



## RETAIL TRADE, SEPTEMBER 2022

In September 2022, the retail trade turnover decreased in real terms at the monthly and increased at the annual level.

### At the monthly level, the retail trade turnover of both food and non-food products decreased

In September 2022, the total seasonally and working-day adjusted deflated retail trade turnover of all business entities engaged in this activity, irrespective of their main activity, was in real terms 0.1% lower than in August 2022. Out of that, the retail trade turnover of food products decreased by 0.9%, while the retail trade turnover of non-food products (except of automotive fuels and lubricants) decreased by 2.7%.

### Slight increase in real turnover from retail trade on an annual basis

In September 2022, compared to the same month of the previous year, the working-day adjusted retail trade turnover increased in real terms by 0.4%.

Out of that, the retail trade turnover of food, beverages and tobacco decreased by 0.8%, while the retail trade turnover of non-food products (except of automotive fuels and lubricants) decreased by 0.6%.

In the first nine months of 2022, the working-day adjusted retail trade turnover increased in real terms by 2.5%, compared to the same period last year.

### Non-specialised stores with food, beverages and tobacco predominating had the largest impact on the increase in turnover

The largest impact on the increase in the nominal turnover in September 2022 compared to the same month of the previous year, according to gross, unadjusted indices, was recorded in the following trade branches: Non-specialised stores with food, beverages and tobacco predominating, with a rise in turnover of 15.3% and an impact on the total turnover of 5.4%, Automotive fuels and lubricants, with a rise in turnover of 23.0% and an impact on the total turnover of 4.5%, Textile, clothing, footwear and leather goods with a rise in turnover of 21.7% and an impact on the total turnover of 1.6%, and Other non-specialised stores, with a rise in turnover of 17.8% and an impact on the total turnover of 1.1%. Accordingly, the total gross retail trade turnover increased in nominal terms by 16.2% compared to the same month of the previous year.

A decrease in the nominal turnover in September 2022 compared to the same month of the previous year, according to gross, unadjusted indices, was recorded in only one trade branch: Retail sale via Internet or via mail order, with a fall in turnover of 0.6%.

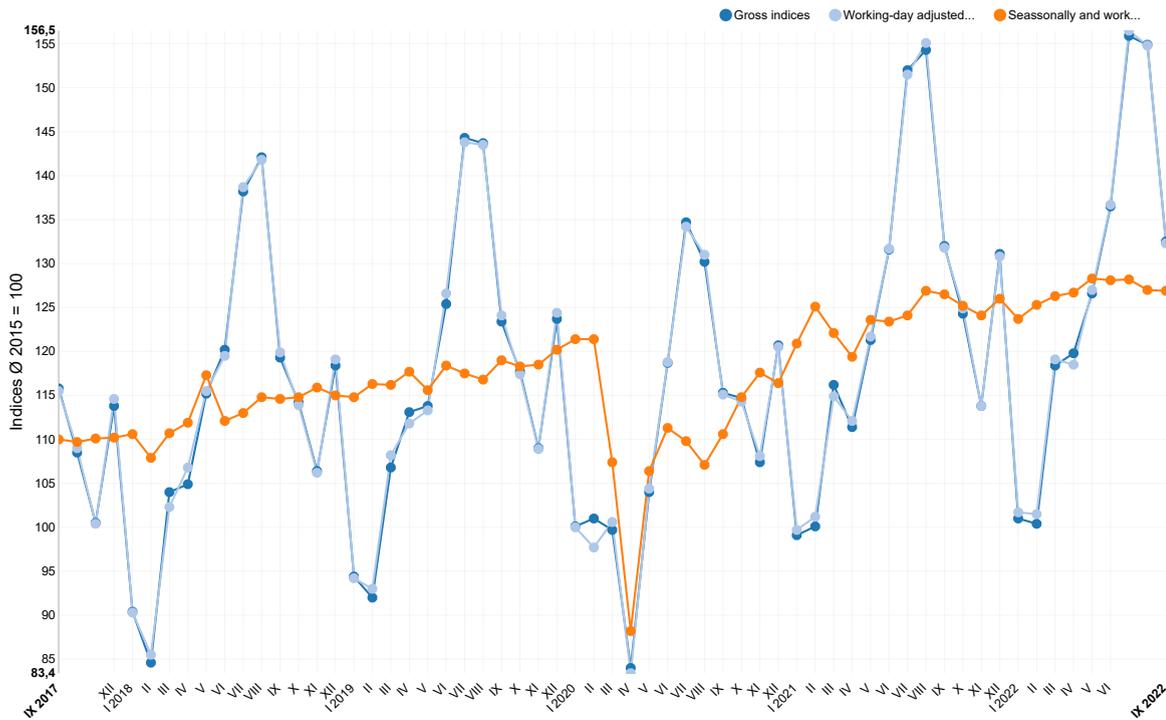
### The total turnover from retailers (NKD division 47)<sup>1)</sup> decreased in real terms both at the monthly and at the annual level

In September 2022, the total seasonally and working-day adjusted deflated turnover generated by all business entities with retail trade as their main activity (classified in division 47 of the NKD 2007.) was in real terms 1.2% lower than in August 2022.

