

Industry

9

CHAPTER

Industry, especially manufacturing, was one of the key drivers of the transformation in the growth trajectory of the Indian economy witnessed during the post-2000 period. However, a cyclical slowdown began in the industrial sector in 2007-08 and was compounded by the twin global shocks in 2008-09. The effects lingered on briefly in the current fiscal, but growth rebound is now amply evident. Gross domestic product (GDP) growth has clearly revived in the second quarter of the current year and the industrial sector has emerged as one of the prime movers of the process.

9.2 The recovery in the industrial sector is clearly discernible as corroborated by both the data on national accounts and the index of industrial production (IIP). The downward trend observed in the rate of growth of the IIP that spanned almost eight quarters (beginning the first quarter of 2007-08 and continuing through to the last quarter of 2008-09) stands reversed as gleaned from the latest data

for the current fiscal. After reaching a trough of 0.6 per cent during the second half of 2008-09, growth in the IIP revived to a level of 7.7 per cent during April-November 2009-10.

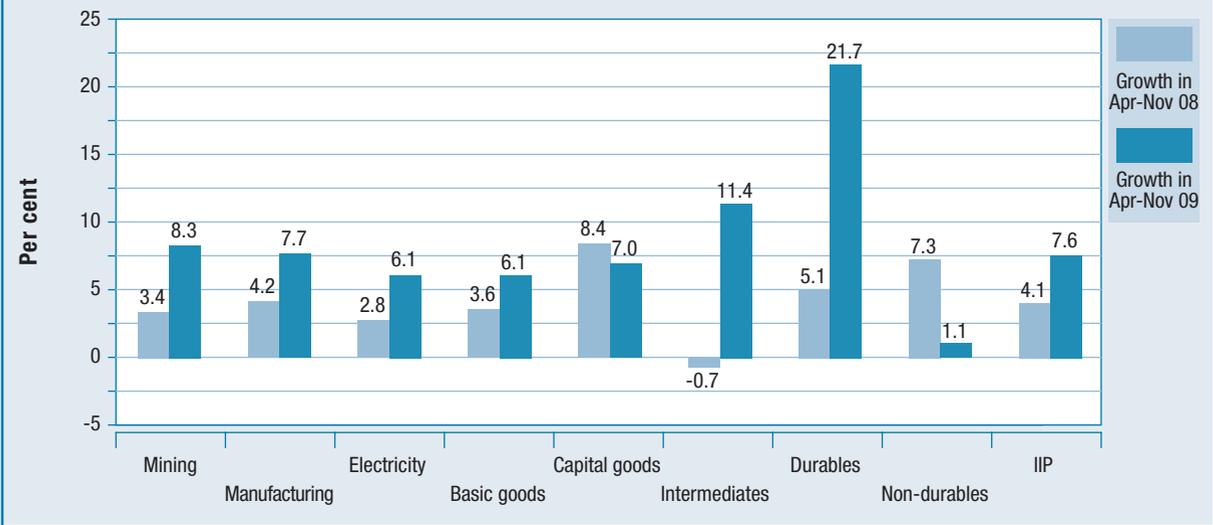
9.3 The broad-based nature of the recovery was evident in the pick-up in growth of almost all major components of the IIP (Table 9.1). With the exception

Table 9.1 : Growth in the IIP and its major components

Period	(per cent)			
	Mining	Manufacturing	Electricity	IIP
2006-07	5.4	12.5	7.2	11.6
Q1 2007-08	2.7	11.1	8.3	10.3
Q2 2007-08	7.4	8.9	7.1	8.7
Q3 2007-08	5.5	8.9	4.6	8.3
Q4 2007-08	5.2	7.3	5.5	7.0
Q1 2008-09	4.0	5.8	2.0	5.3
Q2 2008-09	3.8	4.9	3.2	4.7
Q3 2008-09	2.0	0.5	2.9	0.8
Q4 2008-09	0.9	0.3	3.0	0.5
Q1 2009-10	6.8	3.4	6.0	3.8
Q2 2009-10	9.0	9.3	7.5	9.1
Oct-Nov. 09	9.5	11.9	4.0	11.0

Source : Central Statistical Organisation (CSO).

Figure 9.1 Growth (per cent) in the IIP and its major components



of consumer non-durables, while all the use-based industrial groups subsumed under the IIP have recovered from slump, it was the consistently increasing growth in consumer durables and intermediate goods that drove the industrial revival (Figure 9.1).

9.4 The continuing downward movement in capital goods and consumer non-durables, and to an extent basic goods, suggests that their current rate of growth is significantly below the pre-2007-08 levels and that fuller recovery requires a broader anchor (Figure 9.2).

Figure 9.2A Growth in IIP and its use-based categories (in per cent): Basic goods

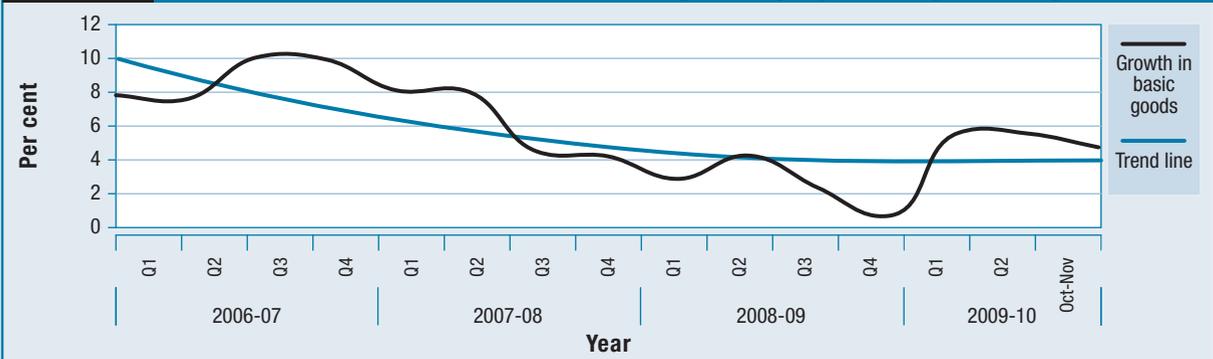


Figure 9.2B Growth in IIP and its use-based categories (in per cent): Capital goods

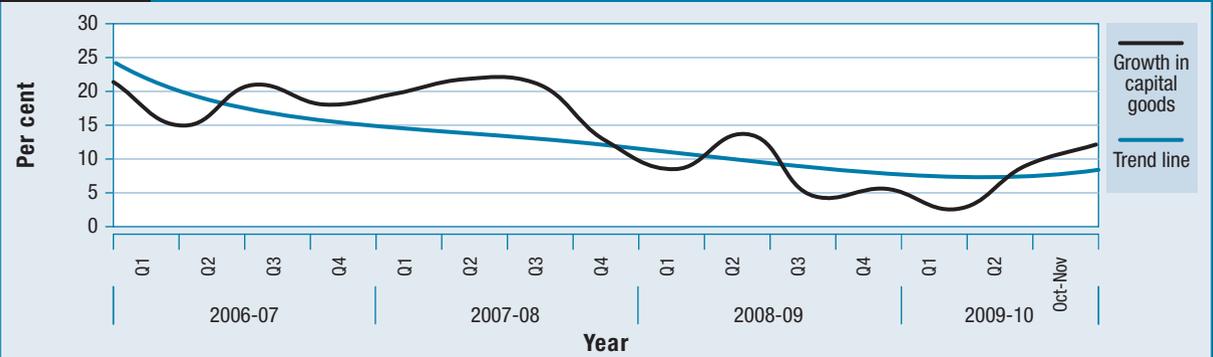


Figure 9.2C Growth in IIP and its use-based categories (in per cent): Intermediate goods

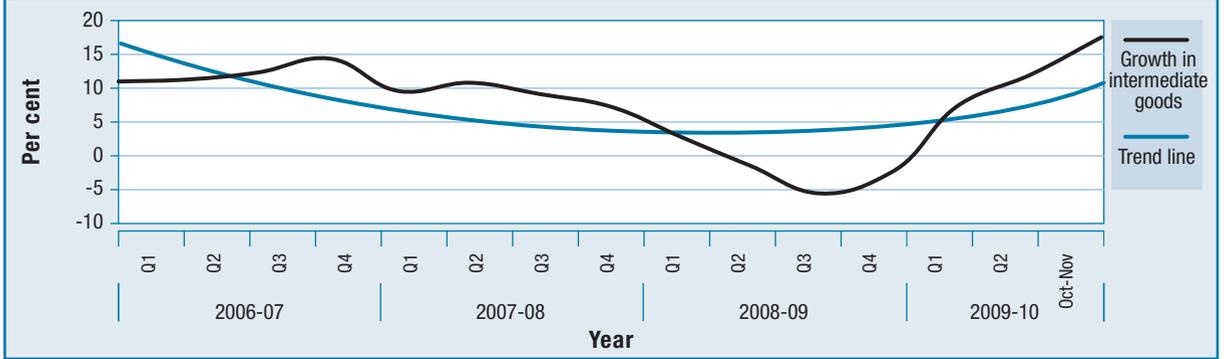


Figure 9.2D Growth in IIP and its use-based categories (in per cent): Durables

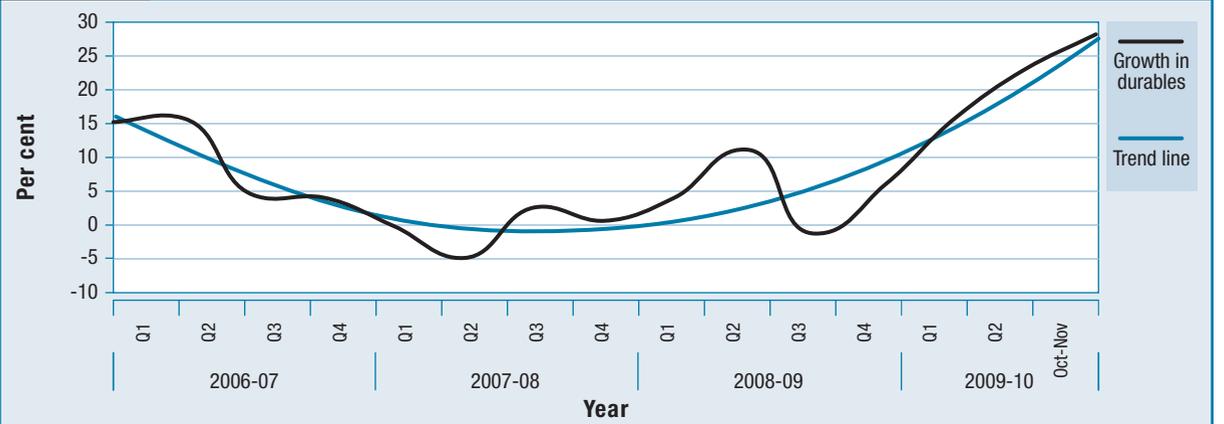


Figure 9.2E Growth in IIP and its use-based categories (in per cent): Non-durables

