



Information Paper Series

Re-basing of the Retail Sales and Food & Beverage Services Indices (2017=100)

ISSN 2591-7544
www.singstat.gov.sg

information paper
on
business statistics

**RE-BASING OF THE RETAIL SALES AND
FOOD & BEVERAGE SERVICES INDICES
(2017 = 100)**

Singapore Department of Statistics
March 2018

Papers in this Information Paper Series are intended to inform and clarify conceptual and methodological changes and improvements in official statistics. The views expressed are based on the latest methodological developments in the international statistical community. Statistical estimates presented in the papers are based on new or revised official statistics compiled from the best available data. Comments and suggestions are welcome.

© Singapore Department of Statistics. All rights reserved.

Please direct enquiries on this information paper to:

Retail Sales and Food & Beverage Services
Indices Section
Singapore Department of Statistics
Tel : 6835 8912
Email : adeline_chia@singstat.gov.sg

Reproducing or quoting any part of this publication is permitted, provided this publication is accredited as the source. Please refer to the Statistics Singapore Website Terms of Use (<https://www.singstat.gov.sg/terms-of-use>) for more details on the conditions of use of this publication.

RE-BASING OF THE RETAIL SALES AND FOOD & BEVERAGE SERVICES INDICES (2017 = 100)

I Introduction

1. Since 1985, the Department of Statistics (DOS) has been compiling the Retail Sales Index (RSI) and Food & Beverage Services Index (FSI) to measure the short-term performance of the retail trade and food & beverage (F&B) services industries.
2. Retail trade establishments sell merchandise directly to the consumers, while F&B services establishments sell prepared food and drinks for in-premises consumption or on a take-away basis.
3. The RSI and FSI are re-based at regular intervals to reflect changes in the structure of the retail trade and F&B services industries. During the re-basing exercise, the methodology, coverage and weights are reviewed and updated. The re-basing of the RSI and FSI series from base year 2014 to 2017 is the 7th re-basing done on the series.
4. This Information Paper provides details on the rebased RSI and FSI, such as the data sources, methodology adopted, the formula used for index computation and a comparison of the re-based series and old series. The list of activities in the retail trade and F&B services industries and the re-based index series for January 2017 to December 2017 are presented in the Annexes.

II What the RSI and FSI Measure

5. The RSI measures the monthly movements in retail sales while the FSI measures the monthly movements in F&B services sales. The two indices are presented at both current prices and constant prices. The indices at current prices measure the changes of sales values which can result from changes in both price and quantity. By removing the price effect, the indices at constant prices measure the changes in the volume of economic activity.

6. Both the RSI and FSI indices are seasonally adjusted to remove the seasonal effects so as to better reflect the underlying trend of the monthly sales. The unadjusted indices show seasonal patterns as there are usually intra-year periodic variations that repeat during the fixed period of time every year.

III Data Sources

7. The data used for the compilation of the RSI and FSI are primarily obtained from the Monthly Retail Sales Survey (RSS) and Monthly Food & Beverage Services Survey (FSS) conducted by DOS. The RSS covers retail trade establishments in the two-digit division of “47” of the Singapore Standard Industrial Classification (SSIC) 2015 (Version 2018) while the FSS covers F&B services establishments in the two-digit division of “56” of the SSIC 2015 (Version 2018). Hawkers and stall-holders who are not registered with the Accounting & Corporate Regulatory Authority (ACRA) are excluded.

8. Administrative records from the Land Transport Authority (LTA) are also used in the estimation of the retail sales of motor vehicles and motorcycles & scooters.

IV Index Computation

9. The sales indices at current prices are computed from the sales values using the following formula:

$$I_{0n} = \sum_i W_i \frac{V_{in}}{V_{i0}} \times 100$$

where

I_{0n} is the index of the overall retail trade/F&B services industry for the current period n compared to the base period 0 (the base year being 2017);

V_{in} is the sales value of i^{th} industry during the current period n ;

V_{i0} is the sales value of i^{th} industry during the base period 0 ;

W_i is the normalised weight assigned to the i^{th} industry, i.e. its share in terms of retail/F&B sales with respect to the overall retail trade/F&B services industry;

\sum_i is the summation of all industries in the retail trade/F&B services industry.

10. The overall sales index at current prices is a weighted average of indices at the detailed industry level. To derive the sales index at detailed industry level, the monthly sales for that industry is divided by the average monthly sales for the same industry in the base year (which is 2017). The overall RSI and FSI are then computed by combining the sales indices of the detailed industries, using weights which measure each industry's relative importance in the overall retail trade and F&B services industry respectively.

11. To derive the indices at constant prices, the sales indices at current prices at the detailed industry level are first deflated by the appropriate price indices. These component indices at constant prices are then weighted and aggregated to derive the overall indices at constant prices.

V The Re-based RSI and FSI Series

Industry Groupings

12. During the re-basing exercise, industry groupings within the retail trade and F&B services industry were reviewed.

13. The current industry grouping of “Department Stores” comprises the SSIC codes of “SSIC 47191 Department stores” and “SSIC 47192 Department stores cum supermarkets (including hypermarkets)”. After rebasing, the latter is re-grouped with “SSIC 47111 Supermarkets” under a revised RSI category “Supermarkets & Hypermarkets”, to reflect the similarity in their activity. As a result, the RSI category of “Department Stores” only refers to “SSIC 47191 Department stores”.

14. The revised RSI categories take effect from reference month January 2018.

Sampling Methodology

15. The RSS and FSS use a stratified random sampling design. The sampling frame is obtained from the Business Register maintained by DOS which contains basic information of enterprises registered in Singapore. The data in the Business Register are primarily obtained from the registration records of the ACRA.

16. The sampling frame was first stratified by industry group. Each industry group was then further stratified by the size of operating receipts into three size strata (large, medium and small). The Lavallée-Hidiroglou (1988) algorithm was then applied within each industry group to determine the size stratum boundaries and the optimal sample size for a required level of precision. All enterprises in the large size stratum were selected with certainty whereas the enterprises in the medium and small size strata were selected using simple random sampling.

