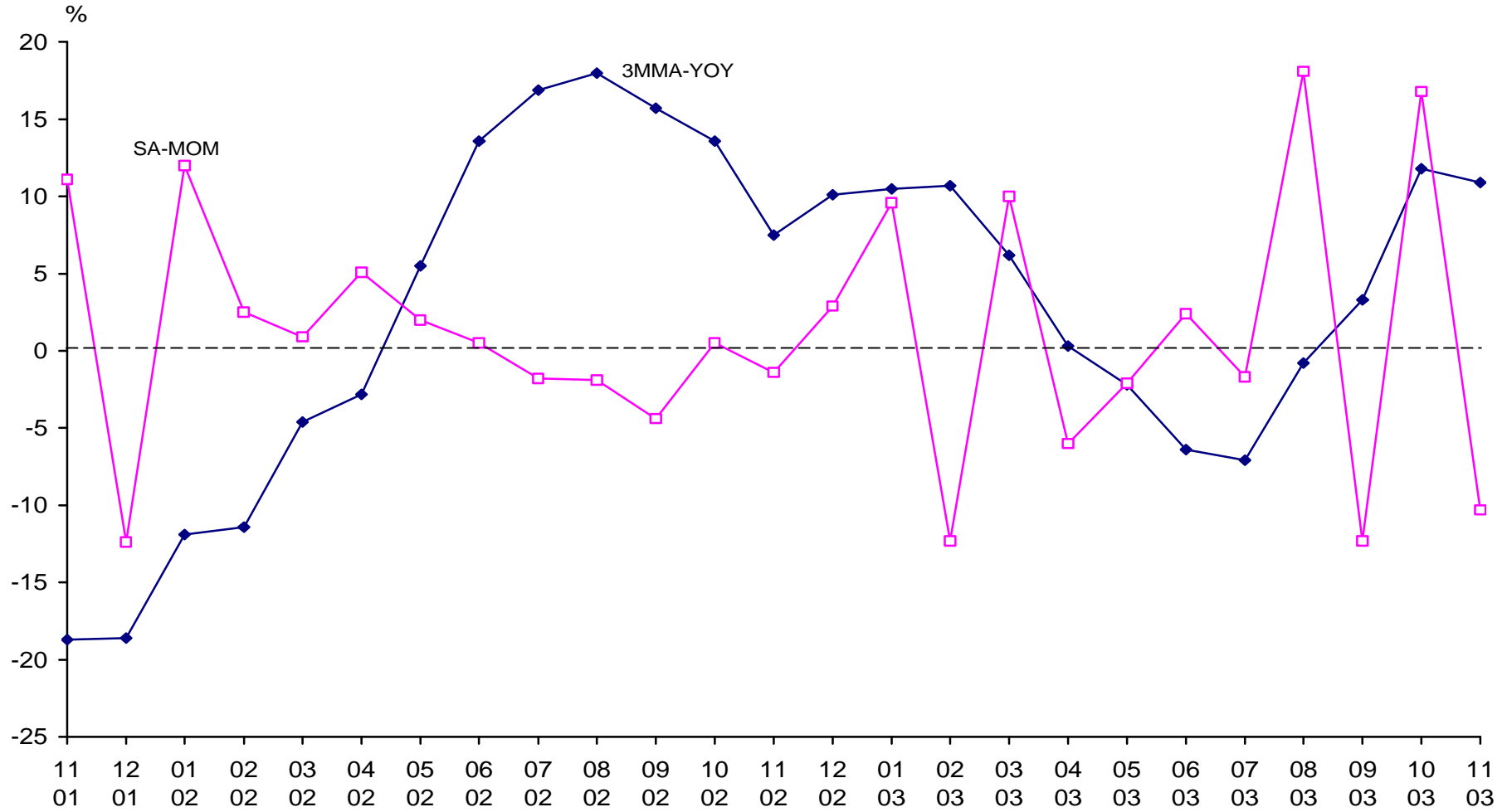


### GROWTH OF MANUFACTURING SECTOR



Note :

- SA Index - Seasonally adjusted index
- 3MMA YOY - 3-month moving average year-on-year
- SA MOM - Seasonally adjusted month-on-month

