

Manufacturing: Production and sales

May 2004

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Key figures as at the end of May 2004

Actual estimates	May 2004	% change between May 2004 and May 2003	% change between May and April 2004	% change between March to May 2004 and March to May 2003	% change between January to May 2004 and January to May 2003
Physical volume of manufacturing production index (2000=100)	109,3	+3,0	+6,3	+2,7	+1,6
Total value of sales of manufactured products (R million)	65 289	+11,2	+8,8	+7,3	+5,3

Seasonally adjusted estimates	May 2004	% change between May 2004 and May 2003	% change between May and April 2004	% change between March to May 2004 and December 2003 to February 2004
Physical volume of manufacturing production index (2000=100)	109,0	+3,0	+0,6	+2,1
Total value of sales of manufactured products (R million)	64 756	+11,2	+2,1	+4,2

Key findings as at the end of May 2004

Manufacturing production increases

Manufacturing production for the three months ended May 2004 increased by 2,1%, after seasonal adjustment, compared with the previous three months. Higher production was reported by 6 of the 10 manufacturing divisions.

The major contributor to the seasonally adjusted increase of 2,1% in total manufacturing production for the three months ended May 2004 was the food and beverage division (contributing +0,8 of a percentage point to total manufacturing production), followed by petroleum, chemical products, rubber and plastic products and basic iron and steel, non-ferrous metal products, metal products and machinery (each contributing +0,6 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 May 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

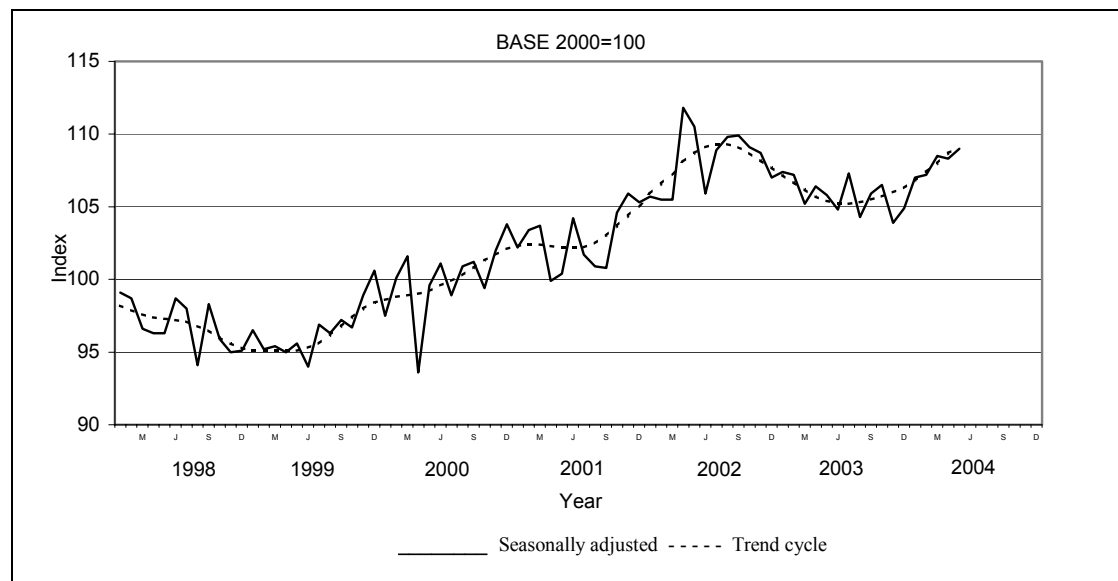


Table A - Contribution of manufacturing divisions to total manufacturing production (Base 2000=100)