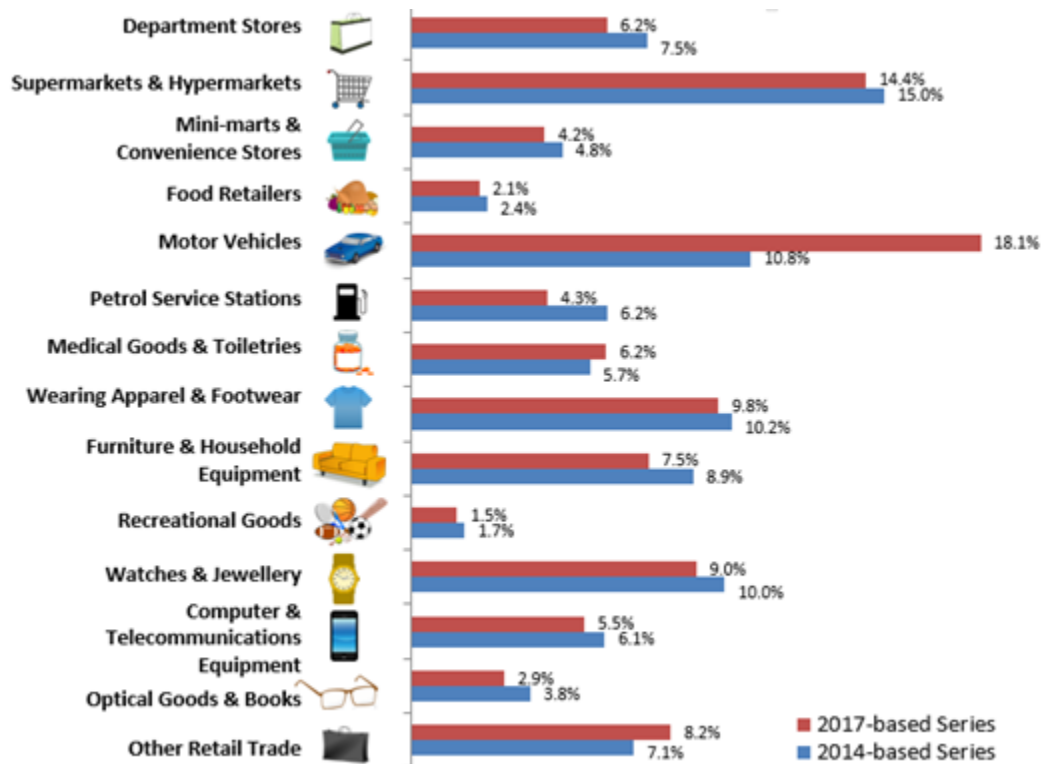
17. The RSS and FSS covers about 450 retail trade enterprises and 170 F&B services enterprises respectively.

Weighting Pattern

18. The weight for each industry reflects its relative importance in the overall retail trade or F&B services industry. The weights are computed based on the retail and F&B services sales of the respective industries obtained from the Annual Surveys of Retail Trade and Food & Beverage Services respectively for reference year 2016.

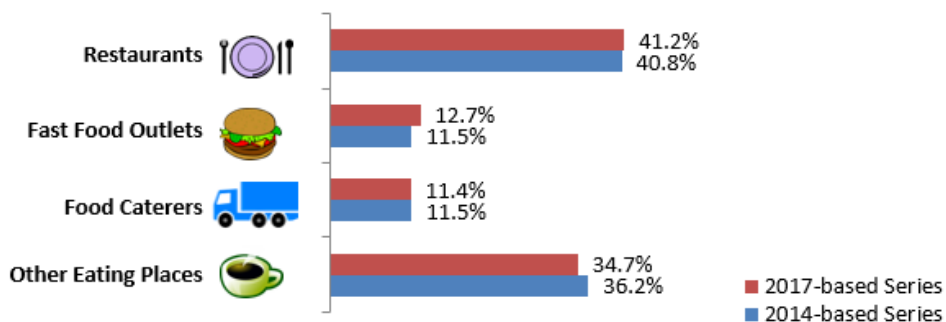
19. Chart 1 compares the old and new weights for RSI categories. The most significant change in weights occurred in the motor vehicles category which increased from 10.8% of total retail trade to 18.1%. The weights of most of the other retail categories decreased, for instance, “Petrol Service Stations” (-1.9 percentage points), “Furniture & Household Equipment” (-1.4 percentage points) and “Department Stores” (-1.3 percentage points).

Chart 1: Weighting Pattern of RSI in 2014-Based & 2017-Based Series



20. Chart 2 presents the old and new weights for FSI categories. Changes in the weights of the various F&B services categories were minor. The weights for “Fast Food Outlets” increased 1.2 percentage points while the weights for “Other Eating Places” decreased 1.5 percentage points.

Chart 2: Weighting Pattern of FSI in 2014-Based & 2017-Based Series



New Indicator on “Proportion of Online Sales out of Total Retail Sales” Compiled

21. The retail landscape in Singapore has evolved in recent years, with more businesses adopting a multi-channel retail strategy.
22. Together with the re-based RSI, a new indicator on the proportion of online sales out of total retail sales at the overall retail trade sector level will be published from reference month January 2018 onwards.
23. The online retail sales proportion is estimated using data of retailers in Singapore covered in the Monthly Retail Sales Survey. Online retail sales are generated by (multi-channel) retailers in Singapore that sell via both physical stores and online/e-commerce sites, as well as retailers in Singapore that sell mainly via online/e-commerce sites.

VI Linking of Historical Series

24. To facilitate the time series analysis of the RSI and FSI series, the 2014-based series is linked to the 2017-based series using the following approach:

Linked 2017-based index = 2014-based index \times Linking Coefficient

where the Linking Coefficient is the ratio of the average value of the 2017-based index in 2017 to the average value of the 2014-based index in 2017.

Example:

Average value of the 2014-based index in 2017 = 102.5

Average value of the 2017-based index in 2017 = 100

Linking Coefficient = 100/102.5

2014-based index in Jan 2016 = 118.2

2017-based index in Jan 2016 = 118.2 \times (100/102.5) = 115.3

VII Comparison of 2014-based and 2017-based Series

25. Charts 3 and 4 compare the overall RSI and FSI at current prices of the 2014-based and 2017-based series for the period of January to December 2017. Both series generally exhibit a similar trend.

