

# **Manufacturing: Production and sales**

## **April 2005**

**Embargoed until:  
9 June 2005  
13:00**

**Table A - Selected key figures regarding manufacturing production and sales for April 2005**

<b>Estimates</b>	<b>April 2005</b>	<b>% change between April 2004 and April 2005</b>	<b>% change between February to April 2004 and February to April 2005</b>	<b>% change between January to April 2004 and January to April 2005</b>
Physical volume of manufacturing production index (2000=100)	107,4	+7,1	+3,4	+3,4
Total value of sales of manufactured products (R million)	68 107	+11,4	+5,6	+5,5

<b>Seasonally adjusted estimates</b>	<b>April 2005</b>	<b>% change between March and April 2005</b>	<b>% change between November 2004 to January 2005 and February to April 2005</b>
Physical volume of manufacturing production index (2000=100)	114,1	+2,8	+1,0
Total value of sales of manufactured products (R million)	70 896	+5,1	+1,2

**Key findings regarding manufacturing production and sales for April 2005**

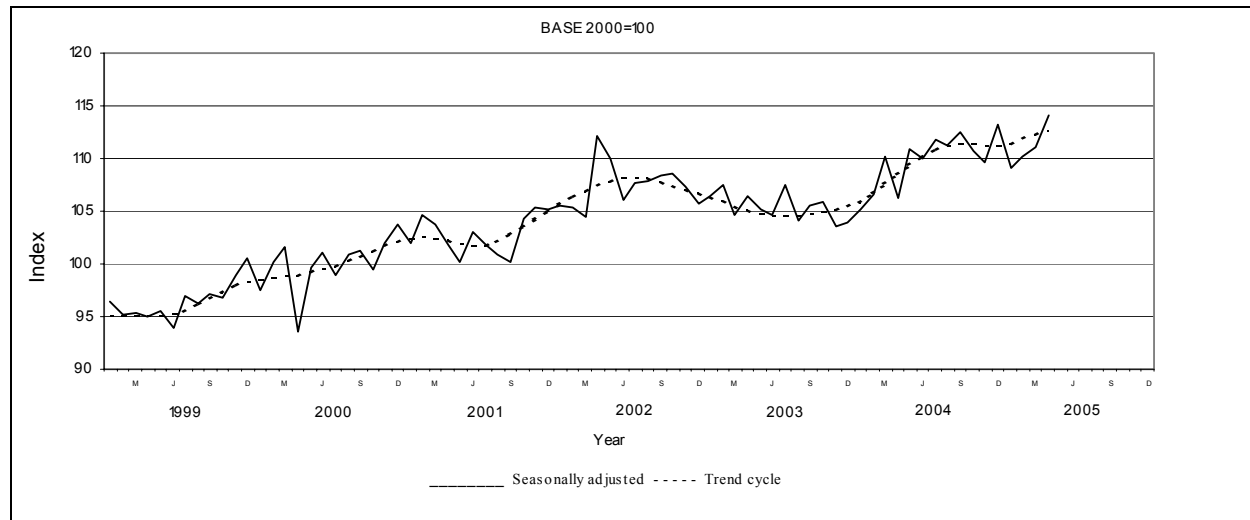
**Manufacturing production increases**

*The estimated manufacturing production for the three months ended April 2005 increased by 1,0% after seasonal adjustment, compared with the previous three months. Higher production was reported by four of the ten manufacturing divisions. Manufacturers reported increased production and sales in April 2005 due to a longer working month after the public holidays in March 2005.*

The major contributor to the seasonally adjusted increase of 1,0% in total manufacturing production for the three months ended April 2005 compared with the previous three months was the food and beverages division (contributing +1,3 percentage points to total manufacturing production), followed by the petroleum, chemical products, rubber and plastic products division (contributing +0,3 of a percentage point), wood and wood products, paper, publishing and printing (contributing +0,1 of a percentage point) and the glass and non-metallic mineral products division (contributing +0,1 of a percentage point). However, these increases were counteracted by decreases reported by the furniture and ‘other’ manufacturing division (contributing -0,5 of a percentage point), the textiles, clothing, leather and footwear division (contributing -0,1 of a percentage point), the radio, television and communication apparatus and professional equipment division (contributing -0,1 of a percentage point) and the motor vehicles, parts and accessories and other transport equipment division (contributing -0,1 of a percentage point) (see table B).

Figure 1 shows the seasonally adjusted and trend series for the volume index of manufacturing production between January 1999 and April 2005. The trend series has been rising since mid-2003 to September 2004, declining slightly up to December 2004 and resuming its upward trend in 2005.

**Figure 1 – Index of the physical volume of manufacturing production**



**Table B - Contribution of manufacturing divisions to total manufacturing production (Base 2000=100)**

Manufacturing divisions	Percentage contribution to the total manufacturing production using the weights according to large sample survey of the manufacturing industry, 2001	Average seasonally adjusted production index for November 2004 to January 2005	Average seasonally adjusted production index for February 2005 to April 2005	Quarterly percentage change of February to April 2005 compared with the preceding three months	Contribution (percentage points) to the seasonally adjusted quarterly percentage change in total manufacturing production
Food and beverages	16,4	112,1	120,7	+7,7	+1,3
Textiles, clothing, leather and footwear	5,4	102,0	100,9	-1,1	-0,1
Wood and wood products, paper, publishing and printing	11,0	104,8	105,2	+0,4	+0,1
Petroleum, chemical products, rubber and plastic products	22,5	107,5	108,7	+1,1	+0,3
Glass and non-metallic mineral products	3,9	112,7	116,2	+3,1	+0,1
Basic iron and steel, non-ferrous metal products, metal products and machinery	22,4	114,5	114,5	0,0	0,0
Electrical machinery	2,7	98,4	98,4	0,0	0,0
Radio, television and communication apparatus and professional equipment	1,3	107,1	102,3	-4,5	-0,1
Motor vehicles, parts and accessories and other transport equipment	8,6	120,5	119,4	-0,9	-0,1
Furniture and other manufacturing divisions	5,8	113,0	103,9	-8,1	-0,5
<b>Total</b>	<b>100,0</b>	<b>110,6</b>	<b>111,8</b>	<b>+1,0</b>	<b>+1,0</b>

1/ The contribution is calculated by multiplying the quarterly percentage change of each manufacturing division with its corresponding weight in the base year, divided by 100.

