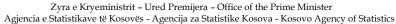


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Harmonized Index of Consumer Prices

December, 2024

Prishtina, 10.01.2025: Kosovo Agency of Statistics (KAS) has started to publish the Consumer Price Index (CPI) in September 2002 until December 2015, while from January 2016 the CPI is harmonized according to the international concept and is published as a Harmonized Index of Consumer Prices (HICP). Consumer prices have started to be collected in May 2002 which is considered the base month. From January 2016 the Harmonized Index of Consumer Prices (HICP), based on the recommendations of Eurostat, is published with the base year 2015 = 100 and all time series of the Consumer Price Index (CPI) respectively the Harmonized Index of Consumer Prices (CPI) in the country have been recalculated on this basis and are published on the KAS website (in the annual publication of the Harmonized Index of Consumer Prices 2002 - 2022). Consumer prices are collected from the 10th to the 20th of the month, in 14 municipalities of Kosovo. Since September 2002 KAS has continuously published CPI - HICP on a monthly basis and eleven publications on an annual basis (2004 - 2023).

This publication contains the table with the Harmonized Index of Consumer Prices in Kosovo on a monthly basis January 2010 – December 2024, annual average 2010-2023 (2015 = 100), with monthly and annual changes in percentage, graphical presentation, table for specific weights, index for December 2024, monthly and annual changes of the harmonized index of consumer prices in percentage (December 2024 / November 2024) and (December 2024 / December 2023) for groups and subgroups according to COICOP, the table with average prices for some consumer goods and the methodology for calculating harmonized consumer price indices.

You can send your suggestions, proposals and remarks to the web address infoask@rks-gov.net

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List of Symbols and Abbreviations

CPI Consumer Price Index

COICOP Classification of individual consumption by purpose

HBS Household Budget Survey

NA National Accounts

HICP Harmonized Index of Consumer Prices

KAS Kosovo Agency of Statistics

: Figure not available

0 Less than half the unit used

Not applicable% Percentage

% Percentage % Promil

W Statistical weights (specific weight – CPI/HICP)

Ø Median (average)

Harmonized Index of Consumer Prices for the month of December 2024

Monthly inflation measured by the harmonized index of consumer prices was (0,7%) in December 2024. The annual inflation rate measured in December 2024 compared to December 2023 was (1,1%).

December 2024 / November 2024 0,7 %

The total harmonized index of consumer prices is higher by an average of 0,7% in December 2024 compared to November 2024. This is mainly explained by the increase in consumer prices in this period in the COICOP groups and subgroups: flight tickets (25,4%), electricity (6,2%), vegetables (2,5%), coffee, tea and cocoa (2,2%) and milk, cheese and eggs (1,3%) with a common impact of these subgroups by 0,8 percent on HICP.

While a decrease in prices is observed in the COICOP group: fruits (-2,5%) and alcoholic beverages (-1,2%) with an impact of -0,1 percent on HICP.

December 2024 / December 2023 1,1 %

The total harmonized index of consumer prices is higher by an average of 1,1% in December 2024 compared to December 2023. This is mainly explained by the increase in consumer prices in this period in the following COICOP groups and subgroups: coffee, tea and cocoa (14,4%), oils and fats (9,3%), financial services (9,1%), mineral water, non-alcoholic beverages, fruit and vegetable juices (5,9%), newspapers, books and office supplies (5,0%), goods and services for the usual maintenance of the household (4,8%), glassware, cutlery and kitchen utensils (4,5%), milk, cheese and eggs (3,8%), alcoholic beverages (3,5%), clothing (3,0%), meat (2,9%), personal care (2,7%), bread and cereals (2,6%), sugar, jam, honey, chocolate and confectionery (2,5%), food products (1,8%), hotel services (1,8%), tools and equipment for home and garden (1,6%), tobacco (1,4%), household appliances (1,2%) and vegetables (1,0%) with a common impact of these subgroups by 2,0 percent on HICP.

While a decrease in prices is observed in the COICOP group: solid fuels, firewood, pellets, etc. (-8,3%), fuels and lubricants for personal transport means (-5,7%), fruits (-4,1%), purchase of vehicles (-2,5%) and electricity (-2,2%) with a common impact of these subgroups by -0,9 percent on HICP.

