Sector-wise growth profile

8.22 The following analysis highlights the growth performance of industrial groups at the two-digit level with emphasis on the high-weighted items that have driven growth or declined within each group. In addition, sectoral production data have been used to supplement the analysis.

Food products

8.23 As per the IIP data, the index of production of food products declined by 9.6 per cent in 2008-09 compared to a growth of 7.0 per cent in the previous year. This has been largely due to steep decline in the production of sugar, which has the highest weight in the "food product" group. Sugar had recorded robust production growth in 2007-08. The other important items like mustard oil/rapeseed oil and malted food also witnessed significant reduction in production during 2008-09. The high-weighted wheat flour/maida, milk powder and tea recorded slack production growth during the year. In contrast, edible oils like groundnut oil, cotton seed oil and hydrogenated oil recoded high production growth.

Beverages, tobacco & related products

8.24 The IIP data indicate that the beverages and tobacco group recorded the highest growth (15.6 per cent) among all the two-digit level industrial groups during 2008-09; that too on top of a strong base. Among the industries subsumed under this product group, cigarette production marginally declined during 2008-09. Most of the growth in the sector during the year was on account of high growth in production of country liquor, Indian-made foreign liquor and beer. The production of rectified spirit fell considerably during 2008-09.

Textiles

8.25 The IIP data show that during 2008-09, cotton textiles declined by 2.8 per cent, wool, silk and man-made fibre textiles by 0.3 per cent and jute textiles by 10 per cent while textile products increased by 3.7 per cent, compared to 2007-08.

8.26 The production of textile fabrics that increased by 4.96 per cent during 2007-08 (provisional), declined by 1.9 per cent during 2008-09. Despite modest increase in the production in hosiery and mill sectors, the decline in the production in power looms and handlooms resulted in the decline in the overall production of fabrics (Table 8.6). Factors such as higher price of cotton, high interest rates, problems in credit availability, high cost of power and power cuts and demand slowdown in major importing countries led to the decline in cotton textiles.

8.27 The textile sector had gathered momentum consequent to the termination of the quota regime in December 2004. During 2007-08, textile exports recorded an increase of 15.6 per cent in US dollar terms and 2.8 per cent in rupee terms. During April 2008–February 2009, however, exports of textiles and clothing stood at US$ 18.52 billion, recording a decline of 5.3 per cent growth (Table 8.7). Total textile exports amounted to US $ 1,602.05 million during February 2009, which meant a decline of 24.4 per cent from February 2008. However, it declined to 6.3 per cent in rupee terms during the same period over February 2008.

Table 8.6 : Production of fabrics
(in million square metres and per cent*)

Sector	2005-06	2006-07	2007-08	2008-09P
Mill sector	1656 (8.5)	1746 (5.4)	1781 (2.0)	1796 (0.8)
Handloom	6108 (6.8)	6536 (7.0)	6947 (6.3)	6677 (-3.9)
Power loom	30626 (8.1)	32879 (7.4)	34736 (5.6)	33648 (-3.1)
Hosiery	10418 (14.3)	11504 (10.4)	11804 (2.6)	12077 (2.3)
Others	769 (11.0)	724 (-5.9)	768 (6.1)	768 (0.0)
Total	49577 (9.2)	53389 (7.7)	56036 (4.9)	54966 (-1.9)

Source : O/o Textiles Commissioner, Mumbai;
* Figures in parenthesis depict per cent growth

Table 8.7 : Export of textiles

Figures in US$ million

Item	2006-07	2007-08	April'08-Feb.'09 (P)	
			Export	Growth (per cent)
Readymade Garments	8282.3	9065.4	8597.3	4.9
Cotton Textiles	5564.2	6851.8	4423.1	-22.8
Wool & Woolen Textiles	423.8	442.9	447.1	21.5
Manmade Textiles	2398.9	3175.6	3007.1	4.7
Silk	706.0	657.4	627.4	9.1
Handicrafts *	1364.9	1451.0	1005.0	-26.6
Coir & Coir Manufactures	145.8	160.2	133.8	-6.8
Jute Goods	260.2	326.1	279.2	-7.1
Grand Total	**19146.0**	**22130.3**	**18520.0**	**-5.3**

