Chapter 14

INDUSTRY

14.1 Significance of Industrial Sector: Industrial growth in the country has, in terms of long run trend, remained aligned with the growth rate of gross domestic product (GDP). The long-term average annual growth of industries comprising mining, manufacturing, and electricity, during the post-reform period between 1991-92 and 2011-12, averaged 6.7 per cent as against GDP growth of 6.9 per cent. Inclusion of construction in industry raises this growth to 7.0 per cent. Further, the share of industry, including construction, in GDP remained generally stable at around 28 per cent in the period (Standard deviation of the average share was very small and the coefficient of variation under 5 per cent validates this stability.), with the share of manufacturing, which is the most dominant sector within industry, also remained in the 14-16 per cent range during this period. However, with the introduction of New Series (NAS- 2011-12 Prices) in 2011-12, the share of manufacturing has increased and as per provisional estimates of GDP 2014-15(NS), share of Industry sector in GDP(constant prices) has increased to around 31-32 % since 2012-13. The increase in share of industry, largely due to increase in share of manufacturing (over 18%), may be on account of methodological changes introduced in the new series, including improved coverage (e.g. corporate sector) etc. Nevertheless, the industrial share in overall GDP is still modest when compared to that of China (above 40 per cent) and some of the East Asian countries (above 30 per cent).

Employment in the Industrial Sector									
	Persons	employed	(million)	Share	in employ	ment (%)	Sha	are in GDP	(%)
	1999- 2000	2004- 2005	2009- 2010	1999- 2000	2004- 2005	2009- 2010	1999- 2000	2004- 2005	2009- 2010
Mining	2.3	2.6	2.9	0.6	0.6	0.6	3.0	2.9	2.3
Manufacturing	43.8	56.1	52.4	11.0	12.2	11.4	15.1	15.3	16.0
Electricity	1.0	1.2	1.3	0.3	0.3	0.3	2.3	2.1	2.0
Construction	17.5	26.1	44.2	4.4	5.7	9.6	6.5	7.7	7.9
Industry	64.6	85.9	100.7	16.2	18.7	21.9	26.9	27.9	28.1

Source : The numbers have been derived applying NSSO segment-wise workers population ratios and Labour force participation rates to the population.

Note : Employment as per usual principal and subsidiary status (UPSS) basis.

Source : Economic Survey

	Persons Employed	Share in	Share in GDP(%)					
	(million)(2011-12)	Employment(%)	(2014-15)(PE)					
		(2011-12)	(2011-12 Prices)					
Mining	2.3	0.5	2.9					
Manufacturing	53.0	12.6	18.1					
Electricity	2.2	0.5	2.3					
Construction	44.6	10.6	8.1					
Industry	102.1	24.3	31.4					

Employment in Industrial Sector

14.2 Estimated employment in the industrial sector, as per NSS Surveys increased from 64.6 million persons in 1999-2000 to 100.7 million persons in 2009-10 and 102.1 million in 2011-12. The share of industry in total employment increased from 16.2 per cent in 1999-2000 to 21.9 per cent in 2009-10 and 24.3 % during 2011-12. However, the increase was largely on account of expansion of employment opportunities in the construction sector, from 17.5 million in 1999-2000 to 44.6 million during 2011-12 whereas employment estimates for Mining, manufacturing and electricity was 2.3 million, 53 million and 2.2 million persons (as per UPSS) respectively during 2011-12.

Industrial Statistics in India :

14.3 Trends in performance of Industrial sector are primarily monitored through Index of Industrial Production (IIP) (monthly) and Annual Survey of Industries, ASI. Whereas enterprise surveys pursuant to Economic Census provide an idea about the dynamics of unorganized sector. Ministry of Statistics & PI, through active involvement of both Central Statistics Office & National Sample Survey Office , is the backbone of Industrial Statistics in India even though various Ministries/Departments (Department of Industrial Policy & Promotion, Ministry of Commerce & Industry , Ministry of Micro Small & Medium Enterprises, Ministry of Corporate Affairs, Indian Bureau of Mines, Ministry of Mines, Office of Textile Commissioner, Coffee/ Tea Boards etc) maintain their own statistics.

14.4 Central Statistics Office, MOSPI, besides compiling information on Industrial Statistics in form of IIP and ASI results has also been responsible for updation of industrial classification and development of new classifications in harmony with the worldwide developments to enable comparability. National Industrial Classification (NIC)-2008 is the latest Industrial classification developed by CSO on the lines of International Standard Industrial Classification (ISIC)Rev 4. The structure of NIC- 2008 is identical to the structure of ISIC Rev.4 up to 4-digit level 'class'.

14.5 Various sources of Industrial Statistics along with their limitations and recent developments may be seen in the last section of the chapter.

Recent Performance of Industrial Sector :

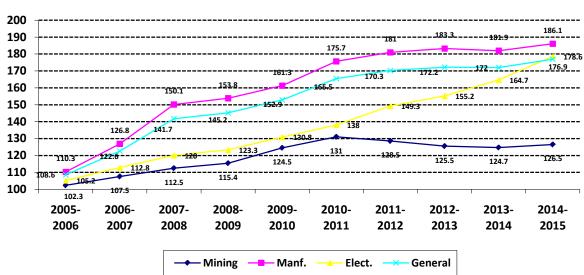
14.6 Post 2008-09, the industrial sector, consisting of manufacturing, mining, electricity, and construction, showed remarkable recovery and steady growth for three years but lost momentum thereafter owing to a combination of supply-side and demand-side constraints. However, the latest indicators, emerging from the recently revised estimates of national income brought out by the Central Statistics Office, point to the fact that the revival of growth had started in 2013-14 and attained further vigour in 2014-15. Brighter prospects in India, compared to the global scenario, owe mainly to the fact that the economy stands largely relieved of the vulnerabilities associated with an economic slowdown, persistent inflation, elevated fiscal deficit, slackening domestic demand, external account imbalances, and oscillating value of the rupee in 2011-12 and 2012-13. Factors like the steep decline in oil prices have also helped . However the sluggish global demand particularly in Europe and recent slowdown in China have partly fed into the lacklusture performance in foreign trade; yet this downward pressure has been compensated by strong domestic demand, keeping the growth momentum going.

