

December 2007

Impact of Growth and Development of Industrial Sector on the Economic Development of India

Shailender Singh

Academy of Management Studies, Dehradun, India

Gajendra Singh

Department of Business Management, HNB Garhwal University, Srinagar (Garhwal), Uttarakhand, India

Follow this and additional works at: <https://managementdynamics.researchcommons.org/journal>



Part of the [Business Commons](#)

Recommended Citation

Singh, Shailender and Singh, Gajendra (2007) "Impact of Growth and Development of Industrial Sector on the Economic Development of India," *Management Dynamics*: Vol. 7: No. 2, Article 6.

DOI: <https://doi.org/10.57198/2583-4932.1194>

Available at: <https://managementdynamics.researchcommons.org/journal/vol7/iss2/6>

This Research Article is brought to you for free and open access by Management Dynamics. It has been accepted for inclusion in Management Dynamics by an authorized editor of Management Dynamics.

IMPACT OF GROWTH AND DEVELOPMENT OF INDUSTRIAL SECTOR ON THE ECONOMIC DEVELOPMENT OF INDIA

Shailender Singh*
Dr. Gajendra Singh**

Abstract

The industrial sector play's a significant role in boosting the overall economic growth of an economy. The small and medium scale industries set-up by the entrepreneurs in different states and Union Territories of India have contributed to the increased shares in the overall production, fixed investment, exports, employment and capacity utilization of SME's Units etc. The importance of industrial sector in providing large-scale employment is of paramount importance. The policy framework right from the First Plan has highlighted the need for the development of industrial sector keeping in view its strategic importance in the overall economic development of India. In this paper, the overall growth and performance of industrial sector has been examined in depth on the basis of the different parameters such as annual growth rates of industrial production, net capital stock in industry, industrial investment, highlights of some industries (automobiles, textiles, steel, cement, tourism, electronics & computer technology), so as to determine its impact on the overall economic development of India.

INTRODUCTION

Industrialization plays a vital and crucial role in the economic development of a country. It is simply because no economic development is possible unless the economy has a wide and strong industrial base. Under-developed economy like India is not an exception to it as Industrialization plays a major role in their

* Lecturer, Academy of Management Studies, Dehradun

** Reader, Department of Business Management, HNB Garhwal University, Srinagar (Garhwal), Uttarakhand

economic development. Industrialization in under-developed economy acts as an instrument both for creating capacity to absorb excess labour power and of catering to the diversification of the market required at higher stages of economic development. The economic development is synonymous with Industrialization especially for the development of small and medium industries. Rapid Industrialization is favoured because it is only through Industrialization that the national income can be increased. Industrial goods have better export potential and hence contribute to self- sufficiency and self-reliance. Besides, industrial development provides a base on which the superstructure of economic development can be built- up. That is why “Industrialize or Perish” has been a popular slogan for the under-developed economy like India.

OBJECTIVES OF THE STUDY:

The broad objectives of the study are:

1. To study the growth and performance of industrial sector in India in the changing economic environment.
2. To study the annual growth rates of industrial production in major sector of industry.
3. To study the role of industrial sector on the economic development of India.
4. To analyze the growth pattern in Indian industry with special references to automobiles, textiles, steel, cement, tourism and electronic and computer industry.

RESEARCH METHODOLOGY

The present study is based on secondary data. Secondary data were collected through unstructured interviews with the senior level functional managers of the studied organizations. Besides, data in the form of company reports, printed appraisal formats, instruction manual & other records were obtained from the organizations under study.

PATTERN OF INDUSTRIAL GROWTH

Table: 1 indicates Annual growth rates of industrial production in major sectors of industry. The rate of growth of industrial sector as measured in terms of Index of Industrial Production (IIP) during April-December 2005-06 was 7.8

per cent compared to a growth of 8.6 per cent in the corresponding period of 2004-05. Impressive performance of the manufacturing sector, which grew at 8.9 per cent during this period, largely contributed to this performance. A moderate deceleration of 0.8 percentage points in the growth rates of IIP in the current year was due to a decline in the growth rates for mining and electricity sectors. Decline in the rate of growth in the mining sector from an average of 4.4 per cent in 2004-05 to 0.4 per cent in the current year so far was partly due to a fall in the levels of crude oil production as a result of a fire accident in July 2005 at Mumbai High North Platform. The electricity sector also witnessed a moderate slow down in the current year, which could partly be attributed to a shortage of gas and coal. Inadequate investment in these two sectors affected the capacity additions and contributed to this shortage.

