in the Eighth Plan period. (These figures are based on data from the World Bank's Debt Reporting System and differ from the Government of India's figures due to differences in coverage, exchange rates, and timing.) Excluding IMF repayments and charges, debt service would rise from 17.1% in 1985/86 to over 19% in 1986/87 and 1987/88 and then decline to the 18% range in the Eighth Plan. Debt outstanding and disbursed would climb to US\$43.7 billion in 1989/90 and US\$68.0 billion in 1994/95. While debt levels and thus, debt service ratios, would rise above recent levels, this should not adversely affect India's credit rating with foreign lenders, particularly in light of the country's reputation for prudent debt management. The principal risk involved in this scenario would be poor export performance.

5.72 Two alternative scenarios illustrate India's vulnerability if exports do not grow fast enough to finance the necessary imports. Table 5.2 summarizes the results of both the base case scenario and the two alternative scenarios. Scenario A shows the results of a delay in the acceleration of export growth on the balance of payments. In this scenario, exports rise only slightly above the long-term trend for the remainder of the Seventh Plan period, and then accelerate to 7% (the average level targeted for the Seventh Plan) during the 1990s. The scenario assumes that the growth target remains unchanged, and since the target GDP growth rate cannot be attained unless the Government's new import policy remains unchanged, the level of imports was not changed in this scenario. As a result, exports would provide only 64% of the projected foreign exchange requirements in 1989/90 and 58% in 1994/95. The debt service ratio would rise rapidly, reaching 22% by 1989/90 and 33% by 1994/95. Such a scenario would clearly be untenable.

5.73 Scenario B illustrates what would happen if exports performed poorly and the Government responded by suppressing imports, rather than allowing external borrowing and debt service ratios to rise. If import growth were reduced enough to maintain the same level of commercial borrowing as in the base case, poor export performance would limit GDP growth to only 4% p.a. during the remainder of the 1980s and in the 1990s. The debt service ratio would rise to 26% in 1987/88 before declining to 22% in the 1990s. These scenarios demonstrate again the critical role that the reform program and export growth will play in ensuring India's long term growth. While exports can be stimulated by specific measures designed to offset the current bias against them, sustaining export performance will require adoption of the more general reform package of trade policy reform and domestic deregulation.

E. CONCLUSIONS

5.74 This report has recommended adoption of an integrated policy package for restructuring and reorienting industrial growth. It suggests using specific measures to promote exports to ease the balance of payments constraint, while a series of coordinated measures are carried out to relax government controls on most aspects of firm-level decision making and, through use of trade policy reform and exchange rate policy, to shift the incentive structure so that it more closely reflects India's comparative advantage. Direct import controls could be phased out and a new tariff structure phased in that would reduce the spread of rates of effective protection available to firms. Expeditious implementation of the full policy package would encourage more rapid growth of labor-intensive, fuel-efficient industry, would result in lower-price, higher-quality goods being available to consumers, would stimulate and sustain export growth, and would result in more rapid technological progress.

Table 5.2
INDIA: Summary of Foreign Exchange Requirements and Sources
 (US\$ billions, at current prices)

	<u>6th Plan</u>	<u>Base Case</u>		<u>Scenario A</u>		<u>Scenario B</u>	
			<u>7th Plan</u>	<u>8th Plan</u>	<u>7th Plan</u>	<u>8th Plan</u>	<u>7th Plan</u>
<u>Foreign Exchange Requirements</u>							
Imports	84.0	109.5	176.1	108.8	172.3	105.0	146.4
Net Factor Payments	1.1	5.9	9.0	6.0	12.8	5.8	8.2
Amortization	4.7	14.8	20.7	14.8	23.9	14.8	20.7
Increase in Reserves	-1.1	1.8	1.4	-0.6	3.4	2.2	1.8
<u>Total</u>	<u>88.7</u>	<u>132.0</u>	<u>207.2</u>	<u>129.0</u>	<u>212.4</u>	<u>127.8</u>	<u>177.1</u>
<u>Foreign Exchange Sources</u>							
Exports	57.7	87.2	147.3	83.0	125.2	83.0	125.2
Transfers & Remittances	12.7	11.4	10.9	11.4	10.9	11.4	10.9
Direct Foreign Investment	0.2	1.2	2.1	1.2	2.1	1.2	2.1
Grants	1.9	1.8	2.0	1.8	2.0	1.8	2.0
M< Loans	19.6	28.2	43.7	29.4	70.9	28.2	35.5
(of which Commercial Loans)	(5.5)	(11.5)	(23.8)	(12.8)	(51.1)	(11.5)	(15.6)
Non-Resident Deposits	1.9	4.8	4.0	4.8	4.0	4.8	4.0
Capital, n.e.i.	-5.3	-2.6	-2.7	-2.6	-2.7	-2.5	-2.6
<u>Total</u>	<u>88.7</u>	<u>132.0</u>	<u>207.2</u>	<u>129.0</u>	<u>212.4</u>	<u>127.8</u>	<u>177.1</u>
<u>Memo Items (%)</u> :							
GDPmp Growth	5.5	5.5	5.6	5.5	5.6	4.8	4.4
Agricultural Growth	4.6	2.1	2.9	2.1	2.9	1.9	2.5
Industrial Growth	4.6	6.6	7.2	6.6	7.2	5.1	4.5
Imports/GDP	8.6	7.9	8.7	7.6	8.5	7.5	7.8
Per Capita GDP Growth	3.4	3.5	3.8	3.5	3.8	2.8	2.6
Export Volume Growth	4.4	6.1	9.1	3.2	7.4	3.2	7.4
Import Volume Growth	3.3	7.6	5.5	7.3	5.2	5.7	2.5
Debt Service Ratio ^a	16.5	20.0	19.7	22.2	33.2	22.0	22.2
Current Account/GDP ^a	1.6	1.3	1.6	2.1	3.1	1.3	0.7

^a Last year of Plan

Source: World Bank

5.75 The program does, however, carry with it some fairly predictable costs, in particular the transitional costs to labor and capital involved in restructuring inefficient subsectors. It also involves certain risks. First, managing the balance of payments with macroeconomic tools and the exchange rate rather than direct import controls involves an element of uncertainty. This risk would, however, be limited, since capital transactions would not be decontrolled. Second, there is the risk of inflationary pressures resulting from downward stickiness of wages and prices in sectors affected by reduced protection, although this could be limited by appropriate monetary and fiscal policies. Third, there is the possibility of lagged production and investment responses owing to uncertainty on the part of entrepreneurs unused to operating without the crutch of government support and control. This could be minimized by clear policy declarations and avoidance of backtracking.

5.76 Achieving India's overall GDP growth targets, generating employment for her rapidly growing labor force and alleviating poverty will require continued progress in the direction already established by Government. Although there are costs and risks, adoption of the entire package, in the sequence suggested, would produce the maximum benefits in the shortest time. The benefits already derived from the actions taken should provide some indication of the potential results. Nevertheless, in the last analysis, only the Government can decide how and when it can proceed. The international community can assist the Government in accelerating the pace of reform by resisting protectionist pressures and by providing increased and well-focused concessional external assistance, thereby reducing the risks of the reform process.

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Table 1.1
ESTIMATED POPULATION & DISTRIBUTION BY SEX, 1960-2000
(in thousands)

Year	Male	Female	Total
1960	225942	208907	434849
1961	228715	215520	444235
1962	234131	220248	454379
1963	239689	225404	465093
1964	245395	230696	476091
1965	251224	236100	487324
1966	257196	241635	498831
1967	263271	247265	510536
1968	269511	253044	522555
1969	275918	258977	534895
1970	282500	265069	547569
1971	289019	271100	560119
1972	295118	276732	571850
1973	301346	282480	583826
1974	307704	288349	596053
1975	314195	294339	608534
1976	320826	300454	621280
1977	327596	306695	634291
1978	334509	313067	647576
1979	341471	319667	661138
1980	354840	332492	687332
1981	362170	339362	701532
1982	370142	346843	716985
1983	378537	354711	733248
1984	386973	362583	749556
1985	395083	370064	765147
1990	435414	408143	843557
1995	474562	445375	919937
2000	512252	482355	994607

Source: World Bank estimates.

Note: The population figures for the census years 1961, 1971 and 1981 differ from the official estimates as they have been corrected for under-counting.

Table 1.2
DISTRIBUTION OF POPULATION BY AGE GROUP AND SEX 1961-1981
(in thousands)

Year	(0-4)	(5-14)	(15-19)	(20-29)	(30-39)	(40-49)	(50-59)	(60+)	Total
1961									
Males	37363	55035	22665	38405	28944	19699	12307	14298	228716
Females	36834	53446	22189	36788	25205	16931	10827	13000	215220
Total	74197	108481	44854	75193	54149	36630	23134	27298	443936
1971									
Males	46758	74948	28688	45944	35790	26098	16590	14204	289020
Females	44531	71689	27303	43880	33613	22522	14459	13103	271100
Total	91289	146637	55991	89824	69403	48620	31049	27307	560120
1981									
Males	53152	91039	37690	56881	42875	34552	23618	22363	362170
Females	51487	84082	34149	55109	41096	31168	20700	21573	339364
Total	104639	175121	71839	111990	83971	65720	44318	43936	701534

Note: The population figures differ from the official census estimates as they have been corrected for under-counting.

Source: World Bank estimates.

Table 1.3
SELECTED DEMOGRAPHIC CHARACTERISTICS BY STATES

STATES	1981 Area in Thousand Sq.kms		Population (million)		Pop. per sq.km 1981	1971-1981 Inter-censal Growth Rate (% per annum)	1981 sex ratio no. of males per 1000 females	Percentage of urban to total population		Literacy rates (b) 1981			1981 workers (c) as % of total population			Vital Rates (per 1000 pop.) Avg. of 1971-1981	
	1971	1981	1971	1981				1971	1981	persons			males females total			Crude Birth Rate	Crude Death Rate
					males	females	total			males	females	total					
Andhra Pradesh	275.1	43.50	53.55	195	2.10	1026	19.3	23.3	29.9	39.3	20.4	57.68	33.54	45.76	31.5	11.6	
Assam	78.4	14.63	19.90(a)	254(a)	3.09 (a)	1110(a)	8.8	10.3(a)	n.a	n.a	n.a	n.a	n.a	n.a	32.7	11.4	
Bihar	173.9	56.35	69.91	402	2.17	1057	10.0	12.5	26.2	38.1	13.6	50.18	13.50	32.35	38.4	14.7	
Gujarat	196.1	26.70	34.09	174	2.46	1061	28.1	31.1	43.7	54.4	32.3	52.91	20.66	37.27	35.1	12.4	
Haryana	44.2	10.04	12.92	292	2.55	1149	17.7	21.9	36.1	48.2	22.3	49.93	10.61	31.63	36.0	11.0	
Himachal Pradesh	53.7	3.46	4.28	77	2.15	1028	7.0	7.6	42.5	53.2	31.5	52.63	31.88	42.40	31.6	10.8	
Jammu & Kashmir	222.2	4.62	5.99	59	2.58	1121	18.6	21.1	26.7	36.3	15.9	55.82	31.32	44.27	31.3	9.3	
Karnataka	191.8	29.30	37.14	194	2.39	1038	24.3	28.9	38.5	48.8	27.7	54.60	25.33	40.24	28.2	9.8	
Kerala	38.9	21.35	25.45	654	1.77	969	16.2	18.7	70.4	75.3	65.7	44.89	16.61	30.53	26.2	6.9	
Madhya Pradesh	443.5	41.65	52.18	118	2.27	1063	16.3	20.3	27.9	39.5	15.5	54.48	30.64	42.92	37.4	15.6	
Maharashtra	307.7	50.41	62.78	204	2.21	1067	31.2	35.0	47.2	58.8	34.8	53.73	30.63	42.56	28.3	10.0	
Manipur	22.3	1.07	1.42	64	2.83	1030	13.1	26.5	41.4	53.3	29.1	46.80	39.49	43.20	29.0	6.6	
Meghalaya	22.4	1.01	1.34	60	2.80	1048	14.5	18.0	34.1	37.9	30.1	53.98	37.48	45.93	32.3	10.4	
Nagaland	16.6	0.52	0.78	47	4.09	1159	9.9	15.5	42.6	50.1	33.9	52.59	43.19	48.24	22.4	6.9	
Orissa	155.7	21.94	26.37	169	1.85	1019	8.4	11.8	34.2	47.1	21.1	35.86	19.81	38.01	31.8	14.0	
Punjab	50.4	13.55	16.79	333	2.16	1138	23.7	27.7	40.9	47.2	33.7	53.76	6.16	31.50	29.6	9.2	
Rajasthan	342.2	25.77	34.26	100	2.87	1088	17.6	21.0	24.4	36.3	11.4	50.90	21.06	36.61	36.8	13.3	
Sikkim	7.1	0.21	0.32	45	4.14	1198	9.5	16.1	34.1	44.0	22.2	57.11	37.64	48.24	n.a	n.a	
Tamil Nadu	130.1	41.20	48.41	372	1.63	1024	30.2	33.0	46.8	58.3	35.0	56.58	26.52	41.73	28.2	11.7	
Tripura	10.5	1.56	2.05	195	2.79	1057	10.4	11.0	42.1	51.7	32.0	50.72	12.76	32.26	26.9	9.1	
Uttar Pradesh	294.4	88.34	110.86	377	2.29	1130	14.0	17.9	27.2	38.8	14.0	50.76	8.07	30.72	39.5	16.4	
West Bengal	88.6	44.31	54.58	616	2.10	1098	24.7	26.5	40.9	50.7	30.3	50.30	8.07	30.17	31.5	11.3	
A & N Islands	8.2	0.11	0.19	23	4.98	1316	22.6	26.5	51.6	58.7	42.1	56.60	10.80	36.80	33.8	8.2	
Arunachal Pradesh	83.7	0.47	0.63	8	3.04	1160	3.6	6.7	20.8	28.9	11.3	38.59	45.76	52.64	33.1	15.4	
Chandigarh	0.1	0.26	0.45	3961	5.67	1300	90.7	93.6	64.8	69.0	59.3	54.72	8.95	34.83	26.7	2.7	
D & N Haveli	0.5	0.07	0.11	211	3.38	1027	-	6.7	26.7	36.3	16.8	56.30	41.33	48.91	34.6	15.4	
Delhi	1.5	4.07	6.22	4194	4.29	1238	89.7	92.7	61.5	68.4	53.1	52.67	6.83	32.18	27.3	8.8	
Goa, Daman & Diu	3.8	0.86	1.09	287	2.39	1019	26.5	32.4	56.7	65.6	47.6	48.20	21.93	35.19	17.7	7.8	
Lakshadweep	0.0	0.03	0.04	1258	2.37	1026	-	46.3	55.1	65.2	44.7	39.31	9.15	24.43	31.0	9.8	
Mizoram	21.1	0.33	0.49	23	3.99	1088	41.9	24.7	59.9	64.5	54.9	52.18	37.85	45.30	n.a	n.a	
Pondicherry	0.5	0.47	0.60	1228	2.50	1015	11.4	52.3	55.9	65.8	45.7	47.16	13.51	30.47	24.8	8.3	
All-India	3287.3	548.16	685.18	216(d)	2.25	1072	19.9	23.3	36.2	46.9	24.8	54.85	22.85	38.60	33.2	13.7	

Notes: (a) Based on projections.

(b) Percentage have been computed on the total population inclusive of Age group 0-4 years.

(c) Includes both main and marginal workers.

(d) Excluding Jammu and Kashmir.

Sources: 1. Census of India 1981, Final Population Totals.

2. Census of India 1981, Primary Census Abstract General Population.

3. Census of India 1981, Key Population Statistics Based on 5 percent Sample Data.

4. Registrar General India, Sample Registration Bulletin, December 1982.

Table 1.4
TRENDS IN DEMOGRAPHIC CHARACTERISTICS
OF THE POPULATION

a. Population

Year	Population (millions)			Average Compound Growth Rate of Population during Previous Ten Years (% per annum)	Sex-Ratio (Males per 1000 Females)	Density of Population Per Sq.KM	Percentage of Urban Population to Total
	Total	Males	Females				
1951	361	185	176	1.26	1057	117	17.3
1961	439	226	213	1.98	1063	142	18
1971	548	284	264	2.2	1075	177	19.9
1981	685	348	324	2.26	1071	216	23.3
1991	799	412	387	1.75	1065	243	27.4

b. Fertility, Life Expectancy & Birth/Death Rates

Average for Period	General Fertility Rate (per thousand women of child bearing age)	Total Fertility Rate	Average Expectation of Life at Birth (years)		Birth Rate (per thous. popul.)	Death Rate (per thous. popul.)
			males	females		
1951/61	201	6	41.2	39.8	42.7	24.4
1961/71	192	5.8	46.7	45.4	42	18.8
1971/76	175	5.4	49.5	49	39	16.5
1976/81	154	5.1	51	50	36.5	14.5
1981/86 (b) (c)	133	4.8	52.7	54.4	34.2	12.7
1986/91 (b) (c)	117	4.3	54.4	56.8	30.9	11.3

c. All India Sample Registration Surveys: Vital Rates

(Annual rate per thousand)

Year	Crude Birth Rate			Crude Death Rate			Infant Mortality Rate per 1000 Live Births		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
1970	36.8	38.9	29.7	15.7	17.3	10.2	129	136	90
1971	36.9	38.9	30.1	14.9	16.4	9.7	129	138	82
1972	36.6	38.4	30.5	16.9	18.9	10.3	139	150	85
1973	34.6	35.9	28.9	15.5	17	9.6	134	143	89
1974	34.5	35.9	28.4	14.5	15.9	9.2	126	136	74
1975	35.2	36.7	28.5	15.9	17.3	10.2	140	151	84
1976	34.4	35.8	28.3	15	16.3	9.5	129	139	80
1977	33	34.3	27.8	14.7	16	9.4	129	142	67
1978	33.2	34.6	27.8	14.1	15.3	9.4	125	136	70
1979	33.1	34.3	28.3	12.8	13.9	8.4	n.a	n.a	n.a
1980	33.3	34.6	28.1	12.4	13.5	8	n.a	n.a	n.a
1981	33.2	34.7	27.2	12.5	13.6	7.9	n.a	n.a	n.a

(a) Projections by Registrar General of India, for March 1 of year shown. The projections yield somewhat lower values than do those produced by World Bank staff, which have a higher base to adjust for census under-counting.

(b) Projections relate to mid-year of period.

(c) For 1981-90 the projections as produced by World Bank staff.

Sources: 1. Office of the Registrar-General.
2. Planning Commission.

Table 1.5
TRENDS IN ACCEPTANCE OF FAMILY PLANNING METHODS AND ESTIMATED NUMBER OF BIRTHS AVERTED
(in thousands)

	1956 (a)	1960 (a)	65/66 (b)	70/71	75/76	77/78	78/79	79/80	80/81	81/82	82/83	83/84	84/85	85/86 (e)	86/87 (e) (f)
Sterilization															
Total	7	64	671	1330	2669	949	1484	1778	2053	2792	3983	4532	4085	4899	2773
Males	2	37	577	879	1438	188	391	473	439	573	585	661	550	638	338
Females	5	27	94	451	1231	761	1093	1305	1614	2219	3398	3871	3535	4261	2435
IUD insertions	n.a	n.a	813	476	607	326	552	635	628	751	1097	2134	2562	3274	2530
Users of Conventional Contraceptives (c)	n.a	n.a	582	1963	3528	3253	3469	3069	3809	4559	5948	8390	9795	10742	7923
Total Acceptors	7	64	2066	3769	6804	4528	5505	5482	6490	8102	11028	15056	16442	18915	13226
Equivalent Sterilizations	7	64	974	1598	3068	1242	1865	2165	2479	3302	4689	5750	5555	6663	4105
Cumulative Number of Births Averted since 1956		36	635	6823	20648	29421	34349	39257	44190	49296	54767	60977	68246	76366	83100
Medical Termination of Pregnancy	n.a	n.a	n.a	n.a	214	247	318	361	388	434	516	547	578	582	362
Cumulative Number of Births Averted since 1956(d)			n.a	n.a	304	725	979	1268	1578	1925	2338	2776	3238	3704	3994
Cumulative Number of Total Births Averted since 1956			n.a	n.a	20952	30146	35328	40525	45768	51221	57105	63753	71484	80070	87094

Sources: 1. Ministry of Health and Family Welfare.
2. World Bank estimates.

Notes: (a) The data for 1956 and 1960 relate to calendar years.

(b) Relates to period January 1965 to March 1966.

(c) From 1970/71 onwards the figures exclude condoms distributed freely to vasectomised cases and as free samples. Equivalent users have been derived by dividing the number of pieces of condoms, diaphragms, jelly & cream tubes, foam tablets and oral pill cycles by 72, 2, 7, 72, 13 respectively, which are the average numbers required to give complete protection to a couple in one year. Data from 1975/76 onwards include oral pill users also.

(d) Estimated by assuming that percentage of births averted due to medical termination of pregnancy is 80.

(e) Provisional.

(f) Up to December 1986.

Table 1.6
EMPLOYMENT IN THE ORGANIZED SECTOR - BY INDUSTRY
(in thousands)

As at the End of the Fiscal Year	Agriculture and allied Activities	Mining & Quarrying	Manufac- turing	Construc- tion	Public Utilities	Transport & Communication	Trade & Commerce	Services	All activities Total
1960/61									
Public Sector	180	129	369	602	224	1725	94	3427	7050
Private Sector (a)	670	550	3020	240	40	80	160	280	5040
Total	850	679	3389	842	264	1805	254	3707	12090
1970/71									
Public Sector	264	177	782	797	402	2189	288	5475	10374
Private Sector (b)	814	429	3900	152	44	101	293	963	6696
Total	1078	606	4822	949	446	2290	581	6438	17070
1975/76 (c)									
Public Sector	359	719	1113	992	536	2418	546	6639	13321
Private Sector (b)	827	132	4158	94	35	74	470	1055	6844
Total	1186	851	5271	1086	571	2491	1016	7694	20165
1979/80									
Public Sector	431	797	1446	1068	661	2651	801	7224	15078
Private Sector (b)	860	125	4417	73	34	71	480	1167	7227
Total	1291	922	5863	1141	695	2722	1281	8391	22305
1980/81									
Public Sector	463	818	1502	1089	683	2709	865	7355	15484
Private Sector (b)	858	130	4545	72	35	60	473	1222	7395
Total	1321	948	6047	1161	718	2769	1338	8577	22879
1981/82									
Public Sector	457	832	1592	1112	698	2781	928	7547	15946
Private Sector (b)	851	129	4661	71	36	60	481	1259	7548
Total	1308	961	6253	1183	734	2841	1409	8806	23493
1982/83									
Public Sector	476	884	1634	1120	721	2826	990	7806	16457
Private Sector (b)	847	120	4626	68	37	59	482	1288	7527
Total	1323	1004	6260	1188	758	2885	1472	9094	23984
1983/84									
Public Sector	489	927	1717	1120	732	2864	1038	7981	16868
Private Sector (b)	819	113	4473	66	39	57	490	1289	7346
Total	1308	1040	6190	1186	771	2921	1528	9270	24214
1984/85 (d)									
Public Sector	498	974	1760	1146	759	2907	1115	8149	17308
Private Sector (b)	822	113	4423	70	39	55	494	1305	7321
Total	1320	1087	6183	1216	798	2962	1609	9454	24629

(a) Establishments of 25 workers and over. Reporting is compulsory.

(b) Includes employment in establishments of 10 workers and over. Reporting for the category 10-25 workers is on a voluntary basis, and the extent of coverage is not known.

(c) Data from 1975/76 onwards is based on National Industrial Classification, 1970 and is not exactly comparable with the earlier years.

(d) Provisional.

Source: Economic Survey, various issues.

Table 1.7
DISTRIBUTION OF PERSONS (AGE 5 AND ABOVE) BY CURRENT WEEKLY ACTIVITY STATUS (a)
(%)

	Rural			Urban			All-India		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Working Persons in Labour Force	60.2	26.9	43.91	55.5	14.22	35.97	59.22	24.38	42.29
Working in own farm	32.25	13.96	23.3	3.34	1.77	2.59	26.2	11.53	19.08
Working in household non-farm enterprise/profession	6.69	2.5	4.64	19.09	4.65	12.26	9.28	2.92	6.19
Working as regular salaried employee/wage labour in farm	2.85	0.37	1.63	0.54	0.13	0.35	2.36	0.32	1.37
Working as regular salaried employee/wage labour in non-farm enterprise/profession	3.72	0.67	2.23	25.85	4.22	15.62	8.35	1.38	4.96
Working as casual labour of which:									
Public works	0.45	0.22	0.34	0.21	0.07	0.14	0.4	0.19	0.3
Agriculture	11.69	8.17	9.97	1.49	1.41	1.45	9.56	6.82	8.23
Non-Agriculture	2.38	1	1.71	4.95	1.98	3.54	2.92	1.19	2.08
Working as bonded laborer	0.17	0.02	0.1	0.03	0	0.02	0.14	0.02	0.08
Not Working but seeking and available for work - unemployed	2.23	1.16	1.71	4.25	1.75	3.07	2.65	1.28	1.98
Not in Labor Force	37.57	71.94	54.38	40.25	84.03	60.96	38.13	74.34	55.72
Total Population	100	100	100	100	100	100	100	100	100

Source: The National Sample Survey, 32nd Round (1977-78), Results of the second quinquennial survey on employment and unemployment published in Sarvekshana, July-October 1981.

(a) For the period July 1977 to June 1978.

Table 1.8
STATEWISE UNEMPLOYMENT RATES (a)
(%)

STATES	Male	Female Rural	Total (b)	Urban			Total		
				Male	Female	Total (b)	Males (b)	Female (b)	Total (b)
Andhra Pradesh	4.06	8.26	5.72	8.08	11.19	8.65	4.88	8.5	6.78
Assam	1.53	1.13	n.a	4.21	9.66	n.a	n.a	n.a	n.a
Bihar	4.1	4.37	4.16	6.89	8.76	6.86	4.4	4.55	4.71
Gujarat	2.57	1.7	2.29	4.85	5.34	4.90	3.25	2.05	2.99
Haryana	4.44	1.46	3.91	5.57	7.25	5.69	4.69	2	4.19
Himachal Pradesh	1.68	0.04	1.04	5.21	10.78	6.14	1.99	0.36	2.95
Jammu & Kashmir	4.08	1.6	3.17	4.39	16.98	6.28	4.14	2.64	4.21
Karnataka	2.82	4.68	3.46	6.53	8.51	6.89	3.79	5.19	4.52
Kerala	12.25	12.84	12.42	15.12	14.67	15.02	12.78	13.08	13.14
Madhya Pradesh	1.41	1.83	1.57	4.83	3.84	4.68	2.03	1.95	2.64
Maharashtra	2.92	4.06	3.4	7.47	14.84	8.53	4.5	5.24	5.19
Manipur	2.36	0.16	1.35	1.57	2.85	2.06	2.17	0.66	1.67
Orissa	3.8	5.57	4.28	6.88	8.05	7.05	4.15	5.7	4.99
Punjab	2.59	11	3.43	3.72	6.63	3.91	2.9	10.18	3.47
Rajasthan	2.19	1.39	1.94	4.38	1.53	4.09	2.62	1.4	2.54
Tamil Nadu	5.87	5.27	5.65	9.11	12.47	9.72	6.85	6.33	6.93
Tripura	1.69	1.56	1.66	12.53	25.16	14.64	2.71	3.38	4.22
Uttar Pradesh	2.46	1.24	2.29	5	3.76	4.93	2.9	1.43	2.62
West Bengal	4.46	3.69	4.35	9.75	12.35	9.97	5.91	5.17	5.07
Delhi	8.13	20	9.83	6.67	30.68	8.86	6.77	29.56	9.73
Goa, Daman & Diu	10.13	11.48	10.6	10.72	12.69	11.21	10.33	11.78	10.79
Pondicherry	10.28	7.24	9.37	14.36	11.59	13.74	12.32	8.98	10.52
All India	3.57	4.13	3.75	7.12	10.93	7.86	4.28	4.99	4.47

(a) Person-weeks seeking and/or available for work as a percentage of total person-weeks in the labor force, for population of age 5 years and above for the period July 1977 to June 1978.

(b) Computed for each state using the data from 1981 Census for male and female workers in rural and urban areas.

Source: National Sample Survey, 32nd Round (1977-78), Results of the Second quinquennial survey on employment and unemployment
Published in Sarvekshana, July-October 1981.

Table 1.9
EDUCATION - PROGRESS OF ENROLMENT

Year	Primary Level (Class I-V) Age 6-11 Years			Medium Level (classes VI-VIII) Age 11-14 Years			Secondary Level (classes IX-XI) Age 14-17 Years			University (c)
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	
(million persons)										
1950/51	13.8	5.4	19.2	2.6	0.5	3.1	1.1	0.2	1.3	0.3
1955/56	17.5	7.7	25.2	3.4	0.9	4.3	1.5	0.4	1.9	0.5
1960/61	23.6	11.4	35.0	5.1	1.6	6.7	2.3	0.5	2.8	0.8
1965/66	32.2	18.3	50.5	9.7	2.8	12.5	3.9	1.2	5.1	1.3
1970/71	35.7	21.3	57.0	9.4	3.9	13.3	4.9	1.7	6.6	2.4
1975/76	40.7	25.0	65.7	11.0	5.0	16.0	5.3	2.1	7.4	3.1
1976/77	42.7	26.4	69.1	11.4	5.3	16.7	5.5	2.1	7.6	3.6
1977/78	43.2	26.9	70.1	12.0	5.7	17.7	6.1	2.5	8.6	3.0
1978/79	44.0	28.2	72.2	12.1	6.0	18.1	5.9	2.4	8.3	4.0
1979/80	44.2	27.3	71.5	13.0	6.2	19.2	6.9	2.9	9.8	3.1
1980/81 (a)	44.8	28.1	72.7	13.2	6.6	19.8	6.7	2.8	9.5	4.0
1981/82 (a)	45.0	28.6	73.6	14.0	7.1	21.1	8.0	3.5	11.5	3.7
1982/83 (a)	47.3	29.8	77.1	14.7	7.5	22.2	8.1	3.7	11.8	4.6
1983/84 (a)	49.3	31.8	81.1	16.4	8.4	24.9	8.9	3.9	12.9	4.3
1984/85 (a)	50.7	33.1	83.9	17.0	9.0	26.1	9.4	4.3	13.8	4.7
Enrolment as percentage of the corresponding age group (b)										
1950/51	60.6	24.8	43.1	20.6	4.6	12.9	8.7	1.5	5.3	-
1970/71	92.6	59.1	76.4	46.5	20.8	34.2	27.1	10.2	19.0	-
1975/76	95.7	62.0	79.3	47.0	23.3	35.6	25.1	10.6	18.2	-
1978/79	100.2	67.8	84.5	49.4	26.0	38.0	25.1	11.5	18.8	-
1979/80	99.3	65.0	82.7	52.0	26.4	39.6	22.9	13.9	21.9	-
1980/81	99.0	66.2	83.1	52.1	27.2	40.0	27.7	12.7	20.4	-
1981/82	99.4	66.9	83.7	54.2	29.1	41.9	33.0	15.3	24.4	-
1982/83	104.0	69.4	87.2	56.3	30.6	43.9	30.4	15.8	24.6	-
1983/84	110.3	75.5	93.4	62.7	34.4	48.9	40.0	19.4	30.0	-
1984/85	110.7	76.7	94.1	64.0	36.3	50.6	35.9	17.9	27.3	-

(a) Provisional.

(b) Enrolment as percentage of corresponding age group may exceed 100 in some instance because of presence of children both younger and older than indicated in the age group for these classes.

(c) Refers to general education in commerce, arts & science courses in the universities. Excludes engineering, medicine and technical courses conducted in autonomous institutions.

Sources: 1. Ministry of Education.

2. Planning Commission, Draft Sixth Five Year Plan 1980-85.

Table 2.1(a)
INDIA: National Accounts Summary, 1975/76-1985/86
(Rs billion at current prices)

		1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
GDPIc	101	683.70	716.65	809.31	872.14	953.58	1135.48	1307.70	1459.61	1727.04	1908.88	2150.24
Agriculture	90	278.45	285.67	327.16	336.96	347.42	427.88	465.46	490.43	615.32	632.61	675.68
Industry	94	153.87	175.32	197.42	220.98	246.77	284.47	333.87	389.44	442.64	506.70	566.25
Mining	95	8.84	10.11	11.17	12.15	15.15	18.43	31.70	43.20	50.33	58.25	64.78
Manufacturing	96	103.75	115.20	128.39	147.37	169.48	189.63	216.73	243.30	275.43	310.81	357.98
Electricity	98	8.35	10.95	12.49	14.90	17.15	19.70	22.68	26.65	31.14	37.20	47.19
Construction	97	32.93	39.06	45.37	46.56	46.99	56.71	62.56	76.29	85.74	100.40	116.30
Services	112	231.38	255.66	284.73	314.20	357.39	423.13	508.37	579.74	669.08	769.57	888.39
Indirect Taxes	103	79.74	85.33	89.17	105.34	121.84	139.05	169.14	191.75	213.57	234.97	285.27
GDPIac	1	743.44	801.98	898.48	977.48	1075.42	1274.53	1476.84	1651.36	1940.61	2143.85	2435.51
Resource Gap (M-X)	2	2.98	-6.43	-4.84	12.55	25.33	48.90	52.27	48.76	48.02	54.86	68.49
Imports (q+nfs)	3	51.89	54.35	61.35	81.28	105.95	137.40	152.04	156.64	170.41	199.11	229.95
Exports (q+nfs)	4	48.92	60.78	66.18	68.73	80.62	88.50	99.77	107.88	122.38	144.25	161.45
Total Expenditure	5	746.42	795.55	893.64	990.03	1100.75	1323.43	1529.11	1700.12	1988.63	2198.71	2504.00
Consumption	6	582.24	618.50	707.43	760.19	839.32	1008.86	1166.82	1295.36	1516.08	1660.27	1898.82
General Gov't	7	73.51	82.06	86.67	96.24	110.25	130.33	152.76	180.16	207.88	240.62	282.71
Private	8	508.73	536.44	620.76	663.95	729.07	878.53	1014.06	1115.20	1308.20	1419.65	1606.11
Investment	9	164.18	177.05	186.21	229.84	261.43	314.57	362.29	404.76	472.55	538.44	615.18
Fixed Investment	10	132.48	153.03	172.19	188.76	213.07	252.09	297.83	349.19	405.61	458.28	536.11
Change in Stocks	11	31.70	24.02	14.02	41.08	48.36	62.48	64.46	55.57	66.94	80.16	79.07
Domestic Savings	12	161.20	183.48	191.05	217.29	236.10	265.66	310.02	356.00	424.53	483.58	546.69
Net Factor Income	13	-1.65	-1.22	-0.92	0.11	2.66	4.85	3.40	-2.82	-5.43	-9.96	-12.35
Current Transfers	14	4.07	6.19	9.22	9.68	14.96	21.87	20.69	24.12	26.50	30.03	32.48
National Savings	15	163.62	188.45	199.35	227.09	253.72	292.39	334.11	377.30	445.59	503.65	566.82
Foreign Savings	55	0.56	-11.40	-13.14	2.75	7.71	22.18	28.18	27.46	26.96	34.79	49.36
GDP per capita (Rs.)	108	1224.78	1293.52	1417.16	1506.13	1619.61	1877.07	2128.01	2329.14	2680.40	2901.01	3230.12
Per capita private consumption	110	838.10	865.23	979.12	1023.03	1097.99	1293.87	1461.18	1572.91	1806.91	1921.04	2130.12
Average Exchange Rates:												
Rupees per US \$	16	8.653	8.939	8.563	8.206	8.076	7.893	8.929	9.628	10.312	11.887	12.237
Rupees per SDR	50	10.342	10.299	10.135	10.418	10.464	10.154	10.298	10.524	10.914	11.944	12.918
Memo Items:												
Private Consumption (CSD)	113	530.78	544.18	630.83	692.59	751.99	909.39	1034.59	1137.92	1355.92	1459.62	1635.06
Population (mill)	60	607	620	634	649	664	679	694	709	724	739	754

Table 2.1(b)
 INDIA: National Accounts Summary, 1975/76-1985/86
 (US\$ million at 70/71 prices)

	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	
GDPfc	102	57187	57547	62560	66159	62921	67497	71293	73424	79388	82451	86651
Agriculture	104	25799	24235	27088	27891	24321	27267	28425	27535	30635	30441	30857
Industry	105	12283	13431	14381	15441	15108	15336	16137	17043	17915	18905	20129
Mining	122	640	664	683	697	703	753	843	921	1007	1084	1140
Manufacturing	123	8171	8891	9467	10491	10311	10284	10840	11587	12173	12835	13769
Electricity	124	769	851	884	983	996	1047	1144	1212	1297	1439	1563
Construction	125	2703	3025	3348	3271	3099	3252	3311	3323	3437	3548	3717
Services	106	19105	19881	21091	22827	23492	24895	26731	28847	30839	33104	35664
Indirect Taxes	107	5216	5517	5659	6592	6328	6224	6837	7577	7936	8207	9715
GDPmc	21	62403	63064	68219	72751	69249	73721	78131	81001	87324	90657	96365
Terms of Trade Effect	22	-1392	-1243	-821	-770	-1137	-2160	-2018	-2022	-2187	-2143	-2245
Gross Domestic Income	23	61011	61821	67397	71980	68113	71562	76113	78979	85137	88514	94121
Resource Gap	24	121	-308	-232	593	968	1342	1301	1167	1112	1134	1408
Imports (q+nfs)	25	2108	2601	2941	3842	4049	3770	3783	3750	3947	4114	4729
Capacity to Import [Exports (q+nfs)]	26	1987	2908	3173	3249	3081	2428	2483	2583	2835	2981	3320
[Exports (q+nfs)]	27	3378	4151	3995	4019	4218	4588	4500	4605	5021	5124	5565
Total Expenditure	28	61132	61514	67165	72573	69080	72904	77414	80146	86250	89648	95529
Consumption	29	48615	48362	53660	57035	53879	56610	60719	63052	68109	70673	75711
General Gov't	30	6513	7063	7341	8084	8820	9575	10604	11757	12931	14289	16016
Private	31	42101	41299	46319	48951	45059	47036	50115	51294	55178	56384	59695
Investment	32	12517	13152	13505	15539	15201	16293	16695	17095	18141	18975	19819
Fixed Investment	33	10019	11336	12464	12573	12243	12976	13672	14595	15324	15952	16836
Change in stocks	34	2499	1816	1041	2965	2959	3317	3023	2500	2817	3023	2983
Domestic Savings	35	12396	13460	13737	14946	14233	14951	15394	15927	17029	17841	18410
Net Factor Income	36	-67	-58	-44	5	102	133	85	-68	-126	-206	-254
Current Transfer	37	165	296	442	458	572	600	515	577	614	620	668
National Savings	38	12494	13697	14136	15409	14907	15685	15993	16437	17517	18256	18824
Foreign Savings	56	23	-545	-630	130	295	609	701	657	624	719	995
GDP per capita (\$)	109	103	102	108	112	104	109	113	114	121	123	128
Per capita consumption (\$)	111	69	67	73	75	68	69	72	72	76	76	79
Rupee Deflators (1970/71=1.0)												
GDP	39	1.588	1.696	1.756	1.791	2.071	2.305	2.520	2.718	2.963	3.153	3.370
Imports (q+nfs)	43	3.283	2.786	2.781	2.821	3.489	4.859	5.358	5.569	5.756	6.452	6.484
Exports (q+nfs)	44	1.930	1.952	2.209	2.280	2.549	2.572	2.956	3.123	3.250	3.754	3.868
Total Expenditure	45	1.628	1.724	1.774	1.819	2.125	2.420	2.634	2.828	3.074	3.270	3.495
Government Consumption	40	1.505	1.549	1.574	1.587	1.667	1.815	1.921	2.043	2.143	2.245	2.354

