

STATISTICAL RELEASE

P6242.1

Retail trade sales (Preliminary)

March 2019

To convert retail sales at current prices to sales at constant prices, Statistics South Africa constructs deflators using components of the consumer price index and weights calculated from the retail large sample survey (LSS). Previously the weights were based on the 2012 LSS. With effect from this publication (March 2019), the deflators were updated with weights from the 2015 LSS. For a short note on the retail deflator and the change in deflator weights, see page 5 of this statistical release.

Embargoed until:
15 May 2019
13:00

ENQUIRIES:
Keshnee Naidoo
(012) 310 8423

FORTHCOMING ISSUE:
April 2019

EXPECTED RELEASE DATE:
12 June 2019

www.statssa.gov.za
info@statssa.gov.za
T +27 12 310 8911

Private Bag X44, Pretoria, 0001, South Africa
ISibalo House, Koch Street, Salvokop, Pretoria, 0002

Contents

Sales at constant 2015 prices: results for March 2019	2
Table A – Key growth rates in retail trade sales at constant 2015 prices.....	2
Table B – Retail trade sales at constant 2015 prices for the latest three months by type of retailer	2
Figure 1 – Retail trade sales at constant 2015 prices	3
Figure 2 – Retail trade sales at constant 2015 prices: year-on-year percentage change.....	3
Sales at current prices: results for March 2019	4
Table C – Key growth rates in retail trade sales at current prices.....	4
Table D – Retail trade sales at current prices for the latest three months by type of retailer	4
Note: Updating the weights of the deflators for retail trade sales	5
Tables.....	7
Table 1 – Retail trade sales at constant 2015 prices (R million)	7
Table 2 – Year-on-year percentage change in retail trade sales at constant 2015 prices	7
Table 3 – Seasonally adjusted retail trade sales at constant 2015 prices	7
Table 4 – Retail trade sales at constant 2015 prices by type of retailer (R million)	8
Table 5 – Year-on-year percentage change in retail trade sales at constant 2015 prices by type of retailer	8
Table 6 – Contribution of each type of retailer to the year-on-year percentage change in retail trade sales at constant 2015 prices (percentage points)	8
Table 7 – Retail trade sales at current prices (R million).....	9
Table 8 – Year-on-year percentage change in retail trade sales at current prices	9
Table 9 – Seasonally adjusted retail trade sales at current prices	9
Table 10 – Retail trade sales at current prices by type of retailer (R million)	10
Table 11 – Year-on-year percentage change in retail trade sales at current prices by type of retailer.....	10
Table 12 – Contribution of each type of retailer to the year-on-year percentage change in retail trade sales at current prices (percentage points)	10
Survey information.....	11
Technical notes	13
Glossary.....	15
Technical enquiries.....	15
General information	16

Sales at constant 2015 prices: results for March 2019

Table A – Key growth rates in retail trade sales at constant 2015 prices

	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19
Year-on-year % change, unadjusted	2,4	3,2	-1,3	1,4	1,4	0,2
Month-on-month % change, seasonally adjusted	0,8	3,2	-5,1	1,6	0,6	-0,7
3-month % change, seasonally adjusted 1/	0,9	1,7	0,8	0,5	-1,6	-0,7

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

Measured in real terms (constant 2015 prices), retail trade sales increased by 0,2% year-on-year in March 2019. Positive annual growth rates were recorded for:

- retailers in household furniture, appliances and equipment (1,9%);
- general dealers (1,8%); and
- all 'other' retailers (1,5%) – see Table 5.

The main contributor to the 0,2% increase was general dealers (contributing 0,8 of a percentage point) – see Table 6.

Seasonally adjusted retail trade sales decreased by 0,7% in March 2019 compared with February 2019. This followed month-on-month changes of 0,6% in February 2019 and 1,6% in January 2019. In the first quarter of 2019, seasonally adjusted retail trade sales decreased by 0,7% compared with the previous quarter.

