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## Production: results for December 2016

**Table A – Key growth rates in the volume of manufacturing production**

	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16
Year-on-year % change, unadjusted	-0,5	2,2	0,3	-2,8	2,0	-2,0
Month-on-month % change, seasonally adjusted	-1,9	-1,0	1,5	-2,0	0,3	0,3
3-month % change, seasonally adjusted <sup>1</sup>	1,2	0,0	-1,3	-1,8	-1,1	-1,1

<sup>1</sup> Percentage change between the previous 3 months and the 3 months ending in the month indicated.

Manufacturing production decreased by 2,0% in December 2016 compared with December 2015. This decrease was mainly due to lower production in the following divisions:

- food and beverages (-6,2% and contributing -2,0 percentage points); and
- petroleum, chemical products, rubber and plastic products (-2,3% and contributing -0,6 of a percentage point) – see Tables 5 and 6.

Seasonally adjusted manufacturing production increased by 0,3% in December 2016 compared with November 2016. This followed month-on-month changes of 0,3% in November 2016 and -2,0% in October 2016 – see Table A.

In 2016, total manufacturing production increased by 0,8% compared with 2015. The largest contributions were made by the following divisions:

- petroleum, chemical products, rubber and plastic products (3,9% and contributing 0,9 of a percentage point);
- wood and wood products, paper, publishing and printing (3,3% and contributing 0,4 of a percentage point); and
- basic iron and steel, non-ferrous metal products, metal products and machinery (-1,7% and contributing -0,3 of a percentage point).

Seasonally adjusted manufacturing production decreased by 1,1% in the fourth quarter of 2016 compared with the third quarter of 2016. Seven of the ten manufacturing divisions reported negative growth rates over this period.

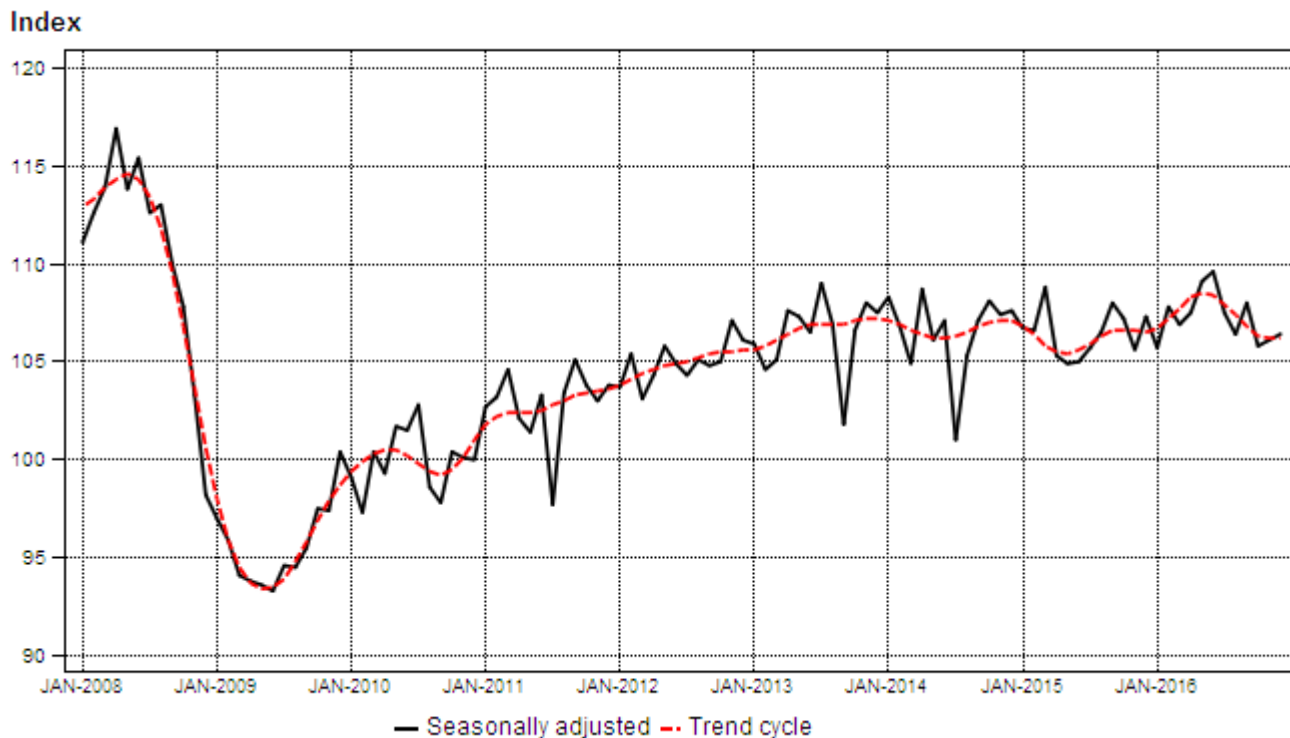
The following divisions made the largest negative contributions to the 1,1% decrease:

- petroleum, chemical products, rubber and plastic products (-2,1% and contributing -0,5 of a percentage point);
- motor vehicles, parts and accessories and other transport equipment (-7,1% and contributing -0,5 of a percentage point); and
- food and beverages (-1,5% and contributing -0,4 of a percentage point) – see Table B.

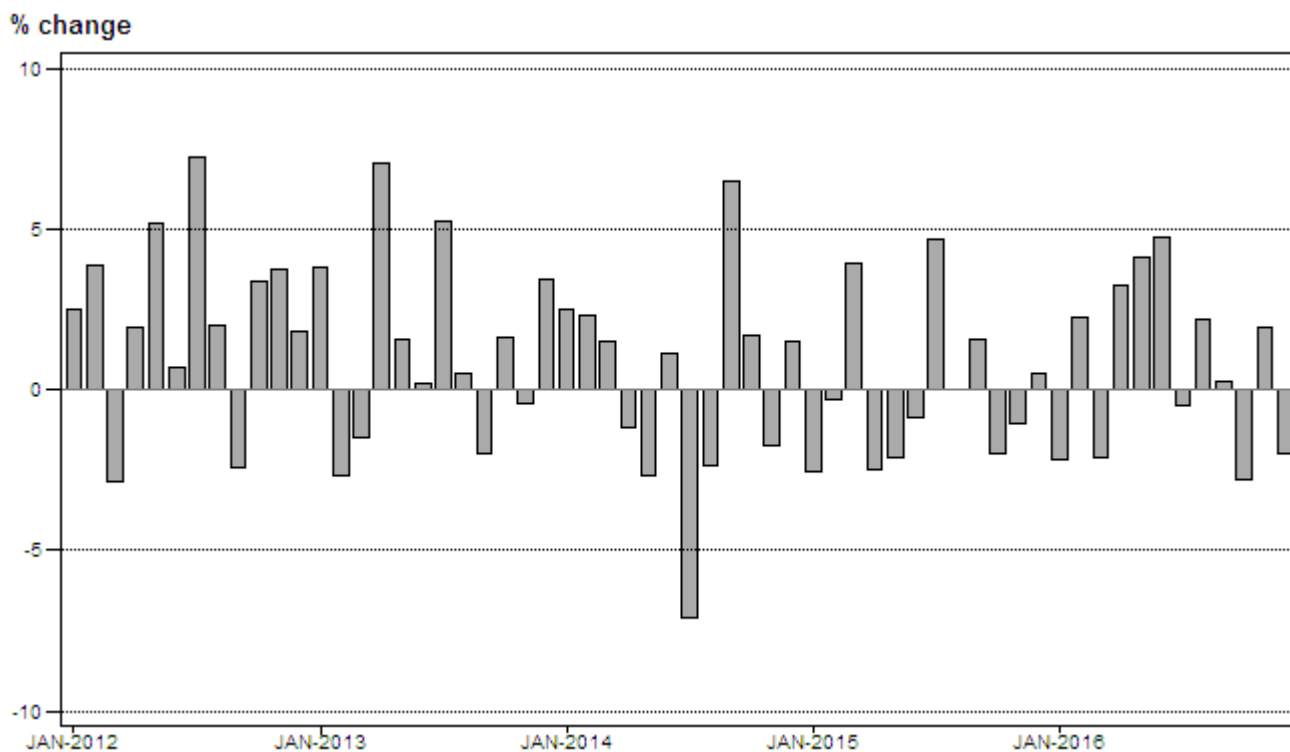
**Table B – Seasonally adjusted manufacturing production for the latest three months by division and major group (Base: 2010=100)**

