Industrial Performance

9

CHAPTER

After recovering to a growth of 9.2 per cent in 2009-10 and 2010-11, growth of value added in industrial sector, comprising manufacturing, mining, electricity and construction sectors, slowed to 3.5 per cent in 2011-12 and to 3.1 percent in the current year. The manufacturing sector, the most dominant sector within industry, also witnessed a decline in growth to 2.7 per cent in 2011-12 and 1.9 per cent in 2012-13 compared to 11.3 per cent and 9.7 per cent in 2009-10 and 2010-11, respectively. The growth in electricity sector in 2012-13 has also moderated. The growth of the mining sector in 2012-13 is estimated at 0.4 per cent, though it showed an improvement over a negative growth of 0.63 per cent recorded in 2011-12. With improved business sentiments and investor perception and a partial rebound in industrial activity in other developing countries, industrial growth is expected to improve in the next financial year.

9.2 The index of industrial production (IIP) with 2004-5 as base is the leading indicator for industrial performance in the country. Compiled on a monthly basis, the current IIP series based on 399 products/ product groups is aggregated into three broad groups of mining, manufacturing, and electricity. The IIP as an index shows both the level of production and growth. Overall industrial performance, as reflected by the IIP continued to moderate from Q1 of 2011-12 with growth turning negative in Q1 of 2012-13, before improving to 2.1 per cent in Q3 of 2012-13. The Mining sector production has contracted in the last six quarters. The contraction in the current year was largely because of decline in natural gas and crude petroleum output. Manufacturing, which is the dominant sector in industry, also witnessed deceleration in growth, as did the electricity sector (Table 9.1). There was, however, a sharp pick-up in growth in October 2012 with manufacturing growth improving to 9.8 per cent, the highest recorded since June, 2011. Growth, however, turned negative in November and December, 2012 and was placed at (-) 0.8 per cent and (-) 0.6 per cent respectively.

9.3 In terms of the use- based classification of industries, the capital goods sector sustained negative growth in the last six quarters. Growth in the consumer durable sector continued to fluctuate, turning negative in Q4 of 2011-12, 0.7 per cent in Q2 and 3.2 per cent in Q3 of 2012-13. Pickup in growth in October was generally broad based with consumer goods, capital goods, and intermediates showing improvement in performance. The growth of consumer durables 16.9 per cent was the highest in the last 20 months (Figure 9.1).

9.4 Industrial growth was volatile across all sectors in this period. The seasonally adjusted annualized rate of growth of the IIP, which had shown a nearly flat trajectory, indicates a downward momentum. This suggests that the IIP growth may perhaps remain sluggish (Figure 9.2).

9.5 The IIP also provides data for 22 sub-groups of the manufacturing sector. Cumulatively during April-December 2012, four manufacturing sub groups with a weight of 14.5 per cent in the IIP recorded a growth in excess of 5 per cent. Seven sub- groups with a

Table 9.1 : Growth Rate

(per cent)

	Weight	2010-11	2011-12	2011-12 Q1	2011-12 Q2	2011-12 Q3	2011-12 Q4	2012-13 Q1	2012-13 Q2	2012-13 Q3
General	100.0	8.23	2.89	6.98	3.18	1.18	0.63	-0.28	0.41	2.13
Mining	14.16	5.23	-1.97	0.65	-4.06	-4.22	-0.37	-1.53	-0.69	-3.25
Manufacturing	75.53	8.95	3.00	7.72	3.36	1.09	0.35	-0.84	0.25	2.61
Electricity	10.32	5.55	8.16	8.26	10.54	9.57	4.53	6.40	2.83	4.40
Basic goods	45.68	5.97	5.48	7.47	7.00	4.36	3.41	3.31	2.21	2.72
Capital goods	8.83	14.75	-3.97	16.99	-5.84	-16.17	-6.85	-20.08	-8.06	-0.95
Intermediate goods	15.69	7.39	-0.62	1.83	-0.83	-2.90	-0.51	0.83	1.47	2.35
Consumer goods	29.81	8.56	4.37	4.46	4.77	7.72	1.05	3.93	1.40	2.48
Consumer durables	8.46	14.16	2.60	2.71	7.87	4.91	-4.13	8.04	0.07	3.17
Consumer non-durables	21.35	4.26	5.86	5.93	2.05	10.09	5.28	0.58	2.61	1.92

Source : CSO

Figure 9.1 : Industrial Growth : Broad Secotors

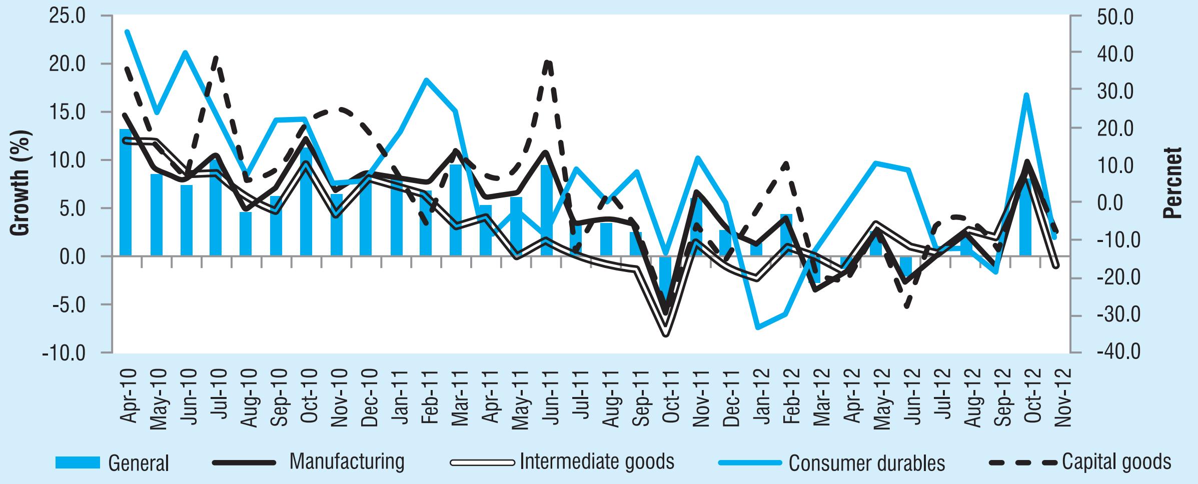
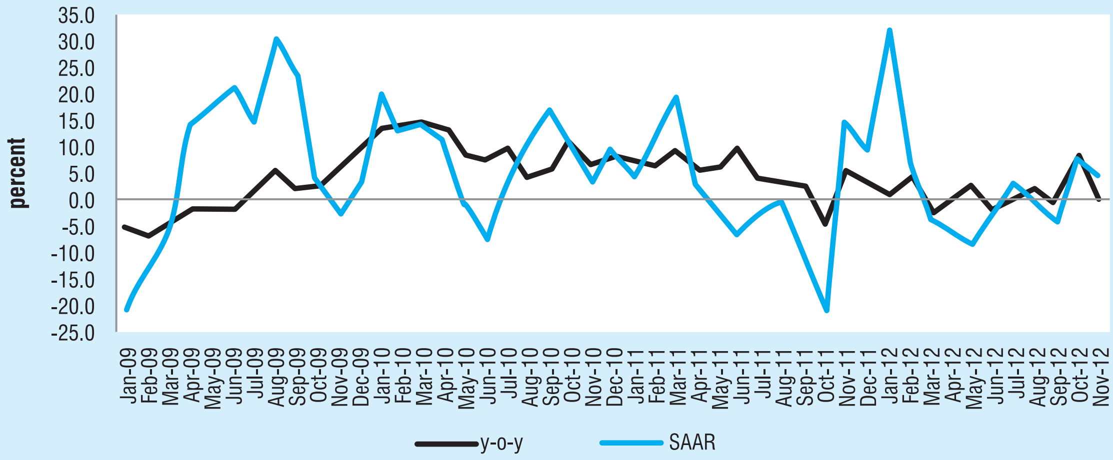


Figure 9.2 : Momentum of IIP (Overall)



weight of 37.0 per cent had a positive growth and eleven sub-groups with a weight of 24.0 per cent had a negative growth, the highest negative growth of 14.6 per cent being shown by electric machinery and apparatus. Negative growth has persisted in tobacco products, office accounting and computing machinery and wood and wood products. On the positive side, however, growth in some of the labour-intensive industries particularly textile has shown improvement in the last three quarters. Growth has also turned significantly positive for leather and food products in the Q3. Growth, as with the broad groups of the IIP, has varied across manufacturing sub-groups and over time (Table 9.2).

