

Dipalopalo tsa Aforika Borwa • Statistieke Suid-Afrika • Tistatistiki ta Afrika-Dzonga • Ukuqokelelwa kwamanani eNingizimu Afrika

Manufacturing: Production and sales April 2004

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Key figures as at the end of April 2004

Actual estimates	April 2004	% change between April 2003 and April 2004	% change between March and April 2004	% change between February to April 2003 and February to April 2004	% change between January to April 2003 and January to April 2004
Physical volume of manufacturing production index (2000=100)	103,6	+2,9	-8,1	+2,0	+1,5
Total value of sales of manufactured products (R million)	60 918	+4,8	-7,6	+4,8	+4,1

Seasonally adjusted estimates	April 2004	% change between April 2003 and April 2004	% change between March and April 2004	% change between November 2003 to January 2004 and February to April 2004
Physical volume of manufacturing production index (2000=100)	109,0	+2,6	+0,5	+2,9
Total value of sales of manufactured products (R million)	64 017	+4,5	+0,5	+5,0

Key findings as at the end of April 2004

Manufacturing production increases

Manufacturing production for the three months ended April 2004 increased by 2,9%, after seasonal adjustment, compared with the previous three months. Higher production was reported by 8 of the 10 manufacturing divisions.

The major contributor to the seasonally adjusted increase of 2,9% in total manufacturing production for the three months ended April 2004 was the food and beverage division (contributing +0,8 of a percentage point to total manufacturing production), followed by textiles, clothing, leather and footwear, and petroleum, chemical products, rubber and plastic products (each contributing +0,6 of a percentage point) and basic iron and steel, non-ferrous metal products, metal products and machinery (+0,5 of a percentage point) (see table A).

Figure 1 shows the seasonally adjusted and trend series for the volume index of manufacturing production between January 1998 and April 2004. While the trend series has been rising since mid 2003, it is still below the peak reached at September 2002.

Figure 1 – Index of the physical volume of manufacturing production

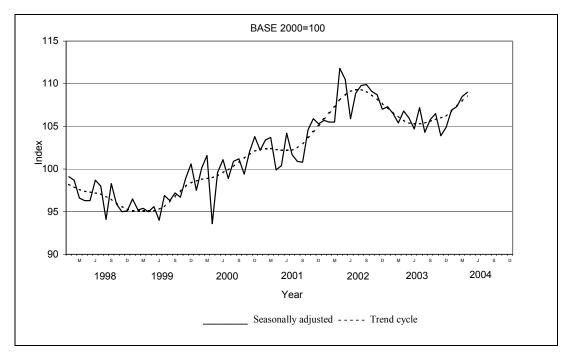


Table A - Contribution of manufacturing divisions to total manufacturing production (Base 2000=100)

Manufacturing divisions 	Percentage contribution to the total manufacturing production using the weights according to 1996 Census of Manufacturing	seasonally adjusted production index for February 2004 to April 2004	change of February to	Contribution (percentage points) to the seasonally adjusted quarterly percentage change in total manufacturing production 1/
Food and beverages	15,3	109,9	+7,0	+0,8
Textiles, clothing, leather and footwear	7.0	07.0	17.0	10.6
	7,8	97,9	+7,8	+0,6
Wood and wood products; paper; publishing and printing	11,4	103,3	-1,5	-0,1
Petroleum, chemical products,	1 11,4	103,3	-1,5	-0,1
rubber and plastic products	19,3	110,4	+3,2	+0,6
Glass and non-metallic mineral	1 19,3	110,4	+3,2	+0,0
products	4,5	106,5	+0,5	+0,0
Basic iron and steel;	1 1,5	100/5	10/3	10,0
non-ferrous metal products;	! 			i
metal products and machinery	23,6	114,6	+2,2	+0.5
Electrical machinery	3,4	101,4	-0,0	-0.0
Radio, television and	i İ	• •	.,.	i
communication apparatus;	I			i
professional equipment	1,5	105,6	+1,3	+0,0
Motor vehicles, parts and	İ			i i
accessories;				i
other transport equipment	9,1	108,0	+2,7	+0,2
Furniture and other				1
manufacturing divisions	4,1	97,3	+0,2	+0,0
Total	100,0	108,2	+2,9	+2,9

^{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 total value of sales of manufactured products at current prices for the three months ended April 2004 increased by 5,0% (+R9 047 million), after seasonal adjustment, compared with the previous three months. Higher manufacturing sales were reported by 8 of the 10 manufacturing divisions during this period (see table B). Furthermore, the actual value of sales of manufactured products at current prices for the three months ended April 2004 was 4,8% higher compared with the three months ended April 2003 (see table C). Sales of manufactured products at current prices for the first four months of 2004 was 4,1% higher than for the first four months of 2003.