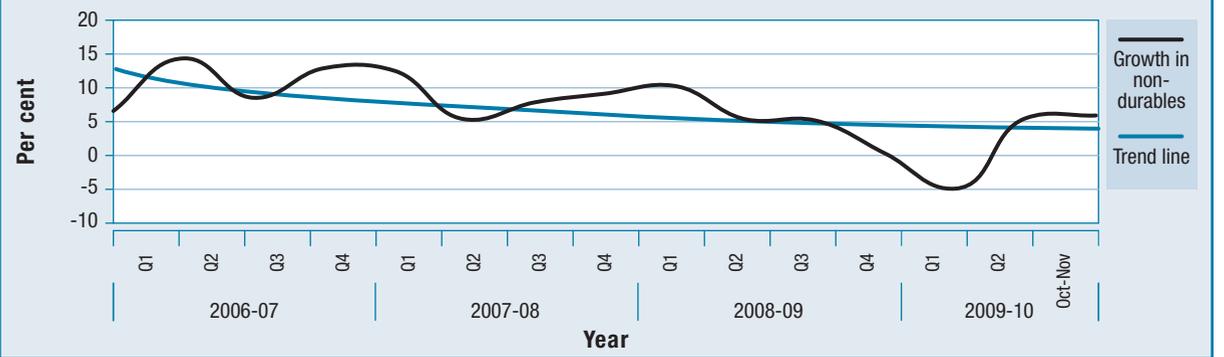
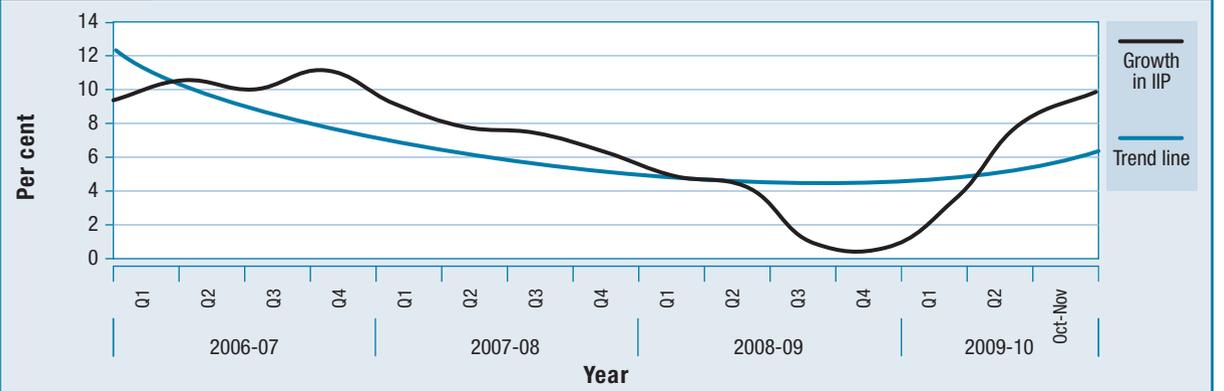


Figure 9.2F Growth in IIP and its use-based categories (in per cent): IIP



DEVELOPMENTS THAT IMPACTED THE SLOWDOWN AND RECOVERY

The slowdown

9.5 A brief recap of the process of slowdown in the IIP since 2007-08 would be useful in appreciating the current process of recovery. The decline in industrial growth, as measured by the IIP, started in the first quarter of 2007-08 and continued through the first half of 2008-09 at a gradual pace. Persistent rise in the price of crude during January 2006-July 2008 and the rise in price of other intermediates (global commodity price shock), particularly metals and ores, from the latter half of 2006-07 to the second half of 2008-09, had their effect on the cost side of the manufacturing sector. A comparison of the major components of expenditure for a sample of manufacturing companies suggests that even by the second half of 2007-08, the cost structure had worsened. This got accentuated in the first two quarters of 2008-09 (Table 9.2).

9.6 The deepening of the global financial crisis immediately following the commodity price shock made it increasingly difficult for companies to raise resources in 2008-09. On the external front, there

was a sharp decline in the flow of funds from American/ global depository receipts (ADRs/GDRs) and external commercial borrowings; but the inflows of foreign direct investment (FDI) continued. Domestically, the mobilization of resources by the private sector through the capital market, especially the equity route, saw a precipitous decline during 2008-09. However, bank credit to the industrial sector recorded impressive growth during 2008-09 and in some ways filled the gap due to the sudden shrinkage of other sources.

9.7 The drying up of trade credit, especially of foreign banks, since mid-September 2008 and the sharp depreciation in the nominal exchange rate of the rupee within a short span of time made it difficult for manufacturers to hedge their positions and finance their ongoing operations. The shrinkage in export demand that started from September 2008 further affected the export-intensive industries. The sharp reversal in commodity prices from the third quarter of 2008 adversely affected such units in terms of build-up of inventories. The decline in construction and real estate activities affected the segments of manufacturing linked to them. These developments ultimately impacted the growth of profits of the manufacturing sector. From the abridged results of

Table 9.2 : Year-on-Year Growth in Sales and Expenditure of listed public limited manufacturing companies in the private sector

Items	2007-08				2008-09				2009-10		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3(P)
No. of Companies	1,811	1,716	1,780	1,803	1,926	1,837	1,849	1,901	1,752	1,752	1857
	Growth rates (in per cent)										
Sales	17.0	12.7	15.4	18.7	30.1	32.1	6.3	0.1	-2.9	-0.3	28.7
Change in Stock-in-trade	-18.2	-13.2	-0.8	151.6	131.9	230.1	@	@	-70.0	-1.3	\$
Expenditure	16.0	12.0	15.9	21.0	34.3	38.8	9.3	-2.9	-6.6	-3.3	26.6
Raw Material	17.9	10.1	15.3	20.3	38.1	44.0	4.0	-9.6	-14.5	-4.7	35.5
Staff Cost	19.0	16.8	18.3	16.6	19.3	17.0	12.4	7.9	10.1	9.4	12.0
Power & Fuel	9.6	6.6	13.7	25.8	28.8	37.8	21.7	3.1	-1.4	-5.4	1.6
Interest Costs	7.8	15.1	35.6	30.8	52.0	69.9	60.5	43.3	10.1	-1.2	-4.8
Profit after tax (PAT)	27.6	19.1	30.2	15.7	6.9	-4.2	-66.4	-28.3	2.7	16.9	177.7
	Ratios (in per cent)										
PAT to Sales	10.5	10.6	11.4	9.5	8.7	7.6	3.6	6.7	9.4	9.0	8.0

Source : Reserve Bank of India Studies on Corporate Performance based on a abridged results of select companies in the private corporate sector.

Note: P : Data for Q3 : 2009-10 is provisional; @ Numerator is negative; \$: Denominator is negative

Table 9.3 : Inflation (in per cent) in use-based industrial groups (WPI based; year-on-year)

	2006-07	2007-08	2008-09	2008 (April-Dec.)	2009 (April-Dec.)
Basic Goods	5.8	2.7	9.0	11.9	-6.0
Capital Goods	8.8	8.6	5.2	6.4	-2.3
Intermediate Goods	5.5	3.3	10.3	14.0	-4.7
Durables	2.0	4.3	3.2	3.5	1.6
Non-durables	3.7	1.9	7.2	7.2	9.8

Source : Department of Industrial Policy & Promotion.

a sample of manufacturing companies, it is seen that while profitability (PAT / sales) was under strain since the fourth quarter of 2007-08, it came down sharply in the third quarter of 2008-09 accompanied by a sharp dip in growth in sales (Table 9.2).

The recovery

9.8 Reflecting the continuance of the developments, the manufacturing sector remained subdued in the first two months of the current fiscal, which reduced the level of growth of the IIP in the first quarter to 3.8 per cent. However, there were visible signs of the reversal of the downward trend in growth in IIP growth for the month of June 2009. Thereafter, the IIP marched ahead, registering growth close to 10 per cent during July - November 2009 (Table 9.1).

9.9 The growth in sales revenues of companies, which remained quite impressive at around 30 per cent during the first half (H1) of 2008-09, slowed down during H1 2009-10 largely due to lower price realisation (Table 9.2). Though year-on-year nominal sales growth remained subdued between quarters ending March 2009 and September 2009, the growth in sales and stock in trade adjusted for prices reflected improvement in production which was also corroborated by the rise in IIP. The momentum in demand was also reflected in the sequential growth in sales revenues. The latest quarter ended December 2009 witnessed noticeable acceleration in sales, mostly driven by increase in volumes; supported also by low base of corresponding quarter last year. Increase in sales revenue together with significantly lower input costs, lower rise in interest outflow, lower foreign exchange-related losses and good growth in non-core other income boosted net profits (Table 9.2). Expenditure on raw materials that fell during first two quarters of 2009-10 mainly on account of lower commodity prices showed noticeable increase as prices, firmed up again in the third quarter. The measure of inflation in use-based industrial groups (a 'rough' measure because of lack of one-to-one correspondence between the

IIP and wholesale price index [WPI]) showed that the prices of items that are employed at different stages of manufacturing have declined during April-December 2009 (Table 9.3). In contrast, the prices of non-durable items of consumption remained firm during the period.

9.10 Stocks in trade that were accumulated during the first half of 2008-09 were depleted during the latter half indicating adjustments of inventory levels to changes in business demand. Stock in trade picked up slowly in the current period indicating revival in the cycle (Table 9.2).

9.11 Mobilization of investible resources became easier during H1 2009-10. Despite significant deceleration in bank credit in the current year, buoyant sources like rights and public issues, qualified institutional placements, private placement of corporate debt, mutual funds and commercial papers as well as a steady flow of external funds through FDI, ADRs/GDRs and external commercial borrowings indicate that mobilizing resources for managing the recovery may not be an issue.

Growth in major industrial groups

9.12 The major industrial groups like automobiles, rubber and plastic products, wool and silk textiles, wood products, chemicals and miscellaneous manufacturing staged a strong recovery during April-November 2009, while machinery and textile products reinforced their growth (Table 9.4). Led by cement, non-metallic mineral products also staged a recovery, albeit a modest one. After posting a growth of around 14 per cent annually in the eight-year period ending 2008-09, beverages and tobacco products experienced a slump in the current year. Product groups like paper, leather, food and jute textiles did not evince any visible recovery. Cotton textiles and metal products have also been experiencing lacklustre growth since 2007-08. Overall, the picture is a mixed one in the analysis of major industrial groups.

Table 9.4 : Growth by industrial groups (Figures in per cent based on the IIP; 1993-94=100)

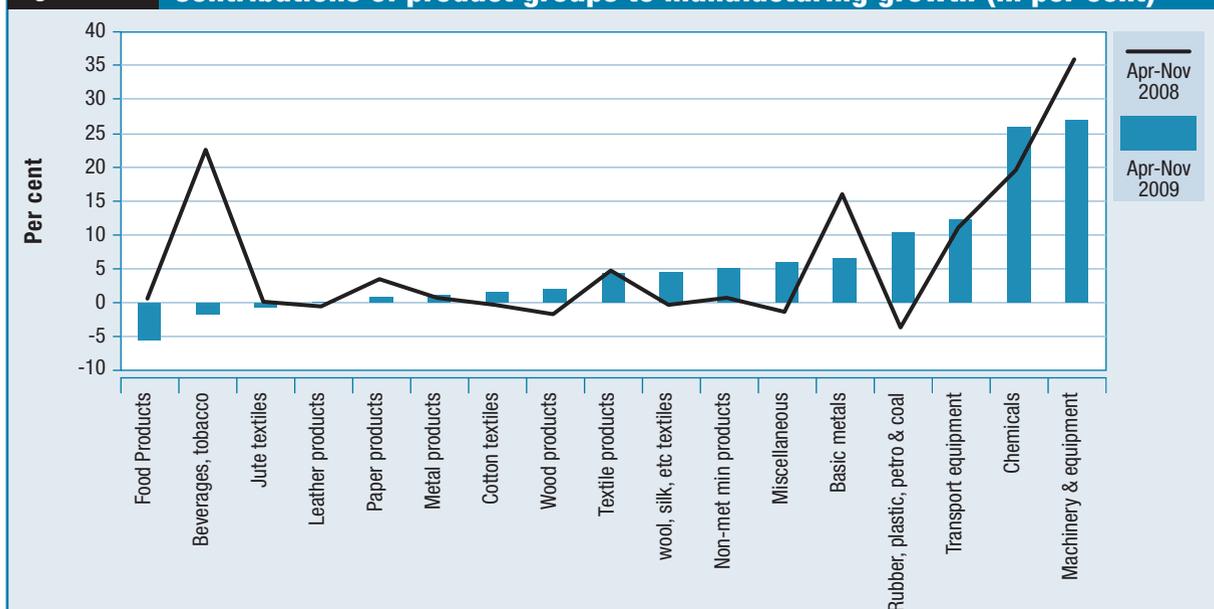
	2007-08	2008-09	H1 2008-09	H2 2008-09	2009-10 (April-Nov.)
Overall Manufacturing	9.0	2.8	5.3	0.4	7.7
High growth in 2009-10 (April-November)					
Transport Equipment	2.9	2.5	12.2	-6.1	13.9
Rubber, Petroleum & Plastic	8.9	-1.5	-4.0	0.9	13.5
Wool, Silk & Man-made Textiles	4.8	0.0	-0.9	0.9	13.0
Miscellaneous Manufacturing	19.8	0.4	-1.1	1.7	12.3
Machinery & Equipment	10.4	8.8	10.1	7.6	12.1
Wood Products	40.5	-9.6	-6.1	-13.2	10.5
Chemicals	10.6	4.1	6.1	2.1	10.0
Textile Products	3.7	5.8	5.2	6.3	9.9
Lower growth in 2009-10 (April-November)					
Non-metallic Mineral Products	5.7	1.2	0.6	1.8	6.4
Basic Metals	12.1	4.0	6.7	1.4	4.8
Metal Products	-5.6	-4.0	1.9	-9.4	4.0
Cotton Textiles	4.3	-1.9	0.1	-3.9	3.2
Paper Products	2.7	1.8	4.6	-0.8	2.1
Leather Products	11.7	-6.9	-1.8	-11.8	0.9
Decline in 2009-10 (April-November)					
Beverages, Tobacco	12.0	16.2	20.3	12.3	-2.2
Food Products	7.0	-9.7	-1.0	-15.1	-7.2
Jute Textiles	33.1	-10.0	-5.4	-14.6	-16.2

Source : CSO.

