7

INDUSTRIAL POLICY AND DEVELOPMENT

Indian Industry is passing through a critical phase of transition and restructuring. After responding to economic reforms with vigour and registering a robust growth rate of 11.7 per cent in 1995-96, industry recorded a growth rate of only 9.8 per cent in April-October 1996 compared with 11.7 per cent in April-October 1995. However, this slowdown cannot be regarded as an onset of a recession, and the industrial growth rate at 9.8 per cent in April-October 1996 is favourable compared with the industrial growth rate of 4.4 per cent in April-October 1993 and 9.6 per cent in April-October 1994 (Table 7.1). The graph in figure 7.2 also indicates that the successive peaks of the Index of Industrial Production (IIP) maintain an increasing trend and the valleys are getting shallower over time.

TABLE 7.1

Annual Growth Rates in Major Sectors of Industry

(per cent)

Period (Weights)	Mining (11.46)	Manufacturing (77.11)	Electricity (11.43)	General (100)
1981-82	17.7	7.9	10.2	9.3
1982-83	12.4	1.4	5.7	3.2
1983-84	11.7	5.7	7.6	6.7
1984-85	8.9	8.0	12.0	8.6
1985-86	4.1	9.7	8.5	8.7
1986-87	6.2	9.3	10.3	9.1
1987-88	3.8	7.9	7.7	7.3
1988-89	7.9	8.7	9.5	8.7
1989-90	6.3	8.6	10.8	8.6
1990-91	4.5	9.0	7.8	8.2
1991-92	0.6	-0.8	8.5	0.6
1992-93	0.5	2.2	5.0	2.3
1993-94	3.5	6.1	7.4	6.0
1994-95	7.5	9.8	8.5	9.4
1995-96	7.1	13.0	8.2	11.7
April-Oct.				
1993-94	3.4	3.9	7.6	4.4
1994-95	7.2	10.3	7.7	9.6
1995-96	9.8	12.3	10.1	11.7
1996-97	1.7	12.1	3.4	9.8

2. The slowdown of industrial growth in the current year is mainly due to the poor performance of electricity generation and mining (especially crude oil). The manufacturing sector, which contributes 77.1 per cent to industrial production, registered a growth rate of 12.1 per cent in April-October 1996, almost the same as 12.3 per cent in April-October 1995. The relative slowdown of growth in industrial production is neither generalised nor widespread. Within the broad groups of manufacturing sector, food products, transport equipment, electrical machinery, beverages and tobacco, paper and paper products and basic metals and alloys have performed well registering a growth rate of over 10 per cent. As per use-based classification, the slowdown is essentially confined to the basic goods, while all other sub-sectors viz. capital goods, intermediate goods and consumer goods have performed well in April-October1996.

3. Box 7.1 indicates the reasons as to why the slowdown in certain sectors can not be interpreted as the onset of an industrial recession.

Industrial Policy Reforms

4. Since July 1991, Indian industry has undergone a sea-change in terms of the basic parameters governing its structure and functioning. The major reforms include wide-scale reduction in the scope of industrial licensing, simplification of procedural rules and regulations, reduction of areas reserved exclusively for the public sector, disinvestment of equity of selected public sector undertakings, enhancing the limits of foreign equity participation in domestic industrial undertakings, liberalisation of trade and exchange rate policies, rationalisation and reduction of customs and excise duties and personal and corporate income-tax, extension of the scope

BOX 7.1

Slowdown of industrial growth rates in some sectors is not indicative of an Industrial Recession.

- Cyclical fluctuations of industrial output and profits are part of normal business cycles and dynamism of the development process, and the temporary slow down of growth rates in some industries cannot be regarded as an onset of a general industrial recession.
- The graph of the Index of Industrial Production (IIP) given in Figure 7.2 indicate that the peaks of industrial output have an increasing trend with valleys getting shallower.
- Industrial growth rate at 9.8 per cent in April-October 1996 is favourable compared with the growth rate of 4.4 per cent in April-October 1993 and 9.6 per cent in April-October 1994. In fact, except for 1995-96, annual industrial growth had never exceeded 9.8 per cent since 1980-81 (Table 7.1).
- The manufacturing sector which contributes 77.1 per cent to industrial production registered a growth rate of 12.1 per cent in April-October 1996, almost the same as 12.3 per cent recorded in April-October 1995.
- Relative slowdown of industrial growth is neither general nor widespread, and is primarily due to the poor performance of crude oil and electricity in April-October, 1996.
- Growth rates are generally well spread out within the manufacturing sectors during April-October 1996.
- Capital goods, consumption goods and intermediate goods recorded growth rates of 16.6 per cent, 8.2 per cent and 10.8 per cent respectively during April-October 1996.
- The emerging pattern and composition of industrial growth can set in motion mutually reinforcing growth impulses for a broad-based and sustainable industrial recovery.

of MODVAT etc. Separate policy measures have been announced in the form of specific packages aimed at upliftment of the small scale, tiny and cottage industries as well as 100 per cent EOU's (Export Oriented Units) and units located in the EPZs (Export Processing Zone) and Technology Parks. Box 7.2 summarises the major industrial policy changes done during 1996-97 and Box 7.3 summarises the extent of permissible foreign equity under the liberalised foreign investment regime.

5. During 1996-97 government liberalised further the policies for foreign direct investment (FDI). Until December 1996 only 35 industries as mentioned in the Annexure III of the New Industrial Policy Statement of July 1991 were eligible for automatic approval of FDI up to 51 per cent of total equity. In December 1996 government allowed automatic approval of FDI up to 74 per cent by the Reserve Bank of India in nine categories of industries, including electricity generation and transmission, non-conventional energy generation and distribution, construction and maintenance of roads, bridges, ports, harbours, runways, waterways, tunnels, pipelines, industrial and power plants, pipeline transport except for POL and gas, water transport, cold storage and warehousing for agricultural products, mining services except for gold, silver and precious stones and exploration and production of POL and gas, manufacture of iron ore pellets, pig iron, semi-finished iron and steel and manufacture of navigational, meteorological, geophysical, oceanographic, hydrological and ultrasonic sounding instruments and items based on solar energy.

6. The list of items for automatic approvals of foreign equity by the RBI has been expanded by including three industries relating to mining activity for foreign equity up to 50 per cent and 13 additional industries for foreign equity up to 51 per cent. These 13 industries include a wide range of industrial activities in the capital goods and metallurgical industries, entertainment electronics, food processing, and the services sectors having significant export potential. These industries specifically include manufacture of food products like dairy products, canning and preservation of fruits and vegetables, grain milling, salt, cocoa products and sugar confectionery etc.; cotton spinning, weaving and processing in integrated mills; wool, silk and man-made fibre textiles; paints and varnishes; coke oven products; fabricated metal products; refrigerators, air-conditioners, fire fighting appliances, primary batteries and cells; support services to land transport like operation of highway bridges, toll roads and tunnels; support services to water transport; cargo handling for land, water and air transport; renting and leasing of transport, computer and industrial equipment without operators; technical testing, research and development services, and health and medical services.

7. The government also announced in January 1997 the first ever guidelines for foreign direct investment (FDI) for expeditious approval of foreign investment in areas not covered under automatic approval. Priority areas for FDI proposals as mentioned in the guidelines include infrastructure,

Figure 7.1

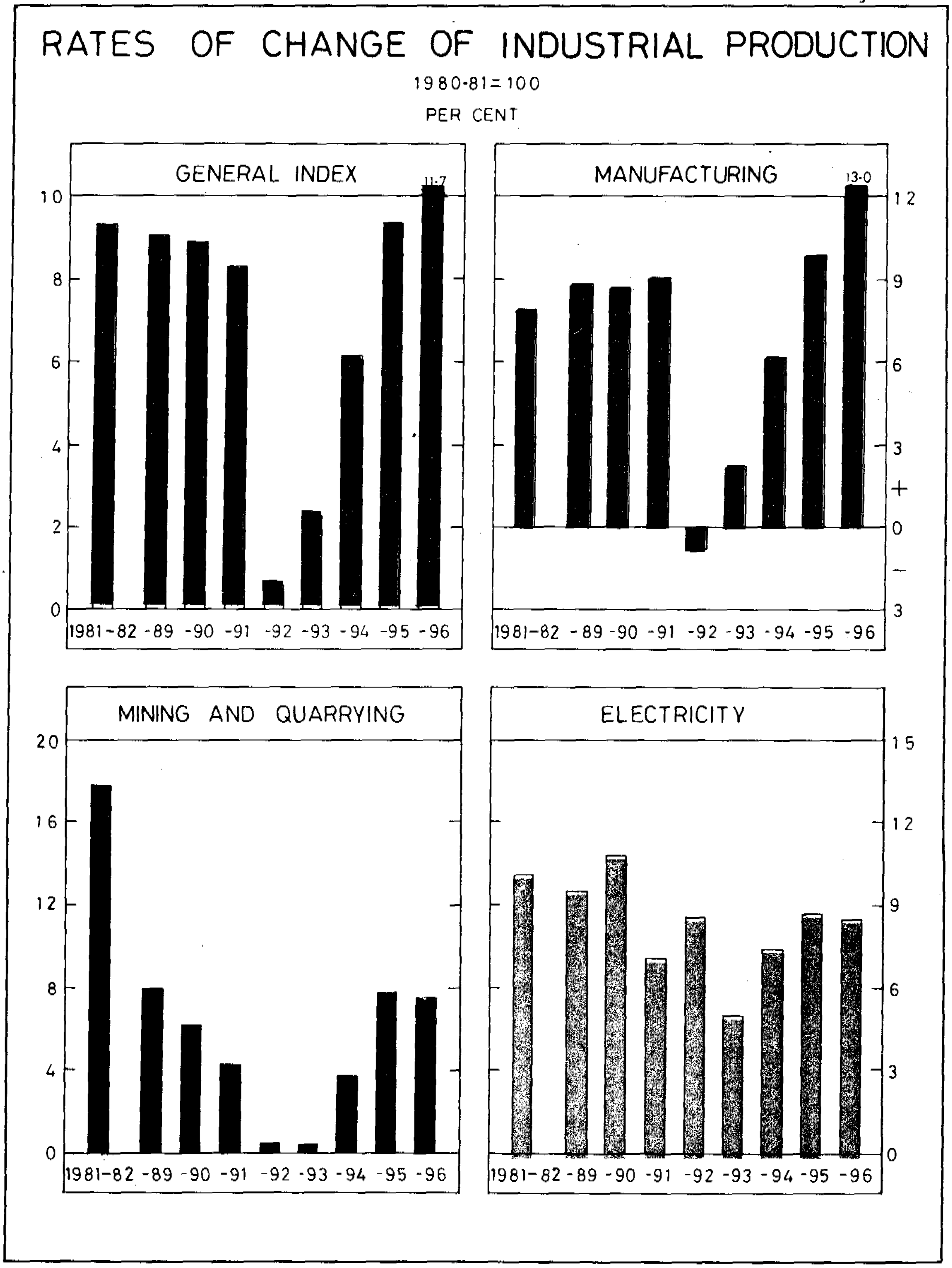
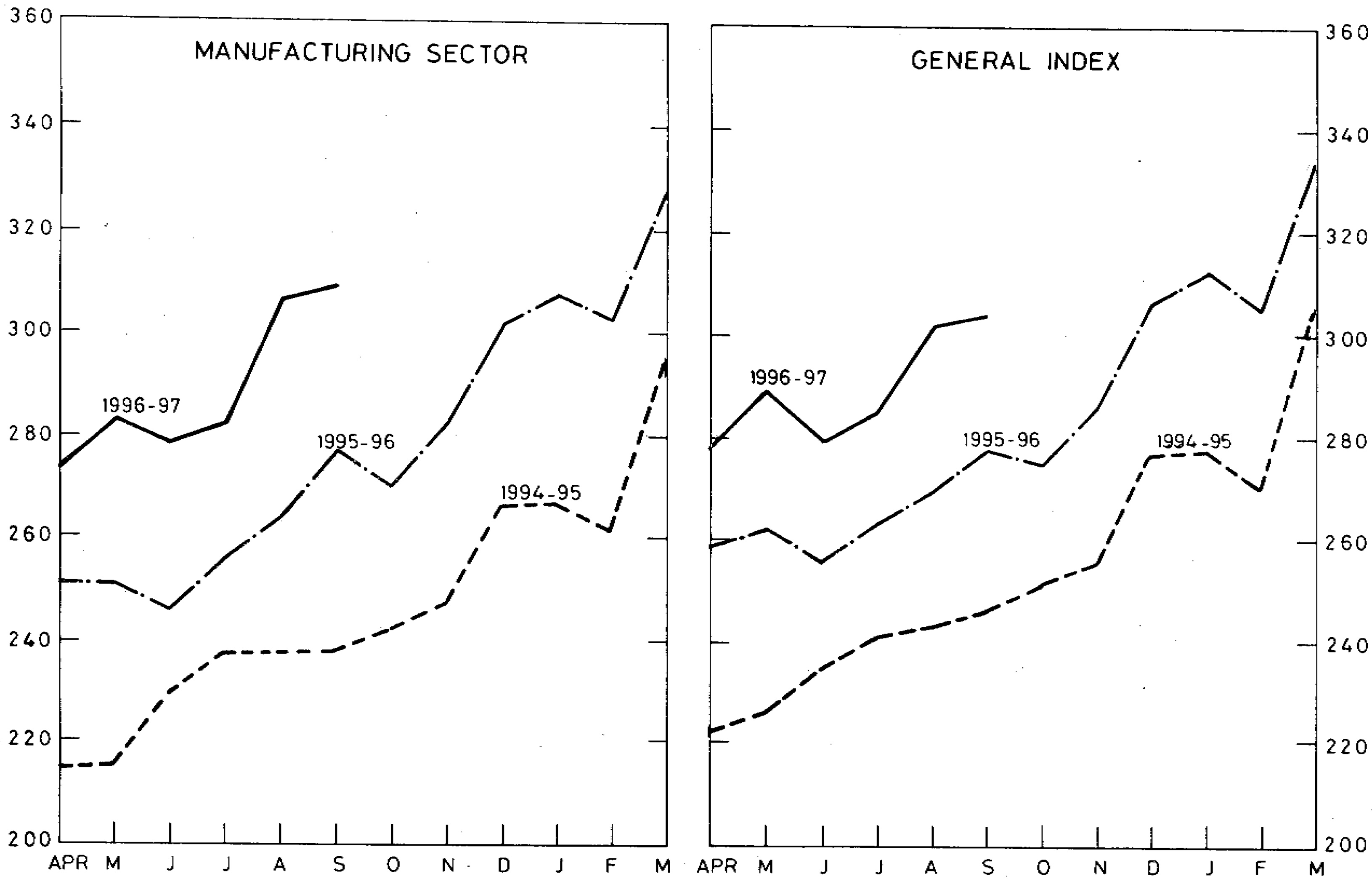