**TABLE 1: PERFORMANCE BY CLUSTERS**

Industry Cluster	2002 Value Added Share (%)	% change over corresponding period of previous year				% change of 3-month moving average over corresponding period of previous year		
		Sep 03	Oct 03	Nov 03 *	Cum Jan – Nov 03	Sep 03	Oct 03	Nov 03 *
<b>Total Manufacturing <sup>1</sup></b>	100.0	5.8	19.3	7.7	3.1	3.3	11.8	10.9
<b>Electronics</b>	32.3	10.2	13.7	11.2	4.1	4.9	9.2	11.7
Semiconductors	12.4	37.6	30.8	31.0	23.9	25.1	29.7	33.2
Computer Peripherals	6.1	-16.9	-7.9	3.7	-10.9	-21.0	-16.9	-7.2
Data Storage	5.5	23.2	21.0	11.2	10.4	22.0	24.5	18.6
Infocomms & Consumer Electronics	5.0	-16.8	2.7	-10.9	-13.3	-14.8	-10.3	-8.1
Other Electronic Modules & Components	3.3	18.1	20.6	18.3	5.7	5.9	14.1	19.0
<b>Chemicals</b>	13.5	8.6	4.3	3.1	6.1	2.4	3.3	5.3
Petroleum	3.9	6.5	-4.1	-11.7	6.7	5.8	2.0	-3.4
Petrochemicals	3.7	8.5	15.5	22.9	10.4	0.9	5.4	15.4
Specialty Chemicals	3.7	8.1	6.2	10.0	0.1	-2.8	0.5	8.1
Others	2.2	13.5	5.8	4.7	5.3	2.8	5.6	7.8
<b>Biomedicals</b>	17.9	11.2	146.0	27.4	15.2	16.8	71.2	59.8
Pharmaceuticals	15.1	13.9	201.9	34.0	18.0	19.6	88.1	79.0
Medical Technology	2.8	2.6	-0.9	7.0	0.4	0.1	0.8	2.8

\* Preliminary

<sup>1</sup> Excluding rubber processing

**TABLE 1: PERFORMANCE BY CLUSTERS (Continued)**

Industry Cluster	2002 Value Added Share (%)	% change over corresponding period of previous year				% change of 3-month moving average over corresponding period of previous year		
		Sep 03	Oct 03	Nov 03*	Cum Jan – Nov 03	Sep 03	Oct 03	Nov 03*
<b>Precision Engineering</b>	14.5	3.3	0.3	3.6	-2.2	-3.6	-1.1	2.4
Machinery & Systems	4.1	6.6	7.6	17.3	5.0	-1.3	4.9	10.3
Precision Modules & Components	10.4	1.8	-2.7	-2.1	-5.2	-4.6	-3.6	-1.0
<b>Transport Engineering</b>	11.0	-10.3	-8.4	-5.6	-7.5	-8.1	-7.8	-8.2
Marine & Offshore Engineering	4.9	-8.5	-7.9	6.2	-10.5	-8.3	-5.2	-4.0
Aerospace	5.1	-9.6	-7.9	-15.6	-4.4	-6.6	-8.5	-10.9
Land	1.0	-30.9	-16.2	-18.8	-3.8	-17.3	-23.9	-22.2
<b>General Manufacturing Industries</b>	10.8	-0.2	-0.1	-1.1	-4.4	-2.3	-2.0	-0.4
Printing	3.4	5.0	7.5	-1.2	-0.8	2.6	4.4	3.6
Food, Beverages & Tobacco	2.8	-0.7	-5.0	-0.5	-1.0	0.1	-2.5	-2.1
Miscellaneous Industries	4.6	-3.7	-2.8	-1.2	-8.6	-7.2	-6.3	-2.6