14.7. As per Provisional estimates of GDP for 2014-15, the growth of 'mining & quarrying' is estimated at 2.4 percent while the growth of 'manufacturing' sector is estimated at 7.1 percent. Production of coal and crude oil registered growth rates of 8.2 percent and (-)0.9 percent in 2014-15 and the key indicators of construction sector, namely, cement and consumption of finished steel registered growth of 5.6 percent and 3.1 percent, respectively.

14.8 Index of Industrial Production : The index of industrial production (IIP), released each month by CSO, MOSPI, is the key indicator of industrial performance. The new IIP series with 2004-05 as base was released in June 2011 replacing the earlier IIP series with base 1993-4. Recent industrial growth, measured in terms of IIP, shows fluctuating trends though the trajectory of manufacturing sector mirrors growth in overall IIP. Growth had reached 15.5 per cent in 2007-8 and then started decelerating. Initial deceleration in industrial growth was

largely on account of the global economic meltdown. There was, however, a recovery in industrial growth from 2.5 per cent in 2008-9 to 5.3 per cent in 2009-10 and 8.2 per cent in 2010-11. Fragile economic recovery in the US and European countries and subdued business sentiments at home affected the growth of the industrial sector in 2011-12 and industrial production slowed down to 2.9 % in 2011-12 and 1.0 % in 2012-13 finally ending with a contraction in 2013-14 (-0.1%) wherein both the manufacturing(-0.8%) and mining & quarrying sector(-0.6 %) contracted. The contraction in Mining Sector was observed for third year in a row as various issues regarding allocation, pricing, relocation etc have cropped up in recent past. Production of electricity, however, increased by 6.1 % over the previous year. The fragile global economic recovery, delays/bottlenecks in implementation of projects, inflationary pressure leading to rising input costs, drop in domestic and external demand etc have contributed to the sluggish performance of industrial sector whereas power generation has improved mainly on account of significant capacity addition made in recent years and robust increase in hydro-power generation during 2013-14. During 2014-15, industrial production attained a growth of 2.8 per cent owing mainly to recovery in the mining sector and impressive growth in the electricity(8.4%). The manufacturing sector continued to remain tepid, registering growth of 2.3 per cent. The low growth in manufacturing is mainly due to high rate of interest, infrastructure bottlenecks, and low domestic and external demand.

14.9 Growth of IIP in terms of its major components is indicated in the figure below:



Industrial Growth as reflected by IIP

(2004-05=100)

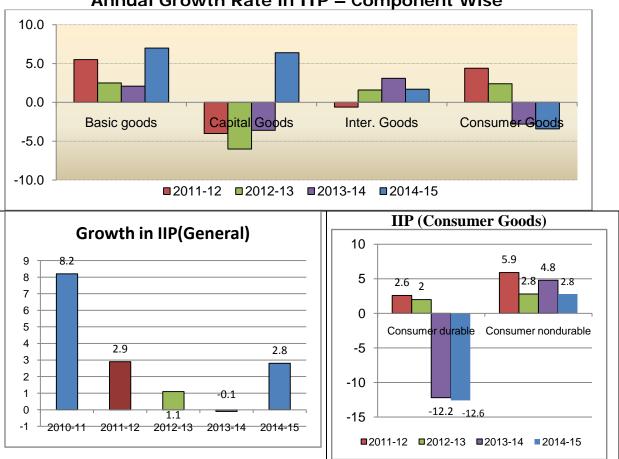
Industrial Growth as reflected by IIP

Growth Rate over previous year	Mining	Manf.	Elect.	General
2005-2006	2.3	10.3	5.2	8.6
2006-2007	5.2	15.0	7.3	12.9
2007-2008	4.6	18.4	6.3	15.5
2008-2009	2.6	2.5	2.7	2.5
2009-2010	7.9	4.8	6.1	5.3
2010-2011	5.2	9.0	5.5	8.2
2011-2012	-2.0	3.0	8.2	2.9
2012-2013	-2.3	1.3	4.0	1.1
2013-2014	-0.6	-0.8	6.1	-0.1
2014-2015	1.5	2.3	8.4	2.8

14.10 In terms of use based classification, basic goods and capital goods have witnessed marked improvement in performance during 2014-15 registering growth rates of 7.0 per cent and 6.4 per cent, intermediate goods have grown by 1.7 per cent, while consumer goods have declined by 3.4 per cent as compared to the same period in 2013-14. The decline in growth of consumer goods is accentuated by the 12.6 per cent decline in consumer durables.