RATES OF CHANGE OF INDUSTRIAL PRODUCTION
1980-81=100
PER CENT
GENERAL INDEX
11·7
MANUFACTURING
13·0
MINING AND QUARRYING
ELECTRICITY
1981-82 -89 -90 -91 -92 -93 -94 -95 -96

Figure 7.2

MONTHLY INDICES OF INDUSTRIAL PRODUCTION

1980-81 = 100



BOX 7.2
Reforms and Policies for Industrial Development during 1996-97

General Measures

- With delicensing of consumer electronics, at present only 14 industries remain under the purview of industrial licensing
- Investment ceilings in plant and machinery for small scale industries (SSI) have been enhanced from Rs 60 lakh and Rs 75 lakh to Rs 3 crore and that for tiny sector has been raised from Rs. 5 lakh to Rs 25 lakh
- Export obligation on non-SSI units manufacturing reserved items has been reduced from 75 per cent to 50 per cent.
- Prices and distribution of D grade of non-coking coal, soft and hard coke have been deregulated with effect from February 11, 1997, and the Coal Mines (Nationalisation) Act, 1973 will be amended to allow any Indian company to mine coal and lignite without any restrictions
- Disinvestment Commission has been set up for identifying PSEs (Public Sector Enterprises) for equity disinvestment as well as for working out the modalities of disinvestment.
- Foreign Investment Promotion Council(FIPC) has been constituted to prepare project reports in selected thrust areas and thereby to facilitate the flow of foreign investment in the country
- Foreign Investment Promotion Board(FIPB) has been revamped for making rules and regulations pertaining to foreign investment more transparent
- First-ever guidelines for approving FDI by the FIPB have been announced to expedite approval of foreign investment in areas not covered under automatic approval, and priority areas for allowing 100 per cent foreign equity have been spelt out
- It is no longer necessary for automatic approvals by RBI that the amount of foreign equity should cover the foreign exchange requirements for import of capital goods needed for the project
- Licensing procedures for sugar industry have been liberalised and incentives schemes for new and expansion units have been reintroduced
- An expanded list of 48 industries eligible for automatic approval upto 51 per cent foreign equity, 3 industries relating to mining activity eligible for automatic approval upto 50 per cent foreign equity and another set of 9 industries eligible for 74 per cent foreign equity have been announced by the Government
- Foreign Institutional Investors (FIIs) have been allowed to make equity investments in unlisted companies and the limit of investment of 5 per cent of total equities in a single company by an individual FII has been raised to 10 per cent
- The guidelines for Euro Issues and External Commercial Borrowing (ECB) have been liberalised to ease the access of Indian companies to international capital markets
- The Government has decided to set up a Tariff Commission which will advise Government on appropriate levels of tariffs, tariff-related disputes and non-tariff measures.

Monetary measures

- In order to augment the flow of credit to industry and other sectors, the Cash Reserve Ratio (CRR) has been reduced in phases from 13 per cent in June 1996 to 10 per cent in January 1997.
- Prime Lending Rate(PLR) applicable on bank credits above Rs 2 lakh has been reduced, and banks have announced their maximum spreads over PLR for all advances other than consumer credit
- Interest rates on term deposits of short term duration have been reduced to a maximum of 10 per cent from the prevailing level of 11 per cent

Fiscal measures

- Five Year Tax Holiday available for companies devoted to maintenance, development and operation of roads, bridges, ports and other core infrastructure services has been extended to water supply, sanitation and sewerage Since January 1997, telecom projects have also been covered under tax holiday scheme
- Introduction of Minimum Alternate Tax(MAT) on the corporate sector with the exception of companies engaged in power and infrastructure sectors
- Reduction of rate of surcharge on corporation tax on domestic companies from 15 to 7.5 per cent
- Customs duty reduced on several imports including crude oil, basic petrochemical intermediates, chemicals, plastics, natural rubber, ferrous and non-ferrous metals, components and raw materials for the electronics sector etc
- Extension of the scope of MODVAT to the textile sector

BOX 7 3

Extent of permissible foreign equity by NRIs/OCBs/PIOs/FIs/FIIs

Areas of Investment	NRIs/OCBs/PIOs	FIs/FIIs
1 a) 35 priority industries announced in July 1991	100% equity, repatriable, automatic approval by RBI	51% equity, repatriable, automatic approval by RBI
b) 9 High priority industries in metallurgical and infrastructure sector announced in Dec 1996	74% equity, repatriable, automatic approval by RBI	74% equity, repatriable, automatic approval by RBI
c) 13 priority industries announced in Dec 1996	51% equity, repatriable, automatic approval by RBI	51% equity, repatriable, automatic approval by RBI
d) Export/Trading/Star trading house	Investment upto 100%	51% equity, repatriable, automatic approval by RBI
2 100% EOUs and units in FTZ and EPZ, Software and Hardware Technology Parks	100% equity, automatic approval by SIA/DC (EPZ)	100% equity, repatriable, automatic approval by SIA/DC (EPZ)
3 Sick industries	100% private placement prior approval by RBI	
4 Mining	50% automatic approval by SIA/FIPB	50% Automatic approval by SIA/FIPB
5 Telecommunications	upto 49% with approval in basic, cellular mobile and paging, VSAT and other wireless services and upto 51% with approval in other value added services (not to be offset against the FDI in the investment company with Indian ownership)	upto 49% with approval in basic, cellular mobile and paging, VSAT and other wireless services and upto 51% with approval in other value added services. (not to be offset against the FDI in the investment company with Indian ownership)
6 Entertainment electronics	51% equity automatic approval	51% equity automatic approval
7 Power	upto 100% with approval	100% equity, with approval
8 Medical clinics, hospitals, shipping, oil exploration, deep-sea fishing, Ind with licenses	upto 100% equity, repatriable, prior approval by SIA	upto 51% equity, case by case approval by SIA
9 Industries reserved for SSI	upto 24%, repatriable prior approval by SIA, export obligations	upto 24% equity prior SIA approval, export obligations
10 Housing, real estate, business centres, infrastructural facilities.	100% equity on repatriation basis, automatic approval	No foreign investment is allowed except for company property
11 Domestic air taxi operations	upto 100% with approval	upto 40% with approval
12 Banking services	upto 40% with approval	upto 20% with approval
13 Non-banking Financial Companies (NBFCs)	upto 51% with no conditions, upto 100% with conditions	upto 51% with no conditions, upto 100% with conditions
14. a) Disinvested shares of PSE's b) Units in UTI c) Public sector mutual funds d) Private sector mutual funds	NRIs/OCBs are permitted to invest on these shares/units/funds on a repatriable basis through both primary and secondary markets	Only FIIs are permitted to invest on these shares/units/funds on a repatriable basis through both primary and secondary markets FIIs are also allowed to invest on dated govt. securities under certain conditions
15 Portfolio Investment (inv in shares & debentures)	Individual ceiling 1%, collective ceiling 5%, relaxable to 24% by General Body Resolution only in listed company stock share Permitted to invest in unlisted companies	Only FIIs are permitted to invest subject to individual ceiling of 10% and collective ceiling of 24% in both listed and unlisted companies 100% investment in debt securities of companies by registered FII Debt Funds also allowed

NRIs= Non-resident Indians, OCBs= Overseas Corporate Bodies, FIIs= Foreign Institutional Investors
PIOs= Persons of Indian origin, FIs= Foreign Investors, SIA= Secretariat for Industrial approvals
EOU=Export Oriented Unit, EPZ=Export Processing Zone, FTZ=Free Trade Zone

export potential, large scale employment potential particularly for rural areas, items with linkages with the farm sector, social sector projects like hospitals, health care and medicines, and proposals that lead to induction of technology and infusion of capital. FDI approvals will, however, be subjected to sectoral caps; 20 per cent (40 per cent for NRIs) in the banking sector; 51 per cent in non-banking financial companies without any special conditions (100 per cent with specified minimum levels of foreign invesment); 100 per cent in power, roads, ports, tourism and venture capital funds; 49 per cent (not to be offset against the FDI in an investment/ holding company where there is cap of 49 per cent) in telecommunications (basic, cellular mobile and paging services); 40 per cent (100 per cent for NRIs) in domestic air-taxi operations/ airlines; 24 per cent in small scale industries; 51 per cent in drugs/ pharma industry for bulk drugs; 100 per cent in petroleum; and 50 per cent in mining except for gold, silver, diamonds and precious stones.

8. The FIPB will allow 100 per cent foreign equity in those cases where the foreign company has expressed inability to find a suitable Indian joint venture partner, subject to the condition that the foreign investor will divest at least 26 per cent of its equity in favour of Indian parties within three to five years.

9. The new guidelines also allow foreign companies to set up 100 per cent companies on the basis of the following criteria: (a) where only holding operation is involved and all downstream investments to be carried out need prior approval; (b) where proprietary technology is sought to be protected or sophisticated technology is proposed to be brought in; (c) where at least 50 per cent of production is exported; (d) consultancy proposals; and (e) projects in power, roads, ports and industrial towns and estates. The FIPB will also allow proposals for 100 per cent trading firms for exports, bulk imports, cash-and-carry wholesale trading and other import of goods and services provided at least 75 per cent is for procurement and sale of goods and services among group firms.

10. Industrial reforms have been to a large extent aided and supported by the liberal investment policies undertaken by the State Governments. The States have been encouraging private investment for development of basic infrastructure and management of industrial houses by awarding various fiscal concessions and other facilities. The incentive package generally includes an investment subsidy, exemption from payment of excise duty by new undertakings, tax concessions to units in small scale and tiny sectors, supply of industrial land under easy conditions, waivers or concessional rates for electricity duty, subsidies on purchase of machinery and other fixed assets, special incentives to industries involved in modernisation, technological upgradation and quality control, upgrading the facilities available at the District Industries Centres (DICs), opening of single window type information dissemination centres and several other measures. Box 7.4 highlights procedural and policy reforms undertaken by selected State Governments and the initiatives taken by them for implementation of new industrial policy.

11. In order to support on-going reforms at the State level, for the first time a multilateral funding agency like Asian Development Bank (ADB) has extended a loan assistance of US $ 250 million for the Gujarat Public Sector Resource Management Programme. The details are indicated at Box 7.5.

Pattern of Industrial Growth

12. Table 7.1 shows trends in growth rates of overall industrial production and its three major components viz., mining, manufacturing and electricity generation. It is observed from the table that since 1992-93, all the major sectors had responded to economic reforms with dynamism and witnessed significant acceleration of their respective growth rates. However, during the current year until October 1996 there has been a deceleration of industrial growth rates due to poor performance by mining and electricity generation.

13. Table 7.2 highlights the contribution made by broad sectors to the pattern of industrial growth in recent years. It is observed from the table that during 1991-96 the contribution of manufacturing sector to industrial growth has maintained an upward trend, the share of mining sector has fluctuated around 6 per cent while that of electricity has exhibited a declining trend.

14. The general index of industrial production (IIP) recorded a growth rate of 11.7 per cent during 1995-96 aided by a growth rate of 7.1 per cent in mining and quarrying, 13.0 per cent in manufacturing and 8.2 per cent in electricity. All of the 17 major (two-digit) groups within manufacturing sector recorded

TABLE 7.2

Sectoral Contribution to Industrial Growth

Year (Weight)	Mining (11.46)	Manu. (77.11)	Elec. (11.43)	General (100.00)
1990-91	6.17	83.14	10.69	100.00
1991-92	16.23	-145.67	229.44	100.00
1992-93	2.94	72.60	24.46	100.00
1993-94	6.72	78.89	14.39	100.00
1994-95	8.24	80.49	11.27	100.00
1995-96	6.69	85.59	7.72	100.00

BOX 7.4

Industrial Policy Reforms Selected State Governments

Andhra Pradesh

- Thrust awarded to development of power projects by finalising power purchase agreements with private developers

Gujarat

- Strong encouragement to private sector participation in development of ports, power stations,desalination of water supply etc
- Review and re-examination of laws pertaining to different aspects of liberalisation by appointing committees

Haryana

- An industrial model township with Japanese assistance , an Indo-German industrial park, a software technology park and an export promotion industrial park are coming up in the state
- Haryana State Industrial Development Corporation (HSIDC) has been authorised to set up industrial estates on its own or jointly with private promoters in potential areas
- Involvement of private initiative in the power sector in areas of generation and distribution
- Encouragement to private sector participation in road, transport and real estate development
- Disinvestment of equity undertaken for 18 selected PSEs at the state level, fully in 10 projects and partially in 8 projects Several more are in the pipeline

Karnataka

- 100 per cent EOUs (Export Oriented Units) and units with 25 per cent export turnover will be exempted from purchase tax, entry tax on all raw materials and other inputs 100 per cent EOUs to be exempted from power cuts imposed by Electricity Board
- Promotion of 'Growth Centres' with comprehensive infrastructure facilities at Hassan, Raichur and Dharwad & mini-growth centres at different places
- Establishment of 'Electronic City' at Dharwad with self-contained infrastructural facilities in addition to electronic cities at Bangalore & Mysore
- Providing Wheeling and Banking of Power through the transmission and distribution System of State Electricity Board.

Kerala

- Steps have already been taken to initiate private participation in selected areas like power, ports and road development
- Several agreements with private entrepreneurs in power and port sector have been entered into by the Government

Madhya Pradesh

- 23 industrial centres to be promoted as nodal points for development by the state government
- Establishment of container depots and air cargo complex in the state
- Development of industry-specific complexes like electronics, garments, leather, food processing, chemicals, bio-technology etc
- Private sector participation in infrastructure development to be encouraged by providing easy access to industrial land or by way of equity participation
- New industries to be given power connection withion 15 days of completion of formalities
- 100 per cent EOUs and continuous process units to be exempt from power cuts as far as possible
- Power of renewing licenses under the Factories Act have been abolished
- Procedures relating to environmental clearances made simpler, quicker and more transparent.

