

Retail Trade Indices (RTI). Base 2015
January 2018. *Provisional data*

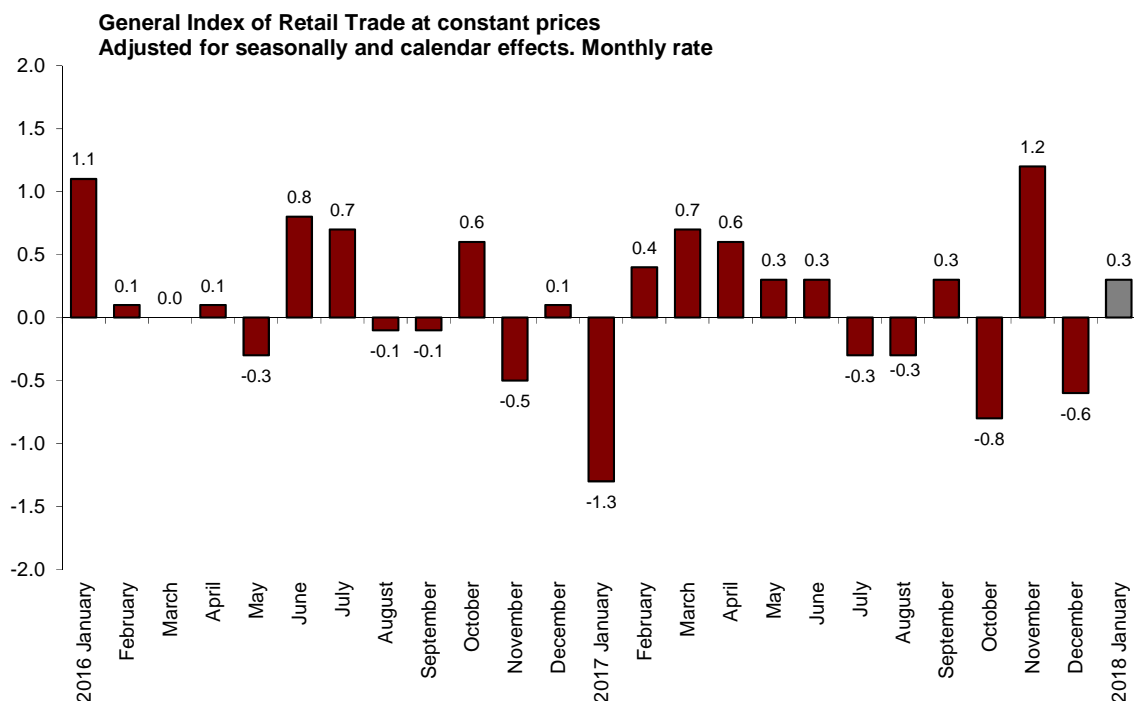
The monthly variation of the Retail Trade Index at constant prices is 0.3% after adjusting for seasonal and calendar effects

The annual rate of the General Retail Trade Index at constant prices stands at 2.2% in the series adjusted for seasonal and calendar effects and at 2.5% in the original series

The INE is today publishing the first RTI in base 2015

Monthly evolution of sales in retail trade

The monthly variation of the general Retail Trade Index (RTI) at constant prices between the months of January and December, after adjusting for seasonal and calendar effects¹ was 0.3%. This rate is nine tenths higher than that of the previous month.