Their total turnover, working-day adjusted, was in real terms 2.2% lower than in September 2021, while it was in real terms 1.0% higher in the first nine months compared to the same period last year.

1) The total turnover from retailers (NKD division 47) is the turnover generated by all business entities with retail trade as their main activity and are classified in division 47 of the NKD 2007.

## G-1 VOLUME RETAIL TRADE TURNOVER INDICES, 2017 - 2022



## I SEASONALLY AND WORKING-DAY ADJUSTED INDICATORS<sup>1)</sup>

### 1 RETAIL TRADE - MONTH-ON-MONTH GROWTH RATES CALCULATED ON BASIS OF SEASONALLY AND WORKING-DAY ADJUSTED INDICES

	IV 2022 III 2022	V 2022 IV 2022	VI 2022 V 2022	VII 2022 VI 2022	VIII 2022 VII 2022	IX 2022 VIII 2022	%
Total turnover from retailers (NKD division 47) <sup>2)</sup>							
Value index	1,3	2,6	0,6	0,6	0,2	0,4	
Volume index	-0,6	0,8	-0,8	-0,3	-0,3	-1,2	
Retail trade turnover							
Value index	2,2	2,9	1,1	0,9	-0,4	1,3	
Volume index	0,3	1,3	-0,2	0,1	-1,0	-0,1	

- 1) Data compared to those of the same month of the previous year are the working-day adjusted data and data compared to those of the previous month are seasonally and working-day adjusted data.  
2) The total turnover from retailers (NKD division 47) is the turnover generated by all business entities with retail trade as their main activity and are classified in division 47 of the NKD 2007.

### 2 RETAIL TRADE - YEAR-ON-YEAR GROWTH RATES CALCULATED ON BASIS OF WORKING-DAY ADJUSTED INDICES

	IV 2022 IV 2021	V 2022 V 2021	VI 2022 VI 2021	VII 2022 VII 2021	VIII 2022 VIII 2021	IX 2022 IX 2021	I-IX 2022 I-IX 2021	%
Total turnover from retailers (NKD division 47) <sup>1)</sup>								
Value index	16,3	17,0	17,1	15,2	13,1	13,2	14,1	
Volume index	3,6	2,8	1,7	0,0	-1,7	-2,2	1,0	
Retail trade turnover								
Value index	18,2	18,8	19,6	19,0	14,8	16,2	15,9	
Volume index	5,7	4,3	3,8	3,3	-0,2	0,4	2,5	

- 1) The total turnover from retailers (NKD division 47) is the turnover generated by all business entities with retail trade as their main activity and are classified in division 47 of the NKD 2007.

3 SEASONALLY AND WORKING-DAY ADJUSTED TURNOVER INDICES, BY MAIN ACTIVITY OF BUSINESS ENTITIES, ACCORDING TO NKD 2007.

	Total turnover from retailers (NKD division 47) <sup>1)</sup>						Retail trade turnover					
	Value indices			Volume indices			Value indices			Volume indices		
	<u>VII 2022</u> VI 2022	<u>VIII 2022</u> VII 2022	<u>IX 2022</u> VIII 2022	<u>VII 2022</u> VI 2022	<u>VIII 2022</u> VII 2022	<u>IX 2022</u> VIII 2022	<u>VII 2022</u> VI 2022	<u>VIII 2022</u> VII 2022	<u>IX 2022</u> VIII 2022	<u>VII 2022</u> VI 2022	<u>VIII 2022</u> VII 2022	<u>IX 2022</u> VIII 2022
Total	100,6	100,2	100,4	99,7	99,7	98,8	100,9	99,6	101,3	100,1	99,0	99,9
47 Retail trade, except of motor vehicles and motorcycles	100,6	100,2	100,4	99,7	99,7	98,8	100,6	100,1	100,6	99,8	99,6	99,1
47.11 + 47.2 Retail trade of food, beverages and tobacco	101,0	100,3	100,6	98,9	99,3	99,8	101,1	100,6	100,5	99,2	99,6	99,1
47.19 + 47.4 + 47.5 + 47.6 + 47.7 + 47.8 + 47.9 Retail trade of non-food products (except of automotive fuels and lubricants)	102,3	100,5	100,4	102,1	100,0	96,5	102,4	101,2	100,7	102,2	100,1	97,3
47 - 47.3 Retail trade, except of automotive fuels and lubricants in specialised stores	101,3	100,3	100,4	100,4	99,8	97,6	101,1	100,3	100,9	100,2	99,5	98,3
Other activities (excluding division 47)	-	-	-	-	-	-	101,9	97,8	103,0	101,0	96,6	102,3