Maharashtra

- District Collector's permission to convert agricultural land into industrial use no longer required
- Industrial location policy revised to permit setting up of non-polluting, non-hazardous and hi-tech industries within the municipal zone of Greater Bombay
- Private participation encouraged in power projects and establishment of industrial estates

Orissa

- The Foreign Investment Division in the Industrial Promotion and Investment Corporation of Orissa will act as a single window for investments by non-resident Indians and foreign investors

Punjab

- State Government signed MOUs with selected industrial units to upgrade industrial training institutes
- Privatisation of public sector units to be undertaken
- Develop selective industrial corridors as part of infrastructural development Use private initiative for infrastructure development, specially power

Rajasthan

- Re-structuring of the State Sales Tax system through rationalisation of the complex multi-layered system to a simpler one
- A State Renewal Fund (SRF) has been set up by the State Government for ensuring safety net for the workers of State Public Enterprises (SPEs)
- Preparation of a draft Rajasthan State Power Sector Reform Bill, 1997 providing for establishment of an independent regulatory Commission and corporatization of Rajasthan State Electricity Board (RSEB)
- 5 projects worth Rs. 65 crores approved by State Cabinet under B-O-T scheme for private investment in roads

Sikkim

- Identification of thrust areas and effective promotion of industries in the chosen areas
- Special promotional measures for rural and traditional industry
- Establishment of growth centres and industrial estates to facilitate integrated development of industry
- Development of a rehabilitation package for sick industries.
- Revamping the public sector undertakings

Tamil Nadu

- Initiatives taken to encourage private investments in infrastructure on a local area as well as institutional basis
- Tirupur Industrial Development Company formed for providing further boost to export turnover in hosiery and textiles
- Tamil Nadu Urban Development Fund, a trust fund and the first of its kind in India, has been constituted for implementation of future urban development projects in infrastructure
- Constitution of Metropolitan Infrastructure Development Corporation(MIDC)
- Foreign collaborative industrial efforts already in the process of implementation in the automobile and textile sectors

Uttar Pradesh

- To give boost to software and hardware industries, the Government has set up software technology park and electronic cities at Noida and Kanpur
- 9 Power purchase agreements have been signed with private promoters and 19 more are in the pipeline
- 411 IEMs (Industrial Entrepreneurial Memorandum) have been fully implemented and 431 LOIs (Letter of Intent) have been implemented.
- 198 FDI (Foreign Direct Investment) proposals, 163 FTC (Foreign Technical Collaborations) have been finalished and 163 EOUs (Export Oriented Units) have been established

West Bengal

- The Single Window Agency of West Bengal Industrial Development Corporation (WBIDC) Ltd , strengthened to provide effective 'Escort Service' to new projects
- Committee under the chairmanship of District Magistrate in each district formed to ensure quick decisions on land, employment and other issues
- Private sector investment in power generation encouraged to meet increased demand

BOX 7 5

ADB Loan of $ 250 million for the Gujarat Public Sector Resource Management Programme

Project Objectives

- The programme supports Government of Gujarat in improving public finances and augmenting domestic resource mobilisation, improving the allocation and efficiency of the public sector, and reducing Government of Gujarat's role in commercial activities while promoting market oriented policies to enhance private sector participation in the infrastructure sectors

Project Scope

- The programme focuses on (i) strengthening of State public finances and their prudent management, (ii) divesting and restructuring of State-owned enterprises (SOEs) to allow the private sector to take the lead in commercial activities while reducing the burden that SOEs put on the budget and the economy at large, and (iii) strengtheing the policy, regulatory, legal, and institutional frameworks for private sector participation in critical infrastructure sectors (power, ports, and roads) and to evolve an enabling environment

Highlights of the Programme

- Reduction in overall fiscal deficit to sustainable levels • Sales tax reforms including introduction of value added tax (VAT), rationalisation of key state taxes and reforms of municipal taxes • Raise user charges to improve cost recovery • Expenditure rationalisation and improved fiscal policy management • SOE reform plan and associated institutional mechanism • Privatisation, partial divestment and restructuring, merger, leasing or closure of SOEs • Social safety mechanism for restructuring of SOEs • Initial steps to start power sector reforms • Revision of power tariffs to maintain 3 per cent rate of return on Gujarat Electricity Board's assets • Improved investment planning in power • Creating a framework for promoting private sector investment in roads and ports and initiate private sector investment in roads and bridges by 1997 • Restructuring of Gujarat Maritime Board • Strengthening of roads and bridges department's capabilities to process private sector road projects

positive growth rates during 1995-96 and 12 groups recorded growth rates exceeding 10 per cent The transport equipment registered the highest growth rate of 23 7 per cent followed by non-electrical machinery and electrical machinery with growth rates of 21 9 per cent and 19 8 per cent respectively As per the use-based classification, capital goods registered a growth rate of 17 8 per cent and the consumer goods 12 5 per cent, while the growth rates of the intermediate goods and basic goods were 10 2 per cent and 8 7 per cent respectively

15 The quick estimates of the Index of Industrial Production (IIP) are available for the period April-October, 1996 According to this index industrial sector registered a growth rate of 9 8 per cent in April-October 1996, supported by a growth rate of 1 7 per cent in mining, 3 4 per cent in electricity and 12 1 per cent in manufacturing As per the growth rates by use-based classification all the sub sectors performed well except basic goods (Table 7 3) Capital goods and intermediate goods sectors recorded growth rates of 16 6 per cent and 10 8 per cent respectively in April-October 1996 as against the growth rates of 15 0 per cent and 7 2 per cent respectively during April-October 1995 The consumer durables and consumer non-durables registered growth rates of 9 8 per cent and 7 7 per cent respectively in April-October 1996 as against growth rates of 30 2 per cent and 9 2 per cent respectively during April-October 1995 But, the basic goods sector registered a growth rate of only 6 7 per cent in April-October 1996 as against a growth rate of 11 1 per cent during April-October 1995

Composition of Growth

16 The continuation of high growth rates within manufacturing are well spread and broad based Of

TABLE 7.3

Growth Rates of Industrial Production by Use-based Classification

Sectors	(Weight)	1991-92	1992-93	1993-94	1994-95	1995-96	Oct.96	April-Oct. 1995	April-Oct. 1996
Basic Goods	(39 4)	6 2	2 6	9 4	5 5	8 7	12 4	11 1	6 7
Capital Goods	(16 4)	-12 8	-0 1	-4 1	24 8	17 8	7 8	15 0	16 6
Intermediate Goods	(20 5)	-0 7	5 4	11 7	3 7	10 2	11 2	7 2	10 8
Consumer Goods	(23 6)	-1 8	1 8	4 0	8 7	12 5	5 9	13 5	8 2
Consumer Durables	(2 6)	-12 5	-0 7	16 1	10 2	37 1	9 4	30 2	9 8
Consumer Non-Durables	(21 1)	1 2	2 4	1 3	8 4	6 4	4 8	9 2	7 7

TABLE 7.4

Growth Rates of Industrial Production by Broad Groups of Manufacturing

Code	Sectors	Weights	1993-94	1994-95	1995-96	Apr-96	May-96	June-96	July-96	Aug-96	Sept-96	Oct.-96	April-October 1995-96	April-October 1996-97
20-21	Food Products	5.3	-8.7	13.6	14.2	23.6	39.0	23.7	8.4	7.9	-3.0	-4.5	24.3	15.7
22	Beverages & Tobacco	1.6	21.2	-2.2	19.3	16.9	5.0	3.6	12.6	27.6	19.4	17.1	16.5	14.0
23	Cotton Textiles	12.3	6.9	-2.9	2.4	2.8	2.5	9.8	14.4	12.5	13.5	11.6	1.8	9.6
25	Jute, Hemp. & Mesta Textiles	2.0	18.6	-11.3	1.2	-1.6	-8.6	-16.5	-26.4	-13.4	-4.9	-0.1	9.2	-9.7
26	Textile Products	0.8	-3.2	7.1	14.1	5.1	8.6	-1.6	8.9	6.0	3.1	5.6	12.1	5.0
27	Wood & wood products	0.4	4.6	3.1	16.7	15.5	-0.7	10.4	3.9	-8.5	1.3	6.5	18.7	3.7
28	Paper & paper products	3.2	6.6	14.8	11.0	4.3	6.1	7.0	14.3	21.8	10.3	12.4	13.8	11.0
29	Leather & fur products	0.5	8.8	3.7	7.4	-4.5	0.8	4.0	11.4	8.4	5.3	18.0	9.2	6.1
30	Rubber, Plastic Petro. & coal products	4.0	1.0	3.2	7.9	8.6	10.8	2.7	2.5	11.4	-4.2	7.3	6.9	5.4
31	Chemicals & chemicals Products	12.5	7.6	9.5	10.6	11.0	20.2	9.4	10.4	12.5	-0.2	6.6	8.9	9.8
32	Non-metalic min. products	3.0	4.5	8.0	12.0	2.0	5.4	8.5	2.5	4.9	5.9	7.6	14.8	5.2
33	Basic Metals & alloys industries	9.8	3.1	-4.3	4.9	-10.5	3.8	-0.5	9.9	34.1	35.2	37.2	9.4	16.1
34	Metal Products & parts	2.3	1.5	17.5	17.9	11.7	7.2	5.0	5.2	7.5	3.3	11.2	15.6	7.2
35	Machinery, Machines tools and parts	6.2	4.5	9.4	21.9	19.0	12.0	17.7	-5.7	0.1	-6.2	-2.0	26.5	3.9
36	Electrical machinery	5.8	-4.9	32.6	19.8	11.9	17.8	30.8	15.3	24.2	24.1	5.8	12.0	18.3
37	Transport equipment & parts	6.4	5.3	13.3	23.7	22.5	17.1	22.2	24.2	23.5	17.8	24.8	22.3	21.7
38	Other mfg. industries	0.9	-5.1	1.0	11.0	-6.9	-10.2	2.8	-2.8	-9.6	-11.5	-3.0	14.3	-6.0

Note : Growth rates are estimated over the corresponding period of the previous year.

the 17 sub sectors within the manufacturing sector, 6 sectors have registered growth rates exceeding 10 per cent in April-October 1996. These sectors include transport equipment (21.7 per cent), electrical machinery (18.3 per cent), basic metals and alloys (16.1 per cent) food products (15.7 per cent), beverages and tobacco (14.0 per cent) and paper and paper products (11.0 per cent). The two groups which registered negative growth rates are jute textiles (-9.7 per cent) and other manufacturing industries (-6.0 per cent) (Table 7.4).

Revision of the current series of IIP

17. The current IIP (base 1980-81) covers 352 items. It is generally agreed that since 1980-81 Indian industry has undergone significant structural changes and the 1980-81 weights do not fully represent some of the sectors such as automobiles, leather goods and electronics which showed substantial dynamism in the 1980s and 1990s. It is also felt that the small scale industries (SSI) sector, which is a dynamic and fast growing sector of the Indian economy, remains under-represented in the weighting diagram due to non-availability of relevant data. It was, therefore, decided to shift the base to 1993-94 for obtaining a more representative weighting diagram. The revision work has been initiated and the shift is likely to be effected during 1997. To fulfil the emerging need of disaggregated statistics pertaining to the industrial sector and to facilitate comparative studies of industrial growth among different States/UTs, the Department of Statistics has initiated action to compile the comparable series of State IIPs with the common base year 1984-85 and with an appropriate linkage to the all-India IIP.

Industrial Investment and Associated Trends

18. The overall investment scenario in the country continues to be buoyant and promising. The number of Industrial Entrepreneurs Memorandum (IEMs) and Letters of Intent (LOIs) filed from 1991 to December 1996 totalled 31,157 with overall investment intention of Rs.6,34,760 crore and estimated employment of 5.7 million (Table 7.5).

19. Transnational corporations and foreign firms have expressed keen interest in investing in India. The total number of foreign collaborations approved during 1991 to October 1996 amounted to 10,041 of which 5,434 proposals involved direct foreign investment amounting to Rs 78,030 crore (Table 7.6). More than 75 per cent of these foreign

TABLE 7 5

Industrial Investment Intentions Filed through IEMs and LOIs

Year	I E M			L O I		
	Number	Proposed Investment (Rs crore)	Proposed Employment (000's)	Number	Proposed Investment (Rs.crore)	Proposed Employment (000's)
1991*	3084	76310	769	195	2071	34
1992	4860	115872	923	620	13994	97
1993	4456	63976	703	528	12845	100
1994	4664	88771	829	546	17937	130
1995	6502	125509	1114	355	14265	91
1996	4825	73278	696	522	29932	181
Total	28391	543716	5035	2766	91044	634

* August to December
Note Total may not tally due to rounding off

investments are in priority sectors such as core and infrastructure industries, capital goods and services (Table 7 7)

20 There has been a substantial growth in assistance disbursed by All India Financial Institutions during the recent months During 1995-96, the All India Financial Institutions sanctioned Rs 64,115 crore and disbursed Rs 36,312 crore of financial assistance, registering an annual growth rate of 12 0 per cent and 13 9 per cent respectively over the level of assistance sanctioned and disbursed during 1994-95 During April-December 1996, sanctions by All India Financial Institutions stood at Rs 34,458 crore and disbursements at Rs 26,813 crore registering a decline of 26 3 per cent in sanctions and increase of 15 6 per cent in disbursements over April-December 1995 The decline in sanctions is attributable to a fall in assistance sanctioned by development financial institutions over April-December 1995 by 30 per cent Over the same period assistance sanctioned by investment institutions increased by 2 9 per cent For 1995-96, the growth in assistance sanctioned and disbursed would have been larger but for a fall in the assistance sanctioned and disbursed by investment institutions (viz LIC, GIC and UTI) by 31 4 per cent and 6 0 per cent respectively

21 The public issues launched during 1995-96 (both equity and debentures) at Rs 14,241 crore registered a decline from Rs 21,044 crore in 1994-95 The amount of rights issued also declined marginally to Rs 6,564 crore from Rs 6,577 crore in 1994-95 Till December, 1996 the amount of public issues (both equity and debentures) stands at Rs 8,619 crore and rights issues is worth Rs 1,750 crore

Industrial Employment

22 Table 7 8 gives the status of overall employment in industry

23 All the three sub-sectors absorbing industrial population i e manufacturing, small-scale and ASI

TABLE 7 6

Total Foreign Technology Agreements and Foreign Direct Investment Approvals

(Rs. Crore)

Category	1991	1992	1993	1994	1995	1996@
Number of FTCs Approved	661	828	691	792	982	653
Number of FDI Approvals	289	692	785	1040*	1351#	1277$
FDI Approved (Rs crore)	534	3888	8859	8957*	30822#	24970$
Actual FDI Inflow (Rs crore)	351	675	1787	2982	6370	6313