Harmonized Index of Consumer Prices for 2024 1,6%

The total harmonized index of consumer prices in the country in 2024 was higher by an average of (1,6%) compared to 2023. The increase in the consumer price index was observed in the following COICOP groups and subgroups: flight tickets (10,8%), coffee, tea and cocoa (8,0%), alcoholic beverages (6,9%), goods and services for the usual maintenance of the household (6,5%), financial services (5,8%), mineral water, non-alcoholic beverages, fruit and vegetable juices (5,3%), glassware, cutlery and kitchen utensils (5,2%), sugar, jam, honey, chocolate and sweets (5,1%), fruits (4,8%), newspapers, books and office supplies (4,6%), clothing (4,0%), personal care (3,7%), electricity (3,4%), solid fuels, firewood, pellets, etc. (3,3%), tobacco (2,7%), bread and cereals (2,5%), hotel services (2,0%) and meat (1,9%) with a common impact by 2,0 percent on HICP.

While a decrease in the harmonized index of consumer prices during 2024 was observed in the COICOP subgroups: fuels and lubricants for personal transport means (-4,4%) and purchase of vehicles (-1,8%) with a joint impact by -0,4 percent on HICP.

Tab. 1: Harmonized Index of Consumer Prices (HICP) January 2010 – December 2024 (2015=100), monthly and annual changes of prices in percent

Month/Year	Index (2015 = 100)	Monthly inflation %	Annual inflation %	
January	88,0	0,6	0,7	
February	88,2	0,2	1,1	
March	88,1	-0,1	0,8	
April	87,2	-1,0	1,6	
May	87,5	0,3	2,2	
June	87,6	0,1	2,2	
July	87,9	0,3	2,7	
August	90,5	3,0	6,0	
September	90,8	0,3	6,0	
October	91,9	1,2	6,0	
November	92,3	0,4	6,2	
December	93,2	1,0	6,5	
Annual average 2010	89,4	:	3,5	
January	94,5	1,4	7,4	
February	96,5	2,1	9,4	
March	97,6	1,1	10,8	
April	96,5	-1,1	10,7	
May	96,5	0,0	10,3	
June	95,7	-0,8	9,2	
July	95,2	-0,5	8,3	
August	95,3	0,1	5,3	
September	95,1	-0,2	4,7	
October	96,2	1,2	4,7	
November	96,2	0,0	4,2	
December	96,5	0,3	3,5	
Annual average 2011	96,0	:	7,4	
January	97,3	0,8	3,0	
February	98,2	0,9	1,8	
March	98,3	0,1	0,7	
April	97,6	-0,7	1,1	
May	97,6	0,0	1,1	
June	97,3	-0,3	1,7	
July	97,3	0,0	2,2	
August	98,3	1,0	3,1	
September	99,1	0,8	4,2	
October	99,9	0,8	3,8	
November	99,5	-0,4	3,4	
December	100,1	0,6	3,7	
Annual average 2012	98,4	<u>:</u>	2,5	
January -	100,7	0,6	3,5	
February	100,8	0,1	2,6	
March	100,8	0,0	2,5	
April	100,0	-0,8	2,5	
May	99,7	-0,3	2,2	
June	99,9	0,2	2,7	
July	99,6	-0,3	2,4	
August	99,5	-0,1	1,2	
September	99,3	-0,2	0,2	
October	100,1	0,8	0,2	
November	100,3	0,2	0,8	
December	100,6	0,3	0,5	
Annual average 2013	100,1	:	1,7	

Tab. 2: Harmonized Index of Consumer Prices (HICP) January 2010 – December 2024 (2015=100), monthly and annual changes of prices in percent (Continued)

