# Manufacturing: Production and sales June 2004 

## Embargoed until: <br> 10 August 2004 <br> 13:00

Key figures as at the end of June 2004

| Actual estimates | June 2004 | \% change between <br> June 2003 and June 2004 | \% change between May and June 2004 | \% change <br> between <br> April to <br> June 2003 <br> and <br> April to <br> June 2004 | $\begin{gathered} \text { \% change } \\ \text { between } \\ \text { January to } \\ \text { June } 2003 \\ \text { and } \\ \text { January to } \\ \text { June } 2004 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Physical volume of manufacturing production index ( $2000=100$ ) | 110,8 | +4,9 | +0,2 | +3,8 | +2,4 |
| Total value of sales of manufactured products ( R million) | 65277 | +9,5 | 0,0 | +8,0 | +6,0 |


| Seasonally adjusted estimates | June 2004 | \% change between <br> June 2003 and June 2004 | \% change between May and June 2004 | \% change between January to March 2004 and April to June 2004 |
| :---: | :---: | :---: | :---: | :---: |
| Physical volume of manufacturing production index ( $2000=100$ ) | 110,2 | +5,1 | +0,2 | +1,8 |
| Total value of sales of manufactured products (R million) | 64897 | +10,0 | +0,3 | +3,2 |

## Key findings as at the end of June 2004

## Manufacturing production increases

Manufacturing production for the second quarter of 2004 increased by 1,8\%, after seasonal adjustment, compared with the first quarter of 2004. Higher production was reported by 8 of the 10 manufacturing divisions.

The major contributors to the seasonally adjusted increase of $1,8 \%$ in total manufacturing production for the second quarter of 2004 were the petroleum, chemical products, rubber and plastic products division and the basic iron and steel, non-ferrous metal products, metal products and machinery division (each contributing $+0,5$ of a percentage point to total manufacturing production), followed by the food and beverage division (contributing $+0,3$ 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 June 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)

| I | \| Percentage | Average | \| Quarterly | \| Contribution |
| :---: | :---: | :---: | :---: | :---: |
| Manufacturing | \| contribution | seasonally | \| percentage | \| (percentage |
| divisions | \|to the total | adjusted | \| change of | \|points) to |
| I | \| manufacturing | production | \| April | Ithe seasonally |
| 1 | \| production | index for | 1 to | \| adjusted |
| I | Iusing the | April 2004 | \| June 2004 | \| quarterly |
| I | \|weights | to | \| compared | \|percentage |
| \| | \| according to | June 2004 | \| with the | \|change in total |
| I | 11996 Census |  | \| preceding | \| manufacturing |
| 1 | lof |  | \| three | \| production |
| \| | \| Manufacturing |  | \| months | \| 1 / |
| \| Food and beverages | \| 15,3 | 111,5 | +3,1 | +0, 3 |
| \| Textiles, clothing, | I |  |  |  |
| \| leather and footwear | 17,8 | 97,5 | +0, 7 | +0, 0 |
| \| Wood and wood products; paper; | I |  |  |  |
| \| publishing and printing | \| 11,4 | 103,8 | +0, 7 | +0, 0 |
| \| Petroleum, chemical products, rubber and plastic products | 19, | 112, | +2, | +0, |
| Glass and non-metallic mineral products | 4 4,5 | 114,0 | 2,9 $+6,4$ | + $+0,2$ |
| \| Basic iron and steel; | 1 4,5 | 114,0 | +6, 4 | +0,2 |
| \| non-ferrous metal products; | I |  |  |  |
| \| metal products and machinery | 123,6 | 116,0 | +2,2 | +0,5 |
| \| Electrical machinery | 13,4 | 100,5 | -0,1 | -0, 0 |
| \| Radio, television and | I |  |  |  |
| \| communication apparatus; | I |  |  |  |
| \| professional equipment | 11,5 | 108,8 | +4,6 | +0, 0 |
| \| Motor vehicles, parts and | I |  |  |  |
| \| accessories; | I |  |  |  |
| \| other transport equipment | 19,1 | 109,3 | +0, 7 | +0, 0 |
| \| Furniture and other | I |  |  |  |
| \| manufacturing divisions | \| 4,1 | 95,8 | -8,4 | -0, 3 |
| \| Total | \| 100,0 | 109,5 | +1, 8 | +1, 8 |