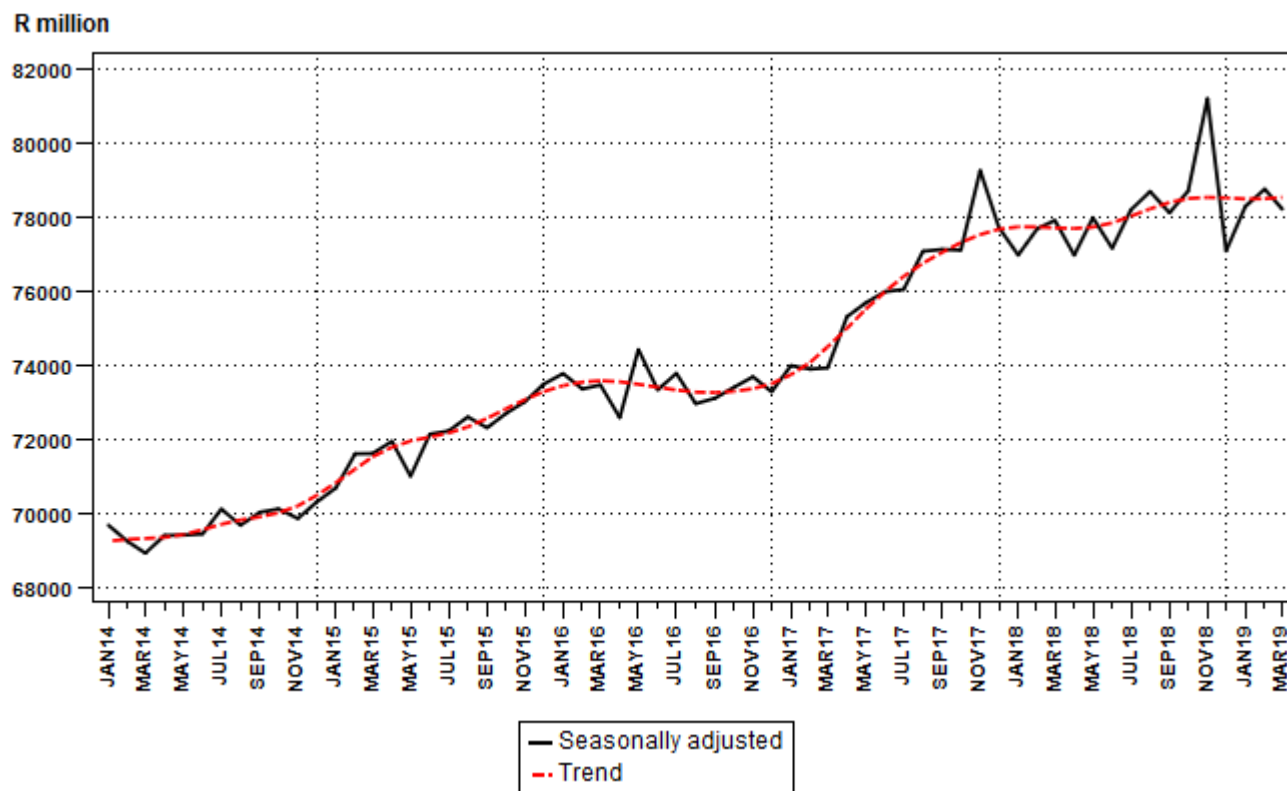
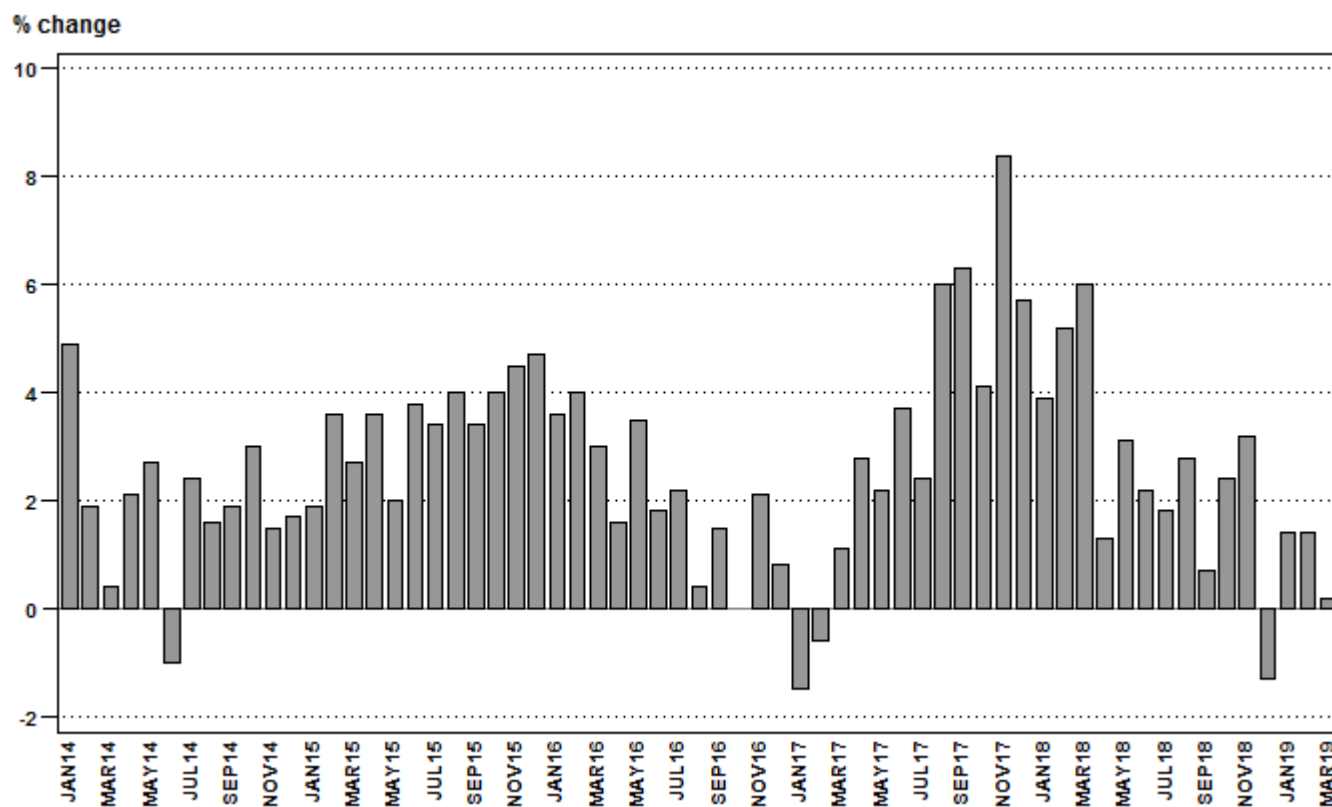
Table B – Retail trade sales at constant 2015 prices for the latest three months by type of retailer *

