

# **Information Paper Series**

## Re-basing of the Wholesale Trade Index (2017=100)

information paper  
on  
business statistics

**RE-BASING OF THE  
WHOLESALE TRADE INDEX  
(2017 = 100)**

Singapore Department of Statistics  
May 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.

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Please direct enquiries on this information paper to:

Wholesale Trade Index Section  
Singapore Department of Statistics  
Tel : 6835 8911  
Email : yap\_hui\_keng@singstat.gov.sg

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# Our Vision

National Statistical Service of Quality, Integrity and Expertise

# Our Mission

We deliver Insightful Statistics and Trusted Statistical Services that  
Empower Decision Making

# Our Guiding Principles

<b>Professionalism &amp; Expertise</b>	<i>We adhere to professional ethics and develop statistical competency to produce quality statistics that comply with international concepts and best practices.</i>
<b>Relevance &amp; Reliability</b>	<i>We produce statistics that users need and trust.</i>
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<b>Confidentiality</b>	<i>We protect the confidentiality of information collected by us.</i>
<b>Timeliness</b>	<i>We disseminate statistics at the earliest possible date while maintaining data quality.</i>
<b>Innovation</b>	<i>We constantly seek ways to improve our processes, leveraging on new technology where feasible, to deliver better products and services to users.</i>
<b>Collaboration</b>	<i>We engage users on data needs, data providers and respondents on supply of data, and undertake the role of national statistical coordination.</i>
<b>Effectiveness</b>	<i>We optimise resource utilisation, leveraging on administrative and alternative data sources to ease respondent burden.</i>

# **RE-BASING OF THE WHOLESALE TRADE INDEX**

**(2017 = 100)**

## **I Introduction**

1. Since 1995, the Department of Statistics (DOS) has been compiling the quarterly Wholesale Trade Index (WTI) to measure the short-term performance of the wholesale trade industry. The index series consists of the Domestic WTI and Foreign WTI for measuring the wholesale sales within and outside of Singapore respectively.
2. The WTI is re-based at regular intervals to reflect changes in the structure of the wholesale trade industry. During the re-basing exercise, the methodology, coverage and weights are reviewed and updated. The re-basing of the WTI series from base year 2012 to 2017 is the fourth re-basing done on the series.
3. This Information Paper provides details on the rebased WTI, such as the data sources, methodology adopted, the formula used for index compilation and a comparison of the latest 2017-based series and old 2012-based series. The list of activities in the wholesale trade industry and the re-based index series for 1Q2017 to 4Q2017 are presented in the Annexes.

## **II What the WTI Measures**

4. The Domestic WTI measures the quarterly trend of wholesale sales in Singapore, while the Foreign WTI measures that of wholesale sales outside Singapore, which comprises sales of off-shore merchandise, domestic exports, re-exports and transshipment cargo.

5. The WTI series is presented at 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. After removing the price effect, the indices at constant prices measure the changes in the volume of economic activity in the wholesale trade industry.

6. The WTI series is seasonally adjusted to remove the seasonal effects so as to better reflect the underlying trend of the quarterly sales. The unadjusted indices display seasonal patterns arising from 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 WTI are obtained from the Quarterly Wholesale Trade Survey (WTS) conducted by DOS, as well as from administrative sources. The WTS covers wholesale trade establishments which are classified under two-digit division “46” of the Singapore Standard Industrial Classification (SSIC) 2015 (Version 2018).

#### IV Index Computation

8. The sales indices at current prices are computed from the sales value 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 wholesale trade industry for the current period  $n$  compared to the base period  $0$  (the base year is 2017);
- $V_{in}$  is the sales value of  $i^{\text{th}}$  industry during the current period  $n$ ;
- $V_{i0}$  is the sales value of  $i^{\text{th}}$  industry during the base period  $0$ ;
- $W_i$  is the normalised weight assigned to the  $i^{\text{th}}$  industry, i.e. its share in terms of wholesale sales with respect to the overall wholesale trade industry;
- $\sum_i$  is the summation of all industries in the wholesale trade industry.

9. 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 quarterly wholesale sales for that industry is divided by the average quarterly wholesale sales for the same industry in the base year (which is 2017). The overall WTI is then computed by combining the sales indices of the detailed industries, using weights which measure each industry's relative importance in the overall wholesale trade industry.

10. 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 WTI Series**

### Sampling Methodology

11. The WTS uses 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 Accounting and Corporate Regulatory Authority (ACRA).

12. The sampling frame was first stratified by industry group. Each industry group was further stratified by size of operating receipts into three size strata (large, medium and small). The Lavallée-Hidioglou (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 establishments in the large size stratum were selected with certainty whereas the establishments in the medium and small size strata were selected using simple random sampling.