**Sales of manufactured products increase**

*The estimated total value of sales of manufactured products at current prices for the three months ended April 2005 increased by 1,2% (+R2 497 million), after seasonal adjustment, compared with the previous three months. Higher manufacturing sales were reported by six of the ten manufacturing divisions during this period (see table C). The value of sales of manufactured products at current prices for the three months ended April 2005 was 5,6% higher than for the three months ended April 2004 (see table D).*

The seasonally adjusted increase of 1,2% in the total value of sales of manufactured products at current prices for the three months ended April 2005 was mainly due to increases reported for glass and non-metallic mineral products (+5,7% or +R317 million), motor vehicles, parts and accessories and other transport equipment (+2,7% or +R813 million), furniture and 'other' manufacturing divisions (+2,6% or +R243 million), food and beverages (+2,5% or +R961 million), wood and wood products, paper, publishing and printing (+2,0% or +R351 million) and basic iron and steel, non-ferrous metal products, metal products and machinery (+1,0% or +R446 million) divisions (see table C).

**Table C - Contribution of the manufacturing divisions to the total value of seasonally adjusted sales of manufactured products**

Manufacturing divisions	Seasonally adjusted sales November 2004 to January 2005	Seasonally adjusted sales February to April 2005	Percentage change between November 2004 to January 2005 and February to April 2005	Difference in seasonally adjusted sales of manufacturing divisions between November 2004 to January 2005 and February to April 2005
	R'000	R'000		R'000
Food and beverages	38 180 813	39 141 660	+2,5	960 847
Textiles, clothing, leather and footwear	10 666 187	10 504 735	-1,5	-161 452
Wood and wood products, paper, publishing and printing	17 533 110	17 884 064	+2,0	350 954
Petroleum, chemical products, rubber and plastic products	39 665 624	39 351 492	-0,8	-314 132
Glass and non-metallic mineral products	5 584 398	5 901 538	+5,7	317 140
Basic iron and steel, non-ferrous metal products, metal products and machinery	43 793 868	44 239 508	+1,0	445 640
Electrical machinery	5 101 605	5 017 160	-1,7	-84 445
Radio, television and communication apparatus and professional equipment	2 748 313	2 675 083	-2,7	-73 230
Motor vehicles, parts and accessories and other transport equipment	30 389 368	31 202 640	+2,7	813 272
Furniture and other manufacturing divisions	9 164 205	9 406 919	+2,6	242 714
<b>Total</b>	<b>202 827 491</b>	<b>205 324 804</b>	<b>+1,2</b>	<b>2 497 313</b>

The major contributors to the increase of 5,6% in sales of manufactured products at current prices for the three months ended April 2005 compared with the three months ended April 2004 were the basic iron and steel, non-ferrous metal products, metal products and machinery (+1,6 percentage points or +R3 062 million), motor vehicles, parts and accessories and other transport equipment (+1,4 percentage points or +R2 707 million), food and beverages (+1,2 percentage points or +R2 231 million) and petroleum chemical products, rubber and plastic products (+0,7 of a percentage point or +R1 380 million) (see table D).

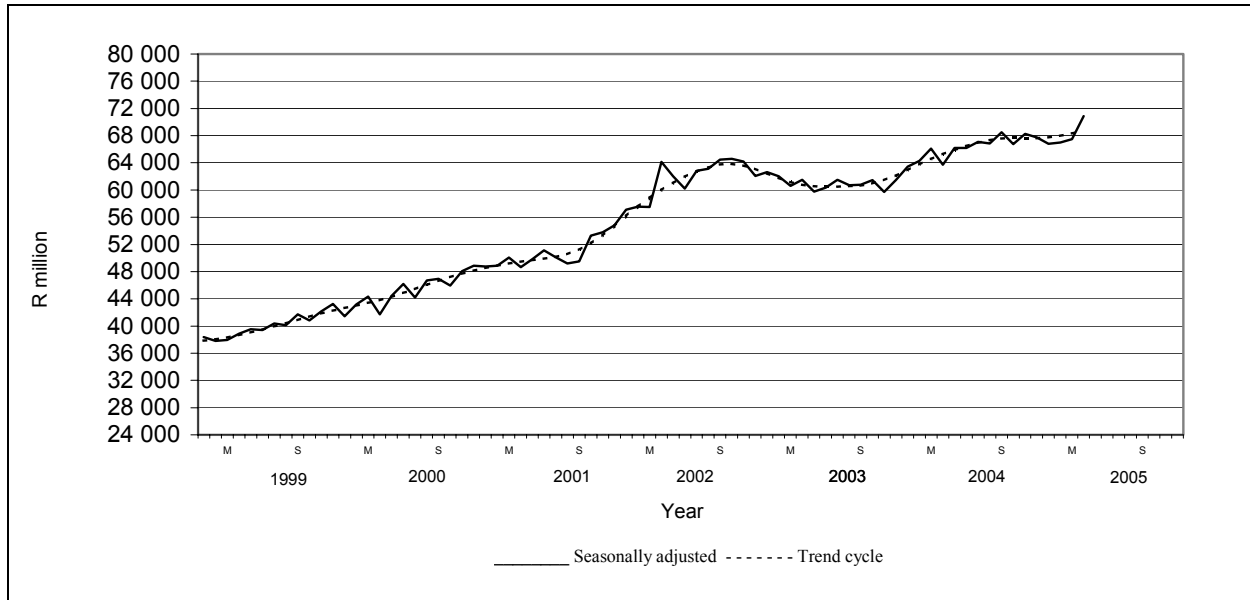
**Table D - Contribution of the manufacturing divisions to total value of sales of manufactured products**