Period	Mining & Quarrying	Manufacturing	Electricity	Overall
Weights	10.47	79.36	10.17	100.00
1995-96	9.7	14.1	8.1	13.0
1996-97	-1.9	7.3	4.0	6.1
1997-98	6.9	6.7	6.6	6.7
1998-99	-0.8	4.4	6.5	4.1
1999-00	1.0	7.1	7.3	6.7
2000-01	2.8	5.3	4.0	5.0
2001-02	1.2	2.9	3.1	2.7
2002-03	5.8	6.0	3.2	5.7
2003-04	5.2	7.4	5.1	7.0
2004-05	4.4	9.2	5.2	8.4
2004-05 #	5.1	9.2	6.4	8.6
2005-06 #	0.4	8.9	4.8	7.8

(April-December)

Table 1: Annual growth rates of industrial production in major sectors of industry (Base: 1993-94 = 100)

Source: Economic Survey 2005-2006.

Table: 2 indicates Growth rates of industrial production by use-based classification. With respect to use-based classification of industries, the growth rate in the capital goods sector in April-December 2005 at 15.7 per cent indicated a substantial improvement over the growth of 13.8 per cent during the same period last year. Consumer goods, both the durables and non-durables segments, also recorded improved performance with double-digit growth in the last two years. The turn-around in consumer durables since 2003-04 continued. In April-December, growth rate of basic goods remained at 6.0 per cent, which is the same as that of the corresponding period in 2004-05. Intermediate goods, however, witnessed a deceleration in growth.

Sectors	(Weight)	1999-00	2000-01	2001-02	2002-03	2003-2004	2004-05	April-December 2004-05 2005-06
Basic Goods	35.5	5.5	3.7	2.6	4.9	5.4	5.5	6.0
Capital Goods	9.3	6.9	1.8	3.4	10.5	13.6	13.9	6.0
Intermediate Goods	26.5	8.8	4.7	1.5	3.9	6.4	6.1	13.8
Consumer Goods of which (Consumer Durables) (Consumer Non-Durables)	28.7	5.7	8.0	6.0	7.1	7.1	11.7	15.7
Consumer Goods of which (Consumer Durables) (Consumer Non-Durables)	5.4	14.1	14.5	11.5	-6.3	11.6	14.3	6.9
Consumer Goods of which (Consumer Durables) (Consumer Non-Durables)	23.3	3.2	5.8	4.1	12.0	5.8	10.8	2.2
Consumer Goods of which (Consumer Durables) (Consumer Non-Durables)	100	6.7	5.0	2.7	5.7	7.0	8.4	11.4
Consumer Goods of which (Consumer Durables) (Consumer Non-Durables)								12.2
Consumer Goods of which (Consumer Durables) (Consumer Non-Durables)								15.3
Consumer Goods of which (Consumer Durables) (Consumer Non-Durables)								13.6
Consumer Goods of which (Consumer Durables) (Consumer Non-Durables)								10.0
Consumer Goods of which (Consumer Durables) (Consumer Non-Durables)								11.7
Consumer Goods of which (Consumer Durables) (Consumer Non-Durables)								8.6
IIP (Index of Industrial Production)								7.8

Table 2: Growth rates of industrial production by use-based classification Sectors

Source: Economic Survey 2005-2006

Table: 3 indicates Growth rates of industrial production by broad groups of manufacturing. Within manufacturing, performance varied across the various segments. At a two-digit level of desegregation of the manufacturing sector, as