Manufacturing divisions	Percentage contribution to the total manufacturing production using the weights according to 1996 Census of Manufacturing	Average seasonally adjusted production index for March 2004 to May 2004	Quarterly percentage change of March to May 2004 compared with the preceding three months	Contribution (percentage points) to the seasonally adjusted quarterly percentage change in total manufacturing production 1/
Food and beverages	15,3	111,5	+6,6	+0,8
Textiles, clothing, leather and footwear	7,8	96,0	+1,4	+0,1
Wood and wood products; paper; publishing and printing	11,4	102,5	-2,5	-0,2
Petroleum, chemical products, rubber and plastic products	19,3	112,0	+3,5	+0,6
Glass and non-metallic mineral products	4,5	109,8	+2,7	+0,1
Basic iron and steel; non-ferrous metal products; metal products and machinery	23,6	115,7	+2,8	+0,6
Electrical machinery	3,4	97,7	-1,7	-0,0
Radio, television and communication apparatus; professional equipment	1,5	108,0	+1,5	+0,0
Motor vehicles, parts and accessories; other transport equipment	9,1	105,7	-1,0	-0,0
Furniture and other manufacturing divisions	4,1	97,0	-2,3	-0,1
Total	100,0	108,6	+2,1	+2,1

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 May 2004 increased by 4,2% (+R7 674 million), after seasonal adjustment, compared with the previous three months. Higher manufacturing sales were reported by 7 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 May 2004 was 7,3 % higher compared with the three months ended May 2003 (see table C). Sales of manufactured products at current prices for the first five months of 2004 was 5,3% higher than for the first five months of 2003.

The seasonally adjusted increase of 4,2% in the total value of sales of manufactured products at current prices for the three months ended May 2004 was mainly due to large increases reported for basic iron and steel, non-ferrous metal products, metal products and machinery (+10,9% or +R4 176 million), petroleum, chemical products, rubber and plastic products (+5,3% or +R2 006 million), motor vehicles, parts and accessories and other transport equipment (+3,7% or +R988 million) and food and beverages (+3,3% or +R1 083 million) (see table B).

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

Manufacturing Divisions	Seasonally adjusted sales March to May 2004	Percentage change between March to May 2004 and December 2003 to February 2004	Difference in seasonally adjusted sales of manufacturing divisions between March to May 2004 and December 2003 to February 2004
	R'000		R'000
Food and beverages	33 455 646	+3,3	1 082 924
Textiles, clothing, leather and footwear	9 105 111	-1,7	-154 535
Wood and wood products; paper; publishing and printing	16 614 519	-2,0	-334 531
Petroleum, chemical products, rubber and plastic products	39 506 390	+5,3	2 005 526
Glass and non-metallic mineral products	5 891 085	+6,1	340 774
Basic iron and steel; non-ferrous metal products; metal products and machinery	42 509 574	+10,9	4 176 319
Electrical machinery	4 957 590	-12,2	-691 243
Radio, television and communication apparatus; professional equipment	3 246 633	+6,5	197 347
Motor vehicles, parts and accessories; other transport equipment	27 607 446	+3,7	988 351
Furniture and other manufacturing divisions	8 976 800	+0,7	63 045
Total	191 870 794	+4,2	7 673 980

The major contributors to the increase of 7,3% in sales of manufactured products at current prices for the three months ended May 2004 compared with the three months ended May 2003 were basic iron and steel, non-ferrous metal products, metal products and machinery (2,5 percentage points or R4 348 million), motor vehicles, parts and accessories and other transport equipment (1,2 percentage points or R2 175 million), food and beverages (1,2 percentage points or R2 122 million) and petroleum, chemical products, rubber and plastic products (0,8 of a percentage point or R1 508 million) (see table C).