1) The total turnover from retailers (NKD division 47) is the turnover generated by all business entities with retail trade as their main activity and are classified in division 47 of the NKD 2007

4 WORKING-DAY ADJUSTED TURNOVER INDICES, BY MAIN ACTIVITY OF BUSINESS ENTITIES, ACCORDING TO NKD 2007.

	Total turnover from retailers (NKD division 47) <sup>1)</sup>						Retail trade turnover					
	Value indices			Volume indices			Value indices			Volume indices		
	<u>VII 2022</u> VII 2021	<u>VIII 2022</u> VIII 2021	<u>IX 2022</u> IX 2021	<u>VII 2022</u> VII 2021	<u>VIII 2022</u> VIII 2021	<u>IX 2022</u> IX 2021	<u>VII 2022</u> VII 2021	<u>VIII 2022</u> VIII 2021	<u>IX 2022</u> IX 2021	<u>VII 2022</u> VII 2021	<u>VIII 2022</u> VIII 2021	<u>IX 2022</u> IX 2021
Total	115,2	113,1	113,2	100,0	98,3	97,8	119,0	114,8	116,2	103,3	99,8	100,4
47 Retail trade, except of motor vehicles and motorcycles	115,2	113,1	113,2	100,0	98,3	97,8	114,1	111,7	112,7	99,0	97,1	97,4
47.11 + 47.2 Retail trade of food, beverages and tobacco	117,5	115,6	115,6	101,6	99,1	99,3	117,0	115,9	115,4	101,2	99,4	99,2
47.19 + 47.4 + 47.5 + 47.6 + 47.7 + 47.8 + 47.9 Retail trade of non-food products (except of automotive fuels and lubricants)	114,8	111,2	113,2	104,5	99,8	98,8	113,6	110,4	114,0	103,4	99,1	99,4
47 - 47.3 Retail trade, except of automotive fuels and lubricants in specialised stores	116,3	113,6	114,4	103,0	99,5	99,1	115,6	113,5	114,7	102,4	99,4	99,4
Other activities (excluding division 47)	-	-	-	-	-	-	134,3	124,5	126,4	116,6	108,3	109,2

1) The total turnover from retailers (NKD division 47) is the turnover generated by all business entities with retail trade as their main activity and are classified in division 47 of the NKD 2007.

II GROSS, NON-ADJUSTED INDICATORS

1 VALUE AND VOLUME INDICES OF RETAIL TRADE TURNOVER

	<u>IX 2022</u> VIII 2022	<u>IX 2022</u> IX 2021	<u>IX 2022</u> Ø 2015	<u>I - IX 2022</u> I - IX 2021
Total turnover from retailers (NKD division 47) <sup>1)</sup>				
Value index	87,0	113,2	155,1	114,1
Volume index	85,1	97,8	126,1	101,0
Retail trade turnover				
Value index	87,5	116,2	163,0	115,9
Volume index	85,6	100,4	132,5	102,5

1) The total turnover from retailers (NKD division 47) is the turnover generated by all business entities with retail trade as their main activity and are classified in division 47 of the NKD 2007