Manufacturing division and major group	Weight (2013)	Jul – Sep 2016	Oct – Dec 2016	% change between Jul – Sep 2016 and Oct – Dec 2016	Contribution (% points) to the total % change
<b>Food and beverages</b>	<b>24,53</b>	<b>112,9</b>	<b>111,2</b>	<b>-1,5</b>	<b>-0,4</b>
Meat, fish, fruit, etc.	5,99	116,9	115,4	-1,3	-0,1
Dairy products	1,81	112,6	110,1	-2,2	0,0
Grain mill products	2,61	103,4	104,7	1,3	0,0
Other food products	7,78	106,8	106,6	-0,2	0,0
Beverages	6,34	120,5	115,9	-3,8	-0,3
<b>Textiles, clothing, leather and footwear</b>	<b>3,34</b>	<b>95,7</b>	<b>94,9</b>	<b>-0,8</b>	<b>0,0</b>
Textiles	0,89	88,1	92,0	4,4	0,0
Other textile products	0,36	96,3	92,5	-3,9	0,0
Knitted, crocheted articles	0,09	51,6	49,7	-3,7	0,0
Wearing apparel	1,13	98,9	95,4	-3,5	0,0
Leather and leather products	0,50	107,4	107,1	-0,3	0,0
Footwear	0,37	98,8	97,1	-1,7	0,0
<b>Wood and wood products, paper, publishing and printing</b>	<b>12,62</b>	<b>106,9</b>	<b>105,7</b>	<b>-1,1</b>	<b>-0,1</b>
Sawmilling and planing of wood	1,81	139,0	141,8	2,0	0,0
Products of wood	2,47	106,9	110,1	3,0	0,1
Paper and paper products	4,96	104,9	99,0	-5,6	-0,3
Publishing	1,55	91,7	89,9	-2,0	0,0
Printing, recorded media	1,83	93,5	95,8	2,5	0,0
<b>Petroleum, chemical products, rubber and plastic products</b>	<b>23,58</b>	<b>111,9</b>	<b>109,6</b>	<b>-2,1</b>	<b>-0,5</b>
Coke, petroleum products and nuclear fuel	9,01	105,4	101,4	-3,8	-0,3
Basic chemicals	4,08	118,5	114,6	-3,3	-0,1
Other chemical products	6,21	123,5	123,7	0,2	0,0
Rubber products	1,35	104,4	103,2	-1,1	0,0
Plastic products	2,93	100,8	100,9	0,1	0,0
<b>Glass and non-metallic mineral products</b>	<b>4,15</b>	<b>95,9</b>	<b>95,0</b>	<b>-0,9</b>	<b>0,0</b>
Glass and glass products	0,83	91,3	92,1	0,9	0,0
Non-metallic mineral products	3,32	97,0	95,7	-1,3	0,0
<b>Basic iron and steel, non-ferrous metal products, metal products and machinery</b>	<b>18,77</b>	<b>97,2</b>	<b>99,6</b>	<b>2,5</b>	<b>0,4</b>
Basic iron and steel products	3,27	87,4	93,6	7,1	0,2
Non-ferrous metal products	3,11	95,1	100,5	5,7	0,2
Structural metal products	1,83	76,2	72,5	-4,9	-0,1
Other fabricated metal products	3,92	121,1	123,3	1,8	0,1
General purpose machinery	2,37	77,2	78,2	1,3	0,0
Special purpose machinery	3,44	105,6	107,3	1,6	0,1
Household appliances	0,83	99,1	98,3	-0,8	0,0
<b>Electrical machinery</b>	<b>1,67</b>	<b>102,9</b>	<b>105,9</b>	<b>2,9</b>	<b>0,0</b>
<b>Radio, television and communication apparatus and professional equipment</b>	<b>1,55</b>	<b>142,9</b>	<b>143,3</b>	<b>0,3</b>	<b>0,0</b>
Radio, television and communication	0,90	163,0	167,1	2,5	0,0
Professional equipment	0,65	115,0	110,4	-4,0	0,0
<b>Motor vehicles, parts and accessories and other transport equipment</b>	<b>6,85</b>	<b>111,8</b>	<b>103,9</b>	<b>-7,1</b>	<b>-0,5</b>
Motor vehicles	2,47	131,1	123,2	-6,0	-0,2
Bodies for motor vehicles, trailers and semi-	0,44	113,3	115,4	1,9	0,0
Parts and accessories	2,78	98,6	90,7	-8,0	-0,2
Other transport equipment	1,16	101,6	90,4	-11,0	-0,1
<b>Furniture and other manufacturing</b>	<b>2,94</b>	<b>92,5</b>	<b>92,3</b>	<b>-0,2</b>	<b>0,0</b>
Furniture	1,06	104,0	105,1	1,1	0,0
Other manufacturing groups	1,88	86,0	85,1	-1,0	0,0
<b>Total</b>	<b>100</b>	<b>107,3</b>	<b>106,1</b>	<b>-1,1</b>	<b>-1,1</b>

**Figure 1 – Volume of manufacturing production (Base: 2010=100)**



**Figure 2 – Volume of manufacturing production (Base: 2010=100): year-on-year percentage change**



**Sales: results for December 2016****Table C – Key growth rates in manufacturing sales at current prices**

	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16
Year-on-year % change, unadjusted	4,5	9,6	7,0	3,0	9,1	4,8
Month-on-month % change, seasonally adjusted	-0,6	0,2	0,5	-1,6	2,3	-1,8
3-month % change, seasonally adjusted <sup>1</sup>	3,6	2,0	0,8	-0,4	0,1	-0,3

<sup>1</sup> Percentage change between the previous 3 months and the 3 months ending in the month indicated.

Seasonally adjusted manufacturing sales decreased by 1,8% in December 2016 compared with November 2016. This followed month-on-month changes of 2,3% in November 2016 and -1,6% in October 2016 – see Table C.

**Table D – Seasonally adjusted manufacturing sales at current prices for the latest three months by division**

Manufacturing division	Jul – Sep 2016 (R million)	Oct – Dec 2016 (R million)	% change between Jul – Sep 2016 and Oct – Dec 2016	Contribution (% points) to the total % change
Food and beverages	124 007	124 719	0,6	0,1
Textiles, clothing, leather and footwear	14 068	13 784	-2,0	-0,1
Wood and wood products, paper, publishing and printing	38 703	38 660	-0,1	0,0
Petroleum, chemical products, rubber and plastic products	109 221	110 076	0,8	0,2
Glass and non-metallic mineral products	14 249	14 165	-0,6	0,0
Basic iron and steel, non-ferrous metal products, metal products and machinery	103 094	104 977	1,8	0,4
Electrical machinery	14 739	15 039	2,0	0,1
Radio, television and communication apparatus and professional equipment	6 813	7 184	5,4	0,1
Motor vehicles, parts and accessories and other transport equipment	68 496	62 622	-8,6	-1,2
Furniture and other manufacturing	16 612	17 336	4,4	0,1
<b>Total</b>	<b>510 002</b>	<b>508 561</b>	<b>-0,3</b>	<b>-0,3</b>

**PJ Lehohla**  
Statistician-General

## Tables

**Table 1 – Index of the volume of manufacturing production (Base: 2010=100)**

Month	2010	2011	2012	2013	2014	2015	2016 <sup>1</sup>
Jan	84,5	86,7	88,9	92,3	94,6	92,2	90,2
Feb	92,2	98,4	102,2	99,5	101,8	101,5	103,8
Mar	103,8	109,3	106,2	104,6	106,2	110,4	108,1
Apr	93,4	93,4	95,2	101,9	100,7	98,2	101,4
May	100,6	101,6	106,9	108,6	105,7	103,5	107,8
Jun	102,9	104,2	104,9	105,1	106,3	105,4	110,4
Jul	105,3	98,9	106,1	111,7	103,8	108,7	108,2
Aug	101,6	107,8	110,0	110,6	108,0	108,0	110,4
Sep	102,2	110,4	107,7	105,6	112,5	114,3	114,6
Oct	110,3	112,9	116,7	118,6	120,6	118,2	114,9
Nov	112,2	116,6	121,0	120,5	118,4	117,2	119,5
Dec	91,0	93,5	95,2	98,5	100,0	100,5	98,5
<b>Total</b>	<b>100,0</b>	<b>102,8</b>	<b>105,1</b>	<b>106,5</b>	<b>106,6</b>	<b>106,5</b>	<b>107,3</b>

<sup>1</sup> The latest three months are preliminary.

**Table 2 – Year-on-year percentage change in the volume of manufacturing production**

Month	2011	2012	2013	2014	2015	2016	2016 year-to-date
Jan	2,6	2,5	3,8	2,5	-2,5	-2,2	-2,2
Feb	6,7	3,9	-2,6	2,3	-0,3	2,3	0,2
Mar	5,3	-2,8	-1,5	1,5	4,0	-2,1	-0,7
Apr	0,0	1,9	7,0	-1,2	-2,5	3,3	0,3
May	1,0	5,2	1,6	-2,7	-2,1	4,2	1,1
Jun	1,3	0,7	0,2	1,1	-0,8	4,7	1,7
Jul	-6,1	7,3	5,3	-7,1	4,7	-0,5	1,4
Aug	6,1	2,0	0,5	-2,4	0,0	2,2	1,5
Sep	8,0	-2,4	-1,9	6,5	1,6	0,3	1,3
Oct	2,4	3,4	1,6	1,7	-2,0	-2,8	0,9
Nov	3,9	3,8	-0,4	-1,7	-1,0	2,0	1,0
Dec	2,7	1,8	3,5	1,5	0,5	-2,0	0,8
<b>Total</b>	<b>2,8</b>	<b>2,2</b>	<b>1,3</b>	<b>0,1</b>	<b>-0,1</b>	<b>0,8</b>	

**Table 3 – Seasonally adjusted volume of manufacturing production**

Month	Index (Base: 2010=100)				Month-on-month % change			
	2013	2014	2015	2016	2013	2014	2015	2016
Jan	105,9	108,3	106,7	105,7	-0,2	0,7	-0,8	-1,5
Feb	104,6	106,8	106,6	107,8	-1,2	-1,4	-0,1	2,0
Mar	105,1	104,9	108,8	106,9	0,5	-1,8	2,1	-0,8
Apr	107,6	108,7	105,3	107,5	2,4	3,6	-3,2	0,6
May	107,3	106,1	104,9	109,1	-0,3	-2,4	-0,4	1,5
Jun	106,5	107,1	105,0	109,6	-0,7	0,9	0,1	0,5
Jul	109,0	101,0	105,7	107,5	2,3	-5,7	0,7	-1,9
Aug	106,9	105,3	106,5	106,4	-1,9	4,3	0,8	-1,0
Sep	101,8	107,1	108,0	108,0	-4,8	1,7	1,4	1,5
Oct	106,6	108,1	107,2	105,8	4,7	0,9	-0,7	-2,0
Nov	108,0	107,4	105,6	106,1	1,3	-0,6	-1,5	0,3
Dec	107,5	107,6	107,3	106,4	-0,5	0,2	1,6	0,3