Chart 3: Retail Sales Index at Current Prices (2017=100)

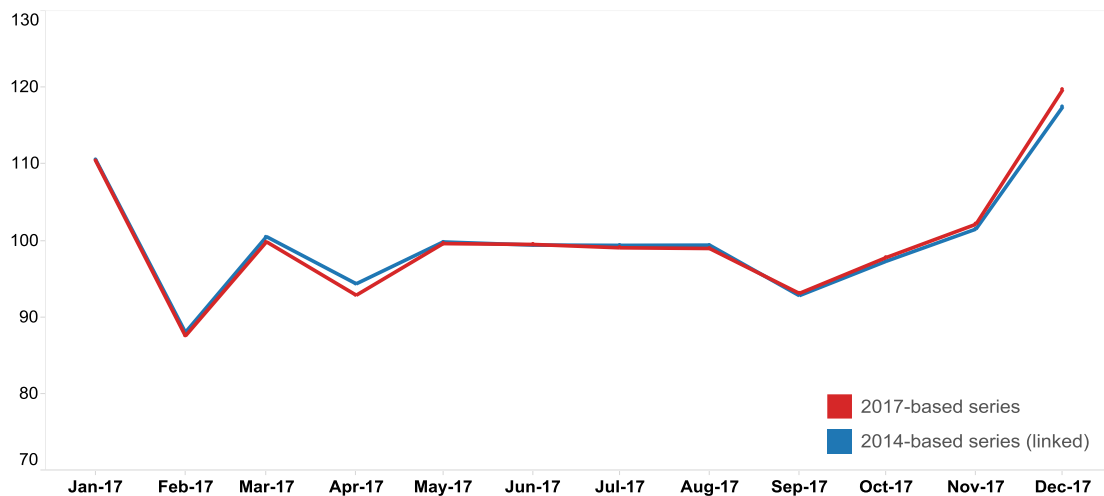
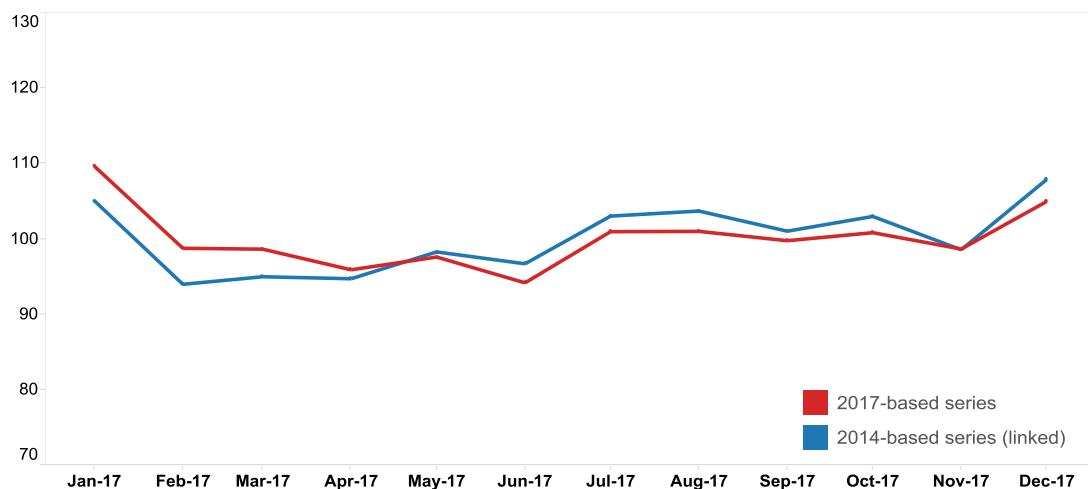


Chart 4: Food & Beverage Services Index at Current Prices (2017=100)



VIII Data Dissemination

26. The 2017-based series will be released with effect from the January 2018 Monthly Retail Sales and Food & Beverage Services Indices report. The monthly report and index series are available on the SingStat Website (<https://www.singstat.gov.sg>) and e-service (<https://www.singstat.gov.sg/tablebuilder>). The RSI and FSI are also published in the Yearbook of Statistics.

Singapore Department of Statistics

March 2018

References

1. *Lavallée, P. & Hidioglou, M. (1988). On the stratification of skewed populations. Survey Methodology 14, 33–43*
2. *Press releases of Retail Sales and Food & Beverage Services Index, available at SingStat website (<https://www.singstat.gov.sg/whats-new/latest-news>)*
3. *Seasonal Adjustment of Economic Time Series, available at SingStat website (<https://www.singstat.gov.sg/-/media/files/publications/reference/ip-e32.pdf>)*
4. *Singapore Standard Industrial Classification 2015 (Version 2018), available at SingStat website (<https://www.singstat.gov.sg/standards/standards-and-classifications/ssic>)*

LIST OF ACTIVITIES IN RETAIL TRADE

SSIC 2015 (Version 2018)	Description of Activity
47	Total Retail Trade
	Department Stores
47191	Department stores
	Supermarkets & Hypermarkets
47111	Supermarkets
47192	Department stores cum supermarkets (including hypermarkets)
47112	Mini-marts & Convenience Stores
	Food Retailers
47211	Fruits and vegetables
47212	Meat, poultry, eggs and seafood
47213	Confectionery and bakery products (not manufactured on site)
47214	Health supplements
47219	Food n.e.c.
47220	Beverages
47230	Tobacco products
47311	Motor Vehicles
47320	Petrol Service Stations
	Medical Goods & Toiletries
47721	Cosmetics and toiletries (including skin care products)
47722	Pharmacies and drug stores (Western)
47723	Chinese medicine shops
47729	Pharmaceutical and medical goods n.e.c.
	Wearing Apparel & Footwear
47711	Clothing for adults
47712	Children and infants' clothing (including products and accessories for infants)
47713	Footwear
47714	Bags, luggages and travel accessories
47715	Sewing and clothing accessories (e.g. button, thread, lace, zip, belt, tie)
47719	Clothing, footwear and leather articles n.e.c.
	Furniture & Household Equipment
47420	Audio and video equipment (e.g. radio and television sets, sound reproducing and recording equipment)
47510	Textiles