Manufacturing divisions	Percentage contribution to total value of sales of manufactured products February to April 2004	Percentage change between February to April 2004 and February to April 2005	Contribution (percentage points) to the change in the total value of sales of manufactured products 1/	Difference in sales of manufacturing divisions between February to April 2004 and February to April 2005
				R'000
Food and beverages	18,8	+6,2	+1,2	2 231 344
Textiles, clothing, leather and footwear	5,4	+0,7	+0,0	77 512
Wood and wood products, paper, publishing and printing	8,8	+3,1	+0,3	527 485
Petroleum, chemical products, rubber and plastic products	19,5	+3,7	+0,7	1 380 352
Glass and non-metallic mineral products	2,7	+9,9	+0,3	502 752
Basic iron and steel, non-ferrous metal products, metal products and machinery	21,2	+7,5	+1,6	3 061 769
Electrical machinery	2,6	+0,3	-0,0	16 942
Radio, television and communication apparatus and professional equipment	1,7	-9,4	-0,2	-296 513
Motor vehicles, parts and accessories and other transport equipment	14,9	+9,5	+1,4	2 707 433
Furniture and other manufacturing divisions	4,4	+6,9	+0,3	589 843
<b>Total</b>	<b>100,0</b>	<b>+5,6</b>	<b>+5,6</b>	<b>10 798 919</b>

1/ The contribution (percentage points) is calculated by multiplying the percentage change of each manufacturing division with the percentage contribution of the same division during corresponding period in 2004, divided by 100.

Figure 2 shows the seasonally adjusted and trend series for sales of manufactured products between January 1999 and April 2005. After peaking in September 2002, the series declined until May 2003, before resuming its upward movement.

**Figure 2 - Total value of sales of manufactured products at current prices**



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# Contents

	<b>Page</b>
<b>Notes</b> .....	7
<b>Detailed tables</b>	
Table 1 Indices of the physical volume of manufacturing production: Total.....	8
Table 2 Percentage change in the index of the physical volume of manufacturing production: Total .....	8
Table 3 Indices of the physical volume of manufacturing production by manufacturing division ..	9
Table 4 Total of estimated sales of the manufacturing industry (R'000) .....	10
Table 5 Percentage change in the value of sales of the manufacturing industry: Total .....	10
Table 6 Sales of manufactured products by manufacturing division (R'000).....	11
Table 7 Percentage change between current quarter and corresponding quarter of the previous year in the physical volume of manufacturing production and sales by manufacturing division .....	12
<b>Explanatory notes</b> .....	13
<b>Glossary</b> .....	16
<b>Table E - Weights according to manufacturing divisions</b> .....	18
<b>General information</b> .....	19

**Notes**

<b>Forthcoming issues</b>	<b>Issue</b>	<b>Expected release date</b>
	May 2005	12 July 2005
<b>Purpose of the survey</b>	The results of the monthly manufacturing production and sales survey are used to calculate indices of the physical volume of manufacturing production. These indices provide an indicator of the real level of manufacturing activity in the economy. They are used in monitoring the state of the economy and formulation of economic policy. They are also important inputs to estimation of the Gross Domestic Product (GDP).	
<b>Special Data Dissemination Standard of the IMF</b>	The data in this statistical release adhere to the Special Data Dissemination Standard (SDDS) of the International Monetary Fund (IMF), which sets out standards on coverage, periodicity and timeliness of data, access by the public, integrity, and quality of the disseminated data.	



Detailed tables

Table 1 - Indices of the physical volume of manufacturing production: Total

Base 2000 = 100

Month	1999	2000	2001	2002	2003	2004	2005
Indices							
J	83,6	85,2	91,1	93,7	94,4	93,1	1/ 96,2
F	93,7	98,7	102,7	103,6	104,3	103,6	1/ 106,5
M	97,9	104,8	106,8	108,2	108,4	114,0	1/ 114,8
A	90,7	89,0	95,3	104,4	100,0	100,3	1/ 107,4
M	95,9	99,9	100,2	110,3	105,6	111,5	
J	94,8	102,1	104,0	106,7	105,3	110,5	
J	98,3	100,1	102,8	108,8	108,7	112,9	
A	97,7	102,5	102,3	109,8	106,4	113,6	
S	100,9	104,8	103,1	111,4	108,6	115,9	
O	107,3	109,8	114,9	119,6	116,7	* 122,4	
N	109,9	113,6	117,6	119,8	115,1	122,2	
D	86,3	89,5	92,5	92,7	91,4	98,9	
Year	96,4	100,0	102,8	107,4	105,4	109,9	
Seasonally adjusted indices							
J	95,4	96,9	102,4	105,6	106,6	105,1	109,1
F	94,6	99,7	105,0	105,8	107,2	106,6	110,2
M	94,4	101,0	103,7	104,6	104,7	110,2	111,0
A	96,6	94,8	101,5	111,9	106,5	106,2	114,1
M	96,4	100,0	100,1	110,0	105,2	110,9	
J	94,0	101,2	103,1	105,9	104,7	110,0	
J	97,3	99,1	101,8	107,6	107,5	111,7	
A	96,9	101,2	100,9	107,8	104,2	111,3	
S	97,1	101,1	100,1	108,3	105,4	112,5	
O	97,3	99,6	104,3	108,5	105,8	110,7	
N	98,2	101,5	105,3	107,3	103,6	109,6	
D	99,5	103,0	105,0	105,6	103,7	113,2	

1/ Preliminary.  
\* Revised.