13. The WTS covers about 1,080 wholesale trade establishments.



### Weighting Pattern

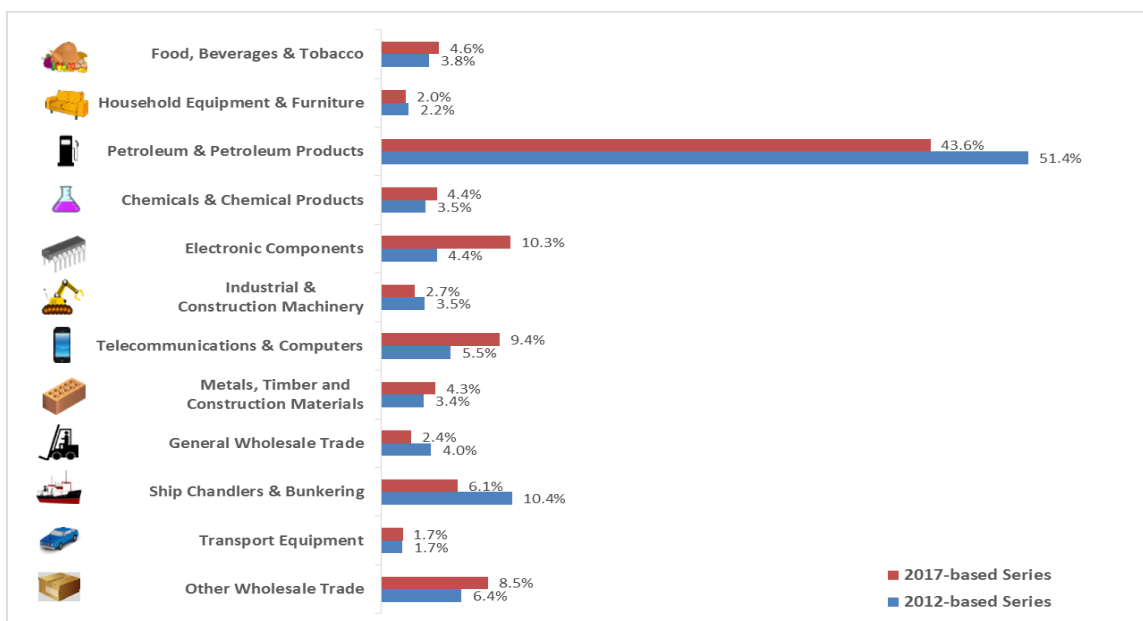
14. The weight for each industry reflects its relative importance in the overall wholesale trade industry. The weights for Domestic WTI and Foreign WTI are computed based on the domestic wholesale sales and foreign wholesale sales of the respective industries from the Annual Survey of Wholesale Trade.

15. Charts 1 and 2 compare the old and new weights for WTI categories for Domestic WTI and Foreign WTI respectively. “Petroleum & Petroleum Products” remained the largest category for both domestic and foreign WTI, accounting for 43.6% of domestic wholesale trade and 41.0% of foreign wholesale trade in terms of sales.

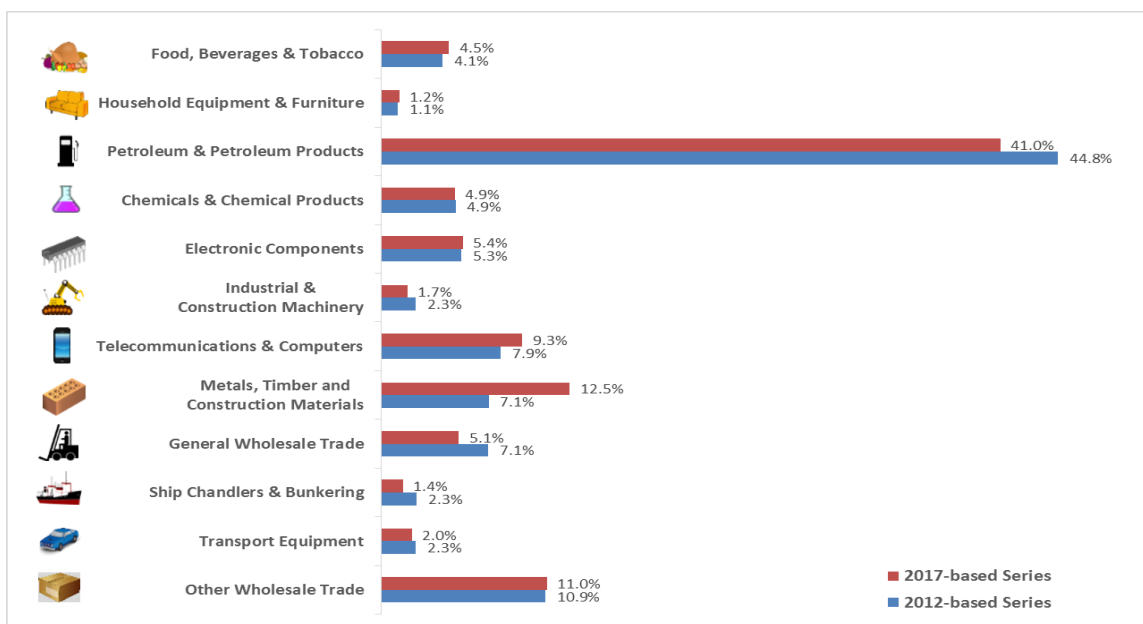
16. For the Domestic WTI, the weights of “Electronic Components” and “Telecommunications & Computers” increased 5.9 percentage points to 10.3% and 3.9 percentage points to 9.4% respectively, reflecting the growths in the relative importance of these categories.

17. In terms of Foreign WTI, “Metals, Timber and Construction Materials” was the second largest category after “Petroleum & Petroleum Products”. Its weights increased 5.4 percentage points to 12.5%.

**Chart 1: Weighting Pattern of Domestic WTI in 2012-Based & 2017-Based Series**



**Chart 2: Weighting Pattern of Foreign WTI in 2012-Based & 2017-Based Series**



## VI Linking of Historical Series

18. To facilitate the time series analysis of the WTI series, the 2012-based series is linked to the 2017-based series using the following approach:

Linked 2017-based index = 2012-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 2012-based index in 2017.

