

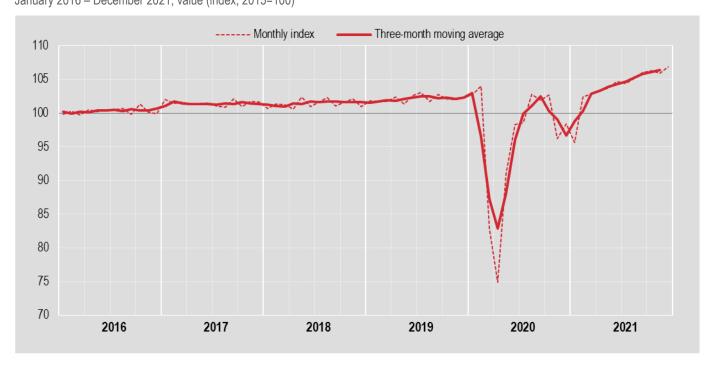


#### December 2021

### **RETAIL TRADE**

- In December 2021 estimates for seasonally adjusted index of retail trade rose in the month on month series by 0.9% in value terms and by 0.6% in volume terms.
- In the 4th quarter 2021 value of sales was up 1.1% when compared with the previous three-month period, likewise volume grew by 0.8%.
- In December 2021 both value and volume of retail trade continued to grow for the 10<sup>th</sup> month in a row in the year on year series. Value sales increased by 9.4% and volume sales rose by 7.7% comparing to December 2020.
- In December 2021, when compared with the same month a year earlier, large-scale distribution was up 5.9%, small-scale distribution rose by 14.8% and non-store retail sales grew by 12.4%.
- Online sales fell by 4.1% in December 2021 when compared with December 2020. This is the second negative y-o-y growth recorded in 2021, however levels of online sales in December 2021 were still substantially higher than those seen in February 2020, before the pandemic.
- Looking at the value of sales for non-food products, all sectors experienced growth besides Electric household appliances, audio-video equipment (-0.1%). The largest increases were reported for Furniture and textile items and household furnishings (+26.1%), Clothing (+24.7%) and Pharmaceutical products (+22.0%).
- In 2021 as a whole, value and volume of sales increased by 7.9% and 7.2% respectively when compared with 2020.

#### CHART 1. RETAIL TRADE, SEASONALLY ADJUSTED INDEX AND THREE-MONTH MOVING AVERAGE January 2016 - December 2021, value (index, 2015=100)









#### CHART 2. RETAIL TRADE, MONTH ON SAME MONTH A YEAR AGO PERCENTAGE CHANGES

January 2017 - December 2021, percentage changes in value and volume, non-seasonally adjusted (index, 2015=100)



#### **TABLE 1. RETAIL TRADE BY MARKETABLE GOODS SECTOR**

December 2021, months on previous months and months on same months a year ago percentage changes in value and volume, seasonally adjusted and non-seasonally adjusted (index, 2015=100) (a)

	Months on previous months percentage changes (seasonally adjusted)				
MARKETABLE GOODS SECTOR	<u>Dec 21</u> Nov 21		Oct-Dec 21 Jul-Sep 21		
	Value	Volume	Value	Volume	
Food	+1.7	+1.2	+0.6	-0.1	
Non food	+0.3	+0.2	+1.4	+1.4	
Total	+0.9	+0.6	+1.1	+0.8	
	Months on same months a year ago percentage changes (non-seasonally adjusted)				
	<u>Dec 21</u>		Jan-De	<u>c 21</u>	
	Dec 20		Jan-Dec 20		
	Value	Volume	Value	Volume	
Food	+3.1	+0.2	+1.4	+0.8	
Non food	+14.3	+13.4	+13.3	+12.5	
Total	+9.4	+7.7	+7.9	+7.2	

<sup>(</sup>a) Provisional data

#### TABLE 2. RETAIL TRADE BY MARKETABLE GOODS SECTOR AND CHANNEL OF DISTRIBUTION

December 2021, months on same months a year ago percentage changes in value, non-seasonally adjusted (index, 2015=100) (a)