Type of retailer	Jan – Mar 2018 (R million)	Weight	Jan – Mar 2019 (R million)	% change between Jan – Mar 2018 and Jan – Mar 2019	Contribution (% points) to the total % change
General dealers	93 915	43,1	95 361	1,5	0,6
Food, beverages and tobacco in specialised stores	16 181	7,4	15 807	-2,3	-0,2
Pharmaceuticals and medical goods, cosmetics and toiletries	16 697	7,7	16 758	0,4	0,0
Textiles, clothing, footwear and leather goods	34 884	16,0	35 503	1,8	0,3
Household furniture, appliances and equipment	10 226	4,7	10 460	2,3	0,1
Hardware, paint and glass	17 313	7,9	17 032	-1,6	-0,1
All other retailers	28 711	13,2	29 116	1,4	0,2
Total	217 927	100,0	220 037	1,0	1,0

* Revised due to reweighting of the deflators. See note on page 5.

Retail trade sales increased by 1,0% in the first quarter of 2019 compared with the first quarter of 2018. The main contributors to this increase were:

- general dealers (1,5% and contributing 0,6 of a percentage point); and
- retailers in textiles, clothing, footwear and leather goods (1,8% and contributing 0,3 of a percentage point) – see Table B.

Figure 1 – Retail trade sales at constant 2015 prices**Figure 2 – Retail trade sales at constant 2015 prices: year-on-year percentage change**

Sales at current prices: results for March 2019

Table C – Key growth rates in retail trade sales at current prices

	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19
Year-on-year % change, unadjusted	4,1	5,3	0,7	3,6	3,5	2,8
Month-on-month % change, seasonally adjusted	0,6	3,4	-4,7	1,5	0,9	-0,3
3-month % change, seasonally adjusted 1/	1,7	2,2	1,3	0,9	-1,1	-0,1

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

Table D – Retail trade sales at current prices for the latest three months by type of retailer

Type of retailer	Jan – Mar 2018 (R million)	Weight	Jan – Mar 2019 (R million)	% change between Jan – Mar 2018 and Jan – Mar 2019	Contribution (% points) to the total % change
General dealers	107 841	44,6	113 364	5,1	2,3
Food, beverages and tobacco in specialised stores	19 481	8,1	19 715	1,2	0,1
Pharmaceuticals and medical goods, cosmetics and toiletries	19 026	7,9	19 799	4,1	0,3
Textiles, clothing, footwear and leather goods	37 316	15,4	38 159	2,3	0,4
Household furniture, appliances and equipment	9 986	4,1	10 177	1,9	0,1
Hardware, paint and glass	18 138	7,5	18 347	1,2	0,1
All other retailers	29 854	12,4	30 008	0,5	0,1
Total	241 639	100,0	249 569	3,3	3,3

Risenga Maluleke
Statistician-General

Note: Updating the weights of the deflators for retail trade sales

Statistics South Africa (Stats SA) publishes monthly data for the retail trade industry. The monthly statistical release provides estimated sales at current and constant prices. To convert retail sales at current prices to sales at constant prices, Stats SA constructs deflators using components of the consumer price index and weights calculated from the retail large sample survey (LSS). The weights have been updated from the 2012 LSS to the 2015 LSS.

An updated deflator for each type of retailer was compiled according to the following procedure (same method as before but using new information).

- (1) Using the 2015 retail LSS, identify the products sold by each type of retailer (previously, the 2012 retail LSS was used).
- (2) Calculate the weight of each product's sales within each type of retailer (sales of the product as a percentage of the sales of the type of retailer).
- (3) Match each product with a corresponding component of the CPI (December 2016 = 100).
- (4) Multiply each CPI component from (3) by its weight from (2) and sum the results to derive a deflator for each type of retailer.
- (5) Convert the results from (4) from December 2016 = 100 to 2015 = 100 (on average).

Retail trade sales at constant prices by type of retailer are obtained by deflating estimated sales at current prices by the relevant deflator. To obtain total retail trade sales at constant prices, estimates of the deflated sales for each type of retailer are aggregated. The new deflators have been applied with effect from January 2015, resulting in revisions to the time series. The impact of the new deflators on total sales is illustrated in Figures 3 and 4.

Figure 3 – Total retail trade sales at constant 2015 prices using 2012 LSS weights and 2015 LSS weights from January 2013 to February 2019: R million