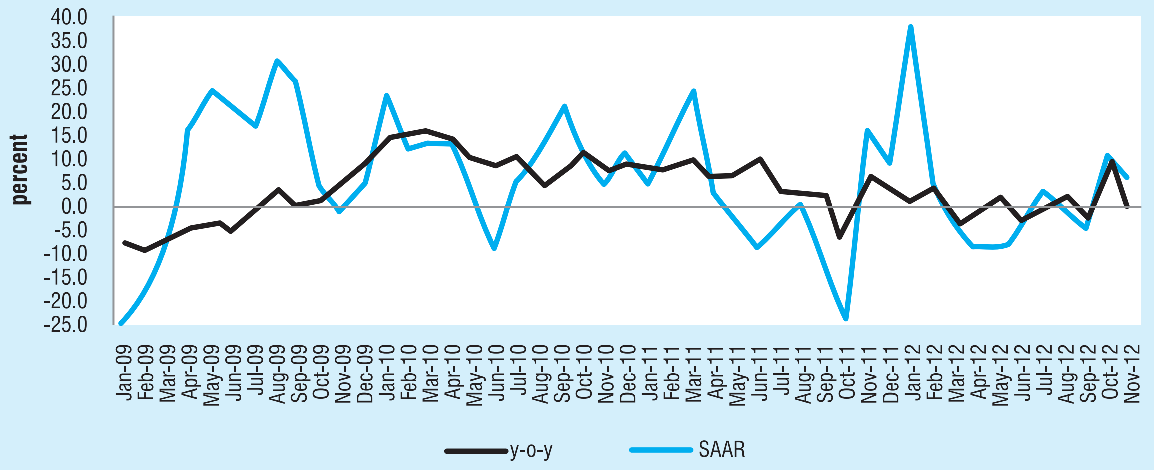
9.6 Momentum of the IIP manufacturing more or less mirrors the path of overall IIP. The seasonally adjusted annualised series indicates a downward trajectory till recently, and a slow pick up (Figure 9.3).

Table 9.2 : Manufacturing Growth Rate (in per cent)

	Weight	2010-11	2011-12	2011-12				2012-13		
		Full Year		Q1	Q2	Q3	Q4	Q1	Q2	Q3
Food products and beverages	7.28	7.0	15.4	17.4	12.3	22.1	11.0	-0.9	0.9	6.7
Tobacco products	1.57	2.0	5.4	4.1	-5.0	16.7	7.2	-5.9	-11.1	-4.2
Textiles	6.16	6.7	-1.3	-2.3	-0.3	-4.7	1.8	9.0	5.4	6.2
Wearing apparel	2.78	3.7	-8.5	-4.9	-9.4	0.0	-18.2	-6.4	5.4	-0.4
Luggage, handbags, saddlery, harness & footwear	0.58	8.1	3.7	5.4	7.7	0.2	1.7	8.8	-0.4	9.8
Wood and products of wood	1.05	-2.2	1.8	-8.1	1.7	9.2	4.8	-2.2	-3.5	-15.3
Paper and paper products	1.00	8.6	5.0	6.7	4.2	5.4	3.8	0.6	1.4	0.3
Publishing, printing & reproduction of recorded media	1.08	11.2	29.6	10.7	7.4	41.9	55.9	13.6	16.7	-14.3
Coke, refined petroleum products & nuclear fuel	6.72	-0.2	3.5	6.0	4.7	1.8	1.7	1.6	7.9	13.1
Chemicals and chemical products	10.06	2.0	-0.4	3.5	-2.1	-0.5	-2.3	-1.2	6.4	3.0
Rubber and plastics products	2.02	10.6	-0.3	-2.5	-0.1	-2.5	3.9	6.9	-2.1	-0.2
Other non-metallic mineral products	4.31	4.1	4.8	-0.5	6.2	8.4	5.2	7.5	-0.2	-4.3
Basic metals	11.34	8.8	8.7	15.6	13.6	4.6	2.4	2.3	0.2	5.0
Fabricated metal products, except machinery & equipment	3.08	15.3	11.2	15.8	12.1	12.9	6.2	2.9	0.6	-9.7
Machinery and equipment n.e.c.	3.76	29.4	-5.8	-1.7	-2.0	-3.8	-13.2	2.4	-3.8	-10.4
Office, accounting & computing machinery	0.31	-5.3	1.6	28.2	0.1	-5.3	-9.5	-1.8	-21.5	-14.7
Electrical machinery & apparatus	1.98	2.8	-22.2	25.5	-27.7	-49.5	-26.4	-43.7	-10.5	33.2
Radio, TV and communication equipment & apparatus	0.99	12.7	4.3	-6.7	16.5	11.6	-5.0	18.3	4.1	4.5
Medical, precision & optical instruments, watches and clocks	0.57	6.8	10.9	-2.2	-1.9	36.0	12.2	15.5	7.4	-17.7
Motor vehicles, trailers & semi-trailers	4.06	30.2	10.8	20.1	8.0	7.6	9.0	0.3	-5.6	-4.2
Other transport equipment	1.82	23.2	11.9	19.1	16.3	11.1	3.1	0.7	-4.7	0.4
Furniture; other manufacturing	3.00	-7.5	-1.8	-0.1	-0.5	-6.4	-0.6	-8.2	-9.2	7.7

Source : **CSO**

Figure 9.3 : Momentum of IIP (Manufacturing)



Why has growth moderated?

9.7 The moderation in industrial growth, particularly in the manufacturing sector, is largely attributed to sluggish growth of investment, squeezed margins of the corporate sector, deceleration in the rate of growth of credit flows and the fragile global economic recovery.

Investment in the industrial sector

9.8 Gross capital formation (GCF) in the industrial sector comprising mining, manufacturing, electricity and construction recorded an average growth of 13.2 per cent during 2004-5 to 2011-12. Growth turned negative during 2008-9 and again in 2011-12. The combined industry sector in 2007-8 accounted for 55 per cent of total GCF (excluding valuables) in the country, which declined 44.4 per cent in 2011-12 (Table 9.3).

9.9 The decline in overall share of GCF in industry in the total GCF for the economy and overall negative annual growth during 2008-09 and 2011-12 was largely due to a negative growth in GCF in the registered and unregistered manufacturing sector. Share of the registered manufacturing sector in overall

Table 9.3 : GCF in Industry

	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Rate of growth of GCF in Industry (per cent)	46.7	18.3	22.0	24.7	-24.5	24.2	22.3	-10.8
Share of Sectors of Industry in overall GCF (per cent)								
Mining	3.7	4.4	4.4	4.3	3.6	3.6	3.8	3.8
Manufacturing	34.1	34.2	34.8	38.1	26.8	32.9	34.7	27.9
Registered Manufacturing	24.3	29.0	27.9	32.5	24.1	27.8	29.7	24.9
Unregistered Manufacturing	9.7	5.3	6.9	5.6	2.7	5.1	5.1	3.0
Electricity	5.3	5.5	5.6	5.4	6.3	6.2	6.6	6.8
Construction	5.4	4.9	7.0	7.2	5.7	4.8	5.3	6.0
Share of Industry in GCF	48.4	49.0	51.8	54.9	42.5	47.5	50.4	44.4
Share of GCF in industry as per cent of GDP of this sector	59.0	63.6	69.2	78.7	56.9	64.7	72.5	62.4
Share of GCF in manufacturing as per cent of GDP in manufacturing	76.0	81.1	83.2	97.3	64.1	78.3	86.8	68.6

Source **: CSO**

GCF declined from a peak of 38.1 per cent in 2007-8 to 27.9 per cent in 2011-12. As percentage of GDP originating from industry, the share of GCF reached 78.7 per cent in 2007-8, though it moderated to 62.4 per cent in 2011-12. The GCF of the registered manufacturing sector in 2008 had reached a level of over 97 per cent income of this sector.

9.10 Investment in industry has generally been buoyant and witnessed an increase in its share in overall GCF of the economy. The share peaked to reach 56.2 per cent of total GCF in the economy in 1995-6 in the post reform period. The rate of growth of GCF, however, moved with the rate of growth of industry. This sector has continued to allocate a significantly high share of its income to the capital formation (Fig 9.4).

9.11 Together with a deceleration in growth of investment (investment in the overall industry sector actually declined in 2011-12), excess capacity in aggregate appears to have persisted. Figure 9.5, which depicts de-trended growth of the IIP and capacity utilization clearly indicates that with moderation in IIP growth, there has also been a decline in capacity utilization. Capacity utilization as measured by the 19th round of the Order Books, Inventories and Capacity Utilization Survey (OBICUS) of the Reserve Bank of India (RBI) shows a continuous decline until Q1 of 2012-13 and a moderately upward trend in Q2. There is a broad co-movement between capacity utilization and de-trended IIP.