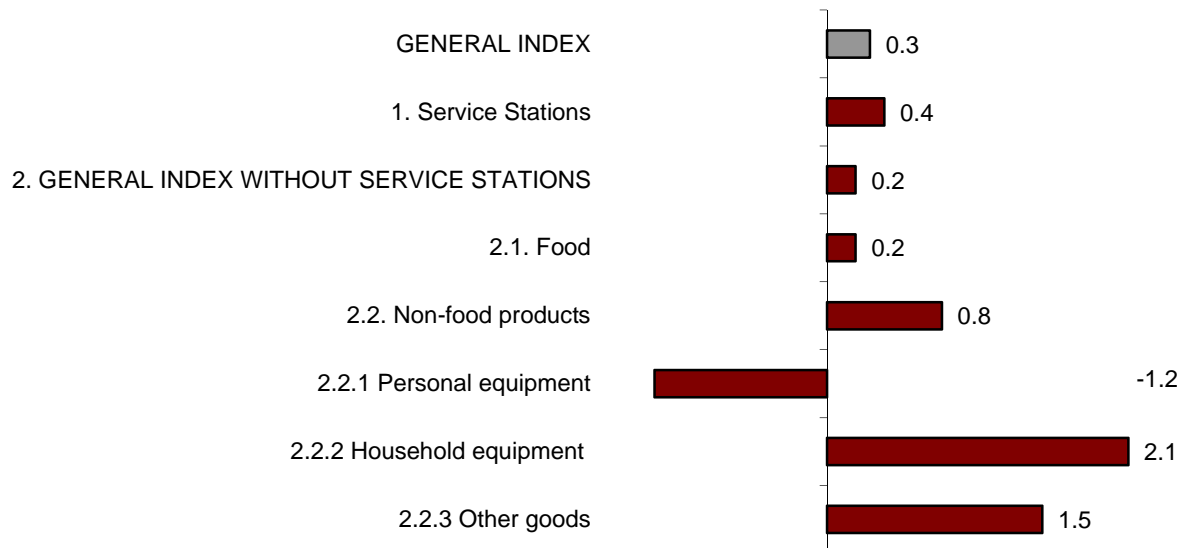


¹ As of this month, the JDemetra+ software is used to carry out the adjustment of seasonal and calendar effects.

The overall index, excluding service stations, recorded a monthly rate of 0.2%.

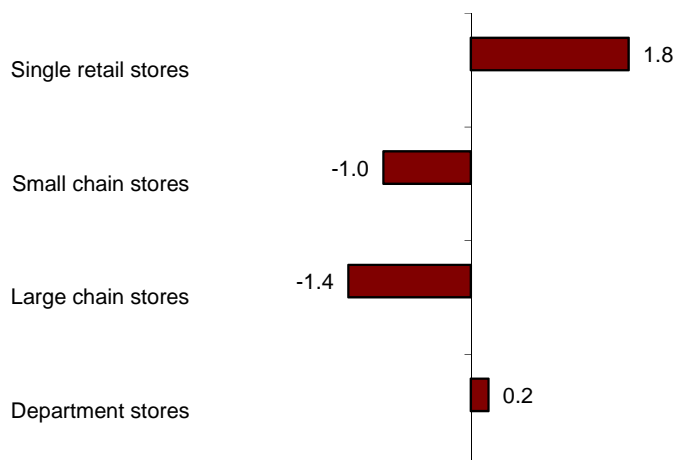
By products, *Food* increased by 0.2% and *Non-food products* by 0.8%. If the latter is broken down by type of product, *Household equipment* showed the highest increase (2.1%).

**Sales Indices at constant prices: General and by type of products.
Adjusted for seasonal and calendar effects. Monthly rate**



Single retail stores (1.8%) and Department stores (0.2%) increased their sales as compared with the previous month. On the other hand, Large chain stores (-1.4%) and Small chain stores (-1.0%) showed negative rates as compared with December.