@ Upto October.
* Excludes 22 GDR approvals for Rs 5230 crore.
\# Excludes 4 GDR approvals for Rs 1190 crore
$ Excludes 10 GDR approvals for Rs 3780 crore

TABLE 7.7

Sectorwise Approvals of FDI from August 1991 till October 1996

	Sector	Foreign Technology Approvals	Foreign Investment Approvals	Foreign Equity (Rs Billions)	Sectoral Share in total Approvals
1	Core & Infrastructure	476	559	133 36	49 13
2	Capital Goods & Machinery	2052	1824	115 90	13 14
3	Consumer Goods	494	1096	135 00	15 31
4	Miscellaneous Industries	1222	1026	88 89	10 08
5	Services	131	878	108 73	12 33
6	Defence Industries	3	0	0	0
7	Total	4378	5383	881 88	100 00

TABLE 7.8

Overall Employment in Industry

(million persons)

Financial Year	Manufacturing	Small-scale	ASI Factory
1990-91	32 70	12 53	8 16
1991-92	33 10	12 98	8 19
1992-93	33 40	13 41	8 71
1993-94	33 80	13 94	N A
1994-95	N A	14 66	N A

factory indicate a progressive rise in levels of employment over the years The growth of employment in the small scale sector is highly encouraging as this displays the sector is still very much in a position to absorb large amount of idle labour

Science & Technology and Research & Development

24 The investment in Research and Development (R&D) has increased from a paltry Rs 20 crore in the First Five Year Plan to about Rs 20,000 crore in the Eighth Five Year Plan Presently there are 214 universities, 400 national laboratories and 1300 in-house R & D centres in the industrial sector Several Science & Technology departments have been set up in the areas of environment, non-conventional energy resources, bio-technology, ocean development, industrial research space, atomic energy, defence, health, agriculture and electronics

25 Identification and promotion of priority areas in R & D is done by Science and Engineering Research Council(SERC) set up under the Department of Science & Technology(DST) DST supports 12 autonomous research institutions as well, for furthering research work in several disciplines Technology Information, Forecasting and Assessment Council(TIFAC) has been set up for generating technology forecasting and technology assessment documents and enabling a technology information system that is interactive and nationally accessible

26 Industrial research in several diverse fields of scientific activity is being undertaken through a network of 40 laboratories and 81 field stations set up by the Council for Scientific and Industrial Research (CSIR) In the field of bio-technology, more than 24 specialised R & D centres have been developed for pursuing state-of-the-art research Identical efforts for promoting new avenues of research are being undertaken in the field of ocean development as well

27 The Union Budget for 1996-97 has taken various measures to promote R&D facilities A matching one time grant has been awarded to CSIR and the Indian Council of Agricultural Research (ICAR) for modernisation of laboratories and institutes The Technology Development and Application Fund created in 1995-96 has been proposed to be strengthened by Rs 30 crore A Five Year Tax Holiday under Section 80-IA of the Income Tax Act has been allowed to companies exclusively created for participation in R&D activities The existing procedure for awarding weighted deduction under Section 35(2AA) of the Income Tax Act on sums paid for scientific research to a National Laboratory or a University or an IIT has been amended by deleting the condition of approval by an outside body In order to encourage R&D efforts, goods developed and patented in India and concurrently in specified countries have been exempted from levy of excise duty for a period of 3 years The exemption procedure for customs duty on import of equipment and consumables for R&D institutions has been rationalised as well

Reforms in Public Sector Enterprises

28 Among the various policies enunciated for restructuring of the PSUs, a major step involved the disinvestment of a part of Government equities in selected public undertakings for improving their performance as well as to increase their public accountability by broad basing their management and ownership In the process of disinvestment, a major step taken by the government has been to set up the Disinvestment Commission for working out the terms and conditions as well as modalities pertaining to disinvestment of public equities At present the government contemplates restructuring of equity in 40 major PSUs, including blue-chip companies like ONGC, GAIL, SAIL, MTNL, IPCL, NTPC, BEML, Power Grid, NHPC, IOC, IBP and Bongaigaon Refineries While the Commission is to determine the modalities of disinvestment, the actual sale of PSU shares would be done through Deptt of Public Enterprises(DPE) The Commission also intends to identify the non-core PSUs where the Government may even disinvest by more than 50 per cent and may have minority ownership Box 7 6 indicates the year-wise and PSU-wise details of Government equities in 40 selected public sector enterprises, where it has approved disinvestment since 1991 until the end of September 1996

29 Under the auspices of the National Renewal Fund(NRF)set up in February 1992, for mobilising funds to assist voluntary retired persons from PSUs in undergoing re-training and re-deployment, Rs 252 crore and Rs 217 crore were released in 1994-95 and 1995-96, respectively An estimated number of 87,800 workers have opted for voluntary retirement so far and a major portion of NRF has been utilised in the textile sector

Performance of Selected Public Sector Undertakings

30 Memorandum of Understandings (MOUs) system has been further strengthened During 1995-96, 104 PSEs signed MOUs as compared to 99 in 1994-95 The Department of Public Enterprises (DPE) carries out an exercise every year for assessing the annual performance of the PSEs who have signed MOUs As per the latest evaluation, out of 104 PSEs, 51 were rated as excellent, 31 as very good and a meagre 2 as poor Evaluation for 1 unit is still pending The results indicate a marked improvement over 1994-95 when 39 units were rated as excellent among the 95 appraised The financial performance of the PSEs has also been better than their targeted levels for 1995-96 (Table 7 9) The gross margin during 1995-96 stood at Rs 26,137 crore as against the target of Rs 24,106 crore thereby surpassing the targeted level by 8 per cent

31 The profitability of PSUs in terms of ratios of gross margin, gross profit and pre-tax profit to capital employed have shown some improvement recently (Table 7 9) The ratio of PAT to net worth has also improved Out of the 15 large enterprises which are monopolies and operate in the core sector the loss making ones included Fertiliser Corporation of India, Indian Airlines Corporation, Bharat Gold Mines, Rashtriya Ispat Nigam and Hindustan Shipyard

TABLE 7.9

Profitability of CPSUs (Rs billions)

		60-61	70-71	80-81	90-91	92-93	93-94	94-95
1	Number of units	26	87	168	236	237	240	241
2	Paid up capital	1 7	18 2	87 3	432 4	518 7	559 7	582 9
3	Net Worth	1 9	22 0	115 5	757 3	956 5	1088 1	1230 0
4	Capital employed	2 4	36 5	182 3	1020 8	1399 3	1598 4	1613 1
5	Gross profit	0 1	1 5	14 2	111 0	159 8	185 6	225 1
6	Pre-tax profits	0 1	0 2	0 4	35 0	52 0	66 6	98 0
7	Profit after tax (PAT)	0 1	0 0	-1 8	22 7	34 0	45 5	72 2
8	%Gross Margin to Capital Employed	10 3	9 5	13 2	17 9	18 0	17 3	20 6
9	%Gross profit to Capital Employed	5 5	4 0	7 8	10 9	11 4	11 6	13 9
10	%Pre-tax profit to Capital Employed	4 5	0 6	0 2	3 4	3 7	4 1	6 0
11	%PAT to Net Worth	4 2	-0 1	-1 6	3 0	3 5	4 2	5 8

BOX 7 6

Year-wise/PSU-wise Details of Shares Disinvested Since 1991-92

S.No	Name of the PSE	%of Central Govt. Holding					
		1 7 91	31.3.92	31 3 93	31.3.94	31.3 95	31.3.96
1	Andrew Yule	71 30	62 80	62 80	62.80	62 80	62 80
2	Bharat Earthmovers Ltd	100 00	80 00	80 00	80 00	60 08	60.08*
3	Bharat Electronics Ltd	100 00	80 00	80 00	80 00	75 86	75 86
4	Bharat Heavy Electricals Ltd	100 00	80 00	79 54	79 46	67 72	67.72
5	Bharat Petroleum Corpn Ltd	100 00	80 00	70 00	69 62	66.20	66 20
6.	Bongaigaon Refineries & Petro Ltd	100 00	80 00	74 60	74 59	74 47	74.47
7	CMC Ltd	100 00	83 31	83 31	83 31	83 31	83 31
8	Cochin Refineries Ltd	61 16	55 04	55 04	55 04	55 04	55 04
9	Dredging Corpn Ltd	100 00	98 56	98 56	98 56	98 56	98 56
10	Fert & Chem (Travancore) Ltd	98 69	97 46	97 35	97 35	97.35	97 35
11	HMT Ltd	100 00	95 14	90 32	90 32	90 32	90.32
12	Hindustan Cables Ltd	100 00	96 36	97 97	97 97	97 97	95 97
13	Hindustan Copper Ltd	100 00	100 00	98 88	98.88	98 88	98 88
14	Hindustan Organic Chemicals Ltd	100 00	80.00	80 00	80 00	56 90	56 90*
15	Hindustan Petroleum Corpn Ltd	100 00	80 00	70 00	69.72	60 25	51 00*
16	Hindustan Photofilms Mfg Co Ltd	100 00	87 47	87 47	87.47	87 47	87 47
17	Hindustan Zinc Ltd	100 00	80 04	75 93	75 93	75 92	75 07
18	Indian Petrochemicals Corpn Ltd	100 00	80 00	80 97	62 40	62 40	61 43
19	Indian Railway Const Co Ltd	100 00	99 74	99 74	99 74	99.74	99 74
20	Indian Telephone Industries Ltd	99 65	79 72	77 79	77 67	77 02	77 02
21	Madras Refinerries Ltd	84 62	67 70	67 70	51 80	51 80	51 80
22	Mahanagar Telephone Nigam Ltd	100 00	80 00	80 00	80 00	67 18	65 73#
23	Minerals & Metals Trading Corpn	100 00	99 33	99.33	99 33	99.33	99 33
24	National Aluminium co Ltd	100 00	97 28	87 20	87 19	87 15	87.15
25	National Fertilizers Ltd	100 00	97 72	97 66	97 66	97 65	97.65
26	National Mineral Dev Corpn Ltd	100 00	100 00	98 38	98 38	98 38	98 38
27	Neyveli Lignite Corporation	100 00	95 42	93 86	94 19	94 19	93 29
28	Rashtriya Chemicals & Fertilizers	100 00	94 36	92 50	92 50	92 50	92 50
29	Shipping Corpn of India	100 00	81 49	81 49	81 49	80 12	80 12
30	State Trading Corpn	100 00	92 02	91 02	91 02	91 02	91 02
31	Steel Authority of India Ltd	100 00	95.01	89 49	89 45	89 04	88 93#
32.	Videsh Sanchar Nigam Ltd	100 00	85 00	85 00	85 00	85 00	82 02
33	Container corporation of India	100.00	100 00	100 00	100 00	80 00	76.92#
34	Indian Oil Corporation	99 88	99 88	99 88	99 88	96 08	91.04
35	Oil & Natural Gas Gorporation	100 00	100 00	100 00	100.00	98 00	96.12
36	Engineers India Ltd	100 00	100 00	100 00	100 00	94 01	94 01
37	Gas Authority of India Ltd	100 00	100 00	100 00	100 00	96 63	96 63
38	Indian Tourism & Dev Corp	100 00	100 00	100 00	100 00	90 00	89 97
39	Kudermukh Iron & Ore Company Ltd	100 00	100 00	100 00	100 00	99 03	99 03
40	Industrial Dev Bank of India	100 00	100 00	100 00	100 00	100 00	72 14

Figures are provisional, as the shares sold in Oct 1995 are yet to be transferred in favour of successful Bidders

***** These companies had floated public issues Percentage of Govt holding after proposed public issue is not known

Performance of Selected Industries

Petroleum Oil and Lubricants

32 The production of crude oil during 1995-96 at 35 19 million tonnes recorded a growth of 9 per cent over the production of 32 24 million tonnes in 1994-95 Oil & Natural Gas Corporation Limited (ONGC) contributed 90 per cent of the total crude oil produced in the country in 1995-96 while the rest was produced by Oil India Limited (OIL) and JVCs The production of crude oil during April-October 1996 at 18 47 million tonnes recorded a decline by 10 2 per cent over the corresponding period of 1995-96 (Table 7 10) The shortfall in the production of crude oil during April-October 1996 was mainly due to frequent power shutdowns by ASEB, increase in water cuts, unexpected adverse behaviour of a few reservoirs, environmental constraints and less base potential because of less number of wells available from ERD in Bombay High ONGC and OIL have taken several steps to augment the oil production and arrest any declining trend

33 The total refinery crude throughput during 1995-96 at 58 58 million tonnes recorded a growth of 3 6 per cent over 56 53 million tonnes achieved in 1994-95 The average capacity utilisation of the 13 refineries was 103 9 per cent in 1995-96 as compared to 105 9 per cent achieved in 1994-95 The total refinery crude throughput during April-October 1996 at 35 96 MMT was 6 per cent higher than the target of 33 91 million tonnes

34 The production of natural gas in 1995-96 at 22 31 billion cubic metres (BCM) was 15 1 per cent higher than the production of 19 38 BCM during 1994-95 The production of natural gas during April-September 1996 was 11 35 BCM

35 Natural gas is likely to play a major role in bridging the gap between the demand and supply of liquid hydrocarbons in the future Flaring of natural gas takes place due to several factors such as lack of required compression and transportation facilities, technical requirements of operational safety, non-lifting of gas by consumers etc The flaring of natural gas is currently down to around 5 per cent, of which the technical flaring is around 2 5 per cent Efforts are being made to further reduce the flaring of natural gas The Gas Authority of India Limited (GAIL) along with ONGC, IOC and