9.13 The chemical group and machinery and equipment (with high weights) together contributed 53 per cent of the manufacturing growth in April-November 2009 (Figure 9.3). These two product groups, together with transport equipment and rubber, plastic, petroleum and coal products, explained more than three-fourths of the manufacturing growth during the period (contribution of a particular group to total manufacturing growth is determined by the weight

of the group in manufacturing, the accumulated index of production and current growth). The distinct changes from the previous to current year (April-November) are the sharp decline in growth contribution of the beverages and tobacco group and the significant improvement in contribution of rubber, plastic, petroleum and coal products.

9.14 An analysis of the trends in the use-based industrial groups (Figure 9.1) and sectoral categories

Figure 9.3 Contributions of product groups to manufacturing growth (in per cent)

subsumed under the National Industrial Classification (Table 9.4) in tandem makes the industrial scenario somewhat clearer. Among the use-based industrial groups, basic goods (with a weight of 35.6 per cent in the IIP) are composed mainly of basic chemicals, basic metals, cement, electricity and minerals. Electricity and mining account for about 58 per cent of the weight of basic goods captured by the IIP and the growth of basic goods during April-December 2009 largely reflected the growth in the two sectors. While other important basic goods like cement and fertilizers recorded reasonable growth, different components of the iron and steel industry showed a mixed picture.

9.15 The strong growth in the machinery and equipment group fed into the growth in capital goods, while some automobile components like commercial vehicles exhibited slack in growth. Despite the lacklustre production performance of petroleum products (except natural gas) and textile intermediates, intermediate goods registered robust growth in H1 2009-10, aided by the strong growth in important items like PVC pipes, commercial plywood, chemical intermediates like paints, granite and stone chips filament yarn, polyester fibre, viscose staple fibre and a wide range of other items.

9.16 Growth in consumer durables has been broad-based, the robust production performance of automobiles being quite significant. On the other hand, the low growth in food products, beverages and tobacco products and cloth and footwear acted as a dampener on the growth in consumer non-durables. Paradoxically, disaggregated growth in

consumer non-durables indicates that the scenario is not as bleak as exhibited by the group as a whole. The strong contractionary movement in some important items like sugar, milk powder, beverages and some pharmaceuticals has had exaggerated impact, leading to negative growth in consumer non-durables during H1 2009-10; otherwise, the majority of the non-durable items of consumption have shown positive growth during the period.

INDUSTRIAL GROWTH BY SECTORS

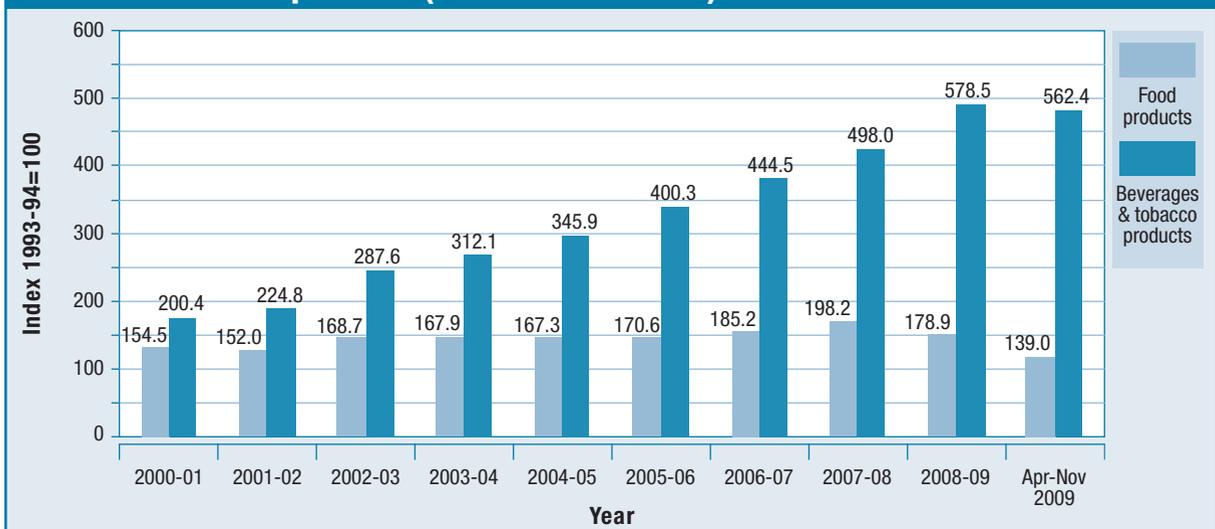
Food products

9.17 As per the IIP, food products experienced a decline in production of 7.2 per cent in April-November 2009 on an year-on-year basis. This came on the back of negligible growth during the same period in the previous year. The main growth dampener in food products was sugar production, which declined by 59.6 per cent in the current year (April-November), following an already significant decline during 2008-09. The other important items that slowed down growth included milk powder, malted food and chocolates and sugar confectionary. Among the important items that exhibited double-digit growth were wheat flour/*maida*, salt, and edible oils like coconut, rice bran, cotton seed, and mustard/rapeseed. Production of sunflower oil, soya bean oil, edible hydrogenated oil and groundnut oil declined.

Beverages and tobacco products

9.18 Beverages and tobacco products declined by about 2.0 per cent during April-November 2009, as per the IIP data. This group had grown by 17.7 per

Figure 9.4 Movement in the index of production of food products and beverages and tobacco products (Index 1993-94=100)



cent during the corresponding period in the previous year. While food products showed slow growth in the post-2000 period (compound annual growth of 1.8 per cent during 2001-02 to 2008-09), the beverages and tobacco product group achieved rapid growth (compound annual growth of 14.2 per cent during 2001-02 to 2008-09). Hence the slowdown shown by these two groups in April-November 2009, compared to the same period in 2008, needs to be viewed differently (Figure 9.4).

9.19 Production of rectified spirit and country liquor declined while that of beer grew by 14 per cent in 2009-10 (April-November). The growth in Indian-made country liquor was only 3.1 per cent during the period. Cigarette production has not shown any significant growth since 2007-08.

Textiles

9.20 As per the IIP data, the textile group consisting of cotton, wool, silk and man-made and jute textiles and textile products, grew by 7.5 per cent during April-November 2009, compared to 1.0 per cent during April-November 2008. While wool, silk and man-made textiles grew by 13 per cent during 2009-10 (April-November) shrugging off the weak performance in the corresponding period last year, cotton textiles barely managed a recovery with 3.2 per cent growth. Textile products achieved growth close to 6.0 per cent in 2008-09 and topped it with 9.9 per cent growth during April-November 2009. However, jute textiles which had slid by 3.9 per cent in 2008-09, declined again by 16.2 per cent in 2009-10 (April-November).

Table 9.5 : Production of fabrics/cloth (million sq. m)

Sector	2006-07	2007-08	2008-09 (P)	2009-10 (Apr.-Nov.) (P)
Mill	1,746 (5.4)	1,781 (2.0)	1,796 (0.8)	1,192 (-0.1)
Handloom	6,536 (7.0)	6,947 (6.3)	6,677 (-3.9)	4,513 (1.7)
Power Loom	32,879 (7.4)	34,725 (5.6)	33,648 (-3.1)	25,157 (12.5)
Hosiery	11,504 (10.4)	11,804 (2.6)	12,077 (2.3)	9,047 (12.8)
Others*	724 (-5.9)	768 (6.1)	768 (0.0)	320 (0.0)
Total Cloth Production	53,389 (7.7)	56,025 (4.9)	54,966 (-1.9)	40,229 (10.8)

Source : O/o Textile Commissioner, Mumbai.

Notes : (P) Provisional;

* Production up to August 2009; Figures in parentheses are growth in per cent, year-on-year

9.21 Overall, the production of textile fabrics increased by 10.7 per cent during April-November 2009-10 (provisional). The highest growth was observed in the hosiery sector (12.8 per cent) followed by power looms (12.5 per cent), while the handloom and mill sectors could not revive from the previous year's slump (Table 9.5). The share of the power-looms sector in total fabric production stood at 62.5 per cent during April-November 2009—with its share gradually increasing over the years, the production of fabric is increasingly driven by power looms.

Table 9.6 : Export of textiles

(US\$ million)

Items	2006-07	2007-08	2008-09 (P)	Apr.-Sept. 2009 (P)	Growth Apr.-Sept. 2009 (per cent)
Ready-made Garments	8,282.3	9,069.8	10,242.8	4,528.8	-10.3
Cotton Textiles	5,564.2	6,858.6	4,741.6	1,788.9	-35.1
Wool & Woollen Textiles	423.8	443.1	478.2	240.6	-8.7
Man-made Textiles	2,398.9	3,177.1	3,280.5	1,889.8	-2.4
Silk	706.0	657.7	675.5	280.7	-24.7
Handicrafts*	1,364.9	1,452.3	1,074.0	401.8	-33.6
Coir & Coir Manufactures	145.8	160.3	148.0	78.3	-2.7
Jute Goods	260.2	327.9	299.1	109.9	-40.8
Handloom Products	0.0	0.0	0.0	112.3	0.0
Grand Total	19,146.1	22,146.8	20,939.8	9,431.1	-15.5

Source : Directorate General of Commercial Intelligence and Statistics (DGCI&S) Kolkata.

Notes : * include only textile-based handicrafts such as, handmade carpets excluding silk; silk carpets; handicrafts excluding handmade carpets);

P : Provisional

9.22 Though the textile sector seemed to have gathered momentum consequent on the termination of the quota regime in December 2004, the performance of Indian textiles continues to lag substantially behind that of China in terms of rate of growth of exports and share in world textile exports. In US dollar terms, textile exports grew by 15.7 per cent during 2007-08 but declined by 5.5 per cent during 2008-09. During April-September 2009, exports of textiles and clothing were at US\$ 9.43 billion, recording an 15.5 per cent decline in growth vis-à-vis exports of US\$ 11.15 billion in April-September 2008 (Table 9.6).

9.23 The Technology Upgradation Fund Scheme (TUFS) and Scheme for Integrated Textile Parks (SITP) are two flagship schemes of the Ministry of Textiles. TUFS, implemented with a view to facilitating modernization and upgradation of the textile industry by providing credit at reduced rates, has been fine-tuned to induce investments in targeted segments. Under the scheme, Rs 78,307 crore was sanctioned against the project cost of Rs 1,79,856 crore and loans worth Rs 66,284 crore were disbursed to 25,777 applicants up to June 30, 2009 (provisional). Under the SITP, 40 integrated textiles parks of international standards, covering the weaving, knitting, processing and garmenting sectors with project proposals worth Rs 4,141.39 crore (of which assistance from the Government is Rs 1,422.43 crore), have been sanctioned. So far, five textile parks have been inaugurated.

Wood and wood products

9.24 Wood and wood products, as per the IIP data, showed 10.5 per cent growth in production during April-November 2009, compared to a 6 per cent decline during the same period in the previous year. Among the two components (included in the IIP),

particle board grew by 7.1 per cent, while commercial plywood grew by 46.3 per cent during the period. Wood and wood products experienced wide-ranging annual fluctuations in production during the post-2000 period and managed only a compound annual growth of 1.3 per cent during 2001-02 to 2008-09 (Fig 9.5).