Month/Year	Index (2015 = 100)	Monthly inflation %	Annual inflation %	
January	100,9	0,3	0,2	
February	100,9	0,0	0,1	
March	101,1	0,2	0,3	
April	100,3	-0,8	0,3	
May	100,2	-0,1	0,5	
June	100,3	0,1	0,4	
July	100,4	0,1	0,8	
August	100,4	0,0	0,9	
September	100,6	0,2	1,3	
October	100,7	0,1	0,6	
November	100,4	-0,3	0,1	
December	100,2	-0,2	-0,4	
Annual average 2014	100,5	:	0,4	
January	100,3	0,1	-0,6	
February	100,6	0,3	-0,3	
March	100,7	0,1	-0,4	
April	99,9	-0,8	-0,4	
May	99,7	-0,1	-0,5	
June	99,9	0,1	-0,4	
July	99,6	-0,2	-0,8	
August	99,7	0,1	-0,7	
September	99,4	-0,3	-1,2	
October	100,0	0,6	-0,7	
November	100,1	0,1	-0,3	
December	100,0	0,0	-0,2	
Annual average 2015	100,0	:	-0,5	
January	100,5	0,4	0,1	
February	100,7	0,2	0,0	
March	100,8	0,1	0,1	
April	99,8	-1,0	-0,1	
May	99,6	-0,2	-0,1	
June	99,6	-0,1	-0,3	
July	99,6	0,0	0,0	
August	99,8	0,2	0,0	
September	99,9	0,2	0,6	
October	100,9	0,9	0,9	
November	101,0	0,1	0,9	
December	101,3	0,4	1,3	
Annual average 2016	100,3	:	0,3	
January	102,2	0,8	1,7	
February	102,3	0,2	1,7	
March	102,3	-0,1	1,5	
April	102,0	-0,3	2,2	
May	101,2	-0,8	1,5	
June 	101,5	0,3	1,9	
July	101,3	-0,2	1,7	
August	101,5	0,2	1,7	
September	101,6	0,1	1,7	
October	101,8	0,2	0,9	
November	101,8	0,1	0,9	
December	101,8	0,0	0,5	
Annual average 2017	101,8	:	1,5	

Tab. 3: Harmonized Index of Consumer Prices (HICP) January 2010 – December 2024 (2015=100), monthly and annual changes of prices in percent (Continued)

Month/Year	Index (2015 = 100)	Monthly inflation %	Annual inflation %	
January	102,0	0,2	-0,2	
February	102,3	0,3	0,0	
March	102,4	0,1	0,1	
April	102,4	0,0	0,4	
May	102,2	-0,2	1,0	
June	102,3	0,1	0,8	
July	102,5	0,2	1,2	
August	103,0	0,4	1,5	
September	103,1	0,1	1,4	
October	103,3	0,2	1,5	
November	103,9	0,7	2,1	
December	104,8	0,8	2,9	
Annual average 2018	102,8	:	1,1	
January	105,2	0,4	3,1	
February	105,6	0,4	3,2	
March	105,7	0,1	3,3	
April	105,9	0,1	3,4	
May	105,7	-0,2	3,4	
June	105,3	-0,3	3,0	
July	105,2	-0,1	2,6	
August	105,7	0,5	2,7	
September	105,6	-0,1	2,4	
October	105,5	0,0	2,2	
November	105,7	0,2	1,7	
December	106,0	0,2	1,2	
Annual average 2019	105,6	:	2,7	
January	106,8	0,8	1,5	
February	106,6	-0,2	1,0	
March	106,5	-0,1	0,7	
April	106,2	-0,3	0,3	
May	105,9	-0,3	0,2	
June	105,4	-0,4	0,1	
July	105,1	-0,3	-0,1	
August	105,2	0,1	-0,5	
September	105,1	-0,1	-0,4	
October	105,3	0,2	-0,2	
November	105,4	0,1	-0,3	
December	106,1	0,6	0,1	
Annual average 2020	105,8	:	0,2	
January	106,6	0,5	-0,2	
February	107,4	0,7	0,7	
March	107,8	0,4	1,2	
April	108,2	0,3	1,9	
May	107,9	-0,2	2,0	
June	107,9	0,0	2,4	
July	108,8	0,8	3,5	
August	110,1	1,2	4,7	
September	110,1	0,1	4,9	
October	111,3	1,0	5,7	
November	112,7	1,0	5,7 6,9	
December	113,2	0,5	6,7	
Annual average 2021	109,3	0,3	3,4	

Tab. 4: Harmonized Index of Consumer Prices (HICP) January 2010 – December 2024 (2015=100), monthly and annual changes of prices in percent (Continued)