**Table 4 – Index of the volume of manufacturing production by division and major group (Base: 2010=100)**

Manufacturing division and major group	Weight (2013)	Jul-16	Aug-16	Sep-16	<sup>1</sup> Oct-16	<sup>1</sup> Nov-16	<sup>1</sup> Dec-16
<b>Food and beverages</b>	<b>24,53</b>	<b>110,0</b>	<b>118,7</b>	<b>120,3</b>	<b>118,0</b>	<b>124,0</b>	<b>123,1</b>
Meat, fish, fruit, etc.	5,99	115,4	119,0	120,0	120,6	122,2	124,3
Dairy products	1,81	108,5	111,8	117,2	121,6	121,9	121,5
Grain mill products	2,61	103,1	106,2	106,1	106,7	113,2	102,4
Other food products	7,78	113,3	127,9	118,3	117,1	114,2	101,3
Beverages	6,34	104,3	114,1	129,9	120,2	142,8	157,8
<b>Textiles, clothing, leather and footwear</b>	<b>3,34</b>	<b>98,0</b>	<b>96,7</b>	<b>103,2</b>	<b>110,1</b>	<b>110,5</b>	<b>73,7</b>
Textiles	0,89	86,4	87,2	98,7	102,4	102,9	59,2
Other textile products	0,36	98,4	95,4	106,7	105,6	108,7	67,4
Knitted, crocheted articles	0,09	56,0	45,6	52,4	57,6	54,9	34,0
Wearing apparel	1,13	108,1	100,8	102,4	113,4	116,0	83,4
Leather and leather products	0,50	91,1	108,6	113,7	119,6	116,7	93,9
Footwear	0,37	113,7	104,9	110,9	122,9	119,0	67,8
<b>Wood and wood products, paper, publishing and printing</b>	<b>12,62</b>	<b>107,4</b>	<b>107,6</b>	<b>119,5</b>	<b>116,0</b>	<b>119,9</b>	<b>97,1</b>
Sawmilling and planing of wood	1,81	145,9	139,5	145,1	151,1	143,3	120,1
Products of wood	2,47	105,3	111,9	117,2	126,2	130,5	84,6
Paper and paper products	4,96	102,2	101,7	123,7	102,2	107,9	99,2
Publishing	1,55	92,3	93,1	101,4	104,2	112,0	94,8
Printing, recorded media	1,83	98,7	98,6	101,0	114,7	121,8	87,6
<b>Petroleum, chemical products, rubber and plastic products</b>	<b>23,58</b>	<b>114,0</b>	<b>113,0</b>	<b>113,3</b>	<b>120,5</b>	<b>121,7</b>	<b>104,2</b>
Coke, petroleum products and nuclear fuel	9,01	110,9	103,0	97,2	105,6	107,8	106,0
Basic chemicals	4,08	117,2	119,4	128,8	136,3	126,1	108,6
Other chemical products	6,21	123,4	129,9	130,4	135,1	140,1	114,7
Rubber products	1,35	108,5	102,0	104,7	114,6	116,7	70,5
Plastic products	2,93	101,6	103,9	108,5	116,4	121,3	85,9
<b>Glass and non-metallic mineral products</b>	<b>4,15</b>	<b>101,5</b>	<b>101,8</b>	<b>107,5</b>	<b>105,4</b>	<b>114,6</b>	<b>65,6</b>
Glass and glass products	0,83	89,1	101,4	103,7	106,1	107,4	86,1
Non-metallic mineral products	3,32	104,6	101,9	108,5	105,2	116,4	60,5
<b>Basic iron and steel, non-ferrous metal products, metal products and machinery</b>	<b>18,77</b>	<b>98,7</b>	<b>97,4</b>	<b>103,3</b>	<b>105,6</b>	<b>110,1</b>	<b>84,5</b>
Basic iron and steel products	3,27	86,7	78,2	88,9	95,8	96,7	78,7
Non-ferrous metal products	3,11	93,6	96,9	97,8	100,1	104,5	93,8
Structural metal products	1,83	74,4	76,1	83,1	81,9	87,7	54,2
Other fabricated metal products	3,92	124,7	128,2	133,5	135,3	146,4	87,6
General purpose machinery	2,37	76,7	82,8	82,7	88,0	88,8	69,0
Special purpose machinery	3,44	115,3	102,4	111,2	111,3	114,1	104,3
Household appliances	0,83	90,8	97,1	109,6	102,4	106,1	86,3
<b>Electrical machinery</b>	<b>1,67</b>	<b>107,5</b>	<b>102,4</b>	<b>117,8</b>	<b>105,5</b>	<b>117,7</b>	<b>87,3</b>
<b>Radio, television and communication apparatus and professional equipment</b>	<b>1,55</b>	<b>142,0</b>	<b>151,0</b>	<b>154,9</b>	<b>161,9</b>	<b>172,5</b>	<b>138,5</b>
Radio, television and communication apparatus	0,90	168,2	175,6	177,9	195,8	204,9	164,9
Professional equipment	0,65	105,8	116,9	123,1	115,1	127,8	102,0
<b>Motor vehicles, parts and accessories and other transport equipment</b>	<b>6,85</b>	<b>116,7</b>	<b>121,8</b>	<b>126,5</b>	<b>109,8</b>	<b>119,2</b>	<b>66,9</b>
Motor vehicles	2,47	143,8	152,2	142,6	134,8	149,8	64,5
Bodies for motor vehicles, trailers and semi-trailers	0,44	119,7	119,6	122,3	122,9	139,0	82,4
Parts and accessories	2,78	106,5	106,3	109,1	96,9	99,0	51,0
Other transport equipment	1,16	82,4	95,0	135,6	82,4	95,4	103,9
<b>Furniture and other manufacturing</b>	<b>2,94</b>	<b>93,4</b>	<b>99,5</b>	<b>100,2</b>	<b>108,5</b>	<b>113,9</b>	<b>75,1</b>
Furniture	1,06	106,6	111,7	114,8	130,4	143,2	87,8
Other manufacturing groups	1,88	86,0	92,7	92,0	96,3	97,5	68,0
<b>Total</b>	<b>100</b>	<b>108,2</b>	<b>110,4</b>	<b>114,6</b>	<b>114,9</b>	<b>119,5</b>	<b>98,5</b>

<sup>1</sup> The latest three months are preliminary.



**Table 5 – Year-on-year percentage change in the volume of manufacturing production by division and major group (Base: 2010=100)**

Manufacturing division and major group	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16
<b>Food and beverages</b>	<b>-2,8</b>	<b>3,5</b>	<b>-2,6</b>	<b>-6,6</b>	<b>3,0</b>	<b>-6,2</b>
Meat, fish, fruit, etc.	-1,2	-1,9	-3,5	-5,0	-7,7	-7,4
Dairy products	-6,5	3,4	-4,5	-9,7	-1,3	-10,4
Grain mill products	-4,9	-2,4	-0,7	1,5	3,0	-6,1
Other food products	-5,4	8,3	-1,3	-6,2	13,5	-4,4
Beverages	1,6	5,2	-3,1	-10,4	4,5	-5,6
<b>Textiles, clothing, leather and footwear</b>	<b>-2,3</b>	<b>-1,4</b>	<b>-0,9</b>	<b>-2,0</b>	<b>-2,1</b>	<b>-1,5</b>
Textiles	-0,5	3,9	8,8	12,3	7,9	5,7
Other textile products	0,6	7,6	17,3	-4,8	4,8	4,8
Knitted, crocheted articles	-5,6	-12,3	-2,8	-8,4	-9,3	2,1
Wearing apparel	3,7	-3,4	-5,7	-6,4	-7,5	0,0
Leather and leather products	-21,3	-10,1	-9,8	-5,4	-6,6	-11,7
Footwear	1,4	1,9	-5,5	-6,4	-2,6	-4,5
<b>Wood and wood products, paper, publishing and printing</b>	<b>-1,0</b>	<b>0,7</b>	<b>3,5</b>	<b>2,2</b>	<b>1,7</b>	<b>1,7</b>
Sawmilling and planing of wood	4,0	12,8	7,3	10,3	10,0	13,4
Products of wood	-7,3	6,5	4,6	8,0	12,0	5,5
Paper and paper products	1,9	-7,2	2,1	-5,5	-4,9	-5,5
Publishing	0,7	-7,3	-1,6	-3,6	-1,7	-2,8
Printing, recorded media	-7,5	9,2	5,3	9,6	-0,8	11,6
<b>Petroleum, chemical products, rubber and plastic products</b>	<b>8,1</b>	<b>4,1</b>	<b>0,5</b>	<b>-1,9</b>	<b>1,2</b>	<b>-2,3</b>
Coke, petroleum products and nuclear fuel	20,4	9,5	-3,4	-7,9	-1,9	-3,3
Basic chemicals	-2,1	-3,6	8,6	4,9	-1,9	-2,8
Other chemical products	6,3	6,7	-0,5	2,7	8,7	-1,5
Rubber products	-2,6	-4,2	0,3	-4,9	2,8	1,0
Plastic products	-0,1	-0,4	1,6	-3,3	-2,9	-1,0
<b>Glass and non-metallic mineral products</b>	<b>-4,8</b>	<b>0,9</b>	<b>-3,1</b>	<b>-5,6</b>	<b>3,1</b>	<b>-9,0</b>
Glass and glass products	-13,3	3,5	-2,5	-3,1	-4,3	-2,2
Non-metallic mineral products	-2,7	0,3	-3,1	-6,2	4,9	-11,2
<b>Basic iron and steel, non-ferrous metal products, metal products and machinery</b>	<b>-5,2</b>	<b>-2,4</b>	<b>-0,2</b>	<b>1,6</b>	<b>5,9</b>	<b>3,0</b>
Basic iron and steel products	-1,1	2,4	10,6	17,8	20,1	-1,9
Non-ferrous metal products	-5,3	3,2	4,9	2,1	13,6	14,7
Structural metal products	-16,5	-9,8	-1,9	-9,0	0,8	-13,3
Other fabricated metal products	-0,6	6,4	1,9	3,0	10,2	4,4
General purpose machinery	-11,3	-9,9	-3,7	-0,8	-0,4	0,7
Special purpose machinery	-2,1	-10,8	-9,5	-3,1	-4,9	2,9
Household appliances	-20,1	-11,7	-3,5	-10,6	-10,6	4,2
<b>Electrical machinery</b>	<b>-13,6</b>	<b>-12,2</b>	<b>-4,4</b>	<b>-9,1</b>	<b>-9,0</b>	<b>-4,3</b>
<b>Radio, television and communication apparatus and professional equipment</b>	<b>10,2</b>	<b>3,9</b>	<b>3,1</b>	<b>2,3</b>	<b>-0,3</b>	<b>0,1</b>
Radio, television and communication apparatus	10,7	-1,3	-2,0	4,8	-4,2	-0,2
Professional equipment	9,2	16,3	15,0	-3,1	9,7	0,9
<b>Motor vehicles, parts and accessories and other transport equipment</b>	<b>-4,1</b>	<b>8,5</b>	<b>9,7</b>	<b>-10,2</b>	<b>-4,2</b>	<b>3,1</b>
Motor vehicles	-7,0	7,4	6,6	-8,5	-2,2	14,2
Bodies for motor vehicles, trailers and semi-trailers	-9,7	1,4	5,9	-9,2	0,8	23,4
Parts and accessories	3,2	16,7	11,8	-5,6	-6,5	-1,7
Other transport equipment	-10,5	-3,4	14,8	-25,9	-6,9	-8,1
<b>Furniture and other manufacturing</b>	<b>2,9</b>	<b>7,5</b>	<b>-4,0</b>	<b>-2,8</b>	<b>6,5</b>	<b>3,2</b>
Furniture	-7,1	4,9	-2,7	-5,4	2,1	-2,4
Other manufacturing groups	11,0	9,3	-5,0	-0,5	10,5	7,8
<b>Total</b>	<b>-0,5</b>	<b>2,2</b>	<b>0,3</b>	<b>-2,8</b>	<b>2,0</b>	<b>-2,0</b>