Sectors	Weigh	2003	2004-04	Apr 05	May	Jun	July	Aug	Sep	Oct	Nov	Dec.	2004-05 Apr-Dec.	2005-06 Apr-Dec.
1. Food Products	9.1	-0.5	-0.4	6.6	8.2	3.1	25.5	-7.4	-	-4.1	4.7	6.9	-0.9	-2.2
2. Beverages, Tobacco & related Products	2.4	8.5	10.8	7.6	13.2	29.7	25.1	11.8	19.6	23.2	12.6	9.5	9.0	16.4
3. Cotton Textiles	5.5	-3.1	7.6	8.0	10.3	11.8	10.1	14.0	18.2	12.7	10.3	2.1	8.2	10.2
4. Wool, Silk & manmade fibre textiles	2.3	6.8	3.5	10.9	5.9	16.6	-3.6	-3.6	13.1	-5.6	2.5	7.1	4.2	-0.1
5. Manufact. of Jute & other veg. fibre Tex. (exc. cotton)	0.6	-4.2	3.7	-4.0	3.1	4.0	10.7	6.5	5.5	3.2	4.2	3.2	-1.4	2.7
6. Textile Products (incl. wearing Apparel)	2.5	3.2	19.2	21.2	29.7	30.6	12.7	25.8	0.4	20.0	8.5	5.7	14.8	18.6
7. Wood & wood products, Furniture & Fixtures	2.7	6.8	-8.4	-6.0	3.4	4.5	10.9	2.1	19.2	-5.0	-4.6	-5.7	-8.5	-3.8
8. Paper & paper prods. & Print., Pub. & Allied Inds.	2.7	15.6	10.5	17.9	7.3	6.6	1.3	5.9	-	8.2	-4.0	25.8	6.8	0.5
9. Leather and Leather & Fur products	1.1	-3.9	6.7	13.5	9.5	-0.1	2.8	-1.5	0.8	-0.6	17.4	16.5	4.1	-1.6
10. Basic Chemicals & Chem. Prods (exc. prod. of Pet.)	14.0	8.7	14.5	11.8	14.8	19.9	9.6	8.7	0.1	10.2	3.4	-2.4	16.1	9.8
11. Rubber, Plastic, Petro. & Coal products	5.7	4.5	2.4	2.1	2.9	6.4	7.7	0.6	12.5	0.3	1.5	11.9	2.0	3.8
12. Non-Metallic Mineral Products	4.4	3.7	1.5	2.5	12.9	7.6	7.7	13.3	0.6	8.3	8.3	16.2	1.4	9.4
13. Basic Metals & Alloys Inds. Metal Products & parts, except Mach. & Equip.	7.5	9.2	5.4	18.0	14.3	15.3	15.6	20.6	7.7	16.0	13.4	11.4	3.9	15.0
14. Machinery & Equipment other than Trans. equip.	2.8	3.7	5.7	1.3	11.4	-1.3	17.8	-3.9	11.1	0.5	4.0	-5.1	6.8	-2.5
15. Transport equipment & Parts	9.6	15.8	19.8	11.8	10.8	12.0	7.6	7.3	-8.2	11.2	10.1	11.3	22.3	10.5
16. Other mfg. Industries	4.0	17.0	4.1	12.5	14.7	11.9	5.1	11.6	12.6	15.9	11.7	12.1	3.4	12.5
	2.6	7.7	18.5	9.6	9.3	14.1	30.2	24.7	16.8	39.0	18.6	28.7	19.5	23.8
									34.5					

Table 3: Growth rates of industrial production by broad groups of manufacturing (Base: 1993-94=100)

Source: Economic Survey 2005-2006

many as seven sectors, with a combined weight of 34.1 per cent in IIP, grew at over 10 per cent, on an average, during the period April–December 2005. During April–December 2004, there were only four such sectors. But, as against only three sectors (food products, jute textiles and wood & wood products) accounting for a weight of 12.4 per cent in IIP in April–December 2004, five sectors (food products, wool, silk & man-made fibres, wood & wood products, leather and leather & fur products and metal products) with a weight of 17.9 per cent in IIP had a negative growth in April–December 2005. However, in case of food products and wood and wood products, there are some signs of growth revival in the most recent months. Significant improvement in performance was observed in beverages & tobacco, cotton textiles, textile products, basic metal and alloy industries, non-metallic mineral products, basic metals & alloys, transport equipments and other manufacturing industries. The sectors where there has been a perceptible slow-down were machinery and equipment, other than transport equipment); basic chemical and chemical products (except products of petroleum and coal), paper and paper products, metal products (including machinery and equipment) and wool, silk and man-made fibre textiles. Manufacturing growth was reasonably broad-based and high growth sectors were either technology-intensive or with a large export potential.

