

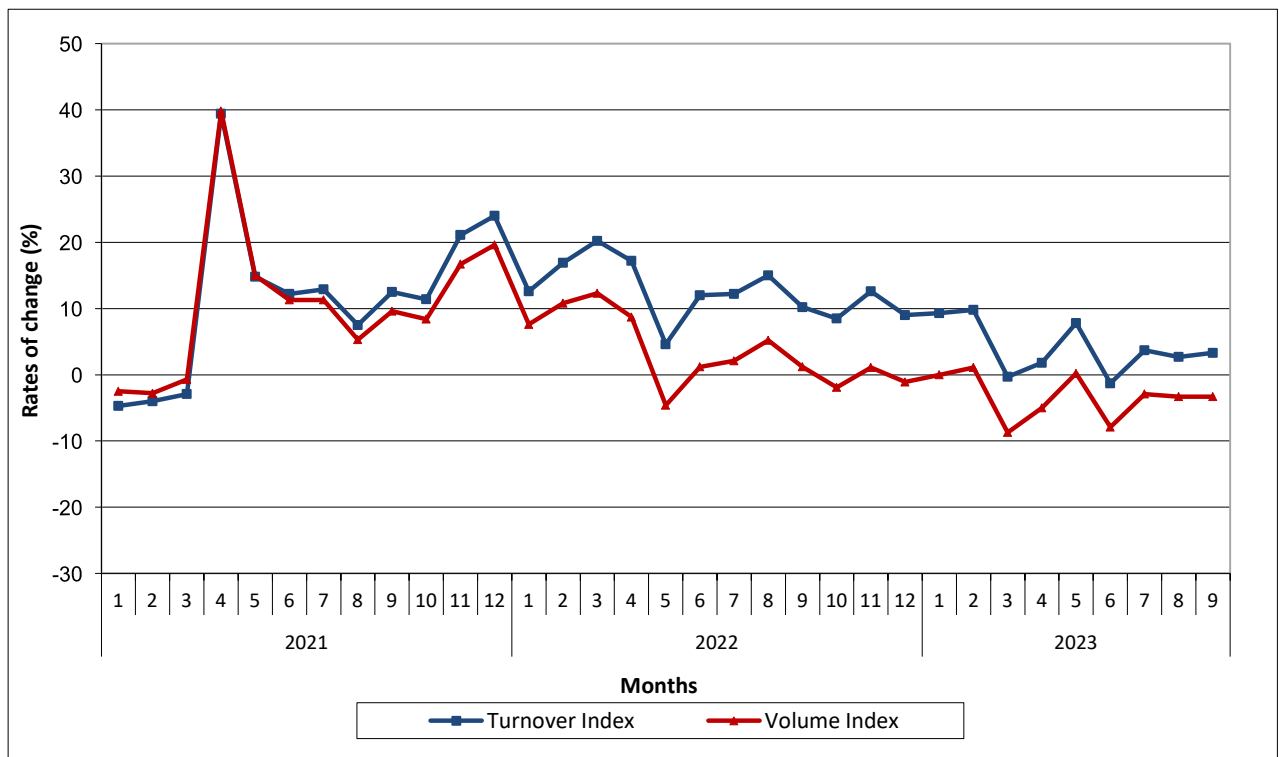


## TURNOVER INDEX IN RETAIL TRADE: September 2023, y-o-y increase 3.3%

The Hellenic Statistical Authority (ELSTAT) announces the Turnover and Volume Indices in Retail Trade with base year 2015=100.0 for September 2023, the evolution of which, according to provisional and reduced data to a typical month, is as follows:

- The Overall Turnover Index in Retail Trade in September 2023 increased by 3.3%, compared with the corresponding index of September 2022, while compared with the corresponding index of August 2023 decreased by 2.9% (Table 1).
- The Overall Volume Index in Retail Trade (i.e., turnover in retail trade at constant prices) in September 2023, decreased by 3.3%, compared with the corresponding index of September 2022, while, compared with the corresponding index of August 2023, decreased by 7.3% (Table 2).
- The seasonally adjusted Overall Turnover Index in September 2023, compared with the corresponding index of August 2023, increased by 0.1% (Table 5).
- The seasonally adjusted Overall Volume Index in September 2023, compared with the corresponding index of August 2023, decreased by 0.8% (Table 5).