The seasonally adjusted increase of 5,0% in the total value of sales of manufactured products at current prices for the three months ended April 2004 was mainly due to large increases reported for basic iron and steel, non-ferrous metal products, metal products and machinery (+7,6% or +R2 979 million), food and beverage (+7,0% or +R2 165 million), petroleum, chemical products, rubber and plastic products (+6,4% or +R2 346 million) and motor vehicles, parts and accessories (+4,2% or +R1 096 million) (see table B).

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

Manufacturing divisions 	Seasonal adjusted sales February to April 200	-	November 2003 to January 2004	manufactu: divisions between	ring
I	R'00	00	I	R'000	- [
Food and beverages Textiles, clothing,	 33 162	428	+7,0	2 165 340)
leather and footwear Wood and wood products; paper;	9 197 	7 272	+3,5	313 299)
publishing and printing Petroleum, chemical products,	16 571	756	-1,4	-236 29	7 j
rubber and plastic products Glass and non-metallic mineral	38 884	943	+6,4	2 346 47	5 I
products Basic iron and steel; non-ferrous metal products;	5 714 	1 157	+6,0	323 23	7
metal products and machinery	41 959		+7,6	2 979 27	
Electrical machinery Radio, television and communication apparatus;	l I	089	-6,3	-330 460	
professional equipment Motor vehicles, parts and accessories;	3 133 	3 406	+4,0	120 27	7
other transport equipment	 26 991 	204	+4,2	1 096 07	5 1
manufacturing divisions	9 032	463	+3,1	270 273	3
Total	189 587	7 306	+5,0	9 047 498	 3

The major contributors to the increase of 4,8% in sales of manufactured products at current prices for the three months ended April 2004 compared with the three months ended April 2003 were basic iron and steel, non-ferrous metal products, metal products and machinery (1,8 percentage points or R3 265 million), motor vehicles, parts and accessories (0,7 of a percentage point or R1 309 million) and food and beverages (0,6 of a percentage point or R1 149 million) (see table C).

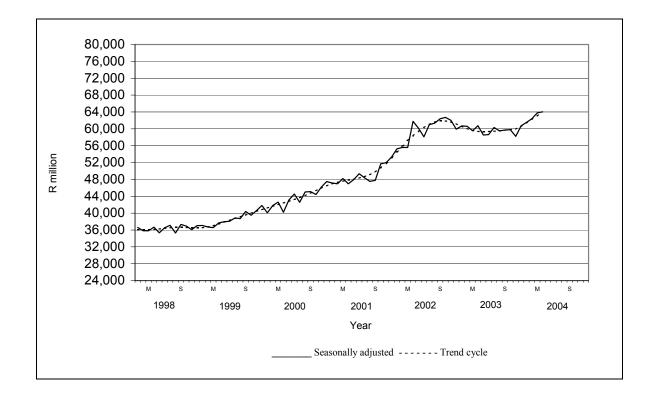
Table C - Contribution of the manufacturing divisions to total value of sales of manufactured products

Manufacturing divisions 	Percentage contribution to total value of sales of manufactured products February to April 2003	change between February to April 2003 and February to	points to the percentage change in the total value of sales of manufactured	in sales of manufacturing divisions between February to April 2003 and and
Food and beverages	17,3	3,7	0,6	1 149 079
Textiles, clothing, leather and footwear	5,0	2,2	0,1	199 498
Wood and wood products; paper; publishing and printing Petroleum, chemical products,	8,7	3,3	0,3	515 982
rubber and plastic products Glass and non-metallic mineral	21,1	1,8	0,4	679 859
products	2,6	17,7	0,5	820 789
Basic iron and steel, non-ferrous metal products; metal products and machinery	21,5	8,5	1,8	3 265 366
Electrical machinery Radio, television and	3,0	-5,5	-0,2	-287 470
communication apparatus; professional equipment Motor vehicles, parts and accessories and	1,7	10,8	0,2	331 605
other transport equipment Furniture and other	14,6	5,0	0,7	1 309 370
Furniture and other manufacturing divisions	4,5	8,1	0,4	649 671
Total	100,0	4,8	4,8	8 633 749

^{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, divided by 100.