Table 2 - Percentage change in the index of the physical volume of manufacturing production: Total

Month	1999	2000	2001	2002	2003	2004	2005
J	.	+1,9	+6,9	+2,9	+0,7	-1,4	+3,3
F	.	+5,3	+4,1	+0,9	+0,7	-0,7	+2,8
M	.	+7,0	+1,9	+1,3	+0,2	+5,2	+0,7
A	.	-1,9	+7,1	+9,5	-4,2	+0,3	+7,1
M	.	+4,2	+0,3	+10,1	-4,3	+5,6	
J	.	+7,7	+1,9	+2,6	-1,3	+4,9	
J	.	+1,8	+2,7	+5,8	-0,1	+3,9	
A	.	+4,9	-0,2	+7,3	-3,1	+6,8	
S	.	+3,9	-1,6	+8,1	-2,5	+6,7	
O	.	+2,3	+4,6	+4,1	-2,4	+4,9	
N	.	+3,4	+3,5	+1,9	-3,9	+6,2	
D	.	+3,7	+3,4	+0,2	-1,4	+8,2	
Year	.	+3,7	+2,8	+4,5	-1,9	+4,3	

The percentage change is the change in the index of the physical volume of manufacturing production of the relevant year compared with the index of physical volume of manufacturing production of the previous year expressed as a percentage.

**Table 3 - Indices of the physical volume of manufacturing production by manufacturing division**

Base 2000 = 100

Manufacturing divisions	Weights	* Year 2004	Indices			Seasonally adjusted indices		
			April 2004	1/ March 2005	1/ April 2005	April 2004	March 2005	April 2005
			Food and beverages	16,4	111,8	97,1	123,5	109,0
Textiles, clothing, leather and footwear	5,4	100,4	93,8	105,8	96,6	98,8	99,2	101,8
Wood and wood products, paper, publishing and printing	11,0	104,0	97,1	107,0	102,9	102,0	103,8	107,9
Petroleum, chemical products, rubber and plastic products	22,5	110,7	107,8	113,0	109,3	109,8	109,2	111,1
Glass and non-metallic mineral products	3,9	113,1	103,5	113,1	112,7	108,9	113,2	118,3
Basic iron and steel, non-ferrous metal products, metal products and machinery	22,4	113,9	105,2	123,3	109,9	112,8	115,6	118,4
Electrical machinery	2,7	98,6	92,3	101,1	95,0	95,6	98,5	98,9
Radio, television and communication apparatus and professional equipment	1,3	111,3	119,4	107,9	104,2	117,3	101,6	102,5
Motor vehicles, parts and accessories and other transport equipment	8,6	115,4	96,7	119,5	117,6	100,3	114,6	121,7
Furniture and other manufacturing divisions	5,8	101,0	76,4	90,0	92,0	89,1	92,5	108,3
Total	100,0	109,9	100,3	114,8	107,4	106,2	111,0	114,1

**Table 3 - Indices of the physical volume of manufacturing production by manufacturing division (concluded)**

Manufacturing divisions	Weights	Year 2004	Indices			Seasonally adjusted indices		
			April 2004	April 2005	Percentage difference between April 2004 and April 2005	March 2005	April 2005	Percentage difference between March and April 2005
			Food and beverages	16,4	111,8	97,1	109,0	+12,3
Textiles, clothing, leather and footwear	5,4	100,4	93,8	96,6	+3,0	99,2	101,8	+2,6
Wood and wood products, paper, publishing and printing	11,0	104,0	97,1	102,9	+6,0	103,8	107,9	+3,9
Petroleum, chemical products, rubber and plastic products	22,5	110,7	107,8	109,3	+1,4	109,2	111,1	+1,7
Glass and non-metallic mineral products	3,9	113,1	103,5	112,7	+8,9	113,2	118,3	+4,5
Basic iron and steel, non-ferrous metal products, metal products and machinery	22,4	113,9	105,2	109,9	+4,5	115,6	118,4	+2,4
Electrical machinery	2,7	98,6	92,3	95,0	+2,9	98,5	98,9	+0,4
Radio, television and communication apparatus and professional equipment	1,3	111,3	119,4	104,2	-12,7	101,6	102,5	+0,9
Motor vehicles, parts and accessories and other transport equipment	8,6	115,4	96,7	117,6	+21,6	114,6 92,5	121,7	+6,2
Furniture and other manufacturing divisions	5,8	101,0	76,4	92,0	+20,4		108,3	+17,1
Total	100,0	109,9	100,3	107,4	+7,1	111,0	114,1	+2,8

1/ Preliminary.  
\* Revised.