**Graph 1.** Evolution of annual rates of change (%) for Turnover and Volume Overall Indices in Retail Trade



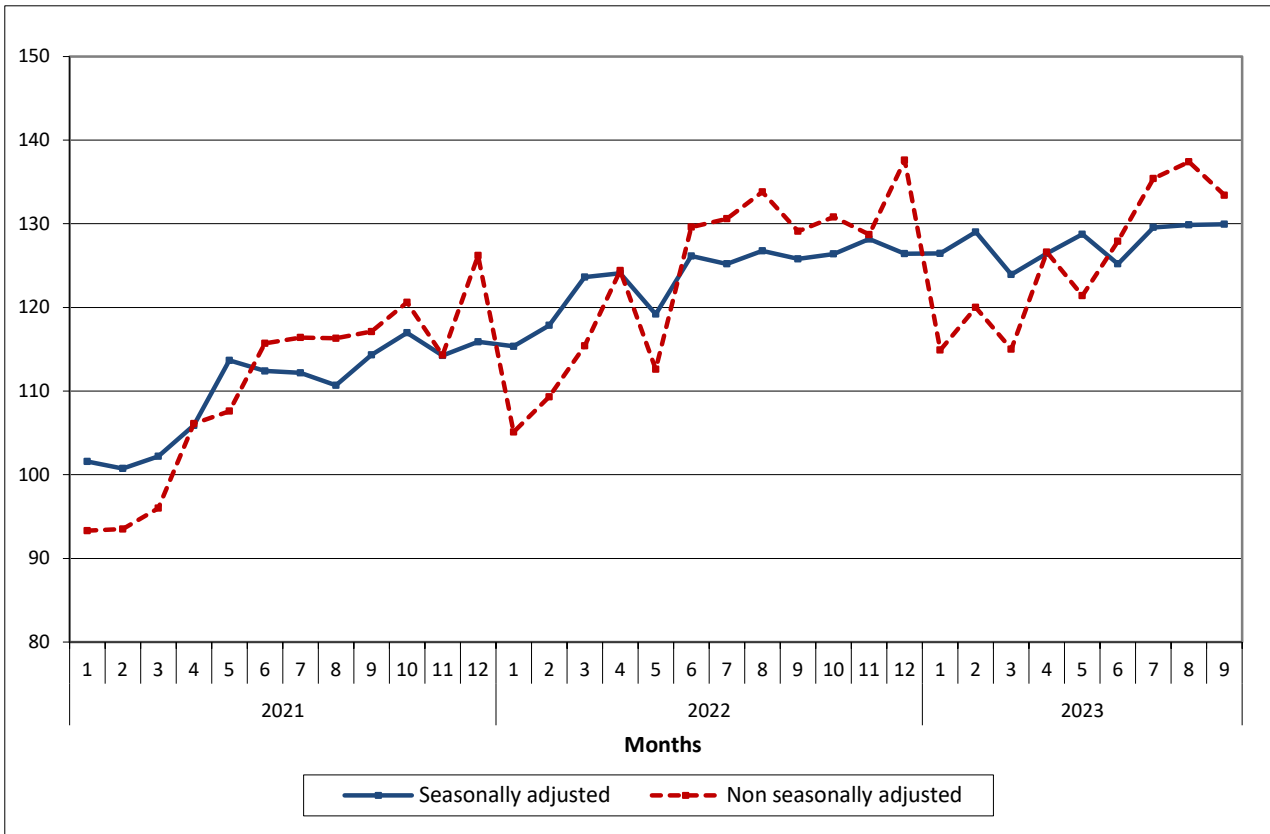
**Information on methodological issues:**

Division of Business Statistics  
Section of Trade and Services Indices  
Head of the Section: Konstantinos Thomas  
Tel: +30 213 135 2048  
E-mail: [k.thomas@statistics.gr](mailto:k.thomas@statistics.gr)