Figure 2 shows the seasonally adjusted and trend series for sales of manufactured products between January 1998 and April 2004. After peaking in September 2002, the series declined until June 2003, before resuming its upward movement.

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



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Contents

		Page
Notes		7
Article	New monthly indicator series – feasibility of seasonal adjustment	8
Detailed tables		
Table 1	Indices of the physical volume of manufacturing production: Total	9
Table 2	Indices of the physical volume of manufacturing production by manufacturing division	10
Table 3	Total sales of manufacturing industry (R'000)	11
Table 4	Sales of manufactured products by manufacturing division (R'000)	12
Explanatory not	es	13
Glossary		16
General informa	ation	18

Notes

Forthcoming issues	Issue	Expected release date
	May 2004	6 July 2004
	June 2004	10 August 2004
	July 2004	7 September 2004
	August 2004	12 October 2004
	September 2004	9 November 2004
	October 2004	7 December 2004
Purpose of the survey	indices of the physical vol indicator of the real level monitoring the state of the	Manufacturing Production and Sales survey are used to calculate tume of manufacturing production. These indices provide an of manufacturing activity in the economy. They are used in economy and formulation of economic policy. They are also n of the Gross Domestic Product (GDP).
Special Data Dissemination Standard of the IMF	(SDDS) of the International periodicity and timeliness	lease should adhere to the Special Data Dissemination Standard Monetary Fund (IMF), which sets out standards on: coverage, of data; access by the public; integrity; and quality of the e there has been a delay, but this is not expected to recur.

Statistics South Africa 8 P3041.2

Article: New monthly indicator series – feasibility of seasonal adjustment

As indicated in earlier discussions, since the beginning of 2003, Stats SA has been conducting its monthly indicator surveys (manufacturing, wholesale trade, retail trade, motor trade and land freight) using fresh samples of businesses drawn from its new business register, in parallel with the continued conduct of the surveys based on the established sample of businesses drawn from the old business address register. The parallel operation was designed to ensure that the new samples were well established, and that estimates could be constructed for an overlap period of one year between the old and new samples, to provide users with a comparability bridge of a reasonable number of observations on both the old and new bases.

The inadequacy of the old business register to accurately capture and represent the true business population across the economy is mainly due to the fact that the register could not be updated regularly or consistently across industry sectors. This has been rectified through access to information about VAT registrations from the South African Revenue Service. This source has been used to construct Stats SA's new business register.

Manufacturing was the most frequently updated sector in the old business address register, through special efforts to build up coverage for reasonably regular censuses of the sector, which in turn provided information for updating the business population for the sector, particularly for ceased businesses and changes in activity. Accordingly the industry structure of the sector was relatively well captured by the old business register, even though it under covered the number of businesses involved, mainly smaller businesses. The movements of the new manufacturing series track that of the old series very closely for 2003, and seasonal adjustment of the new series, including its backcast component, was found to be feasible using the seasonal factors from the old manufacturing series carried over to the new one.

The **wholesale** and **motor** industries remained relatively stable in structure in the old and new registers, and activities were dominated by the large enterprises, even though the old register under covered smaller enterprises. Again, the movements of the new series tracked that of the old series very closely for 2003, and seasonal adjustment of the new series using the seasonal factors from the old series, including their backcast components, produced seasonally adjusted series which were reasonably consistent with the pattern of the seasonally adjusted series from the old surveys. The addition of wholesale on a commission or fee basis in the wholesale survey and the expansion of coverage to wholesale activities in the motor trade survey, contributed to some of the differences noted in the monthly movements.