Table: 4 indicates Net capital stock in industry and the share of public sector. Capacity addition and improved productivity are the two sources of industrial growth. From 1993-94 to 2003-04, net capital stock in industries (comprising

	1994	2000	2001	2002	2003	2004	CAGR
	(Rs. Crore)						(%)
Mining	75,199	84,061	81,433	80,662	79,351	82,604	0.94
Manufacturing	504,658	956,510	1,001,381	1,031,305	1,070,999	1,123,391	8.33
Electricity, Gas & Water Supply	215,585	277,539	286,758	297,942	303,762	310,832	3.73
Share of the Public Sector (%)							
Mining	94.3	93.57	93.13	92.38	92.31	92.77	-0.16
Manufacturing	24.1	14.65	13.73	13.01	12.67	11.72	-6.95
Electricity, Gas & Water Supply	92.8	88.49	87.65	86.28	85.81	85.58	-0.81

Table 4: Net capital stock in industry and the share of public sector

Source Economic: Survey 2005-2006

mining, manufacturing and electricity sectors), which can proxy capacity addition, increased at an average rate of 6.66 per cent per annum. The dominance of the public sector in mining and electricity continued to persist even after industrial liberalization and opening of these sectors to private sector participation. Lower addition to capital stock deprived these sectors of the buoyancy associated with capacity expansion.

INDUSTRIAL INVESTMENT

Table: 5 indicates Industrial investment. Buoyant business expectations successfully lifted the investment tempo in the industrial sector. Filing of investment intentions as reflected in the Industrial Entrepreneur Memorandum (IEMs) for the sectors, which had ceased to have a licensing requirement, picked up again from 2003 after near stagnation in the preceding seven years. During last three years, from January 2003 to December 2005, more than 15,000 IEMs were filed with proposed intention of investment of Rs.739,637 crore and additional employment generation of 2.96 million persons. During this period, 351 industrial

Year	Industrial Entrepreneurs' Memorandum Letters of Intent (LOIs)/Direct Industrial Licences (IEMs) (DILs)					
	Number	Proposed Investment Employment (in Rs. Cr.) (OOO's)		Number Proposed Proposed Investment Employment (in Rs. Cr.) (OOO's)		
1991	3,084	76,310	769 923	195 620	2,071	34 97
1992	4,860	115,872			13,994	
1993	4,456	63,976	703	528	12,845	100
1994	4,664	88,771	829	546	17,937	130
1995	6,502	125,509	1,114	355	14,265	91
1996	4,825	73,278	696	522	29,932	181
1997	3,873	52,379	522	321	9,528	96
1998	2,889	57,389	521	145	3,274	27
1999	2,948	128,892	477	132	827	17
2000	3,058	72,332	411	203	1,042	31
2001	2,981	91,234	809	117	1,318	14
2002	3,172	91,291	380	89	649	8
2003	3,875	118,612	833	116	1,395	14
2004	5,118	267,069	856	100	5,265	21
2005	6,203	353,956	1271	135	2990	23

Table 5: Industrial investment intentions in terms of IEMs, LOIs and DILs

Source: Department of Industrial Policy & Promotion (DIPP), M/o Commerce & Industry.

licenses/letters of intent were issued with proposed investment of Rs.9650 crore. In the post liberalization period (since August 1991) so far, over 66,600 IEMs/ LOIs have been filed with investment intentions amounting to Rs.18, 94,202 core and additional employment potential of 12.0 million.

HIGHLIGHTS OF SOME INDUSTRIES

Automobiles

Table: 6 & Table: 7 indicate the production and export in automobile industry.