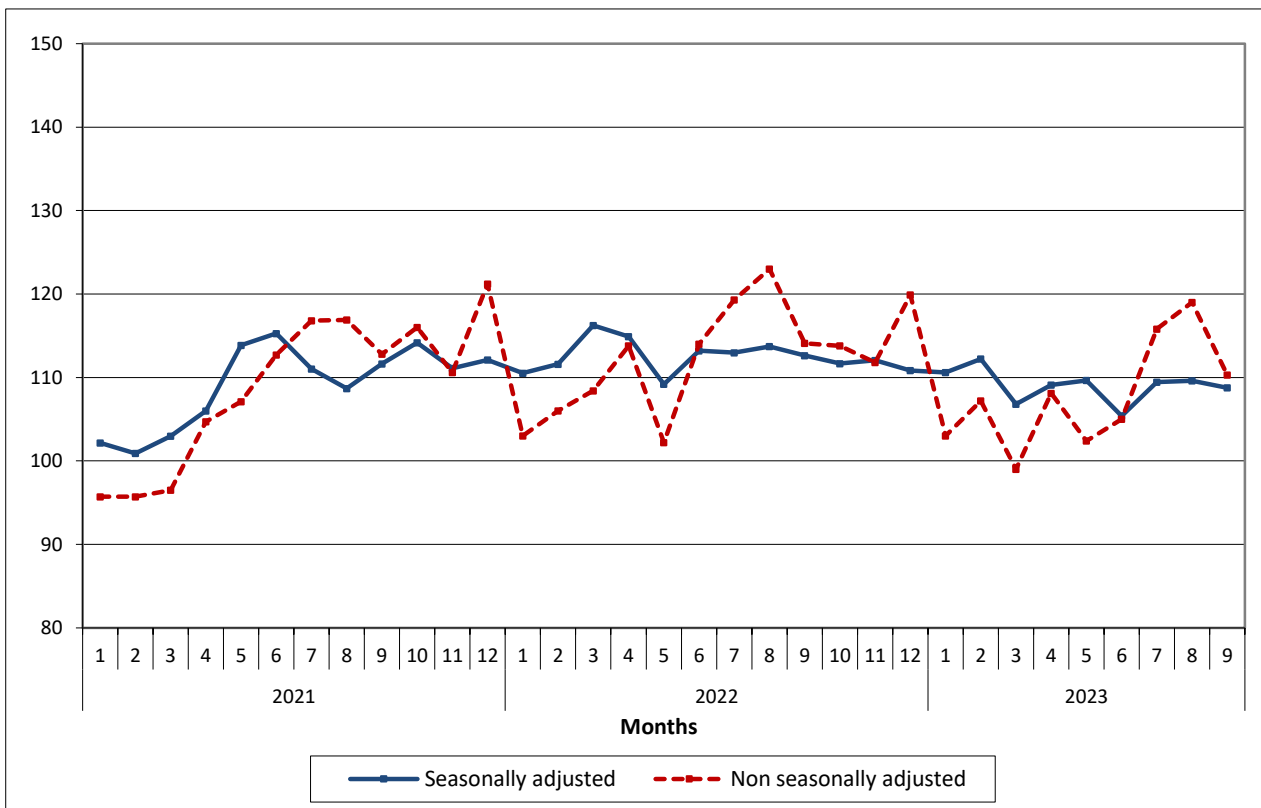
**Information on data provision:**

Tel: +30 213 135 2022, 2308, 2310  
e-mail: [data.dissem@statistics.gr](mailto:data.dissem@statistics.gr)

**Graph 2. Evolution of the Overall Turnover Index in Retail Trade (2015=100.0)**



**Graph 3. Evolution of the Overall Volume Index in Retail Trade (2015=100.0)**



It should be noted, that the timeseries of the seasonally adjusted index is recalculated every time a new observation is added and could differ from 100 for the base year, as seasonal effect is not the same each year. Therefore, the seasonally adjusted data differ from the published data of the Announcement of the previous month.

**Table 1.** Annual and monthly rates of change of Turnover Index in Retail Trade  
(Data adjusted for working days)

Base year: 2015=100.0

Retail Trade Store Categories	Turnover Index				
	September 2023*	September 2022	August 2023**	Annual rates of change (%)	Monthly rates of change (%)
	<b>Overall Index</b>	<b>133.4</b>	<b>129.1</b>	<b>137.4</b>	<b>3.3</b>
<b>Overall Index except automotive fuel</b>	137.9	130.8	141.4	5.4	-2.5
<b>I. Main store categories</b>					
Food sector	143.6	128.3	151.9	11.9	-5.5
Automotive fuel	113.7	121.0	119.8	-6.0	-5.1
Non-food sector except automotive fuel	136.0	136.9	135.0	-0.7	0.7
<b>II. Specialized store categories</b>					
Supermarkets	146.8	131.6	153.8	11.6	-4.6
Department stores	95.4	88.7	101.2	7.6	-5.7
Automotive fuel	113.7	121.0	119.8	-6.0	-5.1
Food, beverages, tobacco	123.7	108.5	137.9	14.0	-10.3
Pharmaceutical products, cosmetics	155.0	158.2	162.4	-2.0	-4.6
Clothing and footwear	114.9	104.7	115.9	9.7	-0.9
Furniture, electrical equipment, household equipment	137.7	157.7	132.7	-12.7	3.8
Books, Stationery, other goods	161.3	161.8	149.1	-0.3	8.2
Retail sales not in stores	143.2	178.1	121.3	-19.6	18.1