The situation for **retail trade** was found to be more complicated. It is the sector where, on the one hand, the structure changed most frequently in terms of business starts, cessations, mergers and acquisitions, so that frequent updating of the business register to reflect these changes was the most important. On the other hand, the inadequacies of the old business register were greatest in this sector, and the sample drawn from it for the monthly retail trade survey was accordingly the most deficient for capturing both the level and movements in activity. While the movements of the new series track that of the old series reasonably well over most months of 2003, the growth shown from November to December 2003 differs quite significantly between the old and new series (the old series showed a current price growth of 40,7% whilst the new series shows a growth of 30,4%). It is the view of Stats SA that the growth from the new survey is more reliable.

Retail trade is more strongly characterised by strong seasonal fluctuations than other industry sectors. The seasonal factors from the old survey were built up over many years for that survey based on the performance of that series, which in turn was influenced by the long-standing inadequacies in the old business frame and sample. When those seasonal factors were applied to the new series, including its backcast component, it was found that the resulting seasonally adjusted series did not behave plausibly.

Stats SA has concluded that there is no option for retail trade but to stop publishing a seasonally adjusted series until enough data points are available to derive seasonal adjustment factors informed by the behaviour of the new series. Usually at least 36 data points are needed, and currently there are 15. However, Stats SA will show an estimated trend line through the original series.

Detailed tables

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

Base 2000 = 100

Month	 	1998	1999	2000	2001	2002	2003	2004	
					Actual indice	s			
J	1	85 , 8	83,6	85 , 2	89,5		94,1	94,0)
F		. ,	93,7	98,7	102,0				
M		98,9	97,9	104,8	107,3				
A	- 1	92,3	90,7	89,0	94,6			103,6	5 1/
M	- 1	96,9	95,9	99,9	100,8	110,7	106,1		
J	- 1	99,6	94,8	102,1	105,0	106,7			
J	- 1	100,0	98,3	100,1	102,7				
A	- 1	95,6	97,7	102,5	102,6	111,9	106,3		
S	- 1	102,3	100,9	104,8	104,0	113,0	108,9		
0			107,3	109,8	115,5		117,7		
N	- 1		109,9	113,6	118,1		- /		
D	I	81,8	86,3	89,5	91,3	92,6	91,3		
Year	 I	96,9	·	100,0	•	108,2	105,7		
					Seasonally adj	usted indice	s		
 Ј	 	99,1	96,4	97 , 5	102,1	105,7	107,3	106,9	 }
F	- 1	98,7	95,2	100,1	103,6	105,9	107,2	107,2	2
M		96,7	95,5	101,7	103,7	105,4	105,2	108,5	5
A	- 1	96,3	95,0	93,6	99,9	111,5	106,2	109,0)
M	- 1	96,3	95,6	99,6	100,5	110,6	106,1		
J		98,8	94,1	101,1	104,2	105,9	104,8		
J		98,0	96,9	98,9	101,7	108,9	107,3		
A		94,1	96,3	100,9	100,9	109,8	104,3		
S		98,3	97,2	101,2	100,7	109,8	105,8		
0		95,9	96,7	99,4	104,5	109,1	, .		
N		95,0	98,8	102,0	106,0	108,7	103,8		
D	- 1	95,0	100,6	103,7	105,3	106,9	104,8		

^{1/} Preliminary

Table 2 - Indices of the physical volume of manufacturing production by manufacturing division

 Manufacturing	 	 	Act	ual indice	es	Seasonal	ly adjuste	d indices
	 Weights 		April	 March	 April 1/	April	 March	April
	 	2003	2003	20	004	2003	200	4
Food and beverages	15,3	105,9	97,2	115,0	102,0	104,5	111,1	109,9
Textiles, clothing, leather and footwear	 7 , 8	94,5	89,9	103,1	94,8	93,6	97,4	98,4
Wood and wood products; paper; publishing and printing	1 11,4	 101 , 1	94,6	105,3	99,5	99,7	101,9	104,8
Petroleum, chemical products, rubber and plastic products	19,3	 107 , 5	105,0	113,2	109,2	108,0	110,8	111,8
Glass and non-metallic mineral products	 4,5	 103 , 6	100,0	105,9	104,0	105,2	106,1	109,3
Basic iron and steel, non-ferrous metal products;								
metal products and machinery Electrical machinery		111,8 104,3	105,3 104,7	119,5 107,8	108,9 97,2	113,3 107,3	113,5 103,8	116,9 99,9
Radio, television and communication apparatus;	 	 						
professional equipment Motor vehicles, parts and	1,5 	97 , 3 	85 , 5	113,8	99,2	90,6	104,2	105,4
accessories and other transport equipment	 9,1	 107 , 6	105,7	117,7	105,9	108,8	109,1	108,2
Furniture and other manufacturing divisions	 4,1	 98 , 7	95 , 3	100,7	82,9	105,1	104,5	89 , 8
Total	100,0	105,7	100,7	112,7	103,6	106,2	108,5	109,0

