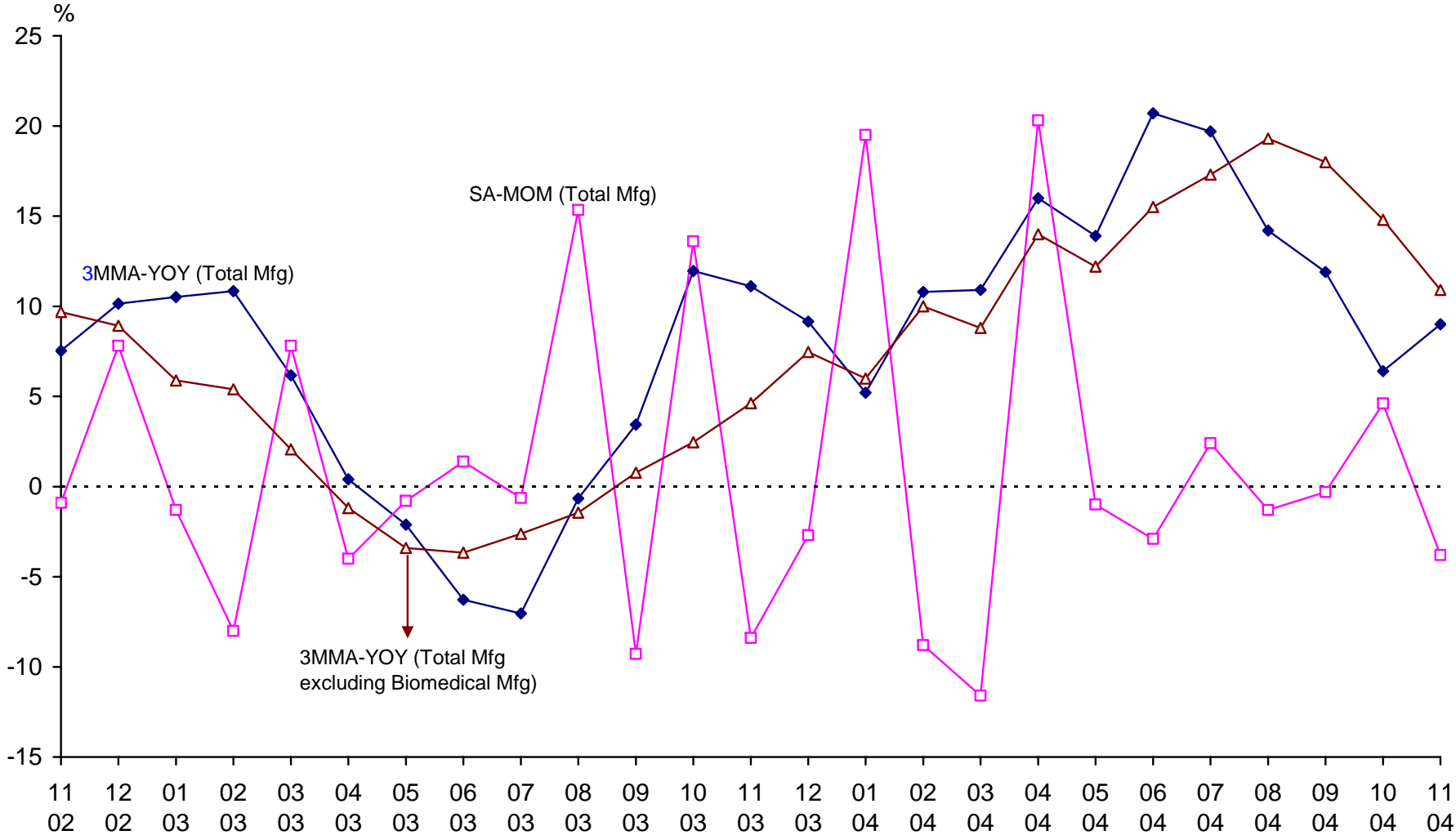


### GROWTH OF MANUFACTURING SECTOR



Note :  
 3MMA YOY - 3-month moving average year-on-year  
 SA MOM - Seasonally adjusted month-on-month

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**TABLE 1: PERFORMANCE BY CLUSTERS**

