7

Industry

Overview

The impressive growth of the industrial sector, propelled by robust growth in manufacturing has continued unabated during the current year so far. Year-on-year industrial growth of 10.6 per cent in the first nine months of 2006-07 was the highest recorded since 1995-96. In seven of the eight months of the current year, the year-on-year growth of the manufacturing sector was in double-digits (Table 7.1).

Table 7.1 : Annual growth rate of industrial production in major sectors of industry

(Based on the index of industrial production)

Base: 1993-94=100

(per cent)

Period	Mining & Quarrying	Manufa-cturing	Electricity	Overall
Weights	**10.47**	**79.36**	**10.17**	**100.00**
1995-96	9.7	14.1	8.1	13.0
1996-97	-1.9	7.3	4.0	6.1
1997-98	6.9	6.7	6.6	6.7
1998-99	-0.8	4.4	6.5	4.1
1999-00	1.0	7.1	7.3	6.7
2000-01	2.8	5.3	4.0	5.0
2001-02	1.2	2.9	3.1	2.7
2002-03	5.8	6.0	3.2	5.7
2003-04	5.2	7.4	5.1	7.0
2004-05	4.4	9.2	5.2	8.4
2005-06	1.0	9.1	5.2	8.2
2006-07#	3.8	11.5	7.3	10.6

 # (April-November)

Source : Central Statistical Organisation.

7.2 In the current year until November, the year-on-year growth of the overall Index of Industrial Production (IIP), which measures the absolute level and percentage growth of industrial production (Box 7.1), as well as its three subsectors, viz. mining, electricity and manufacturing, in April-November 2006 was higher than that in comparable period of the previous year. Manufacturing sector contributed 91.1 per cent to this improved performance. There was a moderate turnaround in the growth rates of the mining and the electricity sectors compared to the previous year, but such growth continued to lag far behind the overall IIP growth.

Fig. 7.1 **Growth Trends of Overall IIP, Intermediate and Capital Goods**

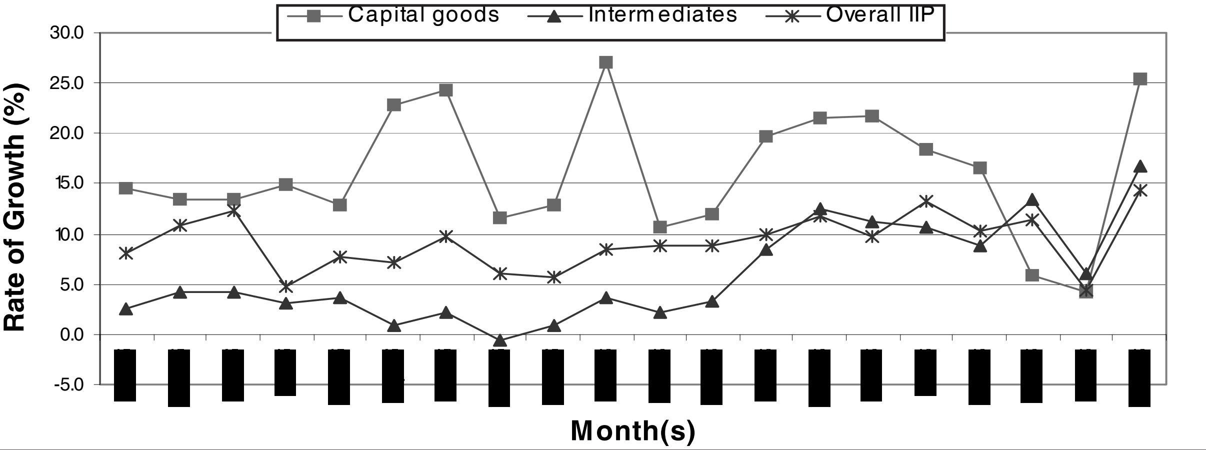

Table 7.2 : Growth rates of industrial production by use-based classification (Base : 1993-94 = 100)

(per cent)

Sector	Weight	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	Apr.-Nov. 2005-06	Apr.-Nov. 2006-07
Basic Goods	35.5	3.7	2.6	4.9	5.4	5.5	6.7	6.1	9.3
Capital Goods	9.3	1.8	-3.4	10.5	13.6	13.9	15.8	16.2	16.1
Intermediate Goods	26.5	4.7	1.5	3.9	6.4	6.1	2.5	2.5	10.9
Consumer Goods Of which	28.7	8.0	6.0	7.1	7.1	11.7	12.0	13.3	9.7
Durables	5.4	14.5	11.5	-6.3	11.6	14.4	15.3	14.2	12.5
Non-Durables	23.3	5.8	4.1	12.0	5.8	10.8	11.0	12.9	8.7
IIP (Index of Industrial Production)	100	5.0	2.7	5.7	7.0	8.4	8.2	8.3	10.6

Source : Central Statistical Organisation

7.3 Under the use-based classification of industries, growth signals were mixed (Table 7.2 and Figure 7.1). Year-on-year, during April-November, while growth accelerated in basic and intermediate goods sectors between 2005 and 2006, there was a deceleration of growth in consumer goods industries. Encouragingly, however, except in the months of September

Table 7.3 : Growth rates of industrial production by broad groups of manufacturing (Base : 1993-94=100)

(per cent)

Code (NIC-1987)	Industry group	Weight	2004-05	2005-06	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Apr-Nov. 2005-06	Apr-Nov. 2006-07
20-21	Food products	**9.1**	-0.4	2.0	-7.4	-6.1	-3.7	26.9	-0.8	11.3	-9.2	11.3	-4.7	1.9
22	Beverages, tobacco and related products	**2.4**	10.8	15.7	13.9	14.6	10.2	11.8	18.2	18.7	2.4	11.0	17.4	12.5
23	Cotton textiles	**5.5**	7.6	8.5	9.3	14.0	10.8	14.3	13.5	14.7	9.7	18.3	11.3	13.0
24	Wool, silk and man-made fibre textiles	**2.3**	3.5	0.0	12.7	12.4	-0.4	2.7	9.9	3.7	-4.0	18.2	-0.8	6.6
25	Jute and other vegetable fibre textiles (except cotton)	**0.6**	3.7	0.5	-6.6	2.5	3.6	-5.1	5.5	0.2	-0.9	9.7	2.6	1.0
26	Textile products (including wearing apparel)	**2.5**	19.2	16.3	12.6	18.0	13.1	28.1	14.8	4.2	-0.4	16.0	20.5	12.9
27	Wood and wood products; furniture and fixtures	**2.7**	-8.4	-5.7	-7.9	-19.6	-15.2	26.4	11.6	11.2	10.4	9.3	-3.5	2.4
28	Paper & paper products and printing, publishing & allied industries	**2.7**	10.5	-0.9	9.0	17.2	10.2	7.3	-2.1	8.8	3.9	15.6	5.2	8.4
29	Leather, and leather & fur products	**1.1**	6.7	-4.8	-24.4	-2.4	-3.7	-3.9	-0.3	5.6	-13.4	17.7	-0.1	-3.7
30	Basic chemicals & chemical products (except products of petroleum & coal)	**14.0**	14.5	8.3	14.5	14.5	4.1	9.6	9.9	11.0	0.9	8.4	11.7	9.1
31	Rubber, plastic, petroleum and coal products	**5.7**	2.4	4.3	4.3	12.1	10.8	9.2	13.0	15.7	7.7	23.2	2.8	11.9
32	Non-metallic mineral products	**4.4**	1.5	11.0	18.5	8.6	18.2	13.3	6.6	16.3	11.1	17.7	8.3	13.7
33	Basic metal and alloy industries	**7.5**	5.4	15.8	21.4	21.4	19.8	20.0	14.3	20.0	20.9	25.4	15.6	20.4
34	Metal products and parts, except machinery and equipment	**2.8**	5.7	-1.1	4.6	-9.7	7.8	6.7	10.1	11.5	25.1	-1.5	-2.2	6.8
35-36	Machinery and equipment other than transport equipment	**9.6**	19.8	12.0	8.8	13.9	18.2	15.8	23.3	14.2	2.1	17.3	10.8	14.1
37	Transport equipment and parts	**4.0**	4.1	12.7	13.8	25.9	21.2	22.8	11.2	12.4	4.4	21.8	12.5	16.3
38	Other manufacturing industries	**2.6**	18.5.	25.2	33.8	37.8	18.9	15.9	7.9	-10.6	-18.5	23.0	18.9	10.4

Growth rates are estimated over the corresponding period of the previous year.
Source: Central Statistical Organisation.

Box 7.1: The historical development of the all india index of industrial production (IIP)

Index of Industrial Production (IIP) is a single representative figure to measure the general level of industrial activity in the economy. The Office of Economic Advisor, Ministry of Commerce and Industry made a maiden attempt of compilation and release of the IIP with base year 1937. With the inception of Central Statistical Organisation (CSO) in 1951, the responsibility for compilation and publication of the IIP was vested with CSO. The IIP covers mining, manufacturing and electricity sectors only. It excludes construction, also considered part of the secondary sector. IIP has been revised from time to time in 1946, 1951, 1956, 1960, 1970, 1980-81 and 1993-94 by shifting the base; by reviewing the coverage of items; and by improving the technique of construction to reflect the changes in industrial structure

IIP, with 1937 as the base, covered 15 industries accounting for more than 90 per cent of the total production of these industries. The weights were allocated on the basis of total value of output during the base year. Cotton textiles; jute manufacture; sugar and steel had 78 per cent of the IIP weight. Subsequently, the base year was shifted to 1946 but the scope continued to be restricted to mining and manufacturing sectors, comprising of 20 industries with 35 items. The '*value added by manufacture'* in the base year obtained from the First Census of Manufactures, India 1946 was used for determining the weights. Cotton textiles, jute manufacturer, steel, sugar and coal accounted for 82.7 per cent of the total weight.