Month/Year	Index (2015 = 100)	Monthly inflation %	Annual inflation	
January	114,2	0,9	7,1	
February	115,5	1,1	7,5	
March	118,6	2,7	10,0	
April	120,3	1,5	11,2	
May	121,4	0,9	12,5	
June	123,1	1,4	14,1	
July	124,2	0,9	14,2	
August	124,5	0,2	13,0	
September	124,2	-0,2	12,7	
October	125,4	0,9	12,7	
November	125,8	0,3	11,6	
December	126,9	0,9	12,1	
Annual average 2022	122,0	:	11,6	
January	127,9	0,8	12,0	
February	127,6	-0,3	10,5	
March	127,0	-0,4	7,1	
April	127,0	0,0	5,6	
May	126,6	-0,3	4,3	
June	126,6	0,0	2,8	
July	127,1	0,4	2,3	
August	128,4	1,0	3,2	
September	129,5	0,9	4,2	
October	129,5	0,0	3,3	
November	129,4	-0,1	2,9	
December	129,8	0,3	2,3	
Annual average 2023	128,0	:	4,9	
January	130,2	0,3	1,8	
February	130,4	0,1	2,2	
March	130,0	-0,3	2,3	
April	130,1	0,1	2,4	
May	129,6	-0,4	2,4	
June	129,6	0,0	2,4	
July	129,9	0,3	2,2	
August	130,2	0,2	1,4	
September	129,8	-0,3	0,2	
October	130,0	0,2	0,4	
November	130,3	0,2	0,7	
December	131,2	0,7	1,1	
Annual average 2024	130,1	:	1,6	

Fig. 1: Harmonized annual index of consumer prices by years 2010 - 2024 (2015=100)

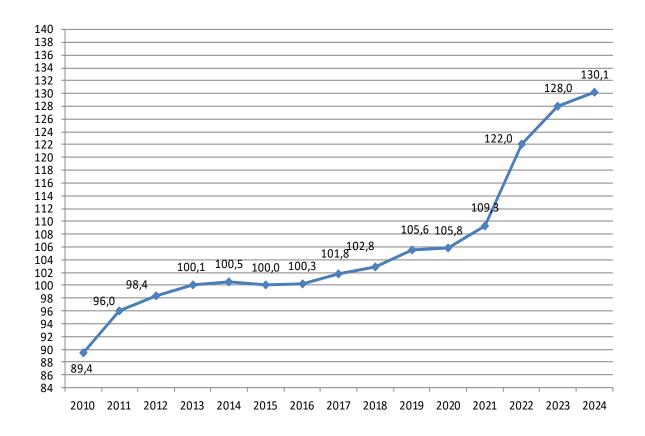
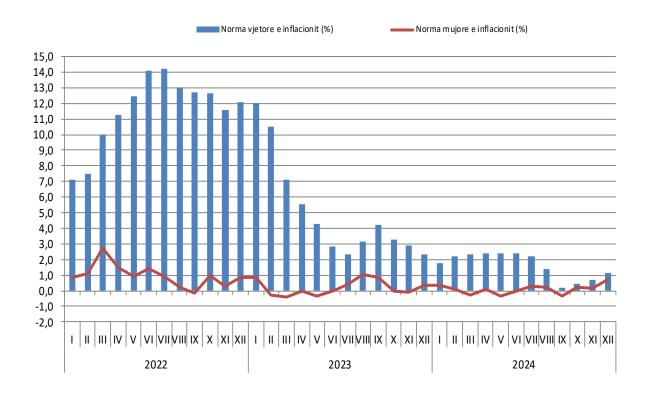


Fig. 2: Annual and monthly inflation rates in percent measured by HICP



Tab. 2: Weights, HICP in December 2024 (2015=100), monthly and annual changes of prices in percent for groups and subgroups according to COICOP