Figure 9.4 : Gross Capital Formation in Industry

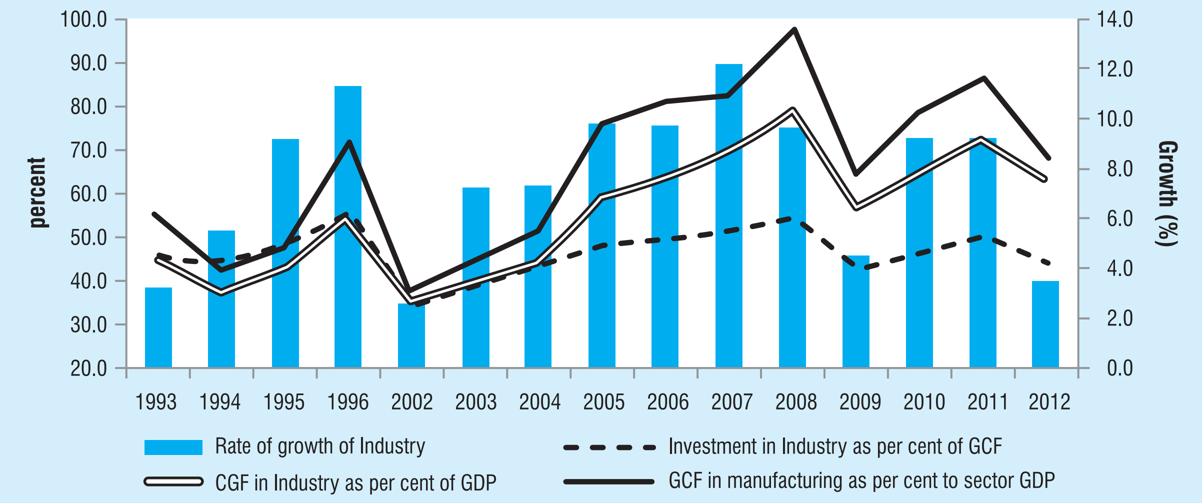


Figure 9.5 : Capacity Utilization and IIP growth

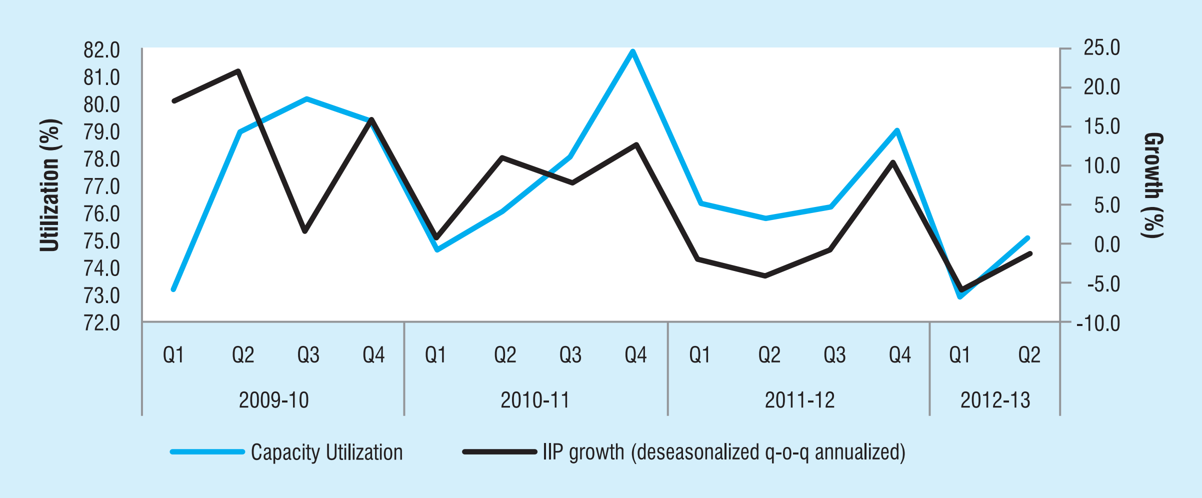


Table 9.4 : Deployment of Credit to Industrial Sector

(₹ billion)

	2010-11	2011-12	2011-12				2012-13		
			Q1	Q2	Q3	Q4	Q1	Q2	Q3
Industries	14461	17656	16541	17121	17964	18999	19772	19890	20752
Manufacturing	9169	11106	10296	10771	11315	12040	12617	12498	12994
Mining	198	283	263	273	285	309	356	367	393
Electricity	2317	3032	2865	2966	3080	3216	3264	3537	3745
Construction	453	523	504	496	531	561	581	593	566
Others	2323	2714	2613	2616	2752	2873	2954	2895	3054
Share in credit disbursed (per cent)									
Manufacturing	63.41	62.90	62.25	62.91	62.99	63.37	63.81	62.84	62.61
Mining	1.37	1.60	1.59	1.59	1.59	1.63	1.80	1.85	1.89
Electricity	16.02	17.17	17.32	17.32	17.15	16.93	16.51	17.78	18.05
Construction	3.13	2.96	3.05	2.89	2.96	2.95	2.94	2.98	2.73
Others	16.06	15.37	15.80	15.28	15.32	15.12	14.94	14.56	14.72
Rate of growth of credit flow (per cent)									
Industries	26.48	22.10	24.82	22.57	21.21	20.24	19.54	16.17	15.52
Manufacturing	19.39	21.12	19.90	22.92	21.08	20.62	22.54	16.04	14.83
Mining	27.97	42.43	41.54	42.16	41.40	44.42	35.08	34.42	37.94
Electricity	48.19	30.83	41.44	34.15	27.06	23.30	13.94	19.26	21.58
Construction	16.30	15.45	14.71	11.04	20.16	15.90	15.35	19.64	6.60
Others	41.20	16.82	29.74	10.98	14.33	14.34	13.06	10.66	10.96

***Source*: RBI**

Credit flow to the industrial sector

9.12 Moderation in investment was largely because of two factors: decline in profitability and deceleration in the rate of growth of credit to the industrial sector. Overall rate of growth of credit flow to industry moderated from 26.48 per cent on an average in 2010-11 to an average15.52 per cent in Q3 of 2012-13. The moderation in the growth was even shaper for the construction sector with overall growth in credit disbursement declining from 16.3 per cent in 2010-11 to 6.6 per cent in Q3 of 2012-13. Mining and electricity sectors also suffered a decline in the growth of credit disbursement (Table 9.4).

9.13 The momentum of credit growth to the industrial sector based on seasonally adjusted annualized rate indicates a downward trajectory suggesting that credit pick up may be slow (Figure 9.6).

9.14 Within manufacturing, which had a share of over 60 per cent in total credit of disbursement to the industrial sector, decline in growth was not distributed across all the sectors, though most of sectors did witness moderation in growth. The chemicals and petroleum products segment, which had a share of over 16 per cent in total outstanding credit in 2010-11 witnessed an increase in the rate of growth of credit in the current year equipments, gems and jewellery and other miscellaneous industries witnessed a sharp decline in the rate of growth of credit flow.

9.15 The aggregate resource flow to industry comprising credit flows, non-SLR investment by banks and flow from non-banking channels, however, is showing cause for optimism. The total flow of financial resources to the commercial sector for the financial year so far (up to 11 January, 2013) has been higher compared with the corresponding period of the previous year in Table 9.5. The increase in flow has been accounted for by both bank and non-bank sources, though the latter played a dominant role. Among the domestic sources, non-food credit and non-statutory liquidity ratio (SLR) investment by scheduled commercial banks (SCBs), net issuance

Figure 9.6 : Momentum of Industrial Credit

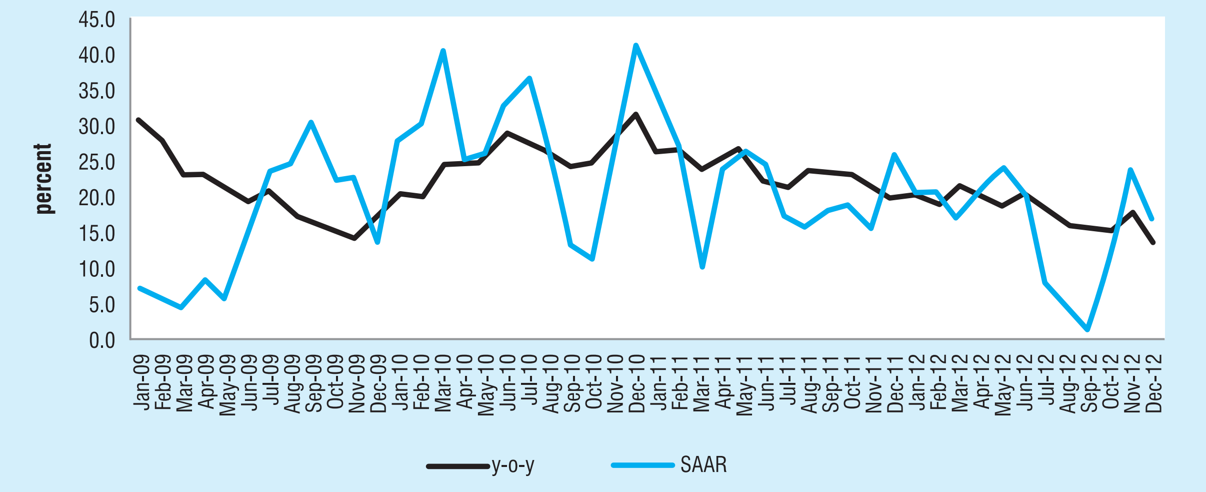


Table 9.5 : Resource Flow to the Commercial Sector

(₹ billion)