Industry Cluster	2003 Value Added Share (%)	% change over corresponding period of previous year				% change of 3-month moving average over corresponding period of previous year		
		Sep 04	Oct 04	Nov 04 *	Cum Jan – Nov 04	Sep 04	Oct 04	Nov 04 *
<b>Electronics</b>	31.4	21.2	11.2	3.1	18.7	26.8	20.0	11.8
Semiconductors	15.6	22.5	12.8	-0.8	29.0	32.9	22.2	11.7
Computer Peripherals	3.9	27.5	34.9	-9.0	13.7	39.6	35.7	15.8
Data Storage	5.1	-7.4	-7.4	-19.9	-9.0	-9.9	-7.4	-11.5
Infocomms & Consumer Electronics	4.4	55.9	18.2	63.0	43.9	50.0	40.0	43.8
Other Electronic Modules & Components	2.5	-11.8	-20.9	-16.5	-0.5	4.2	-8.7	-16.5
<b>Chemicals</b>	14.1	11.7	6.3	15.7	7.7	11.2	12.2	11.1
Petroleum	4.0	24.6	20.4	32.6	10.4	14.6	22.4	25.5
Petrochemicals	4.0	6.6	0.2	11.6	7.2	12.2	9.6	6.0
Specialty Chemicals	3.8	1.3	-3.3	1.9	5.0	4.8	3.2	-0.1
Others	2.3	14.2	6.5	16.4	8.3	14.2	12.7	12.3
<b>Precision Engineering</b>	14.7	8.6	-0.8	0.4	8.2	10.1	5.3	2.8
Machinery & Systems	4.9	8.8	-0.8	0.3	16.3	14.0	5.4	2.9
Precision Modules & Components	9.7	8.5	-0.8	0.5	4.5	8.2	5.2	2.7

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

Industry Cluster	2003 Value Added Share (%)	% change over corresponding period of previous year				% change of 3-month moving average over corresponding period of previous year		
		Sep 04	Oct 04	Nov 04*	Cum Jan – Nov 04	Sep 04	Oct 04	Nov 04*
<b>Transport Engineering</b>	9.6	32.5	31.3	31.9	22.8	29.3	29.9	31.9
Marine & Offshore Engineering	4.5	42.9	50.7	32.3	32.4	38.2	43.8	41.6
Aerospace	4.5	22.0	15.7	34.6	16.0	22.2	17.6	23.5
Land	0.7	17.5	7.3	4.8	-2.3	3.6	8.2	9.6
<b>General Manufacturing Industries</b>	11.3	0.7	-1.9	-0.4	-0.1	1.5	0.7	-0.5
Printing	3.4	-3.0	-1.5	-1.8	1.3	-2.1	-2.8	-2.1
Food, Beverages & Tobacco	2.9	9.5	8.1	7.0	1.5	8.1	9.0	8.2
Miscellaneous Industries	5.0	-1.0	-6.9	-3.2	-1.9	0.6	-1.1	-3.8
<b>Manufacturing excluding Biomedical Manufacturing</b>	81.2	16.3	8.9	7.3	13.0	18.0	14.8	10.8
<b>Biomedical Manufacturing</b>	18.8	-9.7	-19.9	58.1	12.8	-16.3	-25.0	-0.4
Pharmaceuticals	16.0	-11.8	-22.7	76.4	14.3	-18.8	-28.0	-0.5
Medical Technology	2.8	-2.7	5.2	-0.5	5.1	-2.3	-3.5	0.5
<b>Total Manufacturing</b>	100.0	12.9	2.2	13.2	13.0	11.9	6.4	9.0