COICOP	Groups and subgroups	Weight 2024 in	XII - 2024 2015=100	XII - 2024 XI- 2024	XII - 2024 XII - 2023	Average annual index 2024, 2015=100	2024 2023
00	Total HICP	1000,0	131,2	0,7	1,1	130,1	1,6
01	Food and non-alcoholic beverages	351,1	148,2	0,7	3,5	145,3	2,2
01.1	Food	303,0	149,7	0,7	2,4	147,4	1,4
01.1.1	Bread and cereals	65,9	167,8	0,0	2,6	166,9	2,5
01.1.2	Meat	59,4	147,3	0,5	2,9	144,7	1,9
01.1.3	Fish	10,0	138,2	0,2	4,3	136,2	6,9
01.1.4	Milk, cheese and eggs	42,0	152,9	1,3	3,8	147,7	-0,5
01.1.5	Oils and fats	10,7	190,6	1,8	9,3	180,1	-0,8
01.1.6	Fruits	38,5	95,1	-2,5	-4,1	102,1	4,8
01.1.7	Vegetables	46,8	139,0	2,5	1,0	134,2	-0,4
01.1.8	Sugar, jam, honey, chocolate and confectionery	10,8	156,6	0,2	2,5	155,0	5,1
01.1.9	Food products n.e.c.	18,9	141,0	1,0	1,8	139,5	2,8
01.2	Non-alcoholic beverages	48,1	139,2	0,7	8,5	133,8	6,2
01.2.1	Coffee, tea and cocoa	18,2	178,8	2,2	14,4	168,2	8,0
01.2.2	Mineral waters, soft drinks, fruit and vegetable juices	29,9	129,2	0,0	5,9	125,5	5,3
02	Alcoholic beverages, tobacco	67,6	141,7	-0,3	2,1	140,7	4,1
02.1	Alcoholic beverages	24,2	140,2	-1,2	3,5	137,8	6,9
02.2	Tobacco	43,4	145,8	0,2	1,4	145,5	2,7
03	Clothing and footwear	40,6	109,8	0,2	2,2	108,8	2,9
03.1	Clothing	31,9	109,7	0,1	3,0	108,7	4,0
03.2	Footwear	8,8	109,1	0,2	-1,0	108,1	-1,2
04	Housing, water, electricity, gas and other fuels	89,8	125,1	1,9	-3,1	123,6	2,7
04.1	Actual rentals for housing	4,2	100,5	0,0	-1,0	100,3	0,6
04.3	Maitenance and repair of the dwelling	18,6	132,3	-0,5	1,0	132,2	2,6
04.4	Water supply and miscellaneous services relating to the dwelling	3,7	103,1	0,0	1,3	103,1	1,2
04.5	Electricity, gas and other fuels	63,3	129,5	2,9	-4,7	127,2	2,8
04.5.1	Electricity	5,0	116,3	6,2	-2,2	107,6	3,4
04.5.2	Gas	23,1	136,2	0,8	-0,9	136,0	-0,9
04.5.4	Solid fuels	34,2	172,2	-0,2	-8,3	180,4	3,3
04.5.5	Heat energy	1,1	88,4	0,0	0,0	88,4	-2,3
05	Furnishing, household equipment and routine maintenance of the house	63,0	124,0	0,5	2,6	122,5	2,9
05.1	Furniture and furnishings, carpets and other floor coverings	11,8	114,4	0,1	0,6	113,6	0,7
05.2	Household textiles	0,3	108,3	0,4	0,0	108,1	0,1
05.3	Household appliances	14,4	115,1	1,2	1,2	113,5	0,3
05.4	Glassware, tableware and household utensils	11,7	121,3	0,4	4,5	119,8	5,2
05.5	Tools and equipment for house and garden	9,9	124,8	0,0	1,6	124,0	1,3
05.6	Goods and services for routine household maintenance	14,9	145,8	0,3	4,8	143,2	6,5

Tab. 2: Weights, HICP in December 2024 (2015=100), monthly and annual changes of prices in percent for groups and subgroups according to COICOP (Continued)