Source : DGCI&S, Kolkata
P Provisional;
*** Includes only textile-based handicrafts such as hand-made carpets excluding silk, silk carpets, handicrafts excluding hand-made carpets).**

Wood and wood products

8.28 Wood products, comprising particle boards and commercial plywood in the IIP, that had the highest rate of growth of over 40 per cent in 2007-08 slumped to 10.3 per cent in 2008-09. Most of these products are closely linked to demand from the commercial and housing construction. While the production of particle boards declined during the year, the production of commercial plywood increased substantially during 2008-09.

Paper products

8.29 Paper and paper products have been subject to wide annual fluctuations in growth. After growing at 15.6 per cent and 10.5 per cent respectively during 2003-04 and 2004-05, their growth came down to (-) 0.9 per cent in 2005-06 and increased to 8.7 per cent in 2006-07. The rate of growth of the sector during 2007-08 and 2008-09 were 2.7 per cent and 1.3 per cent (provisional) respectively. As per the IIP data, most items in this product group including machine-made pulp, paper and paper boards showed indifferent growth/decline during 2008-09. Despite the fact that India is self-sufficient in most forms of paper, the industry is affected by difficulties like high production cost, problems related to handling pollution, less than acceptable quality and shortage of raw materials.

Leather and leather products

8.30 Leather products contribute significantly to employment generation and export earnings. The IIP data show that after robust growth of 11.7 per cent in 2007-08, this sector registered a sharp fall of (-) 7 per cent during 2008-09. Being export-oriented, leather has also been one of the sectors that has borne the brunt of the shrinkage in demand in foreign markets.

Chemicals, petrochemicals, pharmaceuticals and fertilizers

8.31 The IIP data show that during 2008-09, chemicals & chemical products grew by 2.9 per cent in 2008-09 as compared to 10.6 per cent in 2007-08.

Chemical industry

8.32 Major chemicals undergo several processing stages to be converted into downstream chemicals. These are used by agriculture sector, industry and direct use by the consumers. Agriculture and industrial usages of chemicals include auxiliary materials such as adhesives, unprocessed plastics, dyes and fertilizers, while direct usage by the consumers include pharmaceuticals, cosmetics, household products, paints, etc (Table 8.8).

Table 8.8 : Production of major chemicals

(in 000' MT)

Years	Alkali chemicals	Other inorganic chemicals	Organic chemicals	Pesticides (Tech.)	Dyes & dyes	Total major chemicals
2005-06	5475	544	1545	82	30	7676
2006-07	5269	602	1545	85	33	7534
2007-08	5443	609	1546	83	44	7725
2008-09	5430	504	1212	74	31	7251

Source: Department of Chemicals & Petrochemicals

8.33 The petrochemical industry mainly comprises synthetic fibres, polymers, elastomers, synthetic detergents intermediates and performance plastics. The main sources of feedstock and fuel for petrochemicals are natural gas and naphtha. Petrochemical products permeate the entire spectrum of daily use items and cover almost every sphere of life, ranging from clothing, housing, construction, furniture, automobiles, household items, toys, agriculture, horticulture, irrigation, packaging to medical appliances etc. There are three naphtha-based and three gas-based cracker complexes in the country with a combined ethylene annual capacity of 2.9 million MT. Besides, there are four aromatic complexes also with a combined Xylenes capacity of 2.9 million MT (Table 8.9).

8.34 The production of polymers accounted for almost 62 per cent of the total production of major petrochemicals during 2008-09. The domestic capacity of polymers was 5.72 million MT during 2008-09. With 88.5 per cent capacity utilization, production of polymers during 2008-09 at the level of 5.06 million MT was attained. The domestic production capacity of synthetic fibres was 3.46 million MT during 2008-09. With capacity utilization of about 73 per cent, production at the level of 2.52 million MT was achieved.