\* Preliminary

**TABLE 2: MONTHLY INDEX OF INDUSTRIAL PRODUCTION BY INDUSTRY CLUSTER, NOV 2002 TO NOV 2004**

Period	Electronics						Chemicals					Precision Engineering			
	Total	Semi-conductors	Computer Peripherals	Data Storage	Infocomms & Consumer Electronics	Other Electronic Modules & Components	Total	Petroleum	Petrochemicals	Specialty Chemicals	Others	Total	Machinery & Systems	Precision Modules & Components	
<b>2003 = 100</b>															
2002	Nov	100.9	89.3	114.9	95.2	113.7	93.2	91.6	99.9	79.0	87.3	94.5	97.0	85.7	102.7
	Dec	106.8	104.5	101.0	119.4	102.9	87.9	98.3	103.3	96.8	92.6	92.8	97.8	99.1	97.4
2003	Jan	93.3	87.3	114.9	91.5	77.9	101.5	102.7	100.8	103.9	102.2	105.0	95.4	88.7	98.4
	Feb	79.3	81.7	84.2	76.1	64.8	91.2	91.0	95.5	93.8	86.4	87.0	79.8	70.6	84.0
	Mar	101.1	99.5	104.0	115.9	90.6	90.7	103.5	108.7	96.2	101.7	107.3	104.6	107.3	103.4
	Apr	93.7	84.9	94.8	106.1	92.2	102.1	103.5	104.8	104.9	98.5	107.4	95.9	92.5	97.4
	May	90.0	82.9	97.5	98.9	82.5	97.4	102.2	102.7	106.2	98.9	101.6	96.9	94.6	98.0
	Jun	92.3	97.4	91.2	80.8	97.4	88.6	99.3	95.2	104.9	101.8	95.1	103.5	109.0	101.0
	Jul	91.5	88.6	88.2	97.5	97.7	85.0	99.7	105.9	91.2	100.3	99.6	98.4	94.6	100.2
	Aug	94.2	92.5	92.5	98.6	95.7	93.6	92.3	97.0	85.1	93.1	92.4	98.7	99.9	98.1
	Sep	112.5	123.2	99.9	104.2	114.7	109.9	100.2	97.1	102.5	103.6	97.4	108.5	116.7	104.8
	Oct	114.9	118.5	94.5	112.8	134.6	117.3	103.7	100.3	104.5	107.1	103.2	107.4	107.2	107.5
	Nov	113.2	117.3	119.3	105.9	106.5	110.4	94.5	88.1	97.2	96.3	99.2	101.9	105.3	100.3
	Dec	124.2	126.2	118.9	112.0	145.4	112.3	107.1	103.7	109.6	109.9	105.0	108.9	113.7	106.8
2004	Jan	95.7	103.6	83.9	92.8	97.1	93.0	100.4	98.5	109.6	99.9	92.0	91.8	89.3	92.9
	Feb	101.7	113.9	93.8	99.2	90.5	94.7	100.2	102.2	100.8	99.2	97.6	99.7	106.8	96.5
	Mar	111.5	126.8	99.6	94.2	113.7	105.9	109.0	107.5	106.4	110.1	113.3	116.2	128.8	110.4
	Apr	109.2	121.2	95.8	84.1	131.6	100.9	108.3	108.5	108.0	108.6	107.6	107.5	120.3	101.6
	May	110.7	119.2	107.5	90.6	123.9	99.8	104.0	97.3	110.4	103.0	108.4	107.1	119.5	101.4
	Jun	126.3	146.1	120.4	69.1	166.2	102.4	111.0	114.6	107.2	110.1	111.2	112.8	131.9	104.1
	Jul	119.9	129.7	129.9	83.0	138.2	100.3	103.0	104.5	97.5	101.3	110.3	111.7	119.6	108.1
	Aug	121.7	123.6	134.5	91.2	145.2	103.3	110.1	118.4	106.2	105.1	109.0	106.8	108.1	106.2
	Sep	136.3	151.0	127.4	96.5	178.8	97.0	112.0	121.0	109.3	105.0	111.2	117.9	126.9	113.8
	Oct	127.8	133.7	127.5	104.4	159.2	92.7	110.2	120.8	104.7	103.6	109.9	106.6	106.3	106.7
	Nov*	116.7	116.4	108.5	84.9	173.5	92.2	109.4	116.8	108.5	98.1	115.5	102.3	105.6	100.8