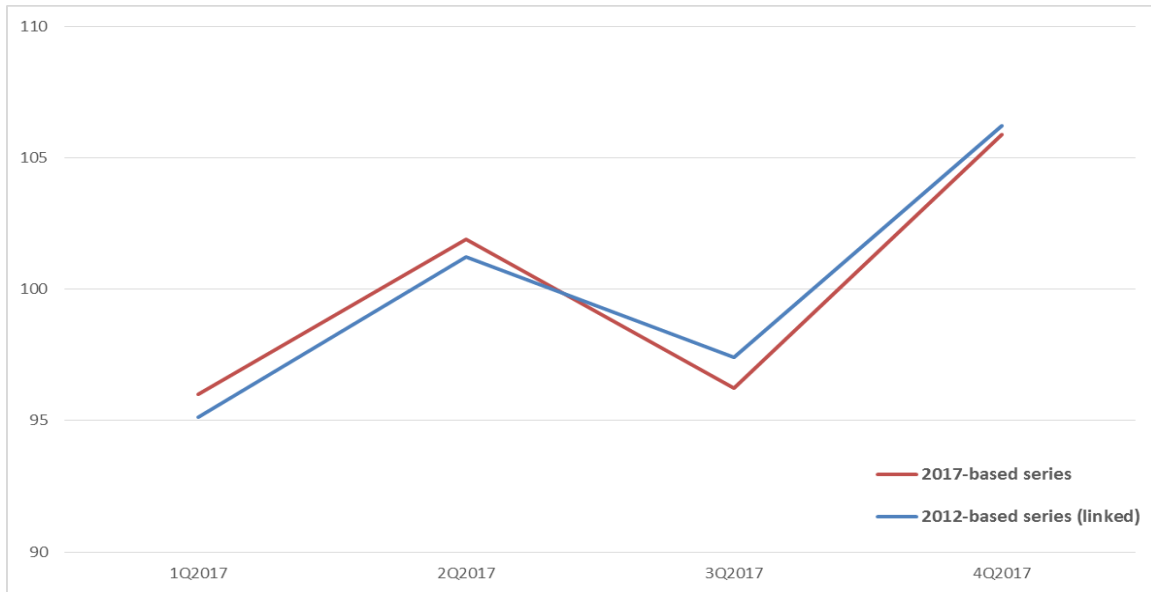
*Example:*

<i>Average value of the 2012-based index in 2017</i>	<i>= 115.5</i>
<i>Average value of the 2017-based index in 2017</i>	<i>= 100</i>
<i>Linking Coefficient</i>	<i>= 100/115.5</i>
<i>2012-based index in 1Q2016</i>	<i>= 94.6</i>
<i>2017-based index in 1Q2016</i>	<i>= 94.6 <math>\times</math> (100/115.5)=81.9</i>

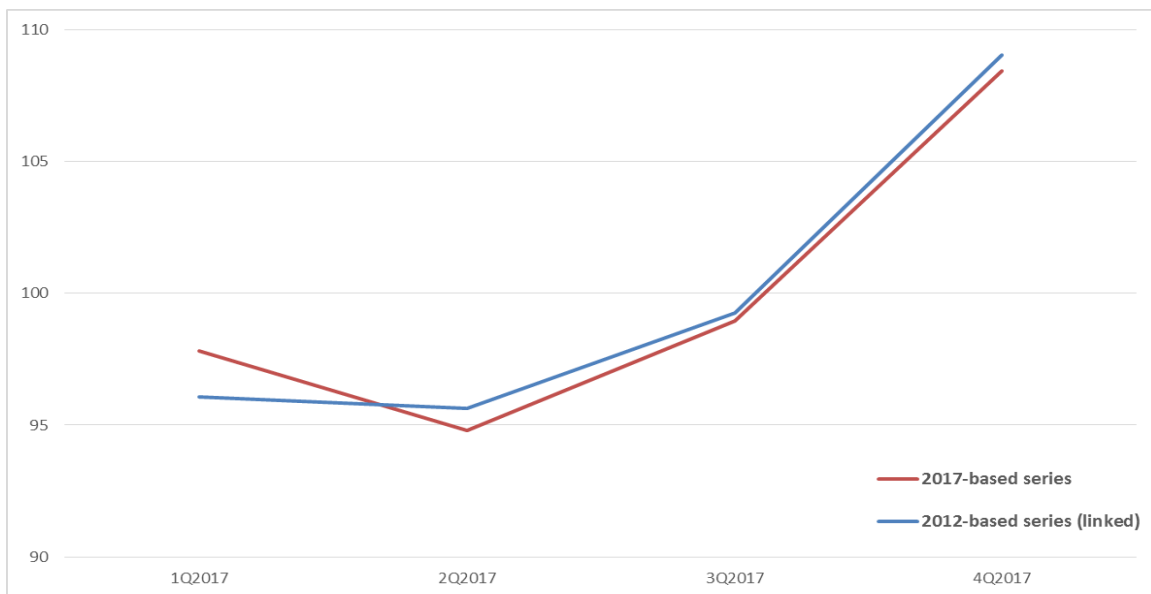
## VII Comparison of 2012-based and 2017-based Series

19. The overall Domestic WTI and Foreign WTI at current prices of the 2012-based and 2017-based series for the period of 1Q2017 to 4Q2017 generally exhibit a similar trend (Charts 3 and 4).

**Chart 3:** Domestic Wholesale Trade Index at Current Prices (2017=100)



**Chart 4:** Foreign Wholesale Trade Index at Current Prices (2017=100)



## **VIII Data Dissemination**

20. The 2017-based series will be released starting from the 1Q2018 Wholesale Trade Index report.

21. The quarterly report and index series are available on the SingStat Website (<http://www.singstat.gov.sg>) and e-service (<http://www.singstat.gov.sg/tablebuilder>). The WTI is also published in the Yearbook of Statistics.

Singapore Department of Statistics

May 2018

## References

1. *Lavallée, P. & Hidirolou, M. (1988). On the stratification of skewed populations. Survey Methodology 14, 33–43*
2. *Press releases of Wholesale Trade Index, available at SingStat website (<https://www.singstat.gov.sg/publications/industry/quarterly-wholesale-trade-index>)*
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 Wholesale Trade