	April-March			April 1 to Jan 11	
	2009-10	2010-11	2011-12	2011-12	2012-13P
A. Adjusted non-food bank credit and non SLR investment	4786	7110	6764	3953	4397
B. Flow from non-banks (b1+b2)	5850	5341	5338	4154	5232
b1. Domestic sources	3652	3011	3034	1913	2951
b2. Foreign sources	2198	2330	2304	2241	2281
C. Total flow of resources	10,636	12,451	12,102	8107	9629

Source : RBI; Note: P: provisional

of commercial paper, net credit by housing finance companies witnessed large increase compared to the corresponding period of the previous year. Foreign sources of funding (up to December 2012), also recorded marginal increase compared to the previous year, mainly on account of a higher external commercial borrowings

Corporate Performance

9.16 Sluggish industrial performance also affected corporate performance. The rate of growth of sales of the corporate sector particularly in respect of listed manufacturing companies for the private sector, declined from an average of 28.8 per cent in Q1 of 2010-11 to 11.4 per cent in Q2 of 2012-13, the latest quarter for which comparable set of data are available. There was a significant increase in the rate of growth of interest expenditure with year on year growth peaking at 41.5 per cent in Q2 of 2011-12. Together with a deceleration in the rate of growth of sales, the ratio of net profit to sales also moderated. The ratio of profit to sales which averaged 8 per cent in the first two quarters of 2010-11 has also moderated to 3.6 per cent in Q3 of 2011-12 and has been in the range of 5 to 6 per cent in the last three quarters (Table 9.6).The growth of interest payments moderated to 10 per cent in Q2 of 2012-13, reflecting stabilization of the interest rate with repo rates remaining unchanged from April, 2012 to January, 2013. Consequently, profit in Q2 2012-13 grew somewhat, in part also because of a sharp increase in other incomes. As has already been indicated in Chapter 4, the corporate sector has only had limited pricing power, with inflation for non-food manufacturing recording a sharper deceleration than headline inflation. Inflation for capital goods remained relatively low.

Capital goods sector continues to be a drag on manufacturing performance

9.17 The lower corporate profitability and moderation in the growth of credit flow to industry

Table 9.6 : Growth in Sales and Expenditure of Listed Manufacturing Companies in the Private Sector

Items	2010-11				2011-12				2012-13	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
No. of companies	1900	1933	1961	1953	1935	1922	1910	1887	2003	1954
	Growth rates (Y-o-Y in per cent)									
Sales	28.8	21.2	19.0	23.3	24.9	19.7	19.5	15.2	13.0	11.4
Change in stock-in-trade	354.0	-46.5	89.0	214.9	-42.8	-24.0	117.7	-53.6	-40.1	224.3
Expenditure of which	34.5	22.5	21.1	26.5	25.0	23.2	25.9	16.2	15.6	12.5
Raw material	40.6	21.9	20.9	30.5	28.8	23.8	26.0	17.0	13.4	14.7
Staff cost	16.9	20.4	21.1	18.2	17.5	15.3	13.5	10.8	13.2	12.5
Power & fuel	13.1	15.6	22.9	20.7	27.9	23.3	25.5	24.4	19.1	15.9
Other income	-28.5	69.5	10.3	-30.5	45.8	-3.0	40.4	72.3	15.8	71.1
Interest expenditure	10.9	7.8	13.7	23.1	20.5	41.5	38.6	30.0	38.2	10.0
Net profit	8.2	10.9	14.6	7.1	9.6	-18.3	-43.9	-9.8	-18.1	28.7
Ratio (in per cent)										
Net profit to sales	8.0	8.1	7.7	7.4	6.8	5.4	3.6	6.1	5.0	6.3

Source **: RBI**

also had its impact of the performance of capital goods sector, which in turn affected overall industrial growth. Post global financial crisis, the IIP-based growth rate of the capital goods sector was robust at 14.8 per cent in 2010-11, thereafter the sector has continued to experience a sustained recession. The output of the capital goods sector contracted by 10.1 per cent during April-December 2012. Turning to sub-sectors of capital goods, we see persistent negative growth in machinery and equipment, electrical machinery and transport segments (Table 9.7). Major individual products falling under the capital goods sector and registering negative growth during the current financial year are computers, UPS, transformers, cable insulated, turbines and construction machinery.

9.18 Deceleration in investment, import substitution in the machinery and electrical machinery segments, and a decline in the number of new projects adversely impacted the capital goods sector. The dip in the transport segment after robust growth in 2009-2011 has mainly been due to the decline in domestic demand for commercial vehicles and three wheelers. During 2010-11 and 2011-12 imports of capital goods increased by 28 per cent

Table 9.7 : IIP-based Growth Rate Of the Capital Goods Sector and its Constituents

(in per cent)

	2009-10	2010-11	2011-12	April-Dec. 2012-13
Fabricated metal products	10.2	15.3	11.2	-2.4
Machinery & equipment	15.8	29.4	-5.8	-3.8
Office, accounting & comp. machinery	3.8	-5.3	1.6	-12.5
Electrical machinery	-13.5	2.8	-22.2	-14.6
Motor vehicles, etc	29.8	30.2	10.8	-3.2
Other transport equipments	27.7	23.2	11.9	-1.2
Capital goods	1.0	14.8	-4.0	-10.1
Manufacturing	4.8	9.0	3.0	0.7

Source **: CSO**

Table 9.8 : Rate of Growth of Imports of Capital Goods valued in US$

(per cent)

	2009-10	2010-11	2011-12	2012-13 (April-Dec.)
1. Machine tools	-27.6	36.1	32.7	-3.6
2. Machinery other than electrical	-9.4	21.0	26.6	-6.7
3. Electrical machinery	-16.1	23.4	24.1	-6.5
4. Transport equipment	-11.5	-2.1	19.2	4.5
5. Project goods	47.9	30.8	42.1	-15.4
6. Manufactures of metals	-26.1	38.5	27.5	3.1
7. Electronic goods	-10.7	26.8	23.0	-8.2
8. Computer Soft. physical form	32.0	-32.5	44.3	-60.8

Source : Department of Commerce, Ministry of Commerce and Industry

and 32 per cent respectively. Imports of machinery, electrical machinery, machine tools and project goods saw a major spurt. However, due to depreciation of the rupee and depressed domestic demand during the current financial year, the import of key capital goods has declined. The share of capital goods in overall imports during 2010-11, 2011-12 and 2012-13 (Apr-Dec) ranged between 18-20 per cent. Total import of capital goods during April-December 2012-13 was about $68.35 billion out of the total imports of $365 billion (Table 9.8).

9.19 Analysis of the quarterly trend of capital goods imports and domestic production of capital goods shows a sudden spurt in imports of capital goods during 2011-12 and these impacted domestic segments of heavy machinery, construction machinery and electrical machinery. But during the current financial year there has been a sharper deceleration in the imports of capital goods especially during Q2 (Fig 9.7). As the IIP-based capital goods sector output declined by 20.1 per cent (in Q1), 8.1 per cent (in Q2) and 1.0 (in Q3) of the current financial year, deceleration in capital goods output is also due to slowdown in domestic investment and project expenditure.

Is industrial slow down bottoming out?

9.20 Notwithstanding a pick-up in industrial growth observed in October 2012, there are mixed signals on whether the slowdown phase has bottomed out or the current sluggishness would persist a little longer. There are at least two factors which suggest some optimism on industrial front. The data on frequency distribution of products/product groups which constitute the IIP indicate the number of products with a negative growth has declined from

Figure 9.7 : Comparative quarterly growth rate of capital goods (Production and Imports)