The IIP with 1951 as the base and compiled by CSO had 88 items. The items were classified according to the International Standard Industrial Classification (ISIC) 1948 of all economic activities. Weights were allotted to various items in proportion to '*value added by manufacture'* in the base year 1951. This index had three sectors: mining, manufacturing and electricity with weights of 7.16 per cent, 90.68 per cent and 2.16 per cent respectively. The index was further revised to base year 1956 on the recommendation of the working group constituted by CSO. It covered 201 items (198 of these were in the manufacturing sector), classified according to the Standard Industrial and Occupational Classification of All Economic Activities. The weights were assigned to the various items on the basis of *'value added by manufacture'*, in the base year as per Census of Manufactures 1956. The weights of mining, manufacturing and electricity sector for this series of IIP were 7.47 per cent, 88.85 per cent and 3.68 per cent respectively. The index with the year 1960 as base year covered 312 items in the monthly index and an additional 124 items in an annual index. The index continued to be the weighted average of the components, with weights proportional to '*value added by the manufacture* in the base year.

The index numbers with base 1970 covered 352 items comprising 61 items for mining; 290 for manufacturing and 1 for electricity sector. The weighting diagram for the manufacturing sector was based on the results of Annual Survey of Industries (ASI) 1970, whereas for the mining, the net value added by that sector as estimated by Indian Bureau of Mines, and in case of electricity, the net value added in 1970 as available from the White Paper on National Income, were used. For compiling the index, monthly production reports were collected by CSO from 17 source agencies, which in turn collected data from the production units.

The IIP with 1980-81 as the base for the first time included 18 items of the small-scale sector in the compilation of the index. Further, in respect of items like machinery, machine tools etc. where the reporting was in value terms, the Wholesale Price Index (base 1981-82) for the concerned category was used as deflators. The index has 350 items in all comprising 61 items from mining; 288 items from manufacturing and 1 from electricity.

The current series of IIP has 1993-94 as its base. The new series has 543 items clubbed into 287 item groups comprising 285 items groups from manufacturing and one each from mining and electricity. The index relating to Mining and Quarrying sector is supplied by the Indian Bureau of Mines, Nagpur and that is dovetailed with manufacturing and electricity indices compiled by CSO. The sectoral weights are allocated on the basis of Gross Value Added for 1993-94 as published in the National Account Statistics. As per the norms laid down by Special Data Dissemination Standards (SDDS) of IMF, the quick estimate of IIP of any month is being released within six weeks from the reference month according to an advance release calendar. This index is subsequently revised twice, namely, in the next month and the following third month.

and October 2006, year-on-year growth for capital goods has been in double digit and higher than overall IIP growth every month since February 2004. Furthermore, a sharp pick-up in growth was observed in intermediate goods in the current year.

7.4 At a two-digit level of disaggregation across the various segments of the manufacturing sector (Table 7.3), as many as nine sectors, with a combined weight of 44.2 per cent in IIP, grew at over 10 per cent, on an average, during the period April–November 2006. During the comparable period of the previous year, there were eight such sectors accounting for a weight of 48.1 per cent. Leather and leather & fur products have exhibited a negative rate of growth during the current year so far (April-November).

7.5 Eleven sub-sectors registered an improvement in performance over the comparable period of the previous year, while performance in the other six groups deteriorated. Sectors like food products, jute and other vegetable fibre textiles, wood and wood products, and leather and leather & fur products have either shown a decline or a moderate growth. Lacklustre growth in these industries, which are relatively more labour intensive, is reflected in the slow growth of employment in manufacturing.

Highlights of some industries

Automotive

7.6 Automotive industry, comprising of the automobile and auto-component sectors, is one of the key segments of the economy with extensive forward and backward linkages with other key segments of the economy. Installed capacity of the industry has been growing at a compounded annual rate of over 16 per cent since 2001-02. The automobile industry produced a wide variety of vehicles including 17 lakh four wheelers (passenger cars, light, medium and heavy commercial vehicles, multi-utility vehicles such as jeeps), and over 80 lakh two and three wheelers (scooters, motor-cycles, mopeds, and three wheelers) in 2005-06 (Table 7.4).

Table 7.4 : Automobile production

(Numbers in 000)

Category	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07 (till Sept'06)
Passenger cars	513	564	609	842	961	1,046	594
Multi-utility vehicles	128	106	112	146	249	263	144
Commercial vehicles	157	163	204	275	350	391	237
Two wheelers	3,759	4,271	5,076	5,625	6,527	7,600	4,155
Three wheelers	203	213	277	341	374	434	264
Total	**4,759**	**5,316**	**6,280**	**7,229**	**8,461**	**9,735**	**5,394**
Growth in per cent	(-)2.00	11.70	18.60	15.12	16.80	14.97	18.04

Source : Ministry of Heavy Industries & Public Enterprises (Department of Heavy Industries)

7.7 Delicensing and opening up to FDI has not only helped this sector to develop in the domestic economy but also to clock impressive pefromance in the export market. Automobile exports crossed the US$1 billion mark in 2003-04 and increased to US$2.28 billion in 2005-06. The industry exported as much as 17.7 per cent and 16.3 per cent of its domestic production of three wheelers and passenger cars in 2005-06 (Table 7.5)

Table 7.5 : Automobile export

(Numbers in 000)

Category	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07 (till Sept'06)
Passenger cars	23	50	71	126	161	170	98
Multi-utility vehicles	4	3	1	3	6	5	3
Commercial vehicles	14	12	12	17	30	41	23
Two wheelers	111	104	180	265	367	513	332
Three wheelers	16	15	43	68	67	77	62
Total	**168**	**185**	**307**	**479**	**620**	**806**	**519**
Growth in per cent	**20.24**	**9.74**	**65.35**	**55.98**	**31.25**	**28.03**	**27.43**

Source : Ministry of Heavy Industries & Public Enterprises (Department of Heavy Industries)

7.8 The auto component industry, comprising of around 500 firms in the organized sector and more than 10,000 firms in the small and unorganized sector has been one of the fastest growing segments of Indian manufacturing. It has the capability to manufacture the entire range of auto parts and has rapidly added to its capacity base. The turnover of the sector has grown from US$3.1 billion to US$10.0 billion between 1997-98 and 2005-06. In 2005-06, the sector's exports grew by 28 per cent to reach US$1.8 billion. The industry has also made considerable progress on the quality front as borne out by international recognition received by several producers and by the direction of extports. The major destinations of export for this sector are USA and Europe, which belong to the category of high Accepted Quality Level (AQL).

7.9 The major challenges that the auto industry is presently facing is with respect to its capability to innovate and upgrade in order to remain competitive (both qualitatively and price wise) in the international market.

7.10 The initiatives taken by the Government in 2006-07 to give a boost to the automobile sector include: a) reduction in the duty of raw material to 5-7.5 per cent from the earlier 10 per cent, b) setting up of the National Automotive Testing and R&D Infrastructure Project (NATRIP) at a total cost of Rs.1,718 crore for enabling the industry to usher in global standards of vehicular safety, emission and performance standards, and (c) finalisation of the Automotive Mission Plan (AMP) 2006-2016 for making India a preferred destination for design and manufacture of automobile and automotive components.

Textiles

7.11 Production of fabrics increased by 9.25 per cent in 2005-06 and, in the current year upto November 2006, by 8.20 per cent over the corresponding period of the previous year (Table 7.6). In US dollar terms, the value of exports increased by 21.8 per cent in 2005-06 and 11.7 per cent in the current year up to September 2006 (Table 7.7).

7.12 Nevertheless, Indian textile sector's performance continues to lag substantially behind that of China even in the post –quota era. China's export of textiles and clothing reached a new peak of US$115.51 billion in 2005 which accounted for 24.07 per cent of global trade. In comparison, India's share was a miniscule 3.37 per cent amounting to US$16.14 billion. The Indian textile sector continues to suffer from ageing machinery, inadequate infrastructural facilities (power and ports), and rigid labour laws. The continuing scheme such as the Technology Upgradation Fund (TUFS) and the Scheme for Integrated Textile Parks launched last year are aimed at addressing some of these problems. Under the Technology Upgradation Fund Scheme

Table 7.6 : Production of fabrics

(in millions of square metres)

Sector	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	April-November 2005-06	April-November 2006-07(P)
Mills	1,670	1,546	1,496	1,434	1,526	1,656	1,085	1,234
	(4.2)	(3.7)	(3.6)	(3.4)	(3.4)	(3.3)	(3.3)	(3.5)
Power looms	30,499	32,259	33,835	34,794	37,437	41,044	27,105	29,471
(including Hosiery)	(75.8)	(76.8)	(80.6)	(82.1)	(82.5)	(82.8)	(82.6)	(83.0)
Handlooms	7,506	7,585	5,980	5,493	5,722	6,108	4,111	4,278
	(18.7)	(18.0)	(14.2)	(13.0)	(12.6)	(12.3)	(12.5)	(12.1)
Others	558	644	662	662	693	769	513	513
	(1.4)	(1.5)	(1.6)	(1.6)	(1.5)	(1.6)	(1.6)	(1.5)
Total	**40,233**	**42,034**	**41,973**	**42,383**	**45,378**	**49,577**	**32,814**	**35,496**