**Table 6 – Contribution of each division and major group to the year-on-year percentage change in the volume of manufacturing production (percentage points)**

Manufacturing division and major group	Weight (2013)	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16
<b>Food and beverages</b>	<b>24,53</b>	<b>-0,7</b>	<b>0,9</b>	<b>-0,7</b>	<b>-1,7</b>	<b>0,8</b>	<b>-2,0</b>
Meat, fish, fruit, etc.	5,99	-0,1	-0,1	-0,2	-0,3	-0,5	-0,6
Dairy products	1,81	-0,1	0,1	-0,1	-0,2	0,0	-0,3
Grain mill products	2,61	-0,1	-0,1	0,0	0,0	0,1	-0,2
Other food products	7,78	-0,5	0,7	-0,1	-0,5	0,9	-0,4
Beverages	6,34	0,1	0,3	-0,2	-0,8	0,3	-0,6
<b>Textiles, clothing, leather and footwear</b>	<b>3,34</b>	<b>-0,1</b>	<b>0,0</b>	<b>0,0</b>	<b>-0,1</b>	<b>-0,1</b>	<b>0,0</b>
Textiles	0,89	0,0	0,0	0,1	0,1	0,1	0,0
Other textile products	0,36	0,0	0,0	0,0	0,0	0,0	0,0
Knitted, crocheted articles	0,09	0,0	0,0	0,0	0,0	0,0	0,0
Wearing apparel	1,13	0,0	0,0	-0,1	-0,1	-0,1	0,0
Leather and leather products	0,50	-0,1	-0,1	-0,1	0,0	0,0	-0,1
Footwear	0,37	0,0	0,0	0,0	0,0	0,0	0,0
<b>Wood and wood products, paper, publishing and printing</b>	<b>12,62</b>	<b>-0,1</b>	<b>0,1</b>	<b>0,4</b>	<b>0,3</b>	<b>0,2</b>	<b>0,2</b>
Sawmilling and planing of wood	1,81	0,1	0,3	0,2	0,2	0,2	0,3
Products of wood	2,47	-0,2	0,2	0,1	0,2	0,3	0,1
Paper and paper products	4,96	0,1	-0,4	0,1	-0,3	-0,2	-0,3
Publishing	1,55	0,0	-0,1	0,0	-0,1	0,0	0,0
Printing, recorded media	1,83	-0,1	0,1	0,1	0,2	0,0	0,2
<b>Petroleum, chemical products, rubber and plastic products</b>	<b>23,58</b>	<b>1,8</b>	<b>1,0</b>	<b>0,1</b>	<b>-0,5</b>	<b>0,3</b>	<b>-0,6</b>
Coke, petroleum products and nuclear fuel	9,01	1,6	0,7	-0,3	-0,7	-0,2	-0,3
Basic chemicals	4,08	-0,1	-0,2	0,4	0,2	-0,1	-0,1
Other chemical products	6,21	0,4	0,5	0,0	0,2	0,6	-0,1
Rubber products	1,35	0,0	-0,1	0,0	-0,1	0,0	0,0
Plastic products	2,93	0,0	0,0	0,0	-0,1	-0,1	0,0
<b>Glass and non-metallic mineral products</b>	<b>4,15</b>	<b>-0,2</b>	<b>0,0</b>	<b>-0,1</b>	<b>-0,2</b>	<b>0,1</b>	<b>-0,3</b>
Glass and glass products	0,83	-0,1	0,0	0,0	0,0	0,0	0,0
Non-metallic mineral products	3,32	-0,1	0,0	-0,1	-0,2	0,2	-0,3
<b>Basic iron and steel, non-ferrous metal products, metal products and machinery</b>	<b>18,77</b>	<b>-0,9</b>	<b>-0,4</b>	<b>0,0</b>	<b>0,3</b>	<b>1,0</b>	<b>0,5</b>
Basic iron and steel products	3,27	0,0	0,1	0,2	0,4	0,5	0,0
Non-ferrous metal products	3,11	-0,1	0,1	0,1	0,1	0,3	0,4
Structural metal products	1,83	-0,2	-0,1	0,0	-0,1	0,0	-0,2
Other fabricated metal products	3,92	0,0	0,3	0,1	0,1	0,5	0,1
General purpose machinery	2,37	-0,2	-0,2	-0,1	0,0	0,0	0,0
Special purpose machinery	3,44	-0,1	-0,4	-0,4	-0,1	-0,2	0,1
Household appliances	0,83	-0,2	-0,1	0,0	-0,1	-0,1	0,0
<b>Electrical machinery</b>	<b>1,67</b>	<b>-0,3</b>	<b>-0,2</b>	<b>-0,1</b>	<b>-0,1</b>	<b>-0,2</b>	<b>-0,1</b>
<b>Radio, television and communication apparatus and professional equipment</b>	<b>1,55</b>	<b>0,2</b>	<b>0,1</b>	<b>0,1</b>	<b>0,0</b>	<b>0,0</b>	<b>0,0</b>
Radio, television and communication apparatus	0,90	0,1	0,0	0,0	0,1	-0,1	0,0
Professional equipment	0,65	0,1	0,1	0,1	0,0	0,1	0,0
<b>Motor vehicles, parts and accessories and other transport equipment</b>	<b>6,85</b>	<b>-0,3</b>	<b>0,6</b>	<b>0,7</b>	<b>-0,7</b>	<b>-0,3</b>	<b>0,1</b>
Motor vehicles	2,47	-0,2	0,2	0,2	-0,3	-0,1	0,2
Bodies for motor vehicles, trailers and semi-trailers	0,44	-0,1	0,0	0,0	0,0	0,0	0,1
Parts and accessories	2,78	0,1	0,4	0,3	-0,1	-0,2	0,0
Other transport equipment	1,16	-0,1	0,0	0,2	-0,3	-0,1	-0,1
<b>Furniture and other manufacturing</b>	<b>2,94</b>	<b>0,1</b>	<b>0,2</b>	<b>-0,1</b>	<b>-0,1</b>	<b>0,2</b>	<b>0,1</b>
Furniture	1,06	-0,1	0,1	0,0	-0,1	0,0	0,0
Other manufacturing groups	1,88	0,1	0,1	-0,1	0,0	0,1	0,1
<b>Total</b>	<b>100</b>	<b>-0,5</b>	<b>2,2</b>	<b>0,3</b>	<b>-2,8</b>	<b>2,0</b>	<b>-2,0</b>

**Table 7 – Seasonally adjusted index of the volume of manufacturing production by division and major group (Base: 2010=100)**