**TABLE 2: MONTHLY INDEX OF INDUSTRIAL PRODUCTION BY INDUSTRY CLUSTER, NOV 2002 TO NOV 2004 (Continued)**

		Transport Engineering				General Manufacturing Industries				Manu- facturing excluding Biomedical Manu- facturing	Biomedical Manufacturing			Total Manu- facturing <sup>1</sup>
		Total	Marine & Offshore Engineering	Aerospace	Land	Total	Printing	Food, Beverages & Tobacco	Miscella- neous Industries		Total	Pharma- ceuticals	Medical Techno- logy	
2002	Nov	104.5	102.1	105.3	113.9	103.6	110.4	96.7	102.9	98.8	55.5	48.3	93.6	91.8
	Dec	103.3	103.8	103.2	89.0	103.0	102.1	98.5	105.9	101.0	124.7	126.6	97.8	104.8
2003	Jan	95.1	90.9	96.1	125.3	106.4	91.8	129.7	103.9	97.1	120.5	125.9	93.7	100.9
	Feb	93.4	97.7	88.7	94.6	80.5	76.3	89.9	78.3	83.2	55.4	50.8	77.9	78.7
	Mar	101.8	93.3	111.7	92.6	100.5	101.3	108.3	96.0	102.2	137.0	144.0	102.5	107.8
	Apr	93.7	85.7	99.6	114.6	93.4	90.3	91.2	96.8	95.6	67.8	61.0	101.3	91.1
	May	94.0	90.4	98.6	87.2	96.5	94.5	92.8	99.8	94.5	86.9	84.3	99.9	93.3
	Jun	105.3	99.5	105.1	158.3	102.8	103.4	95.8	106.2	98.5	94.2	92.5	102.7	97.8
	Jul	99.0	100.6	96.9	103.2	103.4	102.9	101.4	104.8	96.7	81.5	78.3	97.6	94.2
	Aug	101.3	104.3	98.5	97.7	98.4	107.1	95.0	94.3	96.2	174.1	188.8	101.7	108.8
	Sep	107.0	112.7	104.1	80.0	104.2	110.6	99.0	102.8	108.1	83.6	77.7	112.3	104.1
	Oct	99.9	94.1	107.1	90.1	104.4	106.8	95.0	107.6	108.4	171.3	185.5	101.2	118.6
	Nov	98.5	109.0	88.8	87.7	102.0	109.3	96.2	100.2	104.8	70.7	64.7	100.2	99.3
	Dec	111.1	121.6	104.9	68.9	107.4	105.8	105.6	109.3	114.9	57.1	46.6	108.9	105.5
2004	Jan	98.6	101.0	95.8	100.6	87.1	85.4	100.7	81.2	95.0	176.0	194.9	82.6	108.1
	Feb	101.3	95.9	107.3	98.2	89.9	91.3	89.6	89.2	99.5	111.3	116.1	87.5	101.4
	Mar	129.1	138.7	122.2	101.7	101.2	103.9	98.8	100.6	112.8	89.1	76.8	150.1	109.0
	Apr	116.6	126.7	107.8	102.3	96.6	96.4	96.4	96.8	108.0	129.7	134.9	104.1	111.5
	May	109.5	114.9	104.7	101.6	99.9	103.1	100.8	97.2	107.3	137.3	145.8	94.9	112.2
	Jun	124.2	125.6	123.1	120.9	102.3	102.1	99.3	104.1	117.9	112.9	112.1	117.3	117.1
	Jul	128.0	133.3	125.8	98.0	103.9	103.6	106.8	102.6	114.5	99.5	98.0	106.8	112.1
	Aug	127.6	144.4	113.2	99.2	101.7	103.1	104.0	99.4	115.2	109.1	113.3	88.5	114.2
	Sep	141.7	161.1	127.0	94.0	105.0	107.3	108.4	101.7	125.6	75.4	68.6	109.2	117.5
	Oct	131.2	141.9	123.9	96.7	102.3	105.2	102.7	100.2	118.1	137.2	143.4	106.5	121.2
	Nov*	129.9	144.1	119.5	91.8	101.6	107.3	103.0	97.0	112.5	111.8	114.2	99.7	112.4

\*Preliminary

**TABLE 3 : MANUFACTURING SECTOR GROWTH**

Period	INDEX ( 2003 = 100 )	SA INDEX	SA MOM GROWTH (%)	YOY INDEX GROWTH (%)	3MMA YOY INDEX GROWTH (%)
2002 Nov	91.8	94.1	-0.9	-1.1	7.5
Dec	104.8	101.4	7.8	19.7	10.1
2003 Jan	100.9	100.1	-1.3	13.5	10.5
Feb	78.7	92.1	-8.0	-1.9	10.8
Mar	107.8	99.3	7.8	6.1	6.2
Apr	91.1	95.3	-4.0	-3.8	0.4
May	93.3	94.5	-0.8	-8.7	-2.1
Jun	97.8	95.8	1.4	-6.1	-6.3
Jul	94.2	95.2	-0.6	-6.3	-7.0
Aug	108.8	109.8	15.3	10.9	-0.7
Sep	104.1	99.6	-9.3	5.9	3.4
Oct	118.6	113.1	13.6	19.0	12.0
Nov	99.3	103.6	-8.4	8.2	11.1
Dec	105.5	100.8	-2.7	0.7	9.1
2004 Jan	108.1	120.5	19.5	7.1	5.2
Feb	101.4	109.9	-8.8	28.8	10.8
Mar	109.0	97.2	-11.6	1.1	10.9
Apr	111.5	116.9	20.3	22.4	16.0
May	112.2	115.7	-1.0	20.3	13.9
Jun	117.1	112.4	-2.9	19.7	20.7
Jul	112.1	115.1	2.4	19.0	19.7
Aug	114.2	113.6	-1.3	5.0	14.2
Sep	117.5	113.3	-0.3	12.9	11.9
Oct	121.2	118.5	4.6	2.2	6.4
Nov*	112.4	114.0	-3.8	13.2	9.0

Note:

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