Note : Figures in parentheses indicate share in output

P – Provisional

Source : Office of Textile Commissioner, Mumbai

Table 7.7 : Export of textiles					
					(in US$ million)
Item	**2003-04**	**2004-05**	**2005-06**	**April-August**	
				2005-06	**2006-07(P)**
Ready made garment	5,786.37	6,024.39	7,752.44	3,085.34	3,461.88
Cotton Textiles	3,599.95	3,544.16	4,493.20	1,650.53	2,071.09
Wool & Woollen Textiles	337.98	417.09	473.91	197.42	204.89
Manmade Textiles	1,821.24	2,050.73	2,000.08	777.20	907.83
Silk	545.21	594.56	691.83	279.06	292.75
Handicrafts	1,085.36	1,013.85	1,239.26	524.11	501.46
Coir & Coir manufacture	77.77	105.56	134.25	53.99	59.44
Jute goods	242.43	276.25	294.60	127.33	128.79
Total	**13,496.31**	**14,026.72**	**17,079.57**	**6,694.97**	**7,628.13**

Source : Foreign Trade Statistics of India (Principal Commodities and Countries) DGCI&S, Kolkata

(TUFS), launched on April 1, 1999, loans amounting to Rs.14,901 crore have been disbursed to 6,739 applicants. Under the Scheme for Integrated Textile Park (SITP) launched in the last financial year to develop 25 Integrated Textile Parks (covering weaving, knitting, processing and garmenting sectors) of international standard, project proposals worth Rs.2,411 crore, (of which assistance from Government is Rs.862.55 crore) have been sanctioned. These projects are likely to be completed by March 2008.

Gems and Jewellery

7.13 The gems and jewellery sector, contributing about 15 per cent of India's total merchandise exports during 2005-06, continued to maintain India as the largest cutting and polishing centre of diamonds in the world both in terms of quantity and value. In terms of carat, India's share in this sector is about 80 per cent of the world market. Gold jewellery and coloured gem segments accounts for about 15 per cent and 5 per cent, respectively of India's gem and jewellery export in value terms.

7.14 Total exports of gems and jewellery in 2005-06 was US$15.5 billion, up from US$13.4 billion and US$10.7 billion in the previous two years. During the period April-September 2006, however, exports declined marginally by 0.66 per cent from the corresponding period of the previous year due to a reduction in the international prices. Destination wise, the major market for Indian gems and jewellery in terms of importance are USA, UAE, Hong Kong, Belgium, Israel, Japan, Thailand, UK, Singapore and Korea. USA itself accounts for 29 per cent of the total exports from India in this sector.

7.15 In the Foreign Trade Policy updated as on April 7, 2006, Government has extended the following facilities to this sector:

- Import of gold of 8 carat and above has been allowed under the replenishment scheme subject to the import being accompanied by an Assay Certificate specifying the purity, weight and alloy content.
- Duty-free import entitlement of consumables for metals other than gold and platinum at 2 per cent of FOB value of exports during the previous financial year.
- Duty-free import entitlement of commercial samples fixed at Rs. 30,000.
- Duty-free re-import entitlement for rejected jewellery fixed at 2 per cent of FOB value of exports.
- Cutting and polishing of gems and jewellery to be treated as manufacturing for the purpose of exemption under Section 10A of the Income Tax Act.

- Import of precious metal scrap/used jewellery has been allowed for melting, refining and re-export of jewellery. However, such imports will not be allowed through hand baggage.
- Exporters of gems and jewellery have been allowed to export jewellery on consignment basis and export cut and polished precious and semiprecious stones for treatment and re-import as per rules.
- Value addtions norms for different categories of gems and jewellery products have been reduced.

7.16 Steps have been taken to encourage creation of training infrastructure to impart skills in jewellery designing, participation of exporters in international fairs, and arrangement of buyer-seller meets abroad to showcase the quality and variety of Indian products under the Market Development Assistance and Market Access Initiative scheme of the Government.

7.17 Based on traditional strength in craftsmanship, India has emerged as one of the key players in the gem and jewellery sector. However, in a global business worth US$80 billion annually, India's market share continues to be less than 3 per cent. In the coming years factors like changing tastes, competition from other luxury goods, growth of market share of substitutes like synthetic diamonds and non-precious metals, and growth of cutting and polishing industries in mining countries are likely to affect this sector. In order to increase its share, the country has to graduate towards the higher end of the value chain through technological upgradation. The industry will also need to explore and develop virgin markets which are likely to be high growth economies. The share of organized sector has to increase further to ensure better marketing, quality management and professionalisation.

Steel

7.18 The impressive growth of the steel sector continued for the fourth consecutive year. During April-December 2006, production of finished (carbon) steel, year-on-year, increased by 9.7 per cent to reach 35.65 million tonnes (Table 7.8). Additional capacities of four million tonnes have been commissioned in this sector in the current year. The apparent consumption of finished (carbon) steel at 31.45 million tonnes was 9.8 per cent higher than that in the comparable period of the previous year. Export of finished (carbon) steel during this period grew by 10.9 per cent to 3.50 million tonnes.

7.19 The increasing presence of the Indian steel companies in the global market with a wide-ranging export basket including complex and technologically sophisticated product is a pointer to the increased competitiveness of this industry. This is mainly due to improvement in the operational parameters of the Indian plants effected through establishment of new state-of-the-art plants and their continuous modernization and implementation of de-bottlenecking and technology upgradation schemes in the older plants. Most importantly, energy efficiency of the plants in terms of coke rate and power consumption has improved through better operating practices, use of better quality raw materials (e.g. imported coking coal) accessed from global sources and optimum processing of raw materials (e.g. washing of coal, benefication and sintering of iron ore). The average techno-economic parameters of an Indian plant vis-à-vis international bench-marks show that the Indian plants are fast catching up with the best in the world.

7.20 Domestic market prices of steel, in general, declined throughout 2005 and the trend persisted till the start of fiscal 2006-07. However, during the first three quarters of the current fiscal steel prices started firming up. The price rise has been stronger in case of flat products, where most of the key items saw marked rise during October 2006 from a year ago. For non-flat steel, the rise has been of a lesser intensity as compared to the flats. The increase has been mainly due to the strong domestic demand for steel and increase in cost of raw materials like zinc and ferro-alloys. In continuation of the policy thrust to ensure availability of steel and price stability, Government reduced the customs duty on alloy/stainless steel and non-alloy steel items

Table 7.8 : Production, consumption, export and import of finished carbon steel and pig iron					
					(in million tonnes)
Item	**2003-04**	**2004-05**	**2005-06**	**2005-06 (April-December)**	**2006-07 (April-December)**
PRODUCTION					
Finished Carbon Steel					
Main producers	15.19	15.61	16.21	11.79	12.75
	(5.60)	(2.79)	(2.79)		(8.10)
Secondary producers	21.77	24.44	28.33	20.70	22.90
	(12.91)	(12.28)	(15.90)		(10.60)
Total	**36.96**	**40.06**	**44.54**	**32.49**	**35.65**
	(9.70)	**(8.38)**	**(11.20)**		**(9.70)**
Pig Iron					
Main Producers	0.97	0.63	1.01	0.79	0.65
	(-12.70)	(-35.30)	(61.12))		(-17.60)
SecondaryProducers	2.80	2.60	3.69	2.55	2.80
	(-32.90)	(-6.96)	(41.68)		(10.00)
Total	**3.76**	**3.23**	**4.70**	**3.33**	**3.45**
	(-28.70)	**(-14.24)**	**(45.44)**		**(3.50)**
EXPORTS					
Finished Carbon Steel	4.84	4.38	4.48	3.16	3.50
	(7.30)	(-9.38)	(2.21)		(10.90)
Pig Iron	0.52	0.40	0.44	0.30	0.20
	(-17.64)	(-24.13)	(11.95)		(-7.00)
IMPORTS					
Finished Carbon Steel	1.54	2.11	3.85	2.87	2.70
	(1.98)	(36.94)	(82.55)		(-6.00)
Pig Iron	0.00	0.01	0.00	0.00	0.00
	(100.00)	(300.00)	(62.50)		
APPARENT CONSUMPTION					
Finished Carbon Steel	31.17	34.39	39.19	28.63	31.45
	(7.88)	(10.33)	(13.94)		(9.80)
Pig Iron	3.26	2.79	4.14	2.92	3.22
	(-29.67)	(-14.46)	(48.19)		(10.30)

Note: Figures in parenthesis indicate variation over the previous year.

Source : Joint Plant Committee.

to 7.5 per cent and 5 per cent respectively with effect from April 1, 2006. Customs duty on alloy and stainless steel was further reduced to 5 per cent from January 22, 2007.

Chemical, Petrochemical and Pharmaceutical

7.21 The chemical sector, comprising basic chemicals and its products, petrochemicals, fertilizers, paints, gases and pharmaceuticals, accounted for about 17.6 per cent in the output of manufacturing sector, 13-14 per cent in total exports and 8-9 per cent in total imports of the country in 2005-06. This well-diversified sector, covers more than 70,000 commercial products and is intensive in knowledge, capital and power. This sector has made good progress during the last five years, and turned from a net importer in the 1990s to a net exporter. During 2005-06, however, there was a deceleration in the growth rate of the sector to 8.2 per cent from 14.5 per cent in 2004-05.