Paper and paper products

9.25 Paper and paper products grew by only 2.1 per cent during April-November 2009, as per the IIP data. This followed indifferent growth during 2007-08 as well as 2008-09. While paper and paper board and corrugated boxes/cartons achieved reasonable growth during the current year, bleached newsprint and rayon-grade pulp declined by more than 10 per cent.

Leather and leather products

9.26 As per the IIP data, leather products, which include finished leather, leather footwear, shoe uppers, leather garments and other leather goods, showed only 0.9 per cent growth in production during April-November 2009, following a 5 per cent decline during the same period in the previous year. Production of leather and fur products almost stagnated during the post-2000 period (compound annual growth of 0.5 per cent during 2001-02 to 2008-09) with the exception of 2007-08, while overall manufacturing grew at a much faster rate (compound annual growth of 7.3 per cent during 2001-02 to 2008-09) (Fig 9.6).

9.27 Finished leather declined by about 13 per cent, causing much of the slowdown in the sector during April-November 2009. While footwear items showed a mixed picture, leather garments grew by 5.7 per cent during the period.

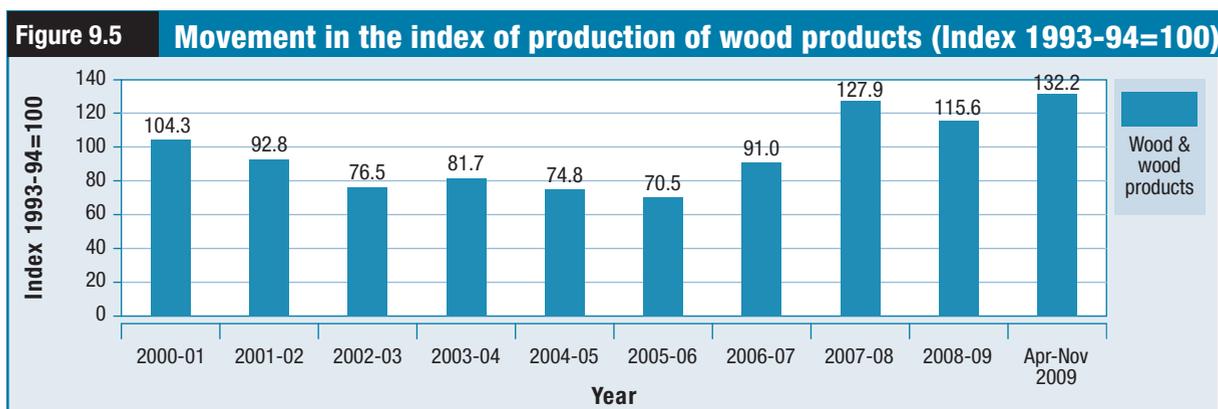
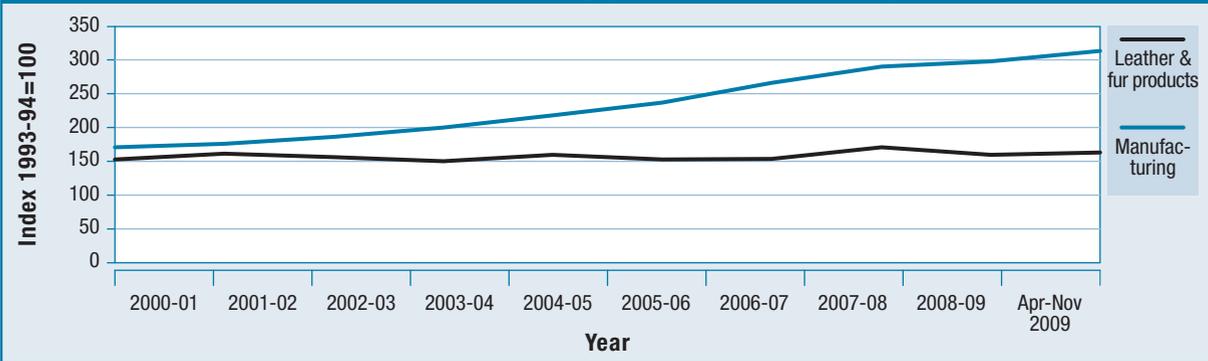


Figure 9.6 Movement in the index of production of leather and fur products and the index of overall manufacturing (Index 1993-94=100)



Chemicals, petrochemicals, pharmaceuticals and fertilizers

9.28 The sector includes basic chemicals and its products, petrochemicals, fertilizers, paints, gases and pharmaceuticals. Major chemicals registered a compounded annual growth of 3.1 per cent during 2002-03 to 2007-08. In the wake of the recent economic slowdown, production declined by 5.2 per cent in 2008-09. The growth in major chemicals stood at (-) 0.91 per cent during April-December 2009 (Table 9.7).

9.29 Petrochemicals mainly comprise synthetic fibres, polymers, elastomers, synthetic detergents, intermediates and performance plastics, apart from their intermediates such as synthetic fibre intermediates, olefins and aromatics. Polymers accounted for almost 62 per cent of the total production of major petrochemicals during 2008-09. The production of petrochemicals grew at 5.8 per cent annually during 2002-03 to 2007-08. Registering the impact of the global meltdown, it declined by 5.5 per cent in 2008-09. During April-December 2009, major petrochemicals except polymers recorded

Table 9.7 : Production of major chemicals

(in 000' MT)

Years	Alkali chemicals	Other inorganic chemicals	Organic chemicals	Pesticides (Tech.)	Dyes & stuffs	Total major chemicals
2006-07	5,269	602	1,545	85	33	7,534
2007-08	5,443	609	1,552	83	44	7,731
2008-09	5,442	513	1,254	85	32	7,326
2009-10 (Apr.-Dec.)	4,133	382	920	58	30	5,523
Growth (per cent)	-0.72	-5.53	-5.55	-13.19	21.51	-0.91

Source : Department of Chemicals & Petrochemicals.

positive growth of 0.76 per cent; performance plastics and synthetic fibres registered impressive growth (Table 9.8).

9.30 The share of chemicals and petrochemicals in total national exports diminished from 11.6 per cent to 9.3 per cent during 2003-04 to 2008-09. Likewise, imports of this group in total national imports declined from 9.2 per cent to 7.2 per cent during 2003-04 to 2008-09 (Table 9.9).

Table 9.8 : Production of major petrochemicals

(000' MT)

Years	Synthetic fibers	Polymers	Elastomers	Synthetic detergent intermediates	Performance plastics	Total major petrochemicals
2005-06	1,906	4,768	110	555	127	7,466
2006-07	2,250	5,183	101	556	133	8,223
2007-08	2,524	5,304	105	585	157	8,675
2008-09	2,343	5,060	96	552	141	8,192
2009-10 (Apr.-Dec.)	1,948	3,549	79	461	129	6,166
Growth (per cent)	13.23	-6.71	9.45	9.57	26.51	0.76

Source : Department of Chemicals & Petrochemicals.

Table 9.9 : Exports and imports—Chemicals and petrochemicals

(Rs crore)

Items	2006-07	2007-08	2008-09
Exports:			
(a) Chemicals	39,351	43,482	53,738
(b) Petrochemicals	21,801	22,199	24,226
(c) Sub-Total (a+b)	61,152	65,681	77,964
Imports:			
(a) Chemicals	47,914	54,422	74,857
(b) Petrochemicals	16,339	18,677	24,020
(c) Sub-Total (a+b)	64,253	73,099	98,877

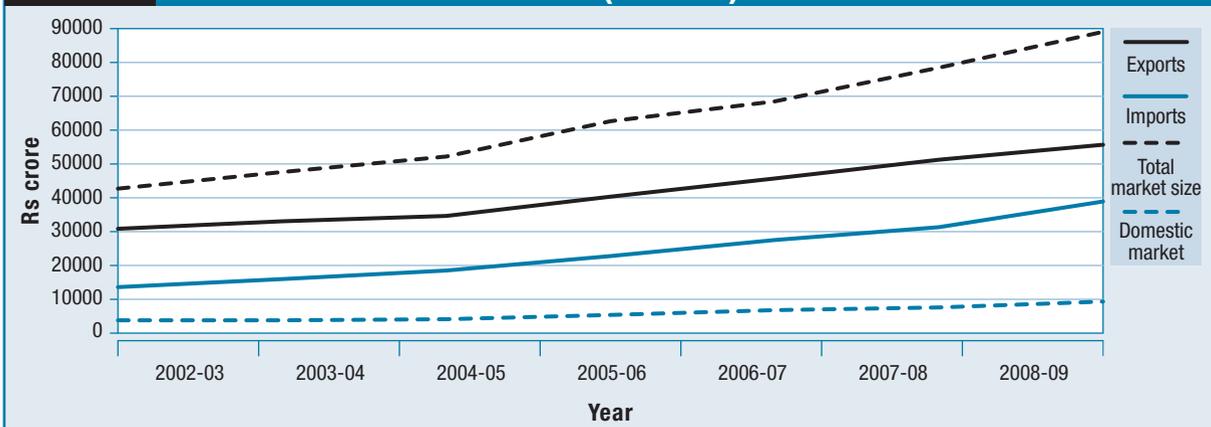
Source : Department of Chemicals & Petro-chemicals.

Pharmaceuticals

9.31 The Indian pharmaceutical industry has grown from a humble Rs 1,500 crore turnover in 1980 to approximately Rs 1,00,611 crore in 2009-10 (September 2009). The country now ranks third in terms of volume of production (10 per cent of global share) and 14th by value. The Indian pharma

industry's growth has been fuelled by exports which registered a growth of 25 per cent in 2008-09 (Figure 9.7). Exports of pharmaceuticals have consistently outstripped imports. India currently exports drug intermediates, active pharmaceutical ingredients (APIs), finished dosage formulations, bio-pharmaceuticals and clinical services. The top five destinations of Indian pharmaceutical products are the USA, Germany, Russia, the UK and China. The domestic pharma sector has also expanded in recent years.

9.32 There are five pharmaceutical Central public-sector/joint-sector undertakings under the Department of Pharmaceuticals which manufacture critical bulk drugs/ formulations. These are Indian Drugs & Pharmaceuticals Limited, Hindustan Antibiotics Limited, Bengal Chemicals & Pharmaceuticals Limited, Rajasthan Drugs and Pharmaceuticals Ltd and Karnataka Antibiotics & Pharmaceuticals Ltd. The value of their production increased from Rs 340.2 crore in 2006-07 to Rs 641.8 crore in 2008-09 and is projected to reach Rs 875 crore in 2009-10.

Figure 9.7 Indian Pharmaceutical Market (Rs crore)**Table 9.10 : Production and import of fertilizers**

(lakh MT)

Year	Production			Imports		
	2007-08	2008-09	2009-10*	2007-08	2008-09	2009-10**
Urea	198.6	199.2	212.4	69.3	56.7	44.9
DAP	42.1	29.9	43.0	29.9	61.9	55.6
Complex Fertilizers	58.5	68.5	79.2			
MOP	Nil	Nil	Nil	44.2	56.7	42.3

Source : Department of Fertilizers

Notes : * estimated; **April-December 2009-10

Fertilizers

9.33 The availability of raw materials and intermediates has been a major bottleneck in the domestic production of fertilizers. As there is no domestic production of muriate of potash (MOP), its requirement is met fully by import (Table 9.10). About 85 per cent of raw materials in Di ammonium phosphate (DAP) or finished DAP and complexes are also being imported.

Rubber and plastic products

9.34 Rubber and plastic products grew by an appreciable 25 per cent during April-November 2009 as per IIP data. The factor that overwhelmingly contributed to this growth was the 54.5 per cent growth in PVC pipes and tubes during the period, in contrast to a 17 per cent decline during April-November 2008. With the automobile sector recording strong growth in the current year so far, the tyre sector (except bicycle tyres) too performed well on the whole.

Non-metallic mineral products

9.35 As per the IIP, this product group grew by 6.4 per cent during April-November 2009, as against negligible growth during the corresponding period in the previous year. Cement led the group with a close to 11 per cent growth. This, along with strong growth in polished granite/stone chips, points towards improving construction activity. Among important items, bottles and bottle glasswares continued the decline shown in 2008-09. Production of railway/concrete sleepers stepped up while that of graphite electrodes and anodes declined steeply during the current year.