Table 2.1(b)
INDIA: National Accounts Summary, 1975/76-1985/86
(US\$ million at 70/71 prices)

		1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Private Consumption	46	1.611	1.732	1.787	1.808	2.157	2.490	2.698	2.899	3.161	3.357	3.587
Fixed Investment	41	1.763	1.800	1.842	2.002	2.320	2.590	2.904	3.190	3.529	3.830	4.246
Change in Stocks	42	1.692	1.764	1.795	1.847	2.179	2.511	2.843	2.964	3.168	3.536	3.535
Dollar Deflators(1970/71=1.0)												
Imports (q+n)s)	59	2.845	2.338	2.436	2.578	3.240	4.617	4.501	4.338	4.186	4.071	3.974
Exports (q+n)s)	58	1.673	1.638	1.935	2.084	2.367	2.444	2.483	2.433	2.363	2.368	2.371
Terms of Trade Index	57	0.588	0.701	0.794	0.808	0.730	0.529	0.552	0.561	0.565	0.582	0.597
Exchange Rate Index (US\$ per Rupee)	47	0.867	0.839	0.876	0.914	0.929	0.950	0.840	0.779	0.727	0.631	0.613

Table 2.2(a)
GROSS DOMESTIC PRODUCT AT FACTOR COST - BY INDUSTRY OF ORIGIN, 1975/76-1985/86
(Rs. billion at current prices)

		1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Agricultural Sector	23	278.45	285.67	327.16	336.96	347.42	427.88	465.46	490.43	615.32	632.61	675.60
Agriculture	2	266.45	272.58	313.72	320.95	329.90	408.38	442.61	465.62	589.08	601.47	640.01
Forestry & Logging	3	6.33	7.08	7.26	8.63	9.84	10.41	12.87	13.85	13.41	15.37	17.62
Fishing	4	5.67	6.01	6.18	7.38	7.68	9.09	9.98	10.96	12.83	15.77	17.97
Industry Sector	25	153.87	175.32	197.42	220.98	246.77	284.47	333.87	389.44	442.64	506.70	586.25
Mining & Quarrying	5	8.84	10.11	11.17	12.15	15.15	18.43	31.70	43.26	50.33	58.29	64.78
Manufacturing	7	103.75	115.20	128.39	147.37	169.48	189.63	216.73	243.30	275.43	310.81	357.68
Registered	8	66.47	75.64	83.31	96.25	110.47	123.06	144.06	165.84	188.06	213.86	248.79
Unregistered	9	37.28	39.56	45.08	51.12	59.01	66.57	72.67	77.46	87.37	96.95	109.19
Construction	10	32.93	39.06	45.37	46.56	46.99	56.71	62.56	76.29	85.74	100.40	116.30
Electricity, Gas & Water	11	8.35	10.95	12.49	14.90	17.15	19.70	22.88	26.65	31.14	37.20	47.19
Services Sector	12	231.38	255.66	284.73	314.20	357.39	423.13	508.37	579.74	669.08	769.57	888.39
Transport, Storage & Communication	13	35.24	41.60	45.64	53.61	57.57	62.38	75.41	91.93	109.22	125.63	149.16
Railway	14	9.01	11.13	11.29	10.87	11.05	11.24	16.28	21.23	24.17	24.74	30.81
Other Transport	15	22.14	25.03	28.36	35.75	38.92	43.24	50.06	59.65	72.02	86.36	101.85
Communication	16	4.09	5.44	5.99	6.99	7.60	7.90	9.07	11.05	13.03	14.53	16.50
Trade, Hotels, etc.	17	92.08	95.97	109.57	116.92	137.84	170.23	209.25	225.44	255.74	285.35	318.53
Banking & Insurance	18	17.77	21.04	23.26	25.27	28.04	34.61	45.67	54.17	61.74	76.25	90.83
Real Estate etc.	19	23.41	27.49	30.51	34.73	39.99	43.99	48.62	54.11	60.77	70.33	81.61
Public Admin & Defense	20	32.37	34.53	36.94	40.72	45.85	54.14	62.06	73.92	85.74	101.58	117.92
Other Services	21	30.51	35.03	38.81	42.95	48.10	57.78	67.36	80.17	95.87	110.43	130.34
GDP at Factor Cost	22	663.70	716.65	809.31	872.14	953.58	1135.48	1307.70	1459.61	1727.04	1908.88	2150.24
Memo items: (a)												
Primary Sector	1	287.29	295.78	338.33	349.11	362.57	446.31	497.16	533.63	665.65	690.90	740.38
Secondary Sector	6	145.03	165.21	186.25	208.83	233.62	266.04	302.17	346.24	392.31	448.41	521.47

Source: CSD, National Accounts Statistics, various issues and Quick Estimates dated January 16, 1987.

Note: 1985/86 data are from Quick Estimates.

(a) CSD definitions: Primary Sector is Agricultural Sector plus Mining and Quarrying; Secondary Sector is Industry Sector minus Mining and Quarrying.

Table 2.2(b)
GROSS DOMESTIC PRODUCT AT FACTOR COST - BY INDUSTRY OF ORIGIN, 1975/76-1985/86
(Rs. billion at 1970/71 prices)

		1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Agricultural Sector	24	193.49	181.76	203.16	209.18	182.41	204.50	213.19	206.51	229.76	228.31	231.43
Agriculture	32	186.13	174.64	196.51	202.18	175.78	198.04	206.54	200.32	223.37	221.59	224.44
Forestry & Logging	33	4.22	4.08	3.61	3.81	3.47	3.24	3.33	2.98	2.76	2.83	2.91
Fishing	34	3.14	3.04	3.04	3.19	3.16	3.22	3.32	3.21	3.63	3.89	4.08
Industry Sector	26	92.12	100.73	107.86	115.81	113.31	115.02	121.03	127.82	134.36	141.79	150.97
Mining & Quarrying	35	4.80	4.98	5.12	5.23	5.27	5.65	6.32	6.91	7.55	8.13	8.55
Manufacturing	37	61.28	66.68	71.00	78.68	77.33	77.13	81.30	86.90	91.30	96.26	102.82
Registered	38	38.72	43.34	46.02	51.32	50.41	49.94	53.23	58.14	61.49	65.33	70.12
Unregistered	39	22.56	23.34	24.98	27.36	26.92	27.19	28.07	28.76	29.81	30.93	32.70
Construction	40	20.27	22.69	25.11	24.53	23.24	24.39	24.83	24.92	25.78	26.61	27.88
Electricity, Gas & Water	41	5.77	6.38	6.63	7.37	7.47	7.85	8.58	9.09	9.73	10.79	11.72
Services Sector	42	143.29	149.11	158.18	171.20	176.19	186.71	200.48	216.35	231.29	248.28	267.48
Transport, Storage & Communication	43	25.29	26.96	28.11	30.47	31.99	34.17	36.89	39.54	42.57	45.52	49.46
Railways	44	7.12	7.64	8.04	8.05	8.18	8.42	9.12	9.33	9.29	9.47	10.45
Other Transport	45	14.98	15.87	16.42	18.51	19.57	21.19	22.84	24.92	27.54	29.79	32.47
Communication	46	3.19	3.45	3.65	3.91	4.24	4.56	4.93	5.29	5.74	6.26	6.54
Trade, Hotels, etc.	47	49.32	51.03	55.29	60.12	58.16	61.37	65.68	69.88	73.23	76.35	80.09
Banking & Insurance	48	8.43	10.14	11.11	12.93	12.58	12.79	13.72	15.94	17.40	19.37	21.60
Real Estate etc.	49	16.58	17.94	18.64	19.31	20.07	20.79	21.61	22.47	23.33	24.26	25.23
Public Admin & Defense	50	22.38	23.70	25.35	28.19	31.43	34.96	39.05	43.79	48.67	55.17	62.06
Other Services	51	21.29	19.34	19.68	20.18	21.96	22.63	23.53	24.73	26.09	27.61	29.04
GDP at Factor Cost	52	428.90	431.60	469.20	496.19	471.91	506.23	534.70	550.68	595.41	618.38	649.88
Memo items: (a)												
Primary Sector	31	198.29	186.74	208.28	214.41	187.68	210.15	219.51	213.42	237.31	236.44	239.98
Secondary Sector	36	87.32	95.75	102.74	110.58	108.04	109.37	114.71	120.91	126.81	133.66	142.42

Source: CSO, National Accounts Statistics, various issues and Quick Estimates dated January 16, 1987.

Note: 1985/86 data are from Quick Estimates.

(a) CSO definitions: Primary Sector is Agricultural Sector plus Mining and Quarrying; Secondary Sector is Industry Sector minus Mining and Quarrying.

Table 2.2(c)
 IMPLICIT PRICE DEFLATORS FOR GDP AT FACTOR COST, 1975/76-1985/86

		1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Agricultural Sector	23	143.91	157.17	161.04	161.09	190.46	209.23	218.33	237.48	267.81	277.06	291.92
Agriculture	2	143.15	156.08	159.65	158.74	187.68	206.21	214.30	232.44	263.72	271.43	285.16
Forestry & Logging	3	150.00	173.53	201.11	226.51	283.57	321.30	386.49	464.77	485.87	543.11	605.50
Fishing	4	180.57	197.70	203.29	231.35	243.04	282.30	300.60	341.43	353.44	405.40	440.44
Industry Sector	25	167.03	174.05	183.03	190.81	219.55	247.32	275.86	304.68	329.44	357.36	388.32
Mining & Quarrying	5	184.17	203.01	218.16	232.31	287.48	326.19	501.58	625.18	666.62	716.97	757.66
Manufacturing	7	169.30	172.77	180.83	187.30	219.16	245.86	266.58	279.98	301.68	322.89	348.16
Registered	8	171.67	174.53	181.03	187.55	219.14	246.42	270.64	285.24	305.84	327.35	354.81
Unregistered	9	165.25	169.49	180.46	186.84	219.21	244.83	258.89	269.33	293.09	313.45	333.91
Construction	10	162.46	172.15	180.68	189.81	202.19	232.51	251.95	306.14	332.58	377.30	417.14
Electricity, Gas & Water	11	144.71	171.63	188.39	202.17	229.59	250.96	266.67	293.18	320.04	344.76	402.65
Services Sector	12	161.48	171.46	180.00	183.53	202.84	226.62	253.58	267.96	289.28	309.96	332.13
Transport, Storage & Communication	13	139.34	154.30	162.36	175.94	179.96	182.56	204.42	232.50	256.57	275.99	301.58
Railway	14	126.54	145.68	140.42	135.03	135.09	133.49	178.51	227.55	260.17	261.25	294.83
Other Transport	15	147.80	157.72	172.72	193.14	198.88	204.06	219.18	239.37	261.51	289.90	313.67
Communication	16	128.21	157.68	164.11	178.77	179.25	173.25	183.98	208.88	227.00	232.11	252.29
Trade, Hotels etc.	17	186.70	188.07	198.17	194.48	237.00	277.38	318.59	322.61	349.23	373.74	397.72
Banking & Insurance	18	210.79	207.50	209.36	195.44	222.89	270.60	332.87	339.84	354.83	393.65	420.51
Real Estate etc.	19	141.19	153.23	163.68	179.85	199.25	211.59	224.99	240.81	260.48	289.90	323.46
Public Admin & Defence	20	144.64	145.70	145.72	144.45	145.88	154.86	158.92	168.81	176.17	184.12	190.01
Other Services	21	143.31	181.13	197.21	212.83	219.03	255.32	286.27	324.18	367.46	399.96	448.83
GDP at Factor Cost	22	154.74	166.04	172.49	175.77	202.07	224.30	244.57	265.06	290.06	308.69	330.87
Memo items:												
Primary Sector	1	144.88	158.39	162.44	162.82	193.19	212.38	226.49	250.04	280.50	292.21	308.52
Secondary Sector	6	166.09	172.54	181.28	188.95	216.23	243.25	263.42	286.36	309.37	335.49	366.15

Source: Derived from Tables 2.2(a) and 2.2(b).

Table 2.3
GROWTH OF TOTAL AND PER CAPITA NET DOMESTIC PRODUCT BY STATES

States	Net Domestic Product at Factor Cost at 1970/71 prices (Rs bill) (a)				Per Capita Net Domestic Product at Factor Cost at 1970/71 prices (Rs.)			
	1960/61	1970/71	1980/81	1984/85	1960/61	1970/71	1980/81	1984/85
Andhra Pradesh	17.96	25.23	34.32	42.01	502	585	647	743
Assam	6.14	7.71	10.74	12.53	575	535	547	579
Bihar	18.14	22.45	29.42	32.88	393	402	425	437
Gujarat	13.48	21.89	30.40	35.66	661	829	905	935
Haryana	4.48	8.69	13.53	15.47	597	877	1058	1127
Himachal Pradesh	1.85	2.32	2.84	3.10	574	678	671	688
Jammu & Kashmir	1.74	2.50	3.78	4.04	491	548	642	636
Karnataka	12.64	18.58	25.25	28.29	541	641	687	715
Kerala	7.89	12.55	16.25	18.99	473	594	643	718
Madhya Pradesh	15.20	19.91	26.07	31.32	475	484	504	572
Maharashtra	29.17	38.76	60.06	70.48	747	783	965	1069
Manipur	0.22	0.40	0.73	0.84	281	381	518	550
Orissa	6.83	10.37	13.83	15.63	395	478	529	1484
Punjab	7.38	14.36	22.86	23.33	669	1070	1374	637
Rajasthan	10.21	16.54	18.28	23.41	519	651	541	646
Tamil Nadu	20.31	23.71	28.81	32.35	610	581	598	646
Tripura	0.51	0.78	1.27	1.40	455	502	623	619
Uttar Pradesh	33.67	42.57	56.93	63.40	460	486	519	533
West Bengal	24.58	31.68	40.99	46.11	712	722	759	802
Delhi	3.20	4.77	8.25	10.04	1434	1199	1361	1448
ALL INDIA (b)	243.60	345.19	474.19	576.54	561	638	700	749

Note: The estimates of net domestic product have been prepared and released by the respective State Statistical Bureaus. The estimates are prepared following, to the extent possible, the standard methodologies recommended by the Working Group on State Income. However, owing to differences in methodology, source material used and the base year for constant price series, these estimates are not strictly comparable among the states.

(a) Converted to 1970/71 prices from 1960/61 prices using implicit price deflator of All India Net domestic product at factor cost.

(b) Including States and Union Territories not listed above.

Sources: State Statistical Bureaus, for estimates at State level.

C.S.O. National Accounts Statistics 1970/71-1982/83, January 1985 and Press Note dated January 16, 1987.
All India estimates.

Table 2.4
GROSS SAVINGS AND INVESTMENT, 1975/76-1985/86
(in Rs billion)

	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	
	(At current prices)											
GROSS NATIONAL SAVINGS	67	163.62	188.45	199.35	227.09	253.72	292.39	334.11	377.30	445.59	505.65	566.82
Households	69	119.67	135.13	143.92	163.17	186.52	219.83	234.42	268.33	345.62	399.90	447.54
Private Corporate Sector	70	10.56	11.47	13.75	16.11	23.53	26.53	27.40	30.56	33.33	39.52	44.47
Public Sector	71	33.39	41.85	41.68	47.81	49.67	48.03	72.29	78.41	66.64	64.23	74.81
Foreign Savings	76	0.56	-11.40	-13.14	2.75	7.71	22.18	28.18	27.46	26.96	34.79	48.36
GROSS DOMESTIC INVESTMENT	24	164.18	177.05	186.21	229.84	261.43	314.57	362.29	404.76	472.55	538.44	615.18
Change in Stocks	25	31.70	24.02	14.02	41.08	48.36	62.48	64.46	55.57	66.94	80.16	79.07
GROSS FIXED CAPITAL FORMATION	26	132.48	153.03	172.19	188.76	213.07	252.09	297.83	349.19	405.61	458.28	536.11
By Type of Asset:												
Construction	27	72.58	85.00	99.46	103.16	109.55	130.15	153.41	182.18	207.01	240.61	278.01
Machinery & Equipment	28	59.90	68.03	72.73	85.60	103.52	121.94	144.42	167.01	198.60	217.67	258.10
By Sector:												
Public Sector	29	56.00	70.48	76.97	83.76	99.74	116.84	145.82	185.60	203.81	234.23	261.12
Private Sector	30	76.48	82.55	95.22	105.00	113.33	135.25	152.01	163.59	201.80	224.05	274.99
GDPmp at current prices	61	743.44	801.98	898.48	977.48	1075.42	1274.53	1476.84	1651.36	1940.61	2143.85	2435.51
	(At 1970/71 prices)											
GROSS DOMESTIC INVESTMENT	54	93.88	98.64	101.29	116.54	114.01	122.20	125.21	128.21	136.06	142.31	148.64
Change in Stocks	55	18.74	13.62	7.81	22.24	22.19	24.88	22.67	18.75	21.13	22.67	22.37
GROSS FIXED CAPITAL FORMATION	56	75.14	85.02	93.48	94.30	91.82	97.32	102.54	109.46	114.93	119.64	126.27
By Type of Asset:												
Construction	57	41.45	46.67	52.43	50.01	46.21	48.32	48.28	48.00	48.62	50.22	52.32
Machinery & Equipment	58	33.69	38.35	41.05	44.29	45.61	49.00	54.26	61.46	66.31	69.42	73.95
By Sector:												
Public Sector	59	31.76	39.16	41.79	41.84	42.98	45.11	50.20	58.18	57.75	61.15	61.51
Private Sector	60	43.38	45.86	51.69	52.46	48.84	52.21	52.34	51.28	57.18	58.49	64.76

Source: CSO, National Accounts Statistics, various issues and Quick Estimates dated January 16, 1987.

Table 2.5
DISPOSABLE INCOME AND ITS USES, 1975/76-1985/86
(in Rs billion at current prices)

		1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
GDP at market prices	61	743.44	801.98	898.48	977.48	1075.42	1274.53	1476.84	1651.36	1940.61	2143.85	2435.51
Net Factor Income from abroad	62	-1.65	-1.22	-0.92	0.11	2.66	4.85	3.40	-2.82	-5.43	-9.96	-12.35
Other current transfers	63	4.07	6.19	9.22	9.68	14.96	21.87	20.69	24.12	26.50	30.03	32.48
Disposable income	64	745.86	806.95	906.78	987.27	1093.04	1301.25	1500.93	1672.66	1961.68	2163.92	2455.64
Private disposable income	65	638.96	683.04	778.43	843.22	933.12	1124.89	1275.88	1414.09	1687.16	1859.07	2098.12
Public disposable income	66	106.90	123.91	128.35	144.05	159.92	176.36	225.05	258.57	274.52	304.85	357.52
Gross National Savings	67	163.62	188.45	199.35	227.09	253.72	292.39	334.11	377.30	445.59	503.65	566.82
Private savings	68	130.23	146.60	157.67	179.28	204.05	246.36	261.82	298.89	378.95	439.42	492.01
Public savings	71	33.39	41.85	41.68	47.81	49.67	46.03	72.29	78.41	66.64	64.23	74.81
Final Consumption	72	582.24	618.50	707.43	760.18	839.32	1008.86	1166.82	1295.36	1516.09	1660.27	1888.82
Private Consumption	73	508.73	536.44	620.76	663.94	729.07	878.53	1014.06	1115.20	1308.21	1419.65	1606.11
Public Consumption	74	73.51	82.06	86.67	96.24	110.25	130.33	152.76	180.16	207.88	240.62	282.71

Sources: (1) CSO, National Accounts Statistics, various issues and Quick Estimates dated January 16, 1987.
(2) World Bank Estimates.

Table 2.6(a)
GROSS DOMESTIC INVESTMENT BY INDUSTRY OF USE, 1975/76-1985/86
(Rs. billion at current prices)

		1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Agricultural Sector	84	22.25	34.11	37.94	49.55	49.00	60.02	62.24	65.38	78.55	89.60	n.a.
Agriculture	2	21.19	32.61	36.13	47.82	47.17	57.62	59.67	62.39	74.80	85.29	93.55
Forestry & Logging	3	0.35	0.54	0.62	0.72	0.82	1.09	1.18	1.43	1.79	2.04	n.a.
Fishing	4	0.71	0.96	1.19	1.01	1.01	1.31	1.39	1.56	1.96	2.27	n.a.
Industry Sector	86	64.80	61.96	77.46	98.82	108.44	129.40	158.14	177.71	190.64	221.87	n.a.
Mining & Quarrying	5	6.41	7.86	7.63	6.21	8.76	12.59	16.75	28.49	29.56	42.72	n.a.
Manufacturing	7	41.30	34.71	45.32	66.41	67.92	78.96	95.29	95.54	108.74	118.56	n.a.
Registered	8	34.70	24.17	29.31	48.94	52.14	59.94	76.64	76.07	83.01	92.88	107.85
Unregistered	9	6.60	10.54	16.03	17.47	15.78	19.02	18.65	19.47	25.73	25.68	n.a.
Construction	10	2.40	3.64	5.03	3.70	5.25	6.49	7.96	6.98	3.81	7.14	n.a.
Electricity, Gas & Water	11	14.69	15.75	19.48	22.50	26.51	31.36	38.14	46.70	48.53	53.45	n.a.
Services Sector	12	60.24	71.14	72.25	94.29	95.34	125.34	140.38	156.32	186.88	212.42	n.a.
Transport, Storage & Communication	13	15.04	15.00	17.23	20.10	23.85	30.47	37.01	40.14	43.59	53.78	n.a.
Railway	14	3.87	3.27	3.92	4.85	6.43	8.56	10.10	10.81	12.20	14.29	17.98
Other Transport	15	9.22	9.40	10.86	12.45	14.46	18.49	21.60	23.42	24.34	30.92	n.a.
Communication	16	1.95	2.33	2.45	2.80	2.96	3.42	5.31	5.91	7.05	8.57	8.80
Trade, Hotels, etc.	17	18.59	18.21	11.24	21.72	13.77	22.19	21.56	21.81	31.29	32.41	n.a.
Banking & Insurance	18	0.64	0.82	0.92	1.20	1.39	2.36	3.76	5.13	5.84	7.35	n.a.
Real Estate etc.	19	14.76	24.88	31.30	33.65	33.83	41.63	46.15	53.04	66.41	71.86	n.a.
Public Admin & Defense	20	9.16	9.39	7.97	13.44	18.25	22.76	25.60	29.10	32.18	38.49	44.08
Other Services	21	2.05	2.84	3.59	4.18	4.25	5.93	6.30	7.10	7.57	8.53	n.a.
Gross Domestic Investment (a)	22	147.29	167.21	187.65	242.66	252.78	314.76	360.76	399.41	456.07	523.89	599.16
Errors & Omissions	23	16.89	9.84	-1.44	-12.82	8.65	-0.19	1.53	5.35	16.48	14.55	16.02
Gross Domestic Investment (adjusted) (b)	24	164.18	177.05	186.21	229.84	261.43	314.57	362.29	404.76	472.55	538.44	615.18
Memo items: (c)												
Primary Sector	1	28.66	41.97	45.57	55.76	57.76	72.61	78.99	93.87	108.11	132.32	n.a.
Secondary Sector	6	58.39	54.10	69.83	92.61	99.68	116.81	141.39	149.22	161.08	179.15	n.a.

Source: CSO, National Accounts Statistics, various issues and Quick Estimates dated January 16, 1987.

Note: 1985/86 data are from Quick Estimates.

(a) Refers to CSO's savings-based estimate of investment.

(b) Refers to Gross Capital Formation adjusted for errors and omissions, which is CSO's direct estimate of investment based on physical flows.

(c) CSO definitions: Primary Sector is Agricultural Sector plus Mining and Quarrying; Secondary Sector is Industry Sector minus Mining & Quarrying.

Table 2.6(b)
GROSS DOMESTIC INVESTMENT BY INDUSTRY OF USE, 1975/76-1985/86
(Rs. billion at 1970/71 prices)

		1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Agricultural Sector	85	12.79	18.79	20.13	24.81	21.35	23.64	22.20	21.56	23.33	24.72	n.a.
Agriculture	32	12.17	17.95	19.08	23.94	20.56	22.74	21.34	20.68	22.32	23.70	23.76
Forestry & Logging	33	0.21	0.30	0.33	0.35	0.34	0.39	0.35	0.36	0.41	0.42	n.a.
Fishing	34	0.40	0.54	0.72	0.52	0.45	0.51	0.51	0.52	0.60	0.60	n.a.
Industry Sector	87	37.26	35.12	42.85	51.29	46.44	51.18	56.40	58.50	57.95	62.22	n.a.
Mining & Quarrying	35	3.54	4.45	4.37	3.25	3.75	4.79	5.70	9.03	8.72	11.85	n.a.
Manufacturing	37	23.53	19.55	24.94	34.62	30.43	31.06	34.11	32.43	33.98	34.57	n.a.
Registered	38	20.08	13.88	16.21	26.00	23.72	23.71	27.50	25.82	26.16	27.36	29.26
Unregistered	39	3.45	5.67	8.73	8.62	6.71	7.29	6.61	6.61	7.82	7.21	n.a.
Construction	40	1.43	2.02	2.67	1.92	2.35	2.54	2.80	2.23	1.33	1.89	n.a.
Electricity, Gas & Water	41	8.76	9.10	10.87	11.60	11.91	12.85	13.79	14.81	13.92	13.91	n.a.
Services Sector	42	34.18	39.25	39.09	46.84	40.45	47.45	46.08	46.46	50.04	51.52	n.a.
Transport, Storage & Communication	43	8.91	8.87	9.94	10.66	10.89	12.71	13.84	13.77	14.07	16.46	n.a.
Railways	44	2.43	2.03	2.38	2.73	3.27	4.15	4.39	3.89	3.96	4.23	4.68
Other Transport	45	5.28	5.49	6.18	6.48	6.25	7.10	7.49	7.96	8.04	9.85	n.a.
Communication	46	1.20	1.35	1.38	1.45	1.37	1.46	1.96	1.92	2.07	2.38	2.22
Trade, Hotels, etc.	47	10.68	10.14	6.24	11.36	5.97	8.63	7.26	7.80	10.15	9.23	n.a.
Banking & Insurance	48	0.38	0.44	0.51	0.62	0.53	0.68	0.79	0.91	0.95	1.10	n.a.
Real Estate etc.	49	7.82	13.01	16.16	15.59	13.43	14.61	13.96	14.28	15.34	14.76	n.a.
Public Admin & Defense	50	5.23	5.19	4.25	6.51	7.78	8.51	8.07	7.52	7.45	7.84	8.04
Other Services	51	1.16	1.60	1.99	2.10	1.85	2.31	2.16	2.18	2.08	2.13	n.a.
Gross Domestic Investment(a)	52	84.22	93.16	102.07	123.04	110.24	122.27	124.68	126.52	131.32	138.46	144.77
Errors & Omissions	53	9.66	5.48	-0.78	-6.50	3.77	-0.07	0.53	1.69	4.74	3.85	3.87
Gross Domestic Investment (adjusted) (b)	54	93.88	98.64	101.29	116.54	114.01	122.20	125.21	128.21	136.06	142.31	148.64
Memoranda items: (c)												
Primary Sector	31	16.32	23.24	24.50	28.06	25.10	28.43	27.90	30.59	32.05	36.57	n.a.
Secondary Sector	36	33.72	30.67	38.48	48.14	44.69	46.39	50.70	49.47	49.23	50.37	n.a.

Source: CSO, National Accounts Statistics, various issues and Quick Estimates dated January 16, 1987.

Note: 1985/86 data are from Quick Estimates.

(a) Refers to CSO's savings-based estimate of investment.

(b) Refers to Gross Capital Formation adjusted for errors and omissions, which is CSO's direct estimate of investment based on physical flows.

(c) CSO definitions: Primary Sector is Agricultural Sector plus Mining and Quarrying; Secondary Sector is Industry Sector minus Mining and Quarrying.

Table 2.6(c)
INVESTMENT DEFLATORS BY INDUSTRY OF USE, 1974/75-1984/85

		1974/75	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85
Agricultural Sector	84	157.79	174.10	181.53	188.47	199.72	229.51	253.89	280.36	303.25	336.69	362.46
Agriculture	2	158.13	174.12	181.67	189.36	199.75	229.43	253.39	279.62	301.69	335.13	359.87
Forestry & Logging	3	157.89	166.67	180.00	187.88	205.71	241.18	279.49	337.14	397.22	436.59	485.71
Fishing	4	148.94	177.50	177.78	165.28	194.23	224.44	256.86	272.55	300.00	326.67	378.33
Industry Sector	86	164.25	173.91	176.42	180.77	192.67	223.86	252.83	280.39	303.78	328.97	356.59
Mining & Quarrying	5	157.48	181.07	176.63	174.60	191.08	233.60	262.84	293.86	315.50	338.99	360.51
Manufacturing	7	167.97	175.52	177.54	181.72	191.83	223.20	254.71	279.36	294.60	320.01	342.96
Registered	8	168.90	172.81	174.14	180.81	188.23	219.81	252.80	278.69	294.62	317.32	339.47
Unregistered	9	164.43	191.30	185.89	183.62	202.67	235.17	260.91	282.15	294.55	329.03	356.17
Construction	10	154.19	167.83	180.20	188.39	192.71	223.40	255.51	284.29	313.00	286.47	377.78
Electricity, Gas & Water	11	152.47	167.69	173.08	179.21	193.97	222.59	244.05	276.58	315.33	348.64	384.26
Services Sector	12	161.47	176.24	181.25	184.83	201.30	235.70	264.15	304.64	336.46	373.46	412.31
Transport, Storage & Communication	13	153.47	168.80	169.11	173.34	188.56	219.01	239.73	267.41	291.50	309.81	326.73
Railway	14	147.68	159.26	161.08	164.71	177.66	196.64	206.27	230.07	277.89	308.08	337.83
Other Transport	15	156.43	174.62	171.22	175.73	192.13	231.36	260.42	288.38	294.22	302.74	313.91
Communication	16	150.00	162.50	172.59	177.54	193.10	216.06	234.25	270.92	307.81	340.58	360.08
Trade, Hotels, etc.	17	167.77	174.06	179.59	180.13	191.20	230.65	257.13	296.97	279.62	308.28	351.14
Banking & Insurance	18	176.67	168.42	186.36	180.39	193.55	262.26	347.06	475.95	563.74	614.74	668.18
Real Estate etc.	19	164.60	188.75	191.24	193.69	215.84	251.90	284.94	330.59	371.43	432.92	486.86
Public Admin & Defense	20	161.94	175.14	180.92	187.53	206.45	234.58	267.45	317.22	386.97	431.95	490.94
Other Services	21	159.84	176.72	177.50	180.40	199.05	229.73	256.71	291.67	325.69	363.94	400.47
Gross Domestic Investment (a)	22	162.17	174.89	179.49	183.84	197.22	229.30	257.43	289.35	315.69	347.30	378.37
Gross Domestic Investment (adjusted) (b)	24	145.09	164.18	177.05	186.21	229.84	261.43	314.57	362.29	404.76	472.55	538.44
Memoranda items: (c)												
Primary Sector	1	157.75	175.61	180.59	186.00	198.72	230.12	255.40	283.12	306.86	337.32	361.83
Secondary Sector	6	164.65	173.16	176.39	181.47	192.38	223.05	251.80	278.88	301.64	327.20	355.67

Source: CSD, National Accounts Statistics, various issues.

(a) Refers to CSD's savings-based estimate of investment.

(b) Refers to Gross Capital Formation adjusted for errors and omissions, which is CSD's direct estimate of investment based on physical flows.

(c) CSD definitions: Primary Sector is Agricultural Sector plus Mining and Quarrying; Secondary Sector is Industry Sector minus Mining and Quarrying.

Table 3.1
INDIA: Balance of Payments, 1975/76-1985/86
(US\$ million at current prices)

	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	
Exports	61	5653	6799	7729	8376	9983	11212	11174	11205	11868	12135	13194
Merchandise	62	4828	5742	6345	6769	7679	8332	8477	8386	8667	8746	8956
Non-factor services	63	825	1057	1384	1607	2304	2880	2697	2819	3201	3389	4238
Imports	64	5997	6080	7164	9905	13119	17408	17028	16269	16525	16750	18791
Merchandise	65	5483	5399	6471	9015	11857	15893	15333	14385	14360	14400	16066
Non-factor services	66	514	691	693	890	1262	1515	1695	1884	2165	2350	2725
RESOURCE BALANCE	67	-344	719	565	-1529	-3136	-6196	-5854	-5064	-4657	-4615	-5597
Net factor income	68	-191	-136	-107	14	329	615	381	-293	-527	-838	-1009
Factor receipts	69	134	209	311	478	796	1083	912	525	449	493	515
Factor payments	70	325	345	418	464	467	468	531	818	976	1331	1524
(M< Interest paid)	71	267	278	300	368	386	402	410	605	768	904	1066
Net current transfers	72	470	692	1077	1180	1852	2771	2317	2505	2570	2526	2654
Transfer receipts	73	490	707	1088	1203	1872	2786	2338	2526	2587	2542	2674
Transfer payments	74	20	15	11	23	20	15	21	21	17	16	20
CURRENT BALANCE	75	-65	1275	1535	-335	-955	-2810	-3156	-2852	-2614	-2927	-3952
M< CAPITAL INFLOW												
Direct investment	76	-	-	-	-	-	8	10	65	63	62	160
Official grant aid	77	342	377	432	449	577	643	497	399	367	453	450
Net M< loans (ORS) [a]	78	1352	1039	758	549	642	2013	1720	2115	2204	2600	2853
Disbursements	79	1915	1599	1348	1236	1361	2769	2442	3000	3176	3687	4586
Repayments	80	563	560	590	687	719	756	722	885	972	1087	1733
Other M< (Net)	81	-	-	-	-	-	-	-	-	-	-	-
Net credit from IMF	82	242	-337	-330	-158	-	312	689	1968	1306	67	-209
Disbursements	83	242	-	-	-	-	312	689	1968	1376	201	-
Repayments	84	-	337	330	158	-	-	-	-	70	134	209
Net short-term capital	85	-	-	-	-	-	-	-	-	-	-	-
Capital flows NEI [b]	86	-800	-426	-329	255	-53	-311	-1717	-1400	29	-264	1245
Errors and omissions [c]	87	-255	-362	-18	715	13	-200	-441	210	-474	272	-
Change in Reserves (- indicates increase)	88	-816	-1566	-2048	-1475	-224	345	2398	-505	-881	-263	-547

[a] Includes IMF Trust Fund in 1980/81.

[b] Includes non-resident deposits, exchange rate adjustments in the valuation of reserves and financing of imbalances in bilateral trade.

[c] As estimated by Government of India.

Table 3.2 (a)
INDIA: Merchandise Exports, 1975/76-1985/86
(US\$ Million at current prices)

	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	
PRIMARY EXPORTS	81	1817	1804	2128	2047	2500	2884	2763	2578	2574	2492	2416
Agricultural Products	82	1510	1446	1760	1646	2013	2360	2189	2052	2070	1974	1851
Cashews	83	111	119	175	98	146	178	203	141	146	151	176
Coffee	84	77	141	227	175	202	271	164	194	176	177	193
Tea	85	274	328	665	415	455	539	443	384	500	645	500
Marine Products	86	146	202	204	276	314	275	319	378	348	321	318
Oilcakes	87	100	262	156	134	158	158	132	154	147	115	101
Sugar	88	546	166	23	160	160	46	71	70	170	30	9
Spices	89	82	84	160	180	185	141	111	98	113	174	208
Rice	90	15	n.a.	13	47	159	284	412	226	110	142	158
Tobacco	91	114	115	137	142	141	178	264	257	173	150	120
HPS Groundnuts	92	n.a.	n.a.	n.a.	n.a.	n.a.	80	31	37	34	18	15
Raw Cotton	93	45	30	1	20	93	209	41	112	152	50	54
Ores and Minerals	94	307	358	368	401	487	524	573	526	504	519	566
Iron Ore	95	247	267	281	284	353	384	394	395	389	387	453
Others	96	60	91	87	117	134	140	179	131	115	132	112
MANUFACTURED EXPORTS	97	2855	3949	4187	4931	5448	5620	5756	5569	5805	6166	6472
Chemicals	98	99	124	136	180	245	508	660	561	546	647	574
Basic Chemicals	99	99	124	136	180	245	286	424	320	318	406	365
Chemical Products	100	-	-	-	-	-	222	236	241	228	241	209
Textiles	101	652	794	879	830	1212	1269	1134	999	949	1221	1033
Cotton Yarn	102	7	35	26	19	19	31	17	30	23	31	39
Cotton Cloth	103	188	295	230	266	347	336	296	248	275	374	335
Jute Manufactures	104	312	252	314	237	463	418	289	214	166	287	220
Other Textile Manufactures	105	145	213	309	308	383	484	532	506	485	529	438
Readymade Garments	106	235	373	352	516	572	654	750	654	671	773	823
Leather & Products	107	264	265	318	432	644	354	341	320	456	585	463
Engineering Goods	108	477	634	721	854	915	1107	1173	1050	970	967	817
Gems & Jewelry	109	150	281	653	886	742	814	919	1068	1171	970	1356
Other Handicrafts	110	120	189	241	296	388	423	492	442	461	422	343
Processed Foods	111	n.a.	n.a.	107	123	168	243	235	260	205	223	235
Other Manufactures [a]	112	859	1290	779	814	563	248	53	216	376	357	828
TOTAL (Customs) [b]	118	4672	5753	6315	6978	7948	8504	8519	8147	8380	8658	8888
Stat. Discrepancy [c]	119	156	-11	30	-209	-269	-172	-42	239	287	87	68
TOTAL (BOP) [b]	120	4828	5742	6345	6769	7679	8332	8477	8386	8667	8746	8956

Sources: 1. Economic Survey, various issues.
2. Export Promotion Councils.