**Table 2.** Annual and monthly rates of change of Volume Index in Retail Trade  
(Data adjusted for working days)

Base year: 2015=100.0

Retail Trade Store Categories	Volume Index				
	September 2023*	September 2022	August 2023**	Annual rates of change (%)	Monthly rates of change (%)
	<b>Overall Index</b>	<b>110.3</b>	<b>114.1</b>	<b>119.0</b>	<b>-3.3</b>
<b>Overall Index except automotive fuel</b>	114.9	117.2	123.3	-2.0	-6.8
<b>I. Main store categories</b>					
Food sector	114.8	110.9	121.5	3.5	-5.5
Automotive fuel	84.0	90.0	90.5	-6.7	-7.2
Non-food sector except automotive fuel	128.4	135.0	169.7	-4.9	-24.3
<b>II. Specialized store categories</b>					
Supermarkets	115.5	113.3	121.1	1.9	-4.6
Department stores	88.9	87.0	130.0	2.2	-31.6
Automotive fuel	84.0	90.0	90.5	-6.7	-7.2
Food, beverages, tobacco	96.5	91.6	107.7	5.3	-10.4
Pharmaceutical products, cosmetics	146.4	155.0	150.3	-5.5	-2.6
Clothing and footwear	97.5	94.4	139.4	3.3	-30.1
Furniture, electrical equipment, household equipment	144.1	166.1	142.5	-13.2	1.1
Books, Stationery, other goods	167.6	179.3	154.5	-6.5	8.5
Retail sales not in stores	:	:	:	:	:

\*Provisional data

\*\*Revised data

: Volume Index for the "Retail sales not in stores" is not calculated

Note: The indices and the percentage changes are published rounded up at one decimal digit.

**Table 3. Evolution of the Turnover Index in Retail Trade**  
(Data adjusted for working days)

Base year: 2015=100.0

Year and month	Overall Index		Overall Index except automotive fuel		Food sector		Automotive fuel sector		Non-food sector except automotive fuel	
	Indices	Annual rates of change (%)	Indices	Annual rates of change (%)	Indices	Annual rates of change (%)	Indices	Annual rates of change (%)	Indices	Annual rates of change (%)
<b>2021:</b>										
1	93.3	-4.7	97.5	1.1	98.3	4.5	75.1	-29.2	99.1	2.1
2	93.5	-4.0	96.5	-1.6	104.4	1.0	80.1	-16.0	91.3	-0.8
3	96.0	-2.9	99.3	-2.7	112.9	-8.6	81.3	-4.6	88.7	8.4