Steel

9.36 India ranked as the fifth largest producer of crude steel in the world during January -November 2009 (World Steel Association). Domestic crude steel production grew at a compounded annual rate of 7.1 per cent during 2004-05 to 2008-09. The increase in production came on the back of capacity expansion, mainly in private-sector plants, and higher utilization rates. During 2008-09, India added nearly 5.5 million tonnes of capacity in steel production.

9.37 In 2008-09, the Indian iron and steel industry was hit hard by the spiralling cost of imported coking coal/metcoke. The first half of 2008-09 witnessed rapid rise in production, consumption and prices, in keeping with international trends. In the latter half, however, the domestic demand for steel was adversely impacted by economic slowdown and, in particular, by slackening demand in some of its leading end-user segments. Domestic steel prices started declining from September 2008 and the pace of growth of production slowed down considerably (Table 9.11).

Table 9.12 : Growth in finished steel (alloy + carbon)

(per cent)

2009-10*	Production for sale	Real consumption	Imports	Exports
April-June	3.4	5.2	-1.3	-38
April-September	3.3	7.0	1.2	-43
April-December	3.8	7.7	16.6	-36

Source : Joint Plant Committee.

Note : * provisional.

Table 9.11 : Production, consumption, import and export of total finished steel and pig iron

(million tonnes)

	Item	2005-06	2006-07	2007-08	2008-09	Change (per cent) over 2007-08
Production for Sale	TFS	46.56	52.53	56.07	57.16	1.9
	PI	4.69	4.93	5.284	6.21	17.52
Import	TFS	4.31	4.93	7.03	5.84	-16.9
	PI	0.03	0.03	0.11	0.08	-27.3
Export	TFS	4.80	5.24	5.08	4.44	-12.6
	PI	0.44	0.71	0.56	0.35	-37.5
Real Consumption ¹	TFS	41.43	46.78	52.12	52.35	0.4
	PI	4.13	4.33	4.62	5.87	27.1

Source : Joint Plant Committee.

Notes : TFS= total finished steel, both alloy and carbon; PI= Pig iron

¹= adjusted for stock variation and double counting.

9.38 However, recovery gathered strength during 2009-10 and the Indian steel industry appears to have successfully overcome the effects of the global economic slowdown (Table 9.12). India and China are the only countries to have registered a positive growth during January-November 2009 (World Steel Association).

9.39 The strong growth in the GDP in the second quarter of the current fiscal and in the IIP during April-November 2009 suggests that the demand side of the steel industry is back on stable footing. Indian steel outlook for 2010 continues to be positive, since Indian steel consumption is expected to be rising at 6-9 per cent during the current year, on account of higher demand from the real estate, construction and automobile sectors.

Metal products (except machinery)

9.40 The production of this group declined during 2007-08 and 2008-09. During April-November 2009, production grew by 4 per cent. Important items like well/offshore platforms, tin metal containers, agricultural implements and bolts and nuts continued their declining trend during the current year. Metallic utensils including pressure cookers, LPG cylinders and drums and barrels registered robust growth during April-November 2009.

Machinery and equipment

9.41 Growth of the machinery and equipment group has been at the core of the growth in capital goods, as it constitutes around 65 per cent of the total weight of capital goods in the IIP. Growth in this group is critical for growth in the overall IIP for the

coming years. The growth in machinery and equipment has consistently been above the 10 per cent mark since 2003-04 and it achieved a compound growth of 14.4 per cent during the quinquennium ending 2007-08, compared to a corresponding rate of 8.7 per cent in the overall IIP. The index of production of machinery and equipment galloped ahead of the overall IIP after the year 2002-03 (Figure 9.8).

9.42 Though it fell below the 10 per cent mark in 2008-09, growth in the group remained one of the highest at 8.8 per cent. During 2009-10 (April-November), this segment gained further strength with a 12.1 per cent growth. Important items like industrial machinery, tractors, ball and roller bearings, power transformers, insulated cables and wires, boilers, electric generators, turbines, electric motors, power-driven pumps, material-handling equipment, cutting tools, conductors, electric fans, washing machines and TV receivers and picture tubes buoyed growth in this manufacturing group during 2009-10 (April-November). On the other hand, products like diesel engines, telephone instruments and telecom-communication cables, protection systems, control panels, cranes, lifts, hydraulic machines and cylinders, dumpers, furnaces, valves, cooling towers, refrigerators and air conditioning plants, air and gas compressors and computer systems dampened its growth.

Electronics and Information Technology

9.43 The economic recession in leading export destinations adversely impacted the performance of Indian IT companies.

Figure 9.8 Movement in the index of production of machinery and equipment and the overall IIP (Index 1993-94=100)

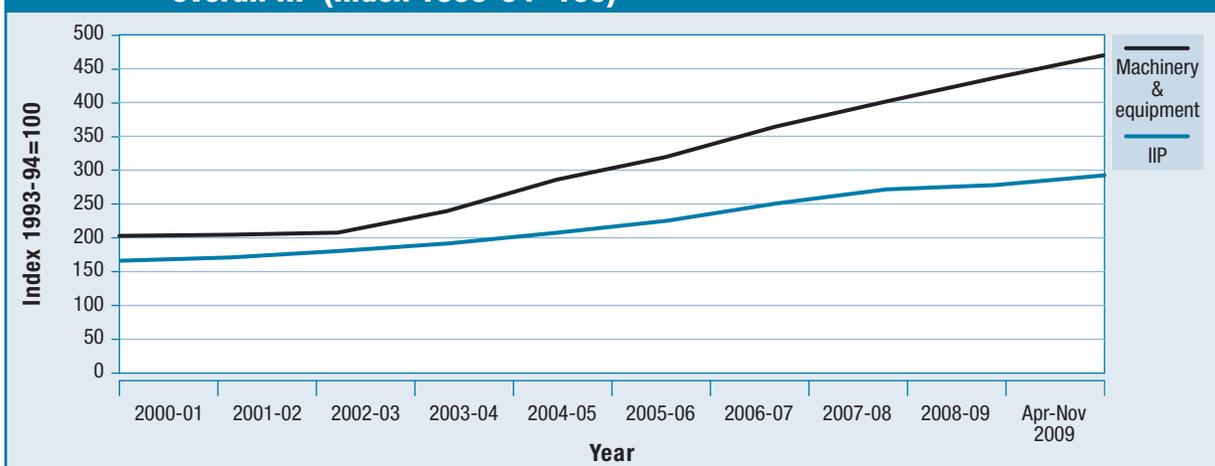


Table 9.13 : Growth in IT-ITeS industries

(US\$ billion)

Item	2006-07	2007-08	2008-09
IT-IT-enabled Services Revenue (including Hardware)	47.8	64.1 (34.1)	70.5 (9.9)
Software & Services Industry (excluding hardware)	39.3	52.1 (32.6)	58.7 (12.7)
Total Software and Services Exports (including ITeS-BPO)	31.1	40.4 (28.9)	46.3 (14.6)
IT BPO Revenue from the Domestic Market	8.2	11.7 (42.7)	12.4 (5.9)
IT Software and Services Employment (million)	1.62	2.01	2.20

Source : Department of Information Technology (DIT);**Note: Figures in parentheses represent change in per cent.**

9.44 The increase of 14.6 per cent in software and services exports in 2008-09 (Table 9.13) was the net effect of a growth of 35.3 per cent in the first six months and a decline of 1.9 per cent in the next six months (Table 9.14). The decline continued in the first half of 2009-10 as well.

Table 9.14 : Software & services exports

Year	Growth (per cent)	
	(first half)	(second half)
2006-07	37.21	27.56
2007-08	26.27	32.94
2008-09	35.35	-1.87
2009-10	-11.5	

Source : RBI & NASSCOM.

9.45 During 2008, electronics hardware production in India constituted around 1.5 per cent of global electronics production. The production of electronics hardware in the country stood at Rs 94,690 crore in 2008-09 (Table 9.15), registering a growth of 12.1 per cent, compared to a growth of 27.8 per cent in 2007-08; the decline is attributable to the global economic slowdown.

Micro, small and medium enterprises (MSMEs)

9.46 MSMEs contribute about 8 per cent of the GDP of the country, about 45 per cent of manufactured output and about 40 per cent of exports. This, coupled with a high labour to capital ratio, high growth and high dispersion makes them crucial for achieving the objective of inclusive growth. As per the Quick Results of the 4th All India Census of MSMEs (2006-07), there were 26 million MSMEs in the country, which provided employment to about 60 million persons. Of the total, 28 per cent were in

Table 9.15 : Electronics & IT production

(Rs crore)

Items	2005-06	2006-07	2007-08	2008-09*
1. Consumer Electronics	18,000	20,000	22,600	25,990
2. Industrial Electronics	8,800	10,400	11,910	12,740
3. Computers	10,800	12,800	15,870	13,490
4. Comm. & Broadcasting Equipment	7,000	9,500	18,700	26,000
5. Strategic Electronics	3,200	4,500	5,700	6,840
6. Components	8,800	8,800	9,630	9,630
Subtotal	56,600	66,000	84,410	94,690
7. Software for Exports	1,04,100	1,41,000	1,64,400	2,16,300
8. Domestic Software	29,600	37,000	47,010	57,230
Total	1,90,300	2,44,000	2,95,820	3,68,220
Electronics & IT exports				
1. Electronics Hardware	9,625	12,500	13,200	19,000
2. Computer Software	1,04,100	1,41,000	1,64,400	2,16,300
Total	1,13,725	1,53,500	1,77,600	2,35,300

Source : DIT Annual Report, 2008-09.**Note : * Estimated**

Table 9.16 : Performance of CPSEs during 2008-09

(Rs crore)			
Sl. Particulars No.	2008-09	2007-08	Per cent change over previous year
1. Investment(long-term loan + equity)	5,28,951	4,55,367	16.2
2. Capital Employed (net fixed assets + working capital)	7,93,096	7,23,719	9.6
3. Total Turnover	12,63,405	10,94,484	15.4
4. Profits of Profit-making CPSEs	98,652	91,571	7.7
5. Losses of Loss-making CPSEs	14,424	10,257	40.6
6. Net Worth	5,84,072	5,18,530	12.6
7. Dividend Declared	25,493	28,081	-9.2
8. Corporate Tax	1,51,728	1,65,994	-8.6
9. Interest Paid	40,330	32,200	25.2
10. Contribution to Central Exchequer	1,51,728	1,65,994	-8.6
11. Foreign Exchange Earnings	74,184	67,678	9.6
11.1 Oil Companies	48,422	46,051	5.1
11.2 Other Companies	25,762	21,627	19.1
12. Foreign Exchange Outgo	4,28,821	3,68,228	16.5
12.1 Oil Companies	2,78,989	2,57,723	8.3
12.2 Other Companies	1,49,832	1,10,505	35.6

Source : Department of Public Enterprises.

the manufacturing sector and 72 per cent in the service sector. This is the first Census after the enactment of the MSMED Act 2006 and includes, for the first time, medium enterprises.

Central Public-sector Enterprises (CPSEs)

9.47 There were altogether 246 CPSEs under the administrative control of various ministries/ departments as on March 31, 2009. The cumulative investment (paid-up capital plus long-term loans) in all the CPSEs together stood at Rs 5,28,951 crore as in end-March 2009 (Table 9.16). The largest share in this investment belonged to the service sector (46.1 per cent) followed by electricity (26.2 per cent), manufacturing (18.1 per cent) and mining (8.8 per cent). A great deal of investment in CPSEs is being made through internal resources rather than through investment from outside.

9.48 Of the total, 158 CPSEs made net profit and 54 net loss in 2008-09. The year witnessed severe financial under-recoveries by public-sector Oil Marketing Companies (OMCs) as they had to keep the prices low on sale of petroleum products in the domestic market. The foreign exchange outgo exceeded the foreign exchange earnings of CPSEs during 2008-09 (Table 9.16).

