

May 2020

RETAIL TRADE

- In May 2020 estimates for value of seasonally adjusted retail trade index rose by 24.3% in the month on month series, after plummeting at record levels in March and April, due to restrictions and temporary closure of stores during Covid-19 pandemic. Likewise, volume of sales grew by 25.2% when compared to the previous month. Therefore, estimates seems to confirm that retail trade reached a turning point in the Covid-19 crisis in April 2020 and partially started to recover from the loss in May 2020.
- Despite the increase in the month on month series, the underlying pattern in the three months to May 2020 shows a decline, as both value and volume of sales fell by 20.6% and 21.8% respectively.
- When compared with May 2019, the value of sales dropped by 10.5% and the volume was down 11.9%
- Comparing with the same month a year earlier, large-scale distribution fell by 4.4%, small-scale distribution decreased by 18.8% and non-store sales was down 23.0%. Notwithstanding the fall, these channels of distribution show a reduction of the year on year loss recorded in the two previous months.
- Internet sales increased by 41.7% when compared with the same month a year earlier, the highest growth on record, suggesting a shift within the retail trade to online sales.
- Looking at the value of sales for non-food products, a fall was seen across most of the categories in the year on year series. This drop resulted in low levels for Clothing (-38.1%), Optical instruments and photographic equipment (-37.4%), Shoes, leather goods and travel items (-34.8%). Growths were registered for Computers and telecommunications equipment (+12.4%) and Tools (+5.6%).
- The Covid-19 emergency did not affect the data collection of the survey concerning May 2020, as no loss in the response rate was registered. Changes in data elaboration process were introduced in order to catch the impact of pandemic on the retail trade sector and release accurate indices for May 2020, (for further details see Methodological note, page 8).

CHART 1. RETAIL TRADE, SEASONALLY ADJUSTED INDEX AND THREE-MONTH MOVING AVERAGE

January 2015 – May 2020, value (index, 2015=100)