MARKETABLE GOODS SECTOR AND CHANNEL OF	<u>Dec 21</u>	Jan-Dec 21
DISTRIBUTION	Dec 20	Jan-Dec 20
Large-scale distribution	+5.9	+5.5
Food	+2.5	+1.7
Non food	+12.8	+13.6
Small-scale distribution	+14.8	+9.7
Food	+3.8	-0.8
Non food	+18.2	+13.6
Non-store retail sales	+12.4	+9.3
Online sales	-4.1	+13.3
Total	+9.4	+7.9

(a) Provisional data

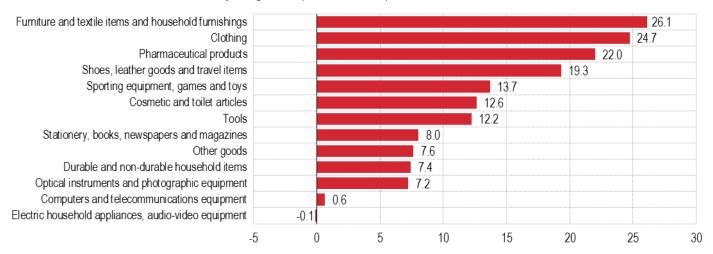






#### CHART 3. YEAR-ON-YEAR NON-FOOD GROWTH RATE BY PRODUCT SEGMENT

December 2021, months on same months a year ago value (index, 2015=100)



### revisions

The table below shows routine revisions, calculated as differences (in percentage points) between first release and the latest estimates concerning growth rates of the same reference period. Revisions to year-on-year growth rate refer to not adjusted data of the last month prior to the current reference period. Estimates are then subject to a second revision, which occurs on annual basis in autumn. With regard to the short-term growth rate, an additional monthly revision for seasonally adjusted data occurs as new observations can change the seasonal factors that are applied to the whole time series.

Table 3 provides revised data for November 2021.

Changes were introduced in revision policy for unadjusted series of retail trade when the bulletin referred to March 2020 was issued. Until the dissemination of data referred to February 2020, publications would revise the two months previous the reference period. However, since March 2020, publications have been revising only one month before the reference period. Moreover, twice a year the latest semester is revised. In the bulletin referred to October 2021 the first six months of the year 2021 were revised, while a revision for the last six months of 2021 will be scheduled within the first semester of 2022.

No changes were introduced for seasonally adjusted series that, as in the past, can be wholly revised.

**TABLE 3. REVISIONS TO GROWTH RATES BY MARKETABLE GOODS SECTOR** 

Differences in percentage points (index, 2015=100)

	Food sales		Non-food sales		Total sales	
	Month-on-month change (a)	Year-on-year change (b)	Month-on-month change (a)	Year-on-year change (b)	Month-on-month change (a)	Year-on-year change (b)
		No	ovember 2021			
Value	+0.4	+0.5	-0.1	-0.5	0.0	-0.1
Volume	+0.3	+0.4	-0.1	-0.5	0.0	-0.1

<sup>(</sup>a) Figures are calculated on seasonally adjusted data

<sup>(</sup>b) Figures are calculated on non-seasonally adjusted data





**Large-scale distribution:** definition of this aggregate was revised according to the classification ATECO 2007 (Italian version of the Classification of Economic Activities NACE Rev.2). Large-scale distribution includes the following categories:

#### Non-specialized stores with food predominating

- Hypermarket (Ateco 47111): store combining a supermarket (food products) and a department store (non-food products), with a selling surface over 2.500 square metres.
- Supermarket (Ateco 47112): store operating in food retailing, organized as a self-service shop covering a surface area over 400 square metres and offering a wide variety of food (mainly canned and packaged goods), personal hygiene products, household cleaners and pet supplies.
- Discount stores (Ateco 47113): retail area selling wide assortments of goods (not name-brand) focusing on low prices rather than service, displays or variety.

#### Non-specialized stores with non-food predominating

Department store and non-specialized store selling computers, peripheral devices, telecoms equipment, consumer electronics (audio and video), electrical household appliances: they both are retail establishments offering a wide range of predominantly non-food consumer goods. Both kinds of stores cover a floor space over 400 square metres and sell a wide range of products such as consumer electronics, household appliances, clothing, furniture and household supplies.