Basic Chemicals

7.22 The production of major basic chemicals comprising alkalies, inorganic and organic chemicals, pesticides and dyes and dyestuffs was up by 3.61 per cent from 7.38 million tonnes to 7.64 million tonnes between 2004-05 and 2005-06. However, the output of basic chemicals showed a marginal decline of 2.22 per cent, year-on-year, in the first half of the current fiscal (April-Sept) vis-à-vis that in the comparable period last year. Within basic chemicals, growth of dyes and dyestuffs, and inorganic chemicals accelerated from over 7 per cent in 2005-06, to over 10 per cent in the first half of the current year.

Petrochemicals

7.23 The production of petrochemicals which mainly comprise of synthetic fibres, polymers, elastomers, synthetic detergent intermediates and performance plastics increased by 1.61 per cent from 7.35 million tonnes in 2004-05 to 7.47 million tonnes in 2005-06. Output of elastomers, synthetic detergent intermediates and performance plastics was higher by 13.40 per cent, 13.93 per cent and 12.39 per cent, respectively, in 2005-06. The overall growth performance of petrochemicals improved to 7.97 per cent in the first half of the current year.

Pharmaceuticals

7.24 Driven by the knowledge skills, growing enterprises, low costs, improved quality and buoyant demand (both domestic and international), the pharmaceutical sector's value of output grew more than tenfold from Rs. 5,000 crore in 1990 to over Rs. 55,000 crore during 2005-06. With value of exports at over Rs. 21,000 crore or US$4.7 billion in 2005-06, India is today recognized as one of the leading global players in pharmaceuticals. Internationally, recognized as amongst the lowest-cost-producers of drugs, India holds fourth position in terms of volume and thirteenth position in terms of value of production in pharmaceuticals. It is estimated that by the year 2010, the Indian pharmaceutical industry has the potential to achieve over Rs. 1,00,000 crore in formulations and bulk drug production.

7.25 Increasing number of Indian pharmaceutical companies have been getting international regulatory approvals for their plants from agencies like USFDA (USA), MHRA (UK), TGA (Australia), and MCC (South Africa). India has the largest number of USFDA-approved plants for generic manufacture. Considering that the pharmaceutical industry involves sophisticated technology and stringent "Good Manufacturing Practice" (GMP) requirements, major share of Indian pharma exports going to highly developed western countries bears testimony to not only the excellent quality of Indian pharmaceuticals but also price-competitiveness. Indian companies are now seeking more Abbreviated New Drug Approvals (ANDAs) in USA in specialized segments like anti infectives, cardiovasculars and central nervous system groups.

7.26 Due to various policy intitiatives taken by Government in the recent past, research and development (R&D) activites in this sector has not only increased quantitatively but also qualitatively. The National Pharmaceutical Policy, aimed at ensuring availability of life saving drugs at reasonable prices, is being finalized and will be implemented shortly.

Oil and Gas

7.27 Crude oil production in 2006-07 up to December 2006 was 25.40 million tonnes, up 6.03 per cent from 24.03 million tonnes in the first nine months of 2005-06. Natural gas production up to December 2006 at 23.53 billion cubic metres, however, was down 2.42 per cent from 24.10 billion cubic metre in the same period of the previous year. Thus, on the aggregate, oil and oil equivalent of gas

Box 7.2 Under recovery by Oil Marketing Companies

(Rupees in Crore)

Under-recovery	2003-04	2004-05	2005-06 (Estimate)	April- June 2006	April-September 2006
PDS Kerosene and domestic LPG*	9,274	17,842	24,630	6,803	14,875
Petrol and Diesel	0	2,304	15,370	10,243	18,310
Total	**9,274**	**20,146**	**40,000**	**17,046**	**33,185**

***On gross basis, i.e. before sharing of losses by upstream oil companies.**

Source: Ministry of Petroleum & Natural Gas

(O+OEG) production in 2006-07 up to December 2006, year-on-year, increased by only about 1.85 per cent.

7.28 With 19 refineries – 17 in the public sector and 2 in the private – the domestic refining capacity in December 2006 was 148.97 million tonnes per year. During 2005-06, refinery throughput at 130.11 million tonnes was up 2.1 per cent from 127.42 million tonnes in the previous year. During April-December 2006, such throughput was 107.42 million tonnes.

7.29 Global prices of crude oil and petroleum products reached new highs in the past two years. The Indian basket of crude oil prices touched an all-time high of US$75.20 per barrel on August 8, 2006. Government tried to distribute the heavy burden of this oil price hike equitably amongst various stakeholders, namely upstream companies, oil-marketing companies, Government and the consumers. As in 2004 and 2005, Government tried to further restructure the duties on petroleum products to mitigate the burden of price rise on the common man. In the Union Budget 2006, LPG (Domestic) was categorized as "Declared Goods" requiring State Governments to peg the sales tax rate to no more than 4 per cent and thereby partially reduce the severe under-recoveries (Box 7.2) suffered by oil marketing companies in sensitive petroleum products. Further, with effect from June 14, 2006, customs duty on petrol and diesel was reduced from 10 per cent to 7.5 per cent. Since mid-June 2006, in line with the recommendation of the High–Powered Inter-Ministerial Committee headed by Dr. C. Rangarajan, the basis of pricing was changed from import-parity to trade-parity. Trade-parity price is the weighted average of import-parity (4) and export-parity (1) prices.

7.30 During 2006, in view of the very high under-recoveries and acute financial distress having a direct bearing on the corporate image and strength of the oil marketing companies, Government was compelled to increase the prices of petrol and diesel by Rs.4 per and Rs.2 per litre respectively with effect from June 6, 2006. Prior to this the prices of petrol and diesel were revised on September 7, 2005. However, the prices of PDS Kerosene and domestic LPG were not touched. Government also decided to issue bonds worth Rs.28,300 crore to oil marketing companies for losses suffered due to non-revision of prices in respect of sensitive petroleum products for the current financial year 2006-07. During the year 2005-06, such bonds worth Rs.11,500 crore were issued by Government.

7.31 However, in view of declining international prices, Government reduced the prices of petrol and diesel with effect from November 30, 2006. The impact of this reduction was around Rs.2 per litre for petrol and Rs.1 per litre for diesel. A further reduction of the same magnitude was made effective from February 16, 2007. International prices of oil are projected to remain high in winter,

Box 7.3 : Policy Decisions during 2006-07

- Petroleum and Natural Gas Regulatory Act, 2006 has been notified on April 3, 2006 to regulate specific activities relating to petroleum, petroleum products and natural gas consequent to deregulation of the petroleum sector.
- Taking into account the oil security of India, Government has decided to set up strategic crude oil storage facility of 5 million tonnes at various locations in the country.
- Sale of 5 per cent ethanol blended petrol in various parts of the country has been allowed, subject to commercial viability, from November 1, 2006.
- Sixth Round of New Exploration Licensing Policy (NELP) was launched on February 23, 2006 by offering 55 exploration blocks covering an area of 3.52 lakh square kilometers.
- Coal Bed Methane (CBM) has emerged as another alternative viable source of gas. The third round of CBM-II policy was launched, and 10 CBM blocks have been awarded.
- On December 20, 2006 Government has notified the Policy for Development of Nautral Gas Pipelines and City or Local Natural Gas Distribution Networks, which inter alia seeks to promote competition and arm's length business.
- Along with intensifying exploration efforts in the country, the oil companies are aggressively following a policy of gaining global properties. ONGC Videsh Limited (OVL) has presence in 15 countries and has set a target to acquire 20 million tonnes per annum of oil and oil equivalent gas production by 2020.

with OPEC announcing a cut in output by 1.2 million barrels per day with effect from November 1, 2006 and a further cut of 0.50 million barrel per day with effect from February 1, 2007 with a view to maintain oil prices. Government has taken several steps to effectively control and regulate the volatility in prices, and augment production of oil and natural gas (Box 7.3).

Tourism

7.32 The impressive growth profile of the tourism sector observed over the last two years appears to be continuing. As per the World Tourism Organization, about 808 million tourists travelled internationally – a growth of 5.6 per cent over 2004 – and spent about US$680 billion. Furthermore, according to the World Travel and Tourism Council (WTTC), tourism accounted for 10.6 per cent of global GDP, 12.0 per cent of the total world exports and 8.3 per cent of global employment in the year 2005.

7.33 The double-digit growth in both number of foreign tourist arrivals and foreign exchange earnings therefrom continued for the third consecutive year in 2005-06. However, there was a deceleration in the growth rate of foreign tourist arrivals and foreign exchange earnings therefrom between 2004-05 and 2005-06 (Table 7.9).

7.34 Sustained improvement in tourist infrastructure, such as airports, rail and roads leading to connectivity of tourist destinations, development of tourist destinations and circuits, improving and expanding existing products such as cultural and heritage tourism, rural tourism, adventure tourism and health and healing tourism, need to be pursued to establish India's competitive advantage in this critical sector.