\* Preliminary

<sup>1</sup> Excluding rubber processing

**TABLE 2: MONTHLY INDEX OF INDUSTRIAL PRODUCTION BY INDUSTRY CLUSTER, NOV 2001 TO NOV 2003**

Period	Total Manufacturing <sup>1</sup>	Electronics						Chemicals				
		Total	Semi-conductors	Computer Peripherals	Data Storage	Infocomms & Consumer Electronics	Other Electronic Modules & Components	Total	Petroleum	Petro-Chemicals	Specialty Chemicals	Others
<b>1999 = 100</b>												
2001 Nov	105.7	98.3	106.1	97.8	140.4	71.8	101.4	100.3	86.5	126.0	115.9	95.3
Dec	100.4	101.4	107.6	93.5	168.9	66.6	96.4	103.8	90.9	133.4	115.2	96.4
2002 Jan	101.8	94.6	97.6	101.1	135.7	67.6	96.2	108.6	90.3	131.8	123.7	118.1
Feb	91.2	83.4	108.1	79.7	111.7	58.7	69.2	92.0	72.8	129.2	102.6	93.4
Mar	114.0	109.2	143.4	102.7	150.9	74.1	91.7	115.3	95.8	148.0	128.2	120.1
Apr	109.5	103.2	121.2	106.3	157.1	62.9	103.3	118.5	93.9	155.7	136.1	127.5
May	116.7	97.1	135.6	104.1	124.0	56.0	108.7	110.9	79.6	147.2	144.2	123.9
Jun	119.9	99.4	153.0	105.7	112.8	59.2	95.7	121.3	98.1	157.7	148.1	119.4
Jul	116.3	96.7	130.1	106.7	125.0	56.8	97.7	117.4	98.1	143.6	135.1	123.9
Aug	113.2	100.1	133.0	119.2	121.1	60.6	101.7	113.2	91.1	148.5	130.4	118.2
Sep	110.9	112.7	147.6	117.0	156.2	69.2	105.0	110.2	89.8	153.9	120.9	108.4
Oct	108.8	110.1	138.8	107.4	154.0	71.8	108.9	117.4	100.4	152.2	123.4	120.2
Nov	104.5	107.5	147.4	109.5	148.1	62.0	110.3	111.5	97.7	138.2	114.1	117.5
Dec	120.2	117.2	170.1	96.9	190.5	61.5	104.2	116.2	99.9	156.8	121.5	111.6
2003 Jan	115.4	101.7	146.8	105.5	130.9	58.5	102.9	122.2	98.0	169.2	130.8	128.6
Feb	89.4	86.4	137.8	77.0	114.2	47.2	89.4	109.4	92.6	148.4	113.9	108.6
Mar	121.0	111.3	169.3	97.1	165.2	61.3	86.6	122.9	105.6	149.8	131.7	131.9
Apr	105.1	99.4	143.8	90.2	147.8	53.4	98.4	125.6	104.7	166.6	131.1	132.0
May	106.5	92.6	145.4	91.9	128.6	44.3	94.9	124.6	101.8	171.7	134.7	125.8
Jun	112.5	99.5	172.2	87.5	123.3	53.4	93.5	120.2	94.1	172.1	134.1	121.7
Jul	109.0	97.6	151.7	84.4	140.1	52.0	93.7	119.6	104.5	146.6	129.9	121.5
Aug	125.2	103.1	159.1	89.3	158.3	49.4	104.8	109.9	95.2	136.4	114.9	115.8
Sep	117.3	124.2	203.1	97.2	192.5	57.6	124.0	119.7	95.6	166.9	130.7	123.1
Oct	129.8	125.2	181.5	98.9	186.2	73.8	131.3	122.5	96.3	175.9	131.1	127.2
Nov*	112.5	119.5	193.2	113.6	164.7	55.2	130.5	115.0	86.3	169.8	125.5	123.0

\*Preliminary data. Previous months' indices were revised.

<sup>1</sup> Excluding rubber processing.