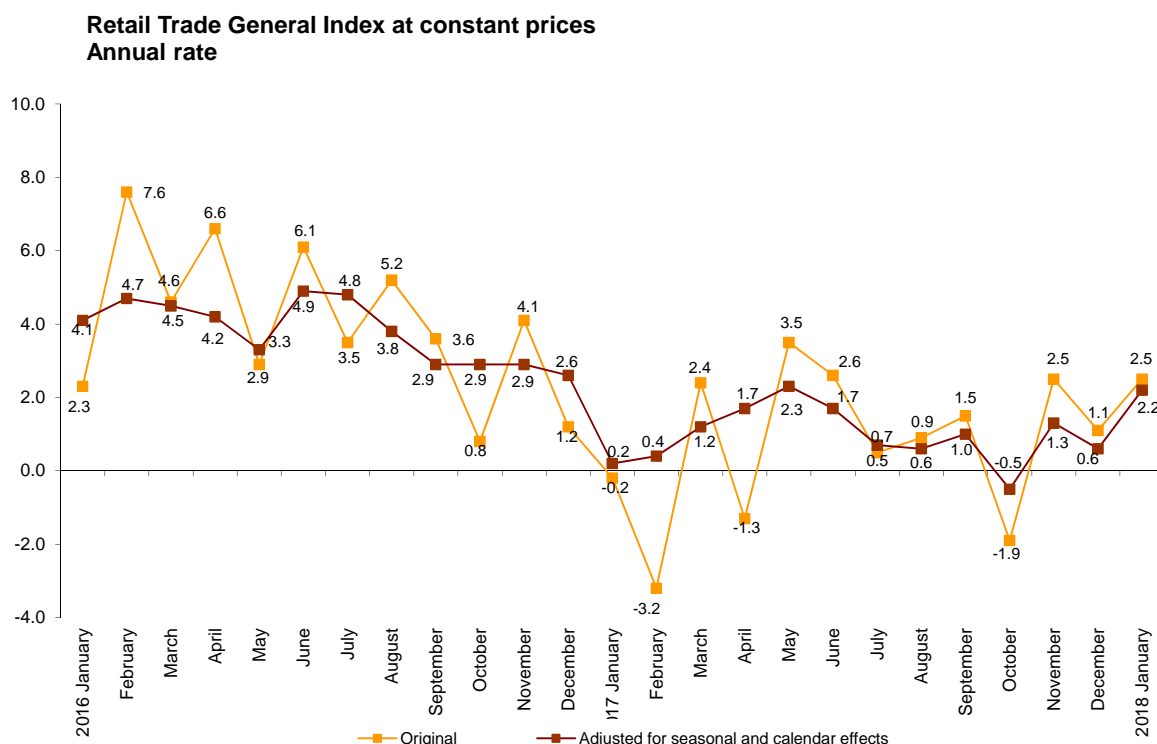
**Sales indices at constant prices by distribution class
Adjusted for seasonal and calendar effects. Monthly rate**



Annual evolution of sales in retail trade

The General Retail Trade Index adjusted for seasonal and calendar effects registered in January a 2.2% variation rate, as compared with the same month of the previous year. This rate is 1.6 points higher than that recorded in December.

The original series of the RTI at constant prices registered a 2.5% variation as compared with January 2017, which is 1.4 points above the rate of the previous month.



The general index excluding service stations and adjusted for seasonal and calendar effects recorded an annual variation of 2.4% in January. If we break down these sales by type of product, *Food* increased by 1.0% and *Non-food products* by 3.7%.

Retail trade sector sales. Annual rates at constant prices.