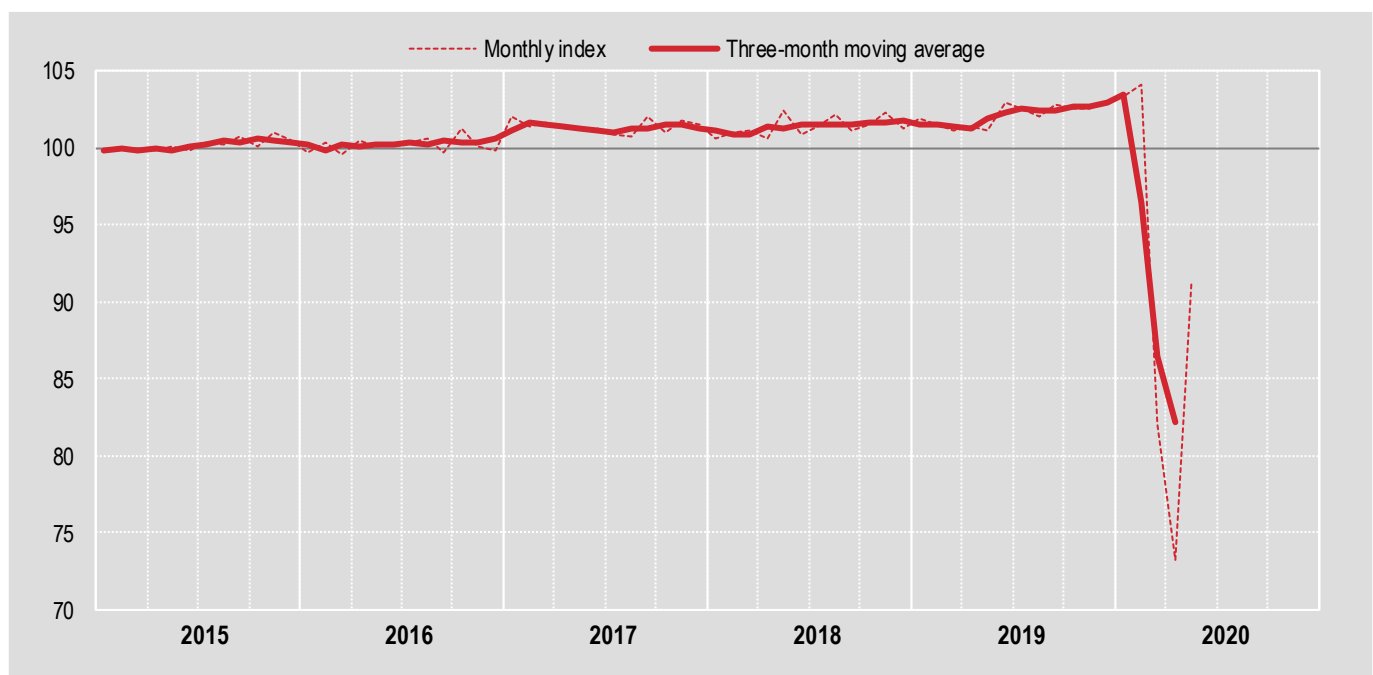


CHART 2. RETAIL TRADE, MONTH ON SAME MONTH A YEAR AGO PERCENTAGE CHANGES

January 2016 – May 2020, percentage changes in value and volume, non-seasonally adjusted (index, 2015=100)

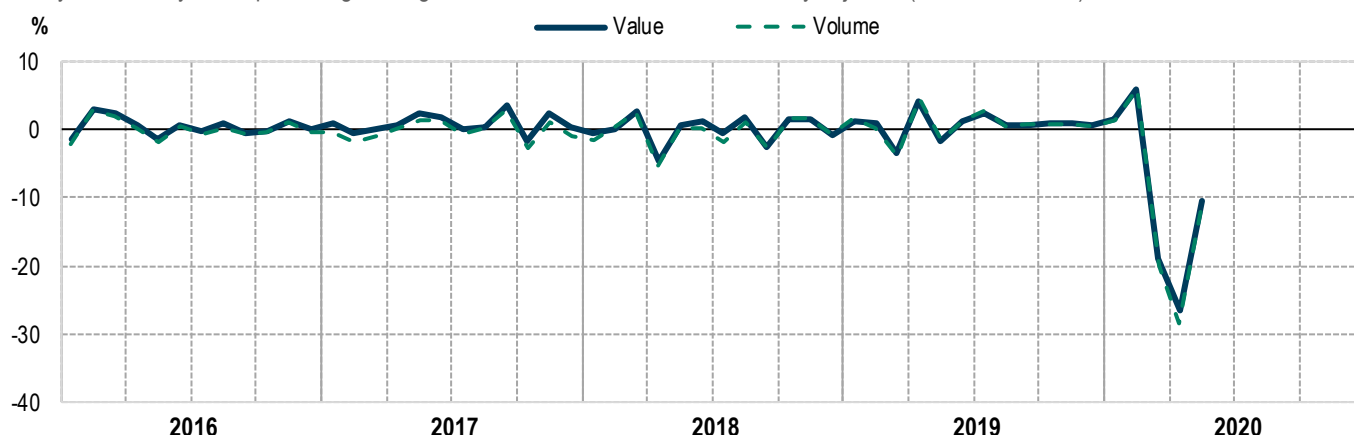


TABLE 1. RETAIL TRADE BY MARKETABLE GOODS SECTOR

May 2020, 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)

MARKETABLE GOODS SECTOR	Months on previous months percentage changes (seasonally adjusted)			
	May20 Apr20		Mar-May20 Dec19-Feb20	
	Value	Volume	value	volume
Food	-1.4	-1.6	+1.5	+0.4
Non food	+66.3	+66.6	-37.4	-37.8
Total	+24.3	+25.2	-20.6	-21.8
MARKETABLE GOODS SECTOR	Months on same months a year ago percentage changes (non-seasonally adjusted)			
	May20 May19		Jan-May20 Jan-May19	
	Value	volume	Value	volume
Food	+2.8	+0.1	+4.6	+2.9
Non food	-20.4	-20.6	-21.6	-20.8
Total	-10.5	-11.9	-10.1	-10.7