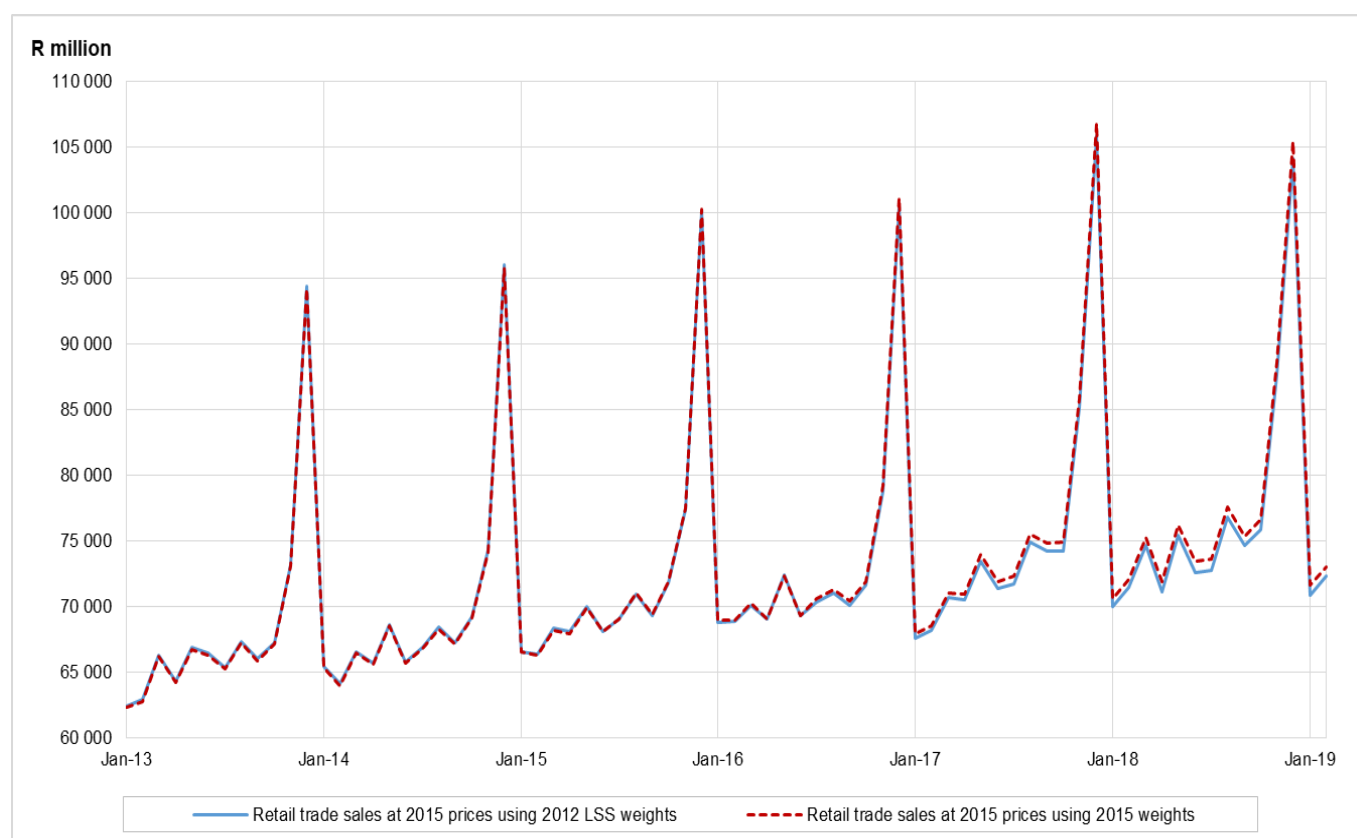
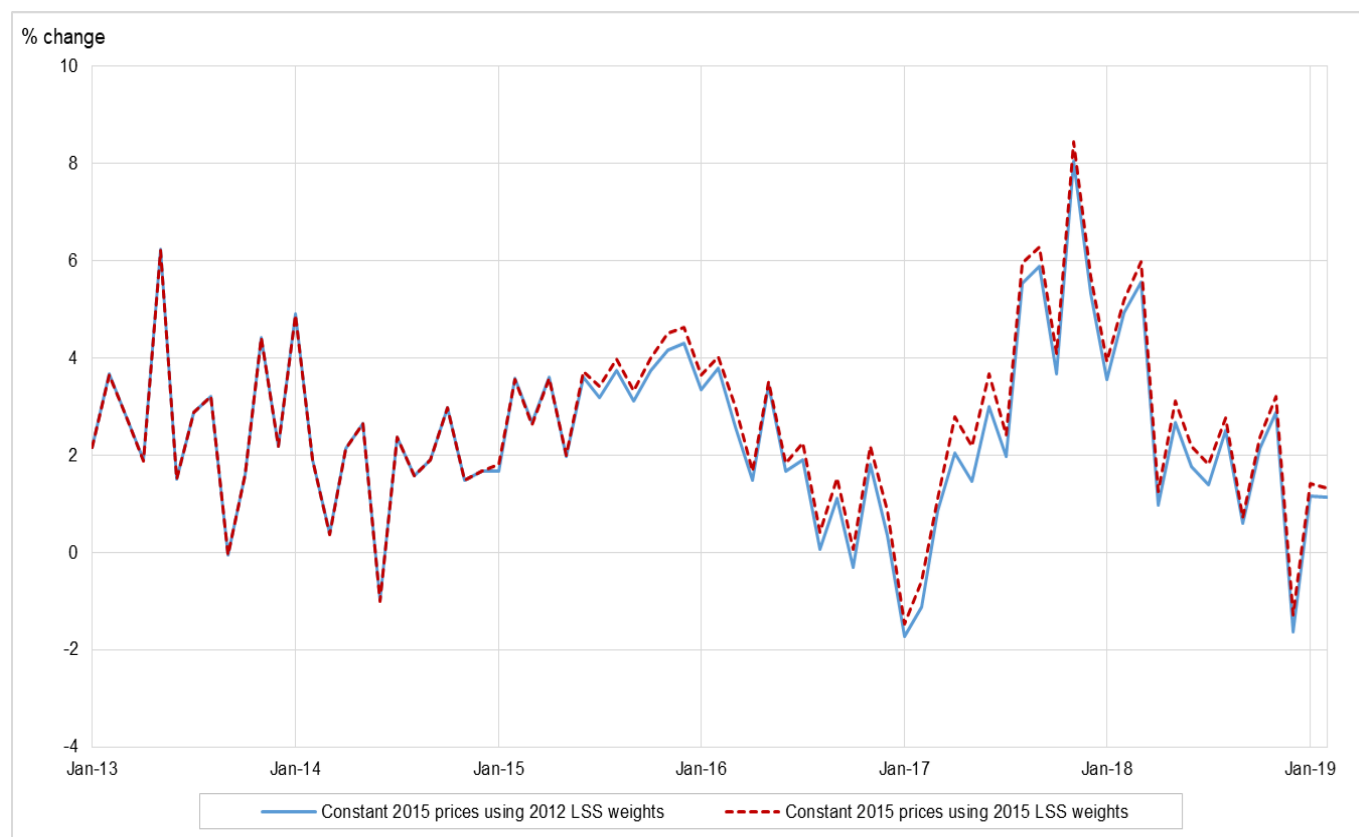