Table 7.9 : Foreign tourist arrivals and foreign exchange earning

Year	Foreign tourists		Estimated foreign Exchange Earnings	
	Number in Lakh	Growth Rate	Million US$	Growth Rate
1998-99	23.97	1.1	2993	2.7
1999-00	25.05	4.5	3036	1.4
2000-01	26.99	7.7	3168	4.3
2001-02	24.28	-10.0	2910	-8.1
2002-03	24.54	1.0	3029	4.1
2003-04	29.33	19.5	3979	31.4
2004-05	36.03	22.8	5029	26.4
2005-06	40.53	12.5	5931	17.9

Source : Ministry of Tourism

Electronics & Computer Technology

7.35 The Indian IT-enabled Services and Business Process Outsourcing (ITES-BPO) have demonstrated their superiority, sustained cost advantage and fundamentally-powered value propostion in the international market. This sector is growing with Indian companies expanding their service offerings, enabling customers to deepen their offshore engagements and shifting from low-end business processes to high-value ones. The software and ITES exports from India grew from US$12.9 billion (Rs. 58,240 crore) in 2003-04 to US$17.7 billion (Rs. 78,230 crore) in 2004-05 (Table 7.10). Software and ITES exports from India estimated at US$23.4 billion during 2005-06 was up 32 per cent from the previous year.

7.36 With strong demand over the past few years placing India among the fastest growing IT markets in the Asia-Pacific region, the industry's contribution to GDP rose from 1.2 per cent in 1999-2000 to an estimated 4.8 per cent in 2005-06. Indian companies are enhancing their global services delivery capabilities through a combination of greenfield initiatives, cross-border mergers & acqusitions, partnerships and alliances with local players. This is enabling them to execute end-to-end delivery of new services. Global software giants such as Microsoft, Oracle and SAP, have established their captive development centres in India. A majority of the companies in India have already aligned their internal processes and practices to international standards such as ISO, CMM, and Six Sigma. This has helped establish India as a credible sourcing destination. As of December, 2006, over 400 Indian companies have acquired quality certifications with 82 companies certified at SEI CMM Level 5 – higher than any other country in the world.

Table 7.10 : Electronics exports

(Rs. Crore)

Items		2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
1.	Electronics Hardware	4,788	5,800	5,600	7,700	8,000	8,500
2.	Computer Software	28,350	36,500	46,100	58,240	78,230	103,200
	Total	**33,138**	**42,300**	**51,700**	**65,940**	**86,230**	**111,700**

Table 7.11 : Electronics production

(Rs. Crore)

Items		2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
1.	Consumer Electronics	11,950	12,700	13,800	15,200	16,800	18,000
2.	Industrial Electronics	4,000	4,500	5,550	6,100	8,300	8,800
3.	Computers	3,400	3,550	4,250	6,800	8,800	10,800
4.	Communications and Broadcasting Equipments	4,500	4,500	4,800	5,350	4,800	7,000
5.	Strategic Electronics	1,750	1,800	2,500	2,750	3,000	3,200
6.	Components	5,500	5,700	6,600	7,600	8,800	8,800
	Sub-Total	31,100	32,750	37,500	43,800	50500	56,600
7.	Software for Exports	28,350	36,500	46,100	58,240	78,230	103,200
8.	Domestic Software	9,400	10,874	13,400	16,250	19,630	26,460
	Total	**68,850**	**80,124**	**97,000**	**118,290**	**148,360**	**186,260**

Source : Ministry of Information and Technology

7.37 While there have been no spectacular achievements in the hardware segment as in the case of the software segment of the IT sector, there has been a steady progress in production (Table 7.11) and exports (Table 7.10) of hardware.

7.38 Contrary to some popular misperceptions, the growth of the IT and ITES sector has had a salutary effect on the employment scenario with total number of professionals employed in this sector growing from an estimated 284,000 in 1999-2000 to 1,287,000 in 2005-06. The increase in the number of employed person in the sector was as high as 230,000 in 2005-06 itself. In addition, Indian IT-ITES is estimated to have helped create an additional 30 lakh job oppurtunities through indirect and induced

Box 7.4 : Policy Initiatives For Electronics and IT Sector

- The Information Technology Amendment Bill has been introduced in the Parliament on December 15, 2006. This proposes to put in place technology applications, security practices and procedures relating to such applications. Furthermore, it addresses the issue of technological neutrality in IT laws as recommended by UNCITRAL Model Law on Electronic Signature.
- A proposal for Electronics & IT Hardware Manufacturing Policy is also under consideration which aims to i) rationalize tariff structure on capital goods and inputs, ii) unifiy manufacturing for domestic market and exports, iii) facilitate registration of international patents, iv) transfer state-of-the-art technology(TOT) and v) enhance Research and Development.
- In order to ensure that the benefits of IT reach the common man, Government has initiated a move to make available tools and fonts in various Indian languages freely to the general public. Tamil, Hindi and Telugu software tools and fonts have already been released. All Indian languages are expected to be covered in the next one year.
- Government , to ensure penetrations of the IT and ITES in the rural areas, has formulated a proposal to establish 1,00,000 Common service Centres (CSCs) in rural areas, which will serve not only as the front-end for most government services but also as a means to connect the citizens of rural India to the World Wide Web. The scheme will be implemented through Public Private Partnership (PPP). An outlay of Rs. 5,742 has been approved of which the share of the Central Government and the State Governments would be Rs.856 croe and Rs.793 crore, respectively. The balance would be invested by the private sector.

employment in telecom, power, construction, facility management, IT transportation, catering and other services. Government has taken several steps to further enhance this industry (Box 7.4).

Central Public Sector Enterprises (CPSEs)

7.39 Contributing an estimated 11.12 per cent of GDP at market prices in 2005-06, the CPSEs continued to be engaged in the production and supply of a wide range of products and sevices (Box 7.5) including basic goods like steel, cement and chemicals; capital goods like pressure vessels, boilers and drilling rigs; and intermediate goods like electricity and gas. They also rendered a large number of services like telecommunications, tourism, and warehousing.

7.40 The National Common Mimimum Programme (NCMP) stipulates a strong and effective public sector whose social objectives are met without prejudice to its commercial functioning. Efforts are being made to modernize and restructure sick CPSEs and revive sick industry. Only the chronically loss-making CPSEs are being considered for closure or sell-off after payment of due compensation to the laid-off employees. The problem of sickness in CPSEs is addressed by the administrative Ministries/Departments by evolving an appropriate need-based strategy concerning a particular CPSE. Government, to further help the CPSUs to turn around financially, set up the Board for Reconstruction of Public Sector Enterprises (BRPSE) in December 2004 to recommend measures for restrucuturing/reviving CPSEs referred to them. The BRPSE also recommends cases where disinvestment or closure or sale are justified. Till October 31, 2006, BRPSE has made recommendations in respect of 36 CPSEs, and Government has approved the proposals in 21 cases.

7.41 In order to ensure and encourage efficiency in their functioning, Government has taken various steps to professionalise the Boards of CPSEs. These include provision of outside professionals in the form of part-time

Box 7.5 : Highlights of CPSE performance in 2005-06

- The share of CPSEs in GDP at market prices stood at 11.12 per cent in 2005-06 and 11.68 per cent in 2004-05.
- The cumulative investment of all CPSEs at end-March, 2006 was Rs.3,93,057 crore. The share of manufacturing CPSEs in such investment was the highest at 51 per cent followed by service CPSEs at 40 per cent, mining CPSEs at 7 per cent.
- The overall growth in turnover of CPSEs was 11.86 per cent. The growth in the turnover of 'heavy engineering and construction services' group was the highest at 39 per cent during the year.
- In terms of capacity utilization, 51 per cent of all CPSEs operated at 75 per cent or higher; 16 per cent at 50-75 per cent, and the residual 33 per cent at less than 50 per cent.
- CPSEs had a near monopoly in the production of coal (85.52 per cent), crude oil (85.87 per cent) and petroleum refining (74.51 per cent).· The aggregate reserves and surpluses of all CPSEs went up to Rs. 3,59,077 crore.
- The long-term loans of CPSEs went up to Rs. 3,61,714 crore.
- The accumulated losses of all CPSEs declined by Rs.10,578 crore from Rs.83,725 crore in 2004-05 to Rs.73,147 crore.
- While the petroleum producing CPSEs ranked among the top ten profit-making CPSEs, the fertilizer producing CPSEs were generally the loss-making ones.
- 44 CPSEs are listed on the domestic stock exchanges. While the shares of MTNL (ADR) are listed on the New York Stock Exchange, the shares of GAIL and SAIL are listed on the London Stock Exchange.
- In net value addition of CPSEs at market prices, the share of 'taxes and duties' was the highest at 46 per cent, followed by 'net profit' (26 per cent), 'salaries & wages' (19 per cent) and 'interest' (9 per cent).
- At end-March, 2006, the 239 CPSEs employed over 16.49 lakh people excluding casual workers. The comparable figures in the previous four years were 19.92 lakh, 18.66 lakh, 17.62 lakh, 17.00 lakh, respectively.

Source: Department of Public Sector Enterprises.

non- official Directors, restricting the number of Government nominated Directors to one-sixth of the actual strength of the Board subject to a maximum of two, and incorporation of functional Directors upto a limit of 50 per cent of the actual strength of the Board. On the recommendations of Arjun Sen Gupta Committee, the Government, during 1987-88, introduced the concept of Memorandum of Understanding (MOU) to ensure clarity in the functioning of CPSEs, and proper balance between accountability and autonomy for better results. The number of CPSEs signing MOUs went up from 4 in 1987-88 to 112 in 2006-07. In order to further the competitive spirit, an attempt has also been made to evaluate the performance of the CPSEs on the basis of (a) sales, (b) growth of sales, (c) net profit, (d) growth in net profit, (e) return on net worth, (f) earning per share, and (g) dividend pay-out ratio.