			Intermediate				Conorel
	Basic	Capital	Intermediate	-			General
Period	goods	goods	goods	Т	otal Consum	er goods	Index
					Durables	Non-durables	
Weight	456.82	88.25	156.86	298.08	84.60	213.47	1000
	<u>G</u>	irowth ov	er correspond	ling perio	d of previou	us year	
2005-06	6.1	18.1	6.6	10.7	16.2	8.6	8.6
2006-07	8.9	23.3	11.5	16.1	25.3	12.3	12.9
2007-08	8.9	48.5	7.3	17.6	33.1	10.2	15.5
2008-09	1.7	11.3	0.0	0.9	11.1	-5.0	2.5
2009-10	4.7	1.0	6.0	7.7	17.0	1.4	5.3
2010-11	6.0	14.8	7.4	8.6	14.2	4.3	8.2
2011-12	5.5	-4.0	-0.6	4.4	2.6	5.9	2.9
2012-13	2.5	-6.0	1.6	2.4	2.0	2.8	1.1
2013-14	2.1	-3.6	3.1	-2.8	-12.2	4.8	-0.1
2014-15	7.0	6.4	1.7	-3.4	-12.6	2.8	2.8

Growth in IIP – Use Based Category

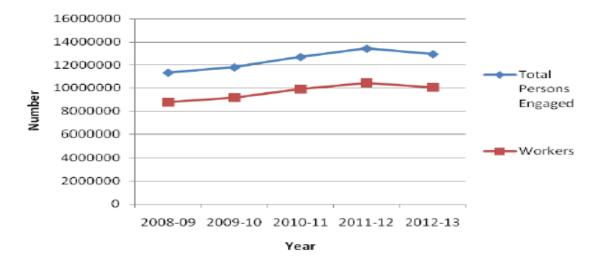


Annual Growth Rate in IIP – Component Wise

14.11 **Annual Survey of Industries:** The Annual Survey of Industries (ASI) is the principal source of organized manufacturing statistics in India. It provides statistical information to assess and evaluate, objectively and realistically, the changes in the growth, composition and structure of organised manufacturing sector comprising activities related to manufacturing processes, repair services, gas and water supply and cold storage. The Survey is conducted annually under the statutory provisions of the Collection of Statistics Act 1953, and the Rules framed there-under in 1959, except in the State of Jammu & Kashmir where it is conducted under the State Collection of Statistics Act, 1961 and the rules framed there-under in 1964. The ASI extends to the entire country except the States of Arunachal Pradesh, Mizoram, Sikkim and Union Territory of Lakshadweep. It covers all factories registered under sections 2m (i) and 2m (ii) of the Factory Act, 1948. The survey also covers bidi and cigar manufacturing establishments registered under Bidi and Cigar Workers (Condition of Employment) Act, 1966 and employing 10 or more workers using power and 20 or more workers not using power. Although the scope of the ASI was extended to all registered manufacturing establishments in the country,

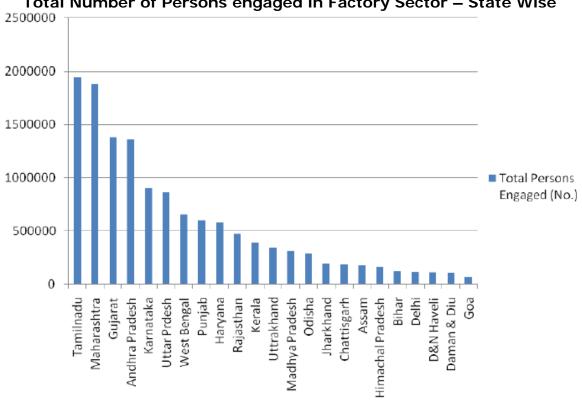
establishments under the control of the Defence Ministry, oil storage and distribution units, restaurants and cafes and technical training institutions not producing anything for sale or exchange were kept outside the coverage of the ASI. The latest available results of ASI pertains to year 2012-13.

14.12Considering all economic activities, estimated total number of fact ories in operation, as per ASI 2012-13, was 179,102, higher by 1.93 percent than that of last year. These factories provided gainful employment to 129.5 Lakh persons showing a decrease of 3.57 percent with respect to the preceding year and distributed Rs 2.38 Lakh Crore as emoluments to employees, showing an increase of 10.86 percent in one year. The factories consumed inputs both industrial and non-industrial in nature, worth Rs 50.19 Lakh Crore, produced Rs 60.26 Lakh Crore, worth of goods and services valued at ex-factory prices and contributed Rs 8.52 Lakh Crore by way of net value added by organized manufacturing sector to the national income. These are found to be higher by 4.58, 4.33 and 1.82 percent, respectively compared to those estimated as per previous ASI (i.e. 2011-12).



14.13 Comparison of the number of workers and total persons engaged during 2008-09 to 2012-13 shows that there has been an increase in both total persons employed and workers over the years, till 2011-12. However, a declining trend was observed in 2012-13. Till 2011-12, the increase in total persons engaged was slightly steeper than the workers implying that the share of auxiliary employees, managerial staff etc. that are not directly linked with the production, was increasing over time in comparison to the employment directly linked to the production process.

14.14 Statewise Comparison : In 2012-13, the highest number of operating factories was reported in Tamil Nadu(14.93%) followed by Maharashtra (12.88%). Gujarat's share was the highest in respect of aggregates gross value of plant and machinery (20.14%), input (19.32%) and output(18.53%). Maharashtra occupied the first position by virtue of its contribution to fixed capital (15.82%), working capital (16.85%), invested capital (15.81%), total emoluments (19.61%), gross value added (20.11%) and net value added (20.98%). In terms of contribution to net value added, Maharashtra is followed by Gujarat (13.95%),Tamil (10.72%),Karnataka Nadu (6.28%)and Uttar Pradesh(4.83%) in that order.