LIST OF ACTIVITIES IN RETAIL TRADE

SSIC 2015 (Version 2018)	Description of Activity
47531	Furniture (including mattresses, cushions)
47532	Furnishings (e.g. curtains, carpets, pillow cases)
47533	Lighting and lighting accessories
47534	Crockery, cutlery and kitchen utensils
47535	Household electrical appliances and equipment (e.g. vacuum cleaners, washing machines, refrigerators)
47536	Musical instruments and scores
47537	Security and fire-fighting equipment
47539	Household appliances, furniture, lighting equipment and other household articles n.e.c.
	Recreational Goods
47620	Music and video recordings (e.g. DVDs, Blu-ray discs)
47630	Sports apparel and equipment (including bicycles, boats and healthcare equipment)
47640	Games and toys
	Watches & Jewellery
47731	Jewellery made from precious metals and stones
47732	Costume jewellery
47733	Watches and clocks
47739	Personal effects n.e.c.
	Computer & Telecommunications Equipment
47411	Handphones
47412	Computer hardware (including handheld computers) and peripheral equipment, and computer software (except games and cybersecurity hardware and software)
47413	Computer games (including electronic games and video game consoles)
47414	Computer and office equipment consumables (e.g. printer cartridges)
47415	Cybersecurity software, hardware and peripheral equipment
	Optical Goods & Books
47610	Books, newspapers and stationery (including newsvendors)
47751	Spectacles and other optical goods
47752	Cameras and other photographic goods
47759	Optical and photographic goods n.e.c.
	Others
47199	Retail sale in other non-specialised stores n.e.c.
47312	Motorcycles and scooters
47313	Tyres and batteries
47314	Spare parts and accessories for motor vehicles
47521	Paints
47522	Hardware (e.g. chains, changkols, axes)

LIST OF ACTIVITIES IN RETAIL TRADE

SSIC 2015 (Version 2018)	Description of Activity
47529	Hardware, paint and glass n.e.c. (e.g. wood, glass, sanitary ware, Do-It-Yourself materials)
47741	Antiques and works of art
47742	Handicrafts, collectibles and gifts
47743	Cut flowers (including wreaths)
47744	Artificial flowers and plants
47745	Aquarium fishes (including food and accessories)
47746	Pet birds and animals (including food and accessories)
47749	Handicrafts and fancy goods, flowers, plants and pet animals n.e.c.
47761	Joss paper and other ceremonial products
47762	Liquefied Petroleum Gas (LPG)
47769	Specific commodities n.e.c. (e.g. jute bags)
47770	Retail sale of second-hand goods in stores
47910	Retail sale via internet (with income mainly from online sales)
47991	Retail sale via vending machines (with income mainly from vending machines sales)
47992	Other retail sale not in stores, stalls or markets (e.g. sale via door-to-door canvassing, mail order houses, TV)

LIST OF ACTIVITIES IN FOOD & BEVERAGE SERVICES

SSIC 2015 (Version 2018)	Description of Activity
56	Total Food & Beverage Services
56111	Restaurants
56121	Fast Food Outlets
56201	Food Caterers
	Other Eating Places
56112	Cafes and coffee houses
56122	Food courts, coffee shops, and eating houses (with mainly food and beverage income)
56123	Snack bars and food kiosks (mainly for takeaway, including bubble tea outlets)
56130	Pubs (including bars)
56202	Canteens

TABLE 1 RETAIL SALES INDEX
(2017 = 100)

	Total	Total (excl Motor Vehicles)	Dept Stores	Supermks & Hvpermkts	Mini-marts & Conv Stores	Food Retailers	Motor Vehicles	Petrol Service Stations	Medical Goods & Toiletries	Wearing Apparel & Footwear	Furniture & Household Equipment	Recreation al Goods	Watches & Jewellery	Computer & Telecomm. Equipment	Optical Goods & Books	Others
Weights	10,000	8,193	620	1,443	423	214	1,807	431	619	975	753	145	904	549	294	823
Period	At Current Prices															
2014	92.1	102.1	104.3	93.1	104.4	118.5	50.8	121.8	87.7	104.7	103.8	105.2	101.3	126.2	112.8	88.0
2015	96.1	100.9	104.9	96.5	101.8	111.0	76.6	99.0	91.0	102.0	101.4	98.8	102.7	118.5	106.2	95.1
2016	98.2	98.2	100.5	96.5	102.9	101.6	98.2	91.2	95.2	98.0	100.8	97.2	96.8	99.5	101.6	100.4
2017	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2017 Jan	111.4	114.4	126.4	126.3	113.9	127.4	98.0	99.8	110.5	134.4	105.8	97.7	108.2	100.7	102.0	99.4
Feb	88.4	89.5	82.9	88.3	91.0	83.0	83.2	92.5	91.7	84.7	78.6	89.9	100.2	89.1	92.2	98.0
Mar	100.5	95.9	90.7	96.2	100.9	93.1	121.5	103.3	98.3	87.6	96.5	100.9	93.5	98.4	98.6	99.7
Apr	92.6	93.0	88.8	97.5	99.5	90.0	90.8	99.6	90.1	89.8	89.5	95.7	95.2	87.8	94.6	91.4
May	99.1	97.0	96.7	100.8	101.8	97.3	108.5	102.0	97.5	90.2	96.8	96.2	100.0	83.5	94.5	100.6
Jun	98.9	97.4	94.9	95.9	97.6	88.2	106.0	95.8	96.5	99.7	112.3	91.8	101.0	86.7	87.8	96.8
Jul	98.7	98.6	96.0	100.7	100.1	102.7	99.3	102.5	98.8	99.1	101.4	98.5	100.4	84.5	98.4	97.5
Aug	98.7	98.3	93.9	102.4	103.4	112.0	100.4	101.6	101.8	93.3	98.4	98.2	98.9	81.4	98.0	100.5
Sep	92.8	94.9	93.8	96.2	98.8	96.5	83.2	99.4	97.3	86.1	93.7	93.9	88.9	102.5	88.1	102.5
Oct	97.7	98.6	97.8	99.3	100.5	98.7	93.6	103.9	97.0	95.1	97.5	95.0	99.6	96.5	94.1	102.8
Nov	101.7	101.6	103.9	93.5	95.4	99.7	102.5	101.5	98.4	99.9	103.5	101.9	94.4	136.3	109.6	102.0
Dec	119.4	120.8	134.3	102.8	97.0	111.4	113.0	98.0	122.1	140.2	126.0	140.3	119.7	152.9	142.1	108.9
Period	At Constant Prices															
2014	93.0	103.3	104.8	96.0	106.9	124.0	51.0	121.5	85.7	105.7	101.7	105.2	106.6	124.8	114.8	88.6
2015	97.3	102.2	105.6	98.7	103.1	114.5	77.3	103.9	89.3	103.2	99.3	98.4	108.0	117.3	108.2	96.2
2016	98.7	98.8	100.9	97.1	103.2	102.9	98.5	99.5	93.7	98.5	98.9	96.2	97.7	98.3	101.6	101.1
2017	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2017 Jan	112.3	115.2	127.9	126.5	114.7	126.9	98.9	101.7	110.7	135.6	106.0	97.9	109.8	101.2	102.6	100.3
Feb	88.7	89.7	83.2	88.5	91.3	83.0	84.1	92.6	92.3	84.5	78.5	90.2	100.5	88.3	92.3	98.2
Mar	101.0	95.9	89.9	96.5	100.6	93.5	124.1	104.2	97.1	87.0	96.2	101.5	94.8	98.8	98.8	99.6
Apr	92.3	92.5	87.6	97.5	99.0	90.1	91.4	100.4	88.5	88.6	89.6	95.6	94.2	87.5	94.8	91.0
May	99.2	97.0	95.9	100.8	101.5	97.4	109.4	103.0	97.9	88.9	97.1	95.9	100.8	83.6	94.5	100.1
Jun	99.2	97.7	95.4	96.1	97.8	88.5	105.9	97.4	96.9	99.9	112.5	93.0	101.0	86.1	87.9	97.3
Jul	98.8	98.8	96.0	100.5	100.0	102.6	98.9	104.5	97.6	99.6	100.9	98.4	101.5	84.2	98.5	98.0
Aug	98.9	98.4	94.1	102.6	104.0	112.3	100.8	102.3	101.4	94.2	98.2	96.8	98.4	81.6	97.8	100.6
Sep	92.4	94.6	93.7	96.0	98.9	96.6	82.8	98.8	97.5	86.2	93.3	94.2	87.2	101.7	88.0	102.2
Oct	96.9	98.0	97.3	98.9	100.1	98.4	92.1	102.1	97.1	94.6	97.4	94.1	98.5	95.7	93.8	101.9
Nov	101.2	101.1	103.6	93.3	95.0	99.6	101.6	97.8	99.9	99.1	103.6	101.6	93.7	135.4	109.2	101.2
Dec	119.3	121.3	135.4	102.7	97.2	111.1	109.8	95.1	123.2	141.9	126.7	140.8	119.7	156.0	141.8	109.7