Figure 4 – Total retail trade sales at constant 2015 prices using 2012 LSS weights and 2015 LSS weights from January 2013 to February 2019: year-on-year percentage change



Tables

Table 1 – Retail trade sales at constant 2015 prices (R million) *

Month	2013	2014	2015	2016	2017	2018	2019 1/
Jan	62 294	65 344	66 555	68 958	67 943	70 609	71 603
Feb	62 778	63 973	66 276	68 922	68 517	72 071	73 065
Mar	66 172	66 420	68 195	70 216	71 005	75 247	75 369
Apr	64 200	65 565	67 945	69 058	70 980	71 871	
May	66 750	68 520	69 913	72 340	73 926	76 237	
Jun	66 305	65 647	68 112	69 332	71 871	73 438	
Jul	65 226	66 767	69 068	70 599	72 300	73 602	
Aug	67 211	68 278	71 023	71 285	75 534	77 623	
Sep	65 879	67 130	69 384	70 416	74 834	75 375	
Oct	67 123	69 115	71 907	71 927	74 866	76 637	
Nov	73 079	74 168	77 539	79 201	85 884	88 629	
Dec	94 241	95 815	100 281	101 108	106 849	105 470	
Total	821 258	836 742	866 198	883 362	914 509	936 809	

1/ Figures for latest month are preliminary.

* Revised due to reweighting of the deflators. See note on page 5.

Table 2 – Year-on-year percentage change in retail trade sales at constant 2015 prices

Month	2014	2015	2016	2017	2018	2019	2019 year-to-date
Jan	4,9	1,9	3,6	-1,5	3,9	1,4	1,4
Feb	1,9	3,6	4,0	-0,6	5,2	1,4	1,4
Mar	0,4	2,7	3,0	1,1	6,0	0,2	1,0
Apr	2,1	3,6	1,6	2,8	1,3		
May	2,7	2,0	3,5	2,2	3,1		
Jun	-1,0	3,8	1,8	3,7	2,2		
Jul	2,4	3,4	2,2	2,4	1,8		
Aug	1,6	4,0	0,4	6,0	2,8		
Sep	1,9	3,4	1,5	6,3	0,7		
Oct	3,0	4,0	0,0	4,1	2,4		
Nov	1,5	4,5	2,1	8,4	3,2		
Dec	1,7	4,7	0,8	5,7	-1,3		
Total	1,9	3,5	2,0	3,5	2,4		

Table 3 – Seasonally adjusted retail trade sales at constant 2015 prices

Month	R million				Month-on-month % change			
	2016	2017	2018	2019	2016	2017	2018	2019
Jan	73 771	73 984	76 967	78 281	0,4	1,0	-1,0	1,6
Feb	73 354	73 892	77 683	78 744	-0,6	-0,1	0,9	0,6
Mar	73 464	73 925	77 901	78 209	0,1	0,0	0,3	-0,7
Apr	72 583	75 304	76 964		-1,2	1,9	-1,2	
May	74 421	75 675	77 973		2,5	0,5	1,3	
Jun	73 332	75 979	77 150		-1,5	0,4	-1,1	
Jul	73 777	76 039	78 186		0,6	0,1	1,3	
Aug	72 958	77 069	78 679		-1,1	1,4	0,6	
Sep	73 106	77 118	78 106		0,2	0,1	-0,7	
Oct	73 395	77 099	78 692		0,4	0,0	0,8	
Nov	73 685	79 247	81 187		0,4	2,8	3,2	
Dec	73 280	77 710	77 079		-0,5	-1,9	-5,1	

Table 4 – Retail trade sales at constant 2015 prices by type of retailer (R million) *

Type of retailer	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19 1/
General dealers	30 206	36 744	42 889	29 614	32 207	33 540
Food, beverages and tobacco in specialised stores	5 704	5 775	8 347	5 136	5 124	5 547
Pharmaceuticals and medical goods, cosmetics and toiletries	5 948	5 609	5 943	5 877	5 295	5 586
Textiles, clothing, footwear and leather goods	13 564	17 308	24 301	12 347	11 838	11 318
Household furniture, appliances and equipment	3 738	4 824	5 402	3 372	3 334	3 754
Hardware, paint and glass	6 736	7 261	6 738	5 385	5 810	5 837
All other retailers	10 741	11 108	11 850	9 872	9 457	9 787
Total	76 637	88 629	105 470	71 603	73 065	75 369

1/ Figures are preliminary.