SSIC 2015 (Version 2018)	Description of Activity
<b>46</b>	<b>Total Wholesale Trade</b>
	<b>Food, Beverages &amp; Tobacco</b>
46301	Fruits and vegetables (including fresh and frozen)
46302	Livestock, meat, poultry, eggs and seafood (including fresh and frozen)
46303	General line (wide range) of groceries (e.g. cereals, sugar, edible oils, sauces and dairy products)
46304	Confectionery and bakery products
46305	Ice-cream
46306	Health supplements
46307	Liquor, soft drinks and beverages
46308	Tobacco products
46309	Food, beverages and tobacco nec
	<b>Household Equipment &amp; Furniture</b>
46431	Furniture (including mattresses, cushions)
46432	Furnishings (including curtains, carpets, wallpaper)
46433	Lighting and lighting accessories
46434	Crockery, cutlery and kitchen utensils
46435	Household electrical appliances and equipment (including household air-conditioners)
46436	Audio and video equipment except electrical and electronic components (e.g. radio and television sets, sound reproducing and recording equipment)
46437	Musical instruments and scores
46439	Furniture, home furnishings and other household equipment nec
	<b>Petroleum &amp; Petroleum Products</b>
46611	Crude petroleum
46612	Mineral fuels and lubricants (excluding ship bunkering)
46619	Solid, liquid and gaseous fuels and related products nec (e.g. bitumen)
	<b>Chemicals &amp; Chemical Products</b>
46641	Basic industrial chemicals (except fertilizers)
46642	Chemical fertilizers
46643	Petrochemical products
46649	Chemicals and chemical products nec
	<b>Electronic Components</b>
46521	Telecommunications equipment (excluding handphones)
46522	Electronic components
	<b>Industrial &amp; Construction Machinery</b>
46530	Agricultural machinery, equipment and supplies
46541	Industrial machinery and equipment (e.g. industrial crane)
46542	Construction equipment (e.g. concrete mixer)
46543	Lifts, escalators and industrial and office air-conditioning equipment
46544	Electrical and wiring accessories
46549	Industrial, agricultural, construction and related machinery and equipment nec
	<b>Telecommunications &amp; Computers</b>
46511	Computer hardware and peripheral equipment (except cybersecurity related hardware and peripheral equipment)
46512	Computer software (except games and cybersecurity software)
46513	Computer accessories (e.g. memory cards, computer cables)
46514	Cybersecurity software, hardware and peripheral equipment
46523	Handphones and other telecommunications apparatus (e.g. smart watches, wearable computer and electronic books)
46591	Office machines and equipment (including accessories)

## List of Activities in Wholesale Trade

SSIC 2015 (Version 2018)	Description of Activity
	<b>Metals, Timber &amp; Construction Materials</b>
46620	Metals and metal ores except general hardware (e.g. steel pipes)
46631	Logs, sawn timber, plywood and related products
46632	General hardware (e.g. locks, hinges)
46633	Structural clay and concrete products (e.g. mosaic tiles, bricks)
46634	Paints (including varnishes and supplies)
46635	Glass
46639	Construction materials, hardware, plumbing and heating equipment and supplies nec (e.g. cement, sand)
	<b>General Wholesale Trade</b>
46900	Wholesale trade of a variety of goods without a dominant product
	<b>Ship Chandlers &amp; Bunkering</b>
46661	Ship chandlers
46662	Ship bunkering
	<b>Transport Equipment</b>
46551	Marine equipment and accessories (including marine navigational equipment and radar)
46552	Aircraft equipment and supplies (including aeronautical equipment)
46559	Transport equipment except motor vehicles and motorcycles nec
46561	Motor vehicles except motorcycles and scooters
46562	Motorcycles and scooters
46563	Parts and accessories for vehicles
	<b>Other Wholesale Trade</b>
	<b><i>Wholesale On a Fee or Contract Basis</i></b>
46100	Wholesale on a fee or contract basis (e.g. commission agents)
	<b><i>Agricultural Raw Materials and Live Animals except Tropical Produce</i></b>
46211	Cut flowers and plants
46212	Aquarium fishes (including food and accessories)
46213	Pet birds and animals (including food and accessories)
46219	Agricultural raw materials and live animals except tropical produce nec
	<b><i>Tropical Produce</i></b>
46221	Rubber (including rubber brokers)
46222	Pepper and other spices
46223	Coffee, cocoa and tea
46224	Coconut
46225	Palm oil
46229	Tropical produce nec
	<b><i>Textile, Clothing, Footwear and Leather Goods</i></b>
46411	Textiles and leathers
46412	Adults' clothing
46413	Children and infants' clothing (including products and accessories for infants)
46414	Footwear
46415	Bags, luggage and travel accessories
46416	Sewing and clothing accessories (e.g. button, thread, lace, zip, belt, tie)
	<b><i>Personal Effects</i></b>
46421	Jewellery made from precious metals and stones
46422	Costume jewellery
46423	Watches and clocks
46424	Cosmetics and toiletries
46429	Personal effects nec



## List of Activities in Wholesale Trade

SSIC 2015 (Version 2018)	Description of Activity
	<b><i>Sporting and Other Recreational Goods</i></b>
46441	Sporting goods and equipment (including bicycles and healthcare equipment)
46442	Music and video recordings (e.g. DVDs, Blu-ray discs)
46443	Toys and games
46444	Computer games (including electronic games and video game consoles)
46449	Sporting and other recreational goods nec
	<b><i>Handicraft &amp; Fancy Goods</i></b>
46451	Antiques and works of art
46452	Handicrafts and gifts
46453	Artificial flowers and plants
46459	Handicrafts and fancy goods nec
	<b><i>Medicinal and Pharmaceutical Products</i></b>
46461	Medicinal and pharmaceutical products (Western)
46462	Medicine and herbs (other than Western)
	<b><i>Paper, Paper and Cellophane Products and Stationery</i></b>
46471	Paper and paper products
46472	Packaging materials
46473	Stationery
46474	Books and magazines
46479	Paper, paper and cellophane products and stationery nec
	<b><i>Other Household Goods</i></b>
46491	Optical equipment and supplies (excluding binoculars)
46492	Photographic equipment and supplies (including binoculars)
46499	Other household goods nec
	<b><i>Other Machinery &amp; Equipment</i></b>
46592	Medical, professional, scientific and precision equipment
46593	Commercial food service equipment (e.g. hotel kitchen equipment)
46594	Service establishment equipment and supplies (e.g. beauty salon equipment)
46595	Security and fire-fighting equipment
46599	Other machinery and equipment nec
	<b><i>Other Intermediate Products, Waste and Scrap</i></b>
46651	Scrap, junk and waste dealers
46659	Other intermediate products, waste and scrap nec