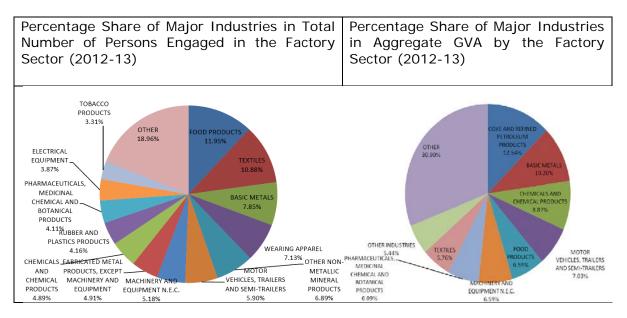


Total Number of Persons engaged in Factory Sector – State Wise

Industry Wise Comparison :

14.15 About 93.35% of the operating factories covered in ASI 2012-13, are engaged in manufacturing activities, 0.38% are undertakings engaged in the generation, transmission and distribution of electricity, gas, water supply etc. and remaining 6.27% in 'other' activity including cotton ginning, cleaning and baling, extraction of salt and some repair services etc. Though the electricity undertakings are a few in numbers, they account for about 12.45% of the total fixed capital of all the factories covered in the survey as against 1.60% share by the 'other'

activities. The manufacturing activities account for about 85.95% of the fixed capital. The manufacturing sector, consistent with its large number of factories, accounts for 94.36% of the value of output, which is produced by 95.89% of the total employees. The electricity, gas, water sector contributes about 1.90% to the gross output and is produced by 0.53% of the total employees. The corresponding share of the 'other' activities in the value of output is 3.74% which is produced by 3.57% of the total persons engaged. Of the estimated total net value added by industrial sector of Rs 8.52 lakh crore, Rs 8.09 lakh crore(94.92%) originate from selected manufacturing activities, Rs 0.22 lakh crore (2.61%) from electricity, gas, water supply, and the remaining Rs 0.21 lakh crore(2.46%) come from the 'other' activities.



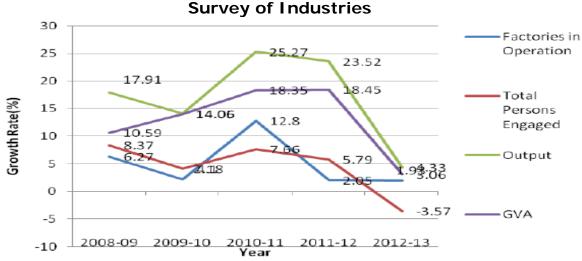
14.16 **Size of Factories (in terms of employment):** ASI data reveals that larger number of factories have low employment size. Out of an estimated number of 1,79,102 factories in operation, 1,30,517 factories are found to employ less than 50 employees each. Further, there is a, by and large, heavy concentration of various attributes like fixed capital, gross output, net value added etc., among the factories belonging to the higher employment size classes. While the lower size classes (up to employment size of 50) have largest concentration of operating factories (72.87%), they utilizes only 7.12% of the fixed capital, provide employment to 15.65 % of the employees, produce 11.54% of the gross output and generate 8.20 % of national income in the form of net value added by manufacture. On the other hand, the operating factories, each of which employ 200 or more employees, constitute 8.87% of the operating factories, utilize 80.84% of the fixed capital, provide gainful employment to 61.06% of the employees,

produce 71.76% of the gross output and generate 75.56 % of net value added by manufacture. The very large operating factories employing 5,000 or more employees each, constitute only 0.22% of the operating factories, however, they engage 7.56 % of employees of industrial sector, utilize 16.37% of the fixed capital, produce 12.79% of the gross output and contribute 12.44% to the net value added.

Employment Range	Factories in Operation	Fixed Capital	Working Capital	Productive Capital	Invested Capital	Workers	Total Persons Engaged	Wages to Workers
0 14	73862	0.46	0.21	0.68	0.71	345966	512400	0.02
15 19	16766	0.17	0.15	0.31	0.33	199201	282372	0.02
20 29	19786	0.34	0.23	0.57	0.61	342729	471940	0.03
30 49	20103	0.59	0.32	0.90	0.98	569269	760470	0.05
50 99	19840	1.07	0.63	1.70	1.73	1043614	1348938	0.09
100 199	12864	1.56	0.62	2.17	2.44	1305644	1665710	0.12
200 499	9258	3.09	1.19	4.28	4.76	1921757	2467583	0.20
500 999	3412	3.68	0.15	3.83	5.25	1407127	1795204	0.18
1000 -1999	1888	3.82	1.12	4.94	5.28	1119765	1437338	0.15
20004999	935	3.47			4.66			
5000&Above	387	3.57	0.91	4.48	4.69	809411	979356	
Total	179102	21.80	6.03	27.84	31.44	10051626	12950025	1.11
Employment	Total	Total Input	Total Output	Gross Value	Depreciation	Net Value	Rent Paid for	Interest Paid
Range	Emoluments			Added		Added	Fixed Assets	
0 14	0.05	1.32	1.51	0.19	0.04	0.16	0.00	0.04
15 19	0.03	0.92	1.03		0.02	0.09	0.00	0.02
20 29	0.06				0.03	0.16		
30 49	0.10			0.34	0.05	0.29	0.01	0.06
50 99	0.18	3.84	4.45	0.61	0.09	0.52	0.01	0.12
100 199	0.25	4.61	5.61	1.00	0.13	0.87	0.02	0.16
200 499	0.43	7.99	9.71	1.71	0.23	1.48	0.03	0.26
500 999	0.39	6.42	8.25		0.26	1.58	0.02	0.26
1000 - 1999	0.34				0.25	1.21	0.02	0.17
20004999	0.29				0.22	1.11	0.02	0.16
5000&Above	0.27				0.22	1.06	0.03	0.09

Growth during recent years :

14.17 The growth rate in GVA, after holding on to over 18 % during 2010-11 and 2011-12 fell drastically to 3.06 per cent during 2012-13. The growth rates, in the organized factory sector, in respect of number of operating factories, output, and employment have also decreased in 2012-13 as compared to 2011-12.