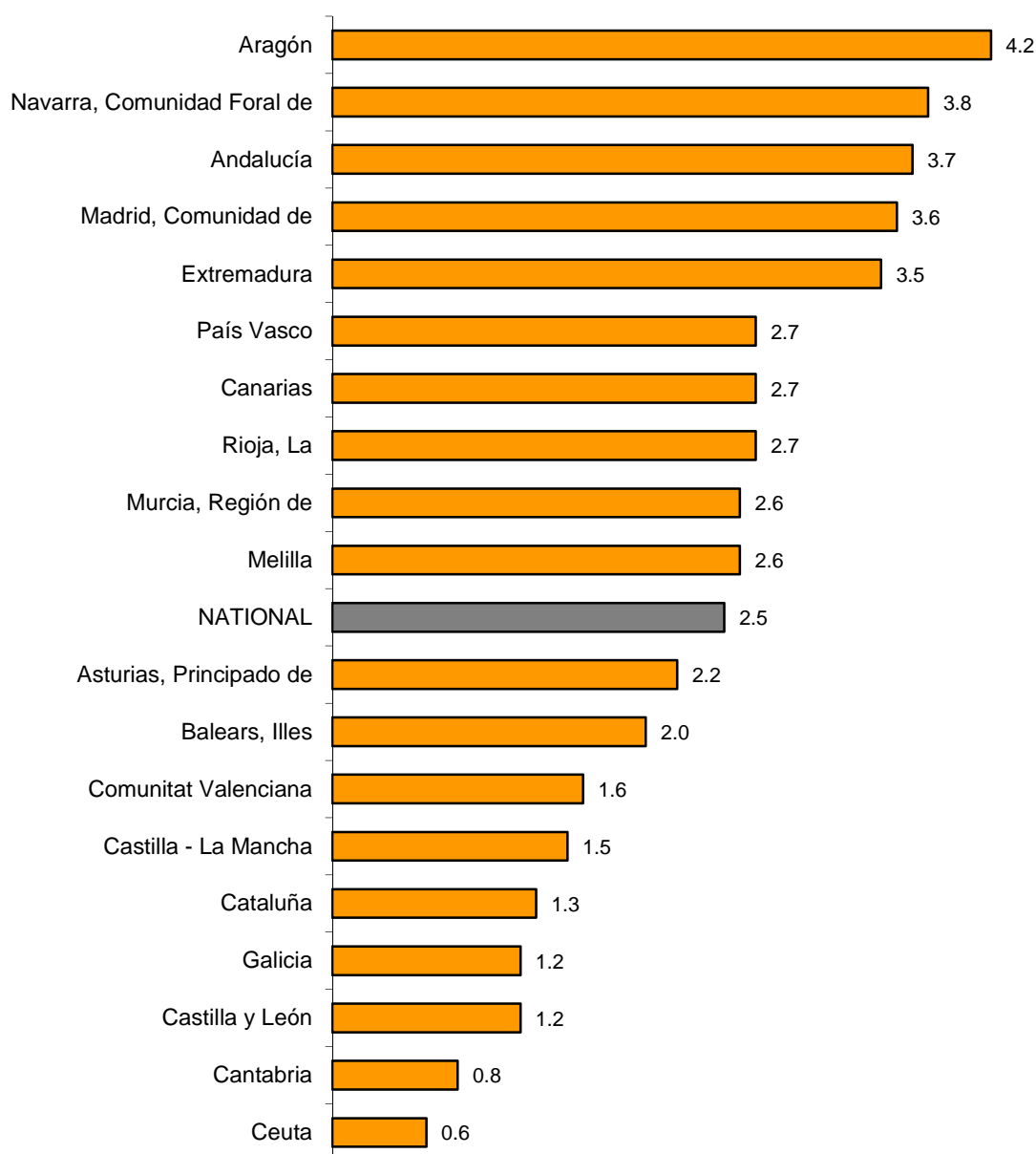
	Original Index	Seasonally adjusted index
	Annual rate (%)	Annual rate (%)
GENERAL INDEX	2.5	2.2
1. Service stations	0.6	0.4
2. GENERAL INDEX WITHOUT SERVICE STATIONS	2.6	2.4
2.1. Food	1.0	1.0
2.2. Non-food products	4.0	3.7
2.2.1 Personal equipment	-0.3	1.0
2.2.2 Household equipment	4.4	3.8
2.2.3 Other goods	4.4	3.7
DISTRIBUTION CLASS		
3. Single retail stores	1.7	1.1
4. Small chain stores	4.2	3.7
5. Large chain stores	4.1	3.9
6. Department stores	0.6	1.8

Results by Autonomous Community. Annual variation rate in sales. Original series

Retail sales increased in all Autonomous Communities as compared with January 2017. Aragón (4.2%), Comunidad Foral de Navarra (3.8%) and Andalucía (3.7%) showed the most positive rates.

On the other hand, Cantabria (0.8%), Galicia and Castilla and Leon (both with 1.2%) registered the smallest increases.

**General Indices : National and by Autonomous City and Community
Annual sales rate**



Evolution of employment

In January, the employment index in the retail trade sector has a variation of 1.0% compared to the same month in 2017. This rate is two tenths higher than that registered in December. Employment increased by 1.3% in *Service stations*.