Manufacturing division and major group	Weight (2013)	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Month-on-month % change
<b>Food and beverages</b>	<b>24,53</b>	<b>113,1</b>	<b>112,3</b>	<b>111,1</b>	<b>111,0</b>	<b>111,6</b>	<b>0,5</b>
Meat, fish, fruit, etc.	5,99	116,1	116,6	118,3	111,7	116,3	4,1
Dairy products	1,81	113,6	110,6	110,8	112,8	106,8	-5,3
Grain mill products	2,61	102,3	104,2	104,8	104,8	104,5	-0,3
Other food products	7,78	109,5	105,7	107,5	105,7	106,6	0,9
Beverages	6,34	119,0	120,0	111,2	118,9	117,6	-1,1
<b>Textiles, clothing, leather and footwear</b>	<b>3,34</b>	<b>95,3</b>	<b>96,0</b>	<b>97,1</b>	<b>92,8</b>	<b>94,8</b>	<b>2,2</b>
Textiles	0,89	86,9	90,2	96,4	89,8	89,8	0,0
Other textile products	0,36	94,6	100,1	94,0	93,4	90,0	-3,6
Knitted, crocheted articles	0,09	50,0	51,9	50,7	48,3	50,2	3,9
Wearing apparel	1,13	96,7	96,4	94,7	92,9	98,7	6,2
Leather and leather products	0,50	113,2	111,1	112,4	104,2	104,8	0,6
Footwear	0,37	98,9	95,0	99,8	94,6	97,0	2,5
<b>Wood and wood products, paper, publishing and printing</b>	<b>12,62</b>	<b>105,8</b>	<b>109,0</b>	<b>105,7</b>	<b>105,6</b>	<b>105,9</b>	<b>0,3</b>
Sawmilling and planing of wood	1,81	140,2	139,1	143,5	138,2	143,6	3,9
Products of wood	2,47	107,8	109,2	109,2	111,9	109,1	-2,5
Paper and paper products	4,96	100,6	109,3	99,1	99,1	98,8	-0,3
Publishing	1,55	90,4	90,3	87,4	92,4	89,8	-2,8
Printing, recorded media	1,83	96,1	93,5	96,7	93,7	97,0	3,5
<b>Petroleum, chemical products, rubber and plastic products</b>	<b>23,58</b>	<b>110,9</b>	<b>111,8</b>	<b>110,9</b>	<b>109,2</b>	<b>108,7</b>	<b>-0,5</b>
Coke, petroleum products and nuclear fuel	9,01	105,1	104,1	101,7	103,1	99,5	-3,5
Basic chemicals	4,08	115,7	123,7	122,1	110,6	111,1	0,5
Other chemical products	6,21	123,2	121,1	123,2	123,1	124,7	1,3
Rubber products	1,35	104,0	105,1	103,7	101,5	104,4	2,9
Plastic products	2,93	98,6	101,8	100,7	100,5	101,6	1,1
<b>Glass and non-metallic mineral products</b>	<b>4,15</b>	<b>95,1</b>	<b>97,8</b>	<b>94,7</b>	<b>97,7</b>	<b>92,5</b>	<b>-5,3</b>
Glass and glass products	0,83	94,0	95,2	92,1	89,7	94,4	5,2
Non-metallic mineral products	3,32	95,4	98,4	95,3	99,7	92,0	-7,7
<b>Basic iron and steel, non-ferrous metal products, metal products and machinery</b>	<b>18,77</b>	<b>94,8</b>	<b>99,1</b>	<b>97,9</b>	<b>100,5</b>	<b>100,5</b>	<b>0,0</b>
Basic iron and steel products	3,27	80,2	90,1	93,6	96,8	90,3	-6,7
Non-ferrous metal products	3,11	93,9	97,7	95,6	102,5	103,5	1,0
Structural metal products	1,83	74,0	80,3	72,4	74,6	70,6	-5,4
Other fabricated metal products	3,92	122,7	122,3	121,2	126,9	121,9	-3,9
General purpose machinery	2,37	77,7	78,4	77,9	78,9	77,8	-1,4
Special purpose machinery	3,44	100,5	104,6	105,3	104,0	112,5	8,2
Household appliances	0,83	95,8	107,5	95,7	88,0	111,1	26,3
<b>Electrical machinery</b>	<b>1,67</b>	<b>99,7</b>	<b>105,8</b>	<b>103,1</b>	<b>102,4</b>	<b>112,3</b>	<b>9,7</b>
<b>Radio, television and communication apparatus and professional equipment</b>	<b>1,55</b>	<b>141,8</b>	<b>142,7</b>	<b>140,4</b>	<b>141,9</b>	<b>147,7</b>	<b>4,1</b>
Radio, television and communication apparatus	0,90	157,0	164,4	164,8	161,1	175,5	8,9
Professional equipment	0,65	120,7	112,7	106,6	115,2	109,4	-5,0
<b>Motor vehicles, parts and accessories and other transport equipment</b>	<b>6,85</b>	<b>110,4</b>	<b>112,5</b>	<b>101,0</b>	<b>104,5</b>	<b>106,2</b>	<b>1,6</b>
Motor vehicles	2,47	133,9	126,5	118,7	125,9	125,0	-0,7
Bodies for motor vehicles, trailers and semi-trailers	0,44	112,1	112,1	107,6	118,3	120,2	1,6
Parts and accessories	2,78	96,3	98,3	93,2	88,1	90,8	3,1
Other transport equipment	1,16	93,4	117,0	79,9	93,2	98,0	5,2
<b>Furniture and other manufacturing</b>	<b>2,94</b>	<b>94,1</b>	<b>93,3</b>	<b>91,0</b>	<b>92,0</b>	<b>93,9</b>	<b>2,1</b>
Furniture	1,06	105,5	104,4	103,7	106,2	105,5	-0,7
Other manufacturing groups	1,88	87,6	87,1	84,0	84,0	87,4	4,0
<b>Total</b>	<b>100</b>	<b>106,4</b>	<b>108,0</b>	<b>105,8</b>	<b>106,1</b>	<b>106,4</b>	<b>0,3</b>

**Table 8 – Manufacturing sales at current prices (R million)**

Month	2010	2011	2012	2013	2014	2015	2016 <sup>1</sup>
Jan	91 479	97 411	108 491	117 959	131 761	131 002	134 925
Feb	103 635	113 324	127 563	133 672	148 322	145 423	157 533
Mar	117 362	127 991	135 237	139 554	153 523	163 845	166 251
Apr	103 535	109 650	119 115	135 261	145 555	144 372	157 266
May	111 173	119 270	132 208	143 182	150 221	155 084	169 757
Jun	115 608	123 962	132 709	141 053	158 110	159 864	173 552
Jul	114 832	114 767	129 532	148 320	147 886	160 520	167 749
Aug	112 499	126 866	136 533	146 049	158 442	158 603	173 834
Sep	115 236	135 195	133 921	142 416	164 928	169 078	180 850
Oct	123 733	135 976	146 705	158 674	177 895	175 325	180 643
Nov	128 820	141 655	155 603	164 565	173 109	176 362	192 341
Dec	106 438	119 470	125 295	142 129	150 084	153 063	160 438
<b>Total</b>	<b>1 344 350</b>	<b>1 465 537</b>	<b>1 582 912</b>	<b>1 712 834</b>	<b>1 859 836</b>	<b>1 892 541</b>	<b>2 015 139</b>

<sup>1</sup> The latest three months are preliminary.

**Table 9 – Year-on-year percentage change in manufacturing sales at current prices**

Month	2011	2012	2013	2014	2015	2016	2016 year-to-date
Jan	6,5	11,4	8,7	11,7	-0,6	3,0	3,0
Feb	9,3	12,6	4,8	11,0	-2,0	8,3	5,8
Mar	9,1	5,7	3,2	10,0	6,7	1,5	4,2
Apr	5,9	8,6	13,6	7,6	-0,8	8,9	5,4
May	7,3	10,8	8,3	4,9	3,2	9,5	6,2
Jun	7,2	7,1	6,3	12,1	1,1	8,6	6,6
Jul	-0,1	12,9	14,5	-0,3	8,5	4,5	6,3
Aug	12,8	7,6	7,0	8,5	0,1	9,6	6,7
Sep	17,3	-0,9	6,3	15,8	2,5	7,0	6,8
Oct	9,9	7,9	8,2	12,1	-1,4	3,0	6,3
Nov	10,0	9,8	5,8	5,2	1,9	9,1	6,6
Dec	12,2	4,9	13,4	5,6	2,0	4,8	6,5
<b>Total</b>	<b>9,0</b>	<b>8,0</b>	<b>8,2</b>	<b>8,6</b>	<b>1,8</b>	<b>6,5</b>	

**Table 10 – Seasonally adjusted manufacturing sales at current prices**

Month	R million				Month-on-month % change			
	2013	2014	2015	2016	2013	2014	2015	2016
Jan	137 677	152 536	154 226	160 585	1,3	0,8	-2,2	0,9
Feb	139 249	154 942	152 013	163 672	1,1	1,6	-1,4	1,9
Mar	139 851	150 090	159 056	164 126	0,4	-3,1	4,6	0,3
Apr	140 569	156 081	154 700	164 999	0,5	4,0	-2,7	0,5
May	141 676	150 450	156 713	170 711	0,8	-3,6	1,3	3,5
Jun	141 303	156 529	156 971	170 457	-0,3	4,0	0,2	-0,1
Jul	147 077	146 877	158 682	169 516	4,1	-6,2	1,1	-0,6
Aug	143 594	157 248	158 346	169 811	-2,4	7,1	-0,2	0,2
Sep	137 304	157 330	160 769	170 675	-4,4	0,1	1,5	0,5
Oct	144 020	160 954	160 621	167 978	4,9	2,3	-0,1	-1,6
Nov	147 664	157 618	158 562	171 850	2,5	-2,1	-1,3	2,3
Dec	151 294	157 732	159 217	168 733	2,5	0,1	0,4	-1,8