[a] Includes Exports of POL Products.

[b] Net of Crude Petroleum Exports.

[c] Difference between Customs-based and Receipts-based figures.

Table 3.2 (b)
INDIA: Merchandise Exports, 1975/76-1985/86
(US\$ Million at constant 84/85 prices)

	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	
PRIMARY EXPORTS	121	2232	2376	2097	2124	2646	2853	2806	2593	2491	2492	2426
Agricultural Products	122	1803	1901	1668	1671	2127	2390	2283	2155	2057	1974	1916
Cashews	123	248	238	186	125	176	149	142	143	171	151	173
Coffee	124	156	134	152	173	162	229	194	201	186	177	221
Tea	125	640	736	674	520	614	691	645	587	585	645	645
Marine Products	126	185	209	222	269	271	245	261	295	302	321	330
Oilcakes	127	137	249	119	127	144	123	115	156	136	115	92
Sugar	128	131	63	8	79	62	8	22	35	107	30	2
Spices	129	97	96	128	165	186	142	132	135	143	174	142
Rice	130	20	n.a.	30	63	296	418	501	261	101	142	141
Tobacco	131	126	138	149	135	136	146	213	212	150	150	114
HPS Groundnuts	132	-	-	-	n.a.	n.a.	76	29	35	33	18	15
Raw Cotton	133	64	38	0	15	81	162	29	97	142	50	40
Ores and Minerals	134	430	476	429	454	519	463	523	438	434	519	511
Iron Ore	135	346	355	327	321	376	340	359	329	335	387	409
Others	136	84	121	101	132	143	124	163	109	99	132	101
MANUFACTURED EXPORTS	137	4381	5942	5633	5806	5307	5389	5320	5337	5967	6166	6452
Chemicals	138	99	120	140	181	212	411	558	536	535	647	568
Basic Chemicals	139	99	120	140	181	212	232	359	306	312	406	361
Chemical Products	140	-	-	-	-	-	180	199	230	224	241	207
Textiles	141	1007	1190	1112	933	1077	1337	1059	952	1067	1221	1036
Cotton Yarn	142	16	63	35	21	20	30	16	23	24	31	38
Cotton Cloth	143	299	412	243	281	332	273	224	203	270	374	329
Jute Manufactures	144	459	410	498	303	356	633	411	316	297	287	239
Other Textile Manufactures	145	233	306	336	327	369	401	408	410	476	529	429
Ready-made Garments	146	322	511	496	571	538	742	679	635	726	773	842
Leather & Products	147	473	368	432	511	575	208	311	306	448	585	458
Engineering Goods	148	648	885	900	1065	963	1051	1108	1006	955	967	810
Gems & Jewelry	149	227	419	885	1045	772	773	868	1024	1151	970	1344
Other Handicrafts	150	181	282	327	349	404	401	465	424	454	422	340
Processed Foods	151	-	-	145	145	175	231	222	249	202	223	233
Other Manufactures [a]	152	1423	2168	1197	1007	591	235	50	206	369	357	821
TOTAL (Customs) [b]	158	6614	8318	7730	7930	7953	8242	8126	7931	8398	8658	8876
Stat. Discrepancy [c]	159	221	-15	37	-237	-269	-167	-40	232	288	87	67
TOTAL (GDP) [b]	160	6834	8303	7767	7693	7684	8075	8086	8163	8685	8746	8946

Sources: 1. Economic Survey, various issues.
2. Export promotion Councils.

[a] Includes Exports of PDL Products.

[b] Net of Crude Petroleum Exports.

[c] Difference between Customs-based and Receipts-based figures.

Table 3.2 (c)
INDIA: Export Unit Value Indices, 1975/76-1985/86
(Base: 84/85 = 100)

	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	
PRIMARY EXPORTS	161	81	76	101	96	94	101	98	99	103	100	100
Agricultural Products	162	84	76	106	99	95	99	96	95	101	100	97
Cashews	163	45	50	94	78	83	119	143	98	86	100	102
Coffee	164	49	105	149	101	125	119	85	97	95	100	87
Tea	165	43	45	99	80	74	78	69	65	85	100	78
Marine Products	166	79	97	92	103	116	112	122	128	115	100	96
Oilcakes	167	73	105	131	105	110	129	115	99	108	100	109
Sugar	168	416	262	299	203	257	584	323	202	158	100	420
Spices	169	85	87	125	109	100	99	84	73	79	100	147
Rice	170	76	n.a.	44	74	54	68	82	87	109	100	112
Tobacco	171	90	83	92	105	104	122	124	122	115	100	105
HPS Groundnuts	172	n.a.	n.a.	n.a.	n.a.	n.a.	105	106	104	102	100	101
Raw Cotton	173	71	78	221	134	115	129	139	116	107	100	134
Ores and Minerals	174	71	75	86	88	94	113	110	120	116	100	111
Iron Ore	175	71	75	86	88	94	113	110	120	116	100	111
Others	176	71	75	86	88	94	113	110	120	116	100	111
MANUFACTURED EXPORTS	177	65	66	74	85	103	104	108	104	98	100	100
Chemicals	178	100	104	97	100	115	123	118	105	102	100	101
Basic Chemicals	179	100	104	97	100	115	123	118	105	102	100	101
Chemical Products	180	n.a.	n.a.	n.a.	n.a.	n.a.	123	118	105	102	100	101
Textiles	181	65	67	79	89	113	95	107	105	89	100	100
Cotton Yarn	182	47	55	75	88	95	100	107	134	97	100	103
Cotton Cloth	183	63	72	95	95	104	123	132	122	102	100	102
Jute Manufactures	184	68	61	63	78	130	66	70	68	56	100	92
Other Textile Manufactures	185	62	69	92	94	104	121	131	123	102	100	102
Ready-made Garments	186	73	73	71	90	106	88	110	103	92	100	98
Leather & Products	187	56	72	74	85	112	170	110	104	102	100	101
Engineering Goods	188	74	72	80	80	95	105	106	104	102	100	101
Gems & Jewelry	189	66	67	74	85	96	105	106	104	102	100	101
Other Handicrafts	190	66	67	74	85	96	105	106	104	102	100	101
Processed Foods	191	66	67	74	85	96	105	106	104	102	100	101
Other Manufactures [a]	192	60	60	65	81	95	106	106	104	102	100	101
TOTAL	198	71	69	82	88	100	103	105	103	100	100	100

Source: Derived from Tables 3.2 (a) and 3.2 (b).

Table 3.3 (a)
INDIA: Merchandise Imports, 1975/76-1985/86
(US\$ Million at current prices)

	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	
Foodgrains	101	1552	971	143	106	131	127	389	387	784	204	73
Edible Oils	102	16	112	829	649	552	864	700	412	712	775	502
Soyabean oil	103	3	57	230	221	217	460	338	165	335	284	212
Palm oil	104	6	20	254	247	226	305	267	188	276	328	290
Others	105	7	35	345	181	109	99	156	59	100	163	-
POL	106	1417	1581	1811	2044	4046	6673	5592	4709	3473	3182	3943
Crude Petroleum	107	1216	1288	1455	1525	2709	4243	3965	3095	2240	1571	2902
Petroleum Products	108	201	293	356	519	1337	2430	1627	1614	1233	1611	1041
Total Fertilizer	109	937	347	498	706	866	1377	1016	384	476	1530	1229
Fert. Raw Material	110	102	101	140	145	179	205	212	100	122	323	317
Fert. Manufactured	111	835	246	358	561	687	1172	804	285	354	1207	912
Urea (N)	112	424	198	215	347	445	684	467	146	194	721	435
DAP (P)	113	167	5	62	87	110	272	185	31	73	348	336
Muriate of Potash (P)	114	38	34	76	74	83	198	149	107	87	138	141
Others	115	206	9	4	52	48	18	3	-	-	-	n.a.
Iron & Steel	116	360	246	307	572	1076	1079	1348	1217	1017	792	1006
Non-Ferrous Metals	117	116	176	224	302	438	606	445	358	379	347	385
Aluminum	118	11	3	13	39	122	258	67	26	41	86	96
Copper	119	25	52	60	126	107	162	166	129	176	86	44
Zinc	120	25	40	49	40	56	57	69	87	67	61	58
Lead	121	11	21	33	19	49	32	21	36	19	16	22
Other Metals	122	44	61	69	77	103	96	121	79	76	97	165
Gems	123	97	202	386	583	470	528	445	757	1049	924	843
Bulk Goods (sub-total)	128	4495	3635	4198	4961	7579	11254	9934	8225	7890	7752	7981
Capital Goods	129	1080	1172	1297	1497	1711	2307	2219	2672	3078	2546	2858
Other Imports	130	510	869	1535	1841	2031	2338	2868	2843	3191	2800	5187
Non-Bulk (sub-total)	137	1590	2041	2832	3338	3742	4645	5086	5515	6269	5347	8046
TOTAL (Customs) [a]	138	6085	5676	7030	8300	11321	15899	15021	13740	14159	13099	16027
Statistical Discrepancy [b]	139	-602	-287	-560	715	536	-6	312	645	201	1301	39
TOTAL (BOP) [a]	140	5483	5389	6471	9015	11857	15893	15333	14385	14360	14400	16066

Sources: 1. Economic Survey, various issues.
2. GOI, Planning Commission.
3. Fertilizer Association of India.

[a] Net of Crude Petroleum Exports.

[b] Difference between Customs-based figures and Receipts-based figures.

Table 3.3 (b)
INDIA: Merchandise Imports, 1975/76-1985/86
(US\$ Million at constant 84/85 prices)

	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	
Foodgrains	141	888	605	86	74	68	80	302	265	524	204	74
Edible Oils	142	17	126	866	696	540	1159	883	674	933	775	669
Soyabean oil	143	3	73	290	293	223	662	396	322	460	284	310
Palm oil	144	9	25	285	246	204	427	377	319	402	328	358
Others	145	5	28	290	157	113	69	110	32	71	163	-
PDL	146	3529	3754	3930	4228	4761	5490	4462	4048	3435	3182	4233
Crude Petroleum	147	2987	3080	3181	3214	3535	3563	3171	2718	2290	1571	3201
Petroleum Products	148	542	674	749	1014	1226	1927	1291	1330	1144	1611	1031
Total Fertilizer	149	671	624	586	825	859	1068	818	393	537	1530	1404
Fert. Raw Material	150	67	249	122	130	154	159	161	91	126	323	330
Fert. Manufactured	151	604	375	464	695	705	909	657	302	411	1207	1073
Urea (N)	152	302	312	293	434	469	557	391	170	255	721	553
DAP (P)	153	115	6	77	114	111	211	160	29	67	348	376
Muriate of Potash (P)	154	38	43	90	83	76	127	103	103	89	138	144
Others	155	149	14	5	65	50	14	3	-	-	-	n.a.
Iron & Steel	156	243	169	235	480	1047	860	1336	1164	927	792	843
Non-Ferrous Metals	157	809	1264	1684	2177	2563	452	561	339	219	347	390
Aluminum	158	112	18	141	441	949	197	65	150	20	86	77
Copper	159	167	359	415	839	558	74	276	60	58	86	70
Zinc	160	350	578	804	677	756	77	93	41	54	61	61
Lead	161	113	219	229	129	194	14	13	12	11	16	18
Other metals	162	66	91	94	91	107	91	114	75	75	97	164
Gems	163	147	301	523	688	489	501	420	726	1032	924	836
Bulk Goods (sub-total)	168	6305	6844	7910	9168	10328	9611	8782	7609	7606	7752	8446
Capital Goods	169	1631	1747	1758	1766	1781	2190	2096	2561	3026	2546	2833
Other Imports	170	770	1295	2081	2172	2114	2219	2709	2724	3138	2800	5141
Non-Bulk (sub-total)	177	2401	3042	3840	3939	3896	4409	4805	5286	6163	5347	7973
TOTAL (Custom)[a]	178	8706	9886	11750	13106	14223	14020	13587	12895	13770	13099	16420
Statistical Discrepancy[b]	179	-862	-501	-935	1129	674	-6	283	605	196	1301	40
TOTAL (BOP) [a]	180	7845	9385	10815	14236	14897	14014	13870	13500	13965	14400	16460

Sources: 1. Economic Survey, various issues.
2. GOI, Planning Commission.
3. Fertilizer Association of India.

[a] Net of Crude Petroleum Exports.

[b] Difference between Customs-based and Receipts-based figures.

Table 3.3 (c)
INDIA: Import Unit Value Indices, 1975/76-1985/86
(Base: 84/85 = 100)

	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	
Foodgrains	181	175	161	166	143	193	158	129	146	150	100	98
Edible Oils	182	92	89	96	93	102	75	79	61	76	100	75
Soyabean oil	183	96	78	79	76	97	69	85	51	73	100	68
Palm oil	184	62	79	89	100	111	71	55	59	69	100	81
Others	185	142	126	119	115	96	142	142	182	141	100	n.a.
POL	186	40	42	46	48	85	122	125	116	101	100	93
Crude Petroleum	187	41	42	46	47	77	119	125	114	98	100	91
Petroleum Products	188	37	43	48	51	109	126	126	121	108	100	101
Total Fertilizer	189	140	56	85	86	101	129	124	98	89	100	88
Fert. Raw Material	190	152	41	115	112	116	129	132	110	97	100	96
Fert. Manufactured	191	138	66	77	81	97	129	122	94	86	100	85
Urea (N)	192	140	63	73	80	95	123	119	86	76	100	79
DAP (P)	193	145	75	81	77	100	129	115	107	109	100	89
Muriate of Potash (P)	194	100	80	85	89	110	156	145	104	98	100	98
Others	195	138	66	77	81	97	129	122	n.a.	n.a.	n.a.	n.a.
Iron & Steel	196	148	145	130	119	103	125	101	105	110	100	119
Non-Ferrous Metals	197	14	14	13	14	17	134	79	105	173	100	99
Aluminum	198	10	14	9	9	13	132	103	18	206	100	125
Copper	199	15	14	14	15	19	221	60	216	302	100	63
Zinc	200	7	7	6	6	7	74	75	211	122	100	95
Lead	201	9	10	14	15	25	226	167	297	172	100	123
Other Metals	202	66	67	74	85	96	105	106	104	102	100	101
Gems	203	66	67	74	85	96	105	106	104	102	100	101
Bulk Goods (sub-total)	208	71	53	53	54	73	117	113	108	104	100	94
Capital Goods	209	66	67	74	85	96	105	106	104	102	100	101
Other Imports	210	66	67	74	85	96	105	106	104	102	100	101
Non-Bulk (sub-total)	217	66	67	74	85	96	105	106	104	102	100	101
TOTAL (Custom)	218	70	57	60	63	80	113	111	107	103	100	98
Statistical Discrepancy	219	70	57	60	63	80	113	111	107	103	100	98
TOTAL (BOP)	220	70	57	60	63	80	113	111	107	103	100	98

Source: Derived from Tables 3.3 (a) and 3.3 (b).

Table 3.4
DESTINATION OF EXPORTS
(% distribution)

	70/71	75/76	80/81	81/82	82/83	83/84	84/85	85/86
Africa	8.37	5.65	5.22	4.66	3.51	3.61	2.99	2.60
America	15.98	14.47	12.54	13.27	12.93	18.42	18.84	19.71
USA	13.51	12.88	11.08	12.09	11.99	17.13	17.35	18.34
Canada	1.82	1.13	0.93	0.89	0.74	1.05	1.29	1.19
Others	0.66	0.45	0.54	0.29	0.19	0.24	0.20	0.18
Asia and Oceania	32.09	38.62	34.78	34.15	32.68	35.57	31.69	32.01
(a) OPEC	6.42	15.26	11.10	12.36	10.60	9.72	9.27	7.84
Of which:								
Iran	1.74	6.76	1.84	1.65	0.92	1.48	1.32	0.87
Iraq	0.63	1.58	0.77	1.12	0.70	0.61	0.48	0.33
Saudi Arabia	0.95	1.49	2.46	2.37	2.93	2.50	2.67	1.96
Kuwait	1.03	1.17	1.45	1.74	1.55	1.29	1.05	1.12
(b) Other Asia and Oceania	25.67	23.35	23.68	21.80	22.09	25.85	22.42	24.17
Japan	13.25	10.72	8.91	9.07	10.77	9.70	10.11	10.95
Australia	1.59	1.19	1.37	1.48	1.21	1.15	1.36	1.15
Others	10.82	11.44	13.41	11.25	10.10	15.00	10.95	12.07
Eastern Europe	21.04	16.32	22.15	25.95	26.16	18.05	22.02	21.49
USSR	13.67	10.32	18.27	21.83	21.57	14.29	18.46	17.81
Others	7.37	6.00	3.87	4.12	4.59	3.76	3.56	3.67
Western Europe	18.39	21.55	21.57	18.95	18.99	20.33	19.67	18.35
of which:								
Belgium	1.32	1.13	2.15	2.19	2.76	2.51	1.90	2.10
France	1.17	2.14	2.19	1.95	1.88	1.85	1.88	1.84
West Germany	2.10	2.92	5.73	4.62	4.39	4.74	4.79	4.66
Netherlands	0.91	2.04	2.27	1.45	1.43	2.37	1.91	1.58
U.K.	11.10	10.44	5.88	5.52	5.45	5.73	6.02	4.95
Others	4.13	3.39	3.75	3.02	5.73	4.03	4.79	5.85
GRAND TOTAL (a)	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Memo Items:								
Total Exports (a) (US\$ million)	2047	4672	8504	8519	8147	8380	8658	8888

Note: Data for 1983/84 to 1985/86 are provisional.

(a) Excludes exports of crude petroleum, for which details regarding destination are not available.

Source: Economic Survey, various issues.

Table 3.5
ORIGIN OF IMPORTS
(% distribution)

	70/71	75/76	80/81	81/82	82/83	83/84	84/85	85/86
Africa	10.35	2.13	1.63	1.57	1.36	2.57	2.56	3.30
America	35.86	29.47	17.39	14.94	13.13	15.95	15.51	15.65
USA	27.72	24.41	12.10	10.43	9.98	11.63	9.93	10.56
Canada	7.17	4.41	2.65	2.27	1.66	2.10	2.91	2.41
Others	0.97	0.66	2.64	2.23	1.49	2.21	2.67	2.67
Asia and Oceania	18.31	33.78	46.51	46.37	46.92	40.96	41.52	40.38
(a) OPEC	7.68	21.86	27.79	27.71	27.28	20.37	24.44	17.11
Of which:								
Iran	5.61	8.74	10.67	9.54	5.62	4.71	2.83	4.56
Iraq	0.19	4.71	6.00	2.97	6.19	5.01	3.94	2.77
Saudi Arabia	1.48	5.51	4.30	6.10	10.47	6.75	7.37	4.11
Kuwait	0.34	1.19	2.69	2.04	1.95	1.65	2.16	1.70
(b) Other Asia and Oceania	10.63	11.92	18.72	18.66	19.64	20.59	17.08	23.27
Japan	5.11	6.86	5.97	6.51	7.61	9.14	7.24	9.10
Australia	2.24	1.93	1.36	1.92	2.28	0.97	1.17	2.14
Others	3.29	3.13	11.40	10.23	9.75	10.48	8.68	12.03
Eastern Europe	13.46	10.75	10.33	11.07	11.97	12.41	12.56	10.93
USSR	6.49	5.88	8.08	8.35	9.89	10.39	10.44	8.47
Others	6.97	4.86	2.25	2.72	2.09	2.02	2.13	2.46
Western Europe	19.59	20.90	21.03	23.14	23.94	25.01	24.61	26.39
of which:								
Belgium	0.70	1.64	2.36	3.68	4.42	4.10	4.63	4.69
France	1.31	3.73	2.23	1.86	2.98	1.83	2.09	3.12
West Germany	6.58	7.03	5.53	6.97	5.82	7.09	7.52	7.81
Netherlands	1.17	1.21	1.71	2.05	1.74	1.76	2.13	1.48
U.K.	7.76	5.39	5.83	6.00	6.38	7.28	5.45	6.32
Others	2.43	2.97	3.11	2.90	2.68	3.10	3.24	3.35
GRAND TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Memo Item:								
Total Imports (a) (US\$ million)	2179	6085	15899	15240	14845	15352	14414	16137

Note: Data for 1983/84 to 1985/86 is provisional.

(a) The figure for total imports shown here differs from the total value of imports shown in Table 3.3 (a), as the latter figure is net of exports of crude petroleum.

Source: Economic Survey, various issues.

Table 3.6
INVISIBLES ON CURRENT ACCOUNT
(US\$ million)

	70/71	74/75	76/77	77/78	78/79	79/80	80/81	81/82	82/83	83/84	84/85	85/86
GROSS RECEIPTS	446	973	1973	2783	3292	4972	6749	5947	5870	6237	6424	7427
Non-Factor Services	272	578	1057	1384	1611	2304	2880	2697	2819	3201	3389	4238
of which:												
Transport	142	271	350	328	342	394	458	445	423	426	542	n.a
Travel	37	118	318	619	688	1139	1477	1191	1174	1043	755	1463
Others (a)	92	189	388	437	581	771	945	1061	1222	1732	2092	n.a
Investment Income	65	118	209	311	478	796	1083	912	525	449	493	515
Current Transfers (b)	109	277	707	1088	1203	1872	2786	2338	2526	2587	2542	2674
GROSS PAYMENTS	614	699	1051	1122	1378	1749	1998	2247	2723	3107	3697	4269
Non-Factor Services	279	364	691	693	891	1262	1515	1695	1884	2165	2350	2725
of which:												
Transport (c)	105	166	277	252	287	313	450	540	725	694	772	n.a
Travel	24	19	43	52	79	109	114	161	192	234	344	n.a
Others	151	179	371	389	525	840	951	994	967	1237	1234	n.a
Investment Income	309	316	345	418	464	467	468	531	818	925	1331	1524
Current Transfers	26	19	15	11	23	20	15	21	21	17	16	20
NET RECEIPTS	-168	274	922	1661	1914	3223	4751	3700	3147	3130	2727	3158
Non-Factor Services	-7	214	366	691	720	1042	1365	1002	935	1036	1039	1513
of which:												
Transport	37	105	73	76	55	81	8	-95	-302	-268	-230	n.a
Travel	13	99	275	567	609	1030	1363	1030	982	809	411	n.a
Others	-59	10	17	48	56	-69	-6	67	255	495	858	n.a
Investment Income	-244	-198	-136	-107	14	329	615	381	-293	-476	-838	-1009
Current Transfers	83	258	692	1077	1180	1852	2771	2317	2505	2570	2526	2654

Notes: (1) The data has been converted from rupees using annual average IMF conversion rates shown in the inside front cover.
(2) Data for 1985/86 are World Bank estimates.

(a) Excludes rupee transactions relating to US counterpart funds.

(b) Excludes grant assistance.

(c) Excludes freight on imports paid in foreign exchange, included within the c.i.f. value of imports.

Source: Govt of India, Economic Survey, various issues.

Table 4.1
INDIA: External Debt Summary, 1975/76-1985/86
(US\$ million)

	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	
Debt Outst and Disb (OOD)												
Concessional	80	11169	12252	13513	14246	14509	15979	15879	16822	17511	17564	20340
IDA	5	2809	3333	3656	3972	4505	5142	5906	6983	7820	8545	9750
Bilateral Loans	15	8360	8919	9835	10238	9940	10085	9258	9089	8935	8276	9771
Multilateral Loans	20	-	-	22	36	64	752	715	750	756	743	819
Non-Concessional	85	1062	1038	1154	1225	1309	1570	2103	2692	3640	4729	6311
IBRD	25	436	456	540	646	728	826	1181	1395	1779	1965	2178
Bilateral Loans	35	327	287	266	245	243	238	195	179	169	321	682
Commercial Loans	70	299	295	348	334	338	506	727	1118	1692	2443	3451
Total Publicly Guaranteed	75	12231	13290	14667	15471	15818	17549	17982	19514	21151	22293	26651
Private Non-Guaranteed	55	277	295	295	348	335	336	873	1239	1767	2611	3093
Total M< (excl'dg IMF)	90	12508	13585	14962	15819	16153	17885	18855	20753	22918	24904	29744
Commitments												
Concessional	76	2203	681	1721	1907	1143	4164	2242	1362	1666	1759	1663
IDA	1	817	-	824	1555	516	1948	1388	776	572	929	958
Bilateral Loans	11	1386	659	883	352	452	1464	854	529	1036	830	705
Multilateral Loans	16	-	22	14	-	175	752	-	57	58	-	-
Non-Concessional	81	231	329	321	296	370	1633	1193	2617	2604	3342	3005
IBRD	21	100	315	269	275	250	555	740	1113	500	1721	1924
Bilateral Loans	31	27	12	-	-	67	7	11	280	507	440	1
Commercial Loans	66	104	2	52	21	53	1071	442	1224	1597	1181	1080
Total Publicly Guaranteed	71	2434	1010	2042	2203	1513	5797	3435	3979	4270	5101	4668
Private Non-Guaranteed	51	112	61	91	61	79	285	422	585	639	835	1135
Total M< (excl'dg IMF)	86	2546	1071	2133	2264	1592	6082	3857	4564	4909	5936	5803
Memo Items:												
Commitments on Bank												
Fiscal Year basis												
IDA	499	684	481	952	1192	1535	1121	900	1063	1001	673	625
IBRD	500	174	269	330	300	125	430	1265	1088	1721	1674	1743

Table 4.1
INDIA: External Debt Summary, 1975/76-1985/86
(US\$ million)

	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	
Disbursements												
Concessional	77	1603	1370	991	921	1017	2022	1281	1640	1348	1306	1647
IDA	2	491	533	333	327	546	652	786	1109	874	823	1047
Bilateral Loans	12	1112	837	636	580	443	652	471	476	457	453	572
Multilateral Loans	17	-	-	22	14	28	718	24	55	17	30	28
Non-Concessional	82	200	168	266	254	265	462	739	775	1189	1546	1804
IBRD	22	39	76	155	180	149	174	421	288	470	291	329
Bilateral Loans	32	51	33	21	14	37	36	7	14	11	185	296
Commercial Loans	67	110	59	90	60	79	252	311	473	708	1070	1179
Total Publicly Guaranteed	72	1803	1538	1257	1175	1282	2484	2020	2415	2537	2852	3451
Private Non-Guaranteed	52	112	61	91	61	79	285	422	585	639	835	1135
Total M< (excl'dg IMF)	87	1915	1599	1348	1236	1361	2769	2442	3000	3176	3687	4586

Source: The External Debt Reporting System maintained by EPD in the World Bank.
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Table 4.2
INDIA: Debt Servicing Summary, 1975/76-1985/86
(US\$ million)

	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	
Principal Repayments												
Concessional	78	315	310	333	419	472	492	491	512	499	428	487
IDA	3	6	9	10	11	13	15	20	26	33	41	53
Bilateral Loans	13	309	301	323	408	459	477	470	484	464	384	405
Multilateral Loans	18	-	-	-	-	-	-	1	2	2	3	29
Non-Concessional	83	187	188	194	195	176	173	146	154	212	354	593
IBRD	23	57	57	72	74	67	75	67	75	87	105	116
Bilateral Loans	33	69	63	60	47	37	31	21	16	12	15	26
Commercial Loans	68	61	68	62	74	72	67	58	63	113	234	451
Total Publicly Guaranteed	73	502	498	527	614	648	665	637	666	711	782	1080
Private Non-Guaranteed	53	61	62	63	73	71	91	85	219	261	305	653
Total M< (excl'dg IMF)	88	563	560	590	687	719	756	722	885	972	1087	1733
Interest Payments												
Concessional	79	179	192	217	256	266	266	262	244	252	248	263
IDA	4	18	21	25	27	30	35	40	46	58	68	71
Bilateral Loans	14	161	171	192	229	236	230	219	195	189	175	187
Multilateral Loans	19	-	-	-	-	-	1	3	3	5	5	5
Non-Concessional	84	71	67	66	90	98	106	111	225	316	428	538
IBRD	24	33	31	35	53	63	66	71	101	157	169	209
Bilateral Loans	34	23	18	16	15	14	17	14	13	12	19	40
Commercial Loans	69	15	18	15	22	21	23	26	111	147	240	289
Total Publicly Guaranteed	74	250	259	283	346	364	372	373	469	568	676	801
Private Non-Guaranteed	54	17	19	17	22	22	30	37	136	200	228	265
Total M< (excl'dg IMF)	89	267	278	300	368	386	402	410	605	768	904	1066

Source: The External Debt Reporting System maintained by EPD in the World Bank.

Table 4.3 (a)
INDIA: Loan Commitments - by Donors, 1975/76-1985/86
(US\$ million)

		1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Bilateral Consortium	117	318.0	550.0	413.0	314.0	517.0	817.0	776.0	662.0	1239.0	1270.0	635.0
Austria	101	3.0	-	3.0	-	10.0	2.0	3.0	-	5.0	-	-
Belgium	102	9.0	10.0	11.0	11.0	12.0	-	18.0	7.0	7.0	-	-
Canada	103	15.0	10.0	40.0	13.0	21.0	82.0	121.0	-	36.0	471.0	2.0
Denmark	104	-	13.0	-	-	-	-	20.0	18.0	21.0	22.0	-
France	105	20.0	82.0	6.0	-	-	114.0	96.0	255.0	94.0	27.0	117.0
W. Germany	106	119.0	162.0	99.0	98.0	203.0	306.0	95.0	235.0	235.0	201.0	251.0
Italy	107	-	6.0	-	-	-	-	-	-	10.0	36.0	-
Japan	108	101.0	76.0	146.0	36.0	39.0	58.0	324.0	78.0	223.0	378.0	180.0
Netherlands	109	28.0	92.0	79.0	98.0	82.0	85.0	64.0	-	33.0	44.0	4.0
Norway	110	-	-	-	-	-	-	-	-	-	-	-
Sweden	111	1386.0	659.0	883.0	352.0	452.0	1464.0	854.0	529.0	1036.0	830.0	705.0
Switzerland	112	-	-	-	-	-	-	-	-	47.0	-	-
U.K.	113	-	-	3.0	-	-	-	-	-	-	-	-
U.S.A.	114	23.0	99.0	26.0	58.0	150.0	170.0	35.0	69.0	528.0	91.0	81.0
Bank Group	120	917.0	315.0	1093.0	1830.0	766.0	2503.0	2128.0	1889.0	1072.0	2650.0	2882.0
IBRD	118	100.0	315.0	269.0	275.0	250.0	555.0	740.0	1113.0	500.0	1721.0	1924.0
IDA	119	817.0	-	824.0	1555.0	516.0	1948.0	1388.0	776.0	572.0	929.0	958.0
Other Consortium	143	-	-	-	-	155.0	21.0	-	27.0	35.0	-	-
TOTAL Consortium	142	1235.0	865.0	1506.0	2144.0	1438.0	3341.0	2904.0	2578.0	2346.0	3920.0	3517.0
Non-Consortium												
Eastern Europe	129	-	-	244.0	-	-	549.0	-	-	113.0	-	-
of which:												
USSR	124	-	-	244.0	-	-	549.0	-	-	113.0	-	-
Gulf Countries	138	1095.0	143.0	240.0	38.0	22.0	155.0	89.0	79.0	103.0	-	71.0
All Other Donors	149	n.a.	n.a.	n.a.	n.a.	n.a.	681.0	n.a.	n.a.	223.0	n.a.	n.a.
of which:												
IMF Trust Fund	147	-	-	-	-	-	681.0	-	-	-	-	-
TOTAL OFFICIAL LOANS	150	2330.0	1008.0	1990.0	2182.0	1460.0	4726.0	2993.0	2657.0	2785.0	3920.0	3588.0

Source: The External Debt Reporting System maintained by EPD in the World Bank.

Table 4.3 (b)
INDIA: Gross Loan Disbursements - by Donors, 1975/76-1985/86
(US\$ million)

	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	
Bilateral Consortium	167	641.0	557.0	401.0	457.0	376.0	615.0	435.0	408.0	367.0	422.0	617.0
Austria	151	3.0	2.0	3.0	-	-	3.0	4.0	3.0	2.0	2.0	3.0
Belgium	152	7.0	10.0	20.0	6.0	9.0	6.0	7.0	4.0	6.0	5.0	2.0
Canada	153	34.0	19.0	33.0	24.0	22.0	26.0	29.0	32.0	29.0	40.0	55.0
Denmark	154	2.0	2.0	4.0	5.0	4.0	4.0	7.0	22.0	11.0	14.0	9.0
France	155	72.0	54.0	27.0	31.0	19.0	50.0	15.0	6.0	16.0	94.0	101.0
W. Germany	156	151.0	173.0	111.0	152.0	95.0	252.0	144.0	170.0	112.0	132.0	166.0
Italy	157	-	4.0	18.0	-	-	-	-	-	-	7.0	10.0
Japan	158	101.0	144.0	78.0	117.0	63.0	75.0	29.0	110.0	125.0	68.0	179.0
Netherland	159	23.0	50.0	59.0	76.0	98.0	93.0	97.0	33.0	16.0	35.0	34.0
Norway	160	-	-	-	-	-	-	-	-	-	-	-
Sweden	161	31.0	6.0	2.0	-	-	-	-	-	-	-	-
Switzerland	162	5.0	2.0	5.0	5.0	4.0	-	-	-	-	-	3.0
U.K.	163	73.0	17.0	16.0	15.0	10.0	2.0	-	-	-	-	-
U.S.A.	164	139.0	74.0	25.0	26.0	52.0	104.0	103.0	28.0	50.0	25.0	55.0
Bank Group	170	530.0	609.0	488.0	507.0	695.0	826.0	1207.0	1397.0	1344.0	1114.0	1376.0
IBRD	168	39.0	76.0	155.0	180.0	149.0	174.0	421.0	288.0	470.0	291.0	329.0
IDA	169	491.0	533.0	333.0	327.0	546.0	652.0	786.0	1109.0	874.0	823.0	1047.0
Other Consortium	193	-	-	-	-	28.0	33.0	14.0	15.0	11.0	25.0	24.0
TOTAL Consortium	192	1171.0	1166.0	889.0	964.0	1099.0	1474.0	1656.0	1820.0	1722.0	1561.0	2017.0
Non-Consortium												
Eastern Europe	179	41.0	42.0	40.0	27.0	42.0	42.0	25.0	42.0	73.0	91.0	132.0
of which:												
USSR	174	31.0	29.0	28.0	26.0	42.0	42.0	25.0	42.0	73.0	91.0	132.0
Gulf Countries	188	481.0	271.0	238.0	124.0	62.0	35.0	28.0	80.0	26.0	76.0	48.0
All Other Donors	199	n.a.	n.a.	n.a.	n.a.	n.a.	681.0	n.a.	n.a.	8.0	54.0	75.0
of which:												
IMF Trust Fund	197	-	-	-	-	-	681.0	-	-	-	-	-
TOTAL OFFICIAL LOANS	200	1693.0	1479.0	1167.0	1115.0	1203.0	2232.0	1709.0	1942.0	1829.0	1782.0	2272.0

Source: The External Debt Reporting System maintained by EPD in the World Bank

Table 4.3 (c)
INDIA: Principal Repayments - by Donors, 1975/76-1985/86
(US\$ million)

		1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Bilateral Consortium	217	307.0	304.0	325.0	369.0	379.0	389.0	356.0	324.0	298.0	286.0	321.0
Austria	201	3.0	2.0	3.0	3.0	3.0	2.0	1.0	1.0	1.0	1.0	2.0
Belgium	202	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	2.0
Canada	203	9.0	11.0	11.0	11.0	14.0	12.0	13.0	14.0	15.0	10.0	8.0
Denmark	204	1.0	1.0	1.0	1.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0
France	205	17.0	18.0	21.0	23.0	28.0	28.0	22.0	18.0	14.0	13.0	15.0
W. Germany	206	93.0	85.0	95.0	108.0	112.0	103.0	82.0	65.0	45.0	42.0	52.0
Italy	207	2.0	2.0	2.0	2.0	2.0	4.0	3.0	2.0	2.0	1.0	1.0
Japan	208	60.0	56.0	52.0	62.0	58.0	60.0	50.0	45.0	48.0	48.0	62.0
Netherlands	209	3.0	7.0	4.0	6.0	8.0	9.0	9.0	11.0	10.0	12.0	14.0
Norway	210	-	-	-	-	-	-	-	-	-	-	-
Sweden	211	-	-	1.0	-	-	-	-	-	-	-	-
Switzerland	212	1.0	2.0	2.0	3.0	3.0	2.0	1.0	1.0	1.0	1.0	2.0
U.K.	213	36.0	34.0	40.0	49.0	56.0	67.0	63.0	59.0	53.0	44.0	48.0
U.S.A.	214	81.0	85.0	92.0	100.0	92.0	99.0	110.0	106.0	107.0	111.0	114.0
Bank Group	220	63.0	66.0	82.0	85.0	80.0	90.0	87.0	101.0	120.0	146.0	169.0
IBRD	218	57.0	57.0	72.0	74.0	67.0	75.0	67.0	75.0	87.0	105.0	116.0
IDA	219	6.0	9.0	10.0	11.0	13.0	15.0	20.0	26.0	33.0	41.0	53.0
Other Consortium	243	-	-	-	-	-	-	-	-	-	-	-
TOTAL Consortium	242	370.0	370.0	407.0	454.0	459.0	479.0	443.0	425.0	418.0	432.0	490.0
Non-Consortium												
Eastern Europe	229	69.0	59.0	57.0	57.0	40.0	42.0	31.0	23.0	26.0	20.0	21.0
of which:												
USSR	224	54.0	50.0	49.0	49.0	32.0	34.0	23.0	17.0	20.0	16.0	18.0
Gulf Countries	238	2.0	1.0	1.0	29.0	77.0	77.0	105.0	155.0	154.0	96.0	93.0
All Other Donors	249	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	25.0
of which:												
IMF Trust Fund	247	-	-	-	-	-	-	-	-	-	-	25.0
TOTAL OFFICIAL LOANS	250	441.0	430.0	465.0	540.0	576.0	598.0	579.0	603.0	598.0	548.0	629.0

Source: The External Debt Reporting System maintained by EPD in the World Bank.