Annual Growth Rates (%) of Various Indicators of Annual Survey of Industries

Capital, Technology & Energy Efficiency in Manufacturing :

14.18 The survey results revealed that in 2012-13, a factory with an average investment of Rs 1,217 Lakh in fixed capital have provided gainful employment to 72 persons, produced goods and services at exfactory prices worth Rs 3,365 Lakh and contributed Rs 476 Lakh by way of net value added by manufacture to the national income. However, taking an employee as a unit of measurement, the survey revealed that an employee in the organized manufacturing sector during 2012-13 has, on an average, gave an output of Rs 46.53Lakh and contributed Rs 6.58 Lakh to the national income by way of net value added by manufacture. The corresponding averages in the preceding year were respectively Rs 43 Lakh and Rs 6.23 Lakh.

14.19 The capital output ratio which provides a measure of the fixed capital required to produce one unit of net output (i.e. net value added) has increased to 2.56 in 2012-13 as compared to 2.33 in the previous year. The fixed capital required to produce one unit of gross output has increased to 0.36, from 0.34 during 2011-12.However, the level of efficiency, measured by the ratio of the net value added to gross output has remained the same during 2012-13 (i.e. 0.14) as that in 2011-12. The GVA to fixed capital, has decreased to 0.46 in 2012-13 from 0.50 in 2011-12; whereas output to input ratio has been the same (1.20) in last two years.

14.20 Technological depth of organized manufacturing, defined in terms of increase in share of value added, indicates a worsening trend in organized manufacturing during the post-reform period. The share of inputs as per cent to output actually increased from 77.2 per cent during 1981-91 to 77.3 per cent during 1991-2001 and further to over 80 per cent (or output to input ratio <1.25) in the last decade. This indicates that the growth of Indian industry in general, particularly the organized manufacturing sector, was largely driven by increase in use of inputs. There has, however, been significant improvement in use of energy. The ratio of expenditure on fuel to output declined from 8.2 per cent during 1981-91 to 7.0 per cent during 1991-2001 and further to around 4.2-4.4 per cent during 2009-10 to 2012-13. Industry has becoming conscious of energy efficiency over the years.

14.21 There has been an increase in profitability in organized manufacturing, with the ratio of profit to output increasing from 3.52 per cent in 1981-91 to 10.72 per cent in 2007-8. However, thereafter there has been a moderation in the ratio of profit to output to 8.67 per cent in 2009-10, 8.3 per cent during 2010-11, 7.8 per cent during 2011-12 and further down to 7.4 percent in 2012-13. Profitability of organized manufacturing seems to be considerably dependent on the rate of interest on its outstanding credit and emoluments paid to workers as over a longer period, a higher intensity of resource use has made the profitability of organized manufacturing considerably dependent on wages and interest rates. A trend of moderating interest rate from 1998-9 until 2007-8 resulted in the ratio of profit to output increasing from 6 per cent to 10.7 per cent. Hardening of interest rates in 2008-9 substantially reduced the ratio of profit to output. The decline in rate of interest, however, did not result in any improvement in profit/output ratio in 2009-10 and the interest paid has risen by 20 per cent, 37 per cent and 14 per cent during 2010-11, 2011-12 & 2012-13 respectively after a smaller increase of only 6.7 per cent during 2009-10. Total emoluments as % of GVA have consistently declined from 40.6 % in 1980-81 to 22 % in 2010-11 & 2011-12, increasing marginally to reach about 24 % during 2012-13. The same, however, has broadly remained stable for the last 7-8 years.