#### Large footprints specialized stores

Large footprints specialized store (or category killer store): specialized store offering a deep product assortment within a given category with a footprints over 400 square metres. Category killer stores typically have a large-scale distribution business model.

**Small retail store:** retail store with a selling surface under 400 square metres. Both specialized stores and non-specialized stores may fall within this category. Among the latter ones, minimarkets (Ateco 47114), frozen food stores (Ateco 47115) and general stores (Ateco 47199) can be found.

**E-commerce:** electronic selling of goods over the internet network (Ateco 47911). The monthly indices refer to real-time sales transactions that occur as a consumer purchases an item from an online store, which predominantly operates in the e-commerce sector. Web sales performed by retailers that sell primarily in stores do not flow into e-commerce indicators.

**Non-store retailing:** (Ateco 478 and 479. except from 47911) sales taking place outside of fixed retail stores. Non-store distribution channel includes market stands, mail and catalogue ordering, automated vending, sales representatives and telesales.

Value of sales index: the value of sales index measures the retail trade turnover over time at current prices.

**Volume of sales index**: the volume of sales index measures the retail trade turnover over time in volume terms (quantity sold). In order to determine the volume of sales index, the value of sales index is divided by the Harmonised index of consumer price (HICP) to allow removing price effects on turnover.

**Seasonally adjusted data:** seasonally adjusted data refer to the statistical technique designed to remove fluctuations related to seasonal factors (such as weather conditions, administrative measures, etc.) and calendar effects when relevant. Seasonal adjustment provides a clearer view for a trend analysis of a short-term index.

**Short-term growth rate**: short-term growth rate compares a period (typically a month or quarter) with the previous period, measuring the percentage change.

**Year-on-year growth rate**: Y-o-Y growth rate compares a period (typically a month or quarter) with the same period from the previous year, measuring the percentage change.



# methodologicalnote

#### Information objectives and reference regulatory framework

The Retail trade index is compiled using data from the monthly survey on retail sales.

This survey refers to enterprises whose main economic activity is retail trade (according to the Economic activity classification NACE Rev.2).

Enterprises having the sale of car and fuel as main economic activity are excluded from the survey.

The legal basis for the STS indicators are the <u>Regulation (EU) 2019/2152</u> of the European Parliament and of the Council on European business statistics, repealing 10 legal acts in the field of business statistics (EBS-Regulation) and the Commission Implementing Regulation 2020/1197 laying down technical specifications and arrangements pursuant to Regulation (EU) 2019/2152 (General Implementing Act).

#### Index base year

The base year for Retail trade indicators is 2015. They are elaborated with reference to the classification of the economic activity Ateco 2007 (the Italian version of the European classification Nace Rev. 2)

The series of monthly indices of retail sales based 2015=100 start with January 2015, Therefore, for the period January 2015-December 2017, the new indices with base year 2015 replace those with base year 2010 already published.

Time series (data for the period January 2000 – December 2014) have been rescaled to the base 2015, in order to meet users' needs and for research purposes.

In coincidence with the elaboration of data in base 2015, a new index on e-commerce starts to be calculated and published.

#### Sampling design

Retail trade data are collected from a sample of about 8.000 enterprises, resident in Italy.

The sample is stratified considering the following variables:

- ✓ main activity according to the classification Ateco 2007
- enterprise size, identified on the basis of three classes of persons employed (1-5, 6-49 and at least 50).

According to the sampling scheme, enterprises with less than 50 persons employed are selected at random, while all the units with 50 or more persons employed are included in the sample.

In the calculation of the monthly indices weights with reference to the base 2015 are used. In particular, weights of the large distribution in terms of turnover is equal to 46.4%, while the weight of small scale distribution enterprises is 48.0%. In the next table data on the weights used in the aggregation of the monthly indices of retail sales in base 2015 are compared to those used in the previous base 2010.



