



## Special Task Force on Impact of Global Financial Crisis on Engineering Sector

### Overview of the Engineering Industry in India

The engineering sector is the largest segment of the overall Indian industrial sector. The engineering industry accounts for 12 per cent of India's GDP. In the year 2004-05, as per the latest Annual Survey of Industry data, the total Net Value Added by the Engineering Industry in India was USD 25 billion. Engineering goods enjoy 30.5 per cent weight in the Index of Industrial Production (IIP); 29.9 per cent share of total investment; and 62.8 per cent share in foreign collaborations.<sup>1</sup> The important groups within the engineering industry include machinery & instruments, primary and semi finished iron & steel, steel bars & rods, non-ferrous metals, electronic goods and project exports.

India has a well-developed and diversified industrial machinery/capital base capable of manufacturing the entire range of industrial machinery. The industry has also managed to successfully develop advanced manufacturing technology over the years. Among the developing countries, India is a major exporter of heavy and light engineering goods, producing a wide range of items. The bulk of capital goods required for power projects, fertilizer, cement, steel and petrochemical plants and mining equipment are made in India. The country also makes construction machinery, equipment for irrigation projects, diesel engines, tractors, transport vehicles, cotton textile and sugar mill machinery.

The Principal Characteristics of the Engineering Industry in India as given by the Annual Survey of Industries for the year 2004-05 is given in Table below :

**Table 1 : Principal Characteristics by Major Engineering Group in ASI 2004-05**

*(Value Figures in Rs. Lakhs)*

NIC-2004	Description	Total Input	Gross Output	Depreciation	Net Value Added
27	Basic Metals	18746221	24480111	808820	4925070
34	Motor Vehicles, Trailers and Semi-Trailers	12302779	14345878	364101	1678997
29	Machinery and Equipment N.E.C.	5673191	7218344	192792	1352361
35	Other Transport Equipments	3510072	4400557	99802	790683
31	Electrical Machinery and Apparatus, N.E.C.	3424259	4313241	104989	783993
28	Fabricated Metal Products	3190239	3881993	88421	603333
36	Furniture & Other Manufacturing N.E.C.	2802014	3226210	42489	381707
32	Radio, Television and Communication Equipments	2607310	3096112	116398	372405
33	Medical, Precision and Optical Instruments	690941	962201	29295	241966
30	Office, Accounting and Computing Machinery	503605	653471	40777	109089
<b>Total Engineering</b>		<b>53450634</b>	<b>66578122</b>	<b>1887889</b>	<b>11239610</b>
<b>Grand Total for All Industry Groups</b>		<b>136294133</b>	<b>167256142</b>	<b>4971324</b>	<b>25990686</b>
<b>Engineering Goods as Percent of Total</b>		<b>39.21%</b>	<b>39.80%</b>	<b>37.97%</b>	<b>43.24%</b>



### Current Trends in Industrial Production

Engineering Exports is a product of engineering production. It may be interesting to see what is the latest trend in industrial production. The Quick Estimates of Index of Industrial Production (IIP) with base 1993-94 for the month of September 2008 have been released by the Central Statistical Organisation of the Ministry of Statistics and Programme Implementation on November 12, 2008. The General Index stands at 273.0, which is 4.8% higher as compared to the level in the month of September 2007. The cumulative growth for the period April-September 2008-09 stands at 4.9% over the corresponding period of the previous year.

The Indices of Industrial Production for the Mining, Manufacturing and Electricity sectors for the month of September 2008 stand at 162.8, 294.4, and 219.3 respectively, with the corresponding growth rates of 5.7%, 4.8% and 4.4% as compared to September 2007. The cumulative growth during April-September, 2008-09 over the corresponding period of 2007-08 in the three sectors have been 3.8%, 5.2% and 2.5% respectively, which moved the overall growth in the General Index to 4.9%.