^{1/} Preliminary

Table 3 - Total sales of manufacturing industry: (R'000)

Month	1		1998			L999		20	000		2	2001		2			:						
											Actua	L vai	Lues										
 Ј	1	30	576	822	31	165	950				40												
F		35	498	014	36	217	248				46												
M		38	210	214	38	782	183	45	391	462	51	045	545	58	657	747	61	384	235	65	908	558	
A		35	326	060			560				44						58	115	074	60	918	138	1
M			971				165				48					265		700	877				
J		37	522	757			946	46															
J		37	828	313	39	493	229	43	083	503			488				60						
A		36	464	484	39	882	171	46	347	295	48	882	757										
S		39	084	149			261				50						61						
0		41	638	504			236				57												
N		40	834	783	45	966	203	52	246	642	58	662	308	69	910	938	64	569	771				
D	1	33	832	123	38	693	443	43	806	229	49	356	949	55	577	011	55	647	226				
Year	 	442	787	992	470						596					141	717	109	533				
											Seasona	ally	adju	sted	valı								
J	ī	37	086	747	37	550	958	40	532	405	47	557	256	55	871	620	60	715	820	61	653	226	
J F	I		086 364				958 553				47 47												
-		36		853	37		553		436	898	47	853		56	477		60	479	840		887	397	
F	i	36 36	364	853 660	37 37	114 152	553	42	436 407	898 621	47 48	853 962	879	56 56	477 367	659	60 59	479 153	840 605	61	887 682	397 627	
F M	i	36 36 37	364 531	853 660 324	37 37 38	114 152	553 881 798	42 43 40	436 407 884	898 621	47 48 47	853 962 540	879 152	56 56 62	477 367 640	659 511	60 59 61	479 153	840 605 454	61 63	887 682	397 627	
F M A	 	36 36 37 36	364 531 283	853 660 324 499	37 37 38 38	114 152 145 641	553 881 798	42 43 40 43	436 407 884 659	898 621 286	47 48 47 48	853 962 540 723	879 152 808	56 56 62 60	477 367 640 926	659 511 829	60 59 61 58	479 153 281	840 605 454 671	61 63	887 682	397 627	
F M A M J	 	36 36 37 36 36	364 531 283 065	853 660 324 499 415	37 37 38 38 38	114 152 145 641	553 881 798 596 107	42 43 40 43 45	436 407 884 659	898 621 286 833 957	47 48 47 48 49	853 962 540 723 950	879 152 808 627	56 56 62 60 58	477 367 640 926 844	659 511 829 710	60 59 61 58	479 153 281 483 790	840 605 454 671 276	61 63	887 682	397 627	
F M A M J J	 	36 36 37 36 36 37	364 531 283 065 877	853 660 324 499 415 311	37 37 38 38 38 39	114 152 145 641 480 618	553 881 798 596 107	42 43 40 43 45 43	436 407 884 659 103 253	898 621 286 833 957	47 48 47 48 49	853 962 540 723 950 106	879 152 808 627 003	56 56 62 60 58 61	477 367 640 926 844 774	659 511 829 710 883	60 59 61 58 58 60	479 153 281 483 790	840 605 454 671 276 733	61 63	887 682	397 627	
F M A M J J		36 36 37 36 36 37 35	364 531 283 065 877 839	853 660 324 499 415 311 995	37 37 38 38 38 39	114 152 145 641 480 618 303	553 881 798 596 107 818	42 43 40 43 45 43	436 407 884 659 103 253 702	898 621 286 833 957 816	47 48 47 48 49 49	853 962 540 723 950 106 128	879 152 808 627 003 545	56 56 62 60 58 61 62	477 367 640 926 844 774 067	659 511 829 710 883 682	60 59 61 58 58 60 59	479 153 281 483 790 749	840 605 454 671 276 733 692	61 63	887 682	397 627	
F M A M J J		36 36 37 36 36 37 35 37	364 531 283 065 877 839 868	853 660 324 499 415 311 995 903	37 37 38 38 38 39 39	114 152 145 641 480 618 303 881	553 881 798 596 107 818 703	42 43 40 43 45 43 45	436 407 884 659 103 253 702 874	898 621 286 833 957 816 857	47 48 47 48 49 49 48	853 962 540 723 950 106 128 626	879 152 808 627 003 545 155	56 56 62 60 58 61 62 63	477 367 640 926 844 774 067 614	659 511 829 710 883 682 511	60 59 61 58 58 60 59 60	479 153 281 483 790 749 597 210	840 605 454 671 276 733 692 471	61 63	887 682	397 627	
F M A M J J A		36 36 37 36 36 37 35 37	364 531 283 065 877 839 868 736	853 660 324 499 415 311 995 903 148	37 38 38 38 39 39 40 40	114 152 145 641 480 618 303 881 004	553 881 798 596 107 818 703 922	42 43 40 43 45 43 45 45	436 407 884 659 103 253 702 874 991	898 621 286 833 957 816 857 165 561	47 48 47 48 49 49 48	853 962 540 723 950 106 128 626 308	879 152 808 627 003 545 155 901 035	56 62 60 58 61 62 63	477 367 640 926 844 774 067 614 476	659 511 829 710 883 682 511 129	60 59 61 58 58 60 59 60 59	479 153 281 483 790 749 597 210 710	840 605 454 671 276 733 692 471 533	61 63	887 682	397 627	