Tourism

9.49 The global financial crisis affected growth in tourism in 2008-09. The Ministry of Tourism made concerted efforts including a series of promotional initiatives to counter the impact of the slowdown. Foreign tourist arrivals and foreign exchange earnings have so far registered positive growth in the year 2009-10 (Table 9.17).

9.50 Initiatives have been taken to develop world class tourism infrastructure through Central financial

Table 9.17 : Number of foreign and domestic tourists

Year	Foreign tourist arrivals (lakh)	*Foreign exchange earnings (million US\$)	*Domestic tourist visits (lakh)**
2006-07	46.7 (13.8)	9,123 (16.2)	4,623.1
2007-08	51.7 (10.7)	11,666 (27.9)	5,265.6
2008-09	50.7 (-1.9)	10,543 (-9.6)	5,629.2
2009-10 (April-Dec.)	37.2 (1.1)	8,663 (10.9)	NA

Source : Ministry of Tourism.

Note : * Figures in parenthesis are growth rates (per cent).

** Domestic tourist visits for calendar years.

assistance to States/Union Territories for identified circuits and destinations. These include mega projects, human resource development, augmenting accommodation infrastructure, positioning Indian tourism products in domestic and overseas markets and promoting India as a round-the-year tourism destination through an integrated media strategy under the "Incredible India" brand. The new initiatives include development of heliports, cruise, caravan, wellness and MICE (meetings, incentives, conferences and exhibitions) tourism. In order to ensure environmental sustainability and create employment opportunities, "responsible tourism" is being pursued by enhancing stakeholder orientation in rural, eco-adventure, wildlife and wellness tourism.

9.51 The Ministry of Tourism continued its efforts to reinforce its brand through Incredible India campaigns. Print media and advertising campaigns have been undertaken in overseas locations. The Ministry has also launched the "Visit India 2009" scheme whereby attractive incentives are being offered to foreign tourists. Market development assistance (MDA) being given to tourism service providers for sales-cum-study tours, participation in fairs and exhibitions and publicity through printed materials, has been liberalized. Through social awareness campaigns, attempt was made to

sensitize stakeholders to the importance of tourism and protection of heritage sites and through generic campaigns, awareness about various destinations/sub-tourism products was generated. For identified destinations/circuits covered by the Jawaharlal Nehru Urban Renewal Mission (JNURM) convergence of resources is being ensured so that tourism-related infrastructure and urban civic infrastructure complement each other.

Financing and investment

9.52 Gross capital formation (GCF) in manufacturing grew at a compound annual rate of 26.2 per cent during 2003-04 to 2007-08. As the National Accounts data on capital formation are available only till 2007-08, it is not possible to analyse the trends beyond that year. However, the increase in the investment demand is evident from the strong growth in capital goods recorded during June-November 2009. In the absence of hard data on capital formation and capacity addition in industry for the current period, information on the mobilization of investible resources by the sector from different sources would be instructive.

9.53 In recent years, especially from 2004-05, the Indian private corporate sector has started to raise external capital (i.e. other than internal resources)

Table 9.18 : Flow of financial resources to commercial sector

Item	2007-08	2008-09	April-November*	
			2008-09	2009-10
Domestic Sources (in Rs crore)				
Public Issues and Rights issues (except Banks/FIs)	56,074	16,220	12,686	19,496
Qualified Institutional Placements (QIPs)	25,525	189	75	34,167
Gross Private Placements by NFIs	68,249	77,891	44,151	81,617#
Net Issuance of CPs Subscribed by Non-banks	10,660	5,590	22,187	51,012#
Bank Credit to Industry (incl. Infra)	1,69,536	1,87,515	1,43,300	99,332
Systemically Important Non-deposit taking NBFCs (net of Bank Credit)	36,460	76,828	37,744	17,990 ^
Mutual Funds Investments in Debt (Non-Gilt)	88,457	-32,168	19,896	1,01,956#
LIC's Gross Investment in Corporate Debt, Infrastructure and Social Sector	24,275	65,815	10,686	18,027 ^
Foreign sources (in US \$ million)				
FDI	34,835	35,180	24,693	26,506\$
ADR/GDR issues (excluding Banks & FIs)	6,645	1,162	1,142	3,152\$
External Commercial Borrowings / FCCB	30,293	15,244	6,332	5,168

Source : RBI/SEBI.

Note : * Comparable period for respective items.
Data pertain to April-September.
Data for 2006-09 and 2009-10 are provisional.

^ Data pertain to April-August.
\$ Data pertain to April-December

mainly to fund its investment and this includes foreign institutional sources. Data on sources and uses of funds for a sample of non-financial public limited companies available till 2006-07 (in a study by the RBI) shows that the share of external finance was as much as 64.1 per cent of the total sources. Some of the predominant sources, other than banks and financial institutions, include resource mobilization through the issue of equities and bonds, private placement, private equity and commercial papers, and foreign sources like FDI, ADRs/GDRs and external commercial borrowings (Table 9.18). It is difficult to compare quantities as sources of exclusively financing the industrial sector (including infrastructure), as most of these quantities combine the total commercial mobilization of resources, of which industry forms only a part.

9.54 Given the caveat, three tentative conclusions seem contextually relevant for the current year so far. First, the growth in bank financing of the industrial sector decelerated significantly during April-November 2009-10. Second, the mobilization of financial resources from the domestic non-bank sector, including the capital market, has been significantly higher during the period compared to the corresponding period in 2008-09. Third, the inflow of investible resources from external sources was

comparable with higher flows from ADRs/GDRs and FDI.

Industrial credit

9.55 The growth in credit to industry declined steeply from 37.0 per cent in November 2008 to 14.2 per cent in November 2009, on a year-on-year basis (Table 9.19). The sectoral composition of the gross deployment of bank credit to industry, including infrastructure, shows widely varying patterns. It is the infrastructure sector that kept growth in industrial credit at the level of 14.2 per cent during November 2009 (Table 9.19). Net of infrastructure, the growth in industrial credit was significantly lower, that is 4.6 per cent in November 2009, compared to 36.5 per cent during the corresponding period of the previous year.

9.56 With the organized sector having access to varieties of financial instruments to raise resources, the implications of a deceleration in credit growth for smaller-scale enterprises can be more pronounced. Industrial credit to micro and small enterprises (including service-sector enterprises) grew at a higher rate (19.3 per cent) in November 2009 compared to the credit growth in the overall industrial sector. Further, industrial credit to micro and small enterprises in the manufacturing sector also grew at

Table 9.19 : Industry-wise deployment of gross bank credit

Sector	% Growth (y-o-y)		Share in outstanding credit to industry(%)	
	Nov. 2008	Nov. 2009	Nov. 2008	Nov. 2009
Mining and Quarrying (incl. Coal)	53.0	2.6	1.5	1.3
Food Processing	23.2	5.9	5.0	4.6
Beverage & Tobacco Products	45.2	49.2	0.7	0.9
Textiles	21.2	7.4	10.0	9.4
Leather & Leather Products	12.5	-0.5	0.6	0.5
Wood and Wood Products	47.2	4.1	0.4	0.4
Paper & Paper Products	29.7	11.0	1.5	1.5
Petroleum, Coal Products and Nuclear Fuels	149.2	-22.0	8.6	5.9
Chemicals and Chemical Products	39.2	1.0	7.5	6.6
Rubber, Plastic & their Products	33.4	6.5	1.3	1.2
Cement and Cement Products	80.5	18.3	1.8	1.8
Basic Metals and Metal Products	27.0	18.3	12.3	12.8
All Engineering	26.5	4.7	6.2	5.7
Transport Equipment	42.5	-2.9	3.7	3.1
Construction	59.9	8.9	3.4	3.2
Infrastructure	38.6	47.2	22.5	29.0
Industry Total (Small, Medium & Large)	37.0	14.2	100.0	100.0
Industry Total minus Infrastructure	36.5	4.6	77.5	71.0

Source : RBI.

Notes : Data are provisional and relate only to select banks.

Table 9.20 : Sectors attracting highest FDI flows

Sector	(Rs crore)			Growth (per cent) in 2009-10
	April-November			
	2007-08	2008-09	2009-10	
Services Sector	9,121	1,5919	16,566	4.06
Telecommunications	3,963	9,231	10,811	17.12
Housing & Real Estate	5,161	8,353	10,565	26.48
Construction	3,593	7,490	8,380	11.88
Agriculture Services	426	16	6,327	39,443.8
Power	208	3,420	5,994	75.26
Automobile Industry	1,191	3,401	4,499	32.28
Computer Software & Hardware	4,217	6,670	2,763	-58.58
Electrical Equipment	2,432	900	2,724	202.67
Hotel & Tourism	830	1,427	2,246	57.39
Information & Broadcasting (including Print Media)	747	1,711	2,015	17.77
Trading	2,108	2,427	1,982	-18.34
Metallurgical Industries	1,909	3,420	1,485	-56.58
Consultancy Services	606	825	1,341	62.55
Sea Transport	363	127	1,293	918.11
Petroleum & Natural Gas	234	947	1,084	14.47
Chemicals (other than Fertilizers)	731	1,991	1,000	-49.77
Grand Total of All FDI Flows				

Source : Department of Industrial Policy and Promotion.

19.0 per cent. The corresponding figures during November 2008 stood at 20.0 per cent and 21.5 per cent respectively.

FDI

9.57 FDI inflows to India, which remained robust in 2008-09 despite the slump in global financial flows, have also continued to flow smoothly during the current year so far. During April-November 2009-10, total FDI equity inflows stood at Rs 93,354 crore (US\$ 19,379 million) as against Rs 85,700 crore (US\$ 19,791 million) during the corresponding period in 2008-09, signifying a growth of 9 per cent in rupee terms and a decline of 2 per cent in US dollar terms; the divergent patterns in growth rates being attributable to exchange rate changes during the period. During 2008-09, total FDI equity inflows stood at Rs1,22,919 crore (US\$ 27,309 million) as against Rs 98,664 crore (US\$ 24,579 million) during 2007-08, signifying a growth of 25 per cent in rupee terms and 11 per cent in US dollar terms (Table 9.20).

9.58 The sectoral shares of FDI inflows have fluctuated significantly in recent years. Sectors like agricultural services, sea transport and electrical equipment have shown a quantum jump in FDI inflows during 2009-10.

POLICY DEVELOPMENTS AND PROGRAMMES

9.59 The developments in terms of policy responses during 2008-09 were to an extent shaped by the effects of the global financial crisis on Indian industry. Measures taken specifically for the industrial sector included fiscal measures and measures to ensure availability of credit. Broadly, the effort in this regard was to mitigate the sharp impact of the global recession on industry, especially the export-oriented sectors that were the most directly affected. Apart from the general stimulus measures announced by the Government and the RBI for the industrial sector, the following sector-specific measures and programmes have been undertaken.

Textiles

9.60 Stimulus measures announced on December 7, 2008 that benefited the textile sector included general reduction of 4 per cent in Central value added tax (CENVAT) rates; abolition of 4 per cent optional CENVAT on cotton textiles; extension of the benefit of service tax refund to service provided by clearing and forwarding agents to exporters; increase in the threshold limit of refund of service tax paid by exporters on foreign commission agent service;

making available drawback benefit simultaneously with refund of service tax paid for exports; making pre- and post-shipment export credit for certain specific sectors including textiles belonging to the small and medium sector more attractive with interest subvention; additional allocation of Rs 1,400 crore to clear the entire backlog in TUFs; inclusion of all handicrafts items under the Vishesh Krishi & Gram Udyog Yojana (VKGUY); and boost to collateral-free lending.

9.61 The stimulus scheme announced on January 2, 2009 included extension of the Duty Entitlement Passbook Scheme (DEPB) scheme till December 31, 2009 and restoration of the rates to those prevailing prior to November 5, 2008 and increase in the duty drawback rates on certain knitted fabrics and specified categories of yarn with retrospective effect from September 1, 2008.

9.62 The Interim Budget 2009-10 announced measures like reduction in general rate of Central excise duty from 10 per cent to 8 per cent, which benefited textile machinery and reduction in rate of service tax on taxable services from 12 per cent to 10 per cent.