4	106.1	39.4	112.1	39.4	118.0	9.6	79.9	40.4	109.1	96.6
5	107.6	14.8	113.0	13.9	108.4	6.6	84.1	22.1	120.4	21.1
6	115.7	12.2	120.0	10.4	113.6	7.5	96.4	23.4	129.3	12.8
7	116.4	12.9	119.6	11.7	113.5	10.7	102.2	20.2	128.6	12.3
8	116.3	7.5	119.3	6.9	123.5	6.4	103.2	11.2	118.2	7.1
9	117.1	12.5	121.6	11.5	116.0	8.2	97.5	19.0	130.2	14.3
10	120.6	11.4	123.0	8.2	117.9	7.3	109.7	30.1	131.3	8.7
11	114.3	21.1	116.6	16.1	103.8	-0.8	103.9	52.8	132.0	33.5
12	126.2	24.0	130.7	20.3	122.3	1.9	106.1	47.8	142.4	42.4
<b>Annual average</b>	<b>110.3</b>	<b>11.5</b>	<b>114.1</b>	<b>10.9</b>	<b>112.7</b>	<b>4.4</b>	<b>93.3</b>	<b>14.9</b>	<b>118.4</b>	<b>18.5</b>
<b>2022:</b>										
1	105.1	12.6	104.0	6.7	102.9	4.7	109.1	45.3	107.9	8.9
2	109.3	16.9	108.7	12.6	106.1	1.6	111.1	38.7	114.1	25.0
3	115.4	20.2	114.5	15.3	118.4	4.9	118.1	45.3	113.8	28.3
4	124.4	17.2	127.8	14.0	125.7	6.5	109.1	36.5	133.3	22.2
5	112.6	4.6	114.5	1.3	109.4	0.9	103.6	23.2	122.6	1.8
6	129.6	12.0	129.7	8.1	127.8	12.5	128.1	32.9	135.2	4.6
7	130.6	12.2	130.5	9.1	130.5	15.0	130.5	27.7	133.9	4.1
8	133.8	15.0	135.2	13.3	139.8	13.2	126.7	22.8	134.4	13.7
9	129.1	10.2	130.8	7.6	128.3	10.6	121.0	24.1	136.9	5.1
10	130.8	8.5	130.0	5.7	124.4	5.5	133.0	21.2	139.1	5.9
11	128.7	12.6	128.0	9.8	114.1	9.9	130.8	25.9	145.4	10.2
12	137.6	9.0	143.0	9.4	131.7	7.7	113.8	7.3	158.2	11.1
<b>Annual average</b>	<b>123.9</b>	<b>12.3</b>	<b>124.7</b>	<b>9.3</b>	<b>121.6</b>	<b>7.9</b>	<b>119.6</b>	<b>28.2</b>	<b>131.2</b>	<b>10.8</b>
<b>2023:</b>										
1	114.9	9.3	117.1	12.6	112.5	9.3	104.6	-4.1	124.9	15.8
2	120.0	9.8	121.6	11.9	120.4	13.5	113.0	1.7	126.0	10.4
3	115.0	-0.3	118.0	3.1	117.8	-0.5	101.6	-14.0	121.4	6.7
4	126.6	1.8	132.4	3.6	132.9	5.7	101.4	-7.1	135.5	1.7
5	121.4	7.8	127.1	11.0	125.5	14.7	96.6	-6.8	132.1	7.7
6	127.9	-1.3	133.7	3.1	132.7	3.8	102.5	-20.0	138.4	2.4
7**	135.4	3.7	140.1	7.4	142.0	8.8	115.0	-11.9	142.0	6.0
8**	137.4	2.7	141.4	4.6	151.9	8.7	119.8	-5.4	135.0	0.4
9*	133.4	3.3	137.9	5.4	143.6	11.9	113.7	-6.0	136.0	-0.7