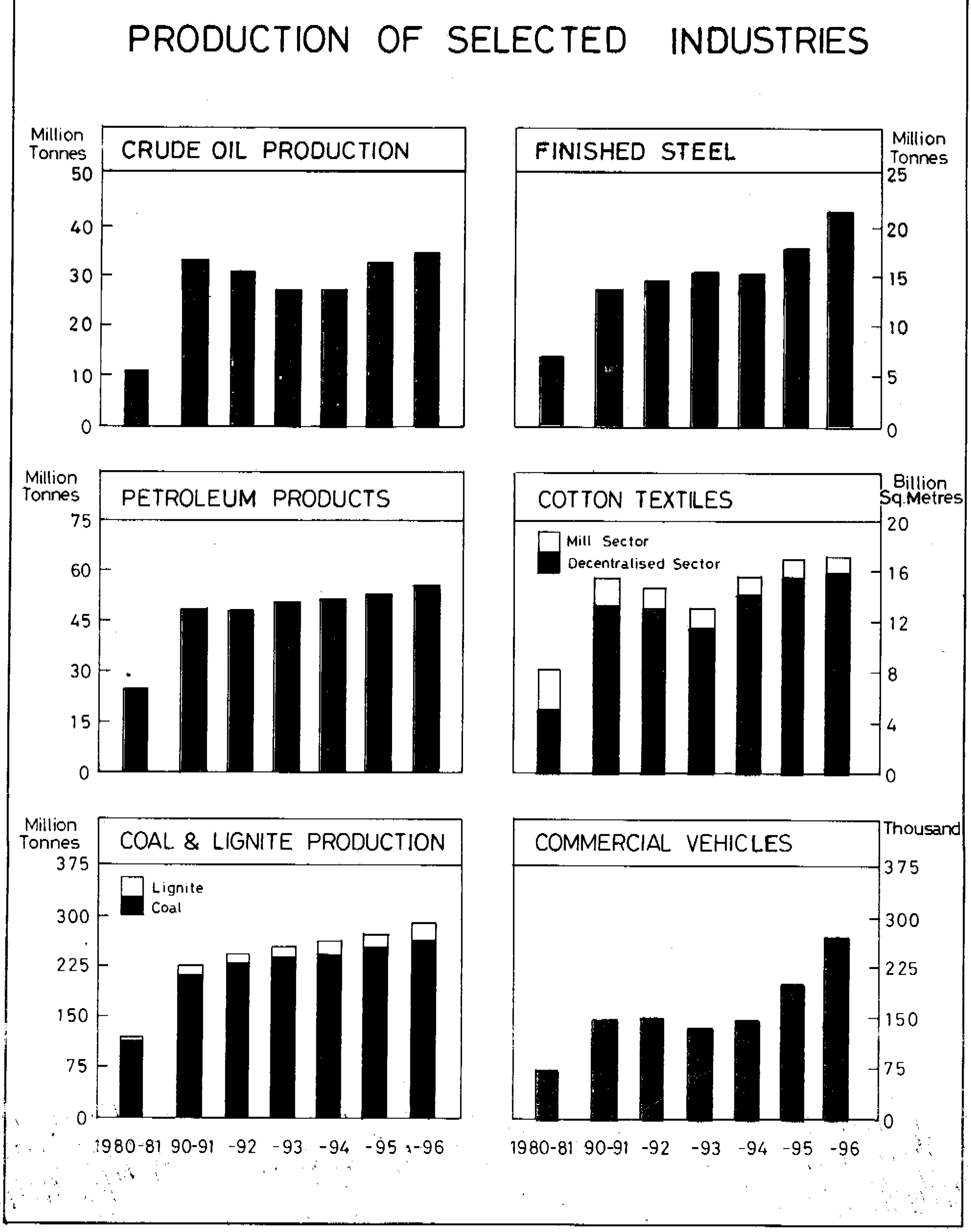
TABLE 7.10

Trends in the Petroleum Sector

				April-October*		Change over previous year		
	1993-94	1994-95	1995-96*	1995	1996	1994-95	1995-96	1996-97@
	(Million tonnes)						(per cent)	
1 Crude oil production**	27 0	32 2	35 2	20 6	18 5	19 3	9 0	-10 2
(i) Onshore	11 7	12 0	11 9	7 0	6 7	3 1	-1 3	-3 9
(a) ONGC	8 8	9 1	9 0	5 3	5 0	3 3	-1 8	-4 6
(b) OIL	2 8	2 9	2 9	1 7	1 7	2 5	0 0	-1 8
(ii) Offshore (ONGC)	15 4	20 2	22 7	13 6	11 8	31 5	12 1	-13 4
2 Refinery throughput	54 3	56 5	58 6	34 4	36 0	4 1	3 6	4 5
3 Production of petroleum products $	51 1	52 9	55 1	27 4 $$	28 6 $$	3 6	4 0 $$	4 4
	(Billion cubic meters)							
4 Natural gas production	18 3	19 4	22 3	10 9 $$	11 4 $$	5 7	15 1 $$	4 1

* Provisional
@ April-October
$ Does not include LPG production from fractionator
$$ Relates to April-September
** Includes contribution by JVCs in the year 1995-96

Figure 7.3



PRODUCTION OF SELECTED INDUSTRIES
CRUDE OIL PRODUCTION
Million Tonnes
50
40
30
20
10
0
FINISHED STEEL
Million Tonnes
25
20
15
10
5
0
PETROLEUM PRODUCTS
Million Tonnes
75
60
45
30
15
0
COTTON TEXTILES
Billion Sq.Metres
Mill Sector
Decentralised Sector
20
16
12
8
4
0
COAL & LIGNITE PRODUCTION
Million Tonnes
Lignite
Coal
375
300
225
150
75
0
1980-81 90-91 -92 -93 -94 -95 -96
COMMERCIAL VEHICLES
Thousand
375
300
225
150
75
0
1980-81 90-91 -92 -93 -94 -95 -96

HPC are actively exploring the feasibility of importing Liquified Natural Gas (LNG) to take care of the widening gap between the demand and indigenous availability of natural gas.

36. Government has taken several steps for opening of the oil and natural gas sector to the private investors. Since 1991, Government has invited six rounds of bids for exploration in order to increase reserve accretion. Government has awarded contracts for 35 exploration blocks. To encourage larger investment in exploration, Government is considering a New Exploration Licensing Policy (NELP). An attractive fiscal incentive package has been proposed for the exploration in deep water and frontier areas, which have high risk but with a possibility of high hydrocarbon potential.

37. To accelerate the domestic production of oil and gas, the Government has offered discovered medium-sized oil and gas fields for the development under joint venture arrangement with 40 per cent participating interest for national oil companies, including small sized fields which have been awarded to private companies. Government has so far awarded 30 fields for development. An investment of about US $ 1.8 billion is involved in the exploration and development of these fields/blocks. Government is also encouraging domestic companies to take up equity oil/exploration acreages abroad to achieve the objective of oil security for the country. ONGC Videsh Limited (OVL), a wholly owned subsidiary of ONGC has taken up exploration acreages in Vietnam Offshore, Tunisia, Egypt and Yemen and is pursuing opportunities in many countries including Russia and Kazakhastan, which are highly prospective hydrocarbon rich countries. OVL, which owns 55 per cent participating interest in Vietnam Offshore block, has already made a gas discovery in this block with a potential of about 2 trillion cubic feet of gas.

38. The total refining capacity in the country is currently 60.40 million metric tonnes per annum (MMTPA). Considering the proposed expansion of existing refineries and based on the letters of intent (LOI) issued till November 1996 to various parties, the refining capacity is expected to increase to around 131 MMTPA if all projects materialise, for meeting the estimated demand of 113 MMTPA of petroleum products by 2001-02. As a part of the liberalisation programme in the hydrocarbon sector, Government has issued LOI to twelve private sector parties for a total refining capacity of 70.3 MMTPA, of which 7 LOIs with a total refining capacity of 29.3 MMTPA are of export oriented units. The above LOIs are besides the grassroot refineries expansion in the PSU refineries or their JVCs that are being put up by the public sector. MRPL, which is a joint venture company between HPCL and Indian Rayon, started production with effect from March 25, 1996 with refining capacity of 3 MMTPA at Mangalore. The capacity of this refinery is being expanded to 9 MMTPA. Besides this, Numaligarh refinery in Assam with a capacity of 3 MMTPA is likely to be commissioned by 1999-2000 using the Assam crude.

39. Transportation of petroleum products through pipelines is a preferred mode compared to transportation by rail/road. The Government has approved formation of a holding company and subsidiary joint venture companies for expeditious implementation of new pipeline projects. Formation of the joint venture companies and financing of the same are under finalisation.

40. The gross imports of crude oil and petroleum products during 1995-96 at 47.68 million tonnes was 15.4 per cent higher than imports at 41.30 million tonnes in 1994-95. The value of POL imports during 1995-96 was Rs.24,095 crore as against Rs.17,838 crore during the previous year. The gross import of POL during April-September 1996 was 26.33 million tonnes valued at Rs.15,547 crore as against the import of 21.66 million tonnes valued at Rs.9,875 crore during the same period last year. The import bill has swollen on account of increasing quantum of import of petroleum products, depreciating rupee value and soaring prices in international markets.

41. During 1995-96 the consumption of petroleum products was 74.72 million tonnes out of which 2.15 million tonnes were from private sector imports. This showed a growth of 10.8 per cent over the previous year. Out of the total consumption of petroleum products, LPG, Mopgas, HSD and FO showed substantially higher growth rates than the average growth rate of 10.8 per cent during 1995-96. During the period April-September 1996, the consumption of petroleum products was 36.73 million tonnes which was 6.5 per cent higher than the corresponding period of last year (Table 7.11).

42. The administered price regime continues for marketing of petroleum products. However, to improve the supply conditions and to reduce the fiscal burden owing to sale of subsidised petroleum products, the Government had decanalised import of kerosene, LPG and LSHS and set up a Parallel Marketing System (PMS) for LPG, SKO, LSHS since February 1993. Under this system, private parties are allowed to import LPG/SKO/LSHS and market the same through their own distribution network at market determined prices. Government announced a reduction in import duties on LPG in January 1994 from 85 per cent to 25 per cent to facilitate the operation of PMS. This duty was further scaled down to 10 per cent in the budget for 1996-97. Safeguards have been incorporated into the system to prevent

TABLE 7.11

Consumption of Petroleum Products**

	1993-94	1994-95	1995-96*	April-October* 1995	1996	Change over previous year 1994-95	1995-96	1996-97@
	(Million tonnes)					(per cent)		
1. Light distillates	10.6	11.6	13.1	6.4	6.8	10.1	12.9	6.5
(a) Naphtha	3.2	3.4	3.7	1.9	1.8	6.6	7.9	-4.3
(b) LPG	3.1	3.4	3.9	1.8	2.0	10.3	12.2	9.5
(c) Petrol	3.8	4.1	4.7	2.3	2.5	8.1	13.0	8.8
2. Middle distillates	38.2	41.0	45.5	21.5	23.3	7.4	11.1	8.2
(a) Kerosene	8.7	9.0	9.4	4.6	4.8	3.0	4.6	4.8
(b) Diesel oil	25.9	28.3	32.3	15.1	16.5	9.2	14.1	9.6
3. Heavy ends of which	12.1	12.9	13.9	6.6	6.7	6.5	8.2	1.4
Fuel oil	9.2	9.9	10.7	5.2	5.2	7.6	8.0	-1.3
Total	60.8	65.5	72.6	34.5	36.7	7.7	10.8	6.5

* Provisional.
@ April-September
** Excluding Refinery Boiler Fuel (RBF).

diversion of the kerosene and LPG marketed by the public sector companies. The private sector has also been allowed to invest in the development of infrastructure for marketing of petroleum products. Private investment has been invited for setting up and operation of depots, tank farms, import facilities, product and crude pipeline etc.

43. The enrolment of new domestic LPG consumers is expected to go up from present 20 lakh to 50 lakh in 1997-98. The marketing of LPG is also being gradually introduced in villages adjoining small towns.

44. The existing system of pricing of petroleum products is based on the report of the Oil Prices Committee (OPC), 1976 as amended by the Oil Cost Review Committee (OCRC), 1984. With a view to contain the deficit in the oil pool account and thus enable the oil companies to maintain uninterrupted supplies of petroleum products in the country, the Government had increased the prices of petroleum products with effect from 2nd/3rd July 1996. The price of ATF and Naphtha (other than fertilisers) was increased by 10 per cent, MS by 25 per cent and other products by 30 per cent. The price of LPG (bulk) and LPG (packed non-domestic) were fixed on the basis of import parity. However, in order to protect the vulnerable sections of the society, no increase was made in the price of SKO (domestic). Later on, the increase in price of HSD was reduced to 15 per cent with effect from 6th/7th July, 1996. Despite these increases the Oil Pool account has huge subsidies having adverse effects on additional resource mobilisation and augmentation of their capacities. Box 7.7 indicates the details.

45. Government has introduced unleaded petrol from April 1995 in the four metros and at selected highways for cars fitted with catalytic converters to mitigate the pollution menace. It is proposed to introduce unleaded petrol throughout the country in phases i.e.

(i) All State capitals/Union Territories by December 1998.

(ii) Throughout the country by March 2000.

46. With a view to develop a comprehensive long term perspective for the hydrocarbon sector, and to meet the challenges that may emerge by the year 2010, Government had set up a Reforms Committee (R-Group) to study and suggest reforms in the petroleum sector and the report has since been submitted to the Ministry. It is under the active consideration of the Government.