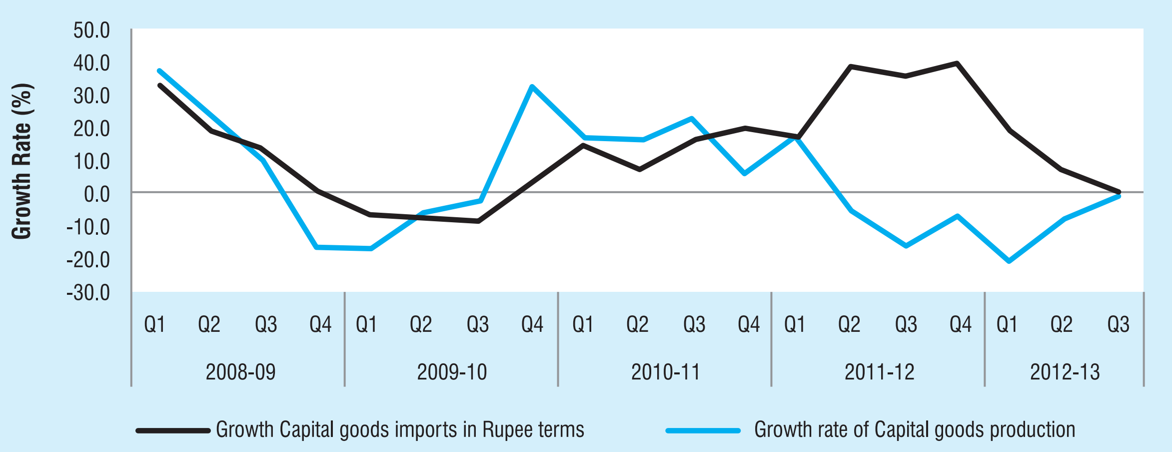


Table 9.9 : Frequency Distribution of Products in Terms of Their Growth

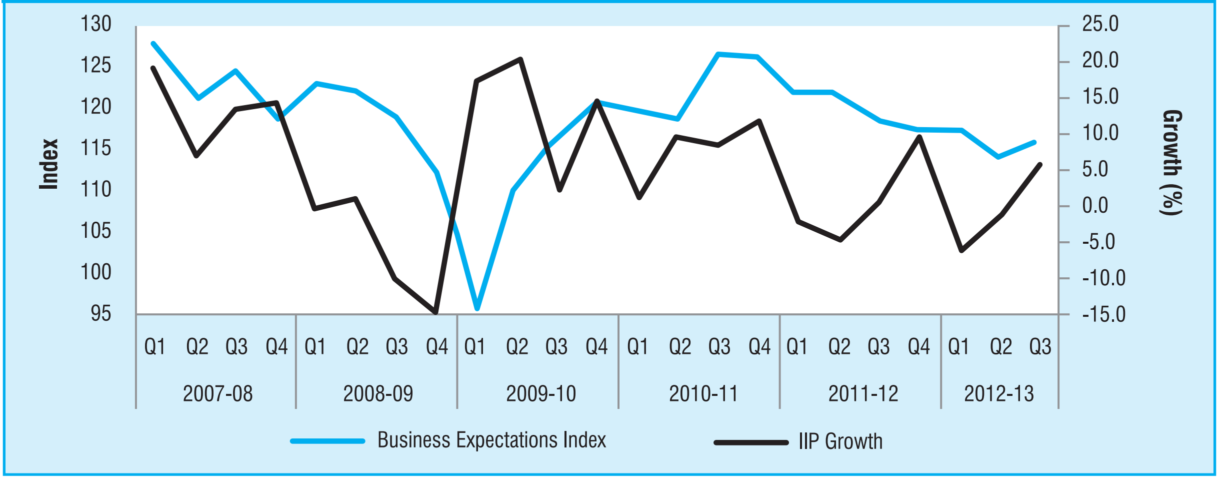
	2010-11	2011-12	2011-12				2012-13		
			Q1	Q2	Q3	Q4	Q1	Q2	Oct-Nov
No.of products/product groups									
Negative	102	163	151	168	179	182	175	188	160
0-5	82	92	74	65	81	77	60	67	75
6 to 20	137	109	105	103	89	80	101	83	97
20 and above	81	38	72	66	53	63	66	64	70
Total commodities	402	402	402	402	402	402	402	402	402
Weights (per cent)									
Negative	22.22	28.60	28.53	36.96	39.53	41.64	45.01	41.38	29.33
0-5	20.86	29.79	16.69	18.10	18.57	27.73	11.42	27.62	34.74
6 to 20	42.58	33.16	41.25	32.44	31.58	23.38	38.01	21.74	24.36
20 and above	14.34	8.44	13.52	12.50	10.33	7.25	5.57	9.25	11.57
Total weight	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

Note: The IIP has 399 products/product groups and treats electricity and mining as one product each. Mining sector has been divided into crude petroleum, coal, natural gas and others, as the first three products are covered in the core industries.

182 in Q4 of 2011-12 to 160 in October-November, 2012. The weight of the products with a negative growth has declined to 29.3 per cent in October-November, 2012 from an average of 40-45 per cent in Q2 of 2011-12. Number of products and their weights which have been witnessing a growth in excess of 20 per cent are showing a mild upward trend (Table 9.9).

9.21 The second set of data making for the optimism is the RBI's business expectation index, which recorded moderately positive growth in Q3 of 2012-13, after persistent negative growth for the previous six quarters. The business expectation index tracks IIP growth fairly closely and this suggests a possible bottoming out of IIP growth moderation (Figure 9.8). Globally also there has been a pick-up in industrial activity. Initiatives taken by the government, both with regard to confidence building and other measures to boost manufacturing should also facilitate industrial recovery (Box 9.2). Downward momentum of IIP, IIP manufacturing and credit growth to industry based on SAAR, however, indicate that the data taken together, should be seen as mixed, and it is a little early to call a bottom to the industrial sector slowdown.

Figure 9.8 : Business Expectation Index and IIP growth

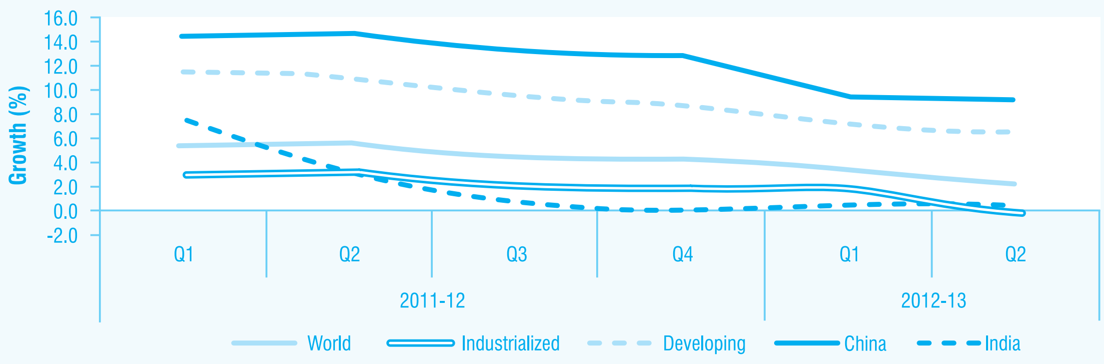


Box 9.1 : Comparative Picture of India and World Manufacturing Production

India is one of the top ten manufacturing countries though its share in total manufacturing value added (MVA) is only about 1.8 per cent. The impact of the post-crisis slowdown on industrial growth has been relatively mild on developing countries including India yet the downward trend in MVA has been significant. The intensity of the slide did vary across countries as shown in Figure in the box. The growth rate of world MVA had declined from 5.4 per cent in Q1 of 2011-12 to 2.2 per cent in Q2 of 2012-13. During the same period China's MVA growth rate declined from 14.3 per cent to 7.3 per cent but the deceleration rate has been sharper in the case of India as the rate of growth dipped from 7.3 per cent to 0.2 per cent. Analysis of the sub-group level MVAs shows sharp differences between India vis -a -vis other major manufacturing countries. The production of machinery and equipment, one of the key segments of the capital goods sector, has been growing at faster rate in the United States, Canada, China, Malaysia as compared to the deceleration in India's case. A similar pattern is observable in other capital goods segments and high technology sectors. The reason is India's competitive disadvantage owing to low-level technology, higher input costs and poor quality infrastructure. A long term trend analysis from 1995 to 2009 shows that India has lagged behind in increasing its share in MVA of sophisticated products. It has fared better in medium-low technology products in labour-intensive sectors such as textiles, wearing apparel and leather products. Even in these three sectors India's share was low as compared to China, which dominates all three sectors.

A two-digit industry level analysis of world manufacturing shows that in recent years the five fastest- growing sectors were - office accounting and computing; radio, TV and communication equipment; electrical machinery and apparatus, other transport; and basic metal. Other than basic metal all these sectors are medium and high technology activities. India's performance in recent years has been dismal in some of these fast moving sectors. In contrast, China accounted for more than 50 per cent of the developing economies total MVA in 15 out of the 22 industrial sectors -- India's share was significant only in a few of these sectors. The latest competitive industrial performance index (CIP) compiled by the United Nations Industrial Development Organization (UNIDO), ranks India 42nd out of 118 countries the same as in 2005. China is ranked 5th.

Comparative Manufacturing Value Added Growth



Source-UNIDO-World Manufacturing Production-Quarterly Reprots

Organized manufacturing

9.22 The Ministry of Statistics and Programme Implementation on 31st December, 2012 released the provisional results of the Annual Survey of Industries (ASI) for 2010-11. The ASI is the most comprehensive survey of organized manufacturing employing 10 or more workers. These industries recorded a growth of 19.5 per cent in gross value added (GVA) in 2010-11 indicating a sharp increase compared to a growth of 10.6 per cent in 2008-9 and 14.1 per cent in 2009-10. Another positive feature is an increase in number of persons engaged. The total number of persons engaged in these industries has shown continuous increase since 2001-2. Overall employment in these industries recorded a growth of 7.8 per cent in 2010-11. The total number of persons engaged in organized manufacturing industries reached 12.7 million in 2010-11 as compared to employment of 7.8 million in 2001-2. The employment growth in organized manufacturing is in sharp contrast to the decline in overall number of persons engaged in manufacturing as per the 2009-10 National Sample Survey Organization (NSSO) survey on employment. Industry has become conscious of its fuel efficiency. Fuel consumption as a percentage of total output has shown continuous decline to stand at 4.2 per cent in 2010-11, organized manufacturing has remained resource intensive. The share of GVA in their total value of output has gradually declined from a peak of 24.9 per cent in 1996-97 to 17.8 per cent in 2010-11, indicating an increase in resource intensity, particularly of raw materials and other non-fuel inputs. (Figure 9.9).