\*Provisional data

\*\*Revised data

Note: The indices and the percentage changes are published rounded up at one decimal digit.

**Table 4.** Evolution of the Volume Index in Retail Trade  
(Data adjusted for working days)

		Base year: 2015=100.0									
Year and month		Overall Index		Overall Index except automotive fuel		Food sector		Automotive fuel sector		Non-food sector except automotive fuel	
		Indices	Annual rates of change (%)	Indices	Annual rates of change (%)	Indices	Annual rates of change (%)	Indices	Annual rates of change (%)	Indices	Annual rates of change (%)
<b>2021:</b>	1	95.7	-2.5	99.9	2.3	96.8	5.4	75.8	-21.5	112.4	4.1
	2	95.7	-2.8	99.1	-1.0	102.5	1.6	78.1	-11.8	104.4	-0.2
	3	96.5	-0.7	100.3	-0.2	110.9	-8.3	75.7	-9.4	96.5	15.8
	4	104.7	39.8	111.0	41.2	116.3	10.9	73.9	21.1	112.9	101.6
	5	107.1	15.0	113.0	15.7	106.2	7.3	77.4	2.4	128.7	25.4
	6	112.7	11.3	117.3	10.6	109.7	7.1	88.1	6.9	134.1	14.8
	7	116.8	11.3	121.0	11.1	110.4	9.3	90.6	3.4	143.9	13.8
	8	116.9	5.3	121.0	5.7	119.4	4.1	90.7	-5.0	135.2	8.4
	9	112.8	9.6	117.9	9.8	110.8	5.5	85.4	0.9	134.1	14.9
	10	116.0	8.4	119.4	6.8	113.0	5.2	93.2	6.6	135.0	9.4
	11	110.6	16.7	114.0	13.5	98.9	-3.4	86.9	22.6	140.3	32.0
	12	121.2	19.6	126.7	17.5	117.0	-1.2	90.1	21.8	146.7	41.3
<b>Annual average</b>		<b>108.9</b>	<b>10.2</b>	<b>113.4</b>	<b>10.5</b>	<b>109.3</b>	<b>3.4</b>	<b>83.8</b>	<b>1.8</b>	<b>127.0</b>	<b>19.7</b>
<b>2022:</b>	1	103.0	7.6	103.3	3.4	97.4	0.6	90.5	19.4	120.5	7.2
	2	106.0	10.8	107.3	8.3	98.9	-3.5	87.9	12.5	129.1	23.7
	3	108.4	12.3	110.3	10.0	109.7	-1.1	85.2	12.5	121.6	26.0
	4	113.8	8.7	119.5	7.7	114.5	-1.5	78.2	5.8	136.1	20.5
	5	102.2	-4.6	106.9	-5.4	98.2	-7.5	69.8	-9.8	128.1	-0.5
	6	114.0	1.2	118.1	0.7	112.4	2.5	80.3	-8.9	135.9	1.3
	7	119.3	2.1	122.9	1.6	115.4	4.5	86.9	-4.1	145.9	1.4
	8	123.0	5.2	127.0	5.0	122.2	2.3	91.7	1.1	148.0	9.5
	9	114.1	1.2	117.2	-0.6	110.9	0.1	90.0	5.4	135.0	0.7
	10	113.8	-1.9	115.0	-3.7	106.4	-5.8	95.9	2.9	135.2	0.1
	11	111.8	1.1	113.1	-0.8	96.6	-2.3	93.0	7.0	143.1	2.0
	12	119.9	-1.1	125.6	-0.9	111.6	-4.6	88.9	-1.3	152.9	4.2
<b>Annual average</b>		<b>112.4</b>	<b>3.2</b>	<b>115.5</b>	<b>1.9</b>	<b>107.8</b>	<b>-1.4</b>	<b>86.5</b>	<b>3.2</b>	<b>135.9</b>	<b>7.0</b>
<b>2023:</b>	1	103.0	0.0	105.8	2.4	94.4	-3.1	81.8	-9.6	150.5	24.9
	2	107.2	1.1	109.3	1.9	99.9	1.0	87.6	-0.3	157.5	22.0
	3	99.0	-8.7	102.3	-7.3	97.5	-11.1	79.1	-7.2	121.9	0.2
	4	108.1	-5.0	113.9	-4.7	110.0	-3.9	78.6	0.5	130.1	-4.4
	5	102.4	0.2	108.0	1.0	102.1	4.0	78.3	12.2	128.1	0.0
	6	105.0	-7.9	110.6	-6.4	105.1	-6.5	81.9	2.0	130.7	-3.8
	7**	115.8	-2.9	120.7	-1.8	113.0	-2.1	90.9	4.6	168.9	15.8
	8**	119.0	-3.3	123.3	-2.9	121.5	-0.6	90.5	-1.3	169.7	14.7
	9*	110.3	-3.3	114.9	-2.0	114.8	3.5	84.0	-6.7	128.4	-4.9