BOX 7.7

Oil Pool Accounts and Subsidies on Major Petroleum Products

- The Oil Pool Accounts are maintained to provide uniform and stable prices to the consumers within the country and reasonable retention margins for the oil companies They are supposed to be self-balancing in a longer time-frame Inflows to the Pool Account is from collection of surcharges on sale of petroleum products while the outflow is for meeting the variation in the elements of standard cost The difference between inflows and outflows represent the surplus/deficit position of the Oil Pool Account

- The prices of petroleum products were increased in July, '96 to contain the deficit in the Oil Pool Account The additional revenue generation was estimated to be Rs 7,000 crore and the outstandings of the oil companies at Rs. 4,700 crore by March 31, 1997

- Based on the latest outlook of international prices, it is estimated that cumulative outstandings of the oil companies which stood at Rs 5,700 crore as on March 31, 1996 would go up to a massive level of Rs. 15,500 crore as on March 31, 1997

- Certain petroleum products viz SKO sold through PDS, LPG for domestic use, inputs for fertilizer industry and HSD are subsidised to protect the interest of the vulnerable section of the society and to achieve inter-fuel substitution namely to wean away the Kerosene users to LPG and users of forest fuel to Kerosene. The estimated subsidies on various petroleum products during 1996-97 are given below

Subsidy on Major Products

(Rs crore)

Subsidy	Subsidy before Price Increase	1996-97 (After Price Revision in July, 1996)	1996-97 (Current Estimates)
HSD	4900	1980	8340
Rs /Litre	1 17	0 47	1 97
SKO (Domestic)	4870	4870	6350
Rs /Litre	4 17	4 17	5.18
LPG (Domestic)	2210	1710	1950
Rs /Cylinder	80 90	62 55	70.22
Naptha (Fert)	940	690	980
Rs /MT	3073	2253	3163
FO (Fert)	560	470	390
Rs./KL	3585	2997	2587
LSHS(Fert)	200	110	200
Rs /MT	1482	811	1502
Bitumen(Packed)	220	140	190
Rs /MT	2720	1724	2596
WAX	40	10	40
Rs/MT	5676	1333	5676
Total	**13940**	**9980**	**18440**

Impact on Oil Companies

- The mounting outstandings of the oil companies from the oil pool account are having an adverse impact on the financial position of the oil companies and has also resulted in their experiencing severe cash crunch necessitating them to resort to huge borrowings The borrowings which were around Rs. 17,500 crore as on December 31, 1996 are estimated to rise to a staggering level of Rs 23,000 crore by March 31, 1997

TABLE 7.12

Trends in the Coal Sector

		1994-95	1995-96	April-October* 1995	April-October* 1996	Change over previous year 1995-96	Change over previous year 1996-97@
		(Million tonnes)					(per cent)
1	Production						
	(a) Opencast	178 6	199 7	95 1	105 5	11 8	11 0
	(b) Underground	75 2	70 4	37 3	39 6	-6 4	6 1
	Total	253 8	270 1	132 4	145 1	6 4	9 6
2	Production (by coal grades)						
	(a) Coking coal	44 3	40 1	12 1	12 9	-9 5	6 6
	(b) Non-coking coal	209 5	230 0	120 4	132 2	9 8	9 9
	(c) Washed coal	11 8	12 2	4 9	4 8	3 6	-1 6
	(d) Middlings	6 3	6 8	0 4	0 4	7 9	11 4
3	Pithead stocks (year-end)	32 1	31 7	33 5	25 2	-1 4	-24 7
4	Despatches	248 3	267 0	128 4	136 1	7 5	6 0
5	Lignite production	19 3	22 1	10 1	10 6	14 7	4 1
6	Output per man-shift (OMS)						
	(i) CIL	1 6	1 8	1 6	1 7	9 4	6 4
	(ii) SCCL	1 1	1 2	1 1	1 0	11 8	-4 6

* Provisional.
@ April-October.

Coal

47 Coal is one of the primary sources of energy accounting for about 67 per cent of total energy consumption in the country Coal production at 270 13 million tonnes in 1995-96 represented a growth of 6 5 per cent over 1994-95 Non-Coking coal production, contributing about 85 2 per cent to total coal output, increased by 9 8 per cent Coking coal production during April-October, 1996 increased by 9 6 per cent (Table 7 12) The underground mines registered a growth of 6 1 per cent while the opencast mines have shown a growth of 10 9 per cent during April-October, 1996, and continued to account for the major share in coal production

48 Coking coal production at 12 85 million tonnes during April-October, 1996 was 6 6 per cent more than that in April-October, 1995 Given the trends in the production of coking coal and its high ash content, it is unlikely that imports of coking coal will go down in the immediate future Imports of coal have been consistently increasing and reached a level of 13 22 million tonnes in 1995-96

49 The despatches of coal in 1995-96 at 267 million tonnes increased by 7 5 per cent and increased further by 6 0 per cent in April-October, 1996 The total pithead stocks of coal declined from 31 70 million tonnes as on March 31, 1996 to 25 20 million tonnes in October, 1996 as against 33 5 million tonnes in October, 1995

50 One of the major constraints on the profitability of the coal sector is low productivity in underground mines This has stagnated at an output per man shift (OMS) of about 0 55 tonnes for the last two decades, despite massive investments made in mechanisation of underground mines The underground mines employ 80 per cent of manpower, but contribute only 30 per cent of total output Productivity levels can be improved through better utilisation of existing stocks of machinery and equipment, greater flexibility in manpower deployment and rationalisation of the work force

51 Indian coal has high ash content and low calorific value The ash content varies from 25 to 40 per cent and sometimes exceeds 40 per cent The transportation of coal, containing so much inert matter over long distances, not only leads to wastage of transport capacity and energy, but also results in low efficiency of coal based thermal power plants and adds to air pollution through higher emission and ash disposal Thermal power stations set up away from the pit-heads of coal are now being encouraged to use beneficiated coal Two non-coking washeries having a capacity of 11 million tonnes per annum are likely to be commissioned in 1997

Four more washeries having a capacity of about 21 million tonnes per annum are to be set up by Coal India Limited (CIL) under Build-Own-and-Operate (BOO) scheme during the Ninth Five Year Plan. Given our large coal reserves and high import prices of alternative fuels, it is imperative to assess the status of advanced coal utilisation techniques to minimise environmental damage.

52. In order to encourage private sector investment in the coal sector, the Coal Mines (Nationalisation) Act, 1973 was amended with effect from the 9th June, 1993 for operation of captive coal mines by companies engaged in the production of iron and steel, power generation and for washing of coal in the private sector. Production of cement has also been notified as an end use with effect from March15, 1996 for purpose of captive coal mining. Imports of coal under Open General Licence (OGL) are being allowed. The import tariff on coking coal is 5 per cent whereas the import tariff for non-coking coal has been reduced from 25 per cent to 20 per cent. Captive coal mining blocks have been identified for fourteen power generating companies/Electricity Boards and for five companies in the iron and steel sector.

53. As on September 30, 1996, out of 65 public projects under implementation in the coal sector, 13 projects are bedevilled by time and cost over-runs. On an average, the cost overrun per project is about Rs.51 crore and the time overrun per project is about 34 months. There is an urgent need to improve project implementation in the coal sector.

54. The borrowings of Coal India Limited (CIL) from the Central Government as on March 31, 1996 were Rs. 3,738 crore. With the reduction in budgetary support public sector coal companies are required to approach domestic and international sources for medium and long term credit to finance their planned increases in production. The cash and carry scheme implemented by CIL from October 1, 1992 enabled the company to slow down the growth of arrears, but the company is required to take steps to realise the large outstanding undisputed sales dues. In order to ensure access to external sources of funds, the coal companies must continue to remain financially viable.

55. CIL plans to invite foreign companies to form joint ventures in longwall mining projects and mechanised bord and pillar mining to improve underground coal production and productivity. Pricing of coal has all along been revised in accordance with an escalation formula prescribed by the Bureau of Industrial Costs and Prices (BICP). This formula neutralises the increase in input costs as indicated by the price indices. However, following a recommendation of BICP, Government has deregulated the prices of coking coal and A,B, & C grades of non-coking coal with effect from March 22, 1996 to enable the coal companies to generate internal resources for reinvestment in coal mining and expansion programmes.

56. Further liberalisations on pricing and distribution of coal have been announced by the Government with effect from February 11, 1997. These include the following:

(a) The prices and distribution of D grade of non-coking coal, hard coke and soft coke have been deregulated with immediate effect.

(b) The Coal India Limited (CIL) and the Singareni Collieries Company Limited (SCCL) have been allowed to fix the prices of E, F and G grades of non-coking coal as per the BICP escalation formula till January 1, 2000 and in relation to market prices after January 1, 2000.

(c) The Coal Mines (Nationalisation) Act, 1973 will be amended to allow any Indian company to mine coal and lignite not only for captive consumption but also for sale.

(d) The Mines and Minerals (Regulation and Development) Act, 1957 will be amended to set up an independent body to allocate blocks on the basis of a competitive bidding process.

Steel

57. The year 1995-96 witnessed a more impressive performance from the steel industry as compared to the previous year. An encouraging feature for the steel industry was contained in the Union Budget provisions for the year 1995-96, in the reduction of peak rate of import duty on steel from 40 per cent to 30 per cent along with reduction of duty on HR coils from 30 per cent to 25 per cent.

58. Production of finished steel in April-November 1996 stood at 14.75 million tonnes exhibiting an increase of 14.30 per cent over the same period in 1995-96. Secondary producers recorded a growth of 26.9 per cent in the current year as compared to a growth of 15.7 per cent in the previous year, while main producers recorded a growth rate of only 2.6 per cent in April-November1996. Saleable pig iron production in April-November 1996 at 2.06 million tonnes recorded a growth of 14.7 per cent. Both main as well as secondary producers experienced sizeable growth in this category (Table 7.13). Consumption of finished steel in April-November 1996 at 14.46 million tonnes registered an increase of 11.2 per cent.

TABLE 7.13
Output of Iron & Steel (Mill tonnes)

	1995-96	1995-96	1996-97
		(April-November)	
Saleable Steel SAIL & VSP	11 32	7 21	7 31
	(7 7)		(1 3)
Total Main Producers	14 02	9 01	9 14
	(8 1)		(1 4)
Finished Steel			
Main Producers	10 59	6 72	6 90
	(10 7)		(2 6)
Secondary Producers	10 81	6 18	7 85
	(31 0)		(27 0)
Total	21 40	12 90	14 75
	(20 1)		(14 3)
Saleable Pig iron			
Main Producers	1 73	1 13	1 19
	(-13 5)		(5 3)
Secondary Producers	1 06	0 67	0 88
	(35 9)		(31 3)
Total	2 79	1 80	2 06
	(0 4)		(14 4)

Note: Figures in brackets indicate percentage change over the same period of the previous year.

59 Exports of steel amounted to 2 million tonnes valued at Rs 1,940 crore in 1995-96 Exports of finished steel at 6 5 lakh tonnes in April-November 1996 recorded an increase of 36 6 per cent Imports of steel recorded a decline of 7 8 per cent during 1995-96 and are maintaining identical trends in the current year The continuous reduction in volume of imports is largely attributable to higher production of HR coils/strips The export basket of steel is in the process of undergoing a transformation with value-added items coming to occupy a more significant share

60 Moving away from a framework dominated by procedural controls, the steel industry is gradually developing a competitive edge for itself in the global perspective The prerogatives of import substitution, with the chief onus behind imports being fulfilment of domestic shortages and exports being conceived as mere disposal of surpluses, are gradually being replaced by a more competitive outlook, under the impact of liberalisation and removal of international trade restrictions

Textiles

61 The textile industry continues to be the largest industry in the country accounting for about one-fifth of the total industrial output and around one-third of the total export earnings and providing employment to over 20 million people

62 Several measures have been undertaken in recent years by the Government to eliminate/reduce controls and bring about greater transparency in the textile sector The textile industry has already been delicenced as per the Textile (Development and Regulation) Order 1993 Keeping in view the requirement of Agreement on Textile and Clothing (ATC), a new Long Term Quota policy applicable for the three years period 1997-99 for export of textile and garments covered by the Quota system has been announced on October 16, 1996 The new policy not only simplifies procedure and ensures greater transparency, but encourages higher value unit realisation for quota items

63 The Indian textile industry continues to be predominantly cotton based with about 65 per cent of raw material consumed being cotton Cotton production during the season 1995-96 (September 95 to August 1996) is estimated by Cotton Advisory Board (CAB) at 156 lakh bales of 170 kgs each (provisional), an increase of 13 per cent over the production of 138 5 lakh bales during the cotton season 1994-95 The prices of raw cotton which had showed a sudden spurt from November 1994, was speedily brought under control by Government by taking several steps like permitting import of viscose staple fibre (VSF), a near substitute to cotton, at zero/concessional rate of duty, and tightening selective credit control measures for cotton With the easing of domestic supply/demand situation, Government released export quota of 15 90 lakh bales for the year 1995-96 (September '95 to August '96) Government has announced in the month of October, 1996 the release of initial quota of 5 lakh bales of cotton for export

64 The production of cotton yarn recorded an increase of 9 66 per cent in 1995-96 over 1994-95 The production of blended and 100 per cent non-cotton yarn increased by over 15 per cent during the same period Table 7 14 indicates the details of the category-wise production of yarn

TABLE 7.14
Production of Spun Yarn
(Million Kgs)

Year	Cotton Yarn	Blended Yarn	100% Non-Cotton Yarn	Total
1989-90	1372	173	107	1652
1990-91	1510	207	107	1824
1991 92	1450	234	122	1806
1992 93	1523	247	125	1895
1993-94	1622	305	140	2067
1994-95	1586	504*	-	2090
1995-96	1738	581*	-	2319
April September				
1995-96	872	289*		1161
1996-97(P)	892	293*		1125

* Including 100% non-cotton yarn.
(P) Provisional

TABLE 7.15

Production of Fabrics

Sector	1991-92	1992-93	1993-94	1994-95	1995-96	(Million Sq.Mtrs) April-September 1995-96	1996-97(P)
Mills	2376	2000	1990	2271*	2036*	1031*	982*
Powerlooms	16089	17826	19631	19523	21095	10665	10748
Handlooms	4123	5219	5851	6180	7020	3520	3569
Total	22588	2504	27472	27975	30151	15216	15298
				Share in Output (per cent)			
Mills	10 52	7 98	7 24	6 35	6 7	6 8	6 4
Powerlooms	71 23	71 18	71 46	71 55	70 0	70 0	70 3
Handlooms	18 25	20 84	21 30	22 10	23 3	23 2	23 3
Total	100 00	100 00	100 00	100 00	100 0	100 0	100 0

(P) Provisional

* Including non-SSI units

65 Table 7 15 indicates the trend in fabric production and the share of mills, powerlooms and handlooms in total fabric production The production of fabric in 1995-96 recorded an increase of 9 3 per cent over the level of production in 1994-95

66 The export of textiles has been increasing at a fast rate during the last few years During 1995-96, export of textiles (including coir, jute and handicraft) was estimated at Rs 35,504 6 crore, registering an increase of 13 3 per cent over 1994-95 Among the various items of textiles, man-made fibre textiles achieved a growth of 26 per cent, jute goods 24 5 per cent, woollen textiles 23 per cent, cotton textiles 19 per cent, handicraft 18 per cent, coir goods 14 per cent and readymade garments 6 4 per cent Provisional data on export of textiles for the period April-October, 1996-97 indicate a significant growth of around 26 per cent over the corresponding period of the previous year

Electronics

67 The electronics industry continued to maintain the positive growth trends in the year 1995-96 as it had done in the year 1994-95 Over the 8th Five Year Plan period, production of electronic items grew by 22 per cent along with an export growth of 41 per cent

68 The electronics sector experienced a turnover of Rs 21,675 crore in the year 1995-96 as compared to Rs 18,060 crore in the previous year (Table 7 16)

TABLE 7.16

Production of Electronics (Sectoral Break-up)

		1992-93	1993-94	1994-95	1995-96	(Rs.crore) 1996-97*
1	Consumer Electronics	3300	4050	4525	5400	6250
2	Industrial Electronics	1700	1750	2080	2400	2900
3	Computer Systems	1300	1470	1950	2225	2740
4	Communication & Broadcasting Equipment	2800	3150	3250	3160	5270
5	Strategic Electronics	385	500	600	650	750
6	Components	2200	2600	3050	3600	4200
7	Domestic Software	490	695	1070	1690	2600
8	Software for Exports (including EPZ,100%EOU)	675	1020	1535	2550	3700
	Total	12850	15235	18060	21675	28410

* Anticipated

Significant performances were recorded by consumer electronics and electronic component sectors. Production of software for exports grew to Rs. 2,550 crore in the aggregate for 1995-96, from Rs. 1,535 crore in the previous year.