Table 4.3 (d)
INDIA: Interest Payments - by Donors, 1975/76-1985/86
(US\$ million)

	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	
Bilateral Consortium	267	174.0	173.0	185.0	206.0	204.0	207.0	192.0	178.0	173.0	166.0	190.0
Austria	251	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Belgium	252	1.0	1.0	1.0	1.0	1.0	1.0	-	-	-	-	-
Canada	253	6.0	4.0	3.0	3.0	2.0	2.0	1.0	1.0	-	-	2.0
Denmark	254	-	-	-	-	-	-	-	-	-	-	-
France	255	12.0	13.0	14.0	16.0	17.0	16.0	12.0	10.0	8.0	9.0	14.0
W. Germany	256	40.0	40.0	43.0	47.0	48.0	44.0	35.0	35.0	32.0	28.0	39.0
Italy	257	1.0	-	1.0	1.0	1.0	1.0	1.0	-	-	-	-
Japan	258	30.0	32.0	37.0	51.0	43.0	44.0	42.0	37.0	40.0	41.0	49.0
Netherlands	259	6.0	6.0	8.0	10.0	12.0	13.0	13.0	13.0	13.0	12.0	13.0
Norway	260	-	-	-	-	-	-	-	-	-	-	-
Sweden	261	1.0	1.0	1.0	-	-	-	-	-	-	-	-
Switzerland	262	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
U.K.	263	18.0	13.0	12.0	12.0	12.0	11.0	8.0	6.0	4.0	3.0	2.0
U.S.A.	264	57.0	61.0	63.0	63.0	66.0	73.0	77.0	74.0	73.0	71.0	69.0
Bank Group	270	51.0	52.0	60.0	80.0	93.0	101.0	111.0	147.0	215.0	237.0	280.0
IBRD	268	33.0	31.0	35.0	53.0	63.0	66.0	71.0	101.0	157.0	169.0	209.0
IDA	269	18.0	21.0	25.0	27.0	30.0	35.0	40.0	46.0	58.0	68.0	71.0
Other Consortium	293	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
TOTAL Consortium	292	225.0	225.0	245.0	286.0	297.0	308.0	303.0	325.0	388.0	403.0	470.0
Non-Consortium												
Eastern Europe	279	9.0	7.0	7.0	1.0	12.0	7.0	7.0	6.0	6.0	7.0	9.0
of which:												
USSR	274	7.0	6.0	6.0	-	11.0	6.0	6.0	5.0	6.0	7.0	9.0
Gulf Countries	288	1.0	9.0	16.0	37.0	34.0	33.0	34.0	24.0	22.0	17.0	19.0
All Other Donors	299	-	-	-	-	-	1.0	3.0	3.0	4.0	8.0	13.0
of which:												
IMF Trust Fund	297	-	-	-	-	-	1.0	3.0	3.0	3.0	3.0	3.0
TOTAL OFFICIAL LOANS	300	235.0	241.0	268.0	324.0	343.0	349.0	347.0	358.0	420.0	435.0	511.0

Source: The External Debt Reporting System maintained by EPD in the World Bank.

Table 4.3 (e)
INDIA: Debt Outstanding & Disbursed (DDD) - by Donors, 1975/76-1985/86
(US\$ million)

	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	
Bilateral Consortium	317	7698.0	7959.0	8636.0	8956.0	8669.0	8857.0	8119.0	8047.0	7982.0	7451.0	9161.0
Austria	301	29.0	31.0	37.0	36.0	33.0	30.0	29.0	31.0	30.0	26.0	36.0
Belgium	302	37.0	49.0	74.0	85.0	88.0	84.0	69.0	68.0	66.0	60.0	79.0
Canada	303	493.0	466.0	457.0	457.0	453.0	469.0	469.0	485.0	482.0	479.0	516.0
Denmark	304	22.0	23.0	28.0	33.0	30.0	29.0	29.0	48.0	54.0	60.0	65.0
France	305	285.0	304.0	335.0	365.0	341.0	328.0	254.0	206.0	190.0	241.0	459.0
W. Germany	306	1284.0	1454.0	1737.0	1926.0	1836.0	1832.0	1649.0	1746.0	1703.0	1513.0	2152.0
Italy	307	14.0	15.0	32.0	31.0	27.0	19.0	13.0	9.0	7.0	11.0	21.0
Japan	308	681.0	829.0	1063.0	1182.0	996.0	1194.0	1003.0	1100.0	1254.0	1135.0	1733.0
Netherland	309	196.0	257.0	355.0	455.0	514.0	544.0	557.0	568.0	537.0	473.0	653.0
Norway	310	-	-	-	-	-	-	-	-	-	-	-
Sweden	311	113.0	124.0	116.0	-	-	-	-	-	-	-	-
Switzerland	312	28.0	28.0	42.0	24.0	24.0	21.0	20.0	17.0	16.0	12.0	18.0
U.K.	313	1060.0	935.0	983.0	1059.0	1063.0	1039.0	766.0	584.0	517.0	402.0	429.0
U.S.A.	314	3456.0	3445.0	3377.0	3303.0	3264.0	3268.0	3261.0	3183.0	3126.0	3039.0	2980.0
Bank Group	320	3245.0	3789.0	4196.0	4618.0	5233.0	5968.0	7087.0	8378.0	9599.0	10510.0	11928.0
IBRD	318	436.0	456.0	540.0	646.0	728.0	826.0	1181.0	1395.0	1779.0	1965.0	2178.0
IDA	319	2809.0	3333.0	3656.0	3972.0	4505.0	5142.0	5906.0	6983.0	7820.0	8545.0	9750.0
Other Consortium	343	-	-	-	-	28.0	62.0	76.0	91.0	101.0	126.0	151.0
TOTAL Consortium	342	10943.0	11748.0	12832.0	13574.0	13930.0	14887.0	15282.0	16516.0	17682.0	18087.0	21240.0
Non-Consortium												
Eastern Europe	329	317.0	304.0	300.0	281.0	282.0	278.0	238.0	241.0	269.0	268.0	381.0
of which:												
USSR	324	255.0	238.0	228.0	213.0	222.0	229.0	203.0	214.0	250.0	255.0	371.0
Gulf Countries	338	672.0	943.0	1187.0	1282.0	1268.0	1228.0	1146.0	1068.0	937.0	909.0	868.0
All Other Donors	349	n.a.	n.a.	n.a.	n.a.	n.a.	650.0	589.0	571.0	571.0	586.0	711.0
of which:												
IMF Trust Fund	347	-	-	-	-	-	650.0	589.0	571.0	563.0	524.0	575.0
TOTAL OFFICIAL LOANS	350	11932.0	12995.0	14319.0	15137.0	15480.0	17043.0	17255.0	18396.0	19459.0	19850.0	23200.0

Source: The External Debt Reporting System maintained by EPD in the World Bank.

Table 4.3 (f)
INDIA: Grant Commitments - by Donors, 1975/76-1985/86
(US\$ million)

	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	
Bilateral Consortium	102	533.5	466.8	460.4	584.2	718.6	373.3	373.4	574.1	445.0	452.6	374.8
Austria	81	-	-	-	-	-	-	-	-	-	-	-
Belgium	82	0.7	-	-	-	-	0.5	-	-	-	-	-
Canada	83	56.1	63.1	20.8	15.1	17.2	8.7	8.5	12.0	54.1	1.5	-
Denmark [a]	84	5.1	10.0	4.9	14.2	15.2	19.6	10.0	16.7	16.0	17.2	11.2
France	85	4.3	-	-	-	-	-	-	-	-	-	-
W.Germany	86	14.1	5.0	-	5.8	-	-	-	-	2.7	-	-
Italy [a]	87	-	-	-	-	-	-	-	0.4	0.2	16.5	1.0
Japan	88	1.1	0.4	1.5	24.6	23.6	19.3	18.1	15.2	9.2	14.7	13.7
Netherland [a]	89	19.8	15.1	6.5	5.1	30.4	28.7	23.6	50.2	29.8	36.8	40.9
Norway [a]	90	12.1	5.8	12.4	20.1	19.8	22.5	18.9	19.7	19.8	19.1	22.3
Sweden [b]	91	38.8	52.3	56.0	60.7	68.2	71.9	61.6	50.7	43.5	39.6	43.0
Switzerland [a]	109	4.1	1.6	1.3	1.2	29.2	4.7	5.2	29.6	19.9	23.7	12.3
U.K	92	269.3	194.6	246.4	320.6	349.6	39.1	84.1	263.1	102.1	170.7	138.9
U.S.A	93	107.9	118.8	110.5	116.9	165.3	158.5	143.4	116.4	147.6	112.8	91.6
Multilateral Consortium	116	108.4	70.2	102.5	185.9	210.9	213.1	249.1	228.5	237.9	196.4	178.0
EEC[a]	110	48.4	10.2	17.5	71.9	101.1	109.7	137.1	118.1	121.5	94.9	70.0
UN[a]	114	60.0	60.0	85.0	114.0	109.8	103.4	112.0	110.4	116.4	101.5	108.0
IFAD	112	-	-	-	-	-	-	-	-	-	-	-
Total Consortium	117	641.9	537.0	562.9	770.1	929.5	586.4	622.5	802.6	682.9	649.0	552.8
Others	108	15.3	7.5	-	-	1.4	5.7	-	-	-	-	-
GRAND TOTAL	120	657.2	544.5	562.9	770.1	930.9	592.1	622.5	802.6	682.9	649.0	552.8

[a] Relates to calendar years; e.g. the figures for 1980/81 relate to calendar year 1980 and so on.

[b] Relates to the year July-June; e.g. the figures for 1980/81 relates to period July 1980-June 1981 and so on.

Sources: 1. Govt. of India, Ministry of Finance, Department of Economic Affairs.
2. Embassies and offices of Consortium donors in New Delhi.

Table 4.3 (g)
INDIA: Grant Disbursements - by Donors, 1975/76-1985/86
(US\$ million)

	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	
Bilateral Consortium	102	413.1	394.8	406.4	506.9	632.0	632.0	464.4	448.9	403.8	399.7	397.8
Austria	81	-	-	-	-	-	-	-	-	-	-	-
Belgium	82	0.7	-	0.5	-	-	-	-	-	-	-	-
Canada	83	65.4	62.3	22.4	5.8	18.4	3.3	7.6	10.7	14.1	15.8	12.3
Denmark [a]	84	5.1	10.0	4.9	14.2	15.2	19.6	10.0	16.7	16.0	17.2	11.2
France	85	4.3	-	-	-	-	-	-	-	-	-	-
W.Germany	86	12.1	4.2	-	6.3	1.3	7.8	0.8	1.9	0.1	0.3	1.4
Italy [a]	87	-	-	-	-	-	-	0.4	0.2	4.2	5.9	
Japan	88	-	-	-	27.2	35.7	5.2	14.7	9.7	13.6	11.8	
Netherlands [a]	89	19.8	15.1	6.5	5.1	30.4	28.7	23.6	50.2	29.8	36.8	40.9
Norway [a]	90	9.0	9.6	15.2	21.2	22.1	22.4	19.7	20.9	20.4	19.9	23.0
Sweden [b]	91	58.2	41.9	67.3	57.0	52.6	64.9	49.1	56.9	53.1	35.1	43.0
Switzerland [a]	109	2.9	2.5	2.9	6.0	16.8	17.1	5.3	18.8	22.3	21.7	11.9
U.K.	92	81.4	120.9	175.6	258.3	282.7	307.7	199.1	164.5	128.4	132.5	151.9
U.S.A.	93	154.3	128.2	111.1	133.1	165.3	124.9	143.9	93.2	109.7	102.6	84.4
Multilateral Consortium	116	112.9	60.0	117.8	135.3	164.2	184.3	206.0	233.0	182.1	143.6	166.4
EEC[a]	110	52.9	-	32.8	21.3	54.4	80.9	94.0	122.6	65.7	42.1	58.4
UN[a]	114	60.0	60.0	85.0	114.0	109.8	103.4	112.0	110.4	116.4	101.5	108.0
IFAD	112	-	-	-	-	-	-	-	-	-	-	-
Total Consortium	117	526.0	454.8	524.2	642.3	796.3	816.3	670.4	681.9	585.9	543.3	564.2
Others	108	15.3	7.5	-	-	1.4	5.7	-	-	-	-	-
GRAND TOTAL	120	541.3	462.3	524.2	642.3	797.7	822.0	670.4	681.9	585.9	543.3	564.2
Memo Item:												
BDP Total [c]	119	342.0	377.0	432.0	449.0	577.0	643.0	497.0	399.0	367.0	453.0	450.0

[a] Relates to calendar years; e.g. the figures for 1980/81 relate to calendar year 1980 and so on.

[b] Relates to the year July-June; e.g. the figures for 1980/81 relates to period July 1980-June 1981 and so on.

[c] As estimated by Government of India in the balance of payments account, presented in the Economic Survey.

Sources: 1. Govt. of India, Ministry of Finance, Department of Economic Affairs.
2. Embassies and offices of Consortium donors in New Delhi.

Table 4.4
EXTERNAL RESERVES
(US \$ million)

	Foreign Exchange	Reserve Position SDRs in the Fund	Reserve excl. Gold	Reserves excluding Gold (c)	Reserves including Gold	Use of INF Credit	Net Reserves	
1950/51 [a]	1809	-	-	1809	247	2056	72	1984
1955/56 [b]	1620	-	15	1635	247	1882	-	1082
1960/61	391	-	-	391	247	638	63	575
1965/66	383	-	-	383	243	626	215	411
1968/69	526	-	-	526	243	769	340	429
1970/71	584	149	76	809	243	1052	-	1052
1971/72	661	269	83	1013	264	1277	-	1277
1972/73	629	297	92	1018	293	1311	-	1311
1973/74	736	296	92	1124	293	1417	75	1342
1974/75	782	293	-	1075	303	1378	620	758
1975/76	1657	234	-	1891	281	2172	807	1365
1976/77	3240	217	-	3457	290	3747	471	3276
1977/78	5305	200	-	5505	318	5823	155	5668
1978/79	6421	470	89	6980	377	7357	-	7357
1979/80	6324	662	218	7204	375	7579	-	7579
1980/81	5850	603	405	6858	370	7228	327	6901
1981/82	3582	473	405	4460	335	4795	964	3831
1982/83	4281	291	393	4965	324	5289	2876	2413
1983/84	5099	230	518	5847	320	6167	4150	2017
1984/85	5482	145	483	6110	325	6435	3932	2503
1985/86	5972	131	554	6657	416	7073	4290	2783
End of the Month								
1985								
March	5482	145	483	6110	325	6435	3932	2503
June	5409	303	486	6198	328	6526	3908	2618
September	5630	221	516	6367	348	6715	4092	2623
December	5549	336	535	6420	361	6781	4201	2580
1986								
March	5972	131	554	6657	416	7073	4290	2783
June	5705	149	574	6428	431	6859	4357	2502
September	5310	219	591	6120	444	6564	4361	2203

[a] At the end of 1950.

[b] At the end of 1955.

[c] Valued at 35 SDR's per fine troy ounce.

Source: 1. IMF, International Financial Statistics.

Table 5.1 (a)
INDIA: PUBLIC FINANCE SUMMARY, 75/76-85/86
(Rs billion at current prices)

		75/76	76/77	77/78	78/79	79/80	80/81	81/82	82/83	83/84	84/85	85/86
PUBLIC INVESTMENT	1	76.77	85.13	74.50	96.49	118.16	139.66	176.11	201.47	216.11	260.22	283.40
Govt Administration	2	12.21	13.06	11.82	18.20	25.12	30.97	35.29	39.96	44.39	53.09	63.07
Public Enterprises	3	64.56	72.07	62.68	78.29	93.04	108.69	140.82	161.51	171.72	207.13	220.33
Fixed Investment	4	44.87	56.94	61.35	63.67	75.03	86.31	110.19	143.82	157.21	178.53	194.01
Change in Stocks	5	19.69	15.13	1.33	14.62	18.01	22.38	30.63	17.69	14.51	28.60	26.32
PUBLIC SAVINGS	6	33.39	41.85	41.68	47.81	49.67	46.03	72.30	78.41	66.64	64.23	74.81
Public Current Income	7	137.39	161.47	170.90	196.86	222.86	248.50	309.83	365.61	410.86	486.49	570.30
Tax Revenue	8	114.77	127.02	135.67	157.92	180.96	203.18	245.46	278.16	318.21	364.86	430.49
Direct	9	26.43	27.76	28.78	30.57	33.87	35.74	44.60	48.34	53.54	57.94	65.08
Indirect	10	88.34	99.26	106.89	127.35	147.09	167.44	200.86	229.82	264.67	306.92	365.41
Public Ent. Surplus [a]	11	16.61	25.44	25.93	28.35	30.46	31.55	49.07	65.99	74.37	89.91	108.00
Interest Receipts	12	4.04	6.55	6.91	7.77	8.62	10.74	11.39	16.67	13.22	23.06	24.64
Miscellaneous Receipts	13	1.97	2.46	2.39	2.82	2.82	3.03	3.91	4.79	5.06	8.66	7.17
Public Current Expenditure	14	104.00	119.62	129.22	149.05	173.19	202.47	237.53	287.20	344.22	422.26	495.49
Consumption Expenditure	15	73.51	82.06	86.67	96.24	110.25	130.33	152.76	180.16	207.88	240.62	282.71
Wages Bill	16	46.81	51.30	55.38	61.37	68.52	81.56	93.82	112.28	131.00	153.20	178.86
Centre	17	17.90	17.86	18.62	19.83	21.37	24.58	27.94	32.23	37.52	44.83	51.89
States	18	28.91	33.44	36.76	41.54	47.15	56.98	65.88	80.05	93.48	108.37	126.97
O & M [b]	19	26.70	30.76	31.29	34.87	41.73	48.77	58.94	67.95	76.88	87.42	103.85
Centre	20	16.19	18.26	19.02	20.76	25.10	27.16	33.05	38.34	43.78	49.46	60.91
States	21	10.51	12.50	12.27	14.11	16.63	21.61	25.89	29.61	33.10	37.96	42.94
Subsidies	22	11.20	13.93	17.72	22.01	25.25	28.39	31.72	38.07	51.10	71.95	80.14
Centre	23	7.93	10.27	12.94	16.02	18.39	19.12	19.46	23.04	28.86	44.84	52.00
States	24	3.27	3.66	4.78	5.99	6.86	9.27	12.26	15.03	22.24	27.11	28.14
Interest Payments	25	4.91	6.01	6.97	9.34	10.08	14.90	18.73	26.75	36.96	49.52	58.84
Current Transfers	26	14.38	17.62	17.86	21.46	27.61	28.85	34.32	42.22	48.28	60.17	73.80
PUBLIC INVESTMENT-SAVINGS GAP	27	43.38	43.28	32.82	48.68	68.49	93.63	103.81	123.06	149.47	195.99	208.59

Table 5.1 (a)
INDIA: PUBLIC FINANCE SUMMARY, 75/76-85/86
(Rs billion at current prices)

	75/76	76/77	77/78	78/79	79/80	80/81	81/82	82/83	83/84	84/85	85/86
PUBLIC INVESTMENT-SAVINGS GAP 27	43.38	43.28	32.82	48.68	68.49	93.63	103.81	123.06	149.47	195.99	208.59
financed by:											
External Resources 28	14.21	12.67	9.95	8.29	9.78	19.43	16.78	20.68	22.61	29.99	34.52
Domestic Resources 29	29.17	30.61	22.87	40.39	58.71	74.20	87.03	102.38	126.86	166.00	174.07
of which:											
Bank Credit to Govt. 30	6.30	11.75	19.23	22.03	40.84	57.04	49.15	46.24	53.85	95.86	80.93
Commercial Banks 31	8.27	3.37	20.41	4.31	10.95	16.66	9.18	22.41	13.98	21.60	36.51
R.B.I. 32	-1.97	8.38	-1.18	17.72	29.89	40.38	39.97	23.83	39.87	74.26	44.42
Memo Item:											
GDP at market prices 33	743.44	801.98	898.48	977.48	1075.42	1274.53	1476.84	1651.36	1940.61	2143.85	2435.51

Sources: 1. CSO, Transactions of the Public Sector, 60/61-79/80.

2. National Accounts Statistics, various issues.

3. Economic and Functional Classification of Central Government Budget, various issues.

Notes: 1. Central Government consumption expenses from 1980/81 onwards are based on information from Economic Classification of the Central Budget.

2. The data in this table are based on National Accounts and are not comparable with the data in Table 5.2 through 5.8, which are based on budgetary accounts.

[a] Includes departmental and non-departmental enterprises, retained profits as well as income transferred to government.

[b] Operation and Maintenance is the expenditure on commodities and services.

Table 5.1 (b)
INDIA: PUBLIC FINANCE SUMMARY, 75/76-85/86
(percentages)

		75/76	76/77	77/78	78/79	79/80	80/81	81/82	82/83	83/84	84/85	85/86
PUBLIC INVESTMENT	1	10.3	10.6	8.3	9.9	11.0	11.0	11.9	12.2	11.1	12.1	11.6
Govt Administration	2	1.6	1.6	1.3	1.9	2.3	2.4	2.4	2.4	2.3	2.5	2.6
Public Enterprises	3	8.7	9.0	7.0	8.0	8.7	8.5	9.5	9.8	8.8	9.7	9.0
Fixed Investment	4	6.0	7.1	6.8	6.5	7.0	6.8	7.5	8.7	8.1	8.3	8.0
Change in Stocks	5	2.6	1.9	0.1	1.5	1.7	1.8	2.1	1.1	0.7	1.3	1.1
PUBLIC SAVINGS	6	4.5	5.2	4.6	4.9	4.6	3.6	4.9	4.7	3.4	3.0	3.1
Public Current Income	7	18.5	20.1	19.0	20.1	20.7	19.5	21.0	22.1	21.2	22.7	23.4
Tax Revenue	8	15.4	15.8	15.1	16.2	16.8	15.9	16.6	16.8	16.4	17.0	17.7
Direct	9	3.6	3.5	3.2	3.1	3.1	2.8	3.0	2.9	2.8	2.7	2.7
Indirect	10	11.9	12.4	11.9	13.0	13.7	13.1	13.6	13.9	13.6	14.3	15.0
Public Ent. Surplus [a]	11	2.2	3.2	2.9	2.9	2.8	2.5	3.3	4.0	3.8	4.2	4.4
Interest Receipts	12	0.5	0.8	0.8	0.8	0.8	0.8	0.8	1.0	0.7	1.1	1.0
Miscellaneous Receipts	13	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.4	0.3
Public Current Expenditure	14	14.0	14.9	14.4	15.2	16.1	15.9	16.1	17.4	17.7	19.7	20.3
Consumption Expenditure	15	9.9	10.2	9.6	9.8	10.3	10.2	10.3	10.9	10.7	11.2	11.6
Wages Bill	16	6.3	6.4	6.2	6.3	6.4	6.4	6.4	6.8	6.8	7.1	7.3
Centre	17	2.4	2.2	2.1	2.0	2.0	1.9	1.9	2.0	1.9	2.1	2.1
States	18	3.9	4.2	4.1	4.2	4.4	4.5	4.5	4.8	4.8	5.1	5.2
O & M [b]	19	3.6	3.8	3.5	3.6	3.9	3.8	4.0	4.1	4.0	4.1	4.3
Centre	20	2.2	2.3	2.1	2.1	2.3	2.1	2.2	2.3	2.3	2.3	2.5
States	21	1.4	1.6	1.4	1.4	1.5	1.7	1.8	1.8	1.7	1.8	1.8
Subsidies	22	1.5	1.7	2.0	2.3	2.3	2.2	2.1	2.3	2.6	3.4	3.3
Centre	23	1.1	1.3	1.4	1.6	1.7	1.5	1.3	1.4	1.5	2.1	2.1
States	24	0.4	0.5	0.5	0.6	0.6	0.7	0.8	0.9	1.1	1.3	1.2
Interest Payments	25	0.7	0.7	0.8	1.0	0.9	1.2	1.3	1.6	1.9	2.3	2.4
Current Transfers	26	1.9	2.2	2.0	2.2	2.6	2.3	2.3	2.6	2.5	2.8	3.0
PUBLIC INVESTMENT-SAVINGS GAP	27	5.8	5.4	3.7	5.0	6.4	7.3	7.0	7.5	7.7	9.1	8.6

Table 5.1 (b)
INDIA: PUBLIC FINANCE SUMMARY, 75/76-85/86
(percentages)

		75/76	76/77	77/78	78/79	79/80	80/81	81/82	82/83	83/84	84/85	85/86
PUBLIC INVESTMENT-SAVINGS GAP	27	5.8	5.4	3.7	5.0	6.4	7.3	7.0	7.5	7.7	9.1	8.6
financed by:												
External Resources	28	1.9	1.6	1.1	0.8	0.9	1.5	1.1	1.3	1.2	1.4	1.4
Domestic Resources	29	3.9	3.8	2.5	4.1	5.5	5.8	5.9	6.2	6.5	7.7	7.1
of which:												
Bank Credit to Govt.	30	0.8	1.5	2.1	2.3	3.8	4.5	3.3	2.8	2.8	4.5	3.3
Commercial Banks	31	1.1	0.4	2.3	0.4	1.0	1.3	0.6	1.4	0.7	1.0	1.5
R.B.I.	32	-0.3	1.0	-0.1	1.8	2.8	3.2	2.7	1.4	2.1	3.5	1.8
Memo Item:												
GDP at market prices	33	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Derived from Table 5.1 (a).

Table 5.2
INDIA: CONSOLIDATED FINANCES OF CENTRAL AND STATE GOVERNMENTS, 1976/77-1986/87
(Rs billion at current prices)

		1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87
REVENUE RECEIPTS	1	152.59	164.35	187.75	212.11	238.36	288.81	330.86	369.59	429.33	507.56	549.53
Tax Revenue	2	123.30	132.38	155.29	176.82	198.44	241.44	272.42	315.26	358.14	428.28	473.55
Direct Taxes	3	25.85	26.80	28.51	30.96	32.68	41.33	44.92	49.08	53.30	62.87	64.36
Indirect Taxes	4	97.45	105.58	126.78	145.86	165.76	200.11	227.50	266.18	304.84	365.41	409.19
Non-Tax Revenue	5	29.29	31.97	32.46	35.29	39.92	47.37	58.44	54.33	71.19	79.28	75.98
Foreign Grants	29	3.37	3.70	3.69	4.66	5.07	4.43	3.84	3.78	5.38	5.51	4.70
REVENUE EXPENDITURE	6	138.63	149.86	173.48	203.57	237.11	278.64	334.51	391.39	473.29	563.52	614.07
Non-developmental	7	78.38	80.63	90.74	106.90	123.06	145.44	176.13	205.83	243.95	299.98	327.85
Developmental	8	60.25	69.23	82.74	96.67	114.05	133.20	158.38	185.56	229.34	263.54	286.22
NET CURRENT BALANCE	9	13.96	14.49	14.27	8.54	1.25	10.17	-3.65	-21.80	-43.96	-55.96	-64.54
CAPITAL EXPENDITURE	10	59.51	61.34	74.01	82.58	111.34	117.78	126.47	147.17	178.75	198.41	204.33
Non-Developmental	11	3.59	2.61	5.13	2.89	9.25	4.99	7.28	13.79	12.32	16.91	20.69
Developmental	12	32.27	38.74	42.40	48.78	63.11	74.72	79.56	92.86	116.50	127.56	132.75
Loans & Advances	13	23.65	19.99	26.48	30.91	38.98	38.07	39.63	40.52	49.93	53.94	50.89
TOTAL BORROWING REQUIREMENT	34	-45.55	-46.85	-59.74	-74.04	-110.09	-107.61	-130.12	-168.97	-222.71	-254.37	-268.87
Non-RBI Borrowing	32	42.15	49.23	53.43	47.49	75.60	82.42	106.63	147.59	169.02	203.98	217.27
Domestic Borrowing	31	32.77	43.22	48.71	42.43	62.70	72.33	93.74	134.90	154.35	183.87	190.61
Market Borrowings	15	10.40	13.87	18.57	21.47	28.00	32.72	41.87	46.25	48.68	60.60	64.27
Small savings	16	4.13	5.45	8.47	11.05	11.21	13.99	17.73	24.09	36.50	48.00	53.00
Other Borrowing	30	18.24	23.90	21.67	9.91	23.49	25.62	34.14	64.56	69.17	75.27	73.34
External Borrowing	28	9.38	6.01	4.72	5.06	12.90	10.09	12.89	12.69	14.67	20.11	26.66
RBI Borrowing (Deficit Financing)	23	3.40	-2.38	6.31	26.55	34.49	25.19	23.49	21.38	53.69	50.39	51.60
memo items:												
TOTAL REVENUE (excl RBI)	19	194.74	213.58	241.18	259.60	313.96	371.23	437.49	517.18	598.35	711.54	766.80
Receipts	1	152.59	164.35	187.75	212.11	238.36	288.81	330.86	369.59	429.33	507.56	549.53
Borrowings	32	42.15	49.23	53.43	47.49	75.60	82.42	106.63	147.59	169.02	203.98	217.27
TOTAL EXPENDITURE	20	198.14	211.20	247.49	286.15	348.45	396.42	460.98	538.56	652.04	761.93	818.40
Non-Developmental	21	81.97	83.24	95.87	109.79	132.31	150.43	183.41	219.62	256.27	316.89	348.54
Developmental	22	92.52	107.97	125.14	145.45	177.16	207.92	237.94	278.42	345.84	391.10	418.97
GDP at market prices	26	801.98	898.48	977.48	1075.42	1274.53	1476.84	1651.36	1940.61	2143.85	2435.51	2763.58

Notes: 1. The data in this table are based on budgetary accounts and are not comparable with the data in Table 5.1, which is based on national accounts.

2. Data for 1985/86 are Revised Estimates; data for 1986/87 are Budget Estimates.

3. The value of GDP in 1986/87 has been estimated by the World Bank.

Source: Ministry of Finance, Indian Economic Statistics (Public Finance).

Table 5.3
INDIA: FINANCES OF CENTRAL GOVERNMENT, 1977/78- 1986/87
(Rs billion at current prices)

		1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87 (a)	1986/87 (b)
REVENUE RECEIPTS	1	95.92	110.03	110.61	124.84	151.40	175.07	197.17	235.49	278.05	300.58	338.53
Tax Revenue	2	70.61	85.68	85.68	93.88	115.73	130.56	154.76	176.94	209.79	226.82	242.07
Direct Taxes	3	17.21	18.11	19.42	19.83	27.52	29.91	33.10	35.46	38.54	38.13	-
Indirect Taxes	4	53.40	67.57	66.26	74.05	88.21	100.65	121.66	141.48	171.25	188.69	-
Non-Tax Revenue	5	19.35	18.34	19.94	22.07	26.59	34.21	29.76	42.39	47.64	47.10	69.95
Foreign Grants	33	3.70	3.69	4.66	5.07	4.43	3.84	3.78	5.38	5.51	4.70	4.70
Int payments from States	6	5.96	6.01	4.99	8.89	9.08	10.29	12.64	16.16	20.62	26.66	26.51
REVENUE EXPENDITURE	7	91.62	107.11	117.55	132.61	154.33	187.61	221.15	270.47	337.45	369.85	410.86
Non-Developmental	8	54.95	61.60	70.78	81.48	96.05	113.92	134.82	162.14	199.23	223.73	-
Developmental	9	17.06	19.16	22.66	23.17	29.73	37.34	42.31	56.13	65.89	70.82	-
Grants to States	10	19.61	26.35	24.11	27.96	28.55	36.35	44.02	52.20	72.33	75.30	-
NET CURRENT BALANCE	11	4.30	2.92	-6.94	-7.77	-2.93	-12.54	-23.98	-34.98	-59.40	-69.27	-72.33
CAPITAL EXPENDITURE	12	41.09	54.46	56.98	81.10	83.74	95.12	111.35	142.89	173.29	164.92	192.42
Non-Developmental	13	2.61	5.14	2.89	9.23	4.93	7.25	13.71	12.26	16.79	20.45	-
Developmental	14	19.81	19.03	21.50	30.60	38.06	41.34	49.05	66.19	72.25	72.37	-
Loans & Advances (net)	15	18.67	30.29	32.59	41.27	40.75	46.53	48.59	64.44	84.25	72.10	-
TOTAL BORROWING REQUIREMENT	25	-36.79	-51.54	-63.92	-88.87	-86.67	-107.66	-135.33	-177.87	-232.69	-234.19	-264.75
Non-RBI Borrowing	37	27.46	42.03	39.66	63.10	72.75	91.11	121.16	140.42	187.79	197.16	181.90
Domestic Borrowing	35	21.45	37.31	34.60	50.20	62.66	78.22	108.47	125.75	167.68	170.50	155.25
Market Borrowings	17	11.85	16.53	19.51	25.79	29.13	37.71	40.38	40.96	51.00	53.00	-
Small Savings	18	5.45	8.47	11.05	11.21	13.99	17.73	24.09	36.50	48.00	53.00	-
Other Borrowing	34	4.15	12.31	4.04	13.20	19.54	22.78	44.00	48.29	68.68	64.50	-
External Borrowing	32	6.01	4.72	5.06	12.90	10.09	12.89	12.69	14.67	20.11	26.66	26.66
RBI Borrowing (Deficit Financing)	38	9.33	9.50	24.26	25.77	13.92	16.56	14.17	37.45	44.90	37.03	82.85
Memo Items:												
TOTAL REVENUE (excl RBI)	21	123.38	152.07	150.27	187.94	224.15	266.17	318.33	375.91	465.84	497.74	520.43
Receipts	1	95.92	110.03	110.61	124.84	151.40	175.07	197.17	235.49	278.05	300.58	338.53
Borrowings	37	27.46	42.03	39.66	63.10	72.75	91.11	121.16	140.42	187.79	197.16	181.90
TOTAL EXPENDITURE	22	132.71	161.57	174.53	213.71	238.07	282.73	332.50	413.36	510.74	534.77	603.28
Non-Developmental	23	57.56	66.74	73.67	90.71	100.98	121.17	148.53	174.40	216.02	244.18	-
Developmental	24	36.87	38.19	44.16	53.77	67.79	78.68	91.36	122.32	138.14	143.19	-
GDP at market prices	30	898.48	977.48	1075.42	1274.53	1476.84	1651.36	1940.61	2143.85	2435.51	2763.58	2763.58

Source: Ministry of Finance, Indian Economic Statistics (Public Finance).

Notes: 1. Data for 1985/86 are Revised Estimates.

2. GDP in 1986/87 has been estimated by the World Bank.

(a) Budget Estimates.

(b) Revised Estimates from the Budget of GOI, 1987-88.

Table 5.4
INDIA: FINANCES OF STATE GOVERNMENTS, 1976/77-1986/87
(Rs billion at current prices)

		1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87
REVENUE RECEIPTS	1	86.52	94.01	110.08	130.60	150.36	175.04	202.43	229.08	262.20	322.46	350.91
Tax Revenue	2	57.50	61.77	69.55	91.17	104.53	125.53	141.78	158.11	181.96	214.54	242.58
Direct Taxes	3	9.19	9.59	10.33	11.52	12.85	13.85	15.01	15.93	18.15	21.54	23.11
Indirect Taxes	4	48.31	52.18	59.22	79.65	91.68	111.68	126.77	142.18	163.81	193.00	219.47
Non-Tax Revenue	5	12.80	12.63	14.18	15.32	17.87	20.96	24.29	26.95	28.04	35.59	33.03
Grants from Centre	6	16.22	19.61	26.35	24.11	27.96	28.55	36.35	44.02	52.20	72.33	75.30
REVENUE EXPENDITURE	7	75.55	83.81	98.73	115.12	141.36	161.93	193.54	226.91	271.18	319.02	346.18
Non-Developmental	8	25.32	25.68	29.14	36.12	41.59	49.38	62.21	71.02	81.81	100.75	104.12
Developmental	9	46.33	52.17	63.58	74.01	90.88	103.47	121.04	143.25	173.21	197.65	215.40
Interest Payments to Centre	10	3.90	5.96	6.01	4.99	8.89	9.08	10.29	12.64	16.16	20.62	26.66
NET CURRENT BALANCE	11	10.97	10.20	11.35	15.48	9.00	13.11	8.89	2.17	-8.98	3.44	4.73
CAPITAL EXPENDITURE	12	26.96	31.00	38.33	44.78	52.53	56.00	59.89	67.00	74.10	84.23	88.58
Non-Developmental	13	0.57	-0.01	-0.01	-	0.02	0.06	0.03	0.06	0.07	0.11	0.24
Developmental	14	16.80	18.94	23.37	27.28	32.51	36.66	38.23	43.83	50.31	55.31	60.38
Loans & Advances (net)	15	9.59	12.07	14.97	17.50	20.00	19.28	21.63	23.11	23.72	28.81	27.96
TOTAL BORROWING REQUIREMENT	20	-15.99	-20.80	-26.98	-29.30	-43.53	-42.89	-51.00	-64.82	-83.08	-80.79	-83.85
Non-RBI Borrowing	16	15.96	19.97	30.17	27.01	34.79	31.62	44.06	57.64	69.48	89.26	80.58
Market Borrowings	17	1.96	2.02	2.04	1.95	2.21	3.59	4.17	5.87	7.72	9.61	11.28
Loans from Centre	18	7.57	11.64	18.78	19.08	22.29	21.92	28.54	31.18	38.24	59.11	49.17
Other Borrowing	19	6.43	6.31	9.35	5.98	10.29	6.11	11.35	20.60	23.52	20.54	20.13
RBI Borrowing (Deficit Financing)	25	0.03	0.83	-3.19	2.28	8.74	11.27	6.94	7.18	13.60	-8.47	3.27
Memo Items:												
TOTAL REVENUE (excl RBI)	21	102.48	113.98	140.25	157.61	185.15	206.66	246.49	286.72	331.68	411.72	431.49
Receipts	1	86.52	94.01	110.08	130.60	150.36	175.04	202.43	229.08	262.20	322.46	350.91
Borrowings	16	15.96	19.97	30.17	27.01	34.79	31.62	44.06	57.64	69.48	89.26	80.58
TOTAL EXPENDITURE	22	102.51	114.81	137.06	159.90	193.89	217.93	253.43	293.90	345.28	403.25	434.76
Non-Developmental	23	25.89	25.67	29.13	36.12	41.61	49.44	62.24	71.08	81.88	100.86	104.36
Developmental	24	63.13	71.11	86.95	101.29	123.39	140.13	159.27	187.07	223.52	252.96	275.78
GDP at market prices	28	801.98	898.48	977.48	1075.42	1274.53	1476.84	1651.36	1940.61	2143.85	2435.51	2763.58

Source: Ministry of Finance, Indian Economic Statistics (Public Finance).