* Revised due to reweighting of the deflators. See note on page 5.

Table 5 – Year-on-year percentage change in retail trade sales at constant 2015 prices by type of retailer

Type of retailer	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19
General dealers	0,7	2,6	-1,7	1,5	1,2	1,8
Food, beverages and tobacco in specialised stores	-2,0	-1,1	-2,4	-1,9	-1,3	-3,6
Pharmaceuticals and medical goods, cosmetics and toiletries	4,1	2,3	-4,5	5,2	0,0	-4,0
Textiles, clothing, footwear and leather goods	3,3	5,4	-0,8	1,6	5,7	-1,8
Household furniture, appliances and equipment	9,4	14,7	-0,6	0,3	4,8	1,9
Hardware, paint and glass	0,0	-0,7	-2,6	-3,0	-1,0	-0,9
All other retailers	6,8	2,6	2,2	3,4	-0,7	1,5
Total	2,4	3,2	-1,3	1,4	1,4	0,2

Table 6 – Contribution of each type of retailer to the year-on-year percentage change in retail trade sales at constant 2015 prices (percentage points)

Type of retailer	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19
General dealers	0,3	1,1	-0,7	0,6	0,5	0,8
Food, beverages and tobacco in specialised stores	-0,2	-0,1	-0,2	-0,1	-0,1	-0,3
Pharmaceuticals and medical goods, cosmetics and toiletries	0,3	0,1	-0,3	0,4	0,0	-0,3
Textiles, clothing, footwear and leather goods	0,6	1,0	-0,2	0,3	0,9	-0,3
Household furniture, appliances and equipment	0,4	0,7	0,0	0,0	0,2	0,1
Hardware, paint and glass	0,0	-0,1	-0,2	-0,2	-0,1	-0,1
All other retailers	0,9	0,3	0,2	0,5	-0,1	0,2
Total	2,4	3,2	-1,3	1,4	1,4	0,2

Table 7 – Retail trade sales at current prices (R million)

Month	2013	2014	2015	2016	2017	2018	2019 1/
Jan	56 113	61 083	65 262	70 458	73 955	78 010	80 795
Feb	56 543	60 103	65 327	71 222	74 891	80 023	82 840
Mar	59 783	62 943	67 575	73 222	78 035	83 606	85 934
Apr	58 350	62 597	67 631	72 839	77 897	80 147	
May	60 632	65 780	69 963	76 533	81 404	85 055	
Jun	60 271	63 164	68 093	73 502	78 973	82 088	
Jul	59 383	64 458	69 025	74 973	79 411	82 196	
Aug	61 412	66 242	71 327	76 113	82 911	86 760	
Sep	60 493	65 181	69 694	75 275	82 217	84 543	
Oct	62 020	67 320	72 455	77 267	82 265	85 624	
Nov	67 756	72 629	78 329	85 195	94 234	99 191	
Dec	87 210	93 609	101 516	109 443	117 359	118 187	
Total	749 966	805 109	866 198	936 042	1 003 552	1 045 430	

1/ Figures for latest month are preliminary.

Table 8 – Year-on-year percentage change in retail trade sales at current prices

Month	2014	2015	2016	2017	2018	2019	2019 year-to-date
Jan	8,9	6,8	8,0	5,0	5,5	3,6	3,6
Feb	6,3	8,7	9,0	5,2	6,9	3,5	3,5
Mar	5,3	7,4	8,4	6,6	7,1	2,8	3,3
Apr	7,3	8,0	7,7	6,9	2,9		
May	8,5	6,4	9,4	6,4	4,5		
Jun	4,8	7,8	7,9	7,4	3,9		
Jul	8,5	7,1	8,6	5,9	3,5		
Aug	7,9	7,7	6,7	8,9	4,6		
Sep	7,7	6,9	8,0	9,2	2,8		
Oct	8,5	7,6	6,6	6,5	4,1		
Nov	7,2	7,8	8,8	10,6	5,3		
Dec	7,3	8,4	7,8	7,2	0,7		
Total	7,4	7,6	8,1	7,2	4,2		

Table 9 – Seasonally adjusted retail trade sales at current prices

Month	R million				Month-on-month % change			
	2016	2017	2018	2019	2016	2017	2018	2019
Jan	75 433	80 335	85 059	88 259	1,0	0,5	-0,9	1,5
Feb	75 796	80 639	86 077	89 066	0,5	0,4	1,2	0,9
Mar	76 260	80 953	86 329	88 758	0,6	0,4	0,3	-0,3
Apr	76 314	82 175	85 209		0,1	1,5	-1,3	
May	78 125	82 909	86 482		2,4	0,9	1,5	
Jun	77 633	83 291	86 242		-0,6	0,5	-0,3	
Jul	78 395	83 605	87 061		1,0	0,4	0,9	
Aug	77 947	84 590	88 116		-0,6	1,2	1,2	
Sep	78 301	85 084	87 762		0,5	0,6	-0,4	
Oct	79 145	84 782	88 269		1,1	-0,4	0,6	
Nov	79 459	87 339	91 230		0,4	3,0	3,4	
Dec	79 928	85 845	86 929		0,6	-1,7	-4,7	