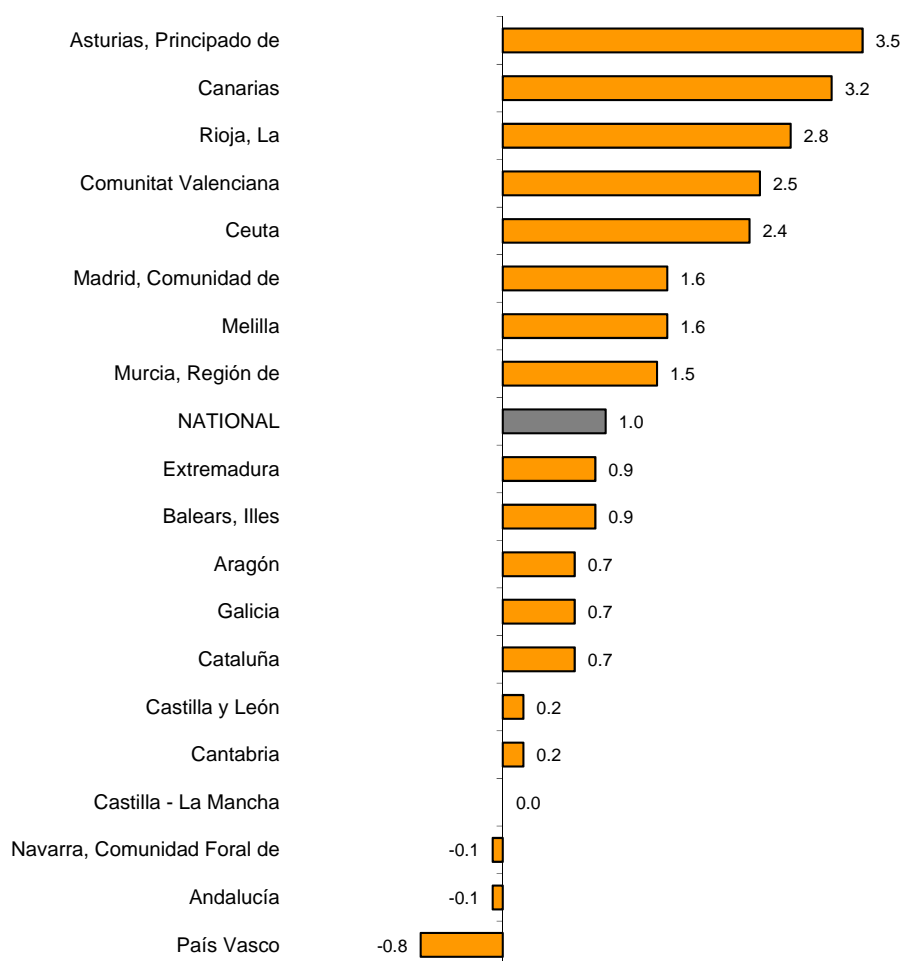
Employment Indices: General and by distribution class

	Index	Rate (%)		
		Monthly	Annual	Year-to-date average
GENERAL INDEX	102.6	-1.9	1.0	1.0
1. Service stations	101.5	-0.7	1.3	1.3
2. GENERAL INDEX WITHOUT SERVICE STATIONS	102.6	-2.0	1.0	1.0
2.1. Single retail stores	100.6	-0.6	0.0	0.0
2.2. Small chain stores	100.3	-1.8	-0.4	-0.4
2.3. Large chain stores	109.2	-2.0	3.9	3.9
2.4. Department stores	102.2	-8.4	1.0	1.0

Results by Autonomous Community. Annual variation rates in employment

In January, the annual rate of employment in retail trade increased in 13 Autonomous Communities. Principado de Asturias showed the largest increase (3.5%).

General Indices : National and by Autonomous City and Community. Employment Index. Annual Rate



Informative annex

Main characteristics of Retail Trade Indices (RTIs) in Base 2015

Today the National Statistics Institute (INE) is publishing the Retail Trade Indices (RTIs) in base 2015. This complies with Council Regulation (EC) No. 1165/98 of 19 May 1998 concerning short-term statistics, which stipulates that Member States must change the base every five years, specifically in those years ending in zero and five. This change must be made within three years after the end of this new base year.

The Retail Trade Indices are calculated, from the base 2010, using chain-linked indices, with the objective of using an indicator in accordance with the general methodology of this survey where, each year, there is a rotation of between 20 and 25% of the sample units and the elevation factors are reviewed.

With the implementation of the new base, the aim is to improve the representativeness of these indicators by updating the sample and the weighting structure. The objective is to obtain an indicator that adapts to changes in the retail sector in recent years, so that it measures developments in the retail sector more accurately, resulting in a more representative indicator of retail trade.

Updating of the sample and weighting structure

- Sample

One of the most important aspects of the base change process is the updating of the sample. To this end, a complete study of the population of retail trade companies (division 47 of CNAE 2009) is carried out in the Central Business Register (CBR), which is the population framework of this survey and a new theoretical sample is defined to better reflect the current structure of the sector. In the years 2015, 2016 and 2017, changes have been made to the sample to improve its representativeness.