8.35 The share of imports of chemicals and petrochemicals in the total national imports ebbed from 9.0 per cent to 6.7 per cent during the period 2002-03 to 2008-09 (upto February) whereas the share of exports declined marginally from 11.2 per cent to 10.0 per cent during the corresponding period (Table 8.10).

8.36 The Assam Gas Cracker Project, approved by the Government in April 2006 at a fixed cost of Rs. 5,460.61 crore and scheduled for commissioning in April 2012, is expected to attract substantial investment by way of setting up of downstream plastic processing industry. GAIL (India) Ltd. is the main promoter of the project.

Table 8.10 : Exports and imports–Chemicals and petrochemicals

(Rs. crore)

Items	2006-07	2007-08	2008-09 (upto Feb.)
Exports:			
(a) Chemicals	39351	43482	64796
(b) Petrochemicals	21801	22199	12338
(c) Sub-Total (a+b)	**61152**	**65681**	**77134**
Imports:			
(a) Chemicals	47914	54422	66169
(b) Petrochemicals	16339	18677	15895
(c) Sub-Total (a+b)	**64253**	**73099**	**82064**

Source: Department of Chemicals & Petrochemicals

Pharmaceuticals

8.37 The Indian pharma industry has grown from a mere Rs. 1,500 crore turnover in 1980 to over Rs. 78,000 crore in 2008 with about 10 per cent of share volume of global production (Table 8.11). High growth has been achieved through; the creation of required infrastructure, capacity building in complex manufacturing technologies of active ingredients

Table 8.11 : Value of production of bulk drugs and formulations

(Rs. crore)

Year	Bulk drugs	Growth %	Formu- lations	Growth %
2006-07	12125	14.0	45626	20.0
2007-08	13822	14.0	54751	20.0
2008-09	15204*	10.0*	66796*	22.0*

Source: IDMA Data Bank; *Estimated

Table 8.9 : Production of major petrochemicals

(000' MT)

Years	Synthetic fibers	Polymers	Elastomers	Synthetic detergent intermediates	Performance plastics	Total major petro-chemicals
2005-06	1906	4768	110	555	127	7466
2006-07	2250	5183	101	556	133	8223
2007-08	2524	5304	105	585	157	8675
2008-09	2343	5060	96	552	141	8192

Source : Department of Chemicals & Petrochemicals

(APIs) and formulations, entering into drug discovery through original and contract research and manufacturing (CRAM) and clinical trials and product specific strategies of acquisition and mergers. The domestic sector had a production turnover of Rs. 47,241 crore from about 10,000 small-scale and 300 large and medium manufacturing units in 2008.

8.38 Pharmaceutical exports have grown from Rs. 6,256 crore in 1998-99 to Rs. 30,759 crore in 2008. Exports of pharmaceuticals have been consistently outstripping the value of corresponding Imports in the period 1996-97 up to 2007-08. Exports registered a growth rate of 25 per cent in 2007-08 over 2006-07. The sector attracted FDI amounting to US$ 1,401.60 million during 2000-01 to September 2008, of which, US$ 125.30 million occurred during April-September 2008.

8.39 Investments in pharmaceutical sector are now expanding into areas of innovative R&D focused outsourcing opportunities like clinical trials, data management services, pharmaceutical informatics, lead discovery and optimization, pharmaco-kinetics and pharmaco-dynamics and pre-clinical drug discovery in combinatorial chemistry, chiral chemistry, new drug delivery systems, bioinformatics and phyto-medicines. The Indian pharma industry is taking leaping strides in innovative drug discovery with clinical trials underway in 34 molecules. Consequently, the Indian drug discovery market has grown from US$ 470 million in 2005 to US$ 800 million in 2007.

Fertilizers

8.40 While the shift from DAP to complexes production affected the production growth of DAP, inadequate availability of raw materials and intermediates has also been a major bottleneck. There is no domestic production of MOP, the requirement of which is met fully by imports (Table 8.12).

8.41 Despite manifold increase in international prices of fertilizers and domestic cost of production, the prices of fertilizers have been kept at 2002 levels for major fertilizers. The increased burden of cost is borne by the government in the form of increased subsidy/concessions paid to manufacturers. The subsidy bill, which was Rs. 11,835 crore during 2003-04, increased to Rs. 40,338 crore during 2007-08.