Box 9.2 : Government's key initiatives to Boost Manufacturing

Apart from the government's recent steps to uplift overall business sentiment and boost investment, several specific initiatives have been initiated to strengthen industry and in particular the manufacturing sector in the country. The Twelfth Five Year Plan document lays down broad strategies for spurring industrial growth and recommends sector specific measures covering micro, small, medium and large industries in the formal as well as informal sector. Some of major initiatives that can change the manufacturing landscape of the country are announcement of National Manufacturing Policy (NMP), implementation of the Delhi Mumbai Industrial Corridor (DMIC) Project (see Chapter 2) and policy reforms to promote foreign direct investment (FDI) and an e-Biz project.

National Manufacturing Policy (NMP)

The NMP was approved by the government in October, 2011. The major objectives of the policy are enhancing the share of manufacturing in gross domestic product (GDP) to 25 per cent and creating an additional 100 million additional jobs over a decade or so. The Policy also provides special focus to industries that are employment intensive, those producing capital goods, those having strategic significance, small and medium enterprises, and public sector enterprises besides industries where India enjoys a competitive advantage. The NMP provides for promotion of clusters and aggregation, especially through the creation of national investment and manufacturing zones (NIMZs). Out of twelve NIMZs so far announced, eight are along the DMIC. Besides, four other NIMZs have been given in-principle approval (i) Nagpur in Maharashtra, (ii) Tumkur in Karnataka, (iii) Chittoor district in Andhra Pradesh, and (iv) Medak district in Andhra Pradesh.

DMIC Project

Industrial development initiatives under DMIC project presently cover eight industrial cities that are proposed to be developed along the railway corridor. The Master Planning for the investment regions and industrial areas taken up initially to be developed as new cities in Gujarat, Madhya Pradesh, Haryana, Rajasthan and Maharashtra have been completed and master planning in Uttar Pradesh has started. The State governments have initiated the process of obtaining land for the new industrial regions/areas as well as for the Early Bird Projects. Environmental impact assessment (EIA) studies have been initiated for five industrial cities. Details of the overall DMIC project have been discussed in Chapter 2.

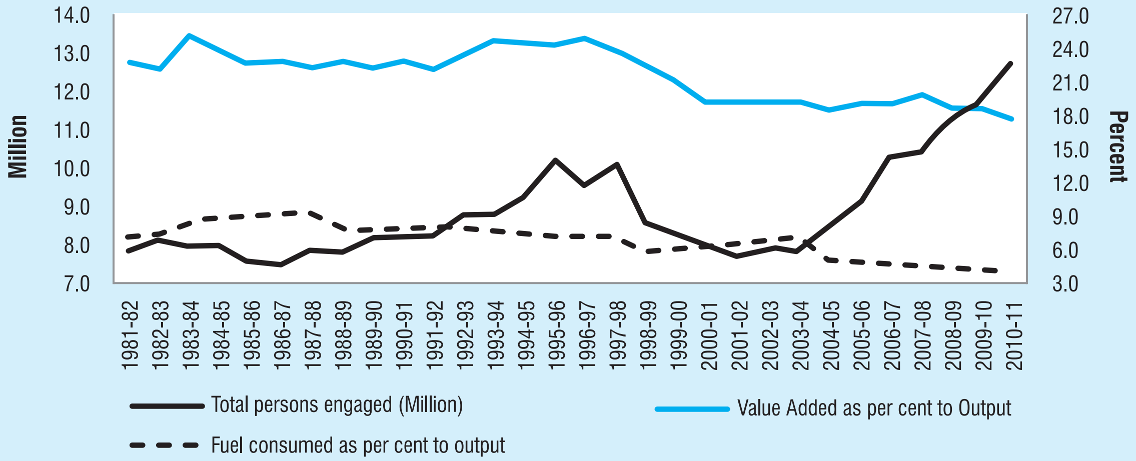
FDI Policy initiatives

As a part of policy reform process, the FDI policy is being progressively liberalized on an ongoing basis in order to allow FDI in more industries under the automatic route. Some recent changes in FDI policy, besides consolidation of the policy into a single document include FDI in multi-brand retail trading up to 51 per cent subject to specified conditions; increasing FDI limit to 100 per cent in single-brand retail trading; FDI up to 49 percent in civil aviation and power exchanges; FDI up to 49 percent in broadcasting sector under the automatic route and FDI above 49 percent and up to 74 percent under the Government route both for teleports and mobile TV.

Setting up of the e-Biz Project to promote ease of doing business

The government has announced the setting up of -'Invest India'-, a joint-venture company between the Department of Industrial Policy and Promotion and FICCI, as a not-for-profit, single window facilitator, for prospective overseas investors and to act as a structured mechanism to attract investment. In addition, the Government has initiated implementation of the e-Biz Project, a mission mode project under the National e-Governance Plan (NeGP) for promoting an online single window at the national level for business users. The objectives of setting up of the e-Biz portal are to provide a number of services to business users, covering the entire life cycle of their operation. The project aims at enhancing India's business competitiveness through a service oriented, event-driven G2B interaction.

Figure 9.9 : Characteristics of Organized Manufacturing



Higher resource intensity not only has implications for internal accruals but also for research and development (R&D).

Characteristics of Organized Manufacturing

9.23 A higher intensity of resource use has made the profitability of organized manufacturing considerably dependent on wages and interest rates. Total emoluments as a percentage of output have consistently declined from 40.6 per cent in 1980-81 to 22 per cent in 2010-11. The share of emoluments in total output has remained in the range of 19-22 per cent in the last seven years. There has also been a decline in the share of interest to output, from 28.4 per cent in 1991-92 to 9.0 per cent in 2006-07, increasing thereafter to 10.6 per cent in 2010-11. The increase in profitability of the organized manufacturing has depended on the reduction in these two ratios and improved from 18.5 per cent in 1991 to 53.8 per cent in 2007-08 before moderating to 47.8 per cent in 2010-11. Interest rates structure therefore becomes one of the important factors for internal accruals of the organized manufacturing sector. Unorganised manufacturing with relatively less access to institutional capital may in fact be even more vulnerable to interest rate increases (Figure 9.10).

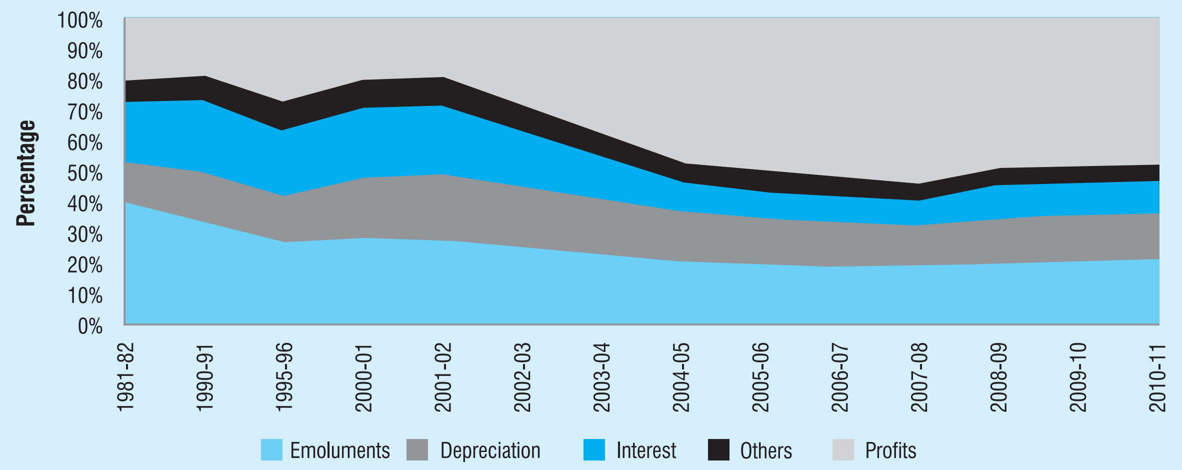
Micro, Small and Medium Enterprises (MSME) sector

9.24 The MSME sector covers both the registered and informal sectors. The classification of micro, small and medium enterprises at present is based on the criterion of investment in plant and machinery by each enterprise. Detailed information for the registered MSMEs on the various economic variables such as employment, investment, products, gross output, and exports is available based on the Fourth Census of MSME (2006-07). The size of the registered MSMEs was estimated to be about 15.84 lakh units with sub-sector wise composition in the proportion of 94.9 per cent micro enterprises, 4.89 per cent small and 0.17 per cent medium enterprises. The total registered MSME sector comprised of 67.1 per cent manufacturing enterprises and 32.9 per cent services enterprises. About 45 per cent of these registered enterprises were located in rural areas. More detailed information based on the Fourth Census on the unorganized sector units, constituting about 94 per cent of the entire MSME sector is awaited.