**TABLE 1**  
**DOMESTIC WHOLESALE TRADE INDEX**  
**(2017 = 100)**

	Total	Total (excluding petroleum)	Food, Beverages & Tobacco	Household Equipment & Furniture	Petroleum & Petroleum Products	Chemicals & Chemical Products	Electronic Components	Industrial & Construction Machinery	Telecom- munications & Computers	Metals, Timber & Construction Materials	General Wholesale Trade	Ship Chandlers & Bunkering	Transport Equipment	Other Wholesale Trade
Weights Period	10,000	5,636	457	196	4,364	441	1,029	269	940	433	240	610	172	849
At Current Prices														
2014	128.8	121.2	94.7	104.0	137.4	120.4	107.9	112.1	111.9	133.4	188.8	177.3	97.4	105.5
2015	100.9	107.7	97.6	104.6	93.3	112.3	116.1	110.0	118.1	120.8	117.1	93.9	100.9	101.3
2016	87.4	96.5	99.6	121.9	77.1	93.7	96.1	102.1	99.6	102.7	95.0	74.2	99.3	97.1
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
2016 I	76.1	94.2	98.3	111.8	55.8	77.8	99.0	96.2	110.3	103.7	93.1	55.9	99.4	99.5
II	86.1	93.8	95.8	105.4	77.4	98.8	89.3	99.4	95.2	110.7	85.0	67.6	108.0	97.9
III	87.0	94.5	103.4	119.1	78.5	98.8	94.2	99.4	88.7	99.6	88.8	79.2	103.2	90.6
IV	100.3	103.7	101.0	151.1	96.6	99.3	102.0	113.3	104.1	96.7	113.1	94.3	86.4	100.4
2017 I	96.0	100.1	100.8	99.9	90.6	102.5	94.6	94.5	104.7	101.9	103.5	98.8	104.6	100.2
II	101.9	98.8	99.2	103.4	105.9	98.6	105.2	94.5	91.9	103.6	101.7	96.1	103.0	96.6
III	96.2	96.3	99.4	88.5	96.1	101.1	97.0	102.7	85.6	100.8	96.6	101.8	105.6	94.8
IV	105.9	104.8	100.6	108.2	107.3	97.8	103.1	108.2	117.8	93.8	98.3	103.3	86.9	108.4
At Constant Prices														
2014	93.6	107.2	93.9	98.6	83.7	89.1	103.4	109.8	102.0	127.8	158.3	113.4	107.5	101.9
2015	101.8	106.2	97.3	100.0	98.6	116.4	108.1	107.9	110.4	118.7	116.3	99.6	106.8	99.6
2016	99.0	100.3	100.5	120.2	98.1	109.2	94.3	103.2	96.4	107.7	101.4	95.8	104.5	96.0
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
2016 I	94.8	99.3	99.1	109.0	91.5	100.7	94.6	96.0	104.8	108.3	103.5	91.7	104.5	98.1
II	99.0	98.0	97.4	104.7	99.7	116.4	88.4	101.3	92.8	116.7	91.7	89.7	113.6	97.3
III	99.1	99.5	104.8	118.8	98.9	115.8	94.0	101.7	87.2	105.6	95.7	100.9	109.3	89.9
IV	103.3	104.3	100.7	148.2	102.5	104.0	100.3	113.8	100.8	100.1	115.0	100.7	90.9	98.7
2017 I	93.7	98.4	100.4	98.3	87.6	99.9	92.1	93.1	102.2	102.2	101.4	96.6	105.7	98.4
II	104.5	99.5	99.3	103.4	110.9	102.7	104.3	94.2	91.7	104.7	102.9	101.3	102.9	96.1
III	99.5	97.9	99.2	89.3	101.6	105.2	98.7	103.8	86.6	101.0	98.9	106.7	105.1	95.5
IV	102.3	104.2	101.0	109.0	99.9	92.1	104.8	108.9	119.4	92.0	96.9	95.4	86.3	110.0

**TABLE 2**  
**PERCENT CHANGE IN DOMESTIC WHOLESALE TRADE INDEX OVER PREVIOUS QUARTER**  
**(2017 = 100)**

	Total	Total (excluding petroleum)	Food, Beverages & Tobacco	Household Equipment & Furniture	Petroleum & Petroleum Products	Chemicals & Chemical Products	Electronic Components	Industrial & Construction Machinery	Telecom- munications & Computers	Metals, Timber & Construction Materials	General Wholesale Trade	Ship Chandlers & Bunkering	Transport Equipment	Other Wholesale Trade
Weights Period	10,000	5,636	457	196	4,364	441	1,029	269	940	433	240	610	172	849
At Current Prices														
2016 I	-23.1	-12.6	-0.6	-1.2	-37.4	-25.9	-17.6	-10.1	-21.5	-7.5	-8.5	-25.9	-8.7	-1.8
II	13.1	-0.4	-2.5	-5.7	38.8	27.1	-9.7	3.4	-13.8	6.8	-8.6	20.8	8.6	-1.6
III	1.0	0.8	7.9	13.0	1.3	0.0	5.5	-0.1	-6.8	-10.0	4.4	17.2	-4.5	-7.5
IV	15.4	9.7	-2.3	26.8	23.0	0.4	8.3	14.0	17.3	-2.9	27.4	19.2	-16.2	10.8
2017 I	-4.3	-3.4	-0.2	-33.9	-6.2	3.3	-7.3	-16.6	0.6	5.4	-8.5	4.8	21.0	-0.2
II	6.1	-1.4	-1.6	3.5	16.9	-3.8	11.3	0.0	-12.3	1.6	-1.8	-2.8	-1.5	-3.6
III	-5.6	-2.5	0.2	-14.4	-9.2	2.5	-7.8	8.6	-6.8	-2.7	-5.0	6.0	2.5	-1.9
IV	10.0	8.8	1.2	22.2	11.7	-3.2	6.3	5.4	37.5	-7.0	1.8	1.4	-17.7	14.4
At Constant Prices														
2016 I	-14.5	-9.4	-0.2	0.4	-18.2	-16.5	-15.8	-7.9	-21.5	-5.0	-2.6	-4.5	-8.9	-2.1
II	4.4	-1.3	-1.7	-3.9	9.0	15.5	-6.6	5.6	-11.5	7.8	-11.4	-2.1	8.8	-0.8
III	0.2	1.5	7.6	13.4	-0.8	-0.5	6.4	0.4	-5.9	-9.6	4.4	12.4	-3.8	-7.5
IV	4.1	4.8	-3.9	24.8	3.7	-10.1	6.6	11.8	15.5	-5.2	20.2	-0.2	-16.8	9.7
2017 I	-9.3	-5.7	-0.3	-33.7	-14.5	-3.9	-8.1	-18.1	1.4	2.2	-11.8	-4.1	16.4	-0.3
II	11.6	1.2	-1.1	5.1	26.6	2.8	13.2	1.1	-10.2	2.4	1.4	4.9	-2.7	-2.2
III	-4.8	-1.6	-0.1	-13.7	-8.4	2.4	-5.3	10.2	-5.6	-3.5	-3.9	5.3	2.2	-0.7
IV	2.8	6.4	1.8	22.2	-1.7	-12.5	6.1	5.0	37.9	-8.9	-2.0	-10.6	-17.8	15.3