**Table 4 – Total of estimated sales of the manufacturing industry (R'000)**

Month	1999	2000	2001	2002	2003	2004	2005
Value of sales							
J	31 728 425	34 497 091	41 025 607	48 138 526	52 765 592	53 523 613	1/ 56 176 889
F	36 780 094	42 065 366	47 630 261	56 200 264	60 485 281	62 603 113	1/ 65 184 336
M	39 575 843	46 300 045	52 194 339	59 871 135	62 637 848	67 981 939	1/ 69 243 666
A	36 769 193	39 384 857	45 883 170	60 294 761	58 615 159	61 151 048	1/ 68 107 017
M	39 561 905	44 639 157	50 164 812	62 579 978	60 277 805	66 779 109	
J	40 068 157	47 091 414	52 019 977	61 105 492	60 885 020	66 559 330	
J	40 275 610	44 033 012	49 979 263	62 721 938	61 445 221	67 215 037	
A	40 781 001	47 401 498	49 935 125	64 085 893	61 595 356	67 870 063	
S	43 163 552	48 549 234	51 116 793	66 502 646	62 956 064	* 70 971 548	
O	45 331 713	50 693 801	58 606 253	70 929 284	67 574 392	* 73 472 746	
N	47 027 113	53 570 122	59 946 335	71 452 903	66 409 310	* 75 751 403	
D	39 465 357	44 728 188	50 549 896	56 892 701	56 065 409	* 61 847 746	
Year	480 527 963	542 953 785	609 051 831	740 775 521	731 712 457	795 726 695	
Seasonally adjusted values							
J	38 428 829	41 487 838	48 794 307	57 173 741	62 635 523	63 452 195	66 824 415
F	37 823 286	43 191 383	48 917 379	57 629 034	62 026 839	64 271 275	66 963 242
M	37 953 035	44 340 873	50 100 779	57 691 373	60 623 094	66 113 355	67 465 673
A	38 819 375	41 642 193	48 549 273	63 817 103	61 518 066	63 706 148	70 895 889
M	39 566 131	44 449 883	49 830 782	62 053 743	59 790 222	66 208 728	
J	39 398 547	46 195 631	51 123 540	60 223 868	60 330 675	66 210 314	
J	40 392 318	44 184 585	50 144 931	62 824 440	61 495 594	67 072 900	
A	40 120 724	46 700 778	49 177 709	63 095 803	60 705 721	66 855 411	
S	41 687 825	46 918 001	49 476 241	64 352 686	60 800 575	68 476 110	
O	40 804 367	45 957 647	53 273 746	64 539 421	61 448 397	66 746 881	
N	42 131 051	48 087 651	53 789 444	64 292 065	59 719 082	68 260 855	
D	43 239 983	48 876 865	54 808 421	62 068 382	61 436 382	67 742 221	

1/ Preliminary.

\* Revised.

**Table 5 - Percentage change in the value of sales of the manufacturing industry: Total**

Month	1999	2000	2001	2002	2003	2004	2005
J	..	+8,7	+18,9	+17,3	+9,6	+1,4	+5,0
F	..	+14,4	+13,2	+18,0	+7,6	+3,5	+4,1
M	..	+17,0	+12,7	+14,7	+4,6	+8,5	+1,9
A	..	+7,1	+16,5	+31,4	-2,8	+4,3	+11,4
M	..	+12,8	+12,4	+24,7	-3,7	+10,8	
J	..	+17,5	+10,5	+17,5	-0,4	+9,3	
J	..	+9,3	+13,5	+25,5	-2,0	+9,4	
A	..	+16,2	+5,3	+28,3	-3,9	+10,2	
S	..	+12,5	+5,3	+30,1	-5,3	+12,7	
O	..	+11,8	+15,6	+21,0	-4,7	+8,7	
N	..	+13,9	+11,9	+19,2	-7,1	+14,1	
D	..	+13,3	+13,0	+12,5	-1,5	+10,3	
Year	.	+13,0	+12,2	+21,6	-1,2	+8,7	

The percentage change is the change in the sales of the manufacturing industry of the relevant year compared with the sales of the previous year expressed as a percentage.

**Table 6 - Sales of manufactured products by manufacturing division (R'000)**

Manufacturing divisions	* Year 2004	Value of sales						Seasonally adjusted value of sales			
		April			March 1/			April		March	April
		2004			2005			2004		2005	
Food and beverages	150 794 199	11 871 949	13 100 882	12 941 392	12 288 608	12 952 4	13 388 706				
Textiles, clothing, leather and footwear	41 695 164	3 293 306	3 555 011	3 506 839	3 358 300	3 387 039	3 592 688				
Wood and wood products, paper, publishing and printing	70 228 139	5 376 947	6 065 760	5 827 789	5 769 009	5 918 891	6 232 808				
Petroleum, chemical products, rubber and plastic products	156 215 360	12 278 568	13 001 118	13 437 636	12 397 238	12 956 578	13 546 626				
Glass and non-metallic mineral products	22 153 630	1 642 031	1 884 487	1 912 304	1 751 950	1 920 874	2 034 596				
Basic iron and steel, non-ferrous metal products, metal products and machinery	169 868 082	12 860 802	15 447 023	14 518 872	13 447 177	14 627 134	15 182 032				
Electrical machinery	20 602 189	1 593 935	1 742 457	1 627 705	1 665 158	1 669 911	1 693 305				
Radio, television and communication apparatus and professional equipment	11 370 745	1 033 055	953 508	918 514	1 036 158	876 890	913 147				
Motor vehicles, parts and accessories and other transport equipment	117 742 616	8 479 043	10 661 265	10 343 514	9 120 997	10 090 362	11 064 904				
Furniture and other manufacturing divisions	35 056 571	2 721 412	2 832 155	3 072 452	2 871 554	3 065 525	3 247 076				
<b>Total</b>	<b>795 726 695</b>	<b>61 151 048</b>	<b>69 243 666</b>	<b>68 107 017</b>	<b>63 706 148</b>	<b>67 465 673</b>	<b>70 895 889</b>				