(Numbers in 000)							
Category	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06*
Passenger cars	577	513	564	609	842	961	494
Multi-utility	124	128	106	112	146	249	128
Commercial	174	157	163	204	275	350	178
Two wheelers	3,778	3,759	4,271	5,076	5,625	6,527	3,568
Three wheelers	206	203	213	277	341	374	201
Total	4,859	4,759	5,316	6,280	7,229	8,461	4,570
Per cent Growth	15.00	(-)2.00	11.70	18.60	15.12	16.80	15.86

* Figures are for April-September 2005-06

Table 6: Automobile Production

Source: Ministry of Heavy Industry and Public Enterprises (Department of Heavy Industry)

The automobile industry maintained a steady annual growth rate of over 15 per cent in the last four years. With the gradual liberalization of the automobile sector since 1991, the number of manufacturing facilities in India has grown progressively to 15 manufacturers of passenger cars and multiutility vehicles, 9 manufacturers of commercial vehicles, 14 manufacturers of two/three wheelers and 14 manufacturers of tractors. The industry had an estimated investment of nearly Rs.50,000 crore in 2002-03, which is expected to go up to Rs.80,000 crore by the year 2007. The turnover of the automobile industry exceeded Rs. 92,500 crore in 2003- 04, and including the turnover of the auto component sector, it may have well exceeded Rs.1,44,000 crore. The industry also offered substantial scope for gainful employment – the direct employment creation was estimated to be to the tune of 4.5 lakhs, and indirect employment at about 1 core. Indian automotive industry is finding increasing recognition worldwide. While a beginning

Category	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05 2005-06*	
Passenger cars	23	23	50	71	126	161	87
Multi-utility vehicles	5	4	3	1	3	6	3
Commercial vehicles	10	14	12	12	17	30	18
Two wheelers	83	111	104	180	265	367	260
Three wheelers	18	16	15	43	68	67	39
Total	140	168	185	307	479	620	407
Per cent growth	(-)12.18	20.24	9.74	65.35	55.98	31.25	35.87

* Figures are for April-September 2005-06

Table 7: Automobile Export

Source: Ministry of Heavy Industry and Public Enterprises (Department of Heavy Industry)

has been made in export of vehicles, the potential in this area is far from fully tapped. During the last two years, export from this sector has grown significantly owing mainly to the export of cars and two/three wheelers. Exports of automobiles as a proportion of total production have increased from 2.9 per cent in 1999-2000 to 8.9 per cent in 2005-06. For passenger cars and three wheelers, exports in 2005-06 accounted for 18-19 per cent of total production.

Textiles

Table: 8 indicates Export of textiles. Budgetary concessions, rationalization of duty structure and assistance under the Technology Upgradation Fund Scheme (TUFS) started paying dividends in the textile sector. A moderate turnaround in the performance of this sector has now become visible in increased production. During 2004-05, production of fabrics touched a peak of 45,378 million square meters. In the year 2005-06 up to November, production of fabrics registered a further growth of 9 per cent over the corresponding period of the previous year. In exports, after near stagnation in 2004-05, better prospects seem to be emerging in the current year. During April- November 2005 textile exports were at US\$ 9,309.81 million, up 8.21 per cent from US\$8,603.33 million during the corresponding period of the previous year.

(in US\$ million)						
Item	2002-03	2003-04	2004-05	2004-05 (April- Nov.)	2005-06 (April- Nov.)	Percent Variation
Ready made garment	5,689.91	6,231.47	6,026.39	3,519.00	4,185.18	18.93
Cotton Textiles	3,361.44	3,599.95	3,283.61	2,222.94	2,311.20	3.97
Wool & Woollen Textiles	50.92	58.28	66.44	295.13	289.88	-1.78
Manmade Textiles	1,417.48	1,821.24	1,944.75	1,308.80	1,140.91	-12.83
Silk	314.10	379.82	405.99	370.65	397.80	7.32
Handicrafts	1,317.92	1,085.36	939.81	647.95	723.45	11.65
Coir & Coir manufacture	73.36	77.77	101.57	65.16	78.40	20.32
Jute goods	187.57	242.43	270.09	173.70	182.99	5.35
Total	12,412.71	13,496.31	13,038.64	8,603.33	9,309.81	8.21