The sampling used is a stratified random sampling, where the stratification variables are: main activity, size and Autonomous Community. In each stratum, a random sample is obtained, except the one formed by companies with 50 or more employees, in which all form part of the sample. There are other smaller strata that are also comprehensive because of their small population.

Every month, information is collected from a sample of around 12,500 companies to obtain the Retail Trade Indices in base 2015. These companies provide information on their turnover—broken down by product and by Autonomous Community—and on employment—broken down by Autonomous Community.

– Weightings

The values used to weight the levels of functional and geographical disaggregation are obtained from the survey itself, as their sample size makes it possible to obtain sufficiently representative weightings for the sector, and guarantees maximum timeliness in the revision of these weightings.

Due to the modifications of the samples in the years 2015, 2016 and 2017 the weightings in these years are revised. The weightings used for the year 2018 are those of December 2017.

Ponderaciones (%)

	Base 2010		Base 2015		
	Año 2016	Año 2017	Año 2016	Año 2017	Año 2018
ÍNDICE GENERAL	100,000	100,000	100,000	100,000	100,000
1. Estaciones de servicio	5,730	7,171	6,578	7,341	8,041
2. GENERAL SIN ESTACIONES DE SERVICIO	94,270	92,829	93,422	92,659	91,959
2.1. Alimentación	40,186	39,317	39,174	39,431	39,261
2.2. Resto	54,084	53,512	54,248	53,228	52,698

The weightings are recalculated annually in order to refer them to the month of December of the year immediately preceding the reference year.

Calculation formula

The Retail Trade Indices are calculated using a chain-linked Laspeyres index, where the reference period for the turnover and employment for the current period is December of the immediately preceding year. In addition, the weightings required for the calculation of the indicators are updated annually.

Chained series

Any change of base implies a break in the series. In order to have continuous series that allow us to calculate variation rates between different periods, and to carry out studies and predictions about the evolution of sales and employment in the sector, the INE publishes the indices in base 2015 with the same starting year and month as in the previous bases.

For the base change, the years 2015, 2016 and 2017 have been recalculated due to the updating of the sample, and the linking coefficient has been applied from December 2015 until the beginning. In this way, the variation rates published in base 2010 will be maintained in all the years in which the index has not been recalculated.

Seasonal and calendar adjustment

In the new base 2015 the series are adjusted for seasonal and calendar effects, as was already the case in the base 2010.

- ***New software: JDemetra +***

The series adjusted for calendar effects and the series adjusted for seasonal and calendar effects are obtained with the JDemetra+ software (version 2.2.0)², from the publication of data referring to 2018. JDemetra+ is officially recommended by Eurostat for performing seasonal and calendar adjustments in the official statistics of the European Union³. This is a new seasonal adjustment tool, developed by the National Bank of Belgium in cooperation with the Deutsche Bundesbank and Eurostat.

JDemetra+ includes the two leading seasonal adjustment methods, TRAMO/SEATS and X-12-ARIMA/X-13ARIMA-SEATS. The tool is built on the basis of the concepts and algorithms used in these two reference methods.

- ***The method of seasonal adjustment remains unchanged***

The change of software from TRAMO/SEATS to JDemetra+ does not affect the seasonal adjustment methodology in the INE series, since it is still performed according to the method based on ARIMA Models (TRAMO/SEATS method) as reflected in the **INE Standard for the adjustment of seasonal and calendar effects in the short-term series**⁴.

This change coincides with the base change and the re-identification of models that takes place once a year. The revisions in the series, caused by the software change, are minimal.

Dissemination of the results

The indices that are published are the same as in the previous base. Indices are published by product group, distribution method and Autonomous Community, both in terms of turnover (at current and constant prices) and employment.

Turnover indices are disseminated in the form of original indices, as well as adjusted for calendar effects and adjusted for seasonal and calendar effects.

All information on the new base of the Retail Trade Indices is available on the INE website (<http://www.ine.es/en/>).