**Table 6 - Sales of manufactured products by manufacturing division (R'000) (concluded)**

Manufacturing divisions	Year 2004	Value of sales				Seasonally adjusted value of sales			
		April		March 1/		April		March	April
		2004		2005		2004		2005	2005
Food and beverages	150 794 199	11 871 949	12 941 392	+9,0	12 952 466	13 388 706	+3,4		
Textiles, clothing, leather and footwear	41 695 164	3 293 306	3 506 839	+6,5	3 387 039	3 592 688	+6,1		
Wood and wood products, paper, publishing and printing	70 228 139	5 376 947	5 827 789	+8,4	5 918 891	6 232 808	+5,3		
Petroleum, chemical products, rubber and plastic products	156 215 360	12 278 568	13 437 636	+9,4	12 956 578	13 546 626	+4,6		
Glass and non-metallic mineral products	22 153 630	1 642 031	1 912 304	+16,5	1 920 874	2 034 596	+5,9		
Basic iron and steel, non-ferrous metal products, metal products and machinery	169 868 082	12 860 802	14 518 872	+12,9	14 627 134	15 182 032	+3,8		
Electrical machinery	20 602 189	1 593 935	1 627 705	+2,1	1 669 911	1 693 305	+1,4		
Radio, television and communication apparatus and professional equipment	11 370 745	1 033 055	918 514	-11,1	876 890	913 147	+4,1		
Motor vehicles, parts and accessories and other transport equipment	117 742 616	8 479 043	10 343 514	+22,0	10 090 362	11 064 904	+9,7		
Furniture and other manufacturing divisions	35 056 571	2 721 412	3 072 452	+12,9	3 065 525	3 247 076	+5,9		
<b>Total</b>	<b>795 726 695</b>	<b>61 151 048</b>	<b>68 107 017</b>	<b>+11,4</b>	<b>67 465 673</b>	<b>70 895 889</b>	<b>+5,1</b>		

1/ Preliminary.  
\* Revised.

**Table 7 - Percentage change between the current quarter and the corresponding quarter of the previous year in the physical volume of manufacturing production and sales by manufacturing division**

Manufacturing divisions	Weights	Indices (base 2000=100)			Value of sales (R'000)		
		February to April 2004	February to April 2005	Annual percentage change between February to April 2004 and February to April 2005	February to April 2004	February to April 2005	Annual percentage change between February to April 2004 and February to April 2005
Food and beverages	16,4	103,0	113,6	+10,3	35 954 616	38 185 960	+6,2
Textiles, clothing, leather and footwear	5,4	100,0	101,7	+1,7	10 444 895	10 522 407	+0,7
Wood and wood products, paper, publishing and printing	11,0	99,7	103,1	+3,4	16 804 259	17 331 744	+3,1
Petroleum, chemical products, rubber and plastic products	22,5	109,6	108,0	-1,5	37 481 681	38 862 033	+3,7
Glass and non-metallic mineral products	3,9	105,3	111,5	+5,9	5 101 247	5 603 999	+9,9
Basic iron and steel, non-ferrous metal products, metal products and machinery	22,4	112,4	113,4	+0,9	40 698 250	43 760 019	+7,5
Electrical machinery	2,7	97,2	98,3	+1,1	4 990 840	5 007 782	+0,3
Radio, television and communication apparatus and professional equipment	1,3	120,6	108,4	-10,1	3 164 259	2 867 746	-9,4
Motor vehicles, parts and accessories and other transport equipment	8,6	107,5	120,0	+11,6	28 585 110	31 292 543	+9,5
Furniture and other manufacturing divisions	5,8	91,7	97,4	+6,2	8 510 943	9 100 786	+6,9
<b>Total</b>	<b>100,0</b>	<b>106,0</b>	<b>109,6</b>	<b>+3,4</b>	<b>191 736 100</b>	<b>202 535 019</b>	<b>+5,6</b>