9.63 Highlights of the Trade Facilitation Measures announced under the Foreign Trade Policy (on February 26, 2009), inter alia, included provision of Rs 325 crore under promotional schemes for leather, textiles, etc., for exports made with effect from April 1, 2009; notification of the benefit of 5 per cent duty credit script on free on board value of exports under the Focus Product Scheme (FPS) for exports of handmade carpets, in lieu of the 3.5 per cent benefit allowed earlier under the VKGUY; inclusion of technical textiles under the High-Tech Products Export Promotion Scheme; announcement of Bhilwara in Rajasthan as the Town of Export Excellence for Textiles; enabling recognized association of units to access funds under the Market Access Initiative (MAI) scheme for creating focused technological services; reduction in the threshold limit for recognition as a premier trading house to Rs 7500 crore from Rs 10,000 crore; proportionate reduction of the export obligation of a product under the Export Promotion Capital Goods (EPCG) scheme, in case of decline in exports of that product by more than 5 per cent; extension of DEPB/duty credit script utilization for payment of duty on import of restricted items; simplification of procedure for claiming duty drawback refund and refund of terminal excise duty; allowing re-credit of 4 per cent special additional duty, in case of payment of duty by incentive scheme

scrips such as the VKGUY, Focus Product and Focus Market; and extension of the export obligation period against advance authorizations up to 36 months.

9.64 On March 4, 2009, the Government announced the facility of refund of service tax paid on all input services to special economic zone (SEZ) units and developers (which was earlier restricted to services that were consumed within the zone).

9.65 The incentives introduced under the Foreign Trade Policy 2009–2014 included extension of incentive schemes by addition of new products and markets; addition of 26 new markets under the Focus Market Scheme (FMS); raising the incentive available under the FMS from 2.5 per cent to 3.0 per cent; raising the incentive available under the FPS from 1.25 per cent to 2.0 per cent; expansion of the Market Linked Focus Product Scheme (MLFPS); extension of MLFPS benefits to export to additional markets for certain products; providing higher allocation for the MDA and MAI schemes; introduction of the EPCG scheme at zero duty for apparels and textiles among others; extension of the DEPB scheme till December 31, 2010; and removal of the requirement of 'Handloom Mark' for availing of benefits under the FPS.

Chemicals and Petrochemicals

9.66 The Assam Gas Cracker Project, approved by the Government in April 2006 at a fixed cost of Rs.5,461 crore, with GAIL (India) Ltd. as the main promoter, is expected to generate substantial employment and investments in downstream plastic-processing industries. The project is scheduled for commissioning in April 2012. The financial closure of the project has been successfully completed in October 2009. The capital subsidy for the project is being released by the Government in the years from 2007-08 to 2012-13. Of the Rs 429.1 crore cumulative expenditure on the project till October 2009, Rs 208 crore has been released in 2009-10 (till October 2009).

9.67 India, a signatory to the Chemical Weapons Convention (CWC), has a fairly large chemical industry which falls under the ambit of the CWC. The Department of Chemicals and Petrochemicals has so far successfully hosted 73 OPCW (Organization for the Prohibition of Chemical Weapons) inspections including 13 in 2009-10. Help desks have been set up at Vadodara, Mumbai and Chennai for facilitating compliance with CWC obligations. A sector-specific investment region,

'Petroleum, Chemicals and Petrochemicals Investment Region' (PCPIR) has been set up to ensure adoption of a holistic approach to promote the petroleum, chemicals and petrochemicals sectors in an integrated and environment -friendly manner. The PCPIR region would be a combination of production projects, public utilities, logistics, environmental protection, residential areas and administrative services. Proposals have been received from the Governments of Andhra Pradesh, Gujarat, Karnataka, Orissa, Tamil Nadu and West Bengal. The Andhra Pradesh, Gujarat and West Bengal proposals have been approved in February 2009 and Memoranda of Agreement (MoA) signed between the Central Government and the three State Governments .

Pharmaceuticals

9.68 In pursuit of excellence in pharmaceutical education and research, six new National Institutes of Pharmaceutical Education & Research (NIPERs) have been set up, in addition to the existing one at Mohali. These NIPERs will award masters and doctoral degrees and encourage R&D activities. The NIPERs have been set up in collaboration with mentor institutes so that advanced curricula and pedagogical methodologies are brought into practice for high-end teaching. Some of the new R&D initiatives in the sector include the launching of an education programme for drug regulators and industry and preparation of a Venture Finance and Incubation Fund for innovative R&D.

9.69 An Environmental Cell has been created in the Department of Pharmaceuticals to collect and disseminate information on pharma-related environmental matters, identify issues and solutions, create awareness on environmental issues and coordinate with other stakeholders.

9.70 The Department of Pharmaceuticals in collaboration with the Ministry of MSME has introduced a Scheme for Schedule 'M' Compliance by small-scale industrial (SSI) units in the pharma sector under the overall umbrella of the Credit Linked Subsidy Scheme (CLCSS). Under the scheme, pharma SSI units are eligible for 15 per cent upfront capital subsidy on institutional finance up to Rs1.00 crore availed of by them for adoption of improved technology to make themselves Schedule 'M' Compliant.

9.71 Other new initiatives that have been taken / are being contemplated by the Department include the launching of the access to affordable medicine Jan Aushadhi Campaign, measures for setting up

world class pharma infrastructure in India through public-private partnership (PPP) and providing impetus for manufacturing of new medical devices and pharma machinery.

Fertilizers

9.72 The government has decided to examine the feasibility of revival of the Hindustan Fertilizer Corporation Ltd (HFCL) and Fertilizer Corporation of India Ltd (FCIL), subject to confirmed availability of gas. An Empowered Committee of Secretaries, constituted to look into the various financial models for revival of the closed units, has recommended the revenue-sharing model (RSM) with an upfront fee for the revival of each unit through the Build Own and Operate (BOO) mode. Action is being taken by the respective companies for finalization of a fully tied up revival proposal for each unit. Revival of Madras Fertilizers Ltd (MFL), Fertilizers & Chemicals Travancore Ltd (FACT) and Brahmaputra Valley Fertilizer Corporation Ltd (BVFCL) is also under consideration.

9.73 The New Pricing Scheme-III (NPS-III) for indigenous urea seeks to rationalize distribution and movement of urea and to lay down a definite plan for conversion of all non-gas-based urea units to gas. The Government has announced a new investment policy for urea units to attract investment in the fertilizer sector that is based on import parity price benchmarking. Besides, a policy for encouraging production and availability of fortified and coated fertilizers was notified.

9.74 To ensure easy availability of fertilizers in all parts of the country, a uniform freight subsidy policy was announced under which rail freight will be paid on actuals and road freight on a normative average district lead.

9.75 The Revised Concession Scheme for decontrolled phosphatic and potassic fertilizers was announced, under which final rates for concession, to be worked out on a monthly basis, for indigenous DAP would be the same as those for imported DAP. Further, mono ammonium phosphate, triple super phosphate and ammonium sulphate have been included in the concession scheme. The maximum retail price has been left open to be decided by the manufactures with effect from October 1, 2009. An amount of Rs 2,000/MT has been allowed as concession on Single Super Phosphate (SSP).

9.76 Possibilities for setting up of joint venture ammonia/urea projects in countries abroad where

adequate gas is available, are being explored. Indian entities are in dialogue for joint ventures in the field of phosphatic and potassic fertilizers in countries such as Jordan, Morocco, Tunisia, Australia, Syria and Canada.

Steel

9.77 Responding to the changed scenario, the Government of India removed the export duty on all steel items, reintroduced import duty of 5 per cent on steel, restored DEPB benefits, reduced excise duty to 8 per cent, placed imports of hot-rolled coils on the “restricted list”, making them available to direct users only and withdrew the exemption from countervailing duty on import of thermo-mechanically treated (TMT) bars and structurals. In recent times, to ensure adequate domestic availability, export duty on iron lumps has been increased from 5 per cent to 10 per cent and a 5 per cent export duty has been imposed on iron ore fines to regulate exports of the material. Moreover, an Inter-Ministerial Group (IMG) has been set up to facilitate interaction between investors and the various agencies in matters of acquisition of land, mining rights, power and transportation including the rail, road and port sectors.

Electronics and information technology

9.78 Approved in May 2006, there are 27 Mission Mode Projects (MMPs) under the National e-Governance Plan (NeGP) consisting of 9 Central MMPs, 11 State MMPs and 7 integrated MMPs (including 8 programme support components) which, inter alia, achieved the following by December 2009. Out of the 100,000 broadband Internet-enabled Common Service Centres (CSCs) planned to be rolled out in rural areas on PPP basis, 58,954 have been rolled out. Eleven States/ Union Territories have completed implementation of the State Wide Area Networks (SWANs) scheme which is envisaged to provide secured network from State headquarters up to block level with a minimum bandwidth capacity of 2 Mbps. Proposals of State Data Centres (SDC) for 31 States/ Union Territories have been approved with a total outlay of Rs 1,378.50 crore. Twenty States/ Union Territories have completed the institutional framework for State-level strategic decision making including setting up of State e-Governance Mission Teams (SeMT) and deployed SeMT personnel.

9.79 Under the initial phase of the National Knowledge Network (with scalable multi-gigabit capabilities to connect 1,000 nodes covering all universities, research institutions, libraries,

laboratories, hospitals and agricultural institutions across the country), a core backbone consisting of 15 Points of Presence (PoPs) has been established with 2.5 Gbp capacity. Fifty-seven institutions of higher learning and advanced research have been connected to the network and six virtual classrooms have been set up at six IITs. Under the National Skill Development Policy, a target has been laid down to skill 10 million people by the year 2022 in the area of IT. The Information Technology Research Academy programme has been conceived for advancing capacity and capability building in the area of information and communication technology and electronics.

9.80 Through the Nanotechnology Programme, R&D capacity and infrastructure is being built up at the Indian Institute of Science Bangalore and IIT Bombay. Application-oriented projects for specific users/ industries with technology demonstration and technology transfers are mostly carried out by R&D societies of the Department of Information Technology like the Centre for Development of Advanced Computing (CDAC) and Society for Applied Microwave Electronic Engineering and Research (SAMEER) with active collaboration from academics. C-DAC commissioned a high performance computing system called PARAM “Yuva”. The “PARAM Sheersh” Supercomputing Facility at the North Eastern Hill University (NEHU), Shillong conducts scientific and engineering research in strategic areas in the North-East region. The nationwide grid-computing initiative, Garuda, aggregates supercomputing and storage resources nationwide, provides a problem-solving environment, and enables collaborative R&D for research and user community. Garuda connects 45 premier institutions across 17 cities.

9.81 The Information Technology (Amendment) Act 2008 has been enforced and rules of important sections have been notified in October 2009 addressing the needs of national cyber security. The Act has, inter alia, added provisions to deal with new forms of cyber crimes like publishing sexually explicit material in electronic form, video voyeurism and breach of confidentiality. The Indian Computer Emergency Response Team (CERT-In) has been designated as the nodal agency for coordinating matters related to cyber security and emergency response. CERT-In has published a crisis management plan for countering cyber attacks and cyber terrorism. It has also created a panel of IT

security auditors. The Certifying Authorities (CAs) licensed by the CCA have issued more than 14,00,000 Digital Signature Certificates. These are being used in applications such as Real Time Gross Settlement System & Electronic Fund Transfer, email, e-procurement, share trading and issue of import/export licences and filing of company returns.

MSMEs

9.82 In accordance with the provisions of the MSMED Act 2006, the MSMED (Furnishing of Information) Rules, 2009 were notified in October 2009. These provide for furnishing of information relating to investment in plant and machinery or equipment by enterprises. Further, the Advisory Committee, as provided in the MSMED Act has been reconstituted in September 2009.

9.83 The National Manufacturing Competitiveness Programme (NMCP) has ten components targeted at enhancing the entire value chain of the MSME sector. Of these, five were already under operation, which included Quality Management Standards (QMS) and Quality Technology Tools (QTT), building awareness on Intellectual Property Rights for MSMEs, Support for Entrepreneurial and Managerial Development of SMEs through Incubators, Marketing Support Assistance to MSMEs and Mini-Tool Rooms. During 2009-10, two more components have been made operational, namely, the Lean Manufacturing Competitiveness Scheme for MSMEs and the Design Clinic Scheme. Of the remaining three schemes, two—Technology and Quality Upgradation Support to MSMEs and the Marketing Assistance and Technology Upgradation Scheme for MSMEs—have been approved.