9.25 In the recent past the Prime Minister's Task Force on MSMEs and the Twelfth Plan Working Group on MSMEs have discussed issues related to the MSME sector. The Twelfth Five Year Plan policy framework is guided by the recommendations of these key committees. The Plan covers various aspects of the MSME sector and its key recommendations fall under six broad verticals, viz. 1) finance and credit (ii) technology (iii) infrastructure (iv) marketing and procurement (v) skill development and training, and (vi) institutional structure. The Plan has a separate set of recommendations for the khadi and village industries and the coir sector. In order to boost the MSME sector, several schemes are under operation including the following ones.

1. Procurement Policy: The government has notified a Public Procurement Policy for Goods

Figure 9.10 : Components of Gross Value Added of Organized Manufacturing



Produced and Services rendered by Micro & Small Enterprises (MSE) order, 2012 effective from 1st April, 2012. The policy mandates that all the central ministries / departments / central public sector undertakings (CPSUs) shall procure a minimum of 20 per cent of their annual value of goods / services required by them from MSEs. Further, policy has earmarked a sub-target of 4 per cent procurement out of this 20 per cent from MSEs owned by scheduled caste/ scheduled tribe (SC / ST) entrepreneurs.

2. MSE- Cluster Development Programme (MSE-CDP): The Ministry of MSME has adopted a cluster approach for holistic development of MSE in a cost effective manner. To build capacity of MSMEs for common supportive actions, soft interventions are undertaken in the existing clusters/new industrial areas/ estates or existing industrial areas/estates. To ensure transparency and speedy implementation of the MSE-CDP, office of the Development Commissioner, MSME has started an online application system from 1 April 2012. Hard interventions are taken up to create/upgrade infrastructure facilities and setting up of common facility centres in new/ existing industrial estates/clusters.

3. Credit Guarantee Scheme: The Government is implementing the Credit Guarantee Fund Scheme for MSEs with the objective of facilitating flow of credit to the MSEs, particularly to micro enterprises by providing guarantee cover for loans upto ₹ 100 lakh without collateral / third party guarantees. For making the scheme more attractive to both lenders as well as borrowers, several modifications have been undertaken which, inter alia, include: (a) enhancement in the loan limit to ₹100 lakh; (b) enhancement of guarantee cover from 75 per cent to 85 per cent for loans upto ₹ 5 lakh; (c) enhancement of guarantee cover from 75 per cent to 80 per cent for MSEs owned/operated by women and for loans in north eastern region (NER); (d) reduction in one-time guarantee fee from 1.5 per cent to 1 per cent and annual service charges from 0.75 per cent to 0.5 per cent for loans upto ₹ 5 lakh and (e) reduction in one-time guarantee fee for NER from 1.5 per cent to 0.75 per cent.

4. Credit Linked Capital Subsidy Scheme for Micro and Small Enterprises (CLCSS) for MSEs: The scheme aims at facilitating technology up-gradation of MSEs by providing 15 per cent capital subsidy (limited to maximum ₹ 15 lakh) for purchase of plant & machinery. Maximum limit of eligible loan for calculation of subsidy under the scheme is ₹ 100 lakh. Presently, 48 well established and improved technologies/sub sectors have been approved under the scheme. The CLCSS is implemented through 11 nodal banks/agencies including the Small Industries Development Bank of India (SIDBI), National Bank for Agriculture and Rural Development (NABARD) and Tamil Nadu Industrial Investment Corporation (TICC), Chennai (TIIC) and National Small Industries Development Corporation (NSIC) Ltd.

Central Public sector Enterprises

9.26 Central Public Sector Enterprises (CPSEs) are an important constituent industry. There were altogether 260 CPSEs under the administrative control of various ministries/departments as on 31 March 2012. Of these, 225 were in operation and 35 under construction. The share of industrial CPSEs in the total investment in CPSEs in terms of gross block, stood at 77.46 percent during the year. The latest complete results are available for the year 2011-12. CPSEs in the mining sector registered the highest increase in net profit (29.45 per cent) in 2011-12. CPSEs in manufacturing sector recorded a decline of 22.65 per cent in net profit in 2011-12 despite 27.73 per cent increase in their turnover. The electricity sector recorded growth of 16 per cent in turnover and 13.42 per cent in profit (Table 9.10).

9.27 The government set a target of raising ₹ 40,000 crore by way of disinvestment in various CPSEs during 2011-12 and raised ₹ 13,854 crore, which included disinvestment by way of 'offer for sale' (OFS) in Oil and Natural Gas Commission(ONGC) amounting to ₹ 12,749.50 crore. The disinvestment target in Budget 2012-13 has been set ₹ 30,000 crore.

Foreign Direct Investment (FDI)

9.28 The government has put in place an investor-friendly policy on FDI, under which equity participation of up to 100 per cent, is permitted through the automatic route, in many sectors/activities. FDI policy is reviewed on an ongoing basis, with a view to making it more investor friendly. For ease of reference, all press notes/circulars issued since 1991 have been consolidated into a single document which is available in the public domain on the website of Department of Industrial Policy and Promotion (www.dipp.nic.in). Significant changes have been made in the FDI policy regime in recent times, to

Table 9.10 : Performance of Industrial CPSEs, 2011-12

(₹ crore)

Sl. No.	Sector	2010-11	2011-12	Per cent change
I.	Manufacturing (28.31 per cent) @			
	1.1) Turnover	947,411.7	1,210,087.6	27.7
	1.2) Net Profit	30,668.2	23,720.5	(22.7)
II.	Mining (23.53 per cent) @			
	2.1) Turnover	15,968.3	188,011.1	17.7
	2.2) Net Profit	47,594.8	61,610.6	29.5
III.	Electricity (25.62 per cent) @			
	3.1) Turnover	84,032.4	97,623.0	16.2
	3.2) Net Profit	18,727.5	21,239.9	13.4

Source **: Department of Public Enterprises**
Note **: @ shows the percentage share, in total investment in terms of gross block;**

ensure that India remains increasingly attractive and investor-friendly. Some of the changes made to the policy during 2012 are as follows:

(i) Significant changes effective from 10.4.2012 include: (i) mandating FIPB approval only for investment made under the FDI scheme in commodity exchanges (ii) clarification that the activity of 'leasing and finance', covers only 'financial leases' and not 'operating leases' ((iii) clarification that raising of the aggregate limit of 24 per cent, to the sectoral cap/statutory ceiling, would be subject to prior intimation to RBI.

(ii) Reviewing the policy relating to calculation of downstream investments by a banking company incorporated in India, which is owned and/or controlled by non-residents/ a non-resident entity/non-resident entities, the government has exempted downstream investments made by such companies, under corporate debt restructuring (CDR), or other loan restructuring mechanism, or in trading books, or for acquisition of shares due to defaults in loans, from being counted as indirect foreign investment.

(iii) The government amended the policy on single-brand retail trading, amending the conditions relating to : (i) the foreign investor being the owner of the brand: it has been specified that, henceforth, only one non-resident entity, whether owner of the brand or otherwise, shall be permitted to undertake single brand product retail trading, for the specific brand, through a legally tenable agreement, with the brand owner and (ii) mandatory sourcing of at least 30 per cent of the value of products to be done from Indian 'small industries/ village and cottage industries, artisans and craftsmen', applicable in respect of proposals involving FDI beyond 51 per cent: It has been specified that, sourcing of 30 per cent of the value of goods purchased, will be done from India, preferably from MSME, village and cottage industries, artisans and craftsmen, in all sectors.

(iv) The government has decided to permit FDI up to 51 per cent, with FIPB approval, in multi-brand retail trading, subject to specified conditions.

(v) In the civil aviation sector, the government has decided to permit foreign airlines also to invest, in the capital of Indian companies, operating scheduled and nonscheduled air transport services, up to the limit of 49 per cent of their paid-up capital.

(vi) The government has decided to permit foreign investment up to 49 per cent, in power exchanges, registered under the Central Electricity Regulatory Commission (Power Market) Regulations, 2010. The foreign investment would be in compliance with Securities and Exchange Board of India (SEBI) Regulations; other applicable laws/ regulations; security and other conditionalities.

(viii) The government has decided to permit NBFCs (i) having foreign investment above 75 per cent and below 100 per cent and (ii) with a minimum capitalisation of US$ 50 million, to set up step down subsidiaries for specific NBFC activities, without any restriction on the number of operating subsidiaries and without bringing in additional capital.

FDI inflows

9.29 During April-November 2012-13, FDI inflow (including equity inflows, reinvested earnings and other capital) was US$ 24.65 billion (Table 9.11). FDI equity inflows were US$ 15.85 billion showing a decline of 43 percent as compared to the corresponding period of the previous year. Cumulative FDI inflow from April 2000 to November 2012 stood at US$ 277.86 billion.