## Explanatory notes

- |                              |  |
|------------------------------|--|
| <b>Introduction</b>          | <p>1 Statistics South Africa (Stats SA) conducts a monthly survey of the manufacturing industry, covering manufacturing enterprises. This statistical release contains the results of a sample drawn from the new business register, with significantly enhanced coverage of South African businesses (see 4 below). The release contains monthly indices of the physical volume of manufacturing production and monthly value of sales of manufactured products by division within manufacturing.</p> <p>2 In accordance with international practice, the indices are re-based every five years to a new base year. The base period of the index is 2000. Both estimated and seasonally adjusted figures are presented.</p> <p>3 As is usual, information for the latest month has had to be estimated for respondents who have not reported by the cut-off date for production of results. These estimates will be revised in future statistical releases when their reported information becomes available.</p> <p>4 As indicated earlier, Stats SA developed a new business register, based on units registered for value-added tax (VAT) and income tax, obtained from the South African Revenue Service (SARS), which replaced the previous business register.</p>   |
| <b>Scope of the survey</b>   | <p>5 This survey covers manufacturing enterprises, i.e. those conducting activities in -</p> <ul style="list-style-type: none"> <li>• the manufacturing, processing, making or packing of products;</li> <li>• the slaughtering of animals, including poultry; and</li> <li>• installation, assembly, completion, repair and related work.</li> </ul>  |
| <b>Classification</b>        | <p>6 The 1993 edition of the <i>Standard Industrial Classification of all Economic Activities (SIC)</i>, Fifth Edition, Report No. 09-90-02, was used to classify the statistical units in the survey. The SIC is based on the 1990 <i>International Standard Industrial Classification of all Economic Activities (ISIC)</i> with suitable adaptations for local conditions. Statistics in this publication are presented at SIC division (two digit) level. Each enterprise is classified to an industry which reflects its predominant activity.</p>  |
| <b>Statistical unit</b>      | <p>7 The statistical unit for which information is compiled and published is the enterprise, defined as a legal unit or a combination of legal units that includes and directly controls all functions necessary to carry out its production activities.</p>   |
| <b>Weighting methodology</b> | <p>8 For those strata not completely enumerated, the weights to produce estimates are the inverse ratio of the sampling fraction, modified to take account of non-response in the survey. Stratum estimates are calculated and then aggregated with the completely enumerated stratum to form division estimates. These procedures, which are in line with international best practice, are described in more detail on the Stats SA website at <a href="http://www.statssa.gov.za/publications/publicationsearch.asp">www.statssa.gov.za/publications/publicationsearch.asp</a>.</p> <p>9 For indices, a weight is calculated for every division according to the value added of the division relative to the total value added of the manufacturing industry as a whole, based on the results of the most recent census of manufacturing or large sample of the manufacturing industry. For the period 1996 to 2000 the weights are based on the 1996 Census of Manufacturing and for the period 2001 to 2005 the weights are based on the 2001 large sample survey of the manufacturing industry. Weights between census years are fixed. The production indices of all divisions are multiplied by the applicable weights and aggregated to produce the index for the total physical volume of manufacturing production (see table E for the fixed weights which were used for the two periods 1996 to 2000 and 2001 to 2005).</p> |

<b>Survey methodology and design</b>	<b>10</b>	The survey is conducted monthly. Questionnaires are sent to a sample of 3 000 enterprises. Completed questionnaires are required to be returned to Stats SA within 10 days after the end of the reference month. Fax and telephone reminders are used to follow up non-respondents.
	<b>11</b>	The value of sales of manufactured products is obtained monthly from the sample of 2 994 enterprises, which was drawn in September 2004 from a population then of 41 009 manufacturing enterprises. Each manufacturing division is divided into four size groups. The sample is drawn at the SIC three-digit level. All large enterprises (size group one), are completely enumerated. Simple random sampling is applied for size group two (medium sized) enterprises, and for size groups three and four (small) enterprises. The total value of sales of manufactured products of large enterprises (size group one) in a division is added to the weighted totals of size groups two, three and four of that division to reflect the total value of sales of the division.
	<b>12</b>	The calculation of the monthly production indices is based on the value of sales of products and articles manufactured, after the effect of price changes has been eliminated through deflation using appropriate indices of the Production Price Index (PPI). For six of the ten SIC divisions in manufacturing, the value of production is calculated from the value of sales and stocks of manufactured products obtained from the monthly survey of manufacturing enterprises.
	<b>13</b>	More direct indicators are used for the production of tobacco, coke and refined petroleum products, basic iron and steel products, basic precious and non-ferrous metal products, motor vehicles, bodies for motor vehicles and parts and accessories for motor vehicles. The volume indices for these major groups are calculated on the basis of physical quantities. This method is used by the national statistical agencies of many other countries for petroleum products as the results are considered more satisfactory (mainly because these commodities are relatively homogeneous).
<b>Seasonal adjustment</b>	<b>14</b>	Seasonally adjusted estimates of all divisions are generated each month, using the X-11 Seasonal Adjustment Program developed by the US Bureau of the Census, 1968. Seasonal adjustment is a means of removing the estimated effects of normal seasonal variation from the series so that the effects of other influences on the series can be more clearly recognised. Seasonal adjustment does not aim to remove irregular or non-seasonal influences which may be present in any particular month. Influences that are volatile or unsystematic can still make it difficult to interpret the movement of the series even after adjustment for seasonal variations. Therefore the month-to-month movements of seasonally adjusted estimates may not be reliable indicators of trend behaviour.
<b>Trend cycle</b>	<b>15</b>	The trend is the long-term pattern or movement of a time series. The X-11 Seasonal Adjustment Program is used for smoothing seasonally adjusted estimates to estimates of the underlying trend cycle.
<b>Reliability of estimates</b>	<b>16</b>	Data presented in this publication are based on information obtained from a sample and are, therefore, subject to sampling variability; that is, they may differ from the figures that would have been produced if the data had been obtained from all enterprises in the manufacturing industry in South Africa. Estimates are subject to sampling and non-sampling errors.
	<b>17</b>	Inaccuracies may occur because of imperfections in reporting by enterprises and errors made in the collection and processing of the data. Inaccuracies of this kind are referred to as non-sampling errors. Every effort is made to minimise non-sampling errors by careful design of questionnaires, testing them in pilot studies, editing reported data and implementing efficient operating procedures. Fluctuations may occur in consecutive months as a result of seasonal and economic factors.
<b>Revised figures</b>	<b>18</b>	Revised figures are due to late submission of data to Stats SA, or to respondents reporting revisions or corrections to their figures. Preliminary figures are

indicated in the relevant tables. Data are edited at the enterprise level.