69. Export of electronic items amounted to Rs. 4,585 crore in the year 1995-96 as against Rs. 3,032 crore in 1994-95. Out of the above, software exports exhibited a very healthy growth rate of nearly 70 per cent in comparison to 1994-95.

70. The Software Technology Park (STP) scheme, initiated for inviting higher investment from entrepreneurs involved in software development and exports, continued to discharge its functions with a high degree of success. Among the 521 units accorded approval so far under the scheme, 157 received approval in 1995-96 only. The contribution to exports from units under the STP scheme are growing at a CAGR (Compound Annual Growth Rate) of 160 per cent with the STP units having exported software worth Rs. 727 crore during 1995-96. Besides 153 units have received approval under the Electronic Hardware Technology Park(EHTP) scheme.

71. The overall electronics production is expected to touch Rs. 28,410 crore in the year 1996-97 with overall exports amounting to Rs. 6,257 crore.

72. The electronics industry has received a further boost by the recently announced removal of consumer electronics from the category of items subject to compulsory licensing. The industry is experiencing widespread diversification through extensive applications in new areas viz. process control, industrial electronics, information technology, security and telecom. Several foreign collaborations have been established in the sector with prominent multi-national corporations (MNCs) setting up production/design base in the country for exploiting the advantages of cost-effective human resources and other inputs. There has been significant growth in investments in computers, consumer electronics and telecom sectors. Besides, a wide base for R&D and design and development in electronics has been built up as well.

Chemicals, Drugs & Pharmaceuticals and Petro-chemicals

Chemicals

73. The chemicals and chemical products industry continued to maintain a robust pattern of growth in the year 1995-96. In 1994-95 the sector exhibited a growth of 9.5 per cent as against a growth of 7.6 per cent in the year 1993-94. In 1995-96 the sector witnessed an even higher growth rate of 11.4 per cent. The exports from the chemical sector have shown a buoyant growth as well. The exports of basic organic and inorganic chemicals including agro-chemicals rose to Rs. 1,234 crore in 1995-96 as against Rs. 846 crore in 1994-95. Exports of dyes and dye intermediates however showed a marginal decline to Rs.1,219 crore in 1995-96 as compared to Rs.1,332 crore in 1994-95. Over the recent years particularly high rates of growth have been witnessed for caustic soda, soda ash, carbon black, acetic acid and methanol. The sector has provided a dedicated thrust to modernisation with the objective of reducing operating costs so as to improve efficiency.

Drugs & Pharmaceuticals

74. In 1995-96, bulk drugs showed a marginally higher growth rate of 20 per cent as against 15 per cent in the previous year. Formulations however maintained the same growth of 15 per cent in 1995-96 as in 1994-95. It is estimated that in 1996-97, the growth of bulk drugs will be at around 20 per cent whereas for formulations it will be 15 per cent. In 1995-96 the production of bulk drugs and formulations were valued at Rs.1,822 crore and Rs. 9,125 crore respectively.

75. Exports from the pharmaceutical sector as well have shown significant rise over the years. The exports rose to Rs. 2,337 crore in 1995-96 as against Rs. 2,179 crore in 1994-95. Bulk drugs are estimated to constitute about 47 per cent of the total exports from the sector.

76. Several foreign collaboration proposals pertaining to joint ventures, R&D, establishment of new undertakings and expansion of existing units, materialised in 1995-96. Subsequent to delicensing of pharmaceuticals industry several IEMs were received for manufacture of various bulk drugs/drug intermediates/formulations. MNCs desirous of initiating production of new bulk drugs from the basic stage are being authorised to set up 100 per cent subsidiaries.

Petro-chemicals

77. Subsequent to the 20 per cent growth in production exhibited by the petro-chemicals sector in the year 1993-94, there was a slight reduction in growth rate to 17 per cent in 1994-95 and a further reduction to the level of 10 per cent in 1995-96.

78. Consumption of major petrochemicals in the country is expected to grow at around 14 per cent in 1996-97. Further the industry is also expected to witness significant additions to capacity towards the end of 1996-97. The prevailing low international prices, however, have to an extent resulted in lower profit margins for the industry in 1996-97.

TABLE 7.17

Growth of Food Processing Industries
(Percentage change over previous year)

	1991	1992	1993	1994	1995	1996#
Processed fruits & vegetables	28.57	30.28	19.19	20.93	25.74	12.94
Milk products	-1.17	8.63	4.06	10.17	4.02	5.28
Fish products*	4.63	8.33	5.04	6.18	3.02	3.76

Export of Processed Food items

(Rs.crore)

	1991-92	1992-93	1993-94	1994-95	1995-96
Processed fruits & vegetables	193.91	263.00	335.67	408.86	470.0
Milk products	11.18	8.37	11.50	40.12	26.65
Fish products*	1375.89	1767.43	2503.60	3575.91	3470.00

Projected
* Relates to financial year.

Food Processing

79. The food processing industry encompasses industries like fruit and vegetable processing, milk, fish and meat. The industry has a tremendous potential for increasing agricultural productivity providing significant and widespread employment and contributing significantly to exports. And all this, using relatively simpler technology.

80. To encourage private sector initiatives in food processing the Government has taken several steps. Union excise duty on fruits and vegetable products was withdrawn in the 1990-91 Budget. Foreign equity participation upto 51 per cent and approval for foreign technology agreement are provided automatically. There are no entry barriers in the food processing industry. Changes in Import-Export Policy and the liberalised exchange rate have also helped this sector.

81. Recent trends of production and exports of various segments of the industry are indicated in Table 7.17.

82. Incidence of duties on packaging material and various State levies are still considered to be impediments for further growth for the fruit and vegetable sector.

83. Despite an impressive increase in recent years commercial processing of fruits and vegetables has been just over 1.4 per cent of the total production.

Automobiles

84. The automobile industry has seen a remarkable recovery in the recent years. There has been an increase in production and sales in all segments of the industry. The vehicle industry has registered a phenomenal growth during 1995-96 and the trend is continuing during 1996-97. The industry has registered a growth of more than 25 per cent during the last two years. All the segments of vehicle industry, i.e. commercial vehicles, cars and two/three wheelers, are expected to register marked growth in production and sales during 1996-97 over that of 1995-96.

85. The estimated growth of commercial vehicles was 7 per cent in 1996-97 over and above the same in 1995-96. The rates for cars, jeep, two wheelers and three wheelers are estimated at 8 per cent, 10 per cent, 11 per cent and 16.5 per cent respectively over 1995-96. During 1995-96, the industry had registered a very high growth of production between 25 per cent to 43 per cent. The total turnover of automobile industry is likely to exceed Rs. 30,000 crore during the current year. The industry is also making a substantial contribution towards export. The export of vehicles has been growing. They have increased sharply from 92,947 nos. during 1994-95 to 1,21,696 vehicles during 1995-96, thereby registering a growth of 31 per cent. A similar trend continued during the current year also.

86. Considering the immense market potential for automobiles in the country, almost all major automobile manufacturers from all over the world, felt it necessary to set up manufacturing base in India, to meet the growing requirement of the domestic market as well as develop production base for meeting the global demand. The number of new vehicles based on contemporary designs and latest technology which have been introduced in the domestic market include Ford Escort, Opel Astra, Cielo, Peugeot, Uno, Mercedes etc. These joint ventures are likely to have commenced production and the cars are available in the Indian market.

Small Scale Sector

87. The small scale sector contributes over 40 per cent to the gross turnover in the manufacturing sector, 45 per cent of manufacturing exports and 34 per cent of total exports.

88. The number, employment, output and exports in the small scale sector as estimated by the Office of the Development Commissioner, Small Scale Industries are given in Table 7.18.

89. In output terms, the small scale sector recorded a growth rate of 11.4 per cent in 1995-96, as against 10.1 per cent in 1994-95. The growth of the small sector has been generally above the growth rates achieved by the industrial sector as a whole. However, the estimated growth rate of the small scale industries in 1995-96 at 11.4 per cent kept pace with the overall industrial growth rate of 11.7 per cent.

90. Several new measures have been adopted for improving the efficiency and performance of the small scale units. These include provision of infrastructural support in integrated manner through Integrated Infrastructure Development (IID) scheme, enhanced technology support for modernisation and quality upgradation through opening of five new tool rooms with Danish and German assistance, enhancing entrepreneurship development programmes by involving voluntary agencies, strengthening special employment generation programmes through Prime Minister's Rozgar Yojana (PMRY) scheme and enhancing the information and data base of the small scale industries sector. Box 7.8 summarises the facilities and incentives provided to the small scale industries sector.

91. Investment limits on plant and machinery for the small scale industries have been raised from Rs. 60 lakh/75 lakh to Rs. 3 crore and that for tiny units has been raised from Rs. 5 lakh to Rs. 25 lakh. Export obligation on non-SSI units manufacturing reserved items has been reduced from 75 per cent to 50 per cent.

92. At the end of March 1996, the aggregate bank credit to SSI sector amounted to Rs. 29,482 crore accounting for 15.99 per cent of the aggregate net bank credit, as against Rs. 25,843 crore at the end of March 1995 accounting for 15.29 per cent of the total net bank credit disbursed. The advances outstanding against tiny sector increased from Rs. 7,734 crore at the end of March 1995 to

TABLE 7.18

Overall Performance of SSI Sector

Year	No.of units (in lakh) as on 31st December	Output (at current prices) (Rs. crore)	Employment (lakh Nos.)	Export (Rs. crore)
1991-92	20.82 (6.9)	1,78,699 (15.0)	129.80 (3.6)	13,883 (43.7)
1992-93	22.46 (7.9)	2,09,300 (17.1)	134.06 (3.3)	17,785 (28.1)
1993-94	23.81 (6.1)	2,41,648 (15.5)	139.38 (4.0)	25,307 (42.3)
1994-95	25.71 (7.8)	2,93,990 (21.7)	146.56 (5.2)	29,068 (14.9)
1995-96 (P)	27.24 (8.1)	3,56,213 (21.2)	152.61 (4.1)	36,470* (25.5)

* Quick Estimate. (P) Provisional

Note: Figures in the brackets give the increase over previous year.

BOX 7.8

Incentives and Facilities for Small Scale Industries

Fiscal Incentives

- Excise concessions available for both registered and unregistered units on a graded scale depending on turnover upto Rs 300 lakh
- Full exemption upto a turnover of Rs 30 lakh and concessional rate of excise duty for a turnover in excess of Rs 30 lakh but not exceeding Rs 75 lakh and normal rate of duty thereafter.
- Reservation of products for exclusive manufacture (836 products at present)
- Investment ceiling on plant and machinery for SSI units has been raised from Rs 60 lakh/75 lakh to Rs 3 crore and that on tiny units from Rs 5 lakh to 25 lakh
- Export obligation of non-SSI units producing reserved items has been reduced from 75 per cent to 50 per cent
- Price and purchase preference to products manufactured in small scale sector in Government purchase programme
- Infrastructural support to Entrepreneurship Development Instititutes (EDIs) to augment their training capacities
- Joint programme with the State Bank of India (SBI) and Small Industries Development Bank of India (SIDBI) for modernisation and technology upgradation of industry cluster
- Assistance to industrial associations/voluntary agencies to set up testing centres
- Special programmes on vendor development, quality awareness and pollution control
- A scheme of Integrated Infrastructure Development (IID) was launched in March, 1994 to strengthen infrastuctural facilities in rural and backward areas 20 projects have been sanctioned so far
- Quality certification scheme launched to improve SSI product quality Financial support to acquire ISO 9000
- A scheme for creation of technology development fund in the States launched with the involvment of the State Government and Industry associations

Credit Policies

- Priority sector lendings to SSIs
- 40 per cent of advances to SSI sector reserved for tiny sector and village and cottage industries
- Concessional/fixed rate of interest of loans upto Rs 2 lakh (two slabs)
- Computation of working capital limits on the basis of minimum of 20 per cent of projected annual turnover for SSI units with fund based working capital requirement upto Rs 100 lakh
- Seven Point Action Plan for improving the flow of credit to SSI sector initiated in 1995-96, consisting of

  Time bound action for setting up of specialised SSI branches in 85 identified districts At least, 100 such dedicated branches were opened before the end of 1995 96 More than 100 branches were opened in 1995-96 and banks will open 100 more specialised branches during 1996-97

  Adequate delegation of powers at the branch and regional levels

  Banks to conduct sample surveys of their performing SSI accounts to find out whether they are getting adequate credit

  Steps to be taken to ensure that composite loans (covering both term loans and working capital) are sanctioned to SSI entrepreneurs as far as possible

  Regular meetings by banks at zonal and regional levels with SSI entrepreneurs

  Need to sensitize bank managers and reorient them regarding working of the SSI sector

  Simplification of procedural formalities by banks for SSI entrepreneurs

- Scope of National Equity Fund (NEF) scheme providing equity type assistance at 1 per cent service charge enhanced to cover whole country except metropolitan areas to support expansion, modernisation and techology upgradation Ceiling of soft loan assistance enhanced to 25 per cent of the project cost subject to a maximum of Rs 2 5 lakh Projects upto Rs 10 lakh are eligible for assistance
- Technology Development & Modernisation Fund (TDMF) scheme launched for modernisation and for improved and updated technology to export oriented units

Rs 8,183 crore at the end of March 1996 However, the share of tiny sector in the advances to SSI sector has declined from 29 93 per cent at the end of March 1995 to 27 76 per cent at the end of March 1996

93 The number of beneficiaries being extended support under the National Equity Fund (NEF) scheme rose to 685 in 1995-96 as against 536 in 1994-95 The sanctions awarded under the scheme stood at Rs 6 6 crore in 1995-96 as compared to 3 1 crore in 1994-95 The disbursements, on the other hand, amounted to Rs 3 8 crore as against Rs 2 2 crore in the previous year