\*Provisional data

\*\*Revised data

Note: The indices and the percentage changes are published rounded up at one decimal digit.

Table 5. Monthly rates of change of seasonally adjusted Turnover and Volume Indices in Retail Trade

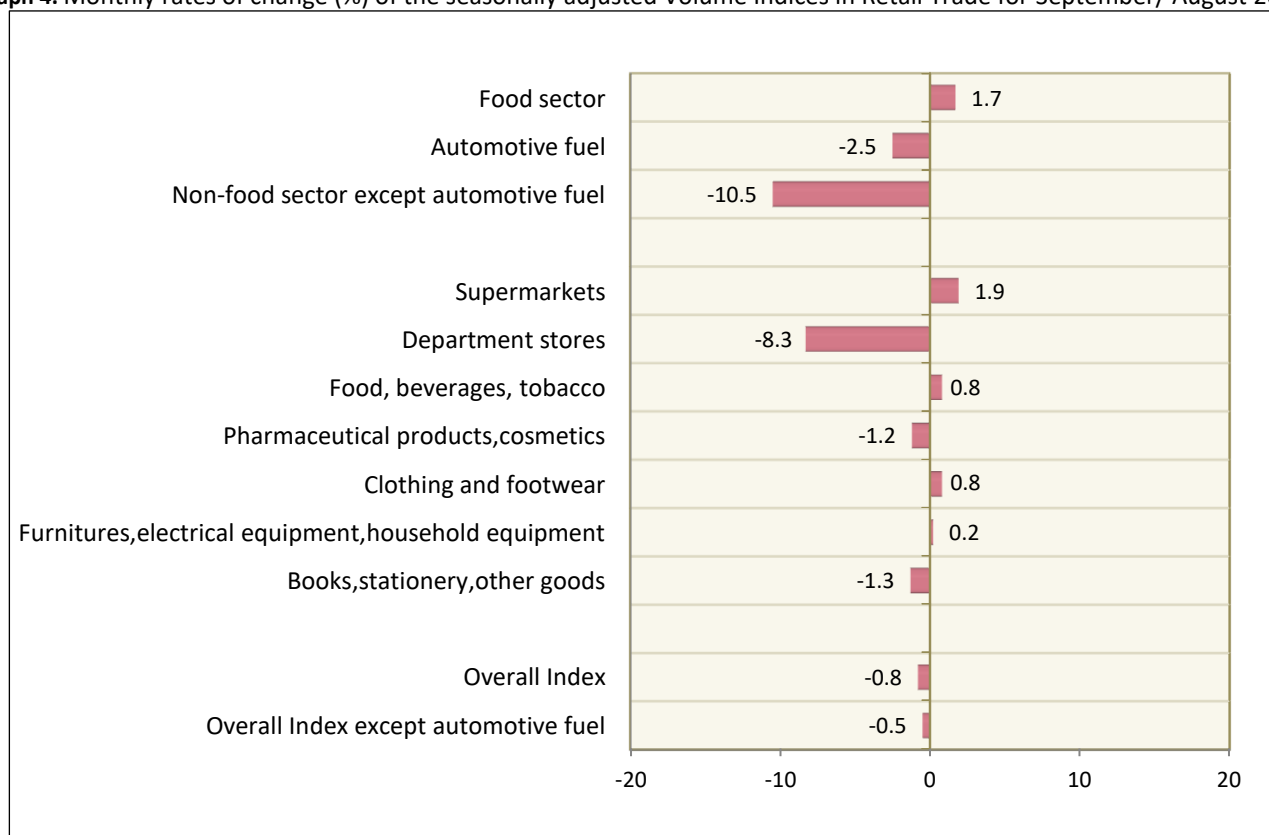
Base year: 2015=100.0

Retail Trade Store Categories	Turnover Index			Volume Index		
	September 2023	August 2023	Monthly rates of change (%)	September 2023	August 2023	Monthly rates of change (%)
<b>Overall Index</b>	<b>129.9</b>	<b>129.9</b>	<b>0.1</b>	<b>108.8</b>	<b>109.6</b>	<b>-0.8</b>
<b>Overall Index except automotive fuel</b>	<b>133.9</b>	<b>133.8</b>	<b>0.1</b>	<b>113.0</b>	<b>113.6</b>	<b>-0.5</b>
<b>I. Main store categories</b>						
Food sector	137.5	135.2	1.7	110.2	108.4	1.7
Automotive fuel	111.8	111.9	0.0	82.9	85.0	-2.5
Non-food sector except automotive fuel	135.2	136.1	-0.7	136.5	152.6	-10.5
<b>II. Specialized store categories</b>						
Supermarkets	141.3	138.6	1.9	111.4	109.3	1.9
Department stores	92.9	91.8	1.3	94.6	103.1	-8.3
Automotive fuel	111.8	111.9	0.0	82.9	85.0	-2.5
Food, beverages, tobacco	115.8	114.8	0.9	90.4	89.7	0.8
Pharmaceutical products, cosmetics	153.9	157.6	-2.4	147.8	149.6	-1.2
Clothing and footwear	121.0	120.3	0.6	114.7	113.8	0.8
Furniture, electrical equipment, household equipment	147.0	147.8	-0.6	145.7	145.4	0.2
Books, Stationery, other goods	152.3	154.3	-1.2	158.4	160.5	-1.3
Retail sales not in stores	148.3	151.6	-2.2	:	:	:

: Volume Index for the "Retail sales not in stores" is not calculated.

Note: The indices and the percentage changes are published rounded up at one decimal digit.

Graph 4. Monthly rates of change (%) of the seasonally adjusted Volume Indices in Retail Trade for September/ August 2023