^{1/} Preliminary

Table 4 - Sales of manufactured products by manufacturing division (R'000)

Manufacturing				[Act	tual	valı	ıes			5	Seaso	nall	у а	djus	ted '	val	ues	
divisions		Year	£	A	April			March April 1			1/	April		1	I	Marc	n	 A	pril		
		2003			2003		2004					2003				2004					
Food and beverages	124	771	847	10	021	472	10	892	644	10	599	005	10	448	437	10	842	624	11	075	489
Textiles, clothing, leather and footwear	35	505	661	1 2	898	711	3	282	137	2	923	775	 2	996	629	3	089	331	3	023	116
Wood and wood products; paper; publishing and printing Petroleum, chemical products,	1 65	416	117	4	995	258	5	575	272	5	291	798	 	333	847	5	443	335	5	631	755
rubber and plastic products Glass and non-metallic mineral	1148	180	564	12	938	678	13	314	843	12	746	696	1 13	3 227	115	13	146	940	12	991	552
products Basic iron and steel,	20 	136	354	i 1	560	418	1	950	245	1	809	489	: 	678	319	1	950	570	1	946	775
non-ferrous metal products; metal products and machinery Electrical machinery Radio, television and	 154 20	879 906		 12 1	225 732			518 759			321 648			3 164 . 817			464 672			209 721	
communication apparatus; professional equipment Motor vehicles, parts and accessories and	 11 	116	190	 	924	353	1	143	498	1	055	034	 	952	276	1	020	460	1	082	235
other transport equipment Furniture and other manufacturing divisions	1102		318	İ	072 745							379 513	İ	806			007				
Total	i											138									

^{1/} Preliminary

Explanatory notes

1

Introduction

- 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.
- 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 actual and seasonally adjusted figures are presented.
- 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.
- As indicated earlier, Stats SA developed a new business register, based on the value-added tax (VAT) database obtained from the South African Revenue Service (SARS), which replaced the previous business register. All enterprises are legally bound to register for VAT when their turnover for a period of twelve months equals or exceeds R300 000. Enterprises that conform to these criteria are included on the new business register, and hence were given a chance of selection in the new sample for the survey.

Scope of the survey

- 5 This survey covers manufacturing enterprises, i.e. those conducting activities in -
 - the manufacturing, processing, making or packing of products;
 - the slaughtering of animals, including poultry; and
 - installation, assembly, completion, repair and related work.