94 Under the Technology Development and Modernisation Fund (TDMF), loans amounting to Rs 25 46 crore were sanctioned in the year 1995-96 to 64 units by Small Industries Development Bank of India (SIDBI) Further under the IID scheme, 20 projects have been sanctioned in different parts of the country Several measures have been taken as well for promoting entrepreneurship development through different courses and schedules

Industrial Sickness

95 Since its inception in May 1987, 1,853 references have been registered with Board for Industrial and Financial Reconstruction (BIFR) upto December 31,1996 under the Sick Industrial Companies (Special Provision) Act, 1985, both in respect of private companies and public sector undertakings Out of 2,692 references received by it, 406 references were dismissed as non-maintainable under the Act Rehabilitation schemes were approved/sanctioned in 404 cases while winding up was recommended in 496 cases 184 companies have been declared "no longer sick" on successful completion of the rehabilitation schemes sanctioned for them As regards public sector undertakings, out of the 188 references registered upto December, 1996, 28 were dismissed as non-maintainable, 36 were recommended for rehabilitation schemes and winding up was suggested for 24 Four public sector undertakings have already been declared "no longer sick" on successful completion of the rehabilitation schemes The proportion of cases effectively decided to those registered by BIFR till the end of December, 1996 has improved to 80 41 per cent

96 BIFR has taken a number of steps to streamline its internal procedure with a view to speed up disposal of cases registered with it The time taken for holding first hearing has been brought down to 30 days recently as against 160 days before The time lag between hearings has also been reduced considerably The number of hearings has increased progressively over the years As against 614 hearings in 1988, 1,560 hearings were held in 1995 1,485 hearings were held upto December, 1996 despite the fact that the Board has been functioning with only three Benches since April, 1996

TABLE 7.19

Status of PSU cases referred to BIFR as on December 31, 1996

	Total	Private Sector	Public Sector Central PSUs	State PSUs	Total
1 References Received	2692	2504	71	117	188
2 Registration declined	810	765	11	34	45
3 Under scrutiny	29	29	—	—	—
4 References registered	1853	1708	61	84	145
5 Dismissed as non maintainable	406	378	3	25	28
6 Rehabilitation schemes approved/ sanctioned	404	368	18	18	36
7 Winding up recommended to High Courts	496	472	9	15	24
8 Draft schemes circulated	36	28	6	2	8
9 Winding up notice issued	65	57	6	2	8
10 Under inquiry	142	118	11	13	24
11 Schemes failed and reopened	28	25	1	2	3
12 Pending cases remanded by AAIFR	27	24	2	1	3
13 Stay ordered by Courts	38	31	4	3	7
14 Schemes by AAIFR/SC	27	27	—	—	—
15 Declared no longer sick	184	180	1	3	4

97 The number of cases being registered with the BIFR has been decreasing progressively except in 1994 when 193 references were registered In 1995 only 117 cases were registered while in 1996 it stands at 97 upto December, 1996 Due to the combined effect of accelerated disposal and reduced fresh registrations, the total pendency of cases in BIFR, which was 436 as on January 1, 1996, has come down to 336 cases as on December 31, 1996 Table 7 19 gives the status relating to private and public sector undertakings registered with BIFR as on December 31, 1996

TABLE 7.20

Profile of Sick Industrial Undertakings

(Rs. crore)

Category	March 1993 No.of Units	March 1993 Amount Outstanding	March 1994 No.of Units	March 1994 Amount Outstanding	March 1995 No.of Units	March 1995 Amount Outstanding
1. SSI sick units	238176	3443.0 (2.3) (4.4)	256452	3680.4 (2.3) (4.6)	268815	3547.2 (1.7) (3.4)
2. Non-SSI	1867	7901.3 (5.3) (10.0)	1909	8151.5 (5.0) (10.1)	1915	8739.6 (4.3) (8.5)
3. Non-SSI weak units	657	1790.1 (1.2) (2.3)	591	1863.8 (1.2) (2.3)	476	1452.2 (0.7) (1.4)
4. All sick industrial units(1 to 3)	240700	13134.4 (8.8) (16.7)	258952	13695.7 (8.5) (17.0)	271206	13739.0 (6.7) (13.3)

Note : Figures in first bracket indicate percentage share to the total bank credit and the ones in second bracket indicate percentage share to the total bank advances to industry.

98. As per the information available with the RBI there were 2,71,206 sick industrial units in the country with outstanding bank credit of Rs.13,739 crore as on March 1995. They accounted for 6.7 per cent of the total bank credit and 13.3 per cent of the total bank advances to industry. These ratios were significantly lower than in the preceding two years. While the small scale units accounted for 99.1 per cent of the total number of sick industrial units, their share in total outstanding bank credit to sick industrial units was only 25.8 per cent (Table 7.20). The reasons for industrial sickness are internal factors such as project appraisal deficiencies, project management deficiencies and several external factors like shortage of raw materials, power crisis, transport and financial bottlenecks, changes in Government policy, increase in overhead cost etc. Marketing problems in the form of market saturation, product obsolescence and demand recession are also to be held responsible.

99. The Reserve Bank has been placing emphasis on a systematic approach to the detection of sickness at the incipient stage and timely formulation of rehabilitation packages in respect of those sick/ weak non-SSI units which are found to be potentially and commercially viable. The RBI continues not only to monitor the performance of individual banks through their half-yearly returns but also guide the banks and financial institutions in implementation of sanctioned rehabilitation packages.

Industrial Relations

100. Industrial relations have shown a steady improvement in the years following the economic reforms. Mandays lost due to strikes and lockouts declined significantly from 22.97 million in 1992-93 to 17.99 million in 1995-96 (Table 7.21). This was mainly due to improvement in the industrial relations situation in cotton, engineering, coal and non-coal mining, beverages, tobacco & tobacco products, jute and rubber industries. During 1992-96, industrial unrest was witnessed mainly in the states of Andhra Pradesh, Gujarat, Tamil Nadu and Maharashtra. Government's proactive role through timely and effective conciliation of industrial disputes and

TABLE 7.21

Mandays lost (in million) on account of strikes and lockouts

Quarter	1992-93*	1993-94*	1994-95*	1995-96*	1996-97*
I	6.70	4.32	5.97	4.63	4.28
II	6.20	6.00	5.15	3.58	2.50
III	5.46	5.36	5.10	5.06	-
IV	4.61	4.76	2.98	4.72	-
Total	22.97	20.44	19.20	17.99	6.78

* Provisional

involvement of the social partners in the formulation and implementation of labour and industrial relations policies and programmes has successfully harmonised the interests of employers and workers.

Environment Issues

101. The rapid increase in industrialisation and urbanisation has exerted extra pressure on the infrastructural facilities of human settlements manifesting in environmental problems like increased incidence of air, water and noise pollution.

102. The ambient air quality of major towns and cities in the country is being monitored under the National Ambient Air Quality Monitoring (NAAQM) programme. The monitoring results indicate that sulphur dioxide and Nitrogen dioxide levels are mostly within the permissible limits whereas Suspended Particulate Matter (SPM) values are higher than the prescribed limits at some places due to vehicular and air pollution, burning of fossil fuel and natural dusty conditions. The pollution caused by vehicles contributes significantly towards air pollution. The problem of suspended particulate matter is more acute during the summer due to local dusty conditions. During the winter months, lower ambient temperatures, lower mixing depth temperature inversion, higher traffic density, higher consumption of domestic fuels, aggravate the pollution problems.

103. The data on ambient water quality of rivers indicates that levels of coliform count and Biological Oxygen Demand (BOD) are generally high resulting in deterioration of water quality. This is primarily due to inadequate sanitation facilities and discharge of waste water into the surface water bodies without proper treatment.

104. Urban noise levels in major cities also indicate an increasing trend due to rise in human population, automobiles and industrial activities. Specific studies reveal that noise levels in industrial areas are generally within the prescribed limits but exceed the standards in respect of commercial, residential and silence zones during certain hours. The problem is more conspicuous near the traffic intersections and commercial centres.

105. The on-going initiatives of Government to improve environment include preventive as well as promotive measures. Fiscal incentives are provided by the Government to encourage the installation of appropriate pollution abatement equipment in the form of custom waive off and soft loans. While the industries are encouraged and the fiscal incentives are provided for installing equipment for control of pollution, punitive measures including legal action is taken against the defaulting units.

106. To achieve the goal of pollution abatement, emission and effluent standards for air, water and noise have been notified. Regular monitoring is carried out and the enforcement efforts have been intensified. At present, a majority of identified units have already installed the requisite pollution control equipment. According to the data collected by the Central Pollution Control Board (CPCB) on September 30, 1996, out of 1,551 units belonging to 17 categories of highly polluting industries, 1,259 units had facilities to comply with the environmental standards, 112 were closed and 180 were not having adequate facilities. Show Cause notices under Section 5 of the Environment (Protection) Act 1986 have been issued to all the defaulting units.

107. Apart from notifications of effluent and emission standards for the major categories of polluting industries, national ambient air quality standards including ambient noise standards have been notified. Industries have been directed to instal necessary pollution control equipment within a stipulated time frame. More stringent norms for vehicular emissions have been notified under the Central Motor Vehicles Rules which have come into effect from April, 1996. Supply of unleaded petrol in four metropolitan cities of Mumbai, Calcutta, Delhi and Chennai has been introduced with effect from April 1, 1995 for use in four wheel vehicles fitted with catalytic converters. The use of unleaded petrol will be gradually expanded to other cities in the country.

108. Twenty-four critically polluted areas in the country have been identified and action plans have been drawn up to improve the quality of environment in these areas. Adoption of clean technologies of production and formation of Waste Minimisation Circles is being encouraged to minimise environmental pollution. Under the World Bank aided Industrial Pollution Control Project, technical and financial assistance is provided for setting up Common Effluent Treatment Plants (CETPs) in clusters of small scale industrial units. An "Eco-Mark" scheme has been launched to certify various products of the industries which fulfil the prescribed pollution control standards to achieve the objective of environment-friendly production, packaging and waste disposal. To increase public awareness and participation, several public awareness campaigns on effects of pollution and measures to control it have been launched.

109. The Policy Statement for Abatement of Pollution indicates adoption of best available clean and practicable technologies, rather than end-of-the-pipe treatment, as the key elements for pollution prevention. As a part of this thrust, the Ministry of Environment & Forests has set up a Clean Technologies Division for identifying cleaner

technologies that can be introduced in different development sectors. Techniques like coal beneficiation are being promoted. The programme envisages setting up a National Clearing House for cleaner technologies as the overall co-ordinating agency and sectoral centres in different areas of development to focus on their activities. Another initiative taken to motivate environmentally oriented technologies and practices is mandatory submission of Annual Environmental Statements which would be subsequently evolved into environmental audit.

110. Prior environmental clearance of development projects based on impact assessment is being increasingly emphasised. Such clearance has been made mandatory for 29 specified categories of development projects through a statutory notification issued in January, 1994. This has been done with a view to mitigating the adverse environmental effects of these projects and in integrating the environmental concerns into development. This mechanism is also of help in catalysing the process of inducting cleaner environment-friendly technologies into the developmental process. (Table 7.22)

111. The success of the Ganga Action Plan has encouraged its replication for water pollution abatement in tributaries of the Ganga (Yamuna, Gomati and Damodar) under Ganga Action Plan Phase-II. A wider scheme called the National River conservation Plan covering pollution abatement works for grossly polluted stretches in 18 major rivers in 10 States of the country has also been initiated. Further, a programme for conservation of selected lakes has also been formulated by the Ministry.

TABLE 7.22

Number of Projects given Environment Clearance during January to December, 1996

Nature of the Project	Number of Projects	
	Received	Cleared
1. Mining projects		
(a) Environmental clearance	52	39
(b) Site clearance	26	15
2. Industrial projects	144	54
3. Atomic power projects	Nil	Nil
4. Thermal power projects	43	26
5. River valley & Hydro-Electric projects	23	6
6. Infrastructural and miscellaneous projects	42	30
Total	330	170

112. The National Environmental Tribunal Act, providing relief, compensation and restitution to victims of accidents while handling hazardous substances, and for environmental damages, came into force from 17 June, 1995. The Act provides (i) strict liability for damages arising out of any accident occurring while handling any hazardous substances and (ii) Establishment of a National Environmental Tribunal for effective and expeditious disposals of cases arising from such accidents with a view to give relief and compensation for damage to persons, property and the environment and (iii) matters connected therewith or incidental thereto.

113. The National Environment Appellate Authority (NEAA) has been set up by the Government in January 1997. Public hearings have now been built into the environment impact assessment. The machinery for hearing appeals against environment pollution impact assessment is also being set up. The measures are to ensure greater transparency and faster decision-making in matters concerning the environmental impact of industrial projects.

Outlook

114. Industrial growth which remained buoyant in 1995-96 has slowed down in the first half of 1996-97. The slowdown of industrial growth is due to a number of factors including constraints in the infrastructure sector, terms of credit availability, lower demand from exports and other segments. In particular, crude oil production and hydel power generation have declined in the first half of 1996. This negative growth coupled with deceleration in thermal and nuclear power and coal production have contributed to the dampening of industrial growth. A general slowdown of demand due to delayed budget presentation and high interest rates along with slowdown in investment, exports, and private and public consumption expenditure have also dampened industrial growth and have possibly led to unintended inventory build up in the current year. At the micro level a slowdown is evident in automobiles, steel and fertiliser production.

115. However, the manufacturing sector which contributes more than three-fourths of industrial production is performing well. The slight slowdown of growth in industrial production is neither generalised nor widespread. The slowdown is essentially confined to the basic goods sector which is primarily due to infrastructural constraints in energy and mining. Otherwise, all other sub-sectors viz. capital goods, intermediate goods and consumer goods are doing well in the current year. A temporary slowdown of the industrial growth cannot be regarded as the beginning of a recession.

116. The warning signals of deceleration in industrial production in certain sectors have been taken very seriously by the Government. Corrective actions have been initiated in the capital and money markets to induce industrial growth. A number of policy measures have been announced by the Reserve Bank of India to ensure that genuine production activities get adequate credit. These include substantial scaling down of cash reserve ratio (CRR), raising of export credit limit, permitting commercial banks to provide foreign currency denominated loans and reduction in Prime Lending Rates (PLR) for all advances and to announce the maximum spread over PLR by banks. A better agricultural performance in the second half of the year is likely to result in increased demand that augurs well for industry. Given these trends, the current year is expected to end up with an industrial growth rate of around 10 per cent.