<b>Generally</b>	The Retail Trade Turnover Index is a monthly index, which was released in 2006 for the first time, with base year (b.y.) the year 2005=100.0. This index is a continuation of the Retail Sales Value Index, which had been compiled since 1963.
<b>Purpose of the index – definitions</b>	The purpose of the index is to depict the evolution of the goods and services market. Turnover comprises the total amounts invoiced by the enterprise during the reference period which correspond to the resale of goods without any further transformation. The data collected each month refer to the actual sales (both retail and wholesale) excluding VAT but including other duties and taxes on the goods.
<b>Legal Framework</b>	The compilation and publication of the Turnover Index is based on the framework of the implementation of Council Regulation (EC) No 1165/1998 concerning short-term statistics (STS-R), as well as Regulation (EC) No 1158/2005 of the European Parliament and of the Council amending Council Regulation (EC) No 1165/1998. Furthermore, this index is governed by Regulation (EC) No 1893/2006 of the European Parliament and of the Council, by Commission Regulation (EC) No 656/2007, by Regulation (EC) No 451/2008 of the Council, by Regulation (EU) No 2019/2152 of the European Parliament and of the Council on European business statistics, as well as Commission Implementing Regulation (EU) No 2020/1197 laying down technical specifications and arrangements pursuant to Regulation (EU) No 2019/2152.
<b>Reference period</b>	Month.
<b>Base year</b>	2015=100.0.
<b>Revision</b>	Pursuant to the provisions of the Council Regulation No 1165/98 concerning “Short Term Statistics”, the index is revised every five (5) years in years ending in 0 or 5. The purpose of the revision is to adapt the index to the changes in the structure of retail trade.
<b>Statistical classification</b>	The NACE Rev.2 statistical classification of economic activities is used in conformity with Regulation (EC) No 1893/2006 of the European Parliament and of the Council.
<b>Geographical coverage</b>	The index covers the whole of the country with data coming from 72 Regional Units.
<b>Coverage of economic activities</b>	The index covers the codes from 4711 to 4799 of the division 47 of NACE Rev 2 statistical classification of economic activities.
<b>Statistical survey</b>	The index includes 38,444 retail trade enterprises, with an annual turnover (in year 2015) equal or greater than 140,000€, from which a random representative sample of 1,674 enterprises was therefore selected and surveyed.
<b>Volume Index</b>	Since 2005, a parallel calculation of the retail trade volume index is introduced, for measuring the volume changes in retail trade.
<b>Calculating the indices</b>	<p>The turnover index is calculated by applying the chaining method. Firstly the moving base index is calculated by comparing the estimated turnover value for the current month with the corresponding value of the previous month. Afterwards, the fixed base index for the current month is calculated by multiplying the moving base index by the fixed base index of the previous month.</p> <p>The comparability of the indices is achieved by reducing them to indices of a typical month of equal duration. This is implemented through the multiplication of the estimated turnover values by a specific correcting coefficient that results, by dividing the average monthly number of working days in the current year, by the number of the regular working days of the surveyed month.</p> <p>The Volume Index (since September 2018) is calculated by deflating the Retail Trade Turnover Index, with the use of the Harmonized Index of Consumer Prices at Constant Tax rates (HICP-CT) as a deflator.</p>
<b>Seasonal Adjustment</b>	Seasonal adjustment is the procedure followed to remove the impact of seasonality on the timeseries (that is eliminating the monthly effects, e.g: the beginning of the school year, holidays, tourist period, etc) in order to improve the comparability over time. The seasonal adjustment is performed by the application of TRAMO-SEATS method with the use of JDemetra+ 2.0.0. The whole series with seasonally adjusted indices is recalculated every time a new observation is added.
<b>Compiled index series</b>	Due to the implementation of the classification NACE Rev 2. parallel time-series for the indices including and not including the automotive fuels are provided. These timeseries data are also compiled seasonally adjusted.
<b>Publication of data</b>	Timeseries of Retail Trade Turnover and Volume Indices (b.y. 2015=100.0) are released monthly since September 2018, with retrospective data from 2000, into the following categories of economic activity classes:

**Supermarkets**

Non-specialized stores with food, beverages or tobacco predominating.

**Department stores**

Other retail sale in non-specialized stores.

**Food, beverages, tobacco**

Fruit and vegetables, meat products. Fishes, crustaceans and molluscs, bread, cakes, flour confectionery and sugar confectionery. Beverages, tobacco products, other retail sale of food in specialized stores.

**Automotive fuel**

Automotive fuel in specialized stores.

**Pharmaceutical products. Cosmetics**

Dispensing chemist, medical and orthopaedic goods, cosmetic and toilet articles in specialized stores.

**Clothing and footwear**

Textiles, clothing, footwear and leather goods in specialized stores.

**Furniture, electrical equipment, household equipment**

Furniture, lighting equipment, audio and video equipment, hardware, paints and glass, electrical household appliances and other household articles, music and video recordings in specialized stores.

**Books, stationery and other goods**

Books, newspapers and stationery, sporting equipment, games and toys, watches and jewellery, computers, peripheral units and software, telecommunications equipment, flowers, plants, seeds, fertilisers, pet animals and pet food, carpets, rugs, wall and floor coverings, other retail sale of new goods in specialized stores.

**Retail sales not in stores**

Retail sales via mail order houses, via Internet, via stalls and markets of other goods and other retail sales not in stores, stalls or markets.

**Food sector**

Supermarkets, Food, beverages, tobacco

**References**

More information on the methodology concerning the compilation and calculation of the indices and for the timeseries is available at ELSTAT website:

[http://www.statistics.gr/en/statistics/-/publication/DKT39/-](http://www.statistics.gr/en/statistics/-/publication/DKT39/)