Notes: 1. Data for 1985/86 are Revised Estimates; data for 1986/87 are Budget Estimates.
2. GDP in 1986/87 has been estimated by the World Bank.

Table 5.5
INDIA: TAX REVENUE - CENTRE AND STATES, 1976/77-1986/87
(in Rs billion)

	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87	
TAX REVENUE - CENTRE												
Income Tax	1	11.94	10.02	11.77	13.40	15.06	14.76	15.70	16.99	19.28	23.97	25.88
Corporation Tax	2	9.84	12.21	12.52	13.92	13.11	19.70	21.85	24.93	25.56	31.18	31.23
Customs Duties	3	15.54	18.24	24.24	29.24	34.09	43.00	51.19	55.83	70.41	92.96	104.04
of which:												
Export Duties	4	1.29	2.29	1.41	1.28	1.18	0.61	0.68	0.76	0.81	0.71	0.59
Union Excise Duties	5	42.21	44.48	53.67	60.11	65.00	74.21	80.59	102.22	111.51	129.20	140.67
Other	6	3.18	3.63	3.05	3.07	4.53	6.80	7.63	7.24	7.95	7.38	7.26
Sub-total	7	82.71	88.58	105.25	119.74	131.79	156.47	176.96	207.21	234.71	284.69	309.08
Less States' Share of:												
Income Tax	8	6.52	6.75	7.07	8.65	10.02	10.17	11.32	11.72	12.31	18.46	20.23
Excise Duties	9	10.28	11.13	12.40	25.30	27.77	32.40	34.92	40.57	45.25	56.25	61.91
Other	10	0.10	0.10	0.10	0.11	0.12	0.17	0.16	0.16	0.21	0.19	0.12
Tax Revenue Retained by Centre	11	65.81	70.60	85.68	85.68	93.88	115.73	130.56	154.76	176.94	209.79	226.82
TAX REVENUE - STATES												
Sales Tax	12	22.30	23.76	27.39	31.70	38.53	48.59	54.41	62.04	70.29	82.16	95.50
State Excise Duties	13	5.11	5.77	5.92	7.05	8.38	11.29	13.56	15.83	18.57	21.18	23.38
Stamps & Registration	14	2.33	2.88	3.35	3.69	4.27	5.17	5.92	6.34	7.06	8.08	9.13
Land Revenue Tax	15	1.87	1.78	2.01	1.65	1.57	2.28	2.26	2.55	3.18	3.22	3.51
Motor Vehicle Tax	16	2.40	2.60	2.95	3.75	4.18	4.57	5.35	6.27	7.05	8.41	9.75
Other	17	6.59	7.00	8.41	9.25	9.72	11.05	13.96	15.01	17.28	20.53	23.21
Sub-Total	18	40.60	43.79	50.03	57.09	66.65	82.95	95.46	108.04	123.43	143.58	164.48
Add States' Share of Central Taxes:	19	16.90	17.98	19.57	34.06	37.91	42.74	46.40	52.45	57.77	74.90	82.26
Tax Revenue Retained by States	20	57.50	61.77	69.60	91.15	104.56	125.69	141.86	160.49	181.20	218.48	246.74
TOTAL - CENTRE & STATES	21	123.31	132.37	155.28	176.83	198.44	241.42	272.42	315.25	358.14	428.27	473.56
Memo Item:												
GDP at market prices	25	801.98	898.48	977.48	1075.42	1274.53	1476.84	1651.36	1940.61	2143.85	2435.51	2763.58

Source: Ministry of Finance, Indian Economic Statistics (Public Finance).

Note: 1. Data for 1985/86 are Revised Estimates; data for 1986/87 are Budget Estimates.
2. GDPmp in 1986/87 has been estimated by the World Bank.

Table 5.6
INDIA: CURRENT EXPENDITURE - BY CENTRE AND STATES, 1976/77-1986/87
(in Rs billion)

		1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87
CENTRAL GOVERNMENT												
Non-Developmental	31	53.06	54.95	61.61	70.78	81.48	96.06	113.92	134.82	162.14	199.23	223.73
Tax Collection	32	1.19	1.19	1.29	1.22	1.42	1.58	1.88	2.15	2.50	3.10	3.10
Admin. Services	33	4.61	4.64	5.04	5.57	6.43	7.33	8.40	9.27	11.49	13.39	13.61
Defence	34	23.47	23.86	26.14	30.94	35.40	41.67	48.82	56.67	63.99	74.44	81.89
Interest Payments	35	13.74	15.21	18.29	22.10	26.04	31.95	39.38	47.96	59.75	74.00	87.50
Other	36	10.05	10.05	10.85	10.95	12.19	13.53	15.44	18.77	24.41	34.30	37.63
Developmental	37	13.92	17.06	19.16	22.66	23.17	29.73	37.34	42.31	56.13	65.89	70.62
Education	38	2.14	2.35	2.69	2.63	2.93	3.42	4.31	4.78	5.95	7.59	8.63
Public Health	39	2.58	2.28	2.59	2.65	2.85	3.71	5.09	6.21	7.17	8.39	9.54
Agriculture	40	1.19	1.67	2.31	1.89	1.93	2.57	3.36	4.61	5.38	5.74	6.86
Industry	41	2.42	3.43	2.68	3.85	3.96	5.58	6.17	5.49	11.39	10.03	9.01
Other	42	5.59	7.33	8.89	11.64	11.50	14.45	18.41	21.22	26.24	34.14	36.78
Grants to States	43	16.22	19.61	26.35	24.11	27.96	28.55	36.35	44.02	52.20	72.33	75.30
TOTAL	44	83.20	91.62	107.12	117.55	132.61	154.34	187.61	221.15	270.47	337.45	369.85
STATE GOVERNMENTS												
Non-Developmental	45	25.32	25.68	29.14	36.12	41.59	49.38	62.21	71.02	81.81	100.75	104.12
Tax Collection	46	2.46	2.41	2.65	3.14	2.62	4.04	4.76	5.78	6.07	7.22	7.84
Admin. Services	47	9.17	9.97	10.83	12.81	15.69	17.89	21.15	24.45	28.70	32.75	34.40
Interest Payments												
other than to Centre	48	3.74	2.20	3.61	4.55	3.52	5.50	6.99	7.29	8.88	11.85	13.42
Other	49	9.95	11.10	12.05	15.62	19.76	21.95	29.31	33.50	38.16	48.93	48.46
Developmental	50	46.33	52.17	63.58	74.01	90.88	103.47	121.04	143.25	173.21	197.65	215.40
Education	51	17.96	20.48	23.17	25.98	31.43	36.30	43.91	50.21	58.65	68.71	74.29
Public Health	52	8.22	8.54	10.03	11.90	14.24	17.10	20.44	24.93	28.17	28.53	30.46
Agriculture	53	4.54	5.62	6.60	8.31	9.76	10.50	11.92	14.99	16.91	19.55	20.70
Industry	54	0.87	1.06	1.45	1.63	2.01	2.55	2.82	3.72	4.29	5.16	5.39
Other	55	14.74	16.47	22.33	26.19	33.44	37.02	41.95	49.40	65.19	75.70	84.56
Int. Payment to Centre	56	3.90	5.96	6.01	4.99	8.89	9.08	10.29	12.64	16.16	20.62	26.66
TOTAL	57	75.55	83.81	98.73	115.12	141.36	161.93	193.54	226.91	271.18	319.02	346.18
TOTAL CENTRE & STATES (net)	58	138.63	149.86	173.49	203.57	237.12	278.64	334.51	391.39	473.29	563.52	614.07
Memo Item:												
GDP at market prices	25	801.98	898.48	977.48	1075.42	1274.53	1476.84	1651.36	1940.61	2143.85	2435.51	2763.58

Source: Ministry of Finance, Indian Economic Statistics (Public Finance).

Notes: 1. Data for 1985/86 are Revised Estimates; data for 1986/87 are Budget Estimates.
2. GDPmp in 1986/87 has been estimated by the World Bank.

Table 5.7
INDIA: TRANSFERS BETWEEN CENTRE AND STATES, 1976/77-1986/87
(in Rs billion)

	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87	
States' Share in Central Taxes	19	16.90	17.98	19.57	34.06	37.91	42.74	46.40	52.45	57.77	74.90	82.26
Grants to States	43	16.22	19.61	26.35	24.11	27.96	28.55	36.35	44.02	52.20	72.33	75.30
Loans to States (gross)(a)	22	14.81	19.56	27.69	27.62	31.46	34.60	42.98	50.59	62.77	89.86	82.98
Loan Repayments by States(b)	23	6.56	8.81	8.92	8.44	9.17	12.64	14.44	19.41	24.54	30.75	33.71
Interest Payments by States	56	3.90	5.96	6.01	4.99	8.89	9.08	10.29	12.64	16.16	20.62	26.66
NET TRANSFER	24	37.47	42.38	58.68	72.36	79.27	84.17	101.00	115.01	132.04	185.72	180.07

Source: Ministry of Finance, Indian Economic Statistics (Public Finance).

Notes: 1. All data are taken from Central Government accounts.

2. Data for 1985/86 are Revised Estimates; data for 1986/87 are Budget Estimates.

(a) Excludes assistance of Rs 5.55 billion in 1979/79 and Rs 17.44 billion in 1982/83 and Rs 4.00 billion in 1983/84 on account of assistance given by Center to States for clearing their overdrafts.

(b) Excludes accounting adjustment of Rs 9.38 billion for 1980/81.

Table 5.8
ECONOMIC AND FUNCTIONAL CLASSIFICATION OF CENTRAL GOVERNMENT FINANCES, 1976/77-1986/87
(Rs billion at current prices)

		1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87
CURRENT REVENUE	1	80.07	88.94	103.54	103.52	118.20	142.61	165.30	187.50	224.60	265.45	289.03
Tax Receipts	2	65.56	70.33	84.54	85.34	93.47	115.31	130.05	154.41	176.53	209.40	226.97
Property Income	3	12.45	15.38	15.62	14.55	20.26	22.36	29.58	27.98	39.63	47.65	53.51
Misc. Receipts	4	2.06	3.23	3.38	3.63	4.47	4.94	5.67	5.11	8.45	8.40	8.55
CURRENT EXPENDITURE	5	75.51	83.56	96.58	105.66	120.86	138.24	166.47	195.66	243.66	297.26	324.97
Consumption Expenditure	6	36.06	36.78	39.75	45.02	51.74	60.96	70.57	81.30	94.28	112.80	124.38
Transfer Payments	7	39.45	46.78	56.83	60.64	69.12	77.28	95.90	114.36	149.38	184.46	200.59
SAVINGS ON CURRENT A/C (Admin.)	8	4.56	5.38	6.96	-2.14	-2.66	4.37	-1.17	-8.16	-19.06	-31.81	-35.94
SAVINGS OF DEPT. ENTERPR.	9	4.28	5.14	4.80	4.44	2.69	6.71	9.74	11.29	9.43	12.72	14.95
GROSS SAVINGS	10	8.84	10.52	11.76	2.30	0.03	11.08	8.57	3.13	-9.63	-19.09	-20.99
Capital Transfers	11	2.88	3.43	2.87	4.04	4.58	3.98	4.36	3.69	4.78	5.33	4.34
Loan Repayments	12	7.40	14.41	15.18	10.06	10.85	13.39	18.20	24.08	24.18	27.99	24.60
TOTAL RECEIPTS	13	19.12	28.36	29.81	16.40	15.46	28.45	31.13	30.90	19.33	14.23	7.95
CAPITAL EXPENDITURE	14	62.48	71.84	87.13	86.42	110.71	122.84	146.52	172.20	204.88	256.14	270.80
Direct Investment	15	11.12	11.07	13.01	15.27	19.08	25.52	28.85	33.56	41.24	49.10	58.89
Gross Fixed Investment	16	10.90	11.18	12.42	14.43	17.52	24.11	28.14	32.19	39.53	47.60	57.13
Change in Inventories	17	0.22	-0.11	0.59	0.84	1.56	1.41	0.71	1.37	1.71	1.50	1.76
Indirect Investment	18	44.88	55.23	67.59	64.11	85.01	90.25	109.63	130.66	153.90	194.23	193.69
Capital Transfers	19	5.02	7.55	10.63	12.20	13.02	15.25	17.88	23.37	29.58	36.24	38.35
Loans for Cap. Formation	20	25.54	28.53	36.92	36.61	45.21	49.18	54.50	63.83	78.85	100.66	101.55
Others	21	14.32	19.15	20.04	15.30	26.78	25.82	37.25	43.46	45.47	57.33	53.79
Debt Repayment	22	6.48	5.54	6.53	7.04	6.62	7.07	8.04	7.98	9.74	12.81	18.21
Amort. of Foreign Debt	23	3.70	4.29	4.70	4.10	3.92	4.22	4.38	4.55	4.86	6.18	7.71
Long-term Rupee Debt	24	2.78	1.25	1.83	2.94	2.70	2.85	3.66	3.43	4.88	6.63	10.50
OVERALL DEFICIT	25	43.36	43.48	57.32	70.02	95.25	94.39	115.39	141.30	185.55	241.91	262.85
Financed by:												
Market Borrowings	26	11.23	13.10	18.37	22.46	28.48	31.98	41.36	43.82	45.84	57.63	63.50
Foreign Debt	27	14.92	8.08	9.16	9.14	16.26	13.39	16.31	17.40	18.69	25.33	32.06
Small Savings	28	4.13	5.45	8.47	11.05	11.21	13.99	17.73	24.09	36.50	48.00	53.00
Others	29	13.08	16.85	21.32	27.37	39.30	35.03	39.99	55.99	84.52	110.95	114.29
memo item:												
GDP at market prices	33	801.98	898.48	977.48	1075.42	1274.53	1476.84	1651.36	1940.61	2143.85	2435.51	2763.58

Source: Ministry of Finance, Economic and Functional Classification of Central Government Budget, various issues.

Table 5.9
PROJECTED AND ACTUAL PLAN OUTLAYS BY SECTORS
(Rs billion)

	Fifth Plan		Sixth Plan	Annual Plans					Seventh Plan		
	(74/75-78/79)		80-85						85-90	85/86	86/87
	proj.	actuals	proj.	80/81	81/82	82/83	83/84	84/85	proj.	(est.)	proj.
A Agriculture & Allied Programs	37.68	48.65	119.15	22.28	24.89	28.92	32.82	43.11	227.93	46.08	53.05
Agriculture	32.31	n.a.	56.95	9.82	11.29	12.61	14.27	18.25	105.74	20.07	22.03
Rural Development	5.37	n.a.	53.64	10.40	11.01	12.96	14.98	20.62	90.74	21.37	25.05
Special Area Program	-	-	14.80	2.06	2.59	3.35	3.57	4.24	31.45	4.64	5.97
B Irrigation & Flood Control	44.32	38.77	121.60	17.77	19.49	21.06	24.45	26.54	169.79	28.38	31.92
Minor Irrigation	7.92	n.a.	18.10	2.91	2.91	3.32	4.50	4.84	28.05	5.30	5.76
Major Irrigation	30.99	n.a.	84.48	12.23	13.78	15.11	16.18	17.63	115.56	18.68	21.43
Flood Control	3.45	n.a.	10.45	1.54	1.64	1.48	1.81	1.64	9.47	1.66	1.66
Command Area Development	2.06	n.a.	8.56	1.09	1.16	1.15	1.96	2.43	16.71	2.74	3.07
C Industry and Minerals	73.62	95.83	150.18	21.94	27.78	30.75	39.17	49.86	224.61	56.05	54.15
Village & Small Scale	5.10	5.93	17.81	2.73	3.23	3.26	4.03	6.20	27.53	5.40	6.06
Large & Medium Industries	68.52	89.89	132.37	19.21	23.60	27.09	34.79	43.24	197.08	50.25	47.74
Others	-	-	-	-	0.95	0.40	0.35	0.42	-	0.40	0.35
D Energy	98.55	74.00	265.35	38.28	50.65	64.09	72.77	81.72	548.21	99.51	119.22
Power	70.16	74.00	192.65	26.57	31.82	37.08	40.92	46.59	342.74	57.19	74.06
Petroleum	16.91	n.a.	43.00	7.35	12.05	18.23	21.98	25.21	126.28	31.01	32.16
Coal	11.48	n.a.	28.70	4.32	6.64	8.56	9.53	9.03	74.01	9.97	11.80
Others	-	-	1.00	0.04	0.14	0.22	0.34	0.89	5.20	1.34	1.20
E Transport	55.28	68.70[b]	124.12	21.63	25.83	27.52	30.76	36.33	229.71	43.98	51.97
Railways	22.02	n.a.	51.00	9.73	12.10	13.20	14.19	16.65	123.34	20.50	26.50
Roads & Road Transport	18.15	n.a.	46.35	8.30	9.35	9.34	10.89	12.94	71.90	14.16	15.52
Ports & Shipping [a]	10.67	n.a.	14.86	1.81	2.17	2.65	2.64	2.86	23.13	5.31	6.26
Civil Aviation	2.97	n.a.	8.59	1.24	1.47	1.64	2.13	3.09	7.58	3.37	3.00
Others	1.47	n.a.	3.33	0.55	0.74	0.69	0.91	0.79	3.75	0.64	0.69
F Communication & Broadcasting	13.89	n.a.	31.34	3.57	5.76	6.75	8.64	9.97	64.73	11.89	12.53
G Science & Technology	4.36	n.a.	8.65	0.97	1.48	2.03	2.28	3.35	24.66	4.21	5.29
H Social Services	52.24	68.34	140.35	20.75	24.87	29.50	38.35	45.68	293.51	49.06	58.08
Education	12.85	17.10[c]	25.24	3.40	4.36	5.39	6.98	9.65	63.83	9.83	12.97
Health & Family Welfare	11.79	12.53	28.31	4.12	5.30	6.75	8.53	9.42	64.49	10.89	12.24
Housing & Urban Development	11.07	11.50	24.88	4.77	4.88	5.07	6.57	7.09	42.60	7.51	8.59
Water Supply & Sanitation	9.71	10.92	39.22	5.17	6.40	7.30	9.93	11.17	65.22	12.06	13.29
Other Social Services	6.82	16.29	22.70	3.29	3.93	4.99	6.34	8.35	57.37	8.77	10.99
I Others	13.28	[d]	8.02	3.05	2.98	6.63	1.64	2.20	16.87	2.86	4.28
J TOTAL	393.2	394.3	975.0	150.2	183.7	217.3	250.9	298.8	1800.0	342.0	390.5

Note: The Plan totals are at base year prices for projections and at current prices for actuals.

[a] Covers Major and Minor ports, Shipping, Lighthouses and Inland Water Transport.

[b] Includes Communication & Broadcasting.

[c] Includes Scientific Research.

[d] Included under other social services.

Source: Planning Commission.

Table 5.10 (a)
PROJECTED AND ACTUAL PLAN OUTLAYS BY SECTORS
(Annual averages at constant 1970/71 prices-Rs billion)

	Fifth Plan		Sixth Plan	Annual Plans					Seventh Plan	
	(74/75-78/79)		80-85						85-90	85/86
	proj.	actuals	proj.	80/81	81/82	82/83	83/84	84/85	proj.	(est.)
A Agriculture & Allied Programs	4.35	5.33	10.39	8.65	8.60	9.19	9.45	11.39	12.05	11.13
Agriculture	3.73	n.a.	4.97	3.81	3.90	4.01	4.11	4.82	5.59	4.85
Rural Development	0.62	n.a.	4.68	4.04	3.80	4.12	4.31	5.45	4.80	5.16
Special Area Program	n.a.	n.a.	1.29	0.80	0.89	1.06	1.03	1.12	1.66	1.12
B Irrigation & Flood Control	5.11	4.25	10.61	6.90	6.73	6.69	7.04	7.01	8.97	6.86
Minor Irrigation	0.91	n.a.	1.58	1.13	1.01	1.06	1.30	1.28	1.48	1.28
Major Irrigation	3.56	n.a.	7.37	4.75	4.76	4.80	4.66	4.66	6.11	4.51
Flood Control	0.40	n.a.	0.91	0.60	0.57	0.47	0.52	0.43	0.50	0.40
Command Area Development	0.24	n.a.	0.75	0.42	0.40	0.37	0.56	0.64	0.88	0.66
C Industry and Minerals	8.49	10.51	13.10	8.52	9.60	9.77	11.28	13.18	11.87	13.54
Village & Small Scale	0.59	0.65	1.55	1.06	1.12	1.04	1.16	1.64	1.46	1.30
Large & Medium Industries	7.90	9.86	11.55	7.46	8.15	8.61	10.02	11.43	10.42	12.14
Others	-	-	-	-	0.33	0.13	0.10	0.11	-	0.10
D Energy	11.37	8.11	23.14	14.87	17.50	20.37	20.95	21.60	28.98	24.04
Power	8.09	8.11	16.80	10.32	11.00	11.79	11.78	12.31	18.12	13.82
Petroleum	1.95	n.a.	3.75	2.85	4.16	5.79	6.33	6.66	6.67	7.49
Coal	1.32	n.a.	2.50	1.68	2.29	2.72	2.74	2.39	3.91	2.41
Others	-	-	0.09	0.02	0.05	0.07	0.10	0.24	0.27	0.32
E Transport	6.38	7.53	10.83	8.40	8.93	8.75	8.86	9.60	12.14	10.63
Railways	2.54	n.a.	4.45	3.78	4.18	4.20	4.09	4.40	6.52	4.95
Roads & Road Transport	2.09	n.a.	4.04	3.22	3.23	2.97	3.14	3.42	3.80	3.42
Ports & Shipping	1.23	n.a.	1.30	0.70	0.75	0.84	0.76	0.76	1.22	1.28
Civil Aviation	0.34	n.a.	0.75	0.48	0.51	0.52	0.61	0.82	0.40	0.81
Others	0.17	n.a.	0.29	0.21	0.26	0.22	0.26	0.21	0.20	0.15
F Communication & Broadcasting	1.60	n.a.	2.73	1.39	1.99	2.15	2.49	2.63	3.42	2.87
G Science & Technology	0.50	n.a.	0.75	0.38	0.51	0.65	0.66	0.89	1.30	1.02
H Social Services	6.03	7.49	12.24	8.06	8.59	9.38	11.04	12.07	15.51	11.85
Education	1.48	1.88	2.20	1.32	1.51	1.71	2.01	2.55	3.37	2.37
Health & Family Welfare	1.36	1.37	2.47	1.60	1.83	2.15	2.46	2.49	3.41	2.63
Housing & Urban Development	1.28	1.26	2.17	1.85	1.69	1.61	1.89	1.87	2.25	1.81
Water Supply & Sanitation	1.12	1.20	3.42	2.01	2.21	2.32	2.86	2.95	3.45	2.91
Other Social Services	0.79	1.79	1.98	1.28	1.36	1.59	1.83	2.21	3.03	2.12
I Others	1.53	-	0.70	1.18	1.03	2.11	0.47	0.58	0.89	0.69
J TOTAL	45.35	43.23	85.04	58.33	63.48	69.07	72.24	78.95	95.14	82.63
Memo Item: Price Deflator	173.4	182.4	229.3	257.5	289.4	314.6	347.3	378.4	378.4	413.9

Note: See Footnotes to Table 5.9.

Table 5.10 (b)
 PLAN OUTLAYS BY SECTORS
 (% distribution and achievement rates) [a]

	Fifth Plan		Sixth Plan		Seventh Plan
	(74/75-78/79)		(80/81-84/85)		(85/86-89/90)
	% share [b]	achieve- ment [c]	% share [b]	achieve- ment [c]	% share [b]
A Agriculture & Allied Programs	9.6	122.7	12.2	91.0	12.7
Agriculture	8.2	n.a	5.8	83.2	5.9
Rural Development	1.4	n.a	5.5	92.9	5.0
Special Area Program	-	n.a	1.5	76.0	1.7
B Irrigation & Flood Control	11.3	83.2	12.5	64.8	9.4
Minor Irrigation	2.0	n.a	1.9	73.0	1.6
Major Irrigation	7.9	n.a	8.7	64.1	6.4
Flood Control	0.9	n.a	1.1	56.8	0.5
Command Area Development	0.5	n.a	0.9	64.2	0.9
C Industry and Minerals	18.7	123.7	15.4	79.9	12.5
Village & Small Scale	1.3	110.5	1.8	77.4	1.5
Large & Medium Industries	17.4	124.7	13.6	79.1	10.9
D Energy	25.1	71.4	27.2	82.3	30.5
Power	17.8	100.3	19.8	68.1	19.0
Petroleum	4.3	n.a	4.4	137.6	7.0
Coal	2.9	n.a	2.9	94.5	4.1
Others	-	-	0.1	107.1	0.3
E Transport	14.1	118.1	12.7	82.3	12.8
Railways	5.6	n.a	5.2	92.8	6.9
Roads & Road Transport	4.6	n.a	4.8	79.0	4.0
Ports & Shipping	2.7	n.a	1.5	58.8	1.3
Civil Aviation	0.8	n.a	0.9	78.5	0.4
Others	0.4	n.a	0.3	79.8	0.2
F Communication & Broadcasting	3.5	n.a	3.2	77.9	3.6
G Science & Technology	1.1	n.a	0.9	81.5	1.4
H Social Services	13.3	124.4	14.4	80.3	16.3
Education	3.3	126.8	2.6	82.7	3.5
Health & Family Welfare	3.0	101.0	2.9	85.2	3.6
Housing & Urban Development	2.8	98.8	2.6	82.2	2.4
Water Supply & Sanitation	2.5	106.9	4.0	72.2	3.6
Other Social Services	1.7	227.1	2.3	83.4	3.2
I Others	3.4	n.a	0.8	153.7	0.9
J TOTAL	100.0	95.3	100.0	80.4	100.0

[a] Derived from Table 5.10(a).

[b] Percentage share in total Plan outlay.

[c] Actual outlay as a percentage of target outlay for the Plan.

Table 5.11(a)
GROSS DOMESTIC INVESTMENT IN PUBLIC SECTOR, 1974/75-1984/85
(Rs billion at current prices)

		1974/75	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85
Agricultural Sector	37	6.14	7.45	10.57	12.58	14.52	16.87	19.37	20.63	22.64	24.52	27.26
Agriculture	2	5.91	7.18	10.13	12.06	13.91	16.18	18.45	19.64	21.43	22.96	25.47
Forestry	3	0.23	0.27	0.44	0.52	0.61	0.69	0.92	0.99	1.21	1.56	1.79
Industry Sector	38	28.19	34.84	40.08	41.91	46.93	61.34	75.01	93.88	112.93	116.55	136.22
Mining & Quarrying	4	2.76	5.19	6.59	6.31	6.26	8.04	11.66	16.75	27.08	28.18	28.89
Manufacturing	6	14.96	14.45	17.37	16.07	18.70	26.57	31.27	36.07	38.91	41.21	52.42
Construction	7	1.04	0.63	0.44	0.96	1.21	1.06	2.57	3.15	2.08	-0.58	1.76
Electricity, Gas and Water	8	9.43	14.57	15.68	18.57	20.76	25.67	29.51	37.91	44.86	47.74	53.15
Services Sector	9	22.31	34.48	34.48	20.01	35.04	39.95	45.28	61.60	65.90	75.04	96.74
Transport and Communication	10	9.19	11.21	10.27	10.71	12.90	15.11	19.28	21.86	25.84	25.86	33.92
Railways	11	3.50	3.87	3.27	3.92	4.85	6.43	8.56	10.10	10.81	12.20	14.29
Communication	12	1.53	1.95	2.33	2.45	2.80	2.96	3.42	5.31	5.91	7.05	8.57
Other transport	13	4.16	5.39	4.67	4.34	5.25	5.72	7.30	6.45	9.12	6.61	11.06
Trade and Hotels	14	3.11	11.92	11.71	-1.82	4.64	1.73	-3.12	6.98	2.71	7.24	12.78
Banking & Insurance	15	0.35	0.37	0.48	0.49	0.70	0.68	1.11	1.30	1.77	2.05	2.74
Admin & Defence	16	8.00	9.16	9.39	7.97	13.44	18.25	22.76	25.60	29.10	32.18	38.49
Other Services	17	1.66	1.82	2.63	2.66	3.36	4.18	5.25	5.86	6.50	7.71	8.81
GROSS DOMESTIC INVESTMENT	18	56.64	76.77	85.13	74.50	96.49	118.16	139.66	176.11	201.47	216.11	260.22
Memo Items: (a)												
Primary Sector	1	8.90	12.64	17.16	18.89	20.78	24.91	31.03	37.38	49.72	52.70	56.15
Secondary Sector	5	25.43	29.65	33.49	35.60	40.67	53.30	63.35	77.13	85.85	88.37	107.33

(a) Primary Sector (CSO) is Agricultural Sector plus Mining & Quarrying; Secondary Sector (CSO) is Industry Sector minus Mining & Quarrying.

Source: CSO, National Accounts Statistics, various issues.

Table 5.11(b)
GROSS DOMESTIC INVESTMENT IN PUBLIC SECTOR, 1974/75-1984/85
(Rs billion at 1970/71 prices)

		1974/75	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85
Agricultural Sector	39	3.72	4.24	5.85	6.72	7.13	7.19	7.28	6.62	6.09	5.90	5.88
Agriculture	20	3.58	4.08	5.61	6.44	6.83	6.90	6.90	6.25	5.66	5.39	5.36
Forestry	21	0.14	0.16	0.24	0.28	0.30	0.29	0.38	0.37	0.43	0.51	0.52
Industry Sector	40	17.36	20.53	23.59	23.83	24.89	28.09	30.34	33.22	36.97	35.50	38.74
Mining & Quarrying	22	1.68	2.93	3.90	3.71	3.36	3.56	4.48	5.53	8.37	8.03	7.62
Manufacturing	24	8.89	8.22	10.35	9.32	10.16	12.38	12.53	12.97	13.14	12.69	15.43
Construction	25	0.62	0.36	0.28	0.55	0.66	0.49	0.95	1.03	0.64	0.02	0.47
Electricity, Gas and Water	26	6.17	9.02	9.06	10.25	10.71	11.66	12.38	13.69	14.82	14.76	15.22
Services	27	14.09	19.56	19.76	11.29	18.10	17.81	18.14	21.40	19.32	19.99	23.80
Transport and Communication	28	6.11	6.19	6.19	6.29	7.05	7.13	8.39	8.51	8.58	7.87	9.63
Railways	29	2.37	2.43	2.03	2.38	2.73	3.27	4.15	4.39	3.89	3.96	4.23
Communication	30	1.02	1.20	1.35	1.38	1.45	1.37	1.46	1.96	1.92	2.07	2.38
Other transport	31	2.72	2.56	2.81	2.53	2.87	2.49	2.78	2.16	2.77	1.84	3.02
Trade and Hotels	32	1.80	6.89	6.63	-0.97	2.49	0.79	-1.21	2.47	0.89	2.25	3.72
Banking & Insurance	33	0.23	0.21	0.29	0.29	0.38	0.31	0.45	0.46	0.56	0.59	0.73
Admin & Defence	34	4.94	5.23	5.19	4.25	6.51	7.78	8.51	8.07	7.52	7.45	7.84
Other Services	35	1.01	1.04	1.46	1.43	1.67	1.80	2.00	1.89	1.77	1.83	1.88
GROSS DOMESTIC INVESTMENT	36	35.17	44.33	49.20	41.84	50.12	53.09	55.76	61.24	62.38	61.39	68.42
Memoranda items: (a)												
Primary Sector	19	5.40	7.17	9.75	10.43	10.49	10.75	11.76	12.15	14.46	13.93	13.50
Secondary Sector	23	15.68	17.60	19.69	20.12	21.53	24.53	25.86	27.69	28.60	27.47	31.12

(a) Primary Sector (CSD) is Agricultural Sector plus Mining & Quarrying; Secondary Sector is Industry Sector minus Mining & Quarrying.

Source: CSO, National Accounts Statistics, various issues.

Table 5.12
PROFITABILITY OF CENTRAL GOVERNMENT NON-DEPARTMENTAL ENTERPRISES, 1975/76-1985/86

	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	
(in Rs million)												
Gross Profits [a]												
Manufacturing Enterprises	1	4321	5810	3611	5038	6314	8039	18727	26061	25972	33194	38041
Steel	2	644	1188	537	1213	717	940	1307	596	-691	866	3243
Minerals & Metals [b]	3	148	276	-636	-1189	-164	1401	1177	1102	-951	1632	1494
Power	4	-	-	-	-	-	-	-	259	743	1764	2756
Petroleum	5	1504	2089	2603	2940	3449	3823	12172	18305	22355	23334	27879
Chemicals	6	69	78	-149	372	138	58	1227	1725	1211	1903	998
Engineering Group	7	1893	2135	1260	1435	1778	1397	3023	3555	4723	5070	5548
Others	8	63	44	-4	267	396	420	-179	519	-1418	-1375	-3877
Service Enterprises	9	2364	4466	5536	5674	6678	6139	7817	8586	9682	13180	15151
Total Running Enterprises	10	6685	10276	9147	10712	12992	14178	26544	34647	35654	46374	53192
Capital Employed [c]												
Manufacturing Enterprises	11	56820	66310	72020	83070	100010	121010	147780	179590	199085	243089	302716
Steel	12	16365	20057	21330	19508	21166	23443	29031	32643	30049	37049	46168
Minerals & Metals [b]	13	10898	12381	14542	15207	17753	20525	33506	37219	41698	47428	51130
Power	14	-	-	-	-	-	-	-	4311	11920	19309	24215
Petroleum	15	5770	8010	8010	13480	18390	27180	31934	39783	50540	63590	96087
Chemicals	16	5363	7194	8112	12351	19334	23582	23711	25608	22707	26640	29969
Engineering Group	17	16247	16357	17930	17923	21074	22457	26101	31057	34937	39418	43545
Others	18	2177	2311	2096	4601	2293	3823	3497	8969	7234	9655	11602
Service Enterprises	19	33240	44260	48630	56620	61810	61060	71570	85670	99425	120812	128241
Total Running Enterprises	20	90060	110570	120650	139690	161820	182070	219350	265260	298510	363901	430957
(percentage)												
Return on Capital Employed [d]												
Manufacturing Enterprises	21	7.60	8.76	5.01	6.06	6.31	6.64	12.67	14.51	13.05	13.66	12.57
Steel	22	3.94	5.92	2.52	6.22	3.39	4.01	4.50	1.83	-2.30	2.34	7.02
Minerals & Metals [b]	23	1.36	2.23	-4.37	-7.82	-0.92	6.83	3.51	2.96	-2.28	3.44	2.92
Power	24	-	-	-	-	-	-	-	6.01	6.23	9.14	11.38
Petroleum	25	26.07	26.08	32.50	21.81	18.75	14.07	38.12	46.01	44.23	36.69	29.01
Chemicals	26	1.29	1.08	-1.84	3.01	0.71	0.25	5.17	6.74	5.33	7.14	3.33
Engineering Group	27	11.65	13.05	7.03	8.01	8.44	6.22	11.58	11.45	13.52	12.86	12.74
Others	28	2.89	1.90	-0.19	5.80	17.27	10.99	-5.12	5.79	-19.60	-14.24	-33.42
Service Enterprises	29	7.11	10.09	11.38	10.02	10.80	10.05	10.92	10.02	9.74	10.91	11.81
Total Running Enterprises	30	7.42	9.29	7.58	7.67	8.03	7.79	12.10	13.06	11.94	12.74	12.34

[a] Gross profits represents excess of income over expenditures after depreciation, but before tax and interest on loans.

[b] Including Coal.

[c] Capital employed is fixed assets less depreciation, plus working capital excluding items under construction or expansion. Capital employed is as of March 31 of each year.

[d] Obtained by dividing gross profits by capital employed.

Source: Bureau of Public Enterprises, Public Enterprises Survey.

Table 5.13(a)
OUTSTANDING DEBT OF CENTRAL GOVERNMENT [a]
(Rs billion at Current prices)

	1980	1981	1982	1983	1984	1985	1986
1. Net liabilities to RBI (a+b+c+d-e)	117.27	152.78	184.86	218.53	258.02	318.58	383.26
a. Treasury bills	92.03	118.44	99.55	159.05	146.47	189.85	242.49
b. CG Securities	26.29	38.58	51.26	63.34	77.91	98.19	n.a.
c. Special securities issued to RBI	-	5.85	41.10	42.10	45.70	46.50	51.87
d. Other liabilities	3.03	-2.92	-4.19	-7.52	-10.52	-9.84	n.a.
e. Cash balances and deposits.	4.08	7.17	2.86	38.44	1.54	6.12	1.48
2. Net liabilities to commercial banks	58.59	73.64	78.79	98.59	106.70	118.26	n.a.
a. Treasury bills	0.65	5.21	1.51	11.55	9.38	2.98	0.46
b. CG Securities	57.94	68.43	77.28	87.04	97.32	115.28	n.a.
3. Net bank credit to CG (1)+(2)	175.86	226.42	263.65	317.12	364.72	436.84	n.a.
4. Net liabilities to others (domestic)	222.57	250.91	292.07	356.33	431.58	525.08	n.a.
a. Securities held by Financial Instns [b]	34.95	38.57	42.03	48.12	54.90	61.91	n.a.
b. Small savings	68.55	79.76	93.75	110.98	135.07	171.57	219.57
c. State/Public Prov. Fund	24.02	26.45	29.24	34.20	37.47	41.58	45.74
d. Others	95.05	106.13	127.05	163.03	204.14	250.02	n.a.
5. Net external loans	99.64	112.99	123.28	136.83	151.20	166.37	183.42
6. Total outstanding debt	498.07	590.32	679.00	810.28	947.50	1128.29	1381.33

[a] As of March 31.