Table 10 – Retail trade sales at current prices by type of retailer (R million)

Type of retailer	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19 1/
General dealers	35 286	43 081	50 299	35 051	38 251	40 062
Food, beverages and tobacco in specialised stores	7 012	7 113	10 299	6 405	6 365	6 945
Pharmaceuticals and medical goods, cosmetics and toiletries	6 918	6 556	6 914	6 866	6 220	6 713
Textiles, clothing, footwear and leather goods	14 517	18 544	26 007	13 249	12 723	12 187
Household furniture, appliances and equipment	3 622	4 685	5 242	3 282	3 256	3 639
Hardware, paint and glass	7 186	7 737	7 198	5 792	6 258	6 297
All other retailers	11 082	11 475	12 228	10 151	9 766	10 091
Total	85 624	99 191	118 187	80 795	82 840	85 934

1/ Figures are preliminary.

Table 11 – Year-on-year percentage change in retail trade sales at current prices by type of retailer

Type of retailer	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19
General dealers	3,6	5,9	1,4	4,9	4,7	5,8
Food, beverages and tobacco in specialised stores	2,7	3,4	1,7	1,9	1,9	-0,1
Pharmaceuticals and medical goods, cosmetics and toiletries	6,9	6,0	-0,4	8,6	3,0	0,7
Textiles, clothing, footwear and leather goods	3,6	5,8	-0,5	2,0	6,1	-1,2
Household furniture, appliances and equipment	7,3	13,7	-1,3	-0,5	4,7	1,6
Hardware, paint and glass	3,0	2,3	0,7	0,1	1,3	2,0
All other retailers	5,0	1,6	1,3	2,4	-1,6	0,7
Total	4,1	5,3	0,7	3,6	3,5	2,8

Table 12 – Contribution of each type of retailer to the year-on-year percentage change in retail trade sales at current prices (percentage points)

Type of retailer	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19
General dealers	1,5	2,5	0,6	2,1	2,1	2,6
Food, beverages and tobacco in specialised stores	0,2	0,2	0,1	0,2	0,1	0,0
Pharmaceuticals and medical goods, cosmetics and toiletries	0,5	0,4	0,0	0,7	0,2	0,1
Textiles, clothing, footwear and leather goods	0,6	1,1	-0,1	0,3	0,9	-0,2
Household furniture, appliances and equipment	0,3	0,6	-0,1	0,0	0,2	0,1
Hardware, paint and glass	0,3	0,2	0,0	0,0	0,1	0,1
All other retailers	0,6	0,2	0,1	0,3	-0,2	0,1
Total	4,1	5,3	0,7	3,6	3,5	2,8

Survey information

Introduction	1	Statistics South Africa (Stats SA) conducts a monthly survey of the retail trade industry, covering retail enterprises (see 4 below). This survey is based on a sample drawn from Stats SA's 2018 business sampling frame (BSF) that contains businesses registered for value added tax (VAT).
	2	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. Published retail trade sales estimates include value added tax (VAT).
Purpose of the survey	3	The results of the monthly retail trade sales survey are used to compile estimates of the gross domestic product (GDP) and its components, which are used in monitoring the state of the economy and formulation of economic policy. These statistics are also used in the analysis of comparative business and industry performance.
Scope of the survey	4	This survey covers retail enterprises according to the following types of retailers: • General dealers: ➢ Retail trade in non-specialised stores with food, beverages and tobacco predominating; and ➢ 'Other' retail trade in non-specialised stores. • Retailers in food, beverages and tobacco in specialised stores: ➢ Retailers in fresh fruit and vegetables; ➢ Retailers in meat and meat products; ➢ Retailers in bakery products; ➢ Retailers in beverages; ➢ Retailers in tobacco; and ➢ Retailers in 'other' food in specialised stores. • Retailers in pharmaceutical and medical goods, cosmetics and toiletries; • Retailers in textiles, clothing, footwear and leather goods: ➢ Retailers in men's and boys' clothing; ➢ Retailers in ladies', girls' and infants' clothing; ➢ General outfitters; and ➢ Retailers in footwear. • Retailers in household furniture, appliances and equipment; • Retailers in hardware, paint and glass; and • All 'other' retailers: ➢ Retailers in reading matter and stationery; ➢ Retailers in jewellery, watches and clocks; ➢ Retailers in sport goods and entertainment requisites; ➢ Retailers in 'other' specialised stores; ➢ Repair of personal and household goods; ➢ Retail trade in second-hand goods in stores; and ➢ Retail trade not in stores.
Classification	5	The 1993 edition of the <i>Standard Industrial Classification of all Economic Activities</i> (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 <i>International Standard Industrial Classification of all Economic Activities</i> (ISIC) with suitable adaptations for local conditions. Each enterprise is classified to the industry which reflects its predominant activity. Statistics in this publication are presented at SIC group (four digit) level.
Collection rate	6	The preliminary collection rate for the survey on retail trade sales for March 2019 was 75,2% accounting for 76,5% of the total estimate. The improved collection rate for February 2019 was 83,0%.