## Sales of manufactured products increase

The total value of sales of manufactured products at current prices for the second quarter of 2004 increased by 3,2\% (+R6 048 million), after seasonal adjustment, compared with the first quarter of 2004. Higher manufacturing sales were reported by 9 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 second quarter of 2004 increased by 8,0\% compared with the second quarter of 2003 (see table C). Sales of manufactured products at current prices for the first six months of 2004 was $6,0 \%$ higher than for the first six months of 2003.

The seasonally adjusted increase of $3,2 \%$ in the total value of sales of manufactured products at current prices for the second quarter of 2004 was mainly due to large increases reported for basic iron and steel, non-ferrous metal products, metal products and machinery ( $+5,9 \%$ or + R2 367 million), petroleum, chemical products, rubber and plastic products $(+4,7 \%$ or + R1 800 million), motor vehicles, parts and accessories and other transport equipment ( $+2,4 \%$ or +R 658 million ) and food and beverages $(+2,2 \%$ or +R 716 million) (see table B$)$.

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


The major contributors to the increase of $8,0 \%$ in sales of manufactured products at current prices for the second quarter of 2004 compared with the second quarter of 2003 were basic iron and steel, non-ferrous metal products, metal products and machinery ( $+2,1$ percentage points or +R 3673 million), petroleum, chemical products, rubber and plastic products ( $+1,6$ percentage points or + R2 912 million), motor vehicles, parts and accessories and other transport equipment ( $+1,4$ percentage points or +R 2477 million) and food and beverages ( $+1,3$ percentage points or + R2 376 million) (see table C).

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


[^0]Figure 2 shows the seasonally adjusted and trend series for sales of manufactured products between January 1998 and June 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

Purpose of the survey

## Special Data <br> Dissemination Standard of the IMF

## Issue

July 2004
August 2004
September 2004
October 2004

## Expected release date

7 September 2004
12 October 2004
9 November 2004
7 December 2004

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).

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.

## Detailed tables

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


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


1/ Preliminary

Table 3-Total sales of manufacturing industry ( $\mathbf{R}^{\prime} \mathbf{\prime 0 0 0}$ )


1/ Preliminary

Table 4 - Sales of manufactured products by manufacturing division ( $\mathbf{R}^{\prime} \mathbf{0 0 0}$ )


[^1]
## Explanatory notes

## Introduction

## Scope of the survey

## Classification

## Statistical unit

## Weighting

 methodology1 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.

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.

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.

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.

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 nonresponse 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

## Seasonal adjustment

## Trend cycle

## Reliability of estimates

10 The survey is conducted by mail on a monthly basis. Questionnaires are sent to a sample of just over 3000 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 3000 enterprises, which was drawn in January 2003 from a population then of approximately 31000 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).

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.

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.

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 nonsampling 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 | Users may also wish to refer to the following publications available from Stats SA - |
|  |  | - Bulletin of Statistics issued quarterly. <br> - 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 | 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 |

## Glossary

## Enterprise <br> Index of physical volume of manufacturing production

## Industry

Intermediate consumption

Output

## Value added

## Sales

## Statistical unit

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.

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 .

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 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 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 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 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.

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

## Weight

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.

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

## Stats SA products

A complete set of Stats SA publications is available at the Stats SA Library and the following libraries:
National Library of South Africa, Pretoria Division
National Library of South Africa, Cape Town Division
Natal Society Library, Pietermaritzburg
Library of Parliament, Cape Town
Bloemfontein Public Library
Johannesburg Public Library
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Central Regional Library, Polokwane
Central Reference Library, Nelspruit
Central Reference Collection, Kimberley
Central Reference Library, Mmabatho
Stats SA also provides a subscription service.

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

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[^0]:    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.

[^1]:    1/ Preliminary