[b] LIC and non-government Provident Fund.

Notes: (1) Items 1,2 and 3 are based on information from RBI and Economic Survey.

(2) Items 5 and 6 are based on Indian Economic Statistics (Album).

(3) Item 4 and 4.d in particular, includes errors and omissions, including differences arising from the use of different data sources.

Sources: 1. RBI, Report on Currency and Finance, various issues.

2. Ministry of Finance, Indian Economic Statistic (Public Finance).

3. Economic Survey, various issues.

Table 5.13 (b)
OUTSTANDING DEBT OF STATE GOVERNMENTS (a)
(Rs billion at Current prices)

	1980	1981	1982	1983	1984	1985	1986
1. Net Liabilities to RBI (a-b)	6.78	11.65	19.54	9.70	10.00	23.78	3.52
a. Gross liabilities	9.00	12.11	19.66	9.84	10.93	24.62	7.86
b. Cash balances and deposits.	2.22	0.46	0.12	0.14	0.85	0.84	4.34
2. Net liabilities to commercial banks	17.50	19.11	23.14	25.75	31.62	41.66	n.a.
a. SG Securities	15.26	16.81	19.59	23.17	29.12	38.38	n.a.
b. Others	2.24	2.30	3.55	2.58	2.50	3.28	n.a.
3. Net bank credit to State Govt. (1)+(2)	24.28	30.76	42.68	35.45	41.70	65.44	n.a.
4. Net liabilities to Central Govt. (a-b-c)	146.72	164.01	187.52	230.32	267.15	304.57	n.a.
a. Loans from Center	157.39	170.71	190.71	235.5	269.81	308.31	353.47
b. States' holding of Treasury Bills	8.34	4.35	1.09	2.97	0.17	1.43	15.20
c. States' holding of CG Securities	2.33	2.35	2.1	2.21	2.49	2.31	n.a.
5. Net liabilities to others	43.36	45.31	46.72	58.22	67.82	63.01	n.a.
a. Securities held by Financial Instns (b)	11.05	12.28	13.53	14.82	15.72	15.78	n.a.
b. State Provident/Insurance Fund	21.08	24.63	29.25	36.55	44.53	53.85	63.74
c. Others	11.23	8.40	3.94	6.85	7.57	-6.62	n.a.
6. Total outstanding debt	214.36	240.08	276.92	323.99	376.67	433.02	492.49

[a] As of March 31.

[b] LIC and non-government Provident Fund.

Notes: (1) Items 1,2, and 3 are based on RBI's Currency and Finance and Economic Survey.

(2) Items 4a and 6 are based on Indian Economic Statistics, Public Finance (Album).

(3) Item 5, and 5c in particular, includes errors and omissions, including differences arising from the use of different data sources.

Sources: 1. RBI, Report on Currency and Finance, various issues.

2. Ministry of Finance, Indian Economic Statistics (Public Finance).

3. Economic Survey, various issues.

Table 5.13(c)
OUTSTANDING DEBT OF CENTRAL AND STATE GOVERNMENTS (a)
(Rs billion at current prices)

	1980	1981	1982	1983	1984	1985	1986
1. Net bank credit to Govt.	200.14	257.18	306.33	352.57	406.42	502.28	583.21
RBI credit to Govt	124.05	164.43	204.40	228.23	268.10	342.36	386.78
- Central Govt	117.27	152.78	184.86	218.53	258.02	318.58	383.26
- State Govt	6.78	11.65	19.54	9.70	10.08	23.78	3.52
Other bank credit	76.09	92.75	101.93	124.34	138.32	159.92	196.43
2. Non-bank domestic sources	255.26	289.52	335.60	409.37	496.74	584.35	n.a.
a. Securities held by Financial Instns [b]	46.00	50.85	55.55	62.94	70.62	77.69	n.a.
b. Small savings	68.55	79.76	93.75	110.98	135.07	171.57	219.57
c. State/Public Prov. Fund	45.10	50.95	58.36	70.62	82.00	95.43	109.48
d. Others	95.61	107.96	127.94	164.83	209.05	239.66	n.a.
3. Net external loans	99.64	112.99	123.28	136.83	151.20	166.37	183.42
4. Total outstanding debt	555.04	659.69	765.21	898.77	1054.36	1253.00	1520.35
Memo Item:							
Loans from Centre to States	157.39	170.71	190.71	235.50	269.81	308.31	353.47

[a] As of March 31.

[b] LIC and non-government Provident Fund.

[c] Excludes loans given by Centre to States.

Notes: (1) Item 1 is based on information from RBI's Currency and Finance and Economic Survey.

(2) Items 3 and 4 are based on Indian Economic Statistics, Public Finance (Album).

(3) Item 2 includes errors and omissions including differences arising from the use of different data sources.

Sources: 1. RBI, Report on Currency and Finance, various issues.

2. Ministry of Finance, Indian Economic Statistics (Public Finance).

3. Economic Survey, various issues.

Table 6.1
MONEY SUPPLY AND SOURCES OF CHANGE, 1976/77-1986/87
(Rs billion)

		1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87
BROAD MONEY SUPPLY (M3)	1	277.81	329.06	401.12	472.26	557.74	627.52	728.68	860.89	1023.57	1186.70	1390.81
• Narrow Money Supply (M1)	18	160.24	143.88	172.92	200.00	234.24	249.37	285.35	333.98	399.15	440.86	507.63
• Currency with public	2	78.73	86.31	102.31	116.54	134.26	144.74	166.59	196.03	226.72	250.50	283.57
• Deposit Money	3	81.51	57.57	70.61	83.46	99.98	104.63	118.76	137.95	172.43	190.36	223.86
• Time Deposits with Banks	4	117.57	185.18	228.20	272.26	323.50	378.15	443.33	526.91	624.42	745.84	883.39
SOURCES OF CHANGE												
Net Bank Credit to Gov't	5	118.04	137.27	159.30	200.14	257.18	306.33	352.57	406.42	502.28	583.21	701.60
• RBI	6	77.62	76.44	94.16	124.05	164.43	204.40	228.23	268.10	342.36	386.78	482.70
• Other Banks	7	40.42	60.83	65.14	76.09	92.75	101.93	124.34	138.32	159.92	196.43	218.90
Bank Credit to Comm. Sector	8	188.50	212.22	255.32	310.11	366.41	434.62	511.62	607.26	709.53	828.03	939.81
• RBI	9	8.98	9.54	12.50	15.46	17.00	20.44	19.25	23.80	27.52	30.52	34.19
• Other Banks	10	179.52	202.68	242.82	294.65	349.42	414.18	492.37	583.46	682.01	797.51	905.62
Net Foreign Exchange Assets of Banking Sector	11	25.28	44.45	53.38	53.44	47.30	26.61	18.28	16.47	29.68	38.09	55.00
Government's Currency Liabilities to the Public	12	5.68	5.93	6.04	5.92	6.19	6.57	6.82	7.19	7.77	9.31	10.77
Non-monetary Liabilities of Banking Sector	13	59.69	70.81	72.92	97.34	119.34	146.61	160.61	176.45	225.69	271.94	316.37
• Net Non-Monetary Liabilities of RBI	14	34.33	37.08	37.35	45.58	53.60	65.22	60.74	53.11	86.22	107.07	133.73
• Other	15	25.36	33.73	35.57	51.76	65.74	81.39	99.87	123.34	139.47	164.87	182.64
Broad Money Supply	16	277.81	329.06	401.12	472.27	557.74	627.52	728.68	860.89	1023.57	1186.70	1390.81
GDP at market prices	17	801.98	898.48	977.48	1075.42	1274.53	1476.84	1651.36	1940.61	2143.85	2435.51	2763.58

Notes: (1) Upto 1985/86, as of March 31 on the basis of the closure of government accounts.

(2) Data for 1986/87 has been estimated on the basis of information available as of end February 1987.

Sources: (1) Economic Survey, various issues.

(2) RBI, Weekly Bulletins, various issues.

Table 6.2
BASE MONEY AND SOURCES OF CHANGE, 1976/77-1986/87
(Rs billion)

		1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87
Total Base Money Supply	1	97.98	109.41	140.82	165.73	194.52	209.98	231.10	289.93	352.16	381.56	464.78
Currency with Public	2	78.73	86.31	102.31	116.54	134.26	144.74	166.59	196.03	226.71	250.50	283.57
Other Deposits with RBI	3	1.21	0.70	1.66	3.91	4.11	1.68	1.86	2.91	5.95	2.89	3.51
Cash with Banks	4	4.15	5.21	6.04	7.28	8.81	9.37	9.80	10.40	11.67	13.98	15.16
Bank Deposits with RBI	5	13.89	17.19	30.81	38.00	47.34	54.19	52.85	80.60	107.82	114.19	162.54
SOURCES OF CHANGE												
RBI Claims	6	100.64	95.24	117.83	151.51	194.19	241.57	268.53	319.61	401.62	441.92	533.31
On Government (net)	7	77.62	76.44	94.16	124.05	164.43	204.40	228.23	268.10	342.36	386.78	482.70
On Banks	8	14.04	9.26	11.17	12.00	12.76	16.73	21.05	27.71	31.74	24.62	16.42
On Commercial Sector	9	8.98	9.54	12.50	15.46	17.00	20.44	19.25	23.80	27.52	30.52	34.19
Net Foreign Exchange Assets of RBI	10	25.99	45.32	54.31	53.88	47.75	27.06	17.29	16.25	28.99	37.40	54.43
Government's Currency Liabilities to the Public	11	5.68	5.93	6.04	5.92	6.19	6.57	6.82	7.19	7.77	9.31	10.77
Net Non-Monetary Liabilities of RBI	12	34.33	37.08	37.35	45.58	53.60	65.22	60.74	53.11	86.22	107.07	133.73
Total Base Money Supply	13	97.98	109.41	140.83	165.73	194.53	209.98	231.90	289.94	352.16	381.56	464.78
GDP at market prices	14	801.98	898.48	977.48	1075.42	1274.53	1476.84	1651.36	1940.61	2143.85	2435.51	2763.58

Notes: (1) Upto 1985/86, as of March 31 on the basis of the closure of government accounts.

(2) Data for 1986/87 has been estimated on the basis of information available as of end February 1987.

Sources: (1) Economic Survey, various issues.

(2) RBI Weekly Bulletins, various issues.

Table 6.3
SELECTED MONETARY POLICY INSTRUMENTS (a)

Year & Month	Bank Rate	Minimum Cash Deposit (a) Ratio	Statutory Liquidity (b) Ratio	Net Liquidity (c) Ratio
1973 June	7	5	30	39
September 8	7	6	30	40
September 22	7	7	30	40
December	7	7	32	40
1974 April	7	7	32	40
June 29	7	5	33	40
July 23	9	5	33	40
December 14	9	4.5	33	40
December 28	9	4	33	39
1975 November 1	9	4	33	(d)
1976 September 4	9	5	33	-
November 13	9	6	33	-
1978 December 1	9	6	34	-
1981 July 11	10	6.5	34	-
August 21	10	7	34.5	-
October 30	10	7	35	-
November 27	10	7.25	35	-
December 25	10	7.5	35	-
1982 January 29	10	7.75	35	-
April 30	10	7.25	35	-
June 11	10	7	35	-
1983 May 28	10	7.5	35	-
July 30	10	8.0	35	-
August 27	10	8.5	35	-
1984 February 4	10	9.0	35	-
July 28	10	9.0	35.5	-
September 1	10	9.0	36	-
1985 June 8	10	9.0	36.5	-
July 6	10	9.0	37	-
1987 February 28	10	9.5	37	-

Note: Dates given are those on which the announced measures take effect.

- (a) Minimum cash resources to be deposited with the RBI as % of aggregate demand and time liabilities
- (b) The ratio of liquid assets (exclusive of those under (a)) to aggregate demand and time liabilities.
- (c) Liquid assets as defined under (b) minus borrowing from RBI, SBI and IDBI. as percentage of aggregate demand and time liabilities.
- (d) Starting from November 1, the net liquidity ratio was abolished as a guideline to refinance.

Sources: 1. Reserve Bank of India, Report of the Committee to Review the Working of the Monetary System, 1985.
2. Reserve Bank of India, Annual Report, 1984/85.

DATE:04/16/86

Table 6.4
INTEREST RATES - SHORT TERM COMMERCIAL BANKING RATES
(in percent)

	1970/71	1975/76	1980/81	1982/83	1983/84	1984/85	1985/86
Bank Rate	5.0/6.0	9.0	9.0	10.0	10.0	10.0	10.0
Treasury Bill Rate	3.0/3.5	4.6	4.6	4.6	4.6	4.6	4.6
Call Money Rate							
State Bank of India							
- Scheduled Banks	8.5/12.0	15.5	15.0/19.4	18.5	18.0	18.0	17.5
- Cooperative Banks	7.5/8.5	14.5	(a)	(a)	(a)	(a)	(a)
Other Major Scheduled Commercial Banks							
- Bombay	6.38	10.55	7.12	8.78	8.63	9.95	10.00
- Calcutta	6.91	11.12	8.28	8.90	8.53	10.00	10.00
- Madras	6.45	9.73	9.42	6.35	7.20	9.98	10.00
Commercial Bank Rates							
Deposit Rates- Ceiling							
- 1 year to 3 years	6.0/6.5	8.0	7.5/8.5	8.0/9.0	8.0/9.0	8.0/9.0	8.5/9.0
- 3 years to 5 years	7.0	9.0	10.0	10.0	10.0	10.0	10.0
- above 5 years	7.25	10.0	10.0	11.0	11.0	11.0	11.0
Key Lending Rates							
Ceiling							
- General	(b)	16.5	19.40	19.50	18.00	18.00	17.50
- Exports	-	11.5	12.5/17.5	12.5/17.5	12.0/16.5	12.0/16.5	12.0/16.5
- Food Procurements	-	12.0	12.50	12.50	12.50	14.00	14.00
- On deferred Payments	-	8.0	8.65	8.65	8.65	8.65	8.65
Minimum							
- General	-	12.5	13.5	(c)	(c)	(c)	(c)
- Selective Controls	-	14.0/15.0	17.5/19.5	17.5/19.5	16.5/18.0	16.5/18.0	16.5/17.5

(a) Effective July 1980, the rates charged on demand loans are same as those applicable to general categories of borrowers for similar advances.

(b) The ceiling on lending rates was withdrawn in January 1970 but was reintroduced from March 1976.

(c) In the revised interest rate structure which became effective from March 2, 1981, no general lending rate was fixed but a broad framework of interest rates was provided with fixed rates on certain types of advances and ceiling rates on other types of advances. Wherever ceiling rates were prescribed, the rate of interest fixed for the preceding advance would serve as floor rate in that category.

Source: Reserve Bank of India - Report on Currency and Finance, various issues.

Table 6.5
INTEREST RATES - LONG TERM RATES
(in percent)

	1970/71	1975/76	1980/81	1982/83	1983/84	1984/85	1985/86
Term Lending Institutions							
Prime Lending Rates							
IDBI	8.5	11.0	14.0	14.0	14.0	14.0	14.0
IFCI	9.0	12.0	14.0	14.0	14.0	14.0	14.0
ICICI	8.5	11.0	14.0	14.0	14.0	14.0	14.0
IRCI	-	8.5	9.2	12.5	12.5	12.5	12.5
SFC	7.5/10.5	8.0/14.5	12.0/16.0	12.5/17.0	14.0/18.0	14.0/20.0	11.5/16.5
(rates charged to small scale Industries)	7.0/8.5	8.0/11.0	12.0/14.5	12.5/14.5	11.5/16.5	12.5/18.5	11.5/16.5
UTI Dividend Rate	8.0	8.8	11.5	13.5	14.0	14.25	15.25
Corporate Borrowing Rates							
Preference - Ceiling	9.5	11.0	11.0	13.5	13.5	15.0	15.0
Debentures - Ceiling	8.0	10.5	13.5	13.5/15.0	13.5/15.0	13.5/15.0	13.5/15.0
		(a)	(b)	(b)	(b)	(b)	(b)
1 year	-	9.0/13.5	9.0/13.5	9.0/15.0	10.0/15.0	9.0/15.0	10.0/15.0
2 years	-	10.0/14.5	10.0/14.5	9.5/15.0	11.0/15.0	11.0/15.0	12.0/15.0
3 years	-	9.5/16.5	13.0/15.5	10.5/15.5	14.0/15.0	14.0/15.0	13.0/15.0
5 years	-	9.0/16.0	15.0/16.0	14.0/15.0	-	-	-
Industrial Securities							
Ordinary Shares	5.53	5.43	5.88	5.86	5.18	4.79	3.43
Debentures - Running Yield	7.31	8.39	n.a	n.a	n.a	n.a	n.a
Government Securities							
Short - term(1 - 5 years)	3.8/4.3	5.2/6.0	4.7/6.0	5.0/8.5	4.5/7.1	4.2/8.3	5.4/9.8
Medium- term(5 -15 years)	4.3/4.8	5.5/6.0	5.8/6.8	6.3/7.8	6.7/9.0	6.5/9.0	6.5/9.5
Long - term(15 years and over)	4.8/5.5	6.1/6.4	6.4/7.5	6.5/9.0	6.5/10.0	7.9/10.5	8.4/11.5

(a) Effective September 12, 1974 and for a term exceeding 7 years. 10 percent for a term less than 7 years.

(b) Interest on 'Rights' debentures issued by public limited companies to augment their long-term working capital requirements had been fixed at the rate of 10.5 percent up to 7 years maturity and 11 percent on the maturity period from 8 to 12 years as per guidelines issued by government in September 1978. The ceiling on interest on public issues of debentures was raised from 11 to 12 percent from October 1980 and further to 13.5 percent from March 2, 1981. From April 17, 1982, while the existing ceiling on interest rate of 13.5 percent was maintained for issues of convertible debentures, the ceiling rate was raised to 15 percent in the case of non-convertible debentures.

(c) The acceptance of deposits for periods more than 3 years has been prohibited effective from April 1, 1978, but companies are permitted to retain such deposits accepted prior to April 1, 1978 till maturity.

Source: Reserve Bank of India - Report on Currency and Finance, various issues.

Table 6.6
SECTORAL DEPLOYMENT OF GROSS BANK CREDIT
 (in Rs billion - change during year)

	80/81	81/82	82/83	83/84	84/85	85/86
Gross Bank Credit	35.69	43.58	53.29	59.30	75.35	72.57
Public Food Procurement Credit	-3.41	3.68	8.37	10.58	16.43	-1.30
Gross Non-Food Credit	39.10	39.90	44.92	48.72	58.92	73.87
Priority Sectors	17.74	21.72	16.46	25.77	35.10	31.57
Agriculture	8.17	10.31	6.60	8.69	15.16	13.98
Small Scale Industries	5.94	6.72	5.85	9.61	11.65	12.04
Other Priority Sectors	3.63	4.69	4.01	7.47	8.29	5.55
Industry (Medium & Large)	16.91	11.95	21.21	13.45	13.18	32.31
Wholesale Trade (other than food procurement)	0.79	2.04	1.55	-0.10	3.06	4.17
Cotton Corporation of India	0.32	-0.06	0.35	-0.97	-0.58	0.25
Food Corporation of India	0.32	1.69	0.01	-1.71	-0.75	-0.25
Jute Corporation of India	0.23	0.36	-0.41	-0.25	0.67	0.11
Other Trade	-0.08	0.05	1.60	2.83	3.72	4.06
Other Sectors	3.66	4.19	5.70	9.60	7.58	5.82
Export Credit	-	1.56	-0.70	3.15	2.94	0.74
Priority Sector advances as percent of net bank credit in the last month of the period. (a)	35.0	37.7	36.8	38.0	39.8	40.8

Sources: Economic Survey, various issues.

(a) Including Participation Certificates.

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Table 6.7
INDICATORS OF INDUSTRIAL INVESTMENT CLIMATE

	1982	1983	1984	1985	1986
Letters of Intent granted	1043	1055	1064	1457	1130
Foreign collaborations approved	590	673	752	1024	958
Schemes registered with DGTD of which: Schemes in backward areas	1538	2024	1915	1961	1162
Cases approved by the Capital Goods Imports Main Committee (Rs. billion)	5.02	6.07	7.13	7.47	n.a.
Consents given by the controller of capital issues: (a)					
Number	472	459	640	910	1171
Amount (Rs billion)	8.93	10.23	18.00	25.79	61.68
Assistance from Financial Institutions (a)					
(Rs. billion)					
(a) Sanctioned	31.84	40.44	56.48	66.14	36.94
(b) Disbursed	23.58	28.93	35.02	49.20	23.88

[a] Relate to the period April-March. Figures for 1982 are for 1982/83 and so on.

Source: Economic Survey, various issues.

Table 7.1
PROGRESS OF SELECTED PHYSICAL AGRICULTURAL DEVELOPMENT PROGRAMMES, 1977/78-1986/87

		1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87
High Yielding Varieties											
Total HYP (mls hectares)	6	38.93	40.13	38.38	43.07	46.49	47.48	53.74	54.14	55.20	60.61
Paddy "	1	16.12	16.88	15.99	18.23	19.69	18.84	21.74	22.78	23.80	25.80
Wheat "	2	15.80	15.89	15.03	16.10	16.75	17.84	19.39	19.09	19.72	20.67
Maize "	3	1.24	1.35	1.35	1.60	1.60	1.72	1.91	2.03	2.22	2.35
Jowar "	4	3.14	3.07	3.05	3.50	3.88	4.37	5.28	5.07	4.88	5.85
Bajra "	5	2.63	2.94	2.96	3.64	4.57	4.71	5.42	5.17	4.58	5.94
Irrigated Area "											
Major and Medium	14	21.20	22.00	22.60	22.70	23.20	24.00	26.60	25.30	25.80	26.40
Minor [a]	8	27.30	28.60	30.00	31.40	32.80	34.20	34.00	35.20	36.40	37.70
Soil conservation (mls. hect.											
(cumulative at end of yr)	9	21.70	22.57	23.40	24.37	25.39	26.52	27.98	29.38	30.48	31.32
Consumption of Chemical											
Fertilisers:											
Nitrogenous (mls. tonnes)	10	2.91	3.42	3.50	3.68	4.07	4.22	5.21	5.49	5.82	6.80
Phosphatic "	11	0.87	1.11	1.15	1.21	1.32	1.44	1.73	1.88	2.07	2.40
Potassic "	12	0.51	0.59	0.61	0.62	0.67	0.73	0.77	0.84	0.85	1.10
Total NPK "	13	4.29	5.12	5.26	5.52	6.06	6.39	7.71	8.21	8.74	10.30

[a] The figures for minor irrigation indicate the net benefit after allowing for seepage.

Source: Economic Survey, various issues.

Table 7.2
PRODUCTION OF MAJOR CROPS, 1977/78-1985/86

		1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Total Foodgrains	3	126.41	131.90	109.70	129.59	133.30	129.52	152.37	145.54	150.47
Kharif	1	77.72	78.08	63.25	77.65	79.38	69.90	89.23	84.52	85.99
Rabi	2	48.69	53.82	46.45	51.94	53.92	59.62	63.14	61.02	64.48
Total Cereals	6	114.40	119.72	101.13	118.96	121.79	117.66	139.48	133.58	137.50
Kharif	4	73.48	74.13	59.90	73.89	75.05	65.77	83.86	79.75	81.54
Rabi	5	40.96	45.59	41.23	45.08	46.74	51.89	55.62	53.83	55.96
Rice	9	52.67	53.77	42.33	53.63	53.25	47.12	60.10	58.34	64.15
Kharif	7	48.95	49.34	38.49	50.09	49.24	43.17	55.05	53.78	59.77
Rabi	8	3.72	4.44	3.84	3.54	4.01	3.95	5.05	4.56	4.38
Wheat	10	31.75	35.51	31.83	36.31	37.45	42.79	45.48	44.07	46.89
Barley (Jowar)	13	12.06	11.44	11.65	10.43	12.06	10.75	11.92	11.40	10.12
Kharif	11	8.89	7.93	7.72	7.50	8.77	7.47	8.66	7.75	7.38
Rabi	12	3.17	3.51	3.93	2.93	3.29	3.28	3.26	3.65	2.74
Maize	14	5.97	6.20	5.60	6.96	6.90	6.55	7.92	8.44	6.89
Bajra	15	4.73	5.57	3.95	5.34	5.54	5.13	7.72	6.05	3.68
Total Pulses	18	11.97	12.18	8.57	10.63	11.51	11.86	12.89	11.96	12.97
Kharif	16	4.24	3.95	3.35	3.76	4.33	4.13	5.37	4.77	4.45
Rabi	17	7.73	8.23	5.22	6.87	7.18	7.73	7.52	7.19	8.52
Gram	19	5.41	5.74	3.36	4.33	4.64	5.29	4.75	4.56	5.68
Tur	20	1.93	1.89	1.76	1.96	2.24	1.99	2.58	2.58	2.43
Total Oilseeds a/	23	9.66	10.10	8.74	9.37	12.08	10.00	12.69	12.95	11.15
Kharif	21	6.38	6.47	5.71	5.00	7.04	5.39	7.21	7.05	6.24
Rabi	22	3.28	3.63	3.03	4.37	5.04	4.61	5.48	5.90	4.91
Groundnut	26	6.09	6.21	5.77	5.01	7.22	5.28	7.09	6.43	5.55
Kharif	24	5.21	5.21	4.73	3.71	5.52	3.74	5.28	4.69	4.09
Rabi	25	0.88	1.00	1.04	1.29	1.70	1.54	1.81	1.74	1.46
Rapeseed & Mustard	27	1.65	1.86	1.43	2.30	2.38	2.21	2.61	3.07	2.64
Sugarcane	28	176.97	151.66	128.83	154.25	186.36	189.51	174.08	170.32	171.68
Cotton	29	7.24	7.96	7.65	7.01	7.88	7.53	6.39	8.51	8.61
Jute & Mesta	30	7.15	8.33	7.96	8.16	8.37	7.17	7.72	7.79	12.73
Jute	31	5.36	6.47	6.07	6.51	6.79	5.95	6.32	6.53	10.95
Mesta	32	1.79	1.86	1.89	1.65	1.58	1.22	1.40	1.26	1.78
Potato	33	8.14	10.13	8.33	9.67	9.91	9.96	12.15	12.57	10.70

Note: Units of measurement of all commodities is million tonnes, except in case of cotton and mesta whose production is in terms of million bales.

a/ Includes groundnuts, rapeseeds and mustard, sesame, linseed, castorseed, nigerseed, safflower, sunflower and soyabean.

Source: Economic Survey, various issues.

Table 7.3
GROSS AREA UNDER MAJOR CROPS, 1977/78-1985/86
(million hectares)

		1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Total Foodgrains	3	127.52	129.01	125.20	126.67	129.14	125.09	131.16	126.67	127.06
Kharif	1	82.88	82.85	80.79	83.21	83.93	79.08	84.14	81.18	81.55
Rabi	2	44.64	46.16	44.41	43.46	45.21	46.01	47.02	45.49	45.51
Total Cereals	6	104.02	105.35	102.95	104.21	105.30	102.26	107.62	103.93	103.24
Kharif	4	72.77	72.69	70.63	72.79	73.49	68.82	73.02	70.65	70.77
Rabi	5	31.25	32.66	32.32	31.42	31.81	33.44	34.60	33.28	32.47
Rice	9	40.29	40.48	39.42	40.15	40.71	38.26	41.24	41.16	40.91
Kharif	7	38.42	38.42	37.60	38.44	38.89	36.41	38.95	39.17	39.04
Rabi	8	1.87	2.06	1.82	1.71	1.82	1.85	2.29	1.99	1.87
Wheat	10	21.46	22.64	22.17	22.28	22.14	23.57	24.67	23.56	23.07
Barley (Jowar)	13	16.31	16.14	16.68	15.81	16.60	16.37	16.43	15.94	15.79
Kharif	11	10.39	10.01	10.12	10.18	10.48	9.83	10.18	9.46	9.64
Rabi	12	5.92	6.13	6.56	5.63	6.12	6.54	6.25	6.48	6.15
Maize	14	5.68	5.76	5.72	6.01	5.94	5.72	5.86	5.80	5.88
Bajra	15	11.10	11.39	10.58	11.66	11.78	10.94	11.83	10.62	10.69
Total Pulses	18	23.49	23.66	22.26	22.46	23.84	22.83	23.54	22.74	23.82
Kharif	16	10.10	10.17	10.16	10.42	10.44	10.26	11.12	10.53	10.78
Rabi	17	13.39	13.49	12.10	12.04	13.40	12.57	12.42	12.21	13.04
Gram	19	7.97	7.71	6.99	5.58	7.87	7.40	7.16	6.91	7.66
Tur	20	2.63	2.64	2.73	2.84	3.00	2.93	3.22	3.16	3.21
Total Oilseeds a/	23	17.17	17.71	16.95	17.60	19.05	17.75	18.69	18.92	18.87
Kharif	21	10.21	10.63	10.35	10.17	10.93	10.54	11.00	11.14	11.47
Rabi	22	6.96	7.08	6.60	7.43	8.12	7.21	7.69	7.78	7.40
Groundnut	26	7.02	7.44	7.16	6.80	7.44	7.22	7.54	7.17	7.31
Kharif	24	6.43	6.74	6.40	5.91	6.38	6.20	6.32	6.02	6.24
Rabi	25	0.59	0.70	0.76	0.89	1.06	1.02	1.22	1.15	1.07
Rapeseed & Mustard	27	0.36	3.54	3.47	4.11	4.40	3.83	3.87	3.99	3.80
Sugarcane	28	3.15	3.09	2.61	2.67	3.19	3.36	3.11	2.95	2.86
Cotton	29	7.87	8.12	8.13	7.82	8.06	7.87	7.72	7.38	7.58
Jute & Mesta	30	1.16	1.26	1.22	1.30	1.15	1.02	1.05	1.13	1.50
Jute	31	0.80	0.88	0.83	0.94	0.83	0.73	0.76	0.83	1.15
Mesta	32	0.37	0.38	0.38	0.36	0.32	0.29	0.29	0.30	0.35
Potato	33	0.67	0.81	0.69	0.73	0.76	0.73	0.79	0.85	0.85

a/ Includes groundnuts, rapeseeds and mustard, sesame, linseed, castorseed, nigerseed, safflower, sunflower and soyabean.

Source: Economic Survey, various issues.

Table 7.4
IRRIGATED AREA UNDER DIFFERENT CROPS, 1973/74-1983/84
(million hectares)

		1973/74	1974/75	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84
Total Foodgrains	9	31.17	32.30	34.09	34.22	35.20	37.21	37.79	37.61	38.32	38.45	40.21
Total Cereals	7	29.30	30.48	32.14	32.45	33.50	35.32	35.84	35.59	36.24	36.62	38.49
Rice	1	14.67	14.67	15.22	14.77	16.20	16.86	16.91	16.34	17.11	16.05	17.43
Jowar	2	0.68	0.75	0.79	0.80	0.66	0.77	0.63	0.63	0.63	0.62	0.65
Bajra	3	0.59	0.64	0.59	0.53	0.47	0.50	0.63	0.64	0.70	0.65	0.56
Maize	4	0.88	1.22	0.96	1.06	0.91	0.95	1.36	1.20	1.15	1.22	0.98
Wheat	5	10.76	11.08	12.56	13.59	13.72	14.87	15.03	15.52	15.47	17.05	17.89
Barley	6	1.36	1.65	1.53	1.25	1.08	0.95	0.90	0.91	0.83	0.71	0.66
Total Pulses	8	1.87	1.82	1.95	1.77	1.70	1.89	1.95	2.02	2.08	1.83	1.72
Other Crops												
Oilseeds [a]	10	1.36	1.48	1.20	1.10	1.59	1.70	1.93	2.28	2.52	2.64	3.06
Cotton	11	1.73	1.78	1.76	1.76	2.11	2.22	2.22	2.13	2.20	2.28	2.27
Sugarcane	12	2.19	2.31	2.23	2.39	2.62	2.60	2.14	2.29	2.77	2.81	2.59

[a] Oilseeds include groundnuts, rapeseed & mustard, linseed, sesame, and others

Source: Economic Survey, various issues.

Table 7.5
YIELD PER HECTARE OF MAJOR CROPS, 1977/78-1985/86
(kgs per hectare)

		1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Total Foodgrains	3	991	1022	876	1023	1032	1035	1102	1149	1184
Kharif	1	938	942	783	933	946	884	1060	1041	1054
Rabi	2	1091	1166	1046	1195	1193	1296	1343	1341	1417
Total Cereals	6	1100	1136	982	1142	1157	1151	1296	1285	1285
Kharif	4	1010	1020	848	1015	1021	956	1148	1129	1129
Rabi	5	1311	1396	1276	1434	1469	1552	1608	1617	1617
Rice	9	1308	1328	1074	1336	1308	1231	1457	1417	1568
Kharif	7	1274	1284	1024	1303	1266	1185	1413	1374	1531
Rabi	8	1995	2151	2116	2071	2204	2135	2205	2274	2338
Wheat	10	1480	1568	1436	1630	1691	1816	1844	1870	2032
Barley (Jowar)	13	739	708	699	660	727	657	726	715	641
Kharif	11	855	792	763	737	837	760	851	820	765
Rabi	12	536	572	599	520	538	501	522	563	446
Maize	14	1051	1076	979	1159	1162	1145	1352	1456	1172
Bajra	15	426	489	373	458	470	469	652	519	345
Total Pulses	18	510	515	385	473	483	519	548	526	544
Kharif	16	420	389	329	361	415	402	483	453	413
Rabi	17	577	610	432	571	536	615	605	589	653
Gram	19	678	745	481	657	590	715	663	661	743
Tur	20	735	716	643	689	745	680	801	819	757
Total Oilseeds a/	23	563	570	516	532	634	563	679	684	591
Kharif	21	625	609	552	492	644	511	655	633	544
Rabi	22	471	513	459	588	621	639	713	758	663
Groundnut	26	866	835	805	735	972	732	940	898	759
Kharif	24	809	773	738	629	866	604	835	779	655
Rabi	25	1485	1437	1363	1444	1613	1516	1484	1518	1366
Rapeseed & Mustard	27	460	525	411	560	541	577	674	771	694
Sugarcane	28	56160	49114	49354	57844	58359	56441	55974	57673	59986
Cotton	29	157	167	160	152	166	163	141	196	193
Jute & Mesta	30	1108	1186	1177	1129	1310	1265	1323	1242	1532
Jute	31	1210	1317	1310	1245	1480	1458	1417	1411	1717
Mesta	32	883	882	888	828	881	771	869	764	919
Potato	33	12228	12555	12152	13256	12996	13549	15206	14806	12610

a/ Includes groundnuts, rapeseeds and mustard, sesame, linseed, castorseed, nigerseed, safflower, sunflower and soyabean.

Source: Economic Survey, various issues.

Table 7.6
NET AVAILABILITY OF CEREALS AND PULSES, 1975/76-1985/86

		1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Population (mls.) [a]	1	617.2	631.3	645.7	660.3	675.2	690.1	705.2	720.3	735.6	750.9	766.1
Cereals (mls. tonnes)												
Net Production [b]	2	94.50	87.33	100.13	104.75	88.49	104.09	106.56	102.95	122.05	116.88	120.32
Net Imports	3	0.66	0.08	-0.82	-0.33	-0.48	0.52	1.58	4.07	2.37	-0.34	-0.03
Change in Govt. Stocks	4	10.74	-1.63	-0.65	0.36	-5.78	-0.24	1.33	2.66	7.06	2.58	-2.03
Net Availability	5	84.42	89.04	99.96	104.06	93.79	104.85	106.81	104.36	117.36	113.96	122.32
Pulses (mls. tonnes)												
Net Availability	6	11.42	9.96	10.69	10.79	7.63	9.44	10.07	10.38	11.28	10.47	11.34
Per Capita Net Avail. (per day in grams)												
Cereals	7	373.80	386.30	422.50	431.80	379.50	416.20	414.80	396.90	436.10	415.90	437.50
Pulses	8	50.50	43.30	45.50	44.70	30.90	37.50	39.20	39.50	41.80	38.10	40.60

[a] Population figures from 1981 onwards are based on the Expert Committee's population projections as approved by the Planning Commission.

[b] Production figures relate to agricultural year July-June.

Source: Economic Survey, various issues.

Table 7.7
NET AVAILABILITY, PROCUREMENT AND PUBLIC DISTRIBUTION OF FOODGRAINS [a], 1975/76-1985/86
(million tonnes)

		1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Net Production	1	105.91	97.27	110.61	115.41	95.99	113.39	116.63	113.33	133.33	127.35	131.66
Net Imports	2	0.67	0.10	-0.60	-0.20	-0.34	0.66	1.58	4.07	2.37	-0.34	-0.03
Change in Government Stocks	6	10.75	-1.62	-0.24	0.35	-5.78	-0.24	1.33	2.66	7.07	2.59	-2.03
Net Availability	3	95.83	98.99	110.25	114.86	101.43	114.29	116.88	114.74	128.63	124.42	133.66
Procurement	4	12.85	9.97	11.10	13.85	11.18	12.98	15.42	15.57	18.72	20.09	17.82
Public distribution	5	9.17	11.73	10.18	11.66	14.99	13.01	14.76	16.21	13.33	15.80	15.84

[a] Production figures relate to agricultural year. Figures for procurement and public distribution relate to calendar years.

Source: Economic Survey, various issues.