- Related publications** 19 Users may also wish to refer to the following publications available from Stats SA -
- *Bulletin of Statistics* issued quarterly.
  - *SA Statistics* issued annually.
- Rounding of figures** 20 The figures in the tables have, where necessary, been rounded to the nearest digit shown.
- Pre-release policy** 21 Stats SA's pre-release policy may be inspected at its website, [www.statssa.gov.za](http://www.statssa.gov.za).
- Symbols and abbreviations** 22
- |          |   |
|----------|---|
| GDP      | Gross Domestic Product  |
| ISIC     | International Standard Industrial Classification              |
| m        | Million   |
| SIC      | Standard Industrial Classification of all Economic Activities |
| SARS     | South African Revenue Service                                 |
| Stats SA | Statistics South Africa                                       |
| VAT      | Value added tax   |
| 1/       | Preliminary figures   |
| •        | Revised figures   |

**Technical notes**

Neyman optimal allocation

Before drawing samples in each of the surveys the population of enterprises on the BSF was stratified. Strata were formed using a combination of Standard Industrial Classification variable and the measure of size variable for enterprises. The Neyman optimal allocation formula used to allocate samples to each stratum is given by a formula below.

$$n_h = \frac{N_h S_h}{\sum N_h S_h}$$

where  $N_h$  and  $S_h$  are the stratum population size and the stratum variance, respectively.

Class limits: Manufacturing

Enterprise size	Lower limits	Upper limits
Very small	0	5 000 000
Small	5 000 001	13 000 000
Medium	13 000 001	51 000 000
Large	51 000 001	



## Glossary

<b>Enterprise</b>	The enterprise is a legal entity or a combination of legal units that includes and directly controls all functions necessary to carry out its production activities.
<b>Index of physical volume of manufacturing production</b>	The index of physical volume of manufacturing production, also known as a production index, is a statistical measure of the change in the volume of production. The production index of a division is the ratio between the volume of production of a division in a given period and the volume of production of the same division in the base period. The base period is 2000. The production in the base period is set at 100.
<b>Industry</b>	An industry is made up of enterprises engaged in the same or similar kinds of economic activity. Industries are defined in the <i>System of National Accounts (SNA)</i> in the same way as in the <i>Standard Industrial Classification of all Economic Activities, Fifth Edition, Report No. 09-90-02 of January 1993 (SIC)</i> .
<b>Intermediate consumption</b>	Intermediate consumption includes - <ul style="list-style-type: none"><li>• purchases and transfers-in of materials;</li><li>• payments to other establishments for work done;</li><li>• other direct factory costs;</li><li>• rent and leasing paid;</li><li>• head office charges;</li><li>• royalties, copyright, trade names and patent rights paid;</li><li>• advertising;</li><li>• insurance premiums;</li><li>• services; and</li><li>• secretarial and administrative fees.</li></ul>
<b>Output</b>	Output is the aggregate value of goods manufactured and work done and includes - <ul style="list-style-type: none"><li>• sales and transfers-out of own manufactures, factory waste and stocks of factored goods;</li><li>• repairs;</li><li>• installation, erection and assembly;</li><li>• sundry trading revenue;</li><li>• sales of factored goods minus purchases of factored goods;</li><li>• rent and leasing received;</li><li>• royalties received;</li><li>• difference between opening value and closing value of work in progress, stocks of own manufactures and stocks of factored goods;</li><li>• head office charges; and</li><li>• other revenue.</li></ul> Output excludes excise and customs duty paid.
<b>Value added</b>	Value added is the value of output less intermediate consumption. It represents the value added to the cost of the materials used in the process of production.
<b>Sales</b>	Sales are the total value of sales and transfers-out of all own manufactured products/articles and the amounts received for installation, erection or assembly or other services rendered.
<b>Statistical unit</b>	A statistical unit is a unit about which statistics are tabulated, compiled or published. The statistical units are derived from and linked to the South African Revenue Service (SARS) administrative data.

For the purpose of this publication, the statistical unit in the monthly manufacturing: production and sales survey is the enterprise.

**Turnover**

Turnover refers to -

- the value of sales and transfers out of all own manufactured products/articles;
- amounts received for work done; and
- amounts received for services rendered.

Turnover excludes -

- value added tax (VAT);
- export freight charges; and
- excise duty.

**Weight**

The weight of a division of manufacturing in the overall index for manufacturing is the ratio of the value added of the division (i.e. output of a division minus intermediate consumption) to the total value added of the manufacturing industry. The weight reflects the importance of the division in the total. The ratios change over time due to changes in the relative performance of industries, due to factors such as quality changes, changes in relative prices, and changes in customer preferences. New weights need to be calculated from time to time.

**Table E – Weights according to manufacturing divisions**

Manufacturing divisions	Weights according to the 1996 census of manufacturing 1996 - 2000	Weights according to the 2001 large sample survey of the manufacturing industry 2001 - 2005
Food and beverages	15,3	16,4
Textiles, clothing, leather and footwear	7,8	5,4
Wood and wood products, paper, publishing and printing	11,4	11,0
Petroleum, chemical products, rubber and plastic products	19,3	22,5
Glass and non-metallic mineral products	4,5	3,9
Basic iron and steel, non-ferrous metal products, metal products and machinery	23,6	22,4
Electrical machinery	3,4	2,7
Radio, television and communication apparatus, professional equipment	1,5	1,3
Motor vehicles, parts and accessories and other transport equipment	9,1	8,6
Furniture and other manufacturing divisions	4,1	5,8
Total	100,0	100,0

**General information**

Stats SA publishes approximately 300 different statistical releases each year. It is not economically viable to produce them in more than one of South Africa's eleven official languages. Since the releases are used extensively, not only locally but also by international economic and social-scientific communities, Stats SA releases are published in English only.

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