In terms of industries, nine (9) out of the seventeen (17) industry groups (as per 2-digit NIC-1987) have shown positive growth during the month of September 2008 as compared to the corresponding month of the previous year. The industry group 'Transport Equipment and Parts' have shown the highest growth of 16.8%, followed by 16.1% in 'Machinery and Equipment other than Transport Equipment' and 12.8% in 'Metal Products and Parts, except Machinery and Equipment'. On the other hand, the industry group 'Wood and Wood Products: Furniture and Fixtures' have shown a negative growth of 9.7% followed by 9.3% in 'Cotton Textiles' and 8.6% in 'Leather and Leather & Fur Products'.

As per Use-based classification, the Sectoral growth rates in September 2008 over September 2007 are 4.6% in Basic goods, 18.8% in Capital goods and (-)3.3% in Intermediate goods. The Consumer durables and Consumer non-durables have recorded growth of 13.1% and 2.8% respectively, with the overall growth in Consumer goods being 5.6%.

**Table 2 : Index of Industrial Production - Sectoral**

(Base : 1993-94 = 100)								
Month	Mining		Manufacturing		Electricity		General	
	(104.73)		(793.58)		(101.69)		(1000.00)	
	2007-2008	2008-2009	2007-2008	2008-2009	2007-2008	2008-2009	2007-2008	2008-2009
Apr	161.2	171.1	267.1	285.0	215.2	218.2	250.7	266.3
May	168.1	177.4	280.5	293.1	225.6	230.1	263.1	274.6
Jun	158.6	158.8	273.6	290.4	211.7	217.1	255.3	269.2
Jul	157.0	161.7	272.9	294.7	216.2	225.9	255.0	273.8
Aug	156.0	160.2	279.2	283.1	219.9	221.6	260.3	264.0
Sep*	154.0	162.8	281.0	294.4	210.1	219.3	260.5	273.0
Oct	169.6		280.2		221.4		262.6	
Nov	174.2		278.9		210.9		261.0	
Dec	184.1		306.3		219.6		284.7	
Jan	186.7		301.9		223.8		281.9	
Feb	183.6		296.8		211.3		276.2	



Month	Mining		Manufacturing		Electricity		General	
	(104.73)		(793.58)		(101.69)		(1000.00)	
	2007-2008	2008-2009	2007-2008	2008-2009	2007-2008	2008-2009	2007-2008	2008-2009
Mar	205.8		327.9		227.1		304.9	
Average								
Apr-Sep	159.2	165.3	275.7	290.1	216.5	222.0	257.5	270.2
Growth over the corresponding period of previous year								
Sep	4.9	5.7	7.4	4.8	4.5	4.4	7.0	4.8
Apr-Sep	4.9	3.8	10.0	5.2	7.7	2.5	9.5	4.9
*Indices for Sep 2008 are Quick Estimates.								
Note : Indices for the months of Jun'2008 and Aug'2008 incorporate updated production data.								

**Table 3 : Index of Industrial Production**
**(Growth at 2-digit level)**
**(Base : 1993-94 = 100)**

Industry Code	Description	Weight	Index		Cumulative Index		Percentage growth	
			Sept'2007	Sept'2008	Apr-Sep		Sept'2008	Apr-Sep
					2007-2008	2008-2009		2008-2009
20-21	Food Products	90.8	126.2	132.7	150.3	148.2	5.2	-1.4
22	Beverages, Tobacco and Related Products	23.8	483.9	540.5	481.5	593.9	11.7	23.3
23	Cotton Textiles	55.2	165.9	150.5	164.1	163.2	-9.3	-0.5
24	Wool, Silk and man-made fibre textiles	22.6	262.1	265.9	276.3	275.8	1.4	-0.2
25	Jute and other vegetable fibre Textiles (except cotton)	5.9	123.4	122.9	120.3	113.7	-0.4	-5.5
26	Textile Products (including Wearing Apparel)	25.4	289.5	284.1	294.5	305.6	-1.9	3.8
27	Wood and Wood Products; Furniture and Fixtures	27.0	127.5	115.1	129.3	115.9	-9.7	-10.4
28	Paper & Paper Products and Printing, Publishing & Allied Industries	26.5	250.6	271.4	249.9	257.5	8.3	3.0
29	Leather and Leather & Fur Products	11.4	171.9	157.2	165.5	165.0	-8.6	-0.3
30	Basic Chemicals & Chemical Products (except products of Petroleum & Coal)	140.0	321.8	310.1	317.2	336.5	-3.6	6.1