²<https://github.com/jdemetra/jdemetra-app/releases/tag/v2.2.0>

³https://ec.europa.eu/eurostat/cros/system/files/Jdemetra_%20release.pdf

⁴ http://www.ine.es/en/clasifi/estandar_efectos_estacionales_en.pdf

Retail Trade Indices. Base 2015 January 2018

Provisional data

1. Sales indices: General, by products and by distribution class Adjusted for seasonal and calendar effects

	Index	Rate (%)		Year-to-date average	Deflated index	Rate (%)		Year-to-date average
		Monthly	Annual			Monthly	Annual	
GENERAL INDEX	106.6	0.4	2.3	2.3	105.4	0.3	2.2	2.2
1. Service stations	107.0	2.8	2.7	2.7	101.5	0.4	0.4	0.4
2. GENERAL INDEX WITHOUT SERVICE STATIONS	106.4	0.1	2.2	2.2	105.4	0.2	2.4	2.4
2.1. Food	105.6	-0.9	2.0	2.0	102.9	0.2	1.0	1.0
2.2. Non-food products	106.6	0.5	1.9	1.9	107.8	0.8	3.7	3.7
2.2.1 Personal equipment	106.8	-1.4	1.2	1.2	105.8	-1.2	1.0	1.0
2.2.2 Household equipment	109.2	2.1	3.5	3.5	109.6	2.1	3.8	3.8
2.2.3 Other goods	105.1	1.1	1.7	1.7	106.6	1.5	3.7	3.7
DISTRIBUTION CLASS								
3. Single retail stores	102.8	1.7	0.7	0.7	102.0	1.8	1.1	1.1
4. Small chain stores	102.2	-0.7	3.3	3.3	100.9	-1.0	3.7	3.7
5. Large chain stores	111.9	-1.2	3.6	3.6	110.8	-1.4	3.9	3.9
6. Department stores	106.6	0.1	2.0	2.0	105.4	0.2	1.8	1.8

2. Sales indices: General, by products and by distribution class. Adjusted for calendar effects

	Index	Rate (%)		Deflated index	Rate (%)	
		Annual	Year-to-date average		Annual	Year-to-date average
GENERAL INDEX	107.5	2.0	2.0	106.7	2.0	2.0
1. Service stations	101.3	2.8	2.8	97.2	0.3	0.3
2. GENERAL INDEX WITHOUT SERVICE STATIONS	107.8	1.8	1.8	107.4	2.1	2.1
2.1. Food	98.2	1.8	1.8	94.7	0.6	0.6
2.2. Non-food products	115.2	1.7	1.7	117.9	3.4	3.4
2.2.1 Personal equipment	123.4	-0.2	-0.2	131.7	-0.7	-0.7
2.2.2 Household equipment	111.5	3.4	3.4	112.2	3.7	3.7
2.2.3 Other goods	111.5	2.1	2.1	114.1	3.9	3.9
DISTRIBUTION CLASS						
3. Single retail stores	101.7	0.8	0.8	101.3	1.1	1.1
4. Small chain stores	106.2	3.3	3.3	105.8	3.6	3.6
5. Large chain stores	111.3	3.2	3.2	110.9	3.6	3.6
6. Department stores	116.1	-0.2	-0.2	115.6	0.2	0.2

3. Sales indices: General, by products and by distribution class Original Series

	Index	Rate (%)		Deflated index	Rate (%)	
		Annual	Year-to-date average		Annual	Year-to-date average
GENERAL INDEX	108.0	2.4	2.4	107.1	2.5	2.5
1. Service stations	101.6	3.1	3.1	97.5	0.6	0.6
2. GENERAL INDEX WITHOUT SERVICE STATIONS	108.3	2.3	2.3	107.9	2.6	2.6
2.1. Food	98.6	2.3	2.3	95.1	1.0	1.0
2.2. Non-food products	115.7	2.2	2.2	118.4	4.0	4.0
2.2.1 Personal equipment	123.9	0.2	0.2	132.2	-0.3	-0.3
2.2.2 Household equipment	112.2	4.1	4.1	112.9	4.4	4.4
2.2.3 Other goods	112.0	2.6	2.6	114.7	4.4	4.4
DISTRIBUTION CLASS						
2.1. Single retail stores	102.2	1.3	1.3	101.8	1.7	1.7
2.2. Small chain stores	106.8	3.9	3.9	106.4	4.2	4.2
2.3. Large chain stores	111.8	3.8	3.8	111.4	4.1	4.1
2.4. Department stores	116.5	0.2	0.2	116.0	0.6	0.6
2.4.1. Food	94.8	0.7	0.7	91.5	-0.6	-0.6
2.4.2. Non-food products	127.1	0.1	0.1	130.1	1.8	1.8