## 2 VALUE INDICES OF RETAIL TRADE TURNOVER, BY BRANCHES

	Share in total turnover, % IX 2022	Effect on total index, % <sup>1)</sup> $\frac{IX\ 2022}{IX\ 2021}$	IX 2022 VIII 2022	IX 2022 IX 2021	$\frac{I - IX\ 2022}{I - IX\ 2021}$
Total	100,0	-	87,5	116,2	115,9
Total, except of motor vehicles, parts and accessories for motor vehicles, motorcycles and related parts and accessories, and automotive fuels and lubricants	77,5	-	88,0	114,4	112,9
01 + 03 + 04 Motor vehicles, parts and accessories for motor vehicles, motorcycles and related parts and accessories	2,7	0,6	115,4	122,3	106,6
30 Automotive fuels and lubricants	19,8	4,5	82,7	123,0	130,8
11 Non-specialised stores with food, beverages and tobacco predominating	35,1	5,4	78,0	115,3	112,7
19 Other non-specialised stores	6,4	1,1	93,7	117,8	114,6
21 + 22 + 23 + 24 + 25 + 26 + 29 Specialised stores with food, beverages and tobacco	5,9	0,8	85,6	113,4	115,3
73 + 74 + 75 Dispensing chemists, medical and orthopaedic goods, cosmetic and toilet articles	7,2	0,6	98,3	108,9	110,6
51 + 71 + 72 Textile, clothing, footwear and leather goods	7,4	1,6	108,8	121,7	117,4
43 + 52 + 54 + 59 + 63 Audio and video equipment, hardware, paints and glass, electrical household appliances, furniture and other household articles	8,1	1,0	108,5	111,9	111,5
41 + 42 + 53 + 61 + 62 + 64 + 65 + 76 + 77 + 78 Computer equipment, books and newspapers, games and toys, flowers and seeds, watches and jewellery and other retail sale in specialised stores	5,8	0,7	101,7	111,4	111,6
91 Retail sale via Internet or via mail order	0,8	0,0	85,0	99,4	98,1
79 – 89 + 99 Other non-store retail sale	0,8	0,1	73,1	108,6	118,7

1) Impact on the total index is a product of the multiplication of a trade branch's share in the total turnover and the rate of growth or fall in turnover in a month of the current year in relation to the same month of the previous year divided by 100.

## III STANDARD ERROR AND COEFFICIENT OF VARIANCE FOR TURNOVER CHAIN INDEX

### 1 STANDARD ERROR AND COEFFICIENT OF VARIANCE FOR TURNOVER CHAIN INDEX, SEPTEMBER 2022

	Estimation of chain index	Coefficient of variance, %	Standard error	Lower 95% confidence interval limit	Upper 95% confidence interval limit
Total turnover from retailers (NKD division 47) <sup>1)</sup>	87,0	1,50	1,30	84,5	89,5
Retail trade turnover	87,5	0,94	0,82	85,9	89,1

1) The total turnover from retailers (NKD division 47) is the turnover generated by all business entities with retail trade as their main activity and are classified in division 47 of the NKD 2007

## NOTES ON METHODOLOGY

### Notice

Time series on retail trade turnover, starting with 2005, and time series on total turnover from retailers (NKD division 47), starting with 2000, are available in Excel tables on the website of the Croatian Bureau of Statistics within the **Databases** under the titles **STS Databases** and **PC-Axis Databases**, and within **Statistics in Line** under the title **Economy – Basic Indicators**.

Precise dissemination dates are listed in the Calendar of Statistical Data Issues for 2022, which is available on the web site of the Croatian Bureau of Statistics <https://podaci.dzs.hr/en>.

### Sources and methods of data collection

The data are based on the Monthly Report on Retail Trade (TRG-1 form) and administrative data sources (Tax Administration fiscalisation file).

The data are collected via a web-based application (the so-called CAWI). The reporting units enter data directly into the TRG-1 e-form, which is available on the Data Dissemination and Collection Portal of the Croatian Bureau of Statistics at <https://podaci.dzs.hr/hr/obrasci/trgovina-i-ostale-usluge/>. The period for data collection ranges each month, as a rule, between the 1<sup>st</sup> and the 20<sup>th</sup> day in a month for the previous reference month data.

The methodology for this survey is based on Council Regulations (EC) Nos 1165/98 (Annex C), 1158/05 and 1503/06 concerning short-term statistics, Regulation (EU) No. 2019/2152 of the European Parliament and of the Council of 27 November 2019 on European business statistics, repealing 10 legal acts in the field of business statistics and the Commission Regulation (EU) No. 2020/1197.

This survey is conducted on the basis of the Official Statistics Act (NN, No. 25/20).

## Coverage and comparability

The observation units are business entities (legal entities and tradesmen) registered in retail trade as their main activity (division 47 of the NKD 2007.) as well as selected business entities registered in other activities if performing retail trade activities.

The survey is carried out by using the sampling method. The sample frame consists of business entities and parts thereof registered in the Register of Business Entities of the Croatian Bureau of Statistics. Since 2021, the sample selection frame has been expanded using an administrative data source (Tax Administration fiscalisation file).