**TABLE 3**  
**PERCENT CHANGE IN DOMESTIC WHOLESALE TRADE INDEX OVER CORRESPONDING PERIOD OF PREVIOUS YEAR**  
**(2017 = 100)**

	Total	Total (excluding petroleum)	Food, Beverages & Tobacco	Household Equipment & Furniture	Petroleum & Petroleum Products	Chemicals & Chemical Products	Electronic Components	Industrial & Construction Machinery	Telecom- munications & Computers	Metals, Timber & Construction Materials	General Wholesale Trade	Ship Chandlers & Bunkering	Transport Equipment	Other Wholesale Trade
Weights Period	10,000	5,636	457	196	4,364	441	1,029	269	940	433	240	610	172	849
At Current Prices														
2014	-5.0	-2.7	4.3	-0.3	-7.2	2.9	3.6	4.2	1.2	-5.9	-3.9	-13.0	2.9	-6.7
2015	-21.6	-11.1	3.1	0.6	-32.1	-6.7	7.5	-1.9	5.6	-9.5	-38.0	-47.0	3.6	-3.9
2016	-13.4	-10.4	2.1	16.5	-17.4	-16.6	-17.2	-7.2	-15.7	-15.0	-18.8	-21.0	-1.6	-4.2
2017	14.5	3.6	0.4	-17.9	29.8	6.8	4.0	-2.0	0.4	-2.6	5.2	34.7	0.8	3.0
2016 I	-21.0	-11.3	1.1	15.4	-34.5	-24.7	-11.3	-9.4	-2.8	-16.3	-34.4	-40.0	8.8	-1.9
II	-20.3	-15.4	1.3	2.8	-26.2	-20.7	-23.2	-12.9	-12.2	-17.0	-30.0	-41.2	13.3	-5.4
III	-13.5	-10.8	3.8	12.8	-16.8	-15.0	-19.0	-11.6	-19.4	-12.4	-13.7	-14.1	-4.3	-8.5
IV	1.3	-3.8	2.2	33.4	8.4	-5.4	-15.0	5.8	-25.9	-13.7	11.2	25.0	-20.7	-0.9
2017 I	26.1	6.4	2.5	-10.7	62.4	31.8	-4.4	-1.7	-5.1	-1.7	11.2	76.7	5.1	0.7
II	18.4	5.3	3.5	-1.9	36.8	-0.2	17.8	-4.9	-3.5	-6.4	19.5	42.2	-4.6	-1.4
III	10.7	1.9	-3.9	-25.7	22.5	2.2	3.0	3.3	-3.5	1.1	8.7	28.6	2.4	4.6
IV	5.5	1.1	-0.4	-28.4	11.2	-1.5	1.1	-4.5	13.2	-3.1	-13.1	9.5	0.5	8.0
At Constant Prices														
2014	0.8	0.6	2.5	7.1	1.0	8.5	6.7	4.2	10.8	-5.1	-1.1	-6.6	-3.6	-6.9
2015	8.8	-0.9	3.6	1.4	17.8	30.7	4.5	-1.7	8.2	-7.1	-26.5	-12.2	-0.7	-2.2
2016	-2.7	-5.6	3.3	20.2	-0.5	-6.1	-12.7	-4.4	-12.7	-9.3	-12.8	-3.8	-2.1	-3.7
2017	1.0	-0.3	-0.5	-16.8	1.9	-8.4	6.0	-3.1	3.7	-7.1	-1.4	4.4	-4.3	4.2
2016 I	1.5	-3.3	3.5	18.2	5.7	-3.3	-8.4	-8.0	2.0	-8.5	-25.8	-2.8	8.0	-1.1
II	0.0	-8.0	2.7	6.7	6.6	-0.5	-18.6	-10.1	-7.8	-10.0	-20.9	-14.2	12.2	-4.6
III	-4.7	-6.2	5.4	17.7	-3.6	-6.5	-13.0	-7.9	-16.7	-6.3	-7.7	-2.4	-4.6	-7.5
IV	-6.9	-4.8	1.5	36.5	-8.3	-13.7	-10.7	9.2	-24.5	-12.2	8.2	4.9	-20.7	-1.5
2017 I	-1.2	-0.9	1.4	-9.8	-4.2	-0.8	-2.6	-3.0	-2.5	-5.6	-2.0	5.4	1.2	0.3
II	5.6	1.6	2.0	-1.3	11.2	-11.7	18.1	-7.1	-1.1	-10.3	12.2	12.9	-9.5	-1.2
III	0.4	-1.6	-5.3	-24.9	2.7	-9.1	5.0	2.0	-0.7	-4.3	3.3	5.7	-3.8	6.1
IV	-0.9	-0.1	0.3	-26.5	-2.6	-11.5	4.5	-4.2	18.5	-8.0	-15.7	-5.3	-5.0	11.5