# methodologicalnote

#### **TABLE 1. WEIGHTING STRUCTURE OF MONTHLY RETAIL SALES INDEX**

Percentage values

Aggregates	base 2010	base 2015
TYPE OF DISTRIBUTION		
Small scale distribution	55.1	48.0
Large scale distribution	44.9	46.4
-Non-specialised large-scale retail	38.2	36.7
Food predominant	34.2	33.7
- Hypermarkets	12.5	11.6
- Supermarkets	16.7	16.7
- Discount stores	5.0	5.4
Non-food predominant	4.1	3.0
- Large scale specialised stores	6.6	9.7
E-commerce	_	1.9
Non-store retailing	-	3.7
PRODUCT GROUPING		
Food products	35.5	42.2
Non-food products	64.5	57.8
Pharmaceuticals and other therapeutic products	9.2	8.4
Clothing	12.1	11.9
Shoes, leather goods and travel items	3.5	3.4
Furniture and textile items and household furnishings	5.9	4.5
Electric household appliances, audio-video equipment	4.0	3.3
Computers and telecommunications equipment	2.7	2.6
Optical instruments and photographic equipment	1.6	1.3
Durable and non-durable household items	3.5	2.1
Household tools and hardware	5.1	4.1
Cosmetic and toilet articles	4.2	3.0
Stationery, books, newspapers and magazines	2.7	1.9
Sporting equipment. games and toys	3.2	2.5
Other goods	6.8	8.8
SIZE OF ENTERPRISES (PERSONS EMPLOYED)		
1-5	27.9	28.4
6-49	28.2	25.4
50 or more	43.9	46.2

#### Value and volume index

The retail trade value index is a short-term measure of the changes in the value of sales by Italian retailers. It reflects the effect of both volume and price. In order to determine estimates on the volume of sales, value of sales indices are processed to allow removing price effects on turnover, using the Harmonised index of consumer price (HICP).

#### Data revision and seasonal effects

Monthly data are revised in the following month after the first publication. The revision is made in order to take into account the additional information from the respondents.

Indices are seasonally adjusted through the Tramo-Seats procedure (942 version for Linux). Like other seasonal adjustment procedures. Tramo Seats is based on the hypothesis that monthly or quarterly time series result from unobservable components:

- ✓ trend-cycle component (long-term and medium-term movements in the data);
- seasonal component (periodical short-term movements having a length of no more than one year);
- ✓ irregular component (unpredictable movements in the data).





# methodologicalnote

Tramo-Seats uses a *model-based* method that is a statistical model that explain the behaviour of the original time series and its components.

In particular, food and non-food series are seasonally adjusted and aggregate seasonally adjusted estimates are then be derived.

Seasonal adjusted data are revised every month as a consequence of the re-estimation of the seasonal adjustment factors, which are also reviewed annually.

#### **Territorial breakdown**

Indices are calculated and disseminated at national level.

#### **Timeliness**

Indices are published on a monthly basis with a delay of approximately 38 days from the end of the reference month.

#### Dissemination

Data are issued through press releases, available on the Istat website at <a href="http://www.istat.it/en">http://www.istat.it/en</a>.

The series of the updated indices are published on the Istat data warehouse (http://dati.istat.it/?lang=en) under the theme "Index of retail trade sales".

#### Measures adopted to handle the impact of pandemic emergency on retail trade survey

The COVID-19 pandemic emergency did not affect the data collection for businesses involved in this survey. Overall, the majority of the businesses involved in the survey provided the information required.

With reference to the seasonally adjustment procedure used to treat the indicators disseminated, the seasonal adjustment models were reviewed to manage the exceptional decreases recorded taking into consideration the Eurostat guidelines, available at the URL:

https://ec.europa.eu/eurostat/documents/10186/10693286/Time series treatment guidance.pdf

Therefore, since March 2020, the unusual size of the changes of the unadjusted time series were taken into account. For this purpose, additional regressors (the so-called additive outliers) were introduced in models for seasonal adjustment when statistically significant. This procedure, which aims at minimizing the revisions of past values of the seasonally adjusted series, was carried up to July 2021. As soon as the available information will allow an overall evaluation of the great volatility phase, models will be revised/modified if necessary. In that case, revisions of seasonally adjusted data may be larger than usual.

### For technical and methodological information

Romina Ciavardini

tel. +39 06 4673.6504 ciavardini@istat.it