8.42 An Empowered Committee of Secretaries has been formed to look into all options for revival of closed units. The Government has decided in principle to examine the feasibility of revival of HFCL and FCIL, subject to confirmed availability of gas. The Government has decided to revive Barauni unit of HFCL through a Special Purpose Vehicle (SPV) promoted by NFL, RCF and KRIBHCO namely Urvarak Videsh Ltd. FACT has been provided a one-time grant of Rs. 200 crore to meet the working capital requirement. Suitable packages to help MFL and BVFCL are also being prepared.

Rubber and plastic products

8.43 As per the IIP production data, this product group declined by 1.5 per cent during 2008-09, compared to their growth of 8.9 per cent during 2007-08. The growth of tyre industry is linked to the growth of the auto industry and the replacement market. Two-wheeler production had a modest growth during 2008-09, so did the two-wheeler tyres. The production of rubber footwear grew by 3.9 per cent while sheets (PVC/rubber) fell by 4.7 per cent. PVC pipes and tubes, which have the highest weight in the product group, witnessed a decline of 7.2 per cent during 2008-09, on top of an impressive growth during the previous two years.

Non-metallic mineral products including cement

8.44 As per the IIP production data, the growth of non-metallic mineral products as a group was 1.0

Table 8.12 : Production of fertilizers

(Lakh MT)

Year	Production			Imports		
	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09
Urea	203.08	198.58	199.22	47.18	69.28	56.67
DAP	48.51	42.12	29.33	28.75	29.9	61.91
Complex fertilizers	74.64	58.50	68.48			
MOP	Nil	Nil	Nil	34.48	44.2	56.72

Source : Department of Fertilizers

per cent during 2008-09 as compared to 5.7 per cent in 2007-08. Important products like glazed/ceramic tiles and bottles and bottle glass wares recorded indifferent growth/decline during 2008-09, while the production of polished granite/stone chips and graphite electrodes and anodes declined significantly. The industry was saved from an overall decline in output by the 8.2 per cent increase in cement production during 2008-09. The cement industry added a record capacity of 30 million tonnes (MTs) during 2007-08 to the capacity of 167.83 MTs that existed at the end of 2006-07. The cement capacity as on November 30, 2008 was 206.46 MTs. Cement and clinker exports grew by about 5.40 per cent and 5.60 per cent respectively in April-November 2008.

Steel

8.45 India ranks as the fifth largest producer of steel in the world. The crude steel production grew at an annual rate of 9.2 per cent during 2003-04 to 2007-08. The increase in production came on the back of capacity expansion, mainly in the private sector plants, and higher utilization rates. The Indian steel industry has diversified its product mix to include sophisticated value-added steel used in the automotive sector, heavy machinery and physical infrastructure. The industry, however, suffers from the high ash content of locally available metallurgical coal and growing dependence on imported coal and delays in getting iron ore mining lease has created uncertainties and constraints in the areas of land acquisition and transport infrastructure.

8.46 The three years, 2005-06 through 2007-08, witnessed double-digit steel consumption growth. As consumption grew at almost double the rate of growth in domestic steel production during 2007-08, import of steel rose sharply while exports stagnated (Table 8.13). Domestic steel prices started rising steeply from December 2007 and reached a peak in March/April 2008 on account of rising international price of steel led by increased global demand, mismatch between the rate of growth in domestic demand and supply and steep increase in raw material prices in the domestic and global markets. The rising domestic prices were sought to be countered with measures like imposition of export duty, reduction of customs duty from 5 per cent to “Nil” on iron and steel products, met coke, ferro-alloys and zinc, reduction in countervailing excise duty from 14 per cent to “Nil” on imported TMT bars & structurals used for construction of houses and ad valorem export tax of 15 per cent on iron ore in place of earlier specific lump-sum tax.