**TABLE 4**  
**FOREIGN WHOLESALE TRADE INDEX**  
**(2017 = 100)**

	Total	Total (excluding petroleum)	Food, Beverages & Tobacco	Household Equipment & Furniture	Petroleum & Petroleum Products	Chemicals & Chemical Products	Electronic Components	Industrial & Construction Machinery	Telecom- munications & Computers	Metals, Timber & Construction Materials	General Wholesale Trade	Ship Chandlers & Bunkering	Transport Equipment	Other Wholesale Trade
Weights Period	10,000	5,904	448	119	4,096	486	540	173	933	1,248	514	143	202	1,098
At Current Prices														
2014	112.9	102.8	89.4	82.8	130.8	117.5	106.8	93.3	82.2	117.7	103.4	180.7	105.5	101.0
2015	95.8	97.7	88.3	82.2	92.5	98.4	109.5	84.9	84.1	106.8	97.5	113.9	106.3	100.6
2016	87.5	92.2	84.3	94.3	79.2	89.7	90.5	83.2	91.9	93.3	92.3	96.5	102.2	94.8
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
2016 I	75.2	81.2	76.9	97.0	64.4	83.8	82.9	73.5	74.0	78.6	79.8	86.7	101.6	85.4
II	85.1	87.2	78.4	88.1	81.4	87.1	86.0	80.0	82.9	86.1	92.4	90.0	103.0	90.0
III	88.7	93.8	83.8	90.4	79.7	89.1	95.3	86.5	85.5	93.1	98.4	90.0	102.2	103.6
IV	100.9	106.4	98.2	101.7	91.1	98.9	97.9	92.7	125.2	115.6	98.4	119.5	102.1	100.2
2017 I	97.8	97.0	102.0	97.3	98.9	103.3	91.5	94.1	93.9	103.2	98.8	97.0	92.0	91.1
II	94.8	98.3	97.2	103.9	89.8	94.8	98.5	98.5	86.1	103.4	101.5	102.8	95.9	102.4
III	99.0	99.0	95.0	103.9	99.0	97.6	102.8	98.6	88.4	100.1	101.8	99.8	110.1	102.9
IV	108.4	105.8	105.8	94.9	112.3	104.3	107.3	108.7	131.5	93.3	97.9	100.4	102.0	103.6
At Constant Prices														
2014	87.3	95.8	91.8	79.4	78.2	89.6	103.2	86.3	79.5	107.7	93.7	118.4	112.1	100.2
2015	95.1	95.4	87.6	79.0	94.7	97.1	101.7	79.7	77.9	107.1	95.0	116.2	111.0	99.5
2016	96.5	94.0	83.2	92.2	99.1	100.5	87.7	82.6	87.4	99.1	94.9	120.3	106.6	94.8
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
2016 I	91.8	84.0	75.7	92.8	100.2	100.5	78.0	72.2	68.7	84.3	82.8	127.7	104.4	86.5
II	95.4	90.2	77.9	87.3	100.9	98.1	84.2	79.8	80.2	94.1	95.9	113.3	108.0	90.9
III	97.9	97.1	83.6	90.5	98.7	100.8	95.0	87.0	83.9	100.6	102.8	111.6	108.2	103.8
IV	100.9	104.9	95.8	98.2	96.7	102.6	93.6	91.5	116.8	117.4	97.9	128.4	105.7	97.8
2017 I	95.0	94.7	101.2	95.0	95.5	102.0	88.3	93.8	89.1	102.9	96.9	96.0	92.9	86.5
II	96.7	98.6	96.3	104.0	93.9	97.6	97.5	98.8	85.2	104.6	102.1	107.8	96.8	101.8
III	102.1	100.2	96.2	105.3	104.9	100.4	104.9	98.7	89.5	100.0	103.5	103.1	109.5	104.8
IV	106.2	106.5	106.3	95.7	105.6	99.9	109.3	108.7	136.1	92.4	97.6	93.1	100.8	106.9

**TABLE 5**  
**PERCENT CHANGE IN FOREIGN WHOLESALE TRADE INDEX OVER PREVIOUS QUARTER**  
**(2017 = 100)**

	Total	Total (excluding petroleum)	Food, Beverages & Tobacco	Household Equipment & Furniture	Petroleum & Petroleum Products	Chemicals & Chemical Products	Electronic Components	Industrial & Construction Machinery	Telecom- munications & Computers	Metals, Timber & Construction Materials	General Wholesale Trade	Ship Chandlers & Bunkering	Transport Equipment	Other Wholesale Trade
Weights Period	10,000	5,904	448	119	4,096	486	540	173	933	1,248	514	143	202	1,098
At Current Prices														
2016 I	-18.1	-15.5	-16.3	16.6	-23.2	-4.6	-22.4	-13.1	-20.2	-18.3	-18.0	-13.4	-9.0	-12.3
II	13.2	7.3	2.0	-9.2	26.3	3.8	3.7	8.8	12.0	9.5	15.7	3.8	1.4	5.4
III	4.3	7.6	6.9	2.6	-2.1	2.4	10.8	8.1	3.1	8.2	6.5	0.0	-0.7	15.1
IV	13.7	13.4	17.1	12.5	14.3	10.9	2.7	7.2	46.5	24.2	0.0	32.8	-0.1	-3.3
2017 I	-3.0	-8.8	3.9	-4.4	8.6	4.5	-6.5	1.6	-25.0	-10.7	0.4	-18.8	-9.9	-9.1
II	-3.1	1.3	-4.7	6.8	-9.2	-8.2	7.7	4.7	-8.3	0.2	2.7	5.9	4.2	12.4
III	4.4	0.7	-2.3	0.0	10.2	3.0	4.3	0.1	2.7	-3.1	0.3	-2.9	14.9	0.5
IV	9.6	6.9	11.4	-8.6	13.5	6.9	4.4	10.2	48.7	-6.8	-3.7	0.6	-7.4	0.7
At Constant Prices														
2016 I	-6.5	-12.2	-16.0	16.5	-0.7	7.1	-21.2	-9.6	-19.6	-16.7	-14.4	8.2	-8.6	-11.7
II	3.9	7.4	2.9	-6.0	0.8	-2.4	7.9	10.5	16.8	11.5	15.8	-11.2	3.5	5.1
III	2.6	7.6	7.4	3.7	-2.2	2.8	12.8	9.0	4.6	7.0	7.2	-1.5	0.2	14.2
IV	3.1	8.1	14.5	8.5	-2.0	1.8	-1.5	5.2	39.2	16.7	-4.8	15.1	-2.3	-5.8
2017 I	-5.9	-9.7	5.7	-3.3	-1.3	-0.5	-5.6	2.5	-23.7	-12.4	-1.0	-25.3	-12.1	-11.5
II	1.7	4.1	-4.9	9.4	-1.6	-4.3	10.4	5.2	-4.4	1.7	5.3	12.3	4.2	17.7
III	5.7	1.7	-0.1	1.3	11.7	2.8	7.6	-0.1	5.1	-4.4	1.4	-4.4	13.1	2.9
IV	3.9	6.3	10.5	-9.2	0.7	-0.5	4.2	10.2	52.1	-7.6	-5.7	-9.7	-7.9	2.0