9.30 During April-October 2012, services, hotels and tourism, metallurgical industries, automobile industry, construction, drugs and pharmaceuticals, industrial machinery were the sectors that attracted maximum FDI inflows. Sector-wise FDI inflows into industry and infrastructure is given in Table 9.12.

9.31 In FDI equity investments, Mauritius tops the list of first ten investing countries, followed by Singapore, the UK, Japan, the US, the Netherlands, Cyprus, Germany, France, and the UAE. The United Nations Conference on Trade and Development (UNCTAD) World Investment Report, 2012 in its analysis of the global trends and sustained growth of FDI inflows continues to report India as the third most attractive location for 2012-14.

Industry- Environment linkages

9.32 The development of a diversified industrial structure in India, based on a combination of large and small-scale industries and growing urban and rural population have produced pressures on the environment as reflected in the growing incidence of air water, and land degradation. Industrial pollution is concentrated in industries like petroleum refineries, textiles, pulp and paper, industrial chemicals, iron and steel, and non-metallic mineral products. Small scale industries, especially foundries, chemical manufacturing, and brick making, are also significant polluters. In the power sector, thermal power, which constitutes the bulk of installed capacity for electricity generation, is an important source of air pollution. Choice of policies and investment has, therefore to be such which encourages more efficient use of resources, substitution away from scarce resources and adoption of technologies and practices that minimize environment impact.

Labour relations

9.33 Due to constant endeavour of the industrial relations machineries of both the centre and states, the industrial relations climate has generally remained peaceful and cordial. While the number of incidences of strikes and lockouts reported during 2007 were 389, this figure was 189 in 2011 (provisional) and stood at 194 (provisional) up to October 2012. The number of strikes has exhibited a declining trend over the period. Similarly the figures for mandays lost were 27.17 million in 2007 and 2.03 million (provisional) up to October, 2012 (Table 9.13).

Table 9.11 : Foreign inflows

(US$ billion)

Financial year	As per international practices	Percentage growth	FDI equity inflow	Percentage growth
2003-4	4.32	(-) 14	2.19	(-) 19
2004-5	6.05	(+) 40	3.22	(+) 47
2005-6	8.96	(+) 48	5.54	(+) 72
2006-7	22.83	(+) 146	12.49	(+) 125
2007-8	34.84	(+) 53	24.58	(+) 97
2008-9	41.87	(+)20	31.40	(+)28
2009-10 (P)	37.75	(-)10	25.83	(-)18
2010-11 (P)	34.85	(-)08	21.38	(-)17
2011-12(P)	46.55	(+)34	35.12	(+)64
2012-13 (P) (Apr-Nov)	24.65		15.85	

Source : DIPP; P : provisional

Table 9.12 : Sector-wise FDI flows into Industry and Infrastructure

(US $ million)

	1991-2000	2000-10	2010-11	2011-12	April-Oct 2011-12	April-Oct 2012-13
Food products	707.4	1237.3	246.9	239.7	122.3	368.4
Fermentation industries	24	770.1	57.7	69.7	53.1	43.7
Textiles	241.8	828.6	129.8	164.7	74.3	91.3
Wood products	0.0	18.8	1.6	29.6	8.1	28.7
Paper	250.5	716.9	44.0	454.7	29.6	3.1
Leather	33.5	42.6	9.3	8.3	5.6	34.7
Chemicals	1480.9	4446.1	2690.2	7534.1	7007.6	789.4
Rubber, plastic & petroleum Products (including oil exploration)	90.3	2953.6	573.6	2217.4	2097.8	476.3
Non Metallic Minerals	261.1	2263.6	657.3	310.0	203.4	189.7
Metals and metal products	186.2	3143.2	1098.1	1786.1	1436.9	1215.1
Machinery and equipment	2043.1	15670.4	1836.3	4147.5	2894.2	1171.2
Transport equipment	0	4603.2	1299.4	923.0	563.7	743.2
Others manufacturing	1761.6	5705.6	1495.6	850.5	625.7	206.3
Mining (including mining services)	0	730.9	79.5	142.7	135.0	15.9
Power*	1038.9	5220.9	1486.2	2104.6	1440.8	771.0
Telecommunication	1089.4	8915.9	1664.5	1997.2	1964.1	48.4
Total	**9208.7**	**57267.7**	**13369.9**	**22979.7**	**18662.0**	**6196.4**

Source **: Office of the Economic Adviser, DIPP**

Note **: Total excludes inflows to services sector and other NRI schemes*includes non-conventional energy**

As regards spatial/industry-wise dispersions of incidences of strikes and lockouts, there exist widespread variations among different states/UTs. Wage and allowance, bonus, personnel, indiscipline and violence and financial stringency have been stated to be the major reasons for these strikes and lockouts.

Table 9.13 : Strikes and Lockouts (man-days lost)

Year	Strikes	Lockouts	Total Man-days lost
2007	210	179	2,71,66,752
2008	240	181	1,74,33,721
2009(P)	205	187	1,33,64,757
2010(P)	261	168	1,79,32,345
2011(P)	106	29	66,71,179
2012 (Jan.-October) (p)	173	21	20,29.439

Source**: Labour Bureau, Ministry of Labour & Employment**

Note **: P = provisional**

Challenges and Outlook

9.34 Industrial production remained sluggish in 2011-12 and the moderation continued during the current financial year. Industrial growth still remains vulnerable to several domestic factors and external shocks. Infrastructure and energy constraints, decline in demand for India's exports, and fragile recovery in investment are the risk factors. The latest lead indicators suggest mixed signals about whether a growth upturn is underway. The policy initiatives taken by the government in the recent months made the business sentiment buoyant and have generated some optimism. The latest seasonally adjusted annualised growth of industrial output indicate that the growth of the sector could remain moderately positive at around 3 per cent for the current year.

9.35 In the short run, revival of investment in industry and key infrastructure sectors is the key challenge. Industrial sector has been hit hard by the deceleration in investment for the second successive year. As per the latest first revised estimates of GDP, gross capital formation in the manufacturing sector in 2011-12 (at 2004-05 prices) had declined by 18.8 per cent as compared to 2010-11. Lower foreign direct investment inflows in key industry and infrastructure sectors during April-October 2012 at $ 6.19 billion as against the inflow of $18.66 billion during the same period of the previous year have further constrained investment in these sectors. Investment intentions indicated in the industrial entrepreneur memorandum (IEMs) filed, which are lead indicators of likely investment flows to industry, also declined in 2011 and 2012. Notwithstanding a marginal pickup in the gross bank credit deployment into industrial sector in recent months, year on year increase in gross bank credit deployment as on end December 2012 has been 13.8 per cent as compared to 19.8 per cent a year ago.

9.36 Apart from weak investment climate, industrial sector performance remained subdued due to infrastructure bottlenecks. Industrial growth rate moderated due to sharp decline in output of natural gas; subdued performance of the coal sector and its resultant impact on thermal power generation; and slow pace of project implementation in rail, road, and ports sectors. In the medium term it is therefore crucial to accelerate the output of core sectors and speed up implementation of crucial big ticket projects.

9.37 As discussed in detail in the earlier sections, the key underpinning cause of the recent industrial slowdown has been the manufacturing sector. India's manufacturing value-added (MVA) as share of GDP, has remained sticky at around 15 per cent. As per the latest competitive industrial performance index (CIP) compiled by UNIDO for the year 2009, India was placed 42nd out of the 118 countries. India's low CIP ranking hints at the underlying weaknesses and vulnerabilities despite being one of the top ten manufacturing nations. India's manufacturing sector therefore needs to acquire dynamism and technological sophistication to become one of the leading manufacturers. From the long term point of view, low level of R&D and inadequate availability of skilled manpower would adversely affect India's competitiveness and the manufacturing growth.

9.38 India has not improved significantly in terms of the ease of doing business and ranks very low in comparison to other industrial peers. The MSME sector in particular faces multiple approval and operational restrictions. The process of setting up and exiting business is time consuming and complicated requiring expensive third party assistance. Since states have the major role in administering MSME sector, the prevailing ecosystem therefore varies from state to state. Exit rules as per the Companies Act, 1956 are complex and costly and do not permit reaping the benefits from reallocation of resources.

9.39 Sourcing of finance at competitive cost is another major constraint for both the organized and the unorganized MSME enterprises. Financing other than internal accruals is costly and prohibitive. The Prime Minister's Task Force on MSMEs had recommended a 20 per cent year-on-year growth in credit to micro and small enterprises to ensure enhanced credit flow. It had also recommended allocation of 60 per cent of the micro and small enterprises advances to the micro enterprises to be achieved in a phased manner. The resource flow, however, needs to improve. Research and technology upgradation activities also need to be scaled up. Presently only a small number of incubators operates in the country which is very low relative to other countries. New incubators will need to be set up on a Public-Private Partnership basis. To attract more investment and talent, incubators need to be allowed to distribute profits back to investors. With some of these changes indutrial growth could become steadier.