Table 0.1(a)
INDEX OF INDUSTRIAL PRODUCTION
(1970=100)

Industry Group	Old					Revised			
	Weight	1980/81	1981/82	1982/83	1983/84	Weight	1983/84	1984/85	1985/86
Mining & Quarrying	9.69	151.9	175.8	195.8	217.3	9.69	217.3	234.8	245.7
Manufacturing	81.08	148.8	159.9	163.9	171.2	81.08	173.2	183.0	194.2
Food Industries	7.74	134.1	150.5	171.7	162.7	7.82	165.5	159.8	165.3
Beverage Industries	0.69	329.2	482.0	555.9	532.5	0.70	532.5	559.5	606.4
Tobacco Industries	2.21	127.2	144.2	150.0	139.5	2.23	139.5	137.7	122.0
Textiles	17.43	155.7	113.0	104.8	111.7	17.61	107.0	116.6	118.9
Footwear & Other Wearing Apparels etc	0.34	72.4	84.9	77.7	91.1	0.34	91.1	93.1	96.7
Wood & Cork except Furniture	0.49	100.2	87.3	136.8	207.7	-	-	-	-
Paper Products	2.24	135.7	149.6	151.8	150.4	2.26	149.6	171.7	192.9
Leather & Fur Products except Footwear	0.32	97.9	93.7	80.8	77.9	-	-	-	-
Rubber Products	2.22	152.0	157.5	164.0	178.0	2.24	186.9	194.7	200.4
Chemical & Chemical Products	10.90	188.2	212.8	217.9	231.5	11.01	234.2	250.8	264.4
Petroleum & Coal Products Non-Metallic Mineral Products	1.62	140.5	164.2	181.0	191.5	1.64	191.5	193.4	232.2
Basic Metal Industries	3.33	161.4	169.9	179.6	189.8	3.36	168.9	196.3	253.7
Metal Products excluding Machinery & Transport Equipment	8.84	137.5	148.1	161.4	160.8	8.93	163.8	173.1	184.7
Mfg. of Machinery except Electrical Machinery	2.77	147.7	149.5	161.4	169.0	2.80	161.9	161.6	167.9
Electrical Machinery, Apparatus & Appliances	5.55	221.8	239.0	238.7	258.9	5.61	275.7	287.1	288.5
Transport Equipment	5.32	176.0	182.1	174.0	184.7	5.35	183.2	190.7	202.6
Miscellaneous Industries	7.39	130.6	145.2	142.5	162.6	7.46	182.9	195.4	215.0
Electricity Generated	1.68	108.9	92.3	89.5	78.5	1.72	72.6	90.7	99.7
General Index	9.23	202.9	223.6	238.9	254.6	9.23	254.6	285.0	245.7
	100.00	154.1	167.4	173.9	183.3	100.00	184.9	197.4	209.8

Source: Economic Survey, 1986-87.

Note: Indices of industrial production are provisional.

Table 8.1 (b)
INDEX OF INDUSTRIAL PRODUCTION
(1980/81=100)

	Weight	Index			% change	
		1983/84	1984/85	1985/86	1984/85	1985/86
					over 1983/84	over 1984/85
General Index	100.00	120.4	130.7	142.1	8.6	8.7
Mining and Quarrying	11.46	147.8	160.8	167.5	8.8	4.2
Electricity Generated	11.43	125.4	140.4	152.4	12.0	8.5
Manufacturing Index	77.11	115.6	124.8	136.9	8.0	9.7
Food products	5.33	121.1	120.0	125.6	-0.9	4.7
Beverages, tobacco, etc.	1.57	104.5	111.7	112.1	6.9	0.4
Cotton textiles	12.31	100.2	102.2	110.4	2.0	8.0
Jute textiles	2.00	78.2	99.4	97.2	27.1	-2.2
Textile products	0.82	92.1	95.6	112.8	3.8	18.0
Wood & wood products	0.45	167.5	216.5	223.2	29.3	3.1
Paper & paper products	3.23	109.3	131.9	148.5	20.7	12.6
Leather & leather products	0.49	116.3	139.7	169.2	20.1	21.1
Rubber, plastic & petroleum prod.	4.00	136.1	147.2	153.0	8.2	3.9
Chemical & chemical products	12.51	131.0	142.8	154.3	9.0	8.1
Non-metallic mineral products	3.06	122.5	138.4	157.3	13.0	13.7
Basic metal & alloy products	9.80	95.1	107.3	117.0	12.8	9.0
Metal products	2.29	88.1	105.0	114.7	19.2	9.2
Machinery & machine tools	6.24	119.6	127.6	130.2	6.7	2.0
Electrical machinery	5.78	143.1	148.8	200.6	4.0	34.8
Transport equipment	6.39	123.4	131.6	135.8	6.6	3.2
Miscellaneous products	0.90	104.6	122.8	152.7	17.4	24.3

Sources: 1. Economic Survey, 1986-87.

2. Government of India, Press Note, February 20, 1987.

Note: The data on the new index of industrial production with base 1980/81=100 is tentative.

Table 8.2
INDEX OF INDUSTRIAL PRODUCTION - BY USE AND INPUT BASE
(Base 1970=100)

Industry Group	Old								Revised			
	Weight	1960	1971	1975	1980	1982	1983	1984	Weight	1983	1984	1985
Use-Based Classification												
Basic Industries	32.28	45.1	104.6	129.0	164.6	203.6	214.8	240.1	33.23	214.6	237.8	253.8
Capital Goods Industries	15.74	44.5	105.4	130.1	168.1	180.1	187.9	205.1	14.98	203.6	217.2	222.9
Intermediate Goods Industries	20.95	63.0	104.0	113.7	140.7	148.6	160.3	163.0	21.33	151.5	160.7	181.0
Consumer Goods Industries	31.03	64.6	103.4	107.4	135.9	155.5	156.1	158.1	30.46	154.9	159.0	163.9
Durable Goods	2.92	40.1	110.8	106.0	162.3	168.0	168.3	189.1	3.81	176.7	208.1	245.3
Non-Durable Goods	28.11	72.6	102.4	107.6	132.7	154.0	154.6	154.4	26.65	151.8	152.0	152.3
Input-based Classification												
Agro-based Industries	33.68	76.3	100.5	106.1	125.3	137.7	143.6	141.9	32.99	141.3	142.7	148.6
Metal-based Industries	21.93	42.4	105.2	123.1	162.2	172.5	178.5	194.1	22.39	188.0	203.0	213.3
Chemical-based Industries	12.86	40.8	111.9	128.9	178.8	213.6	219.8	242.7	13.20	220.8	241.8	252.9
Sectoral Indicators												
Transport Equipment & Allied Industries	10.79	58.7	102.9	116.1	136.6	153.7	164.5	184.7	10.81	183.7	197.8	216.1
Electricity & Allied Industries	14.53	29.0	106.6	131.5	187.3	215.6	221.8	246.9	n.a	n.a	n.a	n.a
Energy Output	18.51	n.a	102.7	132.0	171.0	217.5	233.1	256.6	18.53	232.0	256.5	275.5
General Index	100.00	55.3	104.2	119.7	150.6	172.0	179.9	191.9	100.00	181.2	194.2	206.2

Notes: 1. Data prior to 1970 with a 1960 base have been changed to 1970 base.

2. Some of the industries represented in the series of index numbers of industrial production (1970=100) do not find place in any of the groups and some occur in both the classifications.

Sources: 1. Reserve Bank of India, Report on Currency and Finance, various issues.

2. RBI, Monthly Bulletin, October 1986.

Table 8.3
PRODUCTION OF SELECTED INDUSTRIES

	Units	50/1	60/1	70/1	75/6	77/8	78/9	80/1	81/2	82/3	83/4	84/5	85/6
MINING													
Coal (including lignite)	mls tons	32.8	55.7	76.3	102.7	104.6	105.1	118.8	130.1	136.9	144.9	155.2	162.3
Iron Ore	mls tons	3.0	11.0	32.5	42.2	44.0	38.6	42.2	41.1	42.4	39.0	42.6	42.9
Petroleum Crude	mls tons	n.a.	0.4	6.8	8.4	10.8	11.6	10.5	16.2	21.1	26.0	29.0	30.2
METALLURGICAL INDUSTRIES													
Pig Iron	mls tons	1.7	4.3	7.0	8.5	9.5	9.5	9.6	9.7	9.6	9.2	9.2	10.0
Steel Ingots (a)	mls tons	n.a.	n.a.	6.1	8.3	9.8	10.1	10.3	11.0	11.0	10.5	10.8	12.2
Finished Steel	mls tons	1.0	2.4	4.6	5.8	7.0	7.7	6.8	7.8	8.1	6.1	7.8	9.5
Aluminum (virgin metal)	'000 tons	4.0	18.3	168.8	187.3	178.5	213.7	199.1	206.8	211.5	220.3	276.5	251.5
MECHANICAL ENGINEERING INDUSTRIES													
Machine Tools	mls Rs.	3	70	430	1137	1076	1328	1962	2499	2699	2697	3028	2914
Sugar Mill Machinery	mls Rs.	n.a.	44	139	330	410	352	242	263	415	498	438	426
Cotton Textile Machinery	mls Rs.	n.a.	104	303	1313	1436	1930	3032	3472	3294	3512	3505	3601
Cement Machinery	mls Rs.	n.a.	6	42	57	231	387	336	437	453	448	582	962
Railway Wagons (b)	'000 nos.	2.9	11.9	11.1	12.2	12.2	11.6	13.6	17.8	15.4	17.4	13.0	13.1
Automobiles	'000 nos.	16.5	55.0	87.9	72.7	84.4	103.4	121.1	154.4	151.4	158.4	196.0	209.3
Commercial Vehicles	'000 nos.	8.6	28.4	41.2	43.8	41.0	57.6	71.7	91.1	86.0	88.4	96.8	103.0
Passenger Cars & Jeeps	'000 nos.	7.9	26.6	46.7	28.9	43.4	45.8	49.4	63.3	65.4	70.0	99.3	116.3
Motor Cycles & Scooters	'000 nos.	n.a.	19.4	97.0	182.7	226.0	254.9	317.1	316.2	399.8	440.8	504.1	732.3
Diesel Engines (stationary)	'000 nos.	5.5	44.7	65.0	135.5	133.8	143.5	173.9	174.5	156.5	156.1	170.3	183.9
Diesel Engines (vehicular)	'000 nos.	n.a.	10.8	3.2	4.2	3.2	3.6	5.2	7.1	5.8	5.3	7.3	6.8
Power Driven Pumps	'000 nos.	35	109	259	275	355	378	431	373	461	492	496	512
Sewing Machines	'000 nos.	33	303	235	269	367	206	335	343	309	348	331	291
Bicycles	'000 nos.	103	1071	2042	2332	3183	3743	4189	5051	4781	5895	5893	5553
ELECTRICAL ENGINEERING INDUSTRIES													
Power Transformers	mls k.v.a	0.2	1.4	8.1	13.7	16.1	20.5	19.5	21.5	18.6	23.1	25.4	27.3
Electric Motors	mls h.p	0.1	0.7	2.7	3.7	4.0	3.9	4.1	5.3	4.8	5.4	4.9	5.3
Electric Fans	mls nos.	0.2	1.1	1.7	2.1	3.4	3.1	4.2	3.8	4.1	4.7	4.8	5.2
Electric Lamps	mls nos.	14.0	43.5	119.3	132.8	168.5	180.4	198.1	266.3	271.4	275.1	276.6	260.7
Cables - Aluminum	'000 tons	1.7	23.6	64.2	59.8	57.6	67.5	86.0	70.3	50.4	45.9	53.2	61.1
CHEMICAL & ALLIED INDUSTRIES													
Nitrogenous Fertilizers	'000 tons	9	98	830	1535	2014	2180	2164	3144	3424	3491	3917	4328
Phosphatic Fertilizers	'000 tons	9	52	229	320	662	770	842	949	980	1048	1264	1417
Soda Ash	'000 tons	45	152	449	555	573	581	563	632	635	781	817	918
Caustic Soda	'000 tons	12	101	371	458	521	564	578	614	577	647	684	726
Paper and Paper Board	'000 tons	116	350	755	836	961	1011	1149	1243	1205	1252	1376	1517
Automobile Tyres	mls nos.	n.a.	1.4	3.8	5.4	6.2	7.1	8.0	8.7	8.8	10.2	11.5	12.3
Bicycle Tyres	mls nos.	n.a.	11.2	19.2	24.5	28.5	32.2	27.0	26.6	27.3	32.7	31.2	36.1
Cement	mls tons	2.7	8.0	14.3	17.2	19.3	19.3	18.6	20.9	23.3	26.7	29.5	32.0
Refined Petroleum Products	mls tons	0.2	5.8	17.1	20.8	23.2	24.2	24.1	28.2	31.1	32.9	33.2	39.9

Table 8.3
PRODUCTION OF SELECTED INDUSTRIES (contd...)

	Units	50/1	60/1	70/1	75/6	77/8	78/9	80/1	81/2	82/3	83/4	84/5	85/6
TEXTILE INDUSTRIES													
Jute Textiles	'000 tons	837	1302	1060	1302	1178	1047	1392	1334	1338	1089	1370	1351
Cotton Yarn	mls kgs.	534	907	929	1002	843	947	1067	989	999	1112	1183	1134
Cotton Cloth	bis metres	4.2	7.4	7.6	8.1	6.8	7.6	8.4	8.0	8.0	8.7	9.0	9.2
Mill Sector	bis metres	3.4	4.4	4.1	4.0	3.1	3.3	3.4	2.9	2.4	2.7	2.6	2.6
Decentralised Sector	bis metres	0.8	3.0	3.5	4.1	3.7	4.3	5.0	5.1	5.6	6.0	6.4	6.6
FOOD INDUSTRIES													
Sugar (c)	'000 tons	1134	3510	3740	4264	6462	5844	5148	8438	8232	5909	6143	7003
Coffee	'000 tons	21.0	62.1	71.4	90.7	103.6	114.9	139.5	136.4	135.9	113.1	140.8	160.3
Vanaspati	'000 tons	170	401	558	500	572	678	753	865	886	888	936	868
Tea	mls kgs.	277	376	423	483	557	576	581	552	567	603	640	649
ELECTRICITY GENERATED (d)													
	bis kwh	5.3	33.0	55.8	79.2	91.4	102.5	110.8	122.1	130.3	140.0	156.4	170.0

Source: Economic Survey, Various issues.

Note: Data for 1985/86 is provisional.

(a) Including mini-plants.

(b) Data for 1950/51 relates to calendar year.

(c) Annual figures relate to the sugar season which is October-September from 1967/68. Earlier it was November-October.

(d) Relates to public utilities only.

Table 8.4
CAPACITY UTILISATION OF SELECTED INDUSTRIES
(in percentages)

	Weight 1970 (a)	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	
A. Basic Industries	16.98	55	56	58	56	56	60	60	63	63	57	59	63	59	56	57
Nitrogenous fertilisers	0.87	57	58	72	64	56	58	71	67	64	69	54	65	66	65	74
Phosphatic fertilisers	0.52	53	56	67	69	54	59	61	67	75	78	64	71	71	69	73
Cement	1.17	82	81	80	76	72	77	87	88	88	80	73	72	78	67	74
Pig Iron for sale	0.76	65	50	69	76	77	86	111	83	90	62	77	52	79	35	56
Saleable Steel	3.88	67	67	71	64	73	86	103	94	82	69	86	99	75	66	61
Aluminium	0.35	92	106	91	78	66	73	84	61	67	65	62	66	67	64	74
Electricity	9.23	43	45	45	46	44	45	47	44	48	45	48	46	49	48	50
B. Capital Goods Industries	6.69	79	80	81	74	64	57	57	60	61	62	62	75	67	69	69
Ballroller bearings	0.48	114	101	108	104	105	81	110	91	94	77	91	111	84	88	84
Diesel Engines (station)	0.64	44	54	42	75	38	47	35	43	42	41	44	55	50	51	53
Storage Batteries	0.22	100	89	86	97	76	70	63	65	66	65	66	75	75	72	75
Dry cells	0.32	102	103	100	95	52	42	46	48	62	66	77	75	77	69	70
Power transformers	1.48	121	135	140	94	83	61	59	66	66	70	60	66	56	60	71
Electric motors	0.35	96	89	107	60	60	90	56	60	60	56	57	67	68	73	75
Railway wagons	1.13	37	26	31	35	33	36	33	42	35	41	37	57	52	54	50
Commercial vehicles	1.25	65	66	60	68	65	59	62	59	65	70	93	89	86	83	73
Passenger cars	0.49	76	83	83	89	78	50	67	79	66	56	58	80	86	85	81
Agricultural tractors	0.33	56	51	41	55	60	65	73	65	90	102	100	110	76	81	92
C. Intermediate Goods Industries	11.67	83	88	85	81	77	74	74	78	84	84	85	86	78	76	72
Jute manufactures	2.71	73	84	85	80	73	76	80	88	89	89	106	105	100	87	75
Cotton spinning	1.1	118	129	98	79	86	80	83	79	89	100	92	91	79	83	67
Automobile tyres	1.62	93	93	92	93	79	82	78	83	87	85	75	87	88	91	93
Petroleum products																
D. Consumer Goods Industries	15.41	91	89	82	82	81	77	77	80	85	81	75	80	81	76	68
Sugar	2.75	120	101	79	96	92	106	91	93	116	97	70	81	130	125	86
Cigarettes	2.21	112	117	110	95	93	80	89	71	74	76	74	84	91	64	68
Vanaspati	0.68	64	60	57	44	31	40	42	45	51	49	55	63	66	85	68
Soap (organised sector)	0.61	107	121	130	105	88	118	119	125	150	128	141	140	135	109	109
Paper and paper board	2.17	101	87	87	86	92	76	79	82	80	74	67	73	68	63	63
Cotton cloth mill	5.34	69	72	70	73	73	67	68	76	78	79	77	70	58	65	60
Rubber footwear	0.44	82	81	82	75	77	71	72	75	69	72	78	65	72	68	70
Radio receivers	0.97	77	86	76	64	75	52	59	63	62	69	62	63	50	38	42
Electric fans	0.24	85	108	83	76	78	73	79	110	94	119	116	99	84	93	97
Average for 30 industries	50.75	76	76	75	72	69	68	71	71	74	71	70	75	71	68	66

(a) Weight in Index of Industrial Production.

Sources: Industrial Bank of India, Annual Report, various issues.

Table B.5
CUMULATIVE INVESTMENT IN PUBLIC SECTOR ENTERPRISES
(in Rs million)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Enterprises Producing & Selling Goods										
Steel	28643	30566	31023	34793	41138	49078	51469	57172	63293	67632
Minerals & Metals (a)	18400	20761	26707	32003	36341	50672	59075	70052	80717	91963
Power							17919	25107	30168	54620
Petroleum	6489	8168	8932	10465	15062	21085	30341	37742	47061	51487
Chemicals & Pharmaceuticals	18237	21226	27375	30742	33377	35733	38190	39927	44037	47106
Heavy Engineering	8038	8267	9273	9762	10967	12263	14335	16479	16976	17277
Medium & Light Engineering	2158	2428	2622	3150	3541	4107	4952	5876	7463	10289
Transportation Equipment	3354	3675	4987	5798	7001	7498	8166	11788	14923	18424
Consumer Goods	808	913	1043	1128	1240	5592	6911	7980	3352	11660
Agro-based Enterprises	115	140	154	198	215	235	306	362	398	456
Textiles		3214	4391	5155	5161	5658	7156	8580	10928	12334
Sub-total	86242	99358	116507	133194	154042	191921	238820	281066	327256	383248
Service Enterprises										
Trading & Marketing Services	5277	5651	6145	7462	6864	7580	7938	8246	9369	10704
Transportation Services	9333	10796	12541	13762	16544	17056	20900	24948	25832	26804
Contracts & Construction Services	381	481	729	953	1244	2010	2441	2658	3632	4022
Consultancy Services	39	68	153	725	633	1007	882	942	1045	1243
Development of Small Industries	463	338	314	298	309	377	390	479	542	642
Tourist Services	201	209	246	317	369	488	783	907	914	1080
Others	3708	6623	7495	10843	12253	14293	17467	20228	23334	27900
Sub-total (b)	19402	24166	27623	34360	38216	42811	50800	55407	64668	72515
Enterprises under Construction	5321	9624	10961	14696	18767	14426	10755	17472	35967	47643
TOTAL	110965	133148	155091	182250	211025	249158	300375	353945	427891	503406

Notes: This breakdown of investment by industry consists of equity participation and loans disbursed from the Central and State Governments and from private parties both local and foreign. Excluded from the totals are working capital (generally financed by the State Bank of India) and investment financed by the enterprises out of their own net earnings. The cumulative investment is as of March 31.

(a) Includes Coal.

(b) The apparent fall in investment is due to the fact that Hindustan Paper Corporation now appears in "Enterprises Under Construction" consequent on the formation of Hindustan Newsprint Ltd. to take over Kerala unit.

Source: Ministry of Finance, Bureau of Public Enterprises, various issues of the Annual Report on the Working of Industrial and Commercial Undertakings of the Central Government.

Table B.6
PRODUCTION, IMPORTS AND CONSUMPTION OF FERTILIZERS
(000' nutrient tons)

Year (April-March)	Nitrogenous (a)			Phosphatic (b)			Potassic		Total		
	Produ- ction	Im- ports	Consu- ption	Produ- ction	Im- ports	Consu- ption	Im- ports	Consu- ption	Produ- ction	Im- ports	Consu- ption
1961/62	154.3	307.0	249.8	65.4	-	60.5	75.0	28.0	219.7	382.0	338.3
1962/63	194.2	244.0	333.0	88.3	10.0	82.8	41.0	36.4	282.5	295.0	452.2
1963/64	219.1	228.0	376.8	107.8	13.0	116.5	40.0	50.6	326.9	281.0	543.9
1964/65	243.2	232.0	555.2	131.0	12.0	148.7	57.0	69.3	374.3	301.0	773.2
1965/66	237.9	326.0	574.8	118.8	14.0	132.5	73.0	77.3	356.7	413.0	784.6
1966/67	309.0	632.0	737.8	145.7	148.0	248.6	118.0	114.2	454.7	398.0	1100.6
1967/68	402.6	867.0	1034.6	207.1	349.0	334.8	270.0	169.6	609.8	1486.9	1539.9
1968/69	563.0	844.0	1208.6	213.2	138.0	382.1	213.0	170.0	776.2	1195.0	1760.7
1969/70	730.6	667.0	1356.0	223.7	94.0	416.0	120.0	210.0	954.3	881.0	1982.4
1970/71	832.5	477.0	1479.0	228.1	32.0	541.0	120.0	236.3	1060.6	629.0	2256.0
1971/72	949.2	481.0	1793.0	290.3	248.0	558.2	268.0	300.6	1239.5	997.0	2656.9
1972/73	1054.5	665.0	1839.0	330.3	204.0	581.3	325.0	347.6	1384.8	1194.0	2767.9
1973/74	1049.9	659.0	1829.0	324.5	213.0	649.7	370.0	359.8	1374.4	1242.0	2838.6
1974/75	1186.6	884.0	1765.7	331.2	286.0	471.5	437.0	336.1	1517.2	1607.0	2573.3
1975/76	1508.0	996.0	2148.6	319.7	361.0	466.8	278.0	278.4	1827.7	1635.0	2893.8
1976/77	1862.4	750.1	2456.9	478.3	22.8	634.7	277.8	319.2	2340.7	1050.7	3411.0
1977/78	1999.8	758.1	2913.0	669.9	163.9	866.6	598.9	506.2	2669.4	1520.9	4285.8
1978/79	2173.0	1233.1	3419.5	778.0	243.5	1106.0	517.4	591.5	2951.0	1994.0	5116.9
1979/80	2224.3	1295.3	3498.1	763.1	237.1	1150.9	473.2	606.4	2987.4	2005.6	5255.4
1980/81	2163.9	1510.4	3678.1	841.5	452.1	1213.6	796.5	623.9	3005.4	2759.0	5515.6
1981/82	3143.3	1055.1	4068.7	949.7	343.2	1322.3	643.8	676.2	4093.0	2042.1	6067.2
1982/83	3429.7	424.6	4224.2	983.7	63.4	1435.9	643.7	726.5	4413.4	1131.7	6386.6
1983/84	3491.5	656.1	5204.4	1064.1	142.6	1730.3	556.4	775.4	4555.6	1355.1	7710.1
1984/85	3917.3	2008.6	5486.1	1317.9	745.2	1886.4	871.0	838.5	5235.2	3624.8	8211.0
1985/86(d)	4322.9	1615.8	5811.4	1430.2	804.8	2063.3	893.8	847.3	5753.0	3314.4	8722.1
Average Compound Growth Rate (% per annum)											
1950/51- 75/76	17.9	15.9	16.2	15.6	14.0	19.2	16.1	17.9	17.4	15.5	17.1
1970/71- 80/81	10.0	12.2	9.5	13.9	30.3	8.4	20.8	10.2	11.0	15.9	9.4
1980/81	-2.7	16.6	5.1	10.3	90.7	5.4	68.3	2.9	0.6	37.6	5.0
1981/82	45.3	-30.1	10.6	12.9	-24.1	9.0	-19.2	8.4	36.2	-26.0	10.0
1982/83	9.1	-59.8	3.7	3.6	-81.5	8.6	n.s	7.4	7.8	-44.6	5.8
1983/84	1.8	54.5	23.2	8.2	124.9	20.5	-13.6	6.7	3.2	19.7	20.7
1984/85	12.2	206.1	5.4	23.9	422.6	9.0	56.5	8.1	14.9	167.5	6.5
1985/86(d)	10.4	-19.6	5.9	8.5	8.0	9.4	2.6	1.0	9.9	-8.6	6.2

Source: The Fertilizer Association of India, Fertilizer Statistics, 1985/86.

Notes: For the years 1951/52 to 1960/61 distribution figures are taken for consumption.

- (a) Excludes nitrogen meant for non-agricultural purposes.
- (b) Excludes data in respect of bonemeal and rock phosphate.
- (c) Figures for consumption are provisional.

Table 8.7
INDIAN RAILWAYS - FREIGHT & PASSENGER TRAFFIC

Year	Revenue Earning Freight Traffic			Passenger Traffic					
	Originating tonnage (mln.tons)	Net tons-kilometers (million)	Average lead (kilometers)	Passengers originating (million)	Passenger-kilometers (million)	Average lead (kilometers)	Passenger originating (million)	Passenger-kilometers (million)	Average lead (kilometers)
1950/51	73.2	37565	513	872	59966	68.8	412	6551	15.9
1955/56	92.2	50435	541	780	54273	69.6	495	8127	16.4
1960/61	119.8	72333	603	914	65895	72.1	680	11770	17.3
1965/66	162	98978	611	1064	79130	74.4	1018	17164	16.9
1970/71	167.9	110696	659	1212	95136	78.5	1219	22984	18.9
1971/72	170.1	116894	687	1261	101079	80.2	1275	24250	19.0
1972/73	175.3	121164	691	1268	106931	84.3	1385	26596	19.2
1973/74	162.1	109391	675	1217	107627	88.5	1437	28037	19.5
1974/75	173.6	121374	699	1056	99097	93.8	1373	27157	19.8
1975/76	196.8	134874	685	1306	115899	88.7	1639	32862	20.1
1976/77	212.6	144030	677	1498	126754	84.6	1802	37082	20.6
1977/78	210.8	150250	713	1576	137201	87.1	1928	39433	20.4
1978/79	199.6	143870	721	1606	149546	93.1	2113	43439	20.6
1979/80	193.1	144559	749	1602	159927	99.8	1903	38730	20.4
1980/81	195.9	147652	754	1613	167472	103.9	2000	41086	20.5
1981/82	221.2	164253	743	1640	176822	107.8	2064	43965	21.3
1982/83	228.8	167781	733	1626	181142	111.4	2029	45789	22.6
1983/84	230.1	168849	734	1491	180808	121.3	1834	42127	23.0
1984/85	236.4	172632	730	1449	182318	125.8	1884	44264	23.5
1985/86	258.5	196600	760	1549	195175	126.0	1884	45439	24.1

Source: Ministry of Transport, Department of Railways, Railway Budget.

(a) Passengers booked between stations within the suburban areas of Bombay,

Table 8.8
 PETROLEUM SUMMARY
 COMMODITY BALANCE OF PETROLEUM AND PETROLEUM PRODUCTS
 (Million Tonnes)

	70/71	75/76	76/77	77/78	78/79	79/80	80/81	81/82	82/83	83/84	84/85	85/86
	[a]											
A. CRUDE PETROLEUM												
1. Refinery Throughput	18.4	22.3	23.0	24.9	26.0	27.5	25.8	30.2	33.2	35.3	35.6	42.9
2. Domestic Production	6.8	8.4	8.9	10.8	11.6	11.8	10.5	16.2	21.1	26.0	29.0	30.2
(a) On-shore	6.8	8.4	8.5	8.7	8.3	7.3	5.5	8.2	8.2	8.6	8.9	9.4
(b) Off-shore	-	-	0.4	2.1	3.3	4.4	5.0	8.0	12.9	17.4	20.1	20.8
3. Imports	11.7	13.6	14.0	14.5	14.7	16.1	16.2	15.3	16.9	16.0	13.7	15.1
4. Exports	-	-	-	-	-	-	-	0.8	4.5	5.5	6.5	0.5
5. Net Imports (3-4)	11.7	13.6	14.0	14.5	14.7	16.1	16.2	14.5	12.4	10.5	7.2	14.6
1. Domestic Consumption [b]	17.9	22.4	24.1	25.5	28.2	29.9	30.9	32.5	34.7	35.8	38.5	40.8
(a) Naphtha	0.9	1.8	2.2	2.3	2.5	2.4	2.3	3.0	3.0	2.8	3.1	3.1
(b) Kerosene	3.3	3.1	3.3	3.6	4.0	3.9	4.2	4.7	5.2	5.5	6.0	6.2
(c) High Speed Diesel	3.8	6.6	7.1	7.7	8.6	9.8	10.3	10.8	12.0	12.6	13.7	14.9
(d) Fuel oils	4.7	5.8	5.7	5.8	6.7	7.1	7.5	7.2	7.3	7.6	7.9	7.9
2. Domestic Production	17.1	20.8	21.4	23.2	24.2	25.8	24.1	28.2	31.1	32.9	33.2	39.9
(a) Naphtha	1.2	1.9	2.0	2.1	2.3	2.4	2.1	3.0	3.0	3.6	3.5	5.0
(b) Kerosene	2.9	2.4	2.6	2.5	2.5	2.5	2.4	2.9	3.4	3.5	3.4	4.0
(c) High Speed Diesel	3.8	6.3	6.4	7.1	7.4	8.0	7.4	9.0	9.8	10.9	11.1	14.6
(d) Fuel oils	4.1	5.1	4.7	5.3	5.6	6.4	6.1	6.9	8.0	8.0	7.9	8.0
3. Imports	1.1	2.2	2.6	2.9	3.9	4.7	7.3	4.9	5.0	4.3	6.1	3.9
4. Exports [c]	0.3	0.2	0.1	0.1	0.1	0.1	n.s.	0.1	0.8	1.5	0.9	2.0
5. Net Imports	0.8	2.0	2.5	2.8	3.8	4.6	7.3	4.8	4.2	2.8	5.2	1.9

Source: Economic Survey, 1986/87.

[a] Provisional.

[b] Excludes refinery fuel consumption.

[c] Excludes supplies of POL products to Nepal.

Table 8.9
GENERATION OF ELECTRICITY BY REGION
(in GWH)

	75/76	76/77	77/78	78/79	79/80	80/81	81/82	82/83	83/84	84/85	85/86
I. Thermal (includes steam & gas)											
Northern	9838	11300	11177	11168	12619	13691	14809	17989	20051	22481	25721
Western	14295	16172	18431	19893	22386	25368	27725	32168	35790	42297	48934
Southern	6557	8637	7691	7451	7678	9218	11659	13435	14002	16321	20445
Eastern	12136	13521	13177	13397	13059	12529	14558	15360	15845	16572	18368
North-Eastern	476	615	614	685	531	496	764	917	989	872	868
All-India	43302	50245	51090	52594	56273	61301	69515	79869	86677	98543	114336
II. Hydro											
Northern	10110	11464	11348	15898	15477	15080	16717	18536	19021	18224	19478
Western	6439	7651	8646	9064	7945	7812	7961	6550	7738	7006	6178
Southern	13639	13077	14841	18921	19354	20283	21367	20247	19520	24427	21119
Eastern	2932	2456	2930	3021	2334	2962	3082	2562	3146	3228	3174
North-Eastern	182	188	242	255	367	406	438	478	519	834	1035
All-India	33302	34836	38007	47159	45477	46542	49565	48373	49954	53819	50984
III. Nuclear											
Northern	533	1095	198	483	1131	1228	1057	552	1244	1075	1283
Western	2094	2157	2074	2287	1746	1774	1964	1470	1857	1929	1960
Southern	-	-	-	-	-	-	-	-	445	1071	1739
All-India	2627	3252	2272	2770	2877	3001	3021	2022	3546	4075	4982
IV. Utilities - All India (I through III)	79231	88333	91369	102523	104627	110844	122101	130264	140177	156437	170302
V. Self-Generation in Industry and Railway	6695	7282	7559	7607	8193	8417	9024	10035	10817	122101	13365
VI. Total - All India (IV and V)	85926	95615	98928	110130	112820	119261	131125	140299	150994	168647	183667

Note: Data for 1985/86 is provisional.

Source: Central Electricity Authority, Power Data Bank & Information Directorate.

Table 8.10
ELECTRICITY CONSUMPTION BY SECTORS
(in 000 GWH)

Year (April- March)	Mining & Manufac- turing (a)	Trans- port	Do- mestic	Agri- culture	Others	Total
1953/54	5.00	0.60	0.70	0.20	1.10	7.60
1955/56	6.30	0.70	0.80	0.30	1.30	9.40
1960/61	11.60	0.80	1.50	0.80	2.20	16.90
1970/71	34.35	1.43	3.83	4.54	4.50	48.65
1971/72	36.46	1.67	4.11	5.00	4.68	51.92
1972/73	37.54	1.79	4.31	5.92	4.86	54.42
1973/74	37.91	1.57	4.64	6.31	5.28	55.71
1974/75	38.42	1.56	5.17	7.76	5.47	58.38
1975/76	43.46	1.89	5.82	8.72	6.28	66.17
1976/77	47.98	2.21	6.34	9.62	6.88	73.03
1977/78	49.29	2.34	6.82	10.11	7.39	75.95
1978/79	54.44	2.22	7.58	12.03	7.78	84.05
1979/80	53.20	2.33	8.40	13.45	7.98	85.36
1980/81	55.35	2.31	9.25	14.49	8.30	89.70
1981/82	60.85	2.55	10.44	15.20	9.04	98.08
1982/83	61.71	2.68	12.09	17.82	10.07	104.37
1983/84	66.51	2.75	13.23	18.23	11.07	111.79
1984/85 (b)	n.a	2.92	15.09	21.29	11.29	n.a
1985/86 (b)	n.a	3.17	17.11	23.53	12.71	n.a
Average Compound Growth Rate (% per annum)						
1953/54-75/76	10.33	5.35	10.11	18.72	8.24	52.75
1970/71-80/81	4.89	4.91	9.22	12.31	6.31	37.64
1980/81	4.04	-0.86	10.12	7.73	4.01	5.08
1981/82	9.94	10.39	12.86	4.90	8.92	9.34
1982/83	1.41	5.10	15.80	17.24	11.39	6.41
1983/84	7.78	2.61	9.43	2.30	9.93	7.11
1984/85	n.a	6.18	14.06	16.79	1.99	n.a
1985/86	n.a	8.56	13.39	10.52	12.58	n.a

Source: Central Electricity Authority, Power Data Bank & Information Directorate

Notes: (a) Include industrial power from utilities plus net generation in the non-utilities.
(b) Provisional.

Table 8.11
COAL AND LIGNITE PRODUCTION 1973/74-1985/86
(Million Tonnes)

	73/74	74/75	75/76	76/77	77/78	78/79	79/80	80/81	81/82	82/83	83/84	84/85	85/86
Coal India	69.8	79.0	89.0	89.5	89.0	90.0	91.4	101.0	109.0	114.7	121.4	130.8	134.1
Singareni Coal field	5.3	6.2	7.4	8.3	8.9	9.0	9.4	10.1	12.1	12.3	12.7	12.3	13.7
Others	3.1	3.3	3.3	3.3	3.1	2.9	3.1	2.9	3.2	3.5	4.1	4.3	4.4
Total All-India (excl.Lignite)	78.2	88.5	99.7	101.1	101.0	101.9	104.0	113.9	124.2	130.5	138.2	147.4	154.2
Coking Coal	15.8	20.1	22.2	23.7	23.3	22.5	23.5	24.6	26.8	30.1	30.1	30.6	28.8
Non-Coking Coal	62.4	68.4	77.5	77.4	77.7	79.4	80.4	89.3	97.3	100.4	108.1	116.8	125.4
Lignite	3.7	3.1	3.0	4.0	3.6	3.3	2.9	5.1	6.3	6.9	7.3	7.8	8.0
Total All-India (incl.Lignite)	81.9	91.6	102.7	105.1	104.6	105.2	106.9	119.0	130.5	137.4	145.5	155.2	162.3

Sources: (1) Economic Survey, various issues.

Table 9.1
INDEX NUMBERS OF WHOLESALE PRICES - BY YEARS (a)
(Base 1970/71=100)

	WEIGHTS	60/61	65/66	75/76	80/81	81/82	82/83	83/84	84/85	1985	1986	(b)
TOTAL FOOD ARTICLES	298.0	48.1	71.3	163.6	207.9	235.1	249.6	283.1	297.4	312.4	334.0	6.9
Food Grains	129.2	49.3	74.4	174.1	216.7	237.4	248.8	273.8	276.2	289.6	299.4	3.4
Other Food	168.8	47.2	68.9	155.6	201.2	233.3	250.2	290.3	313.6	330.2	360.5	9.2
INDUSTRIAL RAW MAT.	118.7	51.8	67.5	171.4	311.5	338.1	369.3	356.6	392.8	372.3	372.0	-0.1
Non-Food Articles	106.2	52.7	68.6	139.8	217.7	240.5	282.9	281.6	319.9	296.4	294.8	-0.5
Minerals	12.5	74.8	78.8	440.4	1110.2	1168.6	1105.6	994.0	1011.7	1017.6	1028.2	1.0
FUEL, POWER & LUB.	84.6	61.0	76.9	219.2	354.3	427.5	459.7	494.8	518.2	560.0	613.5	9.6
MANUF. PRODUCTS	498.7	60.1	74.5	171.2	257.3	270.6	272.1	295.8	319.4	338.3	353.8	4.6
Food Products	133.2	51.4	71.1	181.4	308.7	298.9	260.0	298.9	323.8	339.4	372.6	9.8
Beverage & Tobacco	27.1	43.1	61.6	164.7	210.7	217.4	218.7	246.2	253.8	278.7	337.7	21.2
Textiles	110.3	65.7	75.7	147.3	212.7	223.9	232.8	249.6	280.1	281.6	266.8	-5.3
Chemicals and Chemical Products	55.5	59.7	73.8	175.6	241.3	260.2	269.2	281.6	292.1	305.1	323.6	6.1
Basic metals & Products	59.7	54.3	72.5	184.8	272.1	317.1	354.6	381.0	418.9	463.0	476.4	2.9
Machinery and Transport Eqpt.	67.2	65.5	79.7	172.6	239.4	265.1	277.9	289.6	303.8	328.8	350.8	6.7
ALL COMMODITIES	1000.0	55.1	72.7	173.0	257.3	281.3	288.7	316.0	338.3	353.4	372.2	5.3

(a) The indices period to 1970/71, available on different base periods have been converted to base 1970/71.