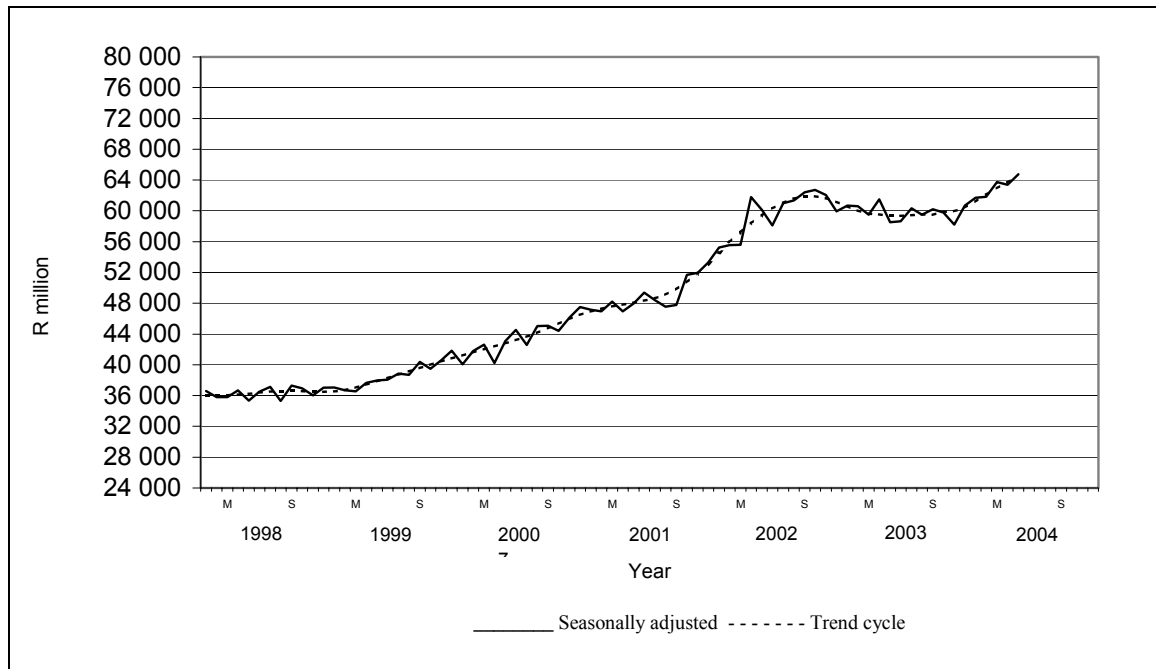
Table C - Contribution of the manufacturing divisions to total value of sales of manufactured products

Manufacturing	Percentage contribution to total value of sales of manufactured products March to May 2003	Percentage change between March to May 2004 and March to May 2003	Contribution (percentage points) to the percentage change in the total value of sales of manufactured products 1/	Difference in sales of manufacturing divisions between March to May 2004 and March to May 2003
				R'000
Food and beverages	17,2	6,9	1,2	2 122 431
Textiles, clothing, leather and footwear	5,1	2,6	0,1	235 468
Wood and wood products; paper; publishing and printing	8,9	3,8	0,3	606 781
Petroleum, chemical products, rubber and plastic products	21,2	4,0	0,8	1 508 442
Glass and non-metallic mineral products	2,7	20,4	0,6	976 497
Basic iron and steel, non-ferrous metal products; metal products and machinery	21,5	11,4	2,5	4 347 894
Electrical machinery	3,0	-5,1	-0,2	-268 862
Radio, television and communication apparatus; professional equipment	1,6	14,7	0,2	421 763
Motor vehicles, parts and accessories and other transport equipment	14,5	8,4	1,2	2 174 733
Furniture and other manufacturing divisions	4,3	11,5	0,5	883 310
Total	100,0	7,3	7,3	13 008 457

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 May 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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Notes

Forthcoming issues	Issue	Expected release date
	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	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).	
Special Data Dissemination Standard of the IMF	The data in this statistical release should 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. In this case there has been a delay, but this is not expected to recur.	

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 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 levels 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 indices							
J	85,8	83,6	85,2	89,5	92,7	94,1	94,0
F	97,2	93,7	98,7	102,0	104,5	105,5	105,5
M	98,9	97,9	104,8	107,3	109,6	109,4	112,7
A	92,3	90,7	89,0	94,6	105,2	100,7	102,8
M	96,9	95,9	99,9	100,8	110,7	106,1	109,3 1/
J	99,6	94,8	102,1	105,0	106,7	105,6	
J	100,0	98,3	100,1	102,7	109,9	107,9	
A	95,6	97,7	102,5	102,6	111,9	106,3	
S	102,3	100,9	104,8	104,0	113,0	108,9	
O	106,9	107,3	109,8	115,5	120,6	117,7	
N	105,5	109,9	113,6	118,1	121,1	115,2	
D	81,8	86,3	89,5	91,3	92,6	91,3	
Year	96,9	96,4	100,0	102,8	108,2	105,7	
Seasonally adjusted indices							
J	99,1	96,5	97,5	102,2	105,7	107,3	107,0
F	98,7	95,2	100,1	103,7	105,9	107,2	107,2
M	96,7	95,5	101,7	103,7	105,4	105,2	108,5
A	96,3	95,0	93,6	99,9	111,6	106,3	108,3
M	96,3	95,6	99,6	100,5	110,4	105,8	109,0
J	98,7	94,0	101,1	104,1	105,9	104,8	
J	98,0	96,9	98,9	101,7	108,9	107,3	
A	94,1	96,3	100,9	100,8	109,8	104,3	
S	98,2	97,2	101,2	100,7	109,9	105,9	
O	95,9	96,7	99,4	104,6	109,1	106,5	
N	95,0	98,8	102,0	106,0	108,7	103,9	
D	95,0	100,6	103,7	105,3	106,9	104,9	