TABLE 2 PERCENTAGE CHANGE IN RETAIL SALES INDEX OVER PREVIOUS MONTH
(2017 = 100)

		Total	Total (excl Motor Vehicles)	Dept Stores	Supermks & Hypermks	Mini-marts & Conv Stores	Food Retailers	Motor Vehicles	Petrol Service Stations	Medical Goods & Toiletries	Wearing Apparel & Footwear	Furniture & Household Equipment	Recreation al Goods	Watches & Jewellery	Computer & Telecomm. Equipment	Optical Goods & Books	Others
Period	Weights	10,000	8,193	620	1,443	423	214	1,807	431	619	975	753	145	904	549	294	823
		At Current Prices															
2017	Jan	-0.8	-2.9	-9.7	28.4	11.0	13.2	9.3	6.2	-6.0	-0.9	-13.6	-25.8	-14.0	-20.9	-22.5	-10.8
	Feb	-20.7	-21.7	-34.5	-30.1	-20.1	-34.8	-15.1	-7.4	-17.0	-37.0	-25.7	-7.9	-7.4	-11.5	-9.6	-1.4
	Mar	13.7	7.1	9.5	9.0	10.8	12.1	46.0	11.7	7.2	3.5	22.9	12.3	-6.7	10.5	7.0	1.8
	Apr	-7.9	-3.0	-2.2	1.3	-1.3	-3.3	-25.3	-3.6	-8.4	2.5	-7.3	-5.2	1.8	-10.7	-4.1	-8.4
	May	7.0	4.3	8.9	3.4	2.2	8.1	19.5	2.4	8.2	0.4	8.2	0.5	5.0	-5.0	-0.1	10.1
	Jun	-0.2	0.3	-1.9	-4.8	-4.1	-9.3	-2.3	-6.0	-1.0	10.5	16.0	-4.5	0.9	3.8	-7.0	-3.8
	Jul	-0.2	1.3	1.1	5.0	2.6	16.3	-6.4	7.0	2.4	-0.6	-9.8	7.3	-0.6	-2.5	12.1	0.7
	Aug	0.0	-0.3	-2.1	1.7	3.3	9.1	1.2	-0.9	3.1	-5.8	-3.0	-0.3	-1.5	-3.6	-0.4	3.2
	Sep	-6.0	-3.5	-0.2	-6.1	-4.5	-13.8	-17.2	-2.1	-4.4	-7.8	-4.7	-4.4	-10.1	25.9	-10.1	2.0
	Oct	5.3	3.9	4.3	3.3	1.7	2.2	12.5	4.5	-0.3	10.4	4.0	1.2	12.0	-5.9	6.8	0.2
	Nov	4.2	3.1	6.3	-5.8	-5.2	1.0	9.5	-2.3	1.4	5.1	6.2	7.3	-5.2	41.3	16.5	-0.7
	Dec	17.4	18.9	29.3	10.0	1.7	11.7	10.3	-3.5	24.1	40.3	21.7	37.7	26.8	12.2	29.7	6.7
2017		At Constant Prices															
	Jan	-0.8	-3.0	-9.4	27.7	11.1	12.0	9.9	5.4	-5.5	-0.7	-13.7	-26.4	-15.0	-19.8	-21.7	-10.6
	Feb	-21.0	-22.2	-35.0	-30.1	-20.4	-34.6	-15.0	-9.0	-16.6	-37.7	-26.0	-7.9	-8.4	-12.7	-10.1	-2.1
	Mar	13.9	6.9	8.1	9.0	10.3	12.6	47.5	12.6	5.1	2.9	22.5	12.6	-5.7	11.8	7.1	1.4
	Apr	-8.6	-3.5	-2.6	1.0	-1.6	-3.6	-26.3	-3.7	-8.8	1.9	-6.8	-5.8	-0.7	-11.4	-4.0	-8.6
	May	7.5	4.9	9.5	3.4	2.5	8.0	19.7	2.6	10.6	0.4	8.4	0.3	7.0	-4.5	-0.3	10.0
	Jun	-0.1	0.7	-0.4	-4.6	-3.6	-9.1	-3.2	-5.4	-1.1	12.4	15.8	-3.0	0.2	3.0	-7.0	-2.8
	Jul	-0.4	1.1	0.6	4.6	2.3	15.9	-6.6	7.3	0.7	-0.3	-10.4	5.8	0.5	-2.2	12.0	0.8
	Aug	0.1	-0.3	-2.0	2.1	4.0	9.5	1.9	-2.1	3.9	-5.4	-2.6	-1.6	-3.1	-3.1	-0.6	2.6
	Sep	-6.5	-3.9	-0.3	-6.4	-4.9	-14.0	-17.9	-3.4	-3.9	-8.5	-5.0	-2.7	-11.4	24.6	-10.1	1.6
	Oct	4.9	3.6	3.8	3.0	1.2	1.9	11.2	3.4	-0.4	9.8	4.4	-0.1	13.0	-5.8	6.6	-0.3
	Nov	4.4	3.2	6.4	-5.7	-5.1	1.2	10.4	-4.2	2.9	4.8	6.4	8.0	-4.9	41.5	16.5	-0.7
	Dec	17.9	20.0	30.7	10.1	2.3	11.5	8.1	-2.7	23.3	43.1	22.3	38.6	27.7	15.1	29.9	8.3