Industry Code	Description	Weight	Index		Cumulative Index		Percentage growth	
			Sept'2007	Sept'2008	Apr-Sep		Sep'2008	Apr-Sep
					2007-2008	2008-2009		2008-2009
31	Rubber, Plastic, Petroleum and Coal Products	57.3	240.6	232.3	246.3	236.0	-3.4	-4.2
32	Non-Metallic Mineral Products	44.0	318.1	316.3	319.6	321.5	-0.6	0.6
33	Basic Metal and Alloy Industries	74.5	308.9	326.1	301.5	320.2	5.6	6.2
34	Metal Products and Parts, except Machinery and Equipment	28.1	188.4	212.5	164.6	166.7	12.8	1.3
35-36	Machinery and Equipment other than Transport equipment	95.7	400.3	464.8	374.9	411.7	16.1	9.8
37	Transport Equipment and Parts	39.8	379.3	443.0	358.3	404.1	16.8	12.8
38	Other Manufacturing Industries	25.6	402.0	444.3	328.9	325.4	10.5	-1.1
1	Mining & Quarrying	104.7	154.0	162.8	159.2	165.3	5.7	3.8
2-3	Manufacturing	793.6	281.0	294.4	275.7	290.1	4.8	5.2
4	Electricity	101.7	210.1	219.3	216.5	222.0	4.4	2.5
	General Index	1000.0	260.5	273.0	257.5	270.2	4.8	4.9

**Table 4 : Index of Industrial Production - Use-Based**

(Base : 1993-94 = 100)						
Month	Basic goods		Capital goods		Intermediate goods	
	(355.65)		(92.57)		(265.14)	
	2007-2008	2008-2009	2007-2008	2008-2009	2007-2008	2008-2009
Apr	212.8	221.3	278.4	313.0	249.2	256.9
May	223.6	230.4	334.7	349.0	264.2	269.1
Jun	215.8	220.5	358.3	386.3	260.1	267.5
Jul	216.7	228.3	317.4	382.2	264.1	271.1
Aug	217.6	225.2	368.6	371.8	273.3	256.5
Sep*	214.0	223.9	389.1	462.1	264.8	256.0
Oct	227.2		350.8		260.5	
Nov	220.8		392.1		255.7	
Dec	230.0		420.5		271.7	
Jan	235.2		340.0		266.6	
Feb	226.4		356.8		259.4	



Month	Basic goods		Capital goods		Intermediate goods	
	(355.65)		(92.57)		(265.14)	
	2007-2008	2008-2009	2007-2008	2008-2009	2007-2008	2008-2009
Mar	246.3		543.4		279.3	
Average						
Apr-Sep	216.8	224.9	341.1	377.4	262.6	262.9
Growth over the corresponding period of previous year						
Sep	6.5	4.6	20.9	18.8	10.1	-3.3
Apr-Sep	9.3	3.7	20.2	10.6	9.9	0.1
*Indices for Sep 2008 are Quick Estimates.						
Note : Indices for the months of Jun'2008 and Aug'2008 incorporate updated production data.						