(a) Provisional data

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

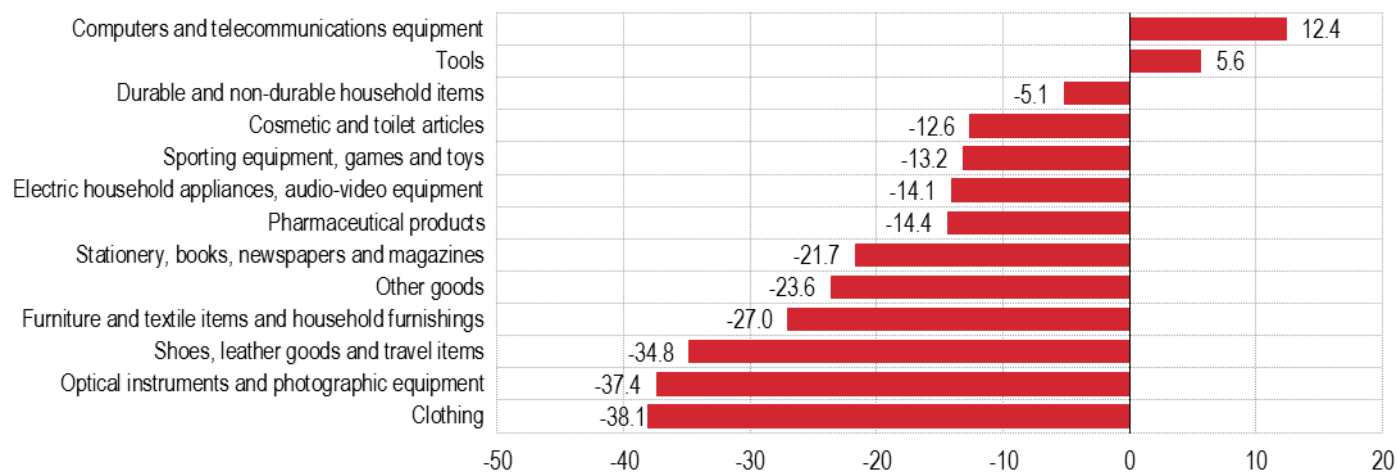
May 2020, months on same months a year ago percentage changes in value, non-seasonally adjusted (index, 2015=100) (a)

MARKETABLE GOODS SECTOR AND CHANNEL OF DISTRIBUTION	May20 May19	Jan-May20 Jan-May19
Large-scale distribution	-4.4	-4.4
Food	+3.9	+6.1
Non food	-20.1	-24.1
Small-scale distribution	-18.8	-16.7
Food	+3.4	+4.7
Non food	-25.3	-23.3
Non-store retail sales	-23.0	-21.1
Online sales	+41.7	+25.8
Total	-10.5	-10.1

(a) Provisional data

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

May 2020, months on same months a year ago value (index, 2015=100)



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 April 2020.

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)
April 2020						
Value	-0.5	-1.0	0.0	0.0	-0.2	-0.4
Volume	-0.5	-0.9	+0.3	+0.1	-0.1	-0.5

(a) Figures are calculated on seasonally adjusted data

(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 newtwork (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 dermine 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.

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.

Apart from the monthly indices released at a national level, monthly estimates, consistent with the [European Union Regulation EC 1165/98](#) concerning short-term statistics¹, are available. The latter refer to the main economic activity of the enterprises only and the former are more detailed.

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.

¹ Eurostat publishes monthly data referring to all European countries. The same data are also used to estimate data for the European Union aggregates.

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).

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, that 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 <http://www.istat.it/en>.

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. The responses rate of businesses did not register any loss compared with the rate recorded for the advance estimate of May 2019. Procedures for data revision and correction were modified to accurately manage the abnormal changes in growth rate of sales to fully include any immediate pandemic effects on retailing and the data verification process was strengthened. Quality of monthly data provided for May is to be considered equivalent to the usual one, although estimates may show higher revisions when the final data will be released.

Series were seasonally adjusted following official Eurostat guidelines, available at:

https://ec.europa.eu/eurostat/documents/10186/10693286/Time_series_treatment_guidance.pdf

Considering the extraordinary fall in sales recorded in May, models for time series treatment included additional regressors (additive outliers) when necessary. This procedure may continue in the next months until the information collected will offer a clear insight and therefore statistical models for seasonal adjustment might be revised.

Therefore, in the next months' revisions of the seasonally-adjusted data may be larger than usual.

For technical and methodological information

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