TABLE 3 PERCENTAGE CHANGE IN RETAIL SALES INDEX OVER CORRESPONDING PERIOD OF PREVIOUS YEAR
(2017 = 100)

	Total	Total (excl Motor Vehicles)	Dept Stores	Supermkt & Hvdermkt	Mini-mart & Conv Stores	Food Retailers	Motor Vehicles	Petrol Service Stations	Medical Goods & Toiletries	Wearing Apparel & Footwear	Furniture & Household Equipment	Recreation al Goods	Watches & Jewellery	Computer & Telecomm. Equipment	Optical Goods & Books	Others	
Weights	10,000	8,193	620	1,443	423	214	1,807	431	619	975	753	145	904	549	294	823	
Period																	
2015 2016 2017 2017	At Current Prices																
	4.4	-1.2	0.6	3.6	-2.5	-6.3	50.8	-18.7	3.8	-2.7	-2.2	-6.2	1.4	-6.1	-5.9	8.1	
	2.2	-2.6	-4.1	-0.1	1.0	-8.4	28.3	-7.9	4.6	-3.9	-0.6	-1.6	-5.8	-16.1	-4.3	5.5	
	1.8	1.8	-0.5	3.7	-2.8	-1.6	1.8	9.6	5.0	2.0	-0.8	2.9	3.3	0.5	-1.6	-0.4	
	Jan	2.9	2.8	1.3	13.7	1.6	6.7	7.3	10.6	11.7	-11.5	-1.3	0.1	-0.1	-16.2	-6.7	
	Feb	-2.1	-4.5	-13.6	-10.7	-6.5	-20.8	9.4	14.7	1.6	-16.4	0.4	2.6	-3.2	2.7	0.8	8.9
	Mar	2.1	1.1	-1.6	2.4	-3.0	-3.8	6.9	11.4	3.4	-2.6	1.1	6.9	3.7	-3.1	7.7	-2.3
	Apr	0.6	2.4	3.7	4.0	-3.4	-3.6	-6.4	13.0	4.4	4.1	-3.7	0.4	13.6	-0.6	-6.2	-4.1
	May	0.2	-0.1	-5.0	2.2	-1.5	-5.5	2.0	12.0	5.9	-3.9	-2.8	-3.4	2.1	-1.4	-5.9	1.9
	Jun	1.5	3.7	1.4	5.9	-0.3	-6.2	-5.6	10.6	3.9	6.3	1.2	3.8	16.0	0.0	-6.7	-3.2
	Jul	1.0	1.2	0.7	2.9	-4.1	5.7	0.3	8.8	6.4	3.4	-6.0	0.4	5.8	2.3	-5.4	-3.0
	Aug	3.0	3.1	1.3	4.1	-2.9	6.4	2.8	9.5	7.5	4.8	6.2	5.4	2.1	-2.7	-1.9	0.8
	Sep	-0.5	3.1	6.9	6.9	-2.8	-1.3	-15.3	9.2	3.8	6.0	-2.4	2.2	5.0	-7.5	-1.1	2.1
	Oct	0.2	1.1	0.6	3.0	-3.1	-2.1	-3.8	7.4	3.7	4.2	2.3	0.6	4.1	-20.8	1.8	3.5
Nov	5.3	4.8	4.1	4.2	-2.4	5.0	7.5	8.9	5.2	1.7	4.9	9.7	1.7	14.2	7.1	1.5	
Dec	6.3	2.6	-4.0	4.5	-5.5	-1.0	26.0	4.2	3.9	3.4	2.9	6.6	-4.8	20.1	8.0	-2.2	
2015 2016 2017 2017	At Constant Prices																
	4.6	-1.0	0.8	2.9	-3.5	-7.6	51.5	-14.5	4.2	-2.4	-2.4	-6.5	1.3	-6.0	-5.8	8.5	
	1.5	-3.4	-4.4	-1.6	0.1	-10.2	27.5	-4.2	5.0	-4.5	-0.4	-2.2	-9.5	-16.2	-6.1	5.1	
	1.3	1.3	-0.9	3.0	-3.1	-2.8	1.5	0.5	6.7	1.5	1.1	3.9	2.4	1.7	-1.6	-1.1	
	Jan	2.8	2.4	2.3	12.8	1.6	4.8	3.7	-0.9	12.6	13.0	-9.9	-4.4	2.2	-16.8	-6.3	
	Feb	-2.2	-4.9	-12.9	-10.8	-6.8	-21.6	11.3	0.3	4.5	-16.5	2.3	2.7	-4.8	3.6	-0.4	8.6
	Mar	2.4	0.9	-1.1	2.3	-3.3	-4.9	9.6	-0.1	4.3	-1.9	2.5	7.5	4.1	-1.2	8.0	-2.5
	Apr	0.3	1.7	3.7	3.7	-3.9	-4.8	-5.1	0.8	5.3	3.7	-0.9	3.9	9.9	0.9	-5.3	-4.3
	May	0.0	-0.5	-6.0	1.6	-2.1	-6.7	2.8	2.0	9.0	-5.7	0.1	-2.3	2.8	0.0	-5.2	0.5
	Jun	1.0	3.2	0.3	5.3	-0.6	-7.2	-5.8	3.7	6.2	4.4	4.0	6.1	15.8	0.3	-6.9	-4.2
	Jul	0.5	0.6	-1.1	1.7	-4.9	4.4	0.0	1.4	7.1	1.0	-4.1	2.4	8.8	2.6	-5.3	-4.3
	Aug	2.3	2.4	0.0	3.2	-3.0	5.5	1.8	-0.5	9.4	3.5	8.1	5.4	3.4	-2.0	-2.0	-1.0
	Sep	-1.5	2.2	5.9	6.0	-2.8	-2.2	-16.7	0.2	4.7	5.4	-0.3	3.1	4.3	-7.8	-1.3	0.9
	Oct	-1.0	0.3	-0.6	1.7	-3.7	-3.5	-6.9	0.3	3.8	3.7	4.5	1.5	2.8	-20.1	1.8	2.4
Nov	4.3	4.2	3.9	3.4	-2.8	3.8	4.8	0.2	8.0	1.5	6.2	10.8	0.6	14.6	7.4	0.6	
Dec	5.4	2.2	-4.0	3.6	-5.9	-2.0	22.0	-1.4	5.2	3.9	3.2	5.8	-7.3	23.6	8.2	-2.2	