**Table 11 – Manufacturing sales at current prices by division and major group (R million)**

Manufacturing division and major group	Jul-16	Aug-16	Sep-16	<sup>1</sup> Oct-16	<sup>1</sup> Nov-16	<sup>1</sup> Dec-16
<b>Food and beverages</b>	<b>39 196</b>	<b>41 251</b>	<b>43 580</b>	<b>42 908</b>	<b>46 713</b>	<b>48 282</b>
Meat, fish, fruit, etc.	11 413	11 510	12 125	11 894	12 502	13 002
Dairy products	3 242	3 408	3 463	3 696	3 639	3 738
Grain mill products	6 797	7 033	6 917	7 003	7 438	6 661
Other food products	8 869	8 893	9 601	9 557	10 052	8 935
Beverages	8 875	10 408	11 473	10 758	13 082	15 945
<b>Textiles, clothing, leather and footwear</b>	<b>4 705</b>	<b>4 789</b>	<b>5 056</b>	<b>5 240</b>	<b>5 536</b>	<b>3 795</b>
Textiles	680	693	770	810	824	471
Other textile products	1 217	1 209	1 344	1 278	1 362	922
Knitted, crocheted articles	208	177	201	212	214	150
Wearing apparel	1 670	1 642	1 642	1 774	1 951	1 361
Leather and leather products	479	608	615	624	599	492
Footwear	450	461	482	542	587	400
<b>Wood and wood products, paper, publishing and printing</b>	<b>12 591</b>	<b>12 796</b>	<b>15 095</b>	<b>14 043</b>	<b>14 862</b>	<b>12 428</b>
Sawmilling and planing of wood	810	794	796	865	733	692
Products of wood	1 643	1 729	1 954	2 114	2 047	1 380
Paper and paper products	5 784	5 788	7 543	5 933	6 361	5 868
Publishing	1 628	1 743	1 957	2 001	2 205	1 830
Printing, recorded media	2 727	2 741	2 845	3 131	3 516	2 658
<b>Petroleum, chemical products, rubber and plastic products</b>	<b>36 334</b>	<b>37 868</b>	<b>37 359</b>	<b>39 778</b>	<b>41 903</b>	<b>34 851</b>
Coke, petroleum products and nuclear fuel	11 905	11 787	10 149	11 476	12 391	11 719
Basic chemicals	7 309	8 064	8 570	9 136	9 231	7 254
Other chemical products	10 159	11 020	11 148	11 432	12 027	9 941
Rubber products	1 478	1 493	1 508	1 532	1 623	1 163
Plastic products	5 482	5 504	5 984	6 202	6 632	4 774
<b>Glass and non-metallic mineral products</b>	<b>4 918</b>	<b>5 118</b>	<b>5 421</b>	<b>5 310</b>	<b>5 622</b>	<b>3 477</b>
Glass and glass products	837	951	997	996	1 090	787
Non-metallic mineral products	4 081	4 167	4 423	4 314	4 532	2 690
<b>Basic iron and steel, non-ferrous metal products, metal products and machinery</b>	<b>34 000</b>	<b>35 188</b>	<b>36 126</b>	<b>36 375</b>	<b>38 577</b>	<b>30 213</b>
Basic iron and steel products	8 570	8 737	9 371	9 701	10 093	7 699
Non-ferrous metal products	8 073	8 738	8 641	8 202	8 830	7 837
Structural metal products	2 757	2 848	3 016	2 924	3 302	2 027
Other fabricated metal products	6 246	6 444	6 662	6 790	7 431	4 467
General purpose machinery	2 962	3 268	3 171	3 362	3 467	2 899
Special purpose machinery	4 460	4 164	4 199	4 334	4 313	4 487
Household appliances	932	991	1 067	1 062	1 141	798
<b>Electrical machinery</b>	<b>5 036</b>	<b>5 025</b>	<b>5 719</b>	<b>4 884</b>	<b>5 545</b>	<b>4 350</b>
<b>Radio, television and communication apparatus and professional equipment</b>	<b>2 311</b>	<b>2 375</b>	<b>2 545</b>	<b>2 702</b>	<b>2 852</b>	<b>2 333</b>
Radio, television and communication apparatus	1 428	1 405	1 547	1 727	1 769	1 430
Professional equipment	882	971	998	974	1 083	904
<b>Motor vehicles, parts and accessories and other transport equipment</b>	<b>23 053</b>	<b>23 724</b>	<b>24 019</b>	<b>23 204</b>	<b>24 186</b>	<b>14 991</b>
Motor vehicles	13 195	13 204	13 251	14 005	14 151	8 180
Bodies for motor vehicles, trailers and semi-trailers	1 058	1 008	1 049	1 046	1 147	710
Parts and accessories	7 167	7 544	6 918	6 435	6 893	3 919
Other transport equipment	1 633	1 968	2 800	1 717	1 995	2 183
<b>Furniture and other manufacturing</b>	<b>5 605</b>	<b>5 700</b>	<b>5 929</b>	<b>6 199</b>	<b>6 544</b>	<b>5 718</b>
Furniture	1 301	1 382	1 381	1 624	1 751	1 128
Other manufacturing groups	4 305	4 319	4 548	4 575	4 793	4 589
<b>Total</b>	<b>167 749</b>	<b>173 834</b>	<b>180 850</b>	<b>180 643</b>	<b>192 341</b>	<b>160 438</b>

<sup>1</sup> The latest three months are preliminary.

**Table 12 – Year-on-year percentage change in manufacturing sales at current prices by division and major group**

Manufacturing division and major group	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16
<b>Food and beverages</b>	<b>9,3</b>	<b>12,9</b>	<b>11,6</b>	<b>8,1</b>	<b>13,3</b>	<b>4,0</b>
Meat, fish, fruit, etc.	10,7	9,9	10,5	7,3	6,7	3,1
Dairy products	0,2	9,9	6,6	3,1	7,1	2,4
Grain mill products	10,7	17,4	15,0	15,9	16,9	3,9
Other food products	18,0	19,1	22,1	18,2	22,0	10,8
Beverages	2,4	9,5	4,7	-1,3	13,8	1,8
<b>Textiles, clothing, leather and footwear</b>	<b>4,0</b>	<b>7,0</b>	<b>8,2</b>	<b>-0,5</b>	<b>4,2</b>	<b>3,7</b>
Textiles	10,9	13,8	13,1	17,2	13,2	4,7
Other textile products	1,8	10,7	23,1	-6,9	8,4	15,3
Knitted, crocheted articles	1,5	-6,3	5,8	-2,8	-2,7	15,4
Wearing apparel	10,8	7,6	2,0	-2,3	2,0	-0,4
Leather and leather products	-16,7	-3,0	-4,7	-0,2	-4,6	-3,3
Footwear	5,4	7,0	6,4	-0,7	3,3	-0,7
<b>Wood and wood products, paper, publishing and printing</b>	<b>2,7</b>	<b>2,2</b>	<b>9,7</b>	<b>5,0</b>	<b>4,6</b>	<b>5,1</b>
Sawmilling and planing of wood	9,8	27,7	-0,7	11,9	9,2	6,1
Products of wood	-2,5	3,3	7,5	15,1	6,9	5,2
Paper and paper products	7,0	-4,6	11,5	0,3	0,9	-1,1
Publishing	-0,5	-2,0	6,5	0,2	4,0	3,1
Printing, recorded media	-2,4	15,5	12,1	9,9	10,1	23,5
<b>Petroleum, chemical products, rubber and plastic products</b>	<b>1,9</b>	<b>7,9</b>	<b>-1,1</b>	<b>-0,3</b>	<b>9,1</b>	<b>3,1</b>
Coke, petroleum products and nuclear fuel	-6,0	4,4	-16,1	-13,1	5,4	0,1
Basic chemicals	-0,5	7,4	4,3	6,4	16,3	9,4
Other chemical products	11,0	12,7	5,1	9,4	10,7	0,6
Rubber products	3,1	7,3	8,4	-1,9	5,5	13,5
Plastic products	8,3	6,8	9,7	1,4	5,2	4,9
<b>Glass and non-metallic mineral products</b>	<b>-1,7</b>	<b>4,6</b>	<b>4,6</b>	<b>-1,1</b>	<b>3,1</b>	<b>0,2</b>
Glass and glass products	0,5	10,1	5,3	-4,0	-1,6	1,8
Non-metallic mineral products	-2,1	3,5	4,4	-0,4	4,4	-0,2
<b>Basic iron and steel, non-ferrous metal products, metal products and machinery</b>	<b>1,1</b>	<b>8,9</b>	<b>5,4</b>	<b>3,9</b>	<b>11,5</b>	<b>10,8</b>
Basic iron and steel products	-5,2	-0,4	-0,5	4,6	15,7	19,8
Non-ferrous metal products	10,5	27,9	24,1	2,9	15,3	6,4
Structural metal products	-8,5	-3,1	-0,3	-4,4	9,4	-10,3
Other fabricated metal products	5,6	12,7	8,0	8,8	19,5	13,1
General purpose machinery	-2,9	6,0	2,3	7,0	7,1	11,5
Special purpose machinery	2,4	3,3	-8,5	3,1	-6,3	15,9
Household appliances	-3,4	5,4	7,2	-4,8	0,0	1,5
<b>Electrical machinery</b>	<b>-6,8</b>	<b>-2,5</b>	<b>2,0</b>	<b>-1,8</b>	<b>-5,2</b>	<b>5,9</b>
<b>Radio, television and communication apparatus and professional equipment</b>	<b>16,5</b>	<b>9,2</b>	<b>10,9</b>	<b>15,0</b>	<b>1,8</b>	<b>6,6</b>
Radio, television and communication apparatus	17,4	1,4	8,6	21,5	-6,0	2,6
Professional equipment	14,8	23,1	14,6	4,8	17,7	13,6
<b>Motor vehicles, parts and accessories and other transport equipment</b>	<b>11,1</b>	<b>18,8</b>	<b>15,7</b>	<b>1,2</b>	<b>7,5</b>	<b>1,9</b>
Motor vehicles	17,1	21,3	18,2	8,4	13,4	-4,6
Bodies for motor vehicles, trailers and semi-trailers	5,3	5,3	6,8	1,3	0,7	24,6
Parts and accessories	7,1	21,1	11,3	-6,3	0,2	16,7
Other transport equipment	-8,2	3,6	19,1	-18,6	-0,5	-1,6
<b>Furniture and other manufacturing</b>	<b>3,0</b>	<b>4,5</b>	<b>3,6</b>	<b>-3,8</b>	<b>8,5</b>	<b>1,3</b>
Furniture	-2,9	12,9	0,4	-1,5	6,3	1,3
Other manufacturing groups	5,0	2,1	4,6	-4,5	9,4	1,3
<b>Total</b>	<b>4,5</b>	<b>9,6</b>	<b>7,0</b>	<b>3,0</b>	<b>9,1</b>	<b>4,8</b>

**Table 13 – Contribution of each division and major group to the year-on-year percentage change in manufacturing sales at current prices (percentage points)**