Classification

The 1993 edition of the Standard Industrial Classification of all Economic Activities (SIC), Fifth Edition, Report No. 09-90-02, was used to classify the statistical units in the survey. The SIC is based on the 1990 International Standard Industrial Classification of all Economic Activities (ISIC) 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.

Statistical unit

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.

Weighting methodology

- 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 http://www.statssa.gov.za/publications/publicationsearch.asp.
- 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, in this instance the 1996 Census. 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.

Survey methodology and design

- The survey is conducted by mail on a monthly basis. Questionnaires are sent to a sample of just over 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.
- The value of sales of manufactured products is obtained monthly from the sample of just over 3 000 enterprises, which was drawn in January 2003 from a population then of approximately 31 000 manufacturing enterprises. Each manufacturing division is divided into four size groups. The sample is drawn at the SIC two-digit level. All large enterprises (size group one), which comprise about one third of the enterprises in the current sample, 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.
- The calculation of the monthly production indices is based on the value 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.
- More direct indicators are used for the production of 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 and other transport equipment. 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).

Seasonal adjustment

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.

Trend cycle

15 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.

Reliability of estimates

- 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. Figures for the latest month are preliminary.
- 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. Figures for the latest month are preliminary. Fluctuations may occur in consecutive months as a result of seasonal and economic factors.

Revised figures

Revised figures are due to respondents reporting revisions or corrections to their figures and late submission of their data to Stats SA. Figures for the latest month are preliminary. 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.

These will, in due course, be revised on the basis of the beckcast series.

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.

Symbols and abbreviations

GDP Gross Domestic Product

ISIC International Standard Industrial Classification

m Million

22

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

Comparability with previously published information

- The levels of sales of manufactured products based on the new sample, are about 17% higher than the levels based on the old sample. The first results of the new sample was published on 18 May 2004.
- The higher values of manufacturers' sales from the new sample can mainly be attributed to the following:
 - The greater currency of the frame now being used compared to the frame drawn from the previous business register; and
 - The improved coverage particularly for smaller enterprises as a result of access to VAT registrations to update the new business register.

As indicated earlier, for the majority of divisions within manufacturing, the calculation of the monthly production indices is based on the values of sales and stocks of manufactured products after the effect of price changes has been taken into account by deflation using appropriate indices of the Production Price Index (PPI). The level of the manufacturing production indices for past periods was not be affected by the greater currency and increased coverage of the new business register, as the previously published data were revised by a constant factor to allow the indices to remain consistent with those previously published.

Glossary

Enterprise

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.

Index of physical volume of manufacturing production

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.

Industry

An industry is made up of enterprises engaged in the same or similar kinds of economic activity. Industries are defined in the *System of National Accounts (SNA)* in the same way as in the *Standard Industrial Classification of all Economic Activities, Fifth Edition, Report No. 09-90-02 of January 1993 (SIC)*.

Intermediate consumption

Intermediate consumption includes -

- purchases and transfers-in of materials;
- payments to other establishments for work done;
- other direct factory costs;
- rent and leasing paid;
- head office charges;
- royalties, copyright, trade names and patent rights paid;
- advertising;
- insurance premiums;
- · services; and
- secretarial and administrative fees.

Output

Output is the aggregate value of goods manufactured and work done and includes -

- sales and transfers-out of own manufactures, factory waste and stocks of factored goods;
- repairs;
- installation, erection and assembly;
- sundry trading revenue;
- sales of factored goods minus purchases of factored goods;
- rent and leasing received;
- royalties received;
- difference between opening value and closing value of work in progress, stocks of own manufactures and stocks of factored goods;
- head office charges; and
- other revenue.

Output excludes excise and customs duty paid.

Value added

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.

Sales

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.

Statistical unit

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;
- amounts received for work done;
- amounts received for services rendered.

Turnover excludes -

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

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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Advance release calendar

An advance release calendar is disseminated on www/statssa.gov.za

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A complete set of Stats SA publications is available at the Stats SA Library and the following libraries:

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Stats SA also provides a subscription service.

Electronic services

A large range of data are available via on-line services, diskette and computer printouts. For more details about our electronic data services, contact (012) 310 8600/8390/8351/4892/8496/8095.

You can visit us on the Internet at: www.statssa.gov.za

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