7.42 The Government policy on disinvestment has evolved over the last decade and has been generally announced through the Budget. Disinvestment of Government equity in CPSEs began in 1991-92. Till 1999-2000, disinvestment was primarily through sale of minority shares in small lots. Between 1999-2000 and 2003-04, the emphasis of disinvestment changed in favour of strategic sale. The proceeds from disinvestment from April 1991 to March 2006 amounted to Rs. 49,241.29 crore. At present, the policy is to list large, profitable CPSEs on domestic stock exchanges.

Micro and Small Enterprises

7.43 The micro and small enterprises (MSEs) constitute an important segment of the Indian economy, contributing around 39 per cent of the country's manufacturing output and 34 per cent of its exports in 2004-05. It provides employment to around 29.5 million people in the rural and urban areas of the country (Table 7.11).

7.44 The process of economic liberalisation and market reforms, while exposing the Indian MSEs to increasing levels of domestic and global competition, has also opened up attractive possibilities of access to larger markets and of stronger and deeper linkages of MSEs with larger enterprises. Improved manufacturing techniques and management processes can be sourced and adopted with greater ease. A robust and vibrant MSE segment can derive the benefits of these new opportunities provided appropriate enabling policies are put in place and measures for capacity building in public private mode are also initiated. In this environment of competition and rapid technological changes, the segment can then achieve higher sustained growth by enhancing its technological capabilities, improving its product and service quality to global standards and seeking ways of innovation

Table 7.11 : Performance of Micro and Small Enterprises

Year	No. of units (in lakh)			Production (Rs. crore)		Employment	Exports
	Regd.	Unregd.	Total	(at current prices)	(at constant prices)	(in lakh)	(Rs. crore)
2002-03	15.91	93.58	109.49 (4.1)	3,11,993 (10.5)	2,10,636 (7.7)	260.21 (4.4)	86,013 (20.7)
2003-04	16.97	96.98	113.95 (4.1)	3,57,733 (14.7)	2,28,730 (8.6)	271.42 (4.3)	97,644 (13.5)
2004-05	17.53	101.06	118.59 (4.1)	4,18,263 (16.9)	2,51,511 (10.0)	282,57 (4.1)	1,24,417 (27.4)
2005-06	18.71	104.71	123.42 (4.1)	4,76,201 (13.9)	2,77,668 (10.4)	294.91 (4.4)	N.A.

Note : Figures in parenthesis indicate percentage growth over previous years

Source : Development Commissioner (SSI).

7.45 Intiatives and measures taken by the Government during the year to enable MSEs enhance their competitive strength, address the challenges of competition and avail of the benefits of the global market include:

- Enactment of the Micro, Small and Medium Enterprises Development (SMED) Act, 2006. (Box 7.6)
- Amendment to the Khadi and Village Industries Commission Act, 1956 introducing several new features to facilitate professionalism in the operations of the Commssion as well as field-level formal and structured consultations with all segments of stakeholders. The new Commission has been constituted.
- A package for Promotion of Micro & Small Enterprises has been approved recently to address most of the concerns in the areas such as credit, cluster-based development, infrastructure, technology, and marketing. Capacity building of MSME Associations and support to women entrepreneurs are the other important features of this package.
- An empowered group of Ministers (EGoM) under the Chairmanship of the External Affairs Minister has been set up to lay down a comprehensive policy for cluster-development and oversee its implementation.
- Under the Credit Guarantee Scheme, life insurance cover for chief promoters of units provided guarantee cover by the Credit Guarantee Fund Trust for Small Industries (CGTSI) has been introduced. Further, the one-time guarantee fee under the scheme has been reduced from 2.5 per cent to 1.5 per cent with effect from April 1, 2006.
- After due consultation with the stakeholders, 180 items reserved for exclusive manufacture in micro & small enterprises have been de-reserved on May 16, 2006 and 87 such items have been dereserved on January 22, 2007.

7.46 The logic of reserving items for domestic production exclusively in the small-scale sector, particularly when such products can be freely imported from large-scale production units abroad and when such a policy prevents the 'small' from growing and benefiting from the economies of scale, has progressively come under serious questioning. However the question that needs to be

Box : 7.6 Salient Features of the Micro, Small and Medium Enterprises Development Act, 2006

- It provides the first-ever legal framework for recognition of the concept of "enterprise" (comprising both manufacturing and services) and integrating the three tiers of these enterprises, viz, micro, small and medium
- Under the Act, enterprises have been categorized broadly into those engaged in (i) manufacturing and (ii) providing/rendering of services. Both categories have been further classified into micro, small and medium enterprises, based on their investment in plant and machinery (for manufacturing enterprises) or in equipment (in case of enerprises providing or rendering services) as under:

  Manufacturing Enterprises:Micro Enterprises-investment up to Rs. 25 lakh.Small Enterprises – investment above Rs. 25 lakh and up to Rs. 5 crore.Medium Enterprises – investment above Rs. 5 crore and up to Rs. 10 crore.

  Service Enterprises:

  Micro Enterprises – investment up to Rs. 10 lakhSmall Enterprises – investment above Rs. 10 lakh and up to Rs. 2 crore.Medium Enterprises – investment above Rs. 2 crore and up to Rs. 5 crore.
- The Act provides for a statutory consultative mechanism at the national level with wide representation of all sections of stakeholders, particularly the three classes of enterprises, and with a wide range of advisory functions, and an Advisory Committee to assist the Board and the Centre/State Governments.
- The other features include (i) establishment of specific Funds for the promotion, development and enhancement of competitiveness of these enterprises, (ii) notification of schemes/ programmes for this purpose, (iii) progressive credit policies and practices, (iv) preference in Government procurements to products and sevices of the micro and small enterprises, (v) more effective mechanisms for mitigating the problems of delayed payments to micro and small enterprises and (vi) simplification of the process of closure of business by all three categories of enterprises.

Table 7.12 : Trend in Reservation of Items for the Small Scale Sector

Date of Notification	Number of Reserved	Number of Dereserved	Cumulative Total
Phase 1			
April 11, 1967	47	0	47
Feb 19, 1970	8	0	55
Feb 24, 1971	73	0	128
Nov 11, 1971	0	4	124
Feb 26,1974	53	0	177
June 5, 1976	3	0	180
April 26, 1978	324	0	504
Phase 2			
April 26,1978*	807		807
Dec 30, 1978		1	806
May 12, 1980	27	0	833
Feb 19,1981	1	1	833
Aug 3, 1981	9		842
Dec 23, 1981	02	13	831
Oct 14,1982		3	828
Oct 19,1982	9		837
Sep 3, 1983	35		872
Oct 18, 1984	1		873
May 30, 1986	7	14**	869
Oct 30,1986	1	7	863
Feb 13, 1987	0	13	850
July 20,1987	0	3	847
March 18, 1988	0	1	846
March 3, 1989	3	14	835
July 31,1989	1		836
April 3, 1997	0	15	821
Feb 3, 1999	0	9	812
Jan 1,2001	0	1	811
June 29,2001	0	14***	799
May 20,2002	0	51@	749
June 3, 2003	0	75@@	675
Oct 20,2004	0	85@@@	605
March 28,2005	0	108@@@@	506
May 16,2006		180	326
Jan 22, 2007	0	87	239

Source: Minsitry of Small Scale Industries (SSI) and Agro & Rural Industries

*** In 1978, it was decided to recast the reserved list by following codes adopted in the NIC and in the process the list of dereserved items expanded from 504 to 807.**

**** Since it included three sub-items, the effective number comes to 11 only**

***** Since it included two sub-items, the effective number comes to 12 only**

@ Since it included one sub-item, the effective number comes to 50 only

@@ Since it included one sub-item, the effective number comes to 74 only

@@@ Since it included 15 sub-items, the effective number comes to 70 only

@@@@ Since it included 10 sub-items, the effective number comes to 98 only

addressed is whether the reservation in the small scale sector is based on any objective policy parameter. The process of reservation of items for production exclusively by the small-scale sector started in 1967 and reached its peak in 1984 (Table 7.12). There has been a gradual relaxation of the reservation policy over time, and the number of items reserved for the small-scale sector was 239 on January 22, 2007.

Industrial Sickness

7.47 Since its inception in May 1987 till the end of September 2006, the Board of Industrial and Financial Reconstruction (BIFR) received 6,991 references under the Sick Industrial Companies (Special Provision) Act (SICA), 1985 (Table 7.13). These references included 296 references from CPSUs and State PSU (SPSUs).] With 6,991 references received, 5,412 were registered under section 15 of SICA. 1,707 were dismissed as non-maintainable under the Act. 760 rehabilitation schemes, including 12 by Appellate Authority of Industrial and Financial Reconstruction (AAIFR)/Supreme Court, were sanctioned and 1,303 companies were recommended to be wound up. 485 companies have been declared 'no longer sick' and were discharged from the purview of SICA on their net worth turning positive after the implementation of the schemes.

7.48 Among the 296 references for PSUs, 213 (91 CPSUs and 122 SPSUs) were registered up to September 30, 2006. Rehabilitation schemes were sanctioned for 28 CPSUs and 26 SPSUs. It was recommended that 29 CPSUs and 40 CPSUs be wound up. 9 CPSUs and 14 SPSUs were declared 'no longer sick'. As on March 31, 2002, 2003, 2004 and 2005 the gross disposal of cases was, 2,400, 2,867, 3,318 and 3,426, respectively. In the current year, the gross disposal of cases, as on September 30, was 4,115.