Table 8: Export of textiles

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

Steel

Table: 9 indicates the Production, consumption, export and import of finished carbon steel and pig iron indicates the buoyancy of the steel sector continued for the third year in a row. During April- October 2005, production of finished (carbon) steel increased by 7.4 per cent over the corresponding period of the previous year to reach 24.25 MT. Additional capacities have been commissioned in this sector. The apparent consumption of finished (carbon) steel was 21.25 MT, which was 8.8 per cent higher than consumption in the corresponding period of the previous year. Exports of finished (carbon) steel during this period at 2.30 MT, however, was down 5.8 per cent from the same period of the previous year. Steel prices started declining from May 2005 and prices in October were considerably lower than the May 2005 level. The price of hot rolled coil fell 25.4 per cent from Rs.35,875 in May 2005 to Rs.26,750 in October 2005. Steel is a critical input to industry and infrastructure. In continuation of the policy thrust to ensure availability of steel and stabilizing its price through reduction in customs duty and abolition of special additional duty, Government reduced the customs duty on non-alloy steel items to 5 per cent and on alloy/stainless steel to 10 per cent during the current year.

Item	2002-03	2003-04	2004-05	2004-05 (April-October)	2005-06* (April-October)
PRODUCTION					
Finished carbon steel					
Main producers	14.38 (10.19)	15.19 (5.6)	15.61 (2.8)	8.78	9.06 (3.2)
Secondary producers	19.28 (5.6)	21.77 (12.9)	24.44 (12.28)	13.80	15.2 (10.1)
Total	33.67 (9.9)	36.96 (9.7)	40.06 (8.38)	22.58	24.26 (7.4)
Pig iron					
Main producers	1.11 (8.5)	(-12.7) 2.80	(-35.3) 2.60	0.25 1.41	0.56 1.56
Secondary producers	4.17 (36.2)	(-32.9) 3.76	(-6.7) 3.23	1.66	(10.6) 2.12
Total	5.28 (29.4)	(-28.7)	(14.24)		(27.80)
EXPORTS					
Finished carbon steel	4.51 (66.6)	4.84 (7.3)	4.39 (-9.4)	2.44	2.30 (-5.8)
Pig iron	0.63 (101.6)	0.52 (-17.6)	0.40 (-24.1)	0.12	0.11 (-11.3)
IMPORTS					
Finished carbon steel	1.51 (18.8)	1.54 (2.0)	2.2 (36.94)	1.11	1.76 (57.0)
Pig iron	0.001	0.002 (100.0)	0.008 (300.0)	Nil	Nil
APPARENT CONSUMPTION					
Finished carbon steel	28.89 (5.3)	31.17 (7.9)	34.39 (10.3)	19.53	21.25 (8.8)
Pig iron	4.64 (22.4)	3.26 (-29.7)	2.8 (-14.5)	1.48	1.99 (34.1)

Table 9: Production, consumption, export and import of finished carbon steel and pig iron

Source: Joint Plant Committee.

Cement

Table: 10 indicates the Production of cement. The impressive performance of the cement industry, both in terms of production and export, continues. Export of cement in 2003-04 and 2004-05 was 9 MT and 10.6 MT, respectively. During April-October 2005, exports were 5.10 MT. Installed capacity of production was augmented during 2004-05 and in view of the growth trend in the last few years, a production target of 142.0 MT was set for the year 2005- 06. During the period April to October 2005, production of 82.26 MT (provisional) has already been achieved. This is 9.39 per cent higher than the production in the corresponding period of the previous year. Efforts to generate adequate domestic

demand to meet the excess production capacity available with the industry are also being made.