(b) Percent change in calendar year 1986 over 1985.

Sources: 1. Ministry of Industry, Office of the Economic Adviser.

2. H.L. Chandok, Wholesale Price Statistics 1947-1978, published by the Economic and Scientific Research Foundation, 1979.

Table 9.2
CONTRIBUTION OF SELECTED COMMODITIES TO
INCREASE IN WPI IN CALENDAR YEAR 1986

	Weights	1985	1986	1986 over 1985 Change	% Contribution to Change in
Agriculture	40.42	308.2	323.7	5.03	33.32
Food	29.80	312.4	334.0	6.91	34.24
Cereals	10.74	255.6	274.0	7.20	10.51
Pulses	2.18	457.1	424.6	-7.11	-3.77
Others	16.88	330.0	360.5	9.24	27.39
Non-Food	10.62	296.4	294.8	-0.54	-0.90
Minerals	1.25	1017.6	1028.2	1.04	0.70
Fuel and Power	8.46	560.0	613.5	9.55	24.07
Coal	1.15	638.9	715.2	11.94	4.67
Mineral oils	4.91	591.4	621.4	5.07	7.84
Electricity	2.40	457.8	548.5	19.81	11.58
Manufactured Products	49.87	338.3	353.8	4.58	41.12
Sugar	7.24	376.9	403.6	7.08	10.28
Edible oils	3.72	290.9	349.5	20.14	11.60
Other food products	2.37	300.8	314.2		1.69
Textiles	11.03	281.6	266.8	-5.26	-8.68
Cement	0.71	499.8	469.7	-6.02	-1.14
Iron and Steel	3.47	519.3	541.5	4.27	4.10
Capital goods	6.72	328.8	350.8	6.69	7.86
Others	14.63	333.7	353.6	5.96	15.49
ALL COMMODITIES	100.00	353.4	372.2	5.32	100.00
of which					
Agriculture-based	53.75	315.9	335.8	6.30	56.89
Non-Agricultural	46.25	397.0	414.5	4.41	43.11

Source: Ministry of Industry, Office of the Economic Adviser.

[a] Weighted share of each commodity in total absolute change in Wholesale Price Index.

Table 9.3
PRICE INDICES OF SELECTED AGRICULTURAL COMMODITIES (a)
(Base 1970/71=100)

COMMODITY GROUP	WEIGHT	50/51	55/56	60/61	65/66	75/76	80/81	81/82	82/83	83/84	84/85	1985	1986	(c)
CEREALS	107.43	53.3	37.0	51.2	73.3	172.6	195.1	216.9	237.9	258.3	244.9	255.6	274.0	7.20
Rice	51.31	48.4	37.0	51.2	67.9	178.8	205.6	226.1	256.9	290.7	273.3	281.5	296.8	5.44
Wheat	34.17	53.2	38.1	47.4	71.5	159.6	176.2	191.6	214.1	217.4	209.6	218.8	236.4	8.04
Jowar	8.39	77.2	31.4	56.9	88.0	175.6	194.2	241.5	221.5	241.1	241.5	235.2	255.8	8.76
PULSES	21.79	42.1	28.2	42.1	79.6	181.6	323.2	338.7	302.2	346.7	430.6	457.1	424.6	-7.11
Grams	10.39	50.5	25.8	45.8	86.4	204.8	369.5	382.2	301.8	328.0	489.2	551.2	462.6	-16.07
VEGETABLES & FRUITS	61.32	35.1	36.6	43.1	69.9	138.8	213.0	243.1	250.0	300.8	304.0	344.8	419.1	21.55
Potatoes	10.12	n.a	39.0	40.8	64.9	87.1	182.5	137.8	150.9	216.2	163.4	163.5	355.2	117.25
Bananas	6.48	n.a	35.0	43.0	74.0	167.0	213.9	263.4	258.7	296.3	350.1	353.5	399.8	13.10
Oranges	4.3	n.a	34.2	45.4	77.0	117.8	163.5	194.2	204.6	281.7	271.0	470.0	357.1	-24.02
Cashew Nuts	3.1	35.1	50.8	50.1	50.1	158.9	399.3	493.6	397.8	442.7	542.1	579.9	772.5	33.21
CONDIMENTS & SPICES	10.94	33.9	23.5	27.3	40.6	186.5	122.2	170.6	186.3	198.8	279.6	276.0	286.1	-25.33
Chillies	5.02	42.5	22.1	35.6	45.0	217.5	116.2	211.0	168.9	121.9	278.5	288.1	154.8	-46.27
FIBERS	31.73	47.2	42.8	61.4	66.2	139.8	179.7	215.7	199.8	227.5	303.4	257.8	187.0	-27.46
Raw Cotton	22.46	49.7	42.7	49.2	56.8	136.4	182.9	227.3	199.5	221.6	261.0	224.6	173.5	-22.75
Raw Jute	4.29	44.8	45.3	81.2	90.5	116.8	129.4	137.3	182.8	234.1	519.5	398.0	167.2	-57.99
OILSEEDS	42.01	39.2	23.7	41.6	67.1	125.8	230.7	253.8	250.0	302.5	322.4	298.2	327.6	9.86
Groundnut	18.21	40.2	23.8	40.4	66.0	129.1	224.8	270.5	264.6	302.0	323.2	305.2	359.1	17.66
Rape & Mustard	8.22	49.7	27.4	44.4	74.9	119.9	269.9	265.1	243.7	321.8	278.2	246.5	303.6	23.16
OTHER COMMODITIES	45.59	68.7	56.8	70.1	75.9	148.3	207.2	225.9	262.2	324.9	353.8	337.7	344.6	2.04
Tea	11.49	80.8	75.4	90.9	89.2	175.0	226.6	242.9	286.2	440.6	494.3	433.7	411.5	-5.12
Coffee	1.61	39.5	43.7	46.6	63.1	117.0	129.0	139.0	142.1	173.0	216.8	220.6	223.0	1.09
Sugarcane	16.42	50.0	52.5	58.6	67.8	124.1	188.6	189.9	190.6	200.0	208.1	220.0	250.1	13.68
Tobacco	8.07	72.8	51.8	75.2	87.1	173.7	147.0	138.8	188.0	238.9	190.0	192.5	222.4	15.53
Rubber	1.28	39.8	65.3	67.7	82.7	153.2	255.0	301.2	296.7	359.4	333.6	338.8	338.8	0.00
Tiaber	3.34	48.7	45.4	57.8	65.5	173.7	407.1	555.8	739.5	847.1	945.6	926.2	853.7	-7.83
TOTAL	320.81	48.1	37.5	50.7	70.7	154.4	209.6	234.6	244.1	282.6	301.4	304.5	318.1	4.47

Sources: 1. Ministry of Industry, Office of the Economic Adviser.
2. H.L. Chandhok, Wholesale Price Statistics, the Economic and Scientific Research Foundation, 1979.

Notes: (a) Excludes fisheries, livestock and dairy products.
(b) Total food articles (297.99) plus non-food is (106.21) less weightage of milk and milk products, fisheries and hides & skins (83.39).
(c) Percentage change in calendar year 1986 over 1985.

Table 9.4
SELECTED PRICE INDICES

Year	Wholesale Price Index (1970/71=100)	Consumer Price Index for Industrial Workers (1960=100)	Implicit Price Deflator for Private consumption Expenditure (1970/71=100)	Implicit Price Deflator for Gross Domestic Capital Formation (1970/71=100)
1950/51	35.7			40.1
1951/52	50.4	86		42.4
1952/53	44.1	86		42.0
1953/54	46.2	87		42.7
1954/55	43.0	81		45.3
1955/56	40.8	79		44.2
1956/57	46.5	88		45.9
1957/58	47.9	92		45.1
1958/59	49.3	97		52.8
1959/60	51.7	101		53.4
1960/61	55.1	102	56.4	56.2
1961/62	55.2	104	58.0	58.9
1962/63	57.3	108	59.8	60.6
1963/64	60.9	113	65.2	64.3
1964/65	67.5	129	71.3	66.9
1965/66	72.7	139	77.7	71.2
1966/67	82.8	157	89.3	81.5
1967/68	92.4	175	99.9	86.9
1968/69	91.3	174	97.0	88.8
1969/70	94.8	177	101.5	94.1
1970/71	100.0	186	100.0	100.0
1971/72	105.6	162	104.5	105.7
1972/73	116.2	207	116.8	114.0
1973/74	139.7	250	139.0	129.9
1974/75	174.9	317	167.1	162.2
1975/76	173.0	313	158.3	174.9
1976/77	176.6	301	163.5	179.4
1977/78	185.8	324	171.6	183.7
1978/79	185.8	331	178.6	197.2
1979/80	217.6	360	203.8	229.3
1980/81	257.3	401	221.3	257.4
1981/82	281.3	451	243.7	289.3
1982/83	288.7	486	258.9	315.7
1983/84	316.0	547	285.6	347.3
1984/85	338.4	582	301.8	378.4
1985/86	357.7	620	328.7	413.9
1986/87	377.1	673 [a]		

Sources: 1. Ministry of Industry, Office of the Economic Adviser.

2. H.L. Chandok, Wholesale Price Statistics 1947-19, published by Economic and Scientific Foundation, 1979

3. Ministry of Labor, Labor Bureau, Simla.

4. Central Statistical Organisation, National Accounts Statistics, various issues.

[a] Relates to the period April 1986 - February 1987.

TABLE 9.5
CONSUMER PRICE INDEX NUMBERS FOR INDUSTRIAL WORKERS, URBAN NON-MANUAL EMPLOYEES AND AGRICULTURAL LABORERS

Year (April - March)	Industrial Workers		Urban Non-Manual Employees	Agricultural Laborers (b)	
	Food Index (1960=100)	General Index (1960 = 100)	(1960=100)	Food Index (1960/61=100)	General Index (1960/61=100)
1960/61	108	102	100 [a]	100	100
1970/71	201	186	174	206	192
1975/76	342	313	277	345	317
1976/77	317	301	277	324	302
1977/78	346	324	298	349	323
1978/79	347	331	306	340	317
1979/80	373	360	330	390	360
1980/81	419	401	369	448	409
1981/82	476	451	413	491	448
1982/83	508	486	446	527	481
1983/84	581	547	492	573	522
1984/85	607	582	532	569	525
1985/86	638	620	568	600	555
1986/87	694 [c]	673 [d]	613 [d]	612 [e]	566 [e]
Average of weeks					
1985					
March	600	586	540	558	517
June	624	606	556	570	530
September	639	619	569	602	555
December	650	630	574	604	557
1986					
March	655	638	584	600	556
June	681	658	599	606	561
September	705	676	615	627	579
December	n.a.	688	622	n.a.	n.a.
Average compound growth rate (% per annum)					
1950/51-1975/76	5.6	5.4	5.2 [f]	6.4 [f]	5.9 [f]
1970/71-1980/81	7.6	8.0	7.8	8.1	7.9
1982/83	6.7	7.8	8.0	7.3	7.4
1983/84	14.4	12.6	10.3	8.7	8.7
1984/85	4.5	6.4	8.1	-0.7	0.6
1985/86	5.1	6.5	6.8	5.4	5.7
1986/87 [g]	9.8	8.9	8.7	5.7	5.6
Percentage Change in Index over the corresponding month of previous year					
1986					
March	9.2	8.9	8.1	7.5	7.5
June	9.1	8.6	7.7	6.3	5.8
September	10.3	9.2	8.1	4.2	4.3
December	n.a.	9.2	8.4	n.a.	n.a.

Sources: 1. Ministry of Labor, Labor Bureau, Simla.

2. Central Statistical Organization.

[a] Relates to the period January to March.

[b] Indices relate to Agricultural Years (July-June).

[c] Based on returns for April-November 1986.

[g] Percentage increase for periods noted in footnotes

[c] to [e], over corresponding period of previous year.

[d] Based on returns for April 1986-February 1987.

[e] Based on returns for April-September 1986.

[f] Relates to the period 1955/56-1975/76.

STATISTICAL APPENDIX

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Table T.A. 4.1

INDIA: Number of Items on Capital Goods DGL Lists
(As of April each year)

	Oct 86	1986	1985	1984	1983	1982	1981	1980	1979	1978	1977	1976	1975
Machine Tools	162	162	132	65	65	51	55		84	46			
Ball bearing machine tools	10	10	10	9	10								
Met. & measuring instrmnts.	16	16	16	11	11	10	10		10				
Testing machines	5	5	5	5	5	3	4		4	8			
Inst. testing & elec. eqpt.	11	11	11	10	9	8	9		6	7			
Garment & hosiery machines	113	113	114	105	100	87	88		87	87	82		
Leather Ind: Tannery	22	22	22	21	21	23	20		21	27	24	24	
" shoes, apparel etc.	106	106	106	97	96	96	97		97	53	55	55	
" woven leather	4	4	4	4	4	4	4		4	4	4		
Dental equipment	4	4	4	4	4	4	4		4	4			
Cinematographic	39	39	39	38	40	37	18		11	11			
Tea industry	3	3	3	3	3	3	3		3	3			
Elec. comp. & eqpt. machinery	224	225	225	221	167	136	100		35				
Misc. electronic	5	6	5										
Printing machinery	21	20	21	21	17	21	18		19				
Food processing machinery	5	5	5	5	5	6	6						
Meat processing machinery	9	9	9	6	6								
Sheep shearing eqpt.	1	1	1	1	1	1	1		1				
Water drill	1	1	1	1	1	1	1						
Textile machinery	15	15	12	10	6	5							
Jute machinery	24	24	24						2				
Seafood ind. machinery	20	20	20	13	13	11							
Poultry processing machinery	3	3	3	3									
Packing machinery	19	19	19	1	1								
Frozen food transport	5	2	2	2	2								
Dairy industry machinery	5	5	5	5	5	5							
Chemical industry machinery	11	11	12	14	14	14							
Woollen industry machinery	29	30	31	24	21	20							
Industrial jewels machinery	18	18	18	18	18								
Spectacle frame machinery	15	15	15	15	15								
Elec. lamp. manf. machinery	12	12	9	8									
Oilfield Services machinery	20	20	20										
Writing instr. machinery	10	10	10										
Miscellaneous	12	11	11	9	7	2							
For manf. elec. eqpt.	2	2											
Instr. for TV industry			5	5	5	5							
Presses										2	2		
Package manf. machinery	6	6	6										
Total	987	985	950	754	672	553	443	386	252	167	79	nil	

Source: GOI, Ministry of Commerce, Annual Import Export Policy Books ("Red Books").

Table T.A. 4.2

INDIA: Share of Canalized Items in Total Imports

	POL (1)	Non - POL			Totals	
		By cana- lizing agencies (2)	Under REP & Other Licences (3)	Total (4)	(1) + (4) (6)	(1)+(2) (7)
1980/81	42.0	21.9	3.3	25.2	67.3	61.9
1981/82	38.1	22.2	4.6	26.8	64.9	60.3
1982/83	39.3	n.a	n.a	20.5	59.8	n.a.
1983/84	30.5	n.a	n.a	19.5	50.0	n.a.
1984/85	31.5	n.a	n.a	20.5	52.0	n.a.
1985/86	26.3	n.a.	n.a	23.9	50.2	n.a.

Sources: Trade statistics and GOI. Note that non-POL canalised items imported under REP and other licences are the values of licences issued, not actual imports. Column (2) non-POL imports of canalized items by canalizing agencies, is obtained by deducting col (3), from col (4) and hence does not correspond to actual imports. Actual import data for the latter is not available. Col.(6) (total imports of canalized items by canalizing agencies) therefore also does not correspond to actual imports.

Table T.A. 4.3

INDIA: Averages and Distribution of Customs Tariff Rates (%) 1986 (6 digit BTN positions)

	<u>For the whole Economy</u> <u>(all BTN positions)</u>		<u>For manufacturing sectors</u>	
	<u>Without exemptions</u>	<u>With quantifiable exemptions</u>	<u>Without exemptions</u>	<u>With quantifiable exemptions</u>
Minimum	0	0	0	0
Maximum	340	340	340	340
Mean	137.6	123.6	137.1	121.7
Standard Deviation	52.4	48.4	53.1	46.6
No. of BTN positions	5010	5012	3414	3416
Frequency Distributions				
0 -20	.9	2.13	.67	1.87
20-40	.9	2.35	1.23	3.02
40-60	.6	1.30	.64	0.97
60-80	9.06	11.53	10.60	12.62
80-100	15.65	20.21	13.62	18.71
100-120	1.36	6.23	1.79	8.78
120-140	59.32	47.39	59.20	45.37
140-160	.82	1.22	1.08	1.49
160-180	.00	0.38	.00	0.56
180-200	2.85	2.15	3.78	2.66
>200	<u>8.54</u>	<u>5.11</u>	<u>7.38</u>	<u>3.95</u>
	100.00	100.00	100.00	100.00

Source: World Bank SINTIAL File.

Notes: "Average Customs Rates" are the sum of the ad valorem basic and auxiliary duties and do not include countervailing (additional) duties. They also do not include the (quite few) specific duties. Only about 30-40% of exemptions could be quantified i.e. associated with reduced tariff rates for particular BTN positions.

Table T.A. 4.4

INDIA: Average Customs Tariff Rates in 1986

	No. of observa-	<u>Without exemptions</u>		<u>With quantifiable exemptions</u>	
		Un- weighted	Weighted by imports	Un- weighted	Weighted by imports
Whole Economy	5,011	137.6	132.5	123.6	88.7
Agriculture	270	130.5	64.5	105.8	52.7
Mining	81	132.3	74.1	126.4	26.7
Manufacturing	3,415	137.1	144.8	121.7	99.3
Intermediate goods	1,168	151.3	n.a.	123.1	n.a.
Capital Goods	1,213	124.9	n.a.	114.5	n.a.
Consumer Goods	1,034	135.4	n.a.	128.5	n.a.

Sources: World Bank SINTIAL File.

Notes: Import weights are 1983/84 imports. The unweighted averages for agriculture and mining do not include all the relevant BTN positions. Hence the sum of the number of observations in agriculture, mining and manufacturing is less than the number of observations for the whole economy.

Table T.A. 4.5

INDIA: Imports and Customs Collections, 1984/85

	Imports Rs billion	Share of total imports %	Duty collections as percentage of imports
POL	54.1	31.6	6.5
Edible Oils	9.2	5.4	8.0
Fertilizers	13.5	7.9	0.1
Precious Stones	10.3	6.0	-
All Other	<u>84.2</u>	<u>49.1</u>	<u>78.9</u>
<u>Total</u>	<u>171.3</u>	<u>100.0</u>	<u>41.3</u>

Note: Data on import duty collections on precious stones is not available. On the assumption that the bulk of imports were duty-free for export processing, the average rate has been taken as zero, even though it is possible that some imports for domestic use may have been subject to duties.

Table T.A. 4.6

INDIA: CROSS COUNTRY COMPARISONS OF IMPORT DUTY COLLECTION RATES

<u>Country</u>	<u>Year</u>	<u>Import duties as % of total value of imports</u>	<u>Percentage of imports in GDP</u>	<u>Import duties as percentage of GDP</u>
Argentina	1982	13.8	7.2	1.0
Bangladesh	1980	15.0	20.3	3.0
China (PRC)	1984	n.a.	13.2	n.a.
Hungary	1984	7.0	n.a.	n.a.
India	1984/85	41.3	8.0	3.3
Mexico	1984	6.8	6.8	0.3
Morocco	1983	16.6	27.0	4.5
Thailand	1984	12.5	24.7	3.1
Turkey	1983	7.0	18.5	1.3
Yugoslavia	1981	10.9	n.a.	n.a.

Sources: India: Economic Survey and GOI Budget, Explanatory Memorandum. Duties collected include countervailing duties. Other Countries: Government Finance Statistics Yearbook 1985 (IMF) and International Financial Statistics Yearbook 1985 (IMF).

Table T.A. 4.7
Example of Combined Effects of Customs Duties and Indirect Taxes
on User and Producer Nominal Protection

Price structure of imported product (Rs/kg)		!	Price structure of import competing manufacturer (Rs/kg)		
			Without MODVAT	With MODVAT	
c.i.f. price	100	!	Ex-factory price	233.9	232.8
Basic import duty 100% of c.i.f.	100	!	Excise duty (20% of ex-factory price)	<u>46.8</u>	<u>46.6</u>
Auxiliary duty 40% of c.i.f.	<u>40</u>	!	Price incl. excise duty	<u>280.70</u>	<u>279.4</u>
Duty paid price	240	!	Sales tax (4%)	11.2	11.1
Countervailing duty (20% of 240)	<u>48</u>	!	Selling price including taxes	<u>292.0</u>	<u>290.5</u>
Unloading & customs clearance	4	!	Octroi (2%)	5.8	5.9
Landed duty-paid (l.d.p. price)	292	!	Price incl. octroi to user factory	<u>297.8</u>	<u>296.4</u>
Octroi (2% of l.d.p. price)	5.8				
Price (incl. octroi) to user factory	<u>297.8</u>				

User nominal protection without MODVAT = $\frac{\text{Price (incl. octroi) to user factory}}{\text{Price without import duties \& indirect taxes}}$

$\frac{297.8}{297.8} = 2.86$

= 104

User nominal protection with MODVAT = $\frac{\text{Price (incl. octroi) minus MODVAT offset}}{\text{Price without import duties \& indirect taxes (l.d.f. price)}}$

$\frac{297.8 - 48}{104} = \frac{249.8}{104} = 2.40$

Producer nominal protection without MODVAT = $\frac{\text{Ex-factory price}}{\text{Landed duty free (l.d.f.) price.}}$

$\frac{233.9}{104} = 2.25$

= 104

Producer nominal protection with MODVAT = $\frac{\text{Ex-factory price}}{\text{l.d.f. price}}$

$\frac{233.02}{104} = 2.24$

= 104

Notes: This example is an intermediate raw material which is both imported and produced by Indian firms. To simplify, transport costs from the port to user's factory, and from the Indian manufacturers to the user's factory are assumed to be low and the same, and have been ignored. Nominal protection is shown as a nominal protection coefficient (NPC). The user NPC of 2.86 means that the buyer of the raw material is paying 186% more than he would have to pay in the absence of customs duties, countervailing duty and octroi. Similarly, the producer NPC of 2.25 means that, to be competitive with imports, the maximum ex-factory price which can be charged by competing Indian manufacturers is 125 in excess of the maximum price they could charge in the absence of import duties and indirect taxes.

Producer nominal protection with MODVAT is calculated by equating the net cost of the import to the user factory (its buying price minus the excise offset) to the price charged by the local factory minus excise offset. This is obtained by solving the following equation for Pf :

$$Pf - \frac{Pf(e)}{(1+o)(1+s)(1+e)} = P^*m - M^*m$$

Here Pf is the selling price of the user factory, o is the octroi tax rate, s is the sales tax rate, e is the excise tax rate, P*m is the given import price to the user factory, and M*m is the excise offset on the import.

Table T.A. 4.8

Approximate Nominal and Effective Protection of Manufacturing Industries

	% of Fixed/C		Wage/No of Pers. Rs 000	000 KWH/ Gross VA	% Share Fixed Cap.	% Share Persons Gross Va	% Share Gross Va	% VA/ Out- put	Nom. In- puts	Prot. Out- puts	Effec. Prot.	ASI Sectors
	VA	Rs 000										
Food Processing	7.4	11.4	4.65	1180.0	5.9	5.9	7.4	25.0	L	L	L	200-219, ex 205, 210, 211, 215
Edible Oils & Fats	1.7	15.3	5.88	1226.3	0.5	0.5	1.7	17.8	M	H	H	210, 211
Beverages	0.6	27.4	8.88	578.6	0.5	0.5	0.6	45.2	L	L	L	220-224
Tobacco Products	1.5	0.9	4.39	90.1	0.2	0.2	1.5	42.6	L	L	L	225-229
Cotton Textiles	7.9	14.6	9.96	2131.9	6.9	6.9	7.9	39.1	L	L	L	230-239
Wool Textiles	0.6	19.2	9.93	927.4	0.5	0.5	0.6	42.8	L	L	L	240-244
Silk Textiles	0.1	8.0	6.11	803.5	0.0	0.0	0.1	39.5	L	L	L	245-246
Synthetic Textiles	3.6	40.1	11.89	1364.9	3.5	3.5	3.6	41.8	H	H	L	247-249
Jute, hemp & mesh Textiles	1.2	4.9	9.78	1720.6	0.6	0.6	1.2	47.5	L	L	L	250-259
Garments /1	1.1	8.6	6.61	171.6	0.3	0.3	1.1	44.1	L	L	L	260, 264, 265
Other Textile Products	0.5	15.0	9.07	430.4	0.2	0.2	0.5	40.8	L	L	L	261-263, 266-269
Wood Products	0.5	9.2	5.48	749.6	0.3	0.3	0.5	39.4	M	M	L	270-279
Pulp & Newsprint	1.8	79.3	11.03	4068.2	4.3	4.3	1.8	50.1	M	H	H	280
Paper Products	0.2	18.9	8.80	699.2	0.2	0.2	0.2	29.6	H	H	L	281-283
Leather & Fur Products /2	0.6	15.6	8.82	532.5	0.4	0.4	0.6	29.1	L	L	L	290-299
Tires & Tubes	1.3	54.4	19.48	1046.0	1.0	1.0	1.3	32.1	H	H	H	300
Rubber Footwear	0.1	13.6	7.37	1653.1	0.1	0.1	0.1	29.2	H	H	L	301
Other Rubber Products	0.4	14.9	9.74	961.3	0.2	0.2	0.4	34.5	H	H	M	302
Plastic Products	0.7	28.4	8.81	1055.3	0.6	0.6	0.7	35.5	H	M	L	303
Petroleum Products /3	2.4	194.6	17.64	812.4	3.7	3.7	2.4	9.8	L	M	H	304-305
Coal Products /4	0.6	41.1	14.48	1464.9	0.5	0.5	0.6	24.9	L	M	H	306-307
Basic Chemicals /5	3.3	117.0	20.18	3201.3	4.0	4.0	3.3	57.5	H	H	H	310
Fertilizers & Pesticides	5.4	256.0	20.60	1880.0	8.5	8.5	5.4	48.7	L	H	H	311
Paints, Varnishes & Laquer	1.1	46.4	21.55	887.8	0.7	0.7	1.1	43.0	H	H	M	312
Drugs & Medicines	2.8	33.8	20.76	793.7	1.7	1.7	2.8	44.7	H	H	M	313
Perfumes, Cosmetics, Soaps	1.0	35.4	14.76	370.1	0.7	0.7	1.0	29.2	H	H	M	314
Syn. Resins, Fibers & Plastics	1.2	83.5	20.67	2205.4	1.4	1.4	1.2	41.8	H	H	H	316
Other Chemical Products	1.7	19.6	7.31	793.5	1.1	1.1	1.7	30.5	H	H	H	315, 317-319
Glass & Glass Products	0.7	16.0	7.27	1409.6	0.5	0.5	0.7	62.7	L	L	L	321
Cement, Lime & Plaster /6	2.8	107.2	15.18	3186.2	3.1	3.1	2.8	66.1	L	L	L	324
Other Non-metallic products	2.2	13.1	7.06	989.4	1.7	1.7	2.2	53.4	L	L	L	320, 322, 323, 325-329
Iron & Steel /7	13.1	151.1	19.80	1636.3	21.7	21.7	13.1	56.0	L	M	H	330
Iron & Steel Foundaries	3.2	27.2	11.79	1264.2	2.8	2.8	3.2	37.3	M	M	L	331
Ferro Alloys	0.3	108.5	12.84	13882.2	0.4	0.4	0.3	60.1	M	H	H	332
Non-Ferrous metals /8	1.7	93.7	16.59	5817.5	2.3	2.3	1.7	42.9	L	H	H	333-339
Metal Products	2.3	15.1	9.97	591.1	1.3	1.3	2.3	41.6	H	M	L	340-347
Non-electrical Machinery	7.5	25.2	14.52	495.8	5.0	5.0	7.5	45.6	H	M	L	350-359

Table T.A. 4.8 (contd.)

	% of Fixed/ Gross VA	Fixed Person Rs 000	Wage/No of Pers. Rs 000	000 KWH/ Gross VA	% Share Fixed Cap.	% Share Persons	% Share Gross Va	% VA/ Out- put	Non. In- Out- puts	Prot. puts	Effec. Prot.	ASI Sectors
Elec.Industrial Machinery	3.0	34.1	20.00	366.8	2.0	2.0	3.0	46.1	H	M	L	360
Insulated wires & cables	0.9	44.7	16.95	773.6	0.7	0.7	0.9	30.3	H	H	H	361
Dry & Wet Batteries	0.4	25.1	18.59	653.1	0.2	0.2	0.4	37.2	H	H	M	362
Elect. apparatus & appl.	0.7	17.1	12.83	643.3	0.4	0.4	0.7	39.3	H	H	H	363
Radio & TV	1.1	25.5	16.17	285.1	0.8	0.8	1.1	47.1	M	H	H	364
Computers etc.	0.5	23.2	19.70	249.8	0.2	0.2	0.5	56.7	M	H	H	366
Other elect/electronic prod	0.3	24.4	12.44	507.8	0.2	0.2	0.3	47.7	M	H	H	365,367,369
Ship building/repairing	0.7	48.0	18.53	301.2	1.1	1.1	0.7	53.0	H	H	H	370
Railways equipment	1.5	29.3	14.17	686.3	2.7	2.7	1.5	53.9	H	M	L	371-373
Motor vehicles & parts /9	4.0	37.1	19.50	627.4	3.1	3.1	4.0	42.1	H	M	L	374
Motorcycles, Scooters & parts	0.4	26.2	13.63	645.1	0.3	0.3	0.4	39.7	H	M	L	375
Bicycles, rickshaw & parts	0.3	11.0	9.06	862.4	0.2	0.2	0.3	33.1	H	L	L	376
Aircraft & parts	0.2	89.7	28.50	923.2	0.3	0.3	0.2	43.8	H	H	H	377
Other transport equipment	0.1	22.3	9.83	427.8	0.1	0.1	0.1	45.4	?	?	?	378-379
Medical, Surgical Equip.	0.3	16.3	13.56	415.0	0.2	0.2	0.3	50.7	H	H	H	380
Photographic & optical eqp	0.0	11.0	8.63	186.2	0.0	0.0	0.0	38.3	H	H	H	381
Watches & Clocks	0.2	34.8	13.30	234.5	0.2	0.2	0.2	53.9	H	H	L	382
Jewelry	0.1	15.2	8.48	414.6	0.0	0.0	0.1	40.4	L	L	L	383
Minting of Coins	0.0	14.2	16.14	874.5	0.0	0.0	0.0	50.0	?	?	?	384
Sporting Goods	0.0	10.1	8.86	176.3	0.0	0.0	0.0	52.1	H	M	L	385
Musical Instruments /10	0.0	19.3	24.64	441.9	0.0	0.0	0.0	66.1	L	L	L	386
Miscellaneous	0.2	13.3	7.91	436.1	0.1	0.1	0.2	39.4	?	?	?	387,389
Totals:	100.0	32.1	0.11	1420.8	100.0	100.0	100.0	38.1				

- /1 Nominal protection for synthetic garments is high, but effective protection low
- /2 Mainly leather tanning and leather footwear
- /3 Petroleum refineries and petroleum products, n.e.c.
- /4 Coal tar etc.
- /5 Organic and inorganic
- /6 Includes mini-cement plants for which protection is higher
- /7 Includes mini-steel industry for which protection is higher than for integrated steel producers
- /8 Principally aluminum, copper and zinc
- /9 Averages dominated by trucks and buses: Effective protection for cars is higher
- /10 Mainly traditional instruments

Table T.A. 4.9
INDIA: Selected Synthetic Fibers and Yarns:
Comparative Plant Sizes and Protection

Product	Average Plant Size (1000 t.p.a.) (No. of Plants in Brackets)			Effective Protection in India November/December 1985	
	Korea	Taiwan	India	Realized (price comparisons)	Available from tariffs
Nylon Filament Yarn	33.8 (6)	12.7 (12)	3.1 (11)	59	163
Polyester Staple Fiber	35.7 (5)	36.0 (8)	7.6 (5)	256	323
Polyester Filament Yarn	18.2 (11)	18.9 (15)	3.8 (10)	121-373	312-378
Acrylic Staple Fiber	140.5 (2)	39.7 (3)	10.0 (2)	259	299

Table T.A. 4.10
INDIA: Fiber Intermediate Production
Time/Size Comparison

	<u>India</u>	<u>Korea</u>	<u>Taiwan</u>	<u>Estimated</u> <u>MES</u>	<u>Nominal Protection</u> <u>in India (%)</u>	
					<u>Used</u>	<u>Available</u>
<u>Caprolactum</u>						
Ist Installed	1974	1974	1975			
No. of Producers	1	1	1		65	90
Avg. Capacity/Producer (1980) MT/Yr.	20	40	100	50		
<u>DMT/TPA</u>						
Ist Installed DMT	1973	-	1974		167	190
TPA	-	1980	1974			
No. of Producers DMT	1	-	1			
TPA	-	1	1		156	191
Avg. Capacity/DMT Producer	24	-	53	(70		
TPA	-	130	180	(
(1980) MT/Yr.						
<u>Ethylene Glycol</u>						
Ist Installed	1979	1979	1975			
No. of Producers	2	1	2		216	110
Avg. Capacity/Producer (1980) MT/Yr.	15	80	89	68		
<u>Acrylonitrile</u>						
Ist Installed	1979	Before 1973	1976			
No. of Producers	1	1	1		84	98
Avg. Capacity/Producer (1980) MT/Yr.	24	83	132	50		

Sources and Notes: Korea, Taiwan and estimated MES: World Bank (Synthetic Fiber Report 1983). India: Plant Sizes
 Nominal Protection: Estimates for Nov./Dec. 1985.

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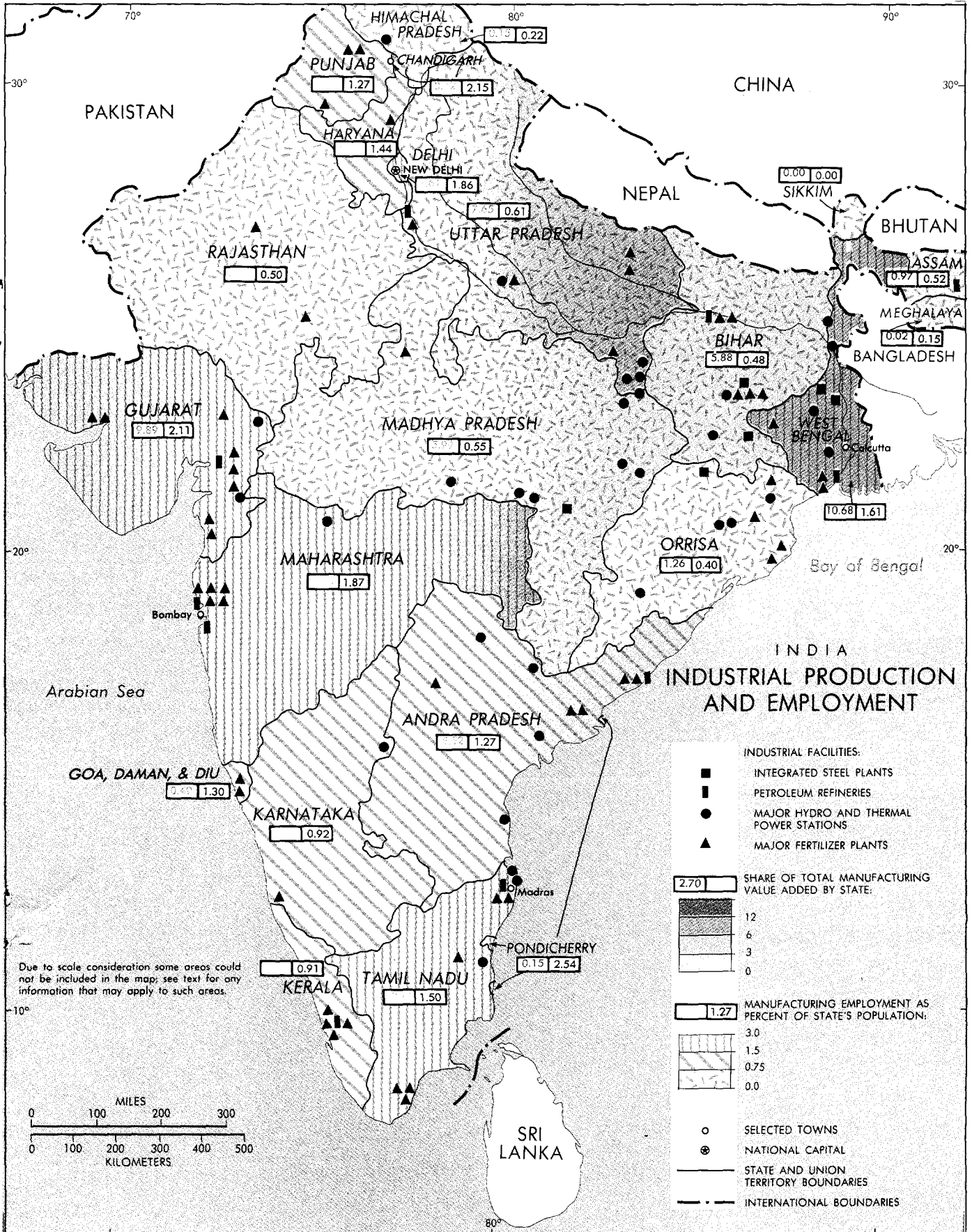
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