8.47 The year 2008-09 has been a watershed year for the Indian iron and steel industry. The industry has been hit hard by the spiraling cost of imported coking coal/met coke. The first half 2008-09 witnessed rapid rise in consumption, prices and profits of steel producers. Spurred by the high growth in steel demand and the availability of key factors of production within India, huge investments were planned for capacity expansion.

8.48 The onset of the global economic crisis since September 2008 led to stagnation and subsequent fall in the international steel prices. Domestic demand for steel was adversely impacted by economic sluggishness and, in particular, by the sharp reduction in demand in some of the leading end-user segments of steel which depend on credit financing. As a result, steel prices started moving

Table 8.13 : Production, consumption, import and export of steel

(million tonnes)

	Item	2005-06	2006-07	2007-08	2008-09 P	Growth (per cent)
Production for sale	TFS	46.56	52.53	56.07	56.42	0.6
	PI	4.69	4.93	5.28	5.28	0.0
Imports	TFS	4.31	4.93	7.03	5.72	-18.7
	PI	0.03	0.03	0.11	0.08	-27.0
Exports	TFS	4.80	5.24	5.08	3.66	-27.9
	PI	0.44	0.71	0.56	0.35	-37.5
Consumption[1]	TFS	41.43	46.78	52.12	52.05	-0.1
	PI	4.13	4.33	4.62	4.91	6.2

Source : JPC;
TFS = Total finished steel, both alloy and carbon; PI: Pig iron
P Provisional estimates; 1- adjusted for stock changes and double-counting.

Table 8.14 : Growth in production, consumption, imports and export of steel (alloy + carbon)

(per cent) *

2008-09	Production for sale	Real consu-mption	Imports	Exports
April-June	4.9	11.0	18.3	(-) 29.6
April-August	4.2	10.1	33.1	(-) 31.4
April-September	5.4	4.9	(-)12.6	(-) 30.2
April-March	0.6	(-)0.1	(-)18.7	(-) 27.9

Source : JPC; * Data are provisional

down sharply from September 2008. On the supply side, the liquidity crunch has negatively impacted steel investors' sentiments (Table 8.14).

Metal products

8.49 This industry suffered from the second consecutive year of decline; its index of production declined by 5.6 per cent in 2007-08 and further by 4 per cent in 2008-09. Five per cent plus growth was recorded by only two products, ie, LPG cylinders and pressure cookers, while important items like well/offshore platforms, tin metal containers, agricultural implements and bolts and nuts recorded sluggish growth/decline during 2008-09.

Machinery and equipment

8.50 The machinery sector (except the transport equipments), grew at 8.7 per cent during 2008-09, on top of five consecutive years of growth in excess of 10 per cent. The important items in the machinery group showed significant variations in the growth of production. In terms of contribution to the growth of the sector, the bulk was accounted for by insulated cables and wires, the production of which more than doubled, as per IIP during 2008-09. The other important items that recorded significant growth during the year included TV receivers, diesel engines, industrial machinery, turbines, hydraulic machines and cylinders, boilers, power-driven pumps, electric generators, cooling towers, cutting tools and dumpers. On the other extreme, items like computer system and its peripherals, telephone instruments, switch gear, control panels/boards/disks, electric motors phase one, material handling equipment, telecommunication cables, valves, furnaces, etc suffered decline in their production indices.

8.51 The Indian capital goods industry is currently facing a surge in imports from China. The import of capital goods from China rose from Rs. 5,120 crore in 2002-03 to Rs. 54,200 crore in 2007-08. The share of China in India's total import of capital goods has gone up from 38 per cent in 2002-03 to 50 per cent in 2007-08. The trend reflects high import dependency of India for capital goods from China. Of particular concern is the zero-duty imports, relating to import of power generation equipment, construction equipment and import of textile machinery under TUFS.

Electronics and information technology

8.52 The year 2007-08 was marked by substantial growth in the revenue of IT-ITeS industry, BPO, software and services exports and software and services employment. However, the expected growth in 2008-09 is significantly lower when compared to 2007-08 (Table 8.15).