Year	Production (in lakh tonnes)	Growth Rate (in percent)
2000-01	976.10	(-)0.61
2001-02	1069.00	9.52
2002-03	1163.50	8.84
2003-04	1235.00	6.15
2004-05	1335.70	8.15

Table 10: Production of cement

Source Economic: Survey 2005-2006

Tourism

Table: 11 indicates the arrivals of foreign tourists and foreign exchange earning. The impressive growth profile of the tourism sector observed over the last two years appears to be continuing. As per the World Tourism Organization, about 763 million tourists traveled internationally in 2004 and spent about US\$622 billion. As per an estimate, tourism accounts for 12.2 per cent of total world exports and 8.1 per cent of global employment. In 2004-05 the Indian tourism industry registered a growth of 24.0 per cent in foreign tourist arrivals compared to the growth of 19.5 per cent registered in 2003-04. Foreign exchange earnings grew at the rate of 26.4 per cent in 2004-05 compared to 31.4 per cent in 2003-04. Improvement of airports, passenger amenities and emphasis on targeted tourist segments need to be vigorously pursued to ensure further sustained boost

Year	Foreign tourists		Estimated foreign Exchange	
	Number	Growthy in Lakh Rate	Earnings Million	Growth US\$ Rate
1997-98	23.71	1.6	2914	1.3
1998-99	23.97	1.1	2993	2.7
1999-00	25.05	4.5	3036	1.4
2000-01	26.99	7.7	3168	4.3
2001-02	24.28	-10.0	2910	-8.1
2002-03	24.54	1.0	3029	4.1
2003-04	29.33	19.5	3979	31.4
2004-05	36.38	24.0	5029	26.4

Table 11: Foreign tourist arrivals and Foreign exchange earning

Source: Ministry of Tourism

in the tourism sector. The aggressive campaigns of the neighbouring South East Asian countries, which have been emerging as a major global destination for business, leisure, religious and medical tourism, need to be converted into a complementary factor for boosting the inflow of tourists in India. This requires evolving concrete strategies and improving tourism related information and infrastructure.

Electronics & computer technology

Table-12 & Table-13 indicate the growth in Electronics exports and electronics production. Information Technology (IT) and IT enabled business process outsourcing (ITESBPO) services continue to be on a robust growth

Items	1999-2000	2000-01	2001-02	2002-03	2003-04	2004-05
1. Electronics Hardware	1,400	4,788	5,800	5,600	7,700	8,000
2. Computer Software	17,150	28,350	36,500	46,100	58,240	78,230
Total	18,550	33,138	42,300	51,700	65,940	86,230

Table 12: Electronics exports

Source: Economic Survey 2005-2006

Items	1999-2000	2000-01	2001-02	2002-03	2003-04	2004-05
1. Consumer Electronics	11,200	11,950	12,700	13,800	15,200	16,800
2. Industrial Electronics	3,750	4,000	4,500	5,550	6,100	8,300
3. Computers	2,500	3,400	3,550	4,250	6,800	8,800
4. Communications and Broadcasting Equipments	4,000	4,500	4,500	4,800	5,350	4,800
5. Strategic Electronics	1,450	1,750	1,800	2,500	2,750	3,000
6. Components Sub-Total	5,200	5,500	5,700	6,600	7,600	8,800
7. Software for Exports	28,100	31,100	32,750	37,500	43,800	50,500
8. Domestic Software	17,150	28,350	36,500	46,100	58,240	78,230
Total	7,200	9,400	10,874	13,400	16,250	19,630
Total	52,450	68,850	80,124	97,000	1,18,290	1,48,360

Table 13: Electronics production

Source: Economic Survey 2005-2006

path. Exports of the Indian software and services sector was Rs. 78,230 crore (US\$17.2 billion) in 2004-05, up 34 per cent from Rs. 58,240 crore (US\$12.8 billion) in 2003-04. The IT exports are likely to grow by 30-32 per cent in the current year. Output of the Indian electronics and IT industry was Rs. 1,48,360 crore during 2004-05, up 25.4 per cent from Rs. 1,18,290 crore in 2003-04. With satisfactory growth of the Indian ITES-BPO sector both on-shore as well as offshore, export revenues from this sector increased rapidly from US\$2.5 billion in 2002-03 to US\$3.6 billion in 2003-04 and further to US\$5.1 billion in 2004-05. A major impact of this growth has been on employment creation, which has almost doubled every year. The number of professionals employed in India by IT and ITES sectors is estimated at 10.45 lakhs as on 31st March 2005.