1/ Preliminary

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

Base 2000 = 100

Manufacturing divisions	Weights	Year 2003	Actual indices			Seasonally adjusted indices					
			May	April	May 1/	May	April	May			
			2003			2004			2003		
			2003			2004			2004		
Food and beverages	15,3	105,9	103,4	105,2	106,7	106,9	112,9	110,3			
Textiles, clothing, leather and footwear	7,8	94,5	94,3	92,3	97,4	91,5	96,1	94,7			
Wood and wood products; paper; publishing and printing	11,4	101,1	100,3	97,6	103,7	99,0	103,2	102,6			
Petroleum, chemical products, rubber and plastic products	19,3	107,5	106,2	109,1	112,6	106,5	111,9	113,0			
Glass and non-metallic mineral products	4,5	103,6	102,4	108,3	110,2	101,7	112,8	109,3			
Basic iron and steel, non-ferrous metal products; metal products and machinery	23,6	111,8	115,0	108,2	116,7	115,9	116,2	117,5			
Electrical machinery	3,4	104,3	103,7	91,5	96,4	102,9	95,2	95,6			
Radio, television and communication apparatus; professional equipment	1,5	97,3	82,8	103,1	97,1	92,8	108,8	110,8			
Motor vehicles, parts and accessories and other transport equipment	9,1	107,6	110,8	97,1	114,3	104,5	100,4	107,5			
Furniture and other manufacturing divisions	4,1	98,7	106,2	82,9	101,8	101,0	90,0	96,3			
Total	100,0	105,7	106,1	102,8	109,3	105,8	108,3	109,0			

1/ Preliminary

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

Month	1998	1999	2000	2001	2002	2003	2004
Actual values							
J	30 576 822	31 165 950	33 906 711	40 233 251	47 375 894	51 643 823	52 541 243
F	35 498 013	36 217 248	41 487 385	46 701 165	55 226 455	59 099 962	60 406 324
M	38 210 216	38 782 180	45 391 460	51 045 548	58 657 750	61 384 235	65 908 558
A	35 326 061	36 079 564	38 606 833	44 861 167	59 046 008	58 115 074	60 010 965
M	35 971 768	38 617 164	43 799 078	48 988 234	61 240 265	58 700 877	65 289 120 1/
J	37 522 754	39 201 945	46 031 926	50 924 770	59 827 100	59 613 288	
J	37 828 313	39 493 231	43 083 506	48 906 488	61 523 700	60 397 962	
A	36 464 484	39 882 170	46 347 295	48 882 758	63 111 998	60 566 563	
S	39 084 148	42 233 261	47 362 496	50 070 717	65 371 794	61 812 044	
O	41 638 502	44 392 235	49 571 166	57 505 396	69 692 230	65 558 708	
N	40 834 784	45 966 203	52 246 640	58 662 310	69 910 936	64 569 771	
D	33 832 128	38 693 441	43 806 233	49 356 948	55 577 013	55 647 226	
Year	442 787 993	470 724 592	531 640 729	596 138 752	726 561 143	717 109 533	
Seasonally adjusted values							
J	37 089 212	37 554 952	40 535 408	47 568 995	55 904 542	60 758 219	61 684 701
F	36 366 545	37 122 407	42 456 332	47 883 672	56 485 400	60 485 857	61 827 793
M	36 533 252	37 160 513	43 420 193	48 976 329	56 376 610	59 170 228	63 720 518
A	37 289 308	38 158 632	40 904 591	47 610 003	62 832 564	61 559 302	63 394 613
M	36 066 941	38 642 120	43 654 035	48 724 029	60 745 500	58 232 439	64 755 663
J	36 883 693	38 484 154	45 100 750	49 935 210	58 830 098	58 764 523	
J	37 824 359	39 596 612	43 229 111	49 062 005	61 741 753	60 707 019	
A	35 870 351	39 301 934	45 694 794	48 109 962	62 048 049	59 573 273	
S	37 738 582	40 883 316	45 872 815	48 617 671	63 607 657	60 200 701	
O	37 298 241	39 995 629	44 977 439	52 287 477	63 458 561	59 696 165	
N	36 673 088	41 286 896	47 002 304	52 743 548	63 056 377	58 264 353	
D	37 182 805	42 438 119	47 905 330	53 534 670	60 685 213	60 684 320	