Some Key Parameters of Organized Manufacturing in India								
CHARACTERISTICS	1981- 1991	1991- 2001	2001- 2006	2006- 2007	2007- 2008	2008- 2009	2009- 2010	
Number of factories	101905	127431	132419	144710	146385	155321	158877	
Value of output (₹ billion)	1450	6469	13923	24085	27757	32728	37228	
In per cent								
Input/ output	77.20	77.26	81.04	80.89	80.09	81.32	81.54	
Fuel/output	8.21	7.01	5.76	4.99	4.67	4.65	4.34	
Capital invested/labour (₹ '000)	133	498	872	1037	1225	1355	1638	
Emoluments/output	8.75	6.18	4.35	3.68	3.80	3.96	3.95	
Profit/output	3.52	5.58	7.44	10.02	10.72	9.07	8.67	
Interest Rate of Interest	11.90	15.31	11.96	9.64	11.34	12.80	11.06	
Structural Ratios		Units	2008-09	2000 40	2040 44	2244 42		
Structural natios		Units	2008-09	2009-10	2010-11	2011-12	2012-13	
Fixed Capital per Factory in Operation		Rs. Lakh	2008-09 680	2009-10 851	2010-11 933		2012-13 1217	
	ration	0			933	1110		
Fixed Capital per Factory in Operation	ration	Rs. Lakh Number Number	680	851 74 58	933 74 58	1110 76 59	1217	
Fixed Capital per Factory in Operation Total Persons Engaged per Factory in Ope	ration	Rs. Lakh Number Number Rs. Lakh	680 73	851 74 58 2350	933 74 58 2716	1110 76 59 3287	1217 72	
Fixed Capital per Factory in Operation Total Persons Engaged per Factory in Ope Workers per Factory in Operation Gross Output per Factory in Operation Net Value Added per Factory in Operation		Rs. Lakh Number Number Rs. Lakh Rs. Lakh	680 73 57 2107 340	851 74 58 2350 373	933 74 58 2716 409	1110 76 59 3287 476	1217 72 56 3365 476	
Fixed Capital per Factory in Operation Total Persons Engaged per Factory in Ope Workers per Factory in Operation Gross Output per Factory in Operation Net Value Added per Factory in Operation Output per Person Engaged	1	Rs. Lakh Number Number Rs. Lakh Rs. Lakh Rs. Lakh	680 73 57 2107 340 28.89	851 74 58 2350 373 31.66	933 74 58 2716 409 36.84	1110 76 59 3287 476 43.01	1217 72 56 3365 476 46.53	
Fixed Capital per Factory in Operation Total Persons Engaged per Factory in Ope Workers per Factory in Operation Gross Output per Factory in Operation Net Value Added per Factory in Operation Output per Person Engaged Gross Value Added per Person Engaged	1	Rs. Lakh Number Number Rs. Lakh Rs. Lakh Rs. Lakh Rs. Lakh	680 73 57 2107 340 28.89 5.40	851 74 2350 373 31.66 5.91	933 74 58 2716 409 36.84 6.50	1110 76 59 3287 476 43.01 7.28	1217 72 56 3365 476 46.53 7.78	
Fixed Capital per Factory in Operation Total Persons Engaged per Factory in Ope Workers per Factory in Operation Gross Output per Factory in Operation Net Value Added per Factory in Operation Output per Person Engaged Gross Value Added per Person Engaged Net Value Added per Person Engaged	1	Rs. Lakh Number Number Rs. Lakh Rs. Lakh Rs. Lakh Rs. Lakh Rs. Lakh	680 73 57 2107 340 28.89 5.40 4.66	851 74 58 2350 373 31.66 5.91 5.02	933 74 58 2716 409 36.84 6.50 5.55	1110 76 59 3287 476 43.01 7.28 6.23	1217 72 56 3365 476 46.53 7.78 6.58	
Fixed Capital per Factory in Operation Total Persons Engaged per Factory in Ope Workers per Factory in Operation Gross Output per Factory in Operation Net Value Added per Factory in Operation Output per Person Engaged Gross Value Added per Person Engaged	1	Rs. Lakh Number Number Rs. Lakh Rs. Lakh Rs. Lakh Rs. Lakh	680 73 57 2107 340 28.89 5.40	851 74 58 2350 373 31.66 5.91 5.02	933 74 58 2716 409 36.84 6.50 5.55	1110 76 59 3287 476 43.01 7.28 6.23	1217 72 56 3365 476 46.53 7.78	
Fixed Capital per Factory in Operation Total Persons Engaged per Factory in Ope Workers per Factory in Operation Gross Output per Factory in Operation Net Value Added per Factory in Operation Output per Person Engaged Gross Value Added per Person Engaged Net Value Added per Person Engaged Wages per Worker	1	Rs. Lakh Number Number Rs. Lakh Rs. Lakh Rs. Lakh Rs. Lakh Rs. Lakh	680 73 57 2107 340 28.89 5.40 4.66	851 74 58 2350 373 31.66 5.91 5.02	933 74 58 2716 409 36.84 6.50 5.55	1110 76 59 3287 476 43.01 7.28 6.23	1217 72 56 3365 476 46.53 7.78 6.58	
Fixed Capital per Factory in Operation Total Persons Engaged per Factory in Ope Workers per Factory in Operation Gross Output per Factory in Operation Net Value Added per Factory in Operation Output per Person Engaged Gross Value Added per Person Engaged Net Value Added per Person Engaged Wages per Worker Technical Coefficients	1	Rs. Lakh Number Number Rs. Lakh Rs. Lakh Rs. Lakh Rs. Lakh Rs. Lakh	680 73 57 2107 340 28.89 5.40 4.66 0.68	851 74 58 2350 373 31.66 5.91 5.02 0.75	933 74 58 2716 409 36.84 6.50 5.55 0.86	1110 76 59 3287 476 43.01 7.28 6.23 0.96	1217 72 56 3365 476 46.53 7.78 6.58 1.10	
Fixed Capital per Factory in Operation Total Persons Engaged per Factory in Ope Workers per Factory in Operation Gross Output per Factory in Operation Net Value Added per Factory in Operation Output per Person Engaged Gross Value Added per Person Engaged Net Value Added per Person Engaged Wages per Worker <u>Technical Coefficients</u> Fixed Capital to Net Value Added	1	Rs. Lakh Number Number Rs. Lakh Rs. Lakh Rs. Lakh Rs. Lakh Rs. Lakh	680 73 57 2107 340 28.89 5.40 4.66 0.68 2.00	851 74 58 2350 373 31.66 5.91 5.02 0.75 2.28	933 74 58 2716 409 36.84 6.50 5.55 0.86 2.28	1110 76 59 3287 476 43.01 7.28 6.23 0.96 2.33	1217 72 56 3365 476 46.53 7.78 6.58 1.10	
Fixed Capital per Factory in Operation Total Persons Engaged per Factory in Ope Workers per Factory in Operation Gross Output per Factory in Operation Net Value Added per Factory in Operation Output per Person Engaged Gross Value Added per Person Engaged Net Value Added per Person Engaged Wages per Worker <u>Technical Coefficients</u> Fixed Capital to Net Value Added Fixed Capital to Output	1	Rs. Lakh Number Number Rs. Lakh Rs. Lakh Rs. Lakh Rs. Lakh Rs. Lakh	680 73 57 2107 340 28.89 5.40 4.66 0.68 2.00 0.32	851 74 58 2350 373 31.66 5.91 5.02 0.75 2.28 0.36	933 74 58 2716 409 36.84 6.50 5.55 0.86 2.28 0.34	1110 76 59 3287 476 43.01 7.28 6.23 0.96 2.33 0.34	1217 72 56 3365 476 46.53 7.78 6.58 1.10 2.56 0.36	
Fixed Capital per Factory in Operation Total Persons Engaged per Factory in Ope Workers per Factory in Operation Gross Output per Factory in Operation Net Value Added per Factory in Operation Output per Person Engaged Gross Value Added per Person Engaged Net Value Added per Person Engaged Wages per Worker <u>Technical Coefficients</u> Fixed Capital to Net Value Added	1	Rs. Lakh Number Number Rs. Lakh Rs. Lakh Rs. Lakh Rs. Lakh Rs. Lakh	680 73 57 2107 340 28.89 5.40 4.66 0.68 2.00	851 74 58 2350 373 31.66 5.91 5.02 0.75 2.28 0.36	933 74 58 2716 409 36.84 6.50 5.55 0.86 2.28 0.34 0.15	1110 76 59 3287 476 43.01 7.28 6.23 0.96 2.33 0.34 0.34 0.14	1217 72 56 3365 476 46.53 7.78 6.58 1.10	