Industrial Relations

7.49 The continued decline in the number of strikes and lockouts indicates an improvment in industrial relations in the country (Table 7.14). The number of strikes and

Table 7.13 : References to BIFR as on September 30, 2006						
Sl. No.	**Status**	**Private**	**Central PSUs**	**State PSUs**	**Total PSUs**	**Total**
1	References received	6,695	108	188	296	6,991
2	Registration declined	1,484	17	66	83	1,567
3	Under Scrutiny	12	0	0	0	12
A	References registered (=1-2-3)	5,199	91	122	213	5,412
	DISPOSALS					
5	Dismissed					
	(i) as non-maintainable	1,660	11	36	47	1,707
	(ii) as multiple registered	218	0	0	0	218
6	Rehabilitation schemes approved/sanctioned					
	(i) by BIFR	695	27	26	53	748
	(ii) by AAIFR/SC	11	1	0	1	12
7	Declared on longer sick out of Sl No. 6	462	9	14	23	485
8	Winding up recommended to the concerned high courts	1,234	29	40	69	1,303
9	Dropped now	119	5	3	8	127
B	Total (5+6+8+9)	3,937	73	105	178	4,115
C	PENDING					
10	Draft schemes circulated	42	2	0	2	44
11	Winding up notice issued	85	1	4	5	90
12	Pending for sickness determination	357	2	1	3	360
13	Declared sick	678	11	10	21	699
14	Schemes failed and reopened	8	1	0	1	9
15	Pending cases remanded by AAIFR	43	1	2	3	46
16	Stay ordered by courts	46	0	3	3	49
	Total (C=A-B)	**1,262**	**18**	**17**	**35**	**1,297**

Source: BIFR, Department of Economic Affairs, Ministry of Finance

lockouts, taken together, was down by 4.4 per cent in 2005. During the current year, as per the available information till September, 2006 West Bengal experienced the maximum instances of strikes and lockout followed by Tamil Nadu and Gujarat. Industrial disturbances were concentrated mainly in textile, financial intermediaries (excluding

Table 7.14 : Strikes and lockouts						
	Strikes		**Lockouts**		**Total**	
Year	**Number**	**Mandays lost (in million)**	**Number**	**Mandays lost (in million)**	**Number**	**Mandays lost (in million)**
2000	426	11.96	345	16.80	771	28.76
2001	372	5.56	302	18.20	674	23.77
2002	295	9.66	284	16.92	579	26.58
2003	255	3.21	297	27.05	552	30.26
2004	236	4.83	241	19.04	477	23.87
2005	227	10.81	229	18.86	456	29.66
2006(Jan-Sep)(P)	154	3.16	192	10.60	346	13.75

P – Provisional, Total may not tally due to rounding off

Source : Labour Bureau, Shimla

insurance and pension fund), engineering and chemical industries.

Foreign Direct Investment

7.50 The inflow of Foreign Direct Investment (FDI) has registered robust growth in the current financial year. As per the latest report of UNCTAD, India surpassed South Korea to become the fourth largest recipient of FDI in the region. During April-September 2006, total FDI inflows (excluding 'reinvested earnings' and 'other capital components') were Rs.20,155 crore (US$4.38 billion). Cumulative FDI inflows since August 1991 up to Septmeber 2006 were Rs.1,81,566 crore (US$43.29 billion). Among sectors attracting high cumulative FDIs (Table 7.15), electrical equipments retained the first spot, followed by sevices and telecommunications. Services and telecommunications dislodged transportation industry to the fourth spot from the second spot held by it last year.

Table 7.15 : Sectors attracting highest FDI inflows

(Amount in Rupees crore and in US$ in million in parentheses)

Ranks	Sector	2003-04	2004-05	2005-06	2006-07 (April – Sep)	Cumulative inflows (from Aug 1991 to Sep 2006)	Share of FDI inflows (in per cent)
1	Electrical Equipment s (including computer software and electronics)	2,449(532)	3,281(721)	6,499(1451)	3,601(778)	27,311(6,272)	17.54
2	Services Sector (financial & non-financial)	1,235(269)	2,106(469)	2,565(581)	6,955(1,509)	19,759(4,600)	12.69
3	Telecommunications (radio paging, cellular mobile, basic telephone services)	532(116)	588(129)	3,023(680)	3,835(405)	16,172(3,776)	10.39
4	Transportation Industry	1,417(308)	815(179)	983(222)	1,187(259)	14,502(3,436)	9.31
5	Fuels (Power +Oil refinery)	521(113)	759(166)	416(94)	632(138)	11,608(2,720)	7.45
6	Chemicals (other than fertilizers)	94(20)	909(198)	1979(447)	439(95)	9,019(2,238)	5.79
7	Food Processing Industries	511(111)	174(38)	183(42)	150(33)	4,852(1,212)	3.12
8	Drugs and Pharmaceuticals	502(109)	1,343(292)	760(172)	219(48)	4,531(1,055)	2.91
9	Metallurgical Industries	146(32)	881(192)	681(153)	511(111)	3,328(766)	2.14
10	Cement and Gypsum Products	44(10)	1(0)	1,970(452)	96(21)	3,327(768)	2.14

Source : FDI Data Cell, Ministry of Commerce

7.51 As destinations of FDI inflows (Table 7.16), the first four spots continued to be New Delhi, Mumbai, Bangalore and

Table 7.16 : Region-wise/State-wise Break- up of Cumulative FDI Inflows until September 2006

Rank	RBI's Regional Office	State covered	Amount of FDI Inflows: Rupees in crore	Amount of FDI Inflows: US$ in million	Share of FDI inflows in rupees (in per cent)
1	New Delhi	Delhi, Part of UP and Haryana	27,369.16	6,053.2	24.00
2	Mumbai	Maharashtra, Dadra and Nagar Haveli, Daman and Diu	24,545.44	5,399.1	21.52
3	Bangalore	Karnataka	7,809.7	1,727.5	6.85
4	Chennai	Tamil Nadu and Pondicherry	7,413.15	1,630.6.7	6.50
5	Hyderabad	Andhra Pradesh	4,412.80	970.6	3.87

Source : FDI Data Cell, Ministry of Commerce

Chennai, while Hyderabad overtook Ahmedabad to occupy the fifth place by September, 2006.

7.52 With increased liberalisation, equity caps on FDI existed only in limit sectors. These are a FM radio broadcasting (upto 20 per cent); insurance, defence production, petroleum refining in the PSUs, print and electronic media covering news and current affairs (upto 26 per cent); air transport services, asset reconstruction companies, cable network, direct to home (DTH), hardware for uplinking, HUB, etc. (upto 49 per cent); single brand retailing (upto 51 per cent); atomic minerals, private sector banking, telecom services, establishment and operation of satellites (upto 74 per cent). FDI is prohibited in retail trading (except for single brand product retailing), gambilng and betting, lottery and atomic energy. Approval for proposals for induction of equity of more than 24 per cent for manufacture of items that are reserved for small-scale sector and the proposals where the foreign investor has an existing joint venture/technical collaboration/ trademark agreemtn in the same field of activity and attract the provisions of Press Note (2005 Series) are not under automatic route.

7.53 A comprehensive review of the FDI policy was undertaken during the current year vide Press Note 4 dated February 10, 2006, to consolidate the liberalization already effected and further rationalize the FDI policy governing various activities. The major policy intiatives taken are:

- **Change of route:** FDI has been allowed up to 100 per cent under the automatic route for distillation and brewing of potable alcohol, manufacture of industrial explosives, manufacture of hazardous chemicals, manufacturing activities located within 25 kms of the Standard Urban Area limits requiring industrial license under the IDR(Act) 1951, setting up of greenfield airport projects, laying of natural gas/LNG pipelines, market study and formulation and investment financing in the petroleum sector, and cash and carry wholesale trading and export trading.
- **Increase in equity caps:** FDI caps have been increased to 100 per cent and automatic route extended to coal and lignite mining for captive consumption, setting up of infrastructure relating to marketing in petroleum and natural gas sector and exploration and mining of diamonds and precious stones.
- **FDI in new activites:** FDI has been allowed up to 100 per cent on the automatic route in power trading and processing and warehousing of coffee and rubber. FDI has also been allowed up to 51 per cent for 'single brand' product retailing which requires prior approval of Government. Specific guidelines have been issued for governing FDI for 'single brand' product retailing.
- **Removal of restrictive conditions:** Mandatory divestment conditions for Business to Business e-commerce has been dispensed with.
- **Procedural simplification:** The transfer of shares from resident to non-resident including acquisition of shares in an existing company has been placed on the automatic route subject to sectoral policy on FDI.