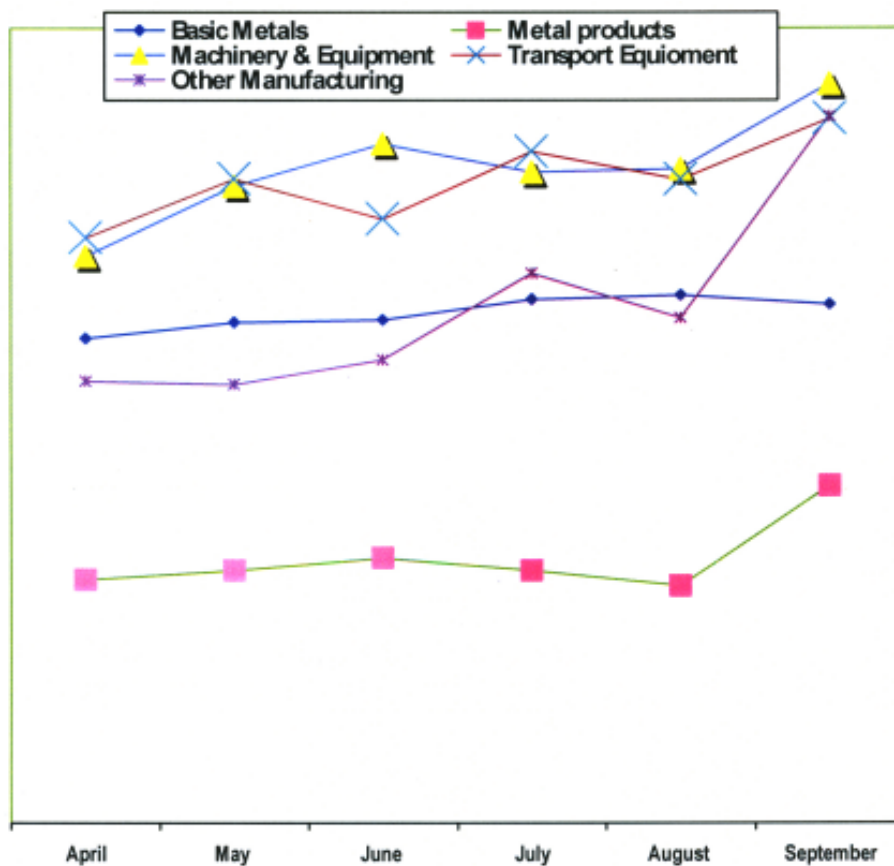
**Table 4 : Index of Industrial Production - Use-Based**
**(2-Digit Level)**
**(Base : 1993-94 = 100)**

Industry code	Description	Weight	Apr'2008	May'2008	Jun'2008	Jul'2008	Aug'2008	Sep'2008
20-21	Food Products	90.8	209.5	150.6	130.0	133.9	132.7	132.7
22	Beverages, Tobacco and Related Products	23.8	611.0	678.2	602.2	621.5	510.2	540.5
23	Cotton Textiles	55.2	162.1	171.4	168.6	164.7	161.7	150.5
24	Wool, Silk and man-made fibre textiles	22.6	259.2	321.8	296.9	248.1	263.0	265.9
25	Jute and other vegetable fibre Textiles (except cotton)	5.9	109.0	106.7	109.0	118.2	116.6	122.9
26	Textile Products (including Wearing Apparel)	25.4	311.3	323.8	301.4	324.4	288.7	284.1
27	Wood and Wood Products; Furniture and Fixtures	27.0	107.7	99.3	127.4	123.5	122.5	115.1
28	Paper & Paper Products and Printing, Publishing & Allied Industries	26.5	247.5	259.0	243.4	261.7	261.9	271.4
29	Leather and Leather & Fur Products	11.4	148.0	182.4	169.8	172.0	160.3	157.2
30	Basic Chemicals & Chemical Products (except products of Petroleum & Coal)	140.0	341.7	347.4	343.8	348.2	327.9	310.1
31	Rubber, Plastic, Petroleum and Coal Products	57.3	234.7	227.0	247.8	240.9	233.5	232.3
32	Non-Metallic Mineral Products	44.0	317.8	329.0	321.3	332.7	311.6	316.3