The sample is divided into strata according to the main activity and the size of a business entity. Business entities are divided by their main activity on the basis of the NKD 2007. (NN, Nos 58/07 and 123/08). By size, they are divided into classes from 1 to 7.

The criterion for determining the size of a business entity is the number of persons in employment. Business entities of size 1 are those employing 0 – 4 persons, of size 2 those employing 5 – 9 persons, of size 3 those employing 10 – 19 persons, of size 4 those employing 20 – 49 persons, of size 5 those employing 50 – 99 persons, of size 6 those employing 100 – 249 persons and of size 7 those employing 250 and more persons. For business entities engaged primarily in non-trade activities, the number of persons in employment in trade activities is taken into account.

The sample covers all business entities employing 10 and more persons as well as business entities employing less than 10 persons selected by using the random sample method.

## Seasonal and working-day adjustment method

Since 2016, in the process of seasonal adjustment the software package JDemetra+ and X13 ARIMA method has been used. This process identifies and assesses seasonal and working-day effects in time series by using statistical models and procedures.

The revision of the previously published seasonally and working-day adjusted indices is due to several causes. The most common cause is the change in estimated parameters of existing statistical models while conducting new estimates, which occurs due to new observations. Other causes are changes in source data or in applied statistical models.

Calendar effects have a significant impact on time series movement, the most common of which are the effect of moving holidays, the effect of the leap year and the effect of working days.

## Notice concerning the terminology

In Croatian language, the term “kalendarsko prilagođavanje” (calendar adjustment) is not the literal translation of the term “working-day adjustment” in English, which means “adjustment for the number of working days”. It is used in order to prevent misunderstandings by national users.

The term “working-day adjustment” in short-term business statistics actually refers to calendar adjustment, but due to specific Eurostat's requirements for short-term statistics, the term “working-day adjustment” is used instead.

## Seasonally and working-day adjusted indices

The seasonally and working-day adjusted indices imply that the gross indices are adjusted for seasonal and working-day effects. Indices adjusted in that way and associated rates of change in two consecutive observations are used to compare data with data from the previous month.

In line with the above mentioned, month-on-month growth rates of turnover calculated on the basis of seasonally and working-day adjusted indices are presented and interpreted (the comparison between the indices of the current reporting month with the indices of the previous reporting month) in the monthly comparison (First Release, part I., tables 1. and 3.).

## Working-day adjusted indices

Working-day adjusted indices imply that the gross indices are adjusted only for calendar effects. Indices adjusted in that way and associated inter-annual rates of change are used to compare data with data from the same month of the previous year.

In line with the above mentioned, year-on-year growth rates of the volume of turnover calculated on the basis of working-day adjusted indices are presented and interpreted (comparison between indices of the reporting month with the indices of the same reporting month of the previous year) in the annual comparison (First Release, part I., tables 2. and 4.).

## Gross indices

In order to sustain the consistency and continuity with the previously released data, indices continue to be presented as gross, unadjusted indices in the same way as before (First Release, part II., tables 1. and 2.).

A part of the data from this survey (those that refer to the total turnover of business entities with the main activity registered in division 47 of the NKD 2007.) are regularly sent to Eurostat every month (in the form of value and volume gross, seasonally and working-day adjusted indices on the basis of 2015). They are available on Eurostat's web site: <http://ec.europa.eu/eurostat> together with the indicators of other EU Member States they are comparable with.

## Definitions

**Turnover** is the total value of all goods sold and services provided on the market in a month, irrespective of whether paid up or not. It also includes the value added tax.

The retail trade turnover is presented in relation to:

- **the total turnover from retailers (NKD division 47)** is a turnover generated by all business entities with retail trade as their main activity and are classified in division 47 of the NKD 2007.

- **the retail trade turnover** is a turnover generated by all business entities engaged in this activity, irrespective of their registered main activity.

The results are shown in the form of nominal (value indices) and real indices (volume indices).

Value indices show the turnover movements in current prices.

Volume indices are calculated by deflating the value indices by the retail trade price indices of goods (without electricity and water distribution) according to the consumer price indices.

## Retail trade branches

Retail trade branches represent the actual predominant assortment of sales in the retail trade, which is also determined according to the NKD 2007.

## Abbreviations

CAWI	computer-assisted web interview
EC	European Community
EU	European Union
Eurostat	Statistical Office of the European Union
NKD 2007.	National Classification of Activities, 2007 version
NN	Narodne novine, official gazette of the Republic of Croatia

#### Symbols

-	no occurrence
0.0	value not zero but less than 0.05 of the unit of measure used



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