9.84 Skill development has been accorded high priority in line with the overall target set by the Prime Minister's National Council on Skill Development. The agencies under the Ministry of MSME will conduct skill development programmes for about 3.62 lakh trainees during 2009-10.

9.85 The cluster approach has been adopted as a key strategy for enhancing the productivity, competitiveness and capacity building of MSEs and their collectives. Under the MSE Cluster Development Programme, 27 new clusters were taken up for diagnostic study, 27 for soft interventions and 8 were approved for setting up of common facility centres (CFCs) during 2009-10. Cumulatively, 441 clusters in 28 States and 7 UTs have so far been taken up for

diagnostic study, soft interventions and setting up of CFCs under the programme.

9.86 Under the Credit Guarantee Fund Scheme for Micro and Small Enterprises, over 1 lakh MSE proposals for an amount of Rs 4,465 crore have been approved for extending loans without collateral/third-party guarantee during April-December 2009, registering substantial growth over the previous year's levels. Cumulatively, about 2.50 lakh MSE proposals for loans amounting to Rs9,200 crore have been approved under the scheme till December 2009.

9.87 Under the Credit Linked Capital Subsidy Scheme (CLCSS), which aims at facilitating technology upgradation of the MSE sector, 1,403 MSEs have been assisted and subsidy amounting to Rs 81.53 crore has been sanctioned during April-November 2009. Cumulatively, 7,910 MSEs have been assisted and subsidy amounting to Rs 344.84 crore sanctioned till November 2009.

9.88 A loan agreement for \$ 150 million was signed between the Government of India and the Asian Development Bank in December 2009 for implementing the comprehensive Khadi Reform Programme, under which the khadi and village industries (KVI) sector is proposed to be revitalized with enhanced sustainability, income, employment and artisan welfare.

9.89 Under the Prime Minister's Employment Generation Programme (PMEGP) launched in August 2008, cumulatively 4.56 lakh applications have been received by various implementing agencies up to November 2009, of which 1.63 lakh have been recommended to banks. A total of 50,207 projects involving margin money of Rs 833.86 crore have been sanctioned by the banks up to November 2009.

9.90 A new scheme, namely Strengthening of Infrastructure of Existing Weak Khadi Institutions and Assistance for Marketing Infrastructure, has been introduced, envisaging renovation of 30 selected khadi sales outlets and providing assistance for strengthening of infrastructure of 100 existing weak institutions.

9.91 The recent global economic slowdown has had an adverse impact on the Indian economy, including the MSME sector. In this context, the representatives of 19 prominent MSME Associations met the Prime Minister on August 26, 2009 to highlight various concerns and issues. The Prime Minister announced the setting up of a Task Force

to reflect on the issues and formulate an agenda for action within a period of three months after discussions with all stakeholders. Accordingly, a Task Force under the chairmanship of the Principal Secretary to the Prime Minister has been constituted to address the issues of MSME sector. The Task Force classified the common issues into following major thematic areas (namely credit, marketing, labour, rehabilitation and exit policy, infrastructure, technology and skill development and taxation) and constituted separate Sub-Groups for detailed examination. A separate Sub-Group was constituted to look into the development of MSMEs in the North-East and Jammu & Kashmir. The Task Force submitted its report to Hon'ble Prime Minister on January 30, 2010. The recommendations of the Task Force have been made with a view to not only help the MSMEs in meeting the challenges of global economic slowdown but will also facilitate their growth and development.

CPSEs

9.92 The Government has been delegating enhanced financial and operational powers to the Navratna, Miniratna and other profit-making CPSEs. There are 18 Navratna enterprises. Six more CPSEs, namely the Airport Authority of India Limited, Ennore Port Ltd, Tehri Hydro Development Corporation, Security Printing and Minting Corporation Ltd, Satluj Jal Vidut Nigam Ltd and Indian Railway Catering and Tourism Corporation Ltd. were granted Miniratna status during the year, raising the total number of Miniratna CPSEs to 62.

9.93 Besides endeavouring to professionalize the Boards of Directors of these enterprises, the Government has issued guidelines on corporate governance of CPSEs. The Board for Reconstruction of Public Sector Enterprises (BRPSE), established to advise the Government, inter alia, on revival / restructuring of sick and loss-making CPSEs, made recommendations on 58 cases until December 31, 2009. The Government has approved proposals for the revival of 37 CPSEs and closure of two. The total assistance approved in this regard up to March 31, 2009 was Rs 15,275 crore, which comprised Rs 2,935 crore as cash assistance and Rs 12,340 crore as non-cash assistance.

9.94 Nearly one-fourth of the employees in CPSEs are in the managerial and supervisory cadres. The total number of employees in all CPSEs came down to 15.35 lakh (excluding casual and contract labour) as on March 31, 2009 compared to 15.66 lakh as on

March 31, 2008. The average per capita emoluments in CPSEs stood at about Rs 5,45,500 per annum.

SOME CRITICAL DIMENSIONS OF INDUSTRIAL DEVELOPMENT

Industrial pollution and environment

9.95 Industries, large, medium and small scale, have been a significant source of air and water pollution. Out of 2,715 industries identified under the 17 categories of highly polluting industries, 1,940 have installed pollution control devices to comply with standards, 479 have been closed and legal action has been taken against 296 defaulting units. Necessary measures – both preventive and promotional – have been taken for control of industrial pollution. These, inter alia, include notification and enforcement of emission and effluent standards; setting up of clean technology mechanisms and effluent treatment plants; establishment of waste minimization circles in clusters of small-scale industries; regulation of location of industries; implementation of the charter on Corporate Responsibility for Environmental Protection (CREP) in the 17 highly polluting categories; introduction of the voluntary Eco Mark scheme; implementation of an auto fuel policy that controls vehicular pollution; use of economic instruments to internalize cost of pollution; and fiscal incentives for pollution control equipments.

9.96 Air quality data (annual average) of designated cities/towns reveal that the levels of sulphur dioxide were within the National Ambient Air Quality Standards (NAAQS). The NAAQS of nitrogen oxide was violated at 14 per cent of monitoring stations in industrial areas. High levels of respirable suspended particulate matter were the more prevalent air pollutant. Similarly, based on the primary water quality criteria evolved in terms of Bio-Chemical Oxygen demand (BOD), 150 stretches on 105 rivers have been identified as polluted.

9.97 Prior environmental clearance of development projects based on impact assessment is mandatory for designated sectors/projects. Table 9.21 gives figures for projects appraised in various sectors during April-November 2009.

9.98 The recent policy initiatives that have been taken by the Government to mitigate the impact of environmental pollution include the following.

Table 9.21 : Projects appraised during April-November 2009

Nature of Project	Cleared		Pending		Rejected/ Returned/ withdrawn	
	EC	TOR	EC	TOR	EC	TOR
1. Industry	296	284	67	144		28
2. Thermal Power	26	50	29	37		12
3. River Valley and Hydroelectric	09	28	09	13		02
4. Mining (Coal & Non-coal)	97	171	85	68		71
5. Infrastructure and Miscellaneous	68	35	47	05		02
6. Construction & Industrial Estates	46	04	17	03		01
Total	542	572	254	270		116

Source : Ministry of Environment and Forests

EC – Environmental clearance; TOR - Terms of Reference

- The Government has recently revised the NAAQS and limits for 12 pollutants have been notified. Area classification based on land use has been done away with so that there are uniform ambient air quality norms for residential and industrial areas. The revised standards are based on global best practices and local Indian conditions.
- Towards a revamped river conservation strategy, the Government has accorded the Ganga the status of a “national river” and has constituted a National Ganga River Basin Authority (NGRBA) to ensure effective abatement of pollution and conservation of the river. The NGRBA has resolved that by the year 2020, no untreated municipal sewage or industrial effluent will flow into the Ganga.
- The Environment Impact Assessment (EIA) Notification 2006 has been amended in December 2009. The amendments made inter alia include decision of the State Level Environment Impact Assessment Authority (SEIAA) to be taken by majority; coal-mine projects with lease area up to 150 ha to be appraised by the SEIAA; biomass-based power plants up to 15 MW and power plants based on non-hazardous municipal solid wastes have been exempted from EIA notification; and information regarding grant of environmental clearance to be put in the public domain for Category ‘A’ projects.
- A National Green Tribunal has been proposed for expeditious disposal of cases relating to environmental protection and conservation of forests and other natural resources including enforcement of any legal right relating to environment and giving

relief and compensation for damages. The proposal to set up a National Environment Protection Authority to strengthen compliance and enforcement of environmental statutes and to improve environmental planning and management is in a conceptual stage.

Labour relations

9.99 The current year, reckoned by the number of man days lost because of strikes and lockouts, has so far been a good year. The number of man days lost because of lockouts has continuously been on the decline (Table 9.22). In regard to the spatial dispersion of the incidences of strikes and lockouts, it is observed that Gujarat, Andhra Pradesh, Kerala and Rajasthan are the most affected States. Among sectors, financial intermediaries (excluding insurance & pension funds) recorded the maximum number of strikes and lockouts.

Table 9.22 : Strikes and lockouts (Man-days lost, in million)

Year	Strikes		Lockouts	
	Number	Man-days lost	Number	Man-days lost
2004	236	4.83	241	19.04
2005	227	10.81	229	18.86
2006	243	5.32	187	15.01
2007	210	15.06	179	12.11
2008 (P)	250	7.02	182	10.46
2009(P) (Jan-Nov.)	91	2.05	31	0.84

Source : Labour Bureau, Shimla

Note : P - Provisional

CHALLENGES AND OUTLOOK

9.100 The cyclical slowdown in the industrial sector that began in 2007-08 got compounded by the twin global shocks in 2008-09. The effects lingered on briefly in the current fiscal; but growth rebound is amply evident. Given the size of the Indian market and the unmet demand for industrial products, coupled with the fact that the overall GDP has started to exhibit growth momentum, there is reasonable hope that demand would not by itself be a constraining factor. Besides, despite the significant step-up in the Government borrowing programme, domestic financial market and external resource flows have given the impression that raising investible resources would not be a major problem. All these factors, combined with the inherent strength of industrial corporates exemplified by the resilience shown by them against adversities in the recent past brighten the industrial outlook in the medium term.

9.101 The emerging investment picture is yet to become clear. Growth in the production of capital goods is improving, but different components of the "capital goods" group have shown a mixed picture during the current year so far. In any case, growth in the indigenous production of capital goods cannot by itself be used to comment on investment and capacity expansion, because, there has, of late, been significant growth in imported capacity addition.

9.102 Industry-agriculture linkages are well known in the Indian context. It appears that there is already some spill over of the slowdown in the agriculture sector affecting some segments of industry. While the ongoing industrial recovery is observed to be broad-based, it should also be noted that some of the sectors that failed to revive in the current year, like food products, paper products, leather products,

jute and cotton textiles and metal products (to an extent), are labour intensive. Ensuring balanced and sustained growth of the Indian economy is predicated, to a great extent, on the ability of manufacturing to absorb the vast surplus labour in the farm sector. Apart from the need for sustaining the high growth in labour-intensive sectors with the vast pool of talent available within the country, another critical challenge in this respect would be to erase the skill deficit with a multi-faceted programme for skill upgradation.

9.103 Manufacturing inflation, especially of prices of industrial inputs, remained mild in the current year. It has predominantly remained an inflation story of food products, which may have partly spilled over from the slowdown in the farm sector. The improvement in the cost structure of manufacturing companies seems to have catalysed the process of recovery. However, indications are that despite the price levels of food products remaining firm, their contribution to manufacturing inflation has been coming down, suggesting a slightly more decentralized movement in manufacturing prices. While higher prices are an incentive to the producer, they also have implications for the cost structure and the demand for manufactured products. This trade-off needs to be carefully managed.

9.104 Capacity addition in some of the key infrastructure sectors like power and roads is lagging; however, it is expected that with the completion of the large number of projects in progress, the targets would be achieved. One of the biggest challenges to sustaining and stepping up industrial growth lies in removing the infrastructural impediments. Growth in infrastructure not only alleviates the supply-side constraints in industrial production, but also stimulates additional domestic demand required for industrial growth.