Manufacturing division and major group	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16
<b>Food and beverages</b>	<b>2,1</b>	<b>3,0</b>	<b>2,7</b>	<b>1,8</b>	<b>3,1</b>	<b>1,2</b>
Meat, fish, fruit, etc.	0,7	0,7	0,7	0,5	0,4	0,3
Dairy products	0,0	0,2	0,1	0,1	0,1	0,1
Grain mill products	0,4	0,7	0,5	0,5	0,6	0,2
Other food products	0,8	0,9	1,0	0,8	1,0	0,6
Beverages	0,1	0,6	0,3	-0,1	0,9	0,2
<b>Textiles, clothing, leather and footwear</b>	<b>0,1</b>	<b>0,2</b>	<b>0,2</b>	<b>0,0</b>	<b>0,1</b>	<b>0,1</b>
Textiles	0,0	0,1	0,1	0,1	0,1	0,0
Other textile products	0,0	0,1	0,1	-0,1	0,1	0,1
Knitted, crocheted articles	0,0	0,0	0,0	0,0	0,0	0,0
Wearing apparel	0,1	0,1	0,0	0,0	0,0	0,0
Leather and leather products	-0,1	0,0	0,0	0,0	0,0	0,0
Footwear	0,0	0,0	0,0	0,0	0,0	0,0
<b>Wood and wood products, paper, publishing and printing</b>	<b>0,2</b>	<b>0,2</b>	<b>0,8</b>	<b>0,4</b>	<b>0,4</b>	<b>0,4</b>
Sawmilling and planing of wood	0,0	0,1	0,0	0,1	0,0	0,0
Products of wood	0,0	0,0	0,1	0,2	0,1	0,0
Paper and paper products	0,2	-0,2	0,5	0,0	0,0	0,0
Publishing	0,0	0,0	0,1	0,0	0,0	0,0
Printing, recorded media	0,0	0,2	0,2	0,2	0,2	0,3
<b>Petroleum, chemical products, rubber and plastic products</b>	<b>0,4</b>	<b>1,7</b>	<b>-0,2</b>	<b>-0,1</b>	<b>2,0</b>	<b>0,7</b>
Coke, petroleum products and nuclear fuel	-0,5	0,3	-1,2	-1,0	0,4	0,0
Basic chemicals	0,0	0,4	0,2	0,3	0,7	0,4
Other chemical products	0,6	0,8	0,3	0,6	0,7	0,0
Rubber products	0,0	0,1	0,1	0,0	0,0	0,1
Plastic products	0,3	0,2	0,3	0,0	0,2	0,1
<b>Glass and non-metallic mineral products</b>	<b>-0,1</b>	<b>0,1</b>	<b>0,1</b>	<b>0,0</b>	<b>0,1</b>	<b>0,0</b>
Glass and glass products	0,0	0,1	0,0	0,0	0,0	0,0
Non-metallic mineral products	-0,1	0,1	0,1	0,0	0,1	0,0
<b>Basic iron and steel, non-ferrous metal products, metal products and machinery</b>	<b>0,2</b>	<b>1,8</b>	<b>1,1</b>	<b>0,8</b>	<b>2,3</b>	<b>1,9</b>
Basic iron and steel products	-0,3	0,0	0,0	0,2	0,8	0,8
Non-ferrous metal products	0,5	1,2	1,0	0,1	0,7	0,3
Structural metal products	-0,2	-0,1	0,0	-0,1	0,2	-0,2
Other fabricated metal products	0,2	0,5	0,3	0,3	0,7	0,3
General purpose machinery	-0,1	0,1	0,0	0,1	0,1	0,2
Special purpose machinery	0,1	0,1	-0,2	0,1	-0,2	0,4
Household appliances	0,0	0,0	0,0	0,0	0,0	0,0
<b>Electrical machinery</b>	<b>-0,2</b>	<b>-0,1</b>	<b>0,1</b>	<b>-0,1</b>	<b>-0,2</b>	<b>0,2</b>
<b>Radio, television and communication apparatus and professional equipment</b>	<b>0,2</b>	<b>0,1</b>	<b>0,1</b>	<b>0,2</b>	<b>0,0</b>	<b>0,1</b>
Radio, television and communication apparatus	0,1	0,0	0,1	0,2	-0,1	0,0
Professional equipment	0,1	0,1	0,1	0,0	0,1	0,1
<b>Motor vehicles, parts and accessories and other transport equipment</b>	<b>1,4</b>	<b>2,4</b>	<b>1,9</b>	<b>0,2</b>	<b>1,0</b>	<b>0,2</b>
Motor vehicles	1,2	1,5	1,2	0,6	0,9	-0,3
Bodies for motor vehicles, trailers and semi-trailers	0,0	0,0	0,0	0,0	0,0	0,1
Parts and accessories	0,3	0,8	0,4	-0,2	0,0	0,4
Other transport equipment	-0,1	0,0	0,3	-0,2	0,0	0,0
<b>Furniture and other manufacturing</b>	<b>0,1</b>	<b>0,2</b>	<b>0,1</b>	<b>-0,1</b>	<b>0,3</b>	<b>0,0</b>
Furniture	0,0	0,1	0,0	0,0	0,1	0,0
Other manufacturing groups	0,1	0,1	0,1	-0,1	0,2	0,0
<b>Total</b>	<b>4,5</b>	<b>9,6</b>	<b>7,0</b>	<b>3,0</b>	<b>9,1</b>	<b>4,8</b>

**Table 14 – Seasonally adjusted manufacturing sales at current prices by division and major group (R million)**

Manufacturing division and major group	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Month-on-month % change
<b>Food and beverages</b>	<b>41 000</b>	<b>41 778</b>	<b>41 496</b>	<b>42 067</b>	<b>41 156</b>	<b>-2,2</b>
Meat, fish, fruit, etc.	11 347	11 605	11 553	11 387	11 597	1,8
Dairy products	3 465	3 366	3 449	3 420	3 367	-1,5
Grain mill products	6 787	6 870	6 946	7 091	6 738	-5,0
Other food products	8 743	9 200	9 137	9 094	8 702	-4,3
Beverages	10 657	10 738	10 412	11 075	10 752	-2,9
<b>Textiles, clothing, leather and footwear</b>	<b>4 675</b>	<b>4 734</b>	<b>4 610</b>	<b>4 611</b>	<b>4 563</b>	<b>-1,0</b>
Textiles	699	710	732	715	697	-2,5
Other textile products	1 188	1 263	1 159	1 189	1 167	-1,9
Knitted, crocheted articles	193	197	197	194	196	1,0
Wearing apparel	1 557	1 541	1 505	1 510	1 493	-1,1
Leather and leather products	598	591	582	568	566	-0,4
Footwear	440	433	435	435	444	2,1
<b>Wood and wood products, paper, publishing and printing</b>	<b>12 524</b>	<b>13 357</b>	<b>12 839</b>	<b>12 859</b>	<b>12 962</b>	<b>0,8</b>
Sawmilling and planing of wood	782	746	788	725	782	7,9
Products of wood	1 671	1 736	1 852	1 756	1 793	2,1
Paper and paper products	5 657	6 514	5 837	5 876	5 848	-0,5
Publishing	1 742	1 781	1 687	1 800	1 779	-1,2
Printing, recorded media	2 671	2 581	2 674	2 702	2 761	2,2
<b>Petroleum, chemical products, rubber and plastic products</b>	<b>36 903</b>	<b>35 821</b>	<b>36 129</b>	<b>37 029</b>	<b>36 918</b>	<b>-0,3</b>
Coke, petroleum products and nuclear fuel	11 865	10 803	10 899	11 922	11 374	-4,6
Basic chemicals	7 784	7 831	7 943	7 788	7 949	2,1
Other chemical products	10 527	10 183	10 523	10 419	10 554	1,3
Rubber products	1 466	1 468	1 394	1 432	1 515	5,8
Plastic products	5 262	5 536	5 369	5 467	5 527	1,1
<b>Glass and non-metallic mineral products</b>	<b>4 774</b>	<b>4 796</b>	<b>4 740</b>	<b>4 725</b>	<b>4 700</b>	<b>-0,5</b>
Glass and glass products	898	873	827	833	872	4,7
Non-metallic mineral products	3 876	3 924	3 913	3 892	3 828	-1,6
<b>Basic iron and steel, non-ferrous metal products, metal products and machinery</b>	<b>34 422</b>	<b>34 593</b>	<b>34 060</b>	<b>35 295</b>	<b>35 622</b>	<b>0,9</b>
Basic iron and steel products	8 756	9 109	9 321	9 761	9 843	0,8
Non-ferrous metal products	8 695	8 412	7 763	8 379	8 103	-3,3
Structural metal products	2 724	2 818	2 708	2 790	2 606	-6,6
Other fabricated metal products	6 058	6 077	6 180	6 389	6 185	-3,2
General purpose machinery	3 137	3 022	3 007	3 099	3 150	1,6
Special purpose machinery	4 044	4 097	4 139	3 885	4 703	21,1
Household appliances	1 008	1 059	942	992	1 033	4,1
<b>Electrical machinery</b>	<b>4 777</b>	<b>5 025</b>	<b>4 746</b>	<b>4 931</b>	<b>5 362</b>	<b>8,7</b>
<b>Radio, television and communication apparatus and professional equipment</b>	<b>2 175</b>	<b>2 292</b>	<b>2 432</b>	<b>2 374</b>	<b>2 378</b>	<b>0,2</b>
Radio, television and communication apparatus	1 210	1 368	1 499	1 403	1 416	0,9
Professional equipment	965	924	933	972	962	-1,0
<b>Motor vehicles, parts and accessories and other transport equipment</b>	<b>23 133</b>	<b>22 642</b>	<b>21 254</b>	<b>22 196</b>	<b>19 172</b>	<b>-13,6</b>
Motor vehicles	13 068	12 794	12 633	12 983	10 065	-22,5
Bodies for motor vehicles, trailers and semi-trailers	945	923	939	967	1 003	3,7
Parts and accessories	7 197	6 524	5 978	6 251	6 047	-3,3
Other transport equipment	1 923	2 400	1 704	1 994	2 057	3,2
<b>Furniture and other manufacturing</b>	<b>5 427</b>	<b>5 636</b>	<b>5 673</b>	<b>5 764</b>	<b>5 899</b>	<b>2,3</b>
Furniture	1 321	1 287	1 281	1 298	1 284	-1,1
Other manufacturing groups	4 107	4 350	4 392	4 466	4 615	3,3
<b>Total</b>	<b>169 811</b>	<b>170 675</b>	<b>167 978</b>	<b>171 850</b>	<b>168 733</b>	<b>-1,8</b>



## Survey information

- 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 business sampling frame (BSF), with enhanced coverage of South African businesses (see 4). The release contains monthly indices of the volume of manufacturing production and monthly value of sales of manufactured products by division and major group.
  - 2 In accordance with international practice, the indices are usually re-based every five years to a new base year. The current base period of the index is 2010. Both estimated and seasonally adjusted figures are presented.
  - 3 In order to improve timeliness, some information for the latest month had to be estimated due to late response. These estimates will be revised in future statistical releases as soon as information becomes available.
  - 4 Stats SA is continuously updating its BSF, based on units registered for value added tax (VAT) and income tax (IT) obtained from the South African Revenue Service (SARS).
- Purpose of the survey**
- 5 The results of the monthly manufacturing production and sales survey are used to calculate the volume of manufacturing production indices in order to estimate the gross domestic product (GDP) and its components, which in turn are used to develop and monitor government policy. These indices provide an indicator of the real level of manufacturing activity in the economy.
- Special Data Dissemination Standard of the IMF**
- 6 The data in this statistical release adhere to the Special Data Dissemination Standard (SDDS) of the International Monetary Fund (IMF), which sets out standards on coverage, periodicity and timeliness of data, access by the public, integrity, and quality of the disseminated data.
- Scope of the survey**
- 7 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**
- 8 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. Each enterprise is classified to an industry which reflects its predominant activity. Statistics in this publication are presented at SIC division (two digit) and major group (three digit) level.
- Collection rate**
- 9 The preliminary collection rate for the survey on manufacturing production and sales for December 2016 was 88,8%. The improved collection rate for November 2016 was 89,4%.
- Statistical unit**
- 10 The statistical unit for which information is compiled and published is an 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. The statistical units are derived from and linked to the South African Revenue Service (SARS) administrative data.
- Revised figures**
- 11 Revised figures are mainly due to late submission of data to Stats SA, or respondents reporting revisions or corrections to their figures. Preliminary figures, as indicated in the relevant tables, are subject to change and when revised will not be indicated as such.