**TABLE 6**  
**PERCENT CHANGE IN FOREIGN WHOLESALE TRADE INDEX OVER CORRESPONDING PERIOD OF PREVIOUS YEAR**  
**(2017 = 100)**

	Total	Total (excluding petroleum)	Food, Beverages & Tobacco	Household Equipment & Furniture	Petroleum & Petroleum Products	Chemicals & Chemical Products	Electronic Components	Industrial & Construction Machinery	Telecom- munications & Computers	Metals, Timber & Construction Materials	General Wholesale Trade	Ship Chandlers & Bunkering	Transport Equipment	Other Wholesale Trade
Weights Period	10,000	5,904	448	119	4,096	486	540	173	933	1,248	514	143	202	1,098
At Current Prices														
2014	-2.8	-0.6	-1.8	-4.0	-5.8	-11.1	-2.3	-7.7	3.0	0.9	6.3	-0.4	-1.9	-1.3
2015	-15.1	-4.9	-1.2	-0.7	-29.3	-16.3	2.5	-9.1	2.4	-9.3	-5.7	-37.0	0.8	-0.4
2016	-8.7	-5.7	-4.5	14.7	-14.4	-8.8	-17.3	-2.0	9.2	-12.6	-5.4	-15.3	-3.8	-5.7
2017	14.3	8.5	18.6	6.0	26.3	11.5	10.5	20.2	8.8	7.1	8.4	3.6	-2.2	5.5
2016 I	-18.6	-13.9	-4.7	26.8	-27.6	-15.3	-23.1	-14.4	-7.6	-24.8	-11.0	-25.7	-2.5	-12.4
II	-16.8	-13.2	-12.2	1.6	-22.8	-19.5	-23.1	-4.5	-0.4	-22.2	-7.3	-29.6	10.2	-15.3
III	-8.5	-6.2	-8.3	9.8	-13.1	-9.5	-14.5	1.7	6.4	-19.6	-5.0	-19.1	-11.9	2.5
IV	10.0	10.7	6.9	22.2	8.5	12.5	-8.4	9.5	34.9	20.2	1.1	19.3	-8.5	2.9
2017 I	30.1	19.5	32.7	0.3	53.5	23.2	10.3	28.0	26.9	31.3	23.8	12.0	-9.4	6.6
II	11.4	12.7	23.9	17.9	10.4	8.9	14.5	23.2	3.9	20.1	9.9	14.3	-6.9	13.7
III	11.5	5.4	13.3	14.9	24.1	9.5	7.8	14.1	3.5	7.6	3.4	10.9	7.7	-0.7
IV	7.5	-0.6	7.8	-6.7	23.3	5.5	9.6	17.3	5.0	-19.3	-0.5	-16.0	-0.2	3.4
At Constant Prices														
2014	1.6	1.2	-2.2	-1.3	2.0	-7.7	1.0	-8.9	5.4	-0.2	8.8	6.2	-6.9	2.3
2015	8.9	-0.4	-4.6	-0.5	21.1	8.3	-1.5	-7.6	-1.9	-0.6	1.3	-1.9	-1.0	-0.7
2016	1.5	-1.4	-4.9	16.6	4.7	3.6	-13.7	3.7	12.2	-7.4	-0.1	3.5	-4.0	-4.7
2017	3.6	6.3	20.1	8.5	0.9	-0.5	14.0	21.0	14.4	0.9	5.4	-16.8	-6.2	5.5
2016 I	1.9	-7.5	-6.3	26.6	12.2	4.7	-21.5	-8.9	-7.1	-14.3	-4.4	12.2	-5.5	-10.4
II	-0.1	-7.5	-13.0	3.5	8.1	-2.4	-20.0	0.2	2.9	-14.4	0.1	-2.9	7.7	-13.1
III	1.4	-0.6	-7.0	14.7	3.6	3.2	-7.7	8.7	12.9	-15.2	2.3	-3.9	-9.2	5.2
IV	2.8	9.7	6.3	23.3	-4.1	9.2	-5.5	14.6	36.8	16.0	1.1	8.9	-7.4	-0.2
2017 I	3.5	12.7	33.7	2.4	-4.7	1.5	13.2	30.0	29.7	22.0	17.0	-24.8	-11.0	0.0
II	1.3	9.3	23.6	19.2	-6.9	-0.5	15.8	23.7	6.2	11.2	6.4	-4.9	-10.4	12.0
III	4.4	3.2	15.0	16.4	6.3	-0.4	10.4	13.4	6.7	-0.6	0.6	-7.6	1.2	0.9
IV	5.2	1.6	11.0	-2.6	9.2	-2.6	16.8	18.8	16.5	-21.3	-0.3	-27.5	-4.7	9.3

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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:

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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.
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