CONCLUSION

Industrial development of any economy is utmost essential as it accelerates the rate of economic growth and leads to the economic development. It creates a larger and more favourable market for agricultural and industrial products and tends to break up the relatively stagnant traditional type of agriculture. It also makes available to the masses a far wider range of consumer and industrial goods. The need for Industrialization also lies in the fact that at all levels of production process, other than the final demand level, industrial investments have more forward and backward linkages with various industries. Industrial development creates in a society a new intellectual environment, which, being less bound by tradition, is more conducive to the rise of entrepreneurial class and through such a class expansion can come by capital formation, financial management and technological expansion. This benefits agricultural as well as other sectors of the economy.

The high growth in the industrial sector continued for the third year in succession. The major driver of this growth in the year 2004-05 was the manufacturing sector. The growth of the electricity sector was almost the same as that of the last year whereas the mining sector showed considerable deceleration. Somewhat subdued performance of the electricity and deceleration in mining sector moderated the manufacturing driven industrial growth. Capital goods maintained a steady increase in its rate of growth during 2004-05. The sector is poised to increase its rate of growth further during the current year.

With a perceptible improvement in the investment scenario, both domestic and foreign, coupled with the policy measures towards further liberalization and simplification of the norms guiding such investment, the overall productive capability of the industrial sector, as a whole, is likely to increase substantially. With a likely pick up in the production of crude oil, the mining sector is expected to improve its performance in the near future. Recent softening in the price of oil in the international market, if sustained, would have a positive impact on the industrial sector. The electricity sector, however, remains a cause of concern as private investment in this sector has remained almost stagnant. The hardening of the interest rates could also be another dampening factor for sustained growth in investment. While various sectors within manufacturing registered an impressive increase in the volume of production and exports, this was largely input driven and the growth in total factor productivity was hardly noticeable. Sustained efforts to remove bottlenecks hindering the productivity and efficiency of the manufacturing sector would boost the performance of the manufacturing sector substantially.

REFERENCES

- Augustine A. Lado and George S. Vozikis, "Transfer of Technology to Promote Entrepreneurship in Developing Countries : An Integration and Proposed Framework", *Entrepreneurship theory and practice*, Winter 1996.
- Chadha, V. and R.S. Johar, "Industrial Development of Punjab : Pattern, Problems and Perspective", in *PSE Economic Analyst*, Amritsar, Vol. II, Dec., 1980.
- Chander Kailash, "Role of Entrepreneur in the Economic Development of this Region", (ed.) B.S.Bhatia and etal, *Encyclopaedia of Business Management*, Deep and Deep Publication, New Delhi, 1999.
- Chandra, M. "Entrepreneurship: Push or Pull effect?" *SEDME*, Vol. XXIV (3) September 1997.
- Dhar, P.N. : "Some Aspects of Technical Progress in Small Enterprise in Indian Economic Development", Asia Publishing House, 1971.
- Dhillon Dalbir, "Financial and Managerial Issues in Entrepreneurship in a Transitional Economy", (ed) B.S.Bhatia and etal, *Encyclopaedia of Business Management*, Deep and Deep Publication, New Delhi, 1999.
- Economic Survey of India 2005-06.
- Gill, S. S. : "Economic Development and Structural Change in Punjab : Some Policy Issues, Ludhiana", Principal Iqbal Singh Memorial Trust, 1996.

Kapoor, T.N. (Ed.) :Industrial Development in the States of India, Sterling Publishers, New Delhi, 1967.

Pandit, M.L. : “Industrial Development in the Punjab”, B.R. Publishing Corporation, New Delhi, 1985.

Saraogi, A.R : “Industrial Growth in India–Turning Obstacles into Opportunities”, *Indian Management*, 1984.

Schumpeter, J.A. “Economic Theory and Entrepreneurial History in Exploration in Enterprise ed. Aitken HGT, Harvard University Press, Cambridge, 1955.

Sharma, R.K. : “Industrial Entrepreneurship in a Developing Economies”, Kalyani Publishers, 1989.

Singh, C. : “India’s Economic Policy”, The Gandhian Blueprint Vikas, New Delhi, 1978.

UNESCO Research Centre on Social and Economic Development in Southern Asia, Social Aspects of Small Industries in India, United India Press, New Delhi, 1962.