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 sales activities. The statistical units are derived from and linked to the South African Revenue Service (SARS) administrative data.
Revised figures	8	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	9	Users may also refer to the following publication available from Stats SA: • <i>Stats in Brief</i> issued annually.
Rounding-off of figures	10	Where figures have been rounded off, discrepancies may occur between sums of the component items and the totals.
Historical data	11	Historical retail trade sales data are available on the Stats SA website. To access the data electronically, use the following link: Click to download historical data
Past publications	12	Past retail trade sales releases are available on the Stats SA website. To access the releases electronically, use the following link: Click to download past releases

Technical notes

Survey methodology and design

- 1 The survey is conducted on a monthly basis. Questionnaires are sent to a sample of 2 824 enterprises from a population of 23 289 enterprises. Completed questionnaires are required to be returned to Stats SA within 10 days after the end of the reference month. Fax, email and telephone reminders are used to follow up on non-respondents.
- 2 A stratified random sample was drawn at the SIC four-digit level in April 2018 from Stats SA's business sampling frame (BSF). Strata were formed using a combination of the Standard Industrial Classification and the measure of size classes for enterprises (see point 3 below).

The Neyman optimal allocation formula given below was used to allocate samples to each stratum:

$$n_h = n * (N_h * S_h) / [\sum (N_i * S_i)].$$

Neyman allocation formula not only allocates sample sizes to each stratum, but also calculates the relative precision for each stratum as well as the relative precision for all strata. The relative precision for these strata did not exceed 9,0%.

Class limits

- 3 The retail sampling frame is divided into four size groups. All large and medium enterprises (size group one and two) are completely enumerated. Simple random sampling is applied to size group three and four (small and very small) enterprises. The total value of sales of the large and medium enterprises (size group one and two) is added to the weighted totals of size group three and four to reflect the total value of sales.

Measure of size classes (Rand)

Enterprise size	Size group	Lower limits	Upper limits
Very small	4	1 086 754	8 000 000
Small	3	8 000 001	38 000 000
Medium	2	38 000 001	78 000 000
Large	1	78 000 001	

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 group estimates. These procedures are consistent with international best practice.

Seasonal adjustment

- 5 Seasonally adjusted estimates are generated each month using the X-12 Seasonal Adjustment Program developed by the US Bureau of the Census. 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 recognised more clearly. 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 retail trade sales is described in more detail on the Stats SA website: [Click to Download Seasonal adjustment Retail Trade Sales February 2018](#)

Trend cycle	6	The trend is the long-term pattern or movement of a time series. The X-12 Seasonal Adjustment Program is used for smoothing seasonally adjusted estimates to estimate the underlying trend cycle.
Constant prices	7	For January 2002 to December 2007 retail trade sales at constant prices were calculated using the consumer price index (CPI) for goods, excluding petrol and purchases of vehicles, for all urban areas to deflate total sales at current prices. From January 2008 onwards total retail trade sales at constant prices are obtained by adding up the deflated sales by type of retailer.
	8	Retail trade sales at constant prices by type of retailer are obtained by deflating estimated sales at current prices by the relevant weighted price index. To obtain total retail trade sales at constant prices, estimates of the deflated sales for each type of retailer are aggregated.
Reliability of estimates	9	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 retail industry in South Africa. Estimates are subject to sampling and non-sampling errors.
	10	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	11	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 percentage change	12	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.
Contribution (percentage points)	13	The contribution (percentage points) to the year-on-year percentage change for any given period is calculated by multiplying the percentage change of each type of retailer by its corresponding weight, divided by 100. The weight is the percentage contribution of each type of retailer to total retail trade sales in the corresponding period of the previous year.

Glossary

Enterprise	An enterprise is a legal entity or a combination of legal units that includes and directly controls all functions necessary to carry out its sales activities.	
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</i> (SNA) in the same way as in the <i>Standard Industrial Classification of all Economic Activities</i> (SIC), Fifth Edition, Report No. 09-90-02 of January 1993.	
Retail trade	Retail trade includes the resale (sale without transformation) of new and used goods and products to the general public for household use.	
Retailer	A retailer is an enterprise deriving more than 50% of its turnover from sales of goods to the general public for household use.	
Symbols and abbreviations	BSF	Business sampling frame
	CPI	Consumer price index
	GDP	Gross domestic product
	ISIC	International Standard Industrial Classification
	SARS	South African Revenue Service
	SIC	Standard Industrial Classification of all Economic Activities
	SNA	System of National Accounts
	Stats SA	Statistics South Africa
	VAT	Value added tax
	*	Revised figures

Technical enquiries

Raquel Floris	Telephone number: (012) 337 6488 Email: raquelf@statssa.gov.za
Keshnee Naidoo	Telephone number: (012) 310 8423 Email: keshneen@statssa.gov.za

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.

Stats SA has copyright on this publication. Users may apply the information as they wish, provided that they acknowledge Stats SA as the source of the basic data wherever they process, apply, utilise, publish or distribute the data; and also that they specify that the relevant application and analysis (where applicable) result from their own processing of the data.

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
Eastern Cape Library Services, King William's Town
Central Regional Library, Polokwane
Central Reference Library, Mbombela
Central Reference Collection, Kimberley
Central Reference Library, Mmabatho

Stats SA also provides a subscription service.

Electronic services

A large range of data is available via online services. For more detail about our electronic services, contact Stats SA's user information service at (012) 310 8600.

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

General enquiries

User information services	Telephone number: (012) 310 8600 Email address: info@statssa.gov.za
---------------------------	---

Postal address	Private Bag X44, Pretoria, 0001
----------------	---------------------------------

Produced by Stats SA