- Related publications** 12 Users may also wish to refer to *Stats in Brief* available from Stats SA.
- Rounding-off of figures** 13 Where necessary, the figures in the tables have been rounded off to the nearest digit shown. There may, therefore, be slight discrepancies between the sums of the constituent items and the totals shown.
- Historical data** 14 Historical manufacturing data are available on the Stats SA webpage. Click on the following link ([Time series data](#)) to access the data electronically.
- Past publications** 15 Past manufacturing releases are available on the Stats SA webpage. Click on the following link ([Past publications](#)) to access the releases electronically.

**Technical notes**

- Survey methodology and design** 1 The survey is conducted monthly. Questionnaires are sent to a sample of 3 005 enterprises from a population of 45 966 manufacturing 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 on non-respondents.
- 2 A stratified random sample was drawn at the Standard Industrial Classification (SIC) three-digit level in April 2016 from Stats SA’s business sampling frame (BSF). Strata were formed using a combination of the SIC and the measure of size classes for enterprises (see point 3 below).

The Neyman optimal allocation formula used to allocate samples to each stratum is given by a formula below:

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

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

- Class limits** 3 Each manufacturing major group is divided into four size groups. All large enterprises (size group one) are completely enumerated. Simple random sampling is applied to medium (size group two) and to small (size group three and four) enterprises. The total value of sales of manufactured products of large enterprises (size group one) in a major group is added to the weighted totals of size group two, three and four of that major group to reflect the total value of sales of the major group.

**Measure of size classes (Rand)**

Enterprise size	Size group	Lower limits	Upper limits
Very small	4	1 878 106	15 000 000
Small	3	15 000 001	39 000 000
Medium	2	39 000 001	153 000 000
Large	1	153 000 001	

- Sample weighting** 4 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 major group and division estimates. These procedures are consistent with international best practice.

- Index of the volume of manufacturing production** 5 The index of the 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 major group is the ratio between the volume of production of a major group in a given period and the volume of production of the same major

group in the base period. The current base period is 2010. The production in the base period is set at 100.

**Calculation of production index**

- 6 The calculation of the monthly production indices is based on the value of sales of products and articles manufactured and change in monthly value of stocks of manufactured products, after the effect of price changes has been eliminated through deflation using appropriate indices of the production price index (PPI). For 38 of the 44 major groups 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.
- 7 More direct indicators are used for the value of production of the following major groups:
  - tobacco;
  - coke and refined petroleum products;
  - basic iron and steel products;
  - basic precious and non-ferrous metal products;
  - motor vehicles; and
  - parts and accessories for motor vehicles.

The volume indices for these major groups are calculated on the basis of 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).

**Index weighting**

- 8 For indices, a weight is calculated for every major group according to the value added of the major group (i.e. output of a major group minus intermediate consumption) relative to the total value added of the manufacturing industry as a whole, based on the results of the most recent census of manufacturing, large sample survey (LSS) of the manufacturing industry or national accounts (NA) value added data. The production indices of all divisions are multiplied by the applicable weights and aggregated to produce the index for the total volume of manufacturing production. Weights between census/LSS/NA years are fixed. The table below reflects the period and the census/LSS/NA which were used as base year for the given period.

Period	Source
1998 to 2000	1996 Census of Manufacturing
2001 to 2004	2001 LSS
2005 to 2009	2005 LSS
2010 to 2016	NA

- 9 The weights reflect the importance of the major group/division to the total manufacturing industry. The weights change over time due to changes in the relative performance of industries, due to factors such as quality changes, changes in relative prices, and changes in customer preferences. New weights need to be calculated from time to time.

**Table E – Weights by division and major group**

Manufacturing divisions and major groups	Weights according to national accounts value added		
	2011	2012	2013 – 2016
<b>Food and beverages</b>	<b>23,82</b>	<b>24,44</b>	<b>24,53</b>
Meat, fish, fruit, etc.	5,19	5,39	5,99
Dairy products	2,30	1,78	1,81
Grain mill products	2,78	2,86	2,61
Other food products	7,12	7,73	7,78
Beverages	6,43	6,68	6,34
<b>Textiles, clothing, leather and footwear</b>	<b>2,92</b>	<b>3,17</b>	<b>3,34</b>
Textiles	0,84	0,74	0,89
Other textile products	0,39	0,47	0,36
Knitted, crocheted articles	0,08	0,10	0,09
Wearing apparel	0,99	1,19	1,13
Leather and leather products	0,19	0,28	0,50
Footwear	0,43	0,39	0,37
<b>Wood and wood products, paper, publishing and printing</b>	<b>9,46</b>	<b>12,65</b>	<b>12,62</b>
Sawmilling and planing of wood	0,82	1,83	1,81
Products of wood	1,76	2,55	2,47
Paper and paper products	3,26	4,89	4,96
Publishing	1,45	1,51	1,55
Printing, recorded media	2,17	1,87	1,83
<b>Petroleum, chemical products, rubber and plastic products</b>	<b>22,52</b>	<b>22,13</b>	<b>23,58</b>
Coke, petroleum products and nuclear fuel	6,32	7,77	9,01
Basic chemicals	4,85	3,81	4,08
Other chemical products	7,06	6,49	6,21
Rubber products	1,18	1,00	1,35
Plastic products	3,11	3,06	2,93
<b>Glass and non-metallic mineral products</b>	<b>4,42</b>	<b>3,91</b>	<b>4,15</b>
Glass and glass products	0,89	0,78	0,83
Non-metallic mineral products	3,53	3,13	3,32
<b>Basic iron and steel, non-ferrous metal products, metal products and machinery</b>	<b>20,40</b>	<b>19,59</b>	<b>18,77</b>
Basic iron and steel products	4,71	3,38	3,27
Non-ferrous metal products (including precious metals)	3,46	3,18	3,11
Structural metal products	2,21	1,89	1,83
Other fabricated metal products	3,89	4,40	3,92
General purpose machinery	2,44	2,44	2,37
Special purpose machinery	3,04	3,44	3,44
Household appliances	0,65	0,86	0,83
<b>Electrical machinery</b>	<b>2,37</b>	<b>1,70</b>	<b>1,67</b>
<b>Radio, television and communication apparatus and professional equipment</b>	<b>1,45</b>	<b>1,41</b>	<b>1,55</b>
Radio, television and communication apparatus	0,88	0,90	0,90
Professional equipment	0,57	0,51	0,65
<b>Motor vehicles, parts and accessories and other transport equipment</b>	<b>8,58</b>	<b>7,39</b>	<b>6,85</b>
Motor vehicles	3,84	2,98	2,47
Bodies for motor vehicles, trailers and semi-trailers	0,53	0,43	0,44
Parts and accessories	3,00	2,77	2,78
Other transport equipment	1,21	1,21	1,16
<b>Furniture and other manufacturing</b>	<b>4,06</b>	<b>3,61</b>	<b>2,94</b>
Furniture	1,05	1,08	1,06
Other manufacturing groups	3,01	2,53	1,88
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

- Seasonal adjustment** 10 Seasonally adjusted estimates of all major groups are generated each month, using the X-12 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. The X-12-ARIMA procedure for manufacturing production and sales is described in more detail on the Stats SA website: [Click to Download Seasonal adjustment Manufacturing March 2016](#)
- Trend cycle** 11 The trend is the long-term pattern or movement of a time series. The X-12 Seasonal Adjustment Programme is used for smoothing seasonally adjusted estimates to estimates of the underlying trend.
- Reliability of estimates** 12 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.
- 13 Inaccuracies may occur because of imperfections in reporting by enterprises and errors made in the collection and processing of the data. Inaccuracies of this kind are referred to as non-sampling errors. Every effort is made to minimise non-sampling errors by careful design of questionnaires, testing them in pilot studies, editing reported data and implementing efficient operating procedures. Fluctuations may occur in consecutive months as a result of seasonal and economic factors.
- Month-on-month percentage change** 14 The month-on-month percentage change in a variable for any given month is the change between that month and the previous month, expressed as a percentage of the latter.
- Year-on-year (annual) percentage change** 15 The year-on-year percentage change in a variable for any given period is the change between that period and the corresponding period of the previous year, expressed as a percentage of the latter.
- Index contribution (percentage points)** 16 The contribution (percentage points) of a major group or division to the total manufacturing production percentage change for a given period is calculated by multiplying the difference in the index of each major group or division by the weight of the major group or division and then dividing by the previous period total manufacturing index.
- Sales contribution (percentage points)** 17 The contribution (percentage points) of a division or major group to the percentage change in total manufacturing sales for a given period is calculated by multiplying the percentage change of each major group or division with its percentage contribution to the total sales of the previous period, divided by 100.

## 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.

**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 (SIC)*, Fifth Edition, Report No. 09-90-02 of January 1993.

**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.

## Symbols and abbreviations

BSF	Business sampling frame
GDP	Gross domestic product
IMF	International Monetary Fund
ISIC	International Standard Industrial Classification
LSS	Large sample survey
NA	National accounts
PPI	Producer price index
Rm	R million
SIC	Standard Industrial Classification of all Economic Activities
SARS	South African Revenue Service
SDDS	Special Data Dissemination Standard
Stats SA	Statistics South Africa
VAT	Value added tax
*	Revised figures

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