Micro, Small, and Medium Enterprises (MSMEs)

Micro, Small and Medium Enterprises (MSME) sector has 14.22 emerged as a highly vibrant and dynamic sector of the Indian economy over the last five decades. MSMEs not only play crucial role in providing comparatively large employment opportunities at lower capital cost than large industries, but also help in industrialization of rural & backward areas, thereby, reducing regional imbalances, assuring more equitable distribution of national income and wealth. MSMEs are complementary to large industries as ancillary units and this sector contributes enormously to the socio-economic development of the country. The major advantage of the sector is its employment potential at low capital cost. The labor intensity of the MSME sector is much higher than that of the large enterprises. The MSMEs constitute over 90% of total enterprises in most of the economies and are credited with generating the highest rates of employment growth and account for a major share of industrial production and exports. In India too, the MSMEs play a pivotal role in the overall industrial economy of the

country. In recent years the MSME sector has consistently registered higher growth rate compared to the overall industrial sector. With its agility and dynamism, the sector has shown admirable innovativeness and adaptability to survive the recent economic downturn and recession. The MSME sector in India constitutes enterprises with investment in Plant & Machinery **less than Rs ten Crore in case of manufacturing** (<Rs 25 lakh : Micro , >Rs 25 Lakh but <Rs 5 Cr : Small, >Rs 5 Cr but <Rs 10 Cr : Medium Enterprise)& **less than Rs five Crore in case of services sector** (<Rs10 lakh : Micro , >Rs 10 Lakh but <Rs 2 Cr : Small, >Rs 2 Cr but <Rs 5 Cr : Medium Enterprise).

14.23 Fourth All India Census of MSME is the first census conducted post implementation of the Micro, Small and Medium Enterprises Development (MSMED) Act, 2006. Prior to implementation of MSMED Act, 2006, the sector was defined as per the provision of Industrial Development and Regulation Act, 1951 as Small Scale Industries (SSI) sector and its constituent, tiny and auxiliary units as per periodic revision of criteria for defining such units. The scope and coverage of the MSME sector were broadened significantly under the MSMED Act, 2006, which recognised the concept of "enterprise" and to include both manufacturing and services sector, besides defining the medium enterprises under the MSME sector.

14.24 As per available statistics (projections based on 4th Census of MSME Sector 2006-07), MSME sector employed (estimated) about 111.4 million persons during 2013-14, spread over 48.8 million enterprises. The size as per Fourth Census, during 2006-07 was about 36.2 million working enterprises with about 80.5 million persons employed in the sector. While on a strictly comparable basis, growth rate recorded during the year 2001-02 (3rd Census) to 2006-07(4th Census) was 15.30% and 15.02% for estimated number of Enterprises and Employment respectively, the sector as a whole recorded a growth rate of 28.02% and 26.42% in cases of estimated number of enterprises and employment respectively, taking into account the definitional changes during the period 2001-02 to 2006-07. For service sector, while the growth rate in estimated number of enterprises and employment recorded was 31.21% and 34.00% respectively, during the period of 2001-02 to 2006-07 taking into account the expanded coverage of the sector, the same was 9.39% and 10.12% respectively on strictly comparable basis. As the activities brought under the coverage of MSME sector due to definitional changes in 2006-07 were limited to services sector, the growth rate for manufacturing sector is comparable. The growth recorded during the year 2001-02 to 2006-07

in manufacturing sector was 22.46% and 18.49% for estimated number of enterprises and employment respectively. Following tables indicate the trends in MSME sector both in terms of employment and output (fig 2007-08 onwards are based on projections).

SI. No.	Year	Total Working Enterprises (in Lakh)	Employment (in Lakh)	Market Value of Fixed Assets (Rs. in Crore)
	I		IV	V
1.	2006-07	361.76	805.23	868,543.79
2.	2007-08*	377.36	842.00	920,459.84
3.	2008-09*	393.70	880.84	977,114.72
4.	2009-10*	410.80	921.79	1,038,546.08
5.	2010-11*	428.73	965.15	1,105,934.09
6.	2011-12*	447.64	1,011.69	1,182,757.64
7.	2012-13*	447.54	1,061.40	1.268,763.67
8.	2013-14#	488.46	1,114.29	1,363,700.54
		of wholesale/retail trade, legal, educ		taurants, transports and storage & warehousing

(except cold storage) for which data were extracted Economic Census 2005, Central Statistics Office, MOSPI.

Estimated on the basis of per enterprises value obtained from sample survey of unregistered sector for activities wholesale/retail trade legal, education & social services, hotel & restaurants, transports and storage & warehousing(except cold storage) which were excluded from Fourth All India Census of MSME, unregistered sector.

- Projected.