**TABLE 2: MONTHLY INDEX OF INDUSTRIAL PRODUCTION BY INDUSTRY CLUSTER, NOV 2001 TO NOV 2003 (Continued)**

Period	Biomedicals			Precision Engineering			Transport Engineering				General Manufacturing Industries				
	Total	Pharmaceuticals	Medical Technology	Total	Machinery & Systems	Precision Modules & Components	Total	Marine & Offshore Engineering	Aerospace	Land	Total	Printing	Food, Beverages & Tobacco	Miscellaneous Industries	
<b>1999 = 100</b>															
2001	Nov	157.0	161.7	136.1	90.2	82.6	93.4	138.7	157.0	123.5	92.2	92.1	96.6	106.2	83.6
	Dec	99.5	96.7	111.5	88.4	94.6	85.8	124.2	137.0	115.1	83.5	93.6	94.3	112.1	85.6
2002	Jan	126.2	122.7	141.4	94.2	83.4	98.7	128.6	134.1	126.6	100.2	93.0	87.2	114.7	87.6
	Feb	151.2	157.9	121.8	75.4	71.1	77.2	117.2	113.0	129.0	83.1	71.9	71.7	88.8	65.1
	Mar	161.0	167.0	134.6	100.0	100.6	99.8	142.4	138.1	154.8	106.5	91.7	96.6	103.8	83.7
	Apr	130.5	126.9	146.6	100.3	88.1	105.4	153.8	159.9	155.7	100.6	90.1	85.7	104.8	86.7
	May	249.4	273.0	145.1	102.8	95.9	105.7	134.6	137.9	140.7	80.0	88.6	91.1	99.2	82.7
	Jun	258.1	284.0	143.9	101.1	104.6	99.6	146.4	137.0	165.3	110.4	85.0	86.0	94.9	80.2
	Jul	224.2	243.2	140.7	105.8	109.0	104.5	144.0	152.9	141.7	94.0	91.3	95.3	104.5	83.5
	Aug	196.7	210.6	135.4	102.4	99.1	103.8	137.0	124.7	155.7	122.8	90.0	96.9	101.4	81.1
	Sep	114.1	107.0	145.1	101.4	107.0	99.1	152.2	147.5	164.7	118.2	89.7	95.1	105.2	80.2
	Oct	101.9	90.5	151.8	100.7	97.6	102.1	144.3	131.0	168.6	106.6	91.0	92.8	105.7	83.9
	Nov	100.2	92.6	133.8	94.7	93.6	95.1	130.7	116.9	152.4	110.8	88.1	100.4	103.5	74.2
	Dec	207.4	223.9	135.1	95.6	106.4	91.0	131.4	121.1	150.0	103.0	88.4	91.4	109.4	77.9
2003	Jan	234.1	255.7	138.7	91.0	88.1	92.2	124.7	115.6	139.0	111.7	85.3	84.0	117.2	73.0
	Feb	106.5	105.3	111.8	77.0	72.7	78.8	119.1	115.5	129.1	90.6	66.5	68.3	87.3	56.7
	Mar	231.3	250.2	148.0	98.4	109.3	93.9	136.9	122.1	161.9	106.9	83.1	90.3	100.6	71.6
	Apr	143.7	144.0	142.7	93.8	96.6	92.6	123.4	110.6	143.4	105.0	80.2	79.8	96.4	73.8
	May	179.9	188.3	143.1	95.0	98.6	93.4	123.8	114.7	142.2	88.8	83.3	84.4	97.7	76.6
	Jun	191.3	201.4	146.7	102.0	111.6	97.9	135.5	123.6	151.7	130.9	86.8	90.7	101.3	78.5
	Jul	169.1	176.6	136.0	98.2	97.3	98.6	130.7	127.9	139.6	101.8	90.2	97.4	107.2	79.0
	Aug	328.8	372.4	136.6	95.4	99.5	93.6	130.9	126.7	143.2	93.6	84.8	97.5	99.6	71.0
	Sep	126.9	121.9	148.9	104.8	114.1	100.8	136.6	135.0	148.9	81.6	89.6	99.9	104.5	77.2
	Oct	250.5	273.3	150.5	101.0	105.0	99.3	132.2	120.6	155.3	89.4	90.9	99.8	100.4	81.5
	Nov *	127.7	124.2	143.2	98.1	109.8	93.1	123.4	124.2	128.5	90.0	87.1	99.2	103.0	73.3

\*Preliminary data. Previous months' indices were revised.  
 1 Excluding rubber processing.

**TABLE 3 : MANUFACTURING SECTOR GROWTH**

Period	INDEX ( 1999 = 100 )	SA INDEX	SA MOM GROWTH (%)	YOY INDEX GROWTH (%)	3MMA YOY INDEX GROWTH (%)
2001 Nov	105.7	106.7	11.1	-13.1	-18.7
Dec	100.4	93.5	-12.4	-21.9	-18.6
2002 Jan	101.8	104.7	12.0	2.8	-11.9
Feb	91.2	107.3	2.5	-12.1	-11.4
Mar	114.0	108.3	0.9	-4.0	-4.6
Apr	109.5	113.8	5.1	8.3	-2.8
May	116.7	116.1	2.0	13.7	5.5
Jun	119.9	116.7	0.5	18.5	13.6
Jul	116.3	114.6	-1.8	18.8	16.9
Aug	113.2	112.4	-1.9	16.6	18.0
Sep	110.9	107.4	-4.4	11.7	15.7
Oct	108.8	107.9	0.5	12.4	13.6
Nov	104.5	106.4	-1.4	-1.1	7.5
Dec	120.2	109.5	2.9	19.7	10.1
2003 Jan	115.4	120.0	9.6	13.4	10.5
Feb	89.4	105.2	-12.3	-2.0	10.7
Mar	121.0	115.7	10.0	6.1	6.2
Apr	105.1	108.8	-6.0	-4.0	0.3
May	106.5	106.5	-2.1	-8.7	-2.2
Jun	112.5	109.1	2.4	-6.2	-6.4
Jul	109.0	107.2	-1.7	-6.3	-7.1
Aug	125.2	126.6	18.1	10.6	-0.8
Sep	117.3	111.0	-12.3	5.8	3.3
Oct	129.8	129.7	16.8	19.3	11.8
Nov*	112.5	116.4	-10.3	7.7	10.9

Note:

\*

SA Index  
3MMA YOY  
SA MOM

- Preliminary
- Seasonally adjusted index
- 3-month moving average year-on-year
- Seasonally adjusted month-on-month