4. Sales indices: National and by Autonomous City and Community Original Series

	Index	Rate (%)		Deflated index	Rate (%)	
		Annual	Year-to-date average		Annual	Year-to-date average
NATIONAL	108.0	2.4	2.4	107.1	2.5	2.5
Andalucía	106.4	3.5	3.5	106.0	3.7	3.7
Aragón	106.0	3.9	3.9	105.3	4.2	4.2
Asturias, Principado de	108.6	1.8	1.8	108.3	2.2	2.2
Balears, Illes	90.8	1.8	1.8	90.1	2.0	2.0
Canarias	118.6	3.3	3.3	118.3	2.7	2.7
Cantabria	102.4	0.7	0.7	101.1	0.8	0.8
Castilla y León	104.5	1.1	1.1	103.7	1.2	1.2
Castilla - La Mancha	107.0	1.6	1.6	105.9	1.5	1.5
Cataluña	103.0	1.8	1.8	101.0	1.3	1.3
Comunitat Valenciana	103.9	1.2	1.2	104.0	1.6	1.6
Extremadura	102.7	3.0	3.0	102.7	3.5	3.5
Galicia	109.8	1.1	1.1	109.0	1.2	1.2
Madrid, Comunidad de	119.6	3.6	3.6	118.8	3.6	3.6
Murcia, Región de	106.1	2.0	2.0	106.0	2.6	2.6
Navarra, Comunidad Foral de	106.7	3.4	3.4	106.3	3.8	3.8
País Vasco	109.5	2.5	2.5	108.5	2.7	2.7
Rioja, La	109.9	2.4	2.4	109.4	2.7	2.7
Ceuta	107.3	-0.1	-0.1	107.3	0.6	0.6
Melilla	109.6	2.7	2.7	109.0	2.6	2.6

5. Employment Indices: General and by distribution class

	Index	Rate (%)		
		Monthly	Annual	Year-to-date average
GENERAL INDEX	102.6	-1.9	1.0	1.0
1. Service stations	101.5	-0.7	1.3	1.3
2. GENERAL INDEX WITHOUT SERVICE STATIONS	102.6	-2.0	1.0	1.0
2.1. Single retail stores	100.6	-0.6	0.0	0.0
2.2. Small chain stores	100.3	-1.8	-0.4	-0.4
2.3. Large chain stores	109.2	-2.0	3.9	3.9
2.4. Department stores	102.2	-8.4	1.0	1.0

6. Employment Indices: National and by Autonomous City and Community

	Index	Rate (%)		
		Monthly	Annual	Year-to-date average
NATIONAL	102.6	-1.9	1.0	1.0
Andalucía	100.7	-1.7	-0.1	-0.1
Aragón	102.0	-2.0	0.7	0.7
Asturias, Principado de	104.7	-0.8	3.5	3.5
Balears, Illes	102.0	-1.8	0.9	0.9
Canarias	108.5	-2.5	3.2	3.2
Cantabria	100.7	-1.8	0.2	0.2
Castilla y León	101.6	-1.7	0.2	0.2
Castilla - La Mancha	101.4	-1.5	0.0	0.0
Cataluña	101.7	-2.1	0.7	0.7
Comunitat Valenciana	104.5	-2.0	2.5	2.5
Extremadura	101.7	-1.6	0.9	0.9
Galicia	101.7	-1.3	0.7	0.7
Madrid, Comunidad de	103.6	-2.4	1.6	1.6
Murcia, Región de	102.0	-2.2	1.5	1.5
Navarra, Comunidad Foral de	101.4	-1.7	-0.1	-0.1
País Vasco	102.1	-1.7	-0.8	-0.8
Rioja, La	104.4	-1.7	2.8	2.8
Ceuta	103.1	-2.8	2.4	2.4
Melilla	103.7	-0.1	1.6	1.6