TABLE 4 FOOD & BEVERAGE SERVICES INDEX
(2017 = 100)

		Total	Restaurants	Fast Food Outlets	Food Caterers	Other Eating Places
Period	Weights	1,000	412	127	114	347
		At Current Prices				
2014		103.4	116.2	92.3	99.1	96.4
2015		100.5	110.6	93.2	97.8	94.2
2016		100.5	104.6	95.9	98.2	98.9
2017		100.0	100.0	100.0	100.0	100.0
2017	Jan	109.9	118.4	102.3	120.8	98.8
	Feb	99.0	106.0	83.6	104.3	94.5
	Mar	98.8	94.9	96.7	94.6	105.7
	Apr	95.8	95.5	95.9	85.2	99.6
	May	97.4	98.5	97.0	89.0	99.0
	Jun	94.0	91.9	98.1	89.6	96.5
	Jul	100.8	97.5	108.0	98.7	102.8
	Aug	100.9	96.4	104.7	105.4	103.3
	Sep	99.4	95.6	98.4	110.4	100.7
	Oct	100.5	101.7	104.5	94.2	99.6
	Nov	98.2	95.0	102.6	103.8	98.6
	Dec	105.4	108.5	108.3	104.1	101.0
		At Constant Prices				
2014		109.1	124.1	97.0	101.7	101.7
2015		103.6	114.4	96.4	100.2	97.2
2016		101.7	105.8	97.0	99.9	100.0
2017		100.0	100.0	100.0	100.0	100.0
2017	Jan	110.4	118.9	102.9	122.1	99.2
	Feb	99.4	106.6	83.8	104.1	95.1
	Mar	99.1	95.1	96.7	94.5	106.1
	Apr	95.9	95.5	96.0	85.1	99.9
	May	97.5	98.6	97.1	88.9	99.1
	Jun	94.0	91.9	98.2	89.5	96.6
	Jul	100.8	97.5	108.2	98.6	102.8
	Aug	100.9	96.4	104.8	105.3	103.3
	Sep	99.4	95.6	98.3	110.3	100.6
	Oct	100.2	101.4	104.3	94.0	99.1
	Nov	97.8	94.7	102.3	103.7	98.0
	Dec	104.7	107.8	107.5	104.0	100.2

ANNEX IVA

TABLE 5 PERCENTAGE CHANGE IN FOOD & BEVERAGE SERVICES INDEX OVER PREVIOUS MONTH
(2017 = 100)

		Total	Restaurants	Fast Food Outlets	Food Caterers	Other Eating Places
Period	Weights	1,000	412	127	114	347
		At Current Prices				
2017	Jan	6.2	11.3	-0.1	14.9	-1.7
	Feb	-9.9	-10.5	-18.3	-13.7	-4.4
	Mar	-0.2	-10.5	15.8	-9.3	11.8
	Apr	-3.1	0.6	-0.9	-10.0	-5.7
	May	1.7	3.2	1.1	4.5	-0.6
	Jun	-3.5	-6.8	1.1	0.6	-2.5
	Jul	7.2	6.2	10.1	10.2	6.5
	Aug	0.0	-1.2	-3.0	6.8	0.5
	Sep	-1.4	-0.8	-6.0	4.8	-2.5
	Oct	1.1	6.4	6.2	-14.7	-1.0
	Nov	-2.3	-6.6	-1.8	10.3	-1.1
	Dec	7.3	14.2	5.6	0.3	2.4
		At Constant Prices				
2017	Jan	6.0	11.0	-0.3	14.8	-1.9
	Feb	-9.9	-10.4	-18.5	-14.7	-4.2
	Mar	-0.3	-10.7	15.4	-9.3	11.6
	Apr	-3.2	0.4	-0.7	-10.0	-5.9
	May	1.6	3.2	1.1	4.5	-0.8
	Jun	-3.5	-6.8	1.1	0.6	-2.6
	Jul	7.2	6.1	10.2	10.2	6.4
	Aug	0.1	-1.1	-3.1	6.8	0.5
	Sep	-1.5	-0.8	-6.2	4.8	-2.6
	Oct	0.8	6.1	6.1	-14.8	-1.5
	Nov	-2.3	-6.7	-2.0	10.3	-1.2
	Dec	7.0	13.8	5.1	0.3	2.3