Industry code	Description	Weight	Apr'2008	May'2008	Jun'2008	Jul'2008	Aug'2008	Sep'2008
33	Basic Metal and Alloy Industries	74.5	303.4	314.5	316.1	329.2	331.9	326.1
34	Metal Products and Parts, except Machinery and Equipment	28.1	153.2	158.9	167.1	159.3	149.0	212.5
35-36	Machinery and Equipment other than Transport equipment	95.7	356.6	400.7	427.1	409.7	411.5	464.8
37	Transport Equipment and Parts	39.8	368.4	405.5	380.2	422.2	405.1	443.0
38	Other Manufacturing Industries	25.6	277.7	275.8	291.1	346.1	317.5	444.3
1	Mining & Quarrying	104.7	171.1	177.4	158.8	161.7	160.2	162.8
2-3	Manufacturing	793.6	285.0	293.1	290.4	294.7	283.1	294.4
4	Electricity	101.7	218.2	230.1	217.1	225.9	221.6	219.3
	General Index	1000.0	266.3	274.6	269.2	273.8	264.0	273.0

A quick analysis of the above table indicates that while for most engineering products, the growth rate has been positive for the data available during April-September 2008, the trend is one of decline, except possibly in the month of September (as a consequence of festival seasons) as is given in the graph below :





**Engineering Exports Trend**

Clearly, therefore, as production growth has been rather inconsistent, the impact on engineering exports too would have been similar. According to the Ministry of Commerce & Industry, India's cumulative value of exports for the period April- October, 2008 was US\$ 107796 million (Rs. 467505 crore) as against US\$ 87144 million (Rs. 354064 crore) registering a growth of 23.7 per cent in Dollar terms and 32 per cent in Rupee terms over the same period last year. Exports during October, 2008 were valued at US\$ 12822 million which was 12.1 per cent lower than the level of US\$ 14588 million during October, 2007. In rupee terms, exports touched Rs.62387 crore, which was 8.2 per cent higher than the value of exports during October, 2007.

<b>EXPORTS &amp; IMPORTS (US \$ million)</b>		
<b>PROVISIONAL</b>	<b>OCTOBER</b>	<b>APRIL-OCTOBER</b>
<b>EXPORTS (including re-exports)</b>		
2007-2008	14588	87144
2008-2009	12822	107796
%Growth 2008-09/2007-2008	-12.1	23.7
<b>IMPORTS</b>		
2007-2008	21126	132780
2008-2009	23360	180789
%Growth 2008-09/2007-2008	10.6	36.2
<b>TRADE BALANCE</b>		
2007-2008	-6538	-45636
2008-2009	-10538	-72993

**Exports & Imports : (Rs. Crore)**

<b>(PROVISIONAL)</b>		
	<b>OCTOBER</b>	<b>APRIL-OCTOBER</b>
<b>EXPORTS(including re-exports)</b>		
2007-2008	57641	354064
2008-2009	62387	467505
%Growth 2008-09/2007-2008	8.2	32.0
<b>IMPORTS</b>		
2007-2008	83472	539879
2008-2009	113659	786059
%Growth 2008-09/2007-2008	36.2	45.6
<b>TRADE BALANCE</b>		
2007-2008	-25831	-185815
2008-2009	-51272	-318554
Figures for 2007-08 are the latest revised whereas figures for 2008-09 are provisional		

Assuming that engineering accounts for 20% of India's total exports, India's engineering exports was to the tune of USD 2564.4 million in October 2008 which is 10.65% lower than USD 2870.38 million in October 2007.

It may be mentioned that the full impact of the global slowdown would be felt by exporters in the months subsequent to October 2008. And the responses received from our members indicate that the global financial crisis was being felt from November 2008 onwards.

*(To be continued at next issue)*

*(Source : EEPC Policy Department)*