7.54 In order to boost production of cash crops through infusion of foreign funds and technical know how, vide Press Note 4 of February 10, 2006, Agriculture & plantations was removed from the list of prohibited sectors for FDI, and the activities permitted within these sectors were included in the sector-specific policy. As per the present policy, FDI up to 100 per cent is permitted under the automatic route in floriculture, horticulture, development of seeds, animal husbandry, pisciculture, aqua-culture and cultivation of vegetables & mushrooms under controlled condtions, and services related to agro and allied sectors. FDI up to 100 per cent with prior Government approval is permitted in tea

Table 7.17 : Employment trends vis-à-vis IIP growth in the organized manufacturing sector (1987-88 to 2003-04)						
(Value figures in lakh and others in numbers)						
Characterestics	**1987-88**	**1991-92**	**1996-97**	**2001-02**	**2002-03**	**2003-04**
No. of factories	102,596	112,286	132,814	128,549	127,957	129,074
Fixed Capital	7,847,463	15,190,240	38,004,439	43,196,013	44,475,938	47,333,140
No. of Workers	6,061,786	6,269,039	7,208,143	5,957,848	6,161,493	6,086,908
No. of employees	7,785,580	8,193,590	9,448,643	7,686,654	7,870,529	7,803,395
Total persons engaged	***7,903,826***	***8,319,563***	***9,536,282***	***7,750,366***	***7,935,948***	***7,870,081***
Wages to workers	893,370	1,358,263	2,655,459	2,743,824	2,968,905	3,047,777
Total emoluments	1,408,105	2,097,048	4,640,358	5,105,957	5,515,801	5,833,675
Other benefits	189,157	421,840	947,074	1,238,964	1,318,412	1,411,758
Total inputs	11,938,728	23,302,799	55,691,484	77,922,749	91,618,549	103,962,377
Value of output	15,397,307	29,919,581	74,180,838	96,245,663	113,056,111	128,738,002
Depreciation	625,220	1,134,080	2,753,467	3,892,702	4,203,558	4,482,349
Net value added	283,360	5,482,702	15,735,887	14,430,212	17,234,004	20,293,276
Rent paid	44,751	119,117	426,234	375,118	379,356	416,084
Interest paid	862,606	1,881,190	3,994,437	4,221,788	3,835,182	3,397,229
Profits 3,28,741	963,507	4,197,844	3,488,385	6,185,254	9,234,531	
IIP growth (%)	***7.3***	***0.6***	***6.1***	***2.7***	***5.7***	***7.0***
Source : Annual Survey of Industries						

plantation subject to the conditions of divestment of 26 per cent equity of the company in favour of an Indian partner/Indian public within a period of five years and prior approval of the State Government concerned in case of any future land use change. Besides the above two, FDI is not allowed in any other agricultural sector/activity.

Industrial Sector, the Eleventh Five Year Plan and Special Economic Zones

7.55 As stated in the Approach Paper to the Eleventh Plan, to "… absorb all new entrants into the labour force, non-agricultural employment would need to increase at over 6 per cent per annum during the 11th Plan. This poses a major challenge not only in terms of generating non-agricultural employment but also in matching its required location and type". Thus, generation of adequate employment is one of the crucial elements in the Eleventh Plan's vision of "inclusive growth". And, this major target of employment generation in the non agricultural sector is intimately linked with the growth of the industrial sector.

7.56 The performance on the employment front in the organized manufacturing sector in the period up to 2003-04 raises some disturbing questions in this context. As per the figures published by Annual Survey of Industries, there was a decline in the absolute number of persons engaged in the organized manufacturing sector between 1987-88 and 2003-04 (Table 7.17). The decline actually took place during the period 1996-97 to 2003-04, when average annual growth rate of IIP was 5.5 per cent, and such growth of the manufacturing sector was even higher at 5.9 per cent. Profitability (i.e., share of profits in the net value added) during the period 1987-88 to 2003-04 increased substantially from 11.6 per cent to 45.51 per cent, while share of wages came down from 56.4 per cent to 35.7 per cent. With a bias towards capital-intensive technology, there was a drop in total employment in the sector. The trend of sluggish employment growth in organized manufacturing is also corroborated by the lacklustre performance of the historically labour-intensive manufacturing sub-sectors like leather, food products, jute and jute products and leather and leather products in more recent years.

7.57 As per Planning Commission estimates, an annual average growth rate of about 12 per cent of the manufacturing sector is necessary to ensure that the targeted average annual gowth of 10 per cent of the industrial sector is achieved during the Eleventh Plan. Upgradation of infrastructure, an enabling fiscal structure, technological modernization, amendment of labour laws and corporate laws and enhanced accessibility to institutional credit are some of the crucial policy aspects which need to be addressed immediately to ensure that the targets are met.

7.58 The challenge ahead lies in appropriately sequencing to sustain the popular support for reforms and reconciling the conflicting interests of the various reforms constituencies. The recent debate about Special Economic Zones (SEZ) illustrates the kind of considerations that have to be taken into account in the formulation of policies. Some of the apprehensions against the SEZs are (a) generation of little new activity as there may be relocation of industries to take advnatage of tax concessions, (b) revenue loss, (c) large-scale land acquisition by the developers which may lead to displacement of farmers with meagre compensation, (d) acquisition of prime agricultural land having serious implications for food security, (e) misuse of land by the developers for real estate and (f) uneven growth aggravating regional inequalities. Many of these apprehensions, however, could be addressed through appropriate policies and safeguards.

7.59 SEZs have been established in many countries as testing grounds for implementation of liberal market economy principles. They are viewed as instruments to enhance the acceptability and credibility of transformation policies, to attract domestic and foreign investment, and generally, for the opening up of the economy. With its genesis in the Export Processing Zones (EPZ), the SEZs in India seek to promote value addition component in exports, generate employment and mobilize foreign exchange. EPZs and SEZs were employed with considerable success by China and other ASEAN countries in the 1970s and 1980s to create regional islands, where export-oriented manufacturing could be undertaken. While EPZs in some of these countries had their share of early difficulties, they provided scope for cultivating manufacturing competitiveness when licensing, labour rigidities and high import duties and taxes acted as a disincentive for investment in the rest of the areas. However, in India, the EPZ experiment was much less of an unequivocal success; and since 1965, when the first EPZ in Kandla was set up, a total of only 11 such zones have come into existence. The Exim Policy of 1997-2002 then introduced the more comprehensive and liberal SEZ concept, after which a bill was drafted and and passsed by Parliament in the form of the SEZ Act, 2005.

Environmental Issues

7.60 Increased and efficient environmental vigilance is an absolute must for containing the negative environmental impact of industrialisation. Industrial pollution is concentrated in industries like petroleum refineries, textiles, pulp and paper, industrial chemicals, iron and steel and non metallic mineral products. Small-scale industries, especially foundries, chemical manufacturing and brick making, can also be significant polluters. In the power sector, thermal power, which constitutes bulk of the installed capacity for electricity generation, is an important source of air pollution.

7.61 In order to contain the damaging impact of industrialisation on environment, Government has initiated various steps (Box 7.7), for protection, conservation and development of the environment. The National Environment Policy (NEP) 2006, which was approved and adopted in May 2006, intends to facilitate realization of sustainable development by mainstreaming environmental concerns in all developmental activities and describing key environmental challenges currently and prospectively facing the country. Another significant policy development was the Environment Impact Assessment (EIA) Notification, 2006 on September 14, 2006, which involved a complete re-engineering of the Environment Impact Assessment (EIA) process and made it more efficient, decentralized and transparent. A National Clean Development Mechanism Authority

Box 7.7 : Major Initiatives to control Environmental Pollution

- Notification of general and source-specific standards for emissions and effluents.
- Regulating the siting of industries.
- Regular monitoring for compliance to environmental standards.
- Legal action for non-compliance.
- Setting up of clean technology mechanisms in polluting industries.
- Setting up of Common Effluent Treatment Plants (CETPs) in industrial estates.
- Establishing waste minimization circles (WMC) in clusters of small scale industries.
- Implementing recommendations of Charter of Corporate Responsibility for Environmental Protection (CREP) in 17 categories of highly polluting industries.
- Implementing an Eco-mark scheme to encourage production/consumption of environment-friendly products.
- Setting up of progressive emission norms at the manufacturing stage for controlling vehicular pollution and introduction of cleaner fuels like unleaded petrol, low sulphur diesel and compressed natural gas (CNG).
- Setting up National Clean Development Mechanism Authority (CDM) as per Kyoto Protocol.
- Promoting economic instruments to internalize the costs of pollution and fiscal incentives for pollution control equipments.

(CDM) has also been set up for the purpose of protecting and improving the quality of environment in terms of the Kyoto Protocol. The CDM Authority receives projects for evaluation and approval for carbon market. Till December 2006, host country approval has been accorded to 473 projects facilitating investment of more than Rs.36,408 crore.

Outlook

7.62 The expected overall annual growth of industry in the Tenth Plan period (2002-2007) at around 8.7 per cent is likely to be short of the targeted growth rate of 10 per cent for the Plan period. Given the recent performance, however, the Eleventh Plan (2007-2012) target of 10 per cent annual industrial growth appears eminently achievable. As the country enters into the first year of the Eleventh Plan, the sustained growth of the industrial sector is crucially dependent on removing the infrastructural impediments, especially, in the power sector.

7.63 Capacity additions through investment is critical for accelerating growth in industry. The investment scenario looks quite optimistic, particularly with rising domestic savings rates and FDI inflows. Sustained economic growth, fiscal consolidation and an enabling policy environment will continue to provide incentive to capacity addition in industry and sustaining its high growth.

7.64 Adequate expansion of employment in the industrial sector, particularly in the organized segment, requires attention. The formation of appropriate skills through a wide variety of vocational training as well as optimal degree of flexibility of labour laws are important aspects in this regard. Progress on these fronts will determine how much progress is made in generating employment in the organized industry in the years to come.