1/ Preliminary

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

Manufacturing divisions	Year	Actual values									Seasonally adjusted values					
		2003	May	April	May 1/			May	April	May	2004					
			2003	2003	2004			2003	2004							
Food and beverages	124 771 847	10 145 246	10 771 108	11 056 608	10 312 688	11 241 490	11 251 807									
Textiles, clothing, leather and footwear	35 505 661	3 029 839	2 890 973	3 116 676	2 951 229	2 984 822	3 037 414									
Wood and wood products; paper; publishing and printing	65 416 117	5 431 998	5 178 996	5 714 936	5 292 880	5 557 336	5 575 243									
Petroleum, chemical products, rubber and plastic products	148 180 564	11 902 673	12 582 487	13 471 650	11 900 948	12 901 595	13 433 600									
Glass and non-metallic mineral products	20 136 354	1 656 182	1 818 032	1 987 329	1 637 387	1 950 849	1 977 544									
Basic iron and steel, non-ferrous metal products; metal products and machinery	154 879 658	12 648 044	12 862 816	14 589 156	12 618 916	13 788 766	14 544 941									
Electrical machinery	20 906 441	1 754 903	1 557 786	1 686 340	1 726 595	1 632 281	1 656 391									
Radio, television and communication apparatus; professional equipment	11 116 190	892 332	1 102 662	1 036 291	936 150	1 136 580	1 087 600									
Motor vehicles, parts and accessories and other transport equipment	102 514 318	8 492 599	8 268 754	9 673 791	8 179 109	9 136 413	9 304 592									
Furniture and other manufacturing divisions	33 682 383	2 747 061	2 977 351	2 956 343	2 676 538	3 064 480	2 886 531									
Total	717 109 533	58 700 877	60 010 965	65 289 120	58 232 439	63 394 613	64 755 663									

1/ Preliminary

Explanatory notes

- Introduction**
- 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.
 - 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 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.
 - 4 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 in 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**
- 6 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**
- 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.
- Weighting methodology**
- 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 www.statssa.gov.za/publications/publicationsearch.asp.
 - 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, 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**
- 10** 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.
- 11** 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.
- 12** 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.
- 13** 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**
- 14** 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**
- 16** 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.
- 17** 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	18	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	<p>Users may also wish to refer to the following publications available from Stats SA -</p> <ul style="list-style-type: none"> • <i>Bulletin of Statistics</i> issued quarterly. • <i>SA Statistics</i> issued annually. <p>These will, in due course, be revised on the basis of the beccast series.</p>																		
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	22	<table border="0"> <tr> <td>GDP</td> <td>Gross Domestic Product</td> </tr> <tr> <td>ISIC</td> <td>International Standard Industrial Classification</td> </tr> <tr> <td>m</td> <td>Million</td> </tr> <tr> <td>SIC</td> <td>Standard Industrial Classification of all Economic Activities</td> </tr> <tr> <td>SARS</td> <td>South African Revenue Service</td> </tr> <tr> <td>Stats SA</td> <td>Statistics South Africa</td> </tr> <tr> <td>VAT</td> <td>Value added tax</td> </tr> <tr> <td>1/</td> <td>Preliminary figures</td> </tr> <tr> <td>*</td> <td>Revised figures</td> </tr> </table>	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
GDP	Gross Domestic Product																			
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Stats SA	Statistics South Africa																			
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1/	Preliminary figures																			
*	Revised figures																			

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 <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> .
Intermediate consumption	Intermediate consumption includes - <ul style="list-style-type: none"> • 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 - <ul style="list-style-type: none"> • 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. <p>Output excludes excise and customs duty paid.</p>
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.

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