Table 8.15: Growth in IT-ITeS industries

(US$ billion)

Item	2006-07	2007-08	2008-09 (expected)
(IT-ITeS) revenue (including hardware)	47.8	64.0	71.7
Software & services industry (excluding hardware)	39.3	52.0	60.0
The total software and services exports	31.1	40.4	47.0
IT-BPO revenue from domestic market	8.2	11.7	12.5
IT software and services employment	1.6 million	2.0 million	2.2 million

Source: Department of Information Technology

8.53 By December 2007, over 498 India-based centres (both Indian firms as well as MNC-owned captives) had acquired quality certifications, with 85 companies certified SEI CMM Level-5. Production of electronic items such as consumer, industrial electronics, computers, communication and broadcasting equipment, strategic electronics and components registered steady growth over a period of three years, from 2005-06 to 2007-08. Similarly export earnings of the electronics hardware and computer

Table 8.16 : Electronics production & exports

(Rs. crore)

Items	2005-06	2006-07	2007-08*
1. Consumer electronics	18,000	20,000	22,500
2. Industrial electronics	8,800	10,400	11,950
3. Computers	10,800	12,800	16,400
4. Comm. & broadcasting equipments	7,000	9,500	14,350
5. Strategic electronics	3,200	4,500	6,100
6. Components	8,800	8,800	9,500
Sub-Total	**56,600**	**66,000**	**80,800**
7. Software for exports	104,100	141,000	163,000
8. Domestic software	29,600	37,000	47,300
Total	**190,300**	**244,000**	**291,100**
Electronics exports (Rs. crore)			
1. Electronics hardware	9,625	12,500	12,700
2. Computer software	104,100	141,000	163,000
Total	**113,725**	**153,500**	**175,700**

Source : Department of Information Technology
*** Estimated**

software have gone up from Rs. 1,13,725 crore in 2005-06 to Rs. 1,75,700 in 2007-08 (Table 8.16).

Automobile sector

8.54 Production of the automotive industry grew at a CAGR of 11.5 per cent over last five years. The industry has a strong multiplier effect on the economy due to its deep forward and backward linkages with several key segments of the economy. While the industry has been witnessing impressive growth during the last two decades, the performance after 2006-07 has not been encouraging. The automobile sector recorded growth of 13.6 per cent in 2006-07. In 2007-08, the industry registered negative growth rate of (-) 2.3 per cent. However, in 2008-09, the industry has witnessed a modest growth of 3.0 per cent. While passenger vehicle, two-wheeler and three-wheeler registered a growth of 3.4 per cent, 4.9 per cent and 0.1 per cent respectively, the utility vehicles and commercial vehicles segment registered negative growth of (-)11.9 per cent and (-)24 per cent respectively (Table 8.17).

Table 8.17 : Automobile production

(in thousands)

Segment	2005-06	2006-07	2007-08	2008-09
Passenger vehicles	1046	1323	1426	1517
Commercial vehicles	263	222	246	218
Total CVs	391	520	549	417
Three-wheelers	7609	8444	8027	8419
Two-wheelers	434	556	501	501
Total	9743	11065	10854	11175
Percentage growth	15.4	13.6	(-) 2.3	3.0

Source: SIAM

8.55 The turnover of the automobile sector in 2008-09 was Rs 2,18,966 crore and exports were at Rs 31,782 crore. The turnover and the exports of the automobile vehicle industry in 2008-09 was at Rs 1,42,646 crore and Rs 16,782 crore whereas for the automobile component industry this was at Rs 76,320 crore and Rs 15,000 crore. The percentage of exports to the total turnover for the automobile industry and the automobile components sector in value terms was 12 per cent and 19.7 per cent respectively. It is estimated that the automobile industry generates direct and indirect employment for 10.5 million people (Table 8.18).

Table 8.18 : Automobile exports

(in thousands)

Segment	2005-06	2006-07	2007-08	2008-09
Passenger vehicles	170	194	218	336
Commercial vehicles	5	4	6	5
Total CVs	41	50	53	37
Three-wheelers	513	619	141	148
Two-wheelers	77	144	819	1004
Total	**806**	**1011**	**1238**	**1530**
Percentage growth	27.7	25.4	22.4	23.6

Source : SIAM