(at 2004-05 prices)

	Gross Value	Share of MSME s	Share of MSME			
Year	of Output of MSME Manufacturing Sector (₹ in crore)	Manufacturing Sector MSME	~ Sector		Manufacturing output in total Manufacturing Output (%)	
2006-07	1198818	7.73	27.40	35.13	42.02	
2007-08	1322777	7.81	27.60	35.41	41.98	
2008-09	1375589	7.52	28.60	36.12	40.79	
2009-10	1488352	7.45	28.60	36.05	39.63	
2010-11	1653622	7.39	29.30	36.69	38.50	
2011-12	1788584	7.27	30.70	37.97	37.47	
2012-13	1809976	7.04	30.50	37.54	37.33	

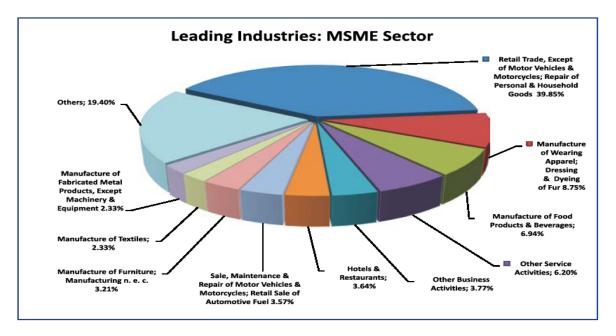
Source:

1. Fourth All India Census of MSME 2006-07,

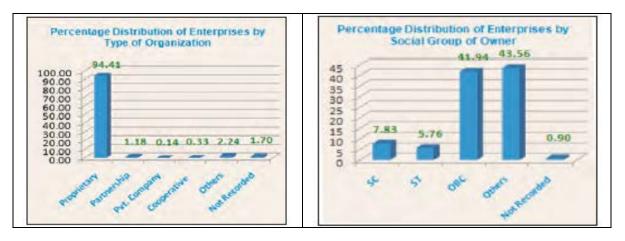
2. National Accounts Statistics (2014), CSO, MOSPI and

3. Annual Survey of Industries, CSO MOSPI

14.25 It is estimated that in terms of value, MSME manufacturing sector accounts for about 38% of the manufacturing output and about 7 % of GDP. Including the MSME services sector also, the share of MSME sector in GDP increases to about 38%. The composition of leading industries in the manufacturing sector as per the fourth census is given in the following chart:



14.26 As per 4th Census, out of the total enterprises, 55.34 % were rural units and 7.36 % were women enterprises, whereas the employment per Unit was 2.23 . Rural areas with 200.19 lakh of working enterprises accounted for 55.34% of the total working enterprises in MSME sector. About 94.41% of the enterprises in the sector were proprietary enterprises, 1.18% of the enterprises were run by partnerships and 0.14% of the enterprises were run by private companies. The rest were owned by co-operatives/ trusts or others. According to social group category, 7.83% of the enterprises were owned by Scheduled Caste entrepreneurs, 5.76% by Scheduled Tribe entrepreneurs and 41.94% by entrepreneurs of Other Backward Classes.



14.27 Sources of Industrial Statistics:

 Economic Census, carried out by Central Statistics Office, Ministry of Statistics & PI , provides frame for all enterprises once in five years. High volatility (rise & deaths of units) in the unorganized sector, however, necessitates more frequent updation of the frame. Efforts towards preparation of **Business Register** to provide a frame on real time basis is a step in this direction.

- Annual Survey of Industries conducted by National Sample Survey Office, Ministry of Statistics & PI, Government of India, is the chief source of information for the organized manufacturing. It covers units registered under Section 2m (i) & (ii) of Factories Act i.e. Units using power with 10 or more workers or those having 20 or more workers without using power. The survey also covers bidi and cigar manufacturing establishments registered under Bidi and Cigar Workers (Condition of Employment) Act, 1966. The frame of units under Factories Act is maintained by Registrar of Factories, which may not be always very updated. Directorate of Economics & Statistics(DES)/State Statistical Bureaus (SSBs) also conduct their own Annual Surveys.
- Enterprise surveys carried out by National Sample Survey Office, Ministry of Statistics & PI in various NSS rounds provide information regarding the unorganized sector.
- Index of Industrial Production (IIP), compiled by Central Statistics Office, Ministry of Statistics & PI, provides monthly information on the movement in production. Besides manufacturing, mining & electricity are also covered in IIP. The information, for most of the items included in IIP is provided Department of Industrial Policy & Promotion (DIPP), Ministry of Commerce. However Indian Bureau of Mines (IBM) provides information wrt Mining Sector, Central Electricity Authority provides information wrt Electricity and various Boards viz Coffe Board, Tea Board, Office of Textile Commissioner etc provide information wrt some of the items.
- Ministry of Corporate Affairs maintains information wrt units registered under Companies Act 1956, Government Companies & Indian subsidiaries of foreign Companies .Information on a few selected parameters is collected online after implementation of MCA21 whereas Registrar of Companies , spread all across India provide information wrt newly registered companies on monthly basis. In order to capture extended information on economic performance of companies , the Ministry is trying to implement reporting through XBRL.
- Ministry of Small Micro & Medium Enterprises(MSME) provides information wrt smaller units. Office of DC (MSME) provides annual estimates wrt various parameters. The Ministry

also conducts **Census** and Final Report of the Fourth All India Census of Micro, Small & Medium Enterprises 2006-2007 for the Registered Sector has been brought out. In order to estimate unregistered MSMEs in the country, a sample of 10,312 villages and 568 towns at All-India level were selected for data collection of enterprises. The data processing work of the Fourth All India Census of MSMEs, unregistered sector is under progress.

References:

- Annual Survey of Industries 2012-13 Summary Results & Vol I, Ministry of Statistics & PI.
- MSME Annual Report 2014-15, Ministry of Micro Small & Medium Enterprises
- Economic Surveys, Ministry of Finance