**TABLE 6 PERCENTAGE CHANGE IN FOOD & BEVERAGE SERVICES INDEX
OVER CORRESPONDING PERIOD OF PREVIOUS YEAR
(2017 = 100)**

		Total	Restaurants	Fast Food Outlets	Food Caterers	Other Eating Places
Period	Weights	1,000	412	127	114	347
		At Current Prices				
2015		-2.8	-4.9	1.0	-1.3	-2.2
2016		0.0	-5.4	2.9	0.4	4.9
2017		-0.5	-4.4	4.3	1.8	1.2
2017	Jan	8.0	8.7	7.3	18.3	1.9
	Feb	-2.3	-9.4	-6.5	3.2	4.4
	Mar	-0.8	-5.7	3.4	0.3	3.4
	Apr	-1.7	-6.2	4.7	-4.2	1.6
	May	-4.5	-8.1	0.8	-4.5	-2.5
	Jun	-2.1	-6.0	14.5	-2.1	-2.6
	Jul	-2.7	-10.1	6.4	-0.8	1.7
	Aug	0.6	-3.7	4.4	-0.5	4.7
	Sep	-2.3	-8.7	1.3	15.4	-1.7
	Oct	-1.7	-4.7	5.4	-5.0	-0.2
	Nov	1.6	-0.7	4.1	1.9	3.5
	Dec	1.8	2.0	5.7	-1.0	0.4
		At Constant Prices				
2015		-5.0	-7.8	-0.6	-1.5	-4.5
2016		-1.9	-7.5	0.6	-0.3	2.9
2017		-1.7	-5.5	3.1	0.1	0.0
2017	Jan	6.2	6.9	4.9	16.8	0.2
	Feb	-3.5	-10.3	-8.4	0.6	3.3
	Mar	-2.2	-6.8	1.1	-2.2	2.2
	Apr	-2.9	-7.3	3.7	-5.8	0.4
	May	-5.6	-9.3	0.3	-6.1	-3.7
	Jun	-3.2	-7.2	13.9	-3.9	-3.8
	Jul	-3.7	-11.1	6.2	-2.5	0.6
	Aug	-0.3	-4.4	4.0	-2.2	3.8
	Sep	-3.2	-9.4	0.4	13.4	-2.6
	Oct	-2.7	-5.7	4.5	-6.2	-1.5
	Nov	0.4	-1.8	3.1	0.6	2.1
	Dec	0.5	0.7	4.1	-2.2	-0.9

SINGAPORE DEPARTMENT OF STATISTICS INFORMATION DISSEMINATION SERVICES

Statistics Singapore Website

The *Statistics Singapore Website* was launched by the Singapore Department of Statistics (DOS) in January 1995. Internet users can access the website by connecting to:

<http://www.singstat.gov.sg>

Key Singapore statistics are available via the following sections:

- **Statistics**
which provides access to the latest statistical findings of DOS as well as statistics compiled by Research and Statistics Units (RSUs) in ministries and statutory boards.
- **News**
which provides a listing of the news released by DOS and RSUs.
- **Publications**
which presents the latest editions of DOS' publications, papers and articles.
- **Browse by Themes**
which presents official statistics compiled by DOS and RSUs in the various ministries and statutory boards according to themes. Within each theme, relevant statistics and related press releases, publications and references are provided.

Statistical resources are available via:

- **Publication and Papers**
which lists the latest editions of publications released by DOS according to statistical domains at <http://www.singstat.gov.sg/publications/publications-and-papers>. All softcopy DOS publications are available for free downloading. Statistical tables of DOS publications in Excel format are also available.
- **Advance Release Calendar**
which provides a six months ahead advance release calendar of key statistical indicators.

The website also provides a convenient gateway to international statistical websites under the "Methodologies & Standards" section:

- **Guide to International Statistics**
which provides hyperlinks to international databases and classifications, as well as websites of international bodies and other national statistical offices.
- **IMF Dissemination Standards Bulletin Board**
which provides metadata about Singapore's key indicators in the real, fiscal, financial and external sectors, including dissemination practices and information about pre-release access of current indicators.

SingStat Express

SingStat Express is a personalised data delivery service which sends the latest press releases, notices of publication, newsletter, occasional and information papers to subscribers via email. SMS alert service is also available to local users. Subscription details are available from the *Statistics Singapore Website* (<http://www.singstat.gov.sg/express>).

SINGAPORE DEPARTMENT OF STATISTICS
INFORMATION DISSEMINATION SERVICES (*cont'd*)

Really Simple Syndication

Really Simple Syndication (RSS) is an easy way to stay updated on the latest statistical news released via the *Statistics Singapore Website*. The SingStat RSS feed delivers statistical news highlights and hyperlinks to the source documents whenever the updates are posted. More information is available at [http://www.singstat.gov.sg/services/really-simple-syndication-\(rss\)](http://www.singstat.gov.sg/services/really-simple-syndication-(rss)).

SingStat Mobile App

SingStat Mobile App provides users with ready access to the latest key Singapore official statistics through their mobile devices while on the go. Users may visualize data for the latest periods with some 200 charts of commonly used statistics from 27 data categories. The app is available for downloading in iOS and Android devices. More information is available at <http://www.singstat.gov.sg/services/singstat-mobile-app>

SingStat Table Builder


The *SingStat Table Builder* contains statistical data series on the Singapore economy and population for users to create customised data tables, plot graphs and charts and export them in different file formats. Explore data trends with this e-service at <http://www.singstat.gov.sg/tablebuilder>.


E-survey

The *E-survey* enables business organisations to complete and submit their survey forms through the internet. Using secured encryption protocols, the *E-survey* ensures that the information transmitted through the net is secured and protected. The system features online helps and validation checks to assist respondents in completing their survey forms. With the *E-survey*, respondents do away with the tedious paper work and manual tasks of mailing or faxing their survey returns to the Department.

Statistical Enquiries and Feedback

If you have any statistical enquiries or comment or suggestions on our statistical publications and electronic services, you are welcomed to:

 E-mail us at **info@singstat.gov.sg**

 Fax to us at **(65) 6332-7689**

 Call us at **1800-3238118* (local callers)**

(65) 6332-7738 (overseas callers)

* Calls from mobile telephone lines to 1800 local toll free number may be subject to mobile airtime charges as imposed by the relevant mobile service provider.