COICOP	Groups and subgroups	Weight 2024 in ‰	XII - 2024 2015=100	XII - 2024 XI- 2024	<u>XII - 2024</u> XII - 2023	Average annual index 2024, 2015=100	2024 2023
06	Health	22,8	117,1	0,6	0,6	116,3	1,2
06.1	Medical products, appliances and	6,6	120,3	2,2	1,9	117,8	1,7
06.1.1	Pharmaceutical products	6,1	119,1	0,7	2,7	117,8	2,3
06.1.2	Other medical products	0,3	110,3	0,1	1,4	109,8	1,0
06.1.3	Therapeutic appliances and equipment	0,2	122,8	3,9	1,6	118,6	1,6
06.2	Out-patient services	14,0	116,0	0,0	0,1	115,9	1,1
06.3	Hospital services	2,2	103,6	0,0	0,0	103,6	0,3
07	Transport	176,7	118,6	1,7	-2,9	120,5	-2,0
07.1	Purchase of vehicles	47,0	109,2	0,2	-2,5	109,6	-1,8
07.2	Operation of personal transport equipment	93,5	118,8	-0,3	-3,8	122,5	-3,4
07.2.1	Spare parts and accessories for personal transport equipment	16,3	113,5	0,2	0,2	112,7	-0,9
07.2.2	Fuels and lubricants for personal transport equipment	73,6	117,4	-0,4	-5,7	122,8	-4,4
07.2.3	Maintenance and repair of personal transport equipment	2,7	140,2	0,0	3,3	137,9	4,9
07.2.4	Other services in respect of personal transport equipment	1,0	144,8	0,0	7,4	141,3	2,6
07.3	Transport services	36,2	139,3	10,4	-0,4	138,1	5,1
08	Communication	23,7	112,3	0,1	-1,9	113,7	-0,7
08.1	Postal services	1,7	104,6	0,0	0,0	104,6	0,0
08.2	Telephone and telefax equipment	1,2	69,9	0,1	-2,4	70,1	-5,5
08.3	Telephone and telefax services	20,8	119,7	0,1	-2,0	121,3	-0,5
09	Recreation and culture	44,5	107,6	0,0	1,4	106,9	3,1
09.1	Audio-visual, photographic and information processing equipment	13,0	86,7	0,0	0,5	86,2	0,9
09.2	Other major durables for recreation and culture	2,1	109,1	0,0	1,4	108,5	0,7
09.3	Other recreational items and equipment, gardens and pets	6,6	119,6	0,0	0,9	119,3	3,2
09.4	Recreational and cultural services	4,8	113,2	0,0	-0,5	112,8	2,4
09.5	Newspapers, books and stationery	15,4	114,0	0,0	5,0	111,2	4,6
09.6	Package Holidays	2,6	121,2	0,0	-1,3	123,7	6,7
10	Education	6,9	104,2	0,0	0,2	104,1	-0,5
11	Restaurants and hotels	40,8	131,6	0,2	1,8	130,3	2,0
11.1	Catering services	36,7	133,3	0,2	1,8	132,0	2,0
11.2	Accommodation services	4,1	114,4	0,0	0,5	114,4	0,5
12	Miscellaneous goods and services	72,2	121,4	0,2	2,3	119,9	2,3
12.1	Personal affects as a	27,4	126,3	0,6	2,7	124,7	3,7
12.3	Personal effects n.e.c.	9,0	119,2	0,0	-0,3	118,8	-0,7
12.4	Social protection	12,1	123,5	0,0	0,0	123,5	1,7
12.5	Insurance	4,7	121,3	0,0	-0,3	121,3	-0,5
12.6	Financial services	5,2	119,0	0,0	9,1	115,0	5,8
12.7	Other services	13,8	100,8	0,0	0,5	100,4	0,4

Tab. 3: Average price in Euro for some consumer goods and services

Code	láo	Unit	XII	ΧI	XII
Code	Item	Mesaure	2023	2024	2024
101	Rice	1 kg	1,64	1,69	1,67
102	Wheat flour	1 kg	0,80	0,81	0,81
103	White bread	500g	0,51	0,52	0,51
111	Beef meat	1 kg	8,88	8,98	9,02
112	Veal meat	1 kg	10,15	10,23	10,22
114	Chicken	1 kg	3,94	4,15	4,11
131	Milk (tetrapak)	1 lit	1,18	1,22	1,23
133	Yoghurt	1 lit	1,15	1,21	1,20
137	Eggs	30 pcs	3,39	3,04	3,30
141	Edible oils	1 lit	1,40	1,48	1,52
151	Apple	1 kg	0,95	0,94	0,91
152	Pears	1 kg	1,93	1,89	1,88
153	Bananas	1 kg	1,43	1,38	1,38
155	Limon	1 kg	1,31	1,60	1,50
161	Potatoes	1 kg	0,81	0,53	0,60
162	Tomatoes	1 kg	1,64	1,85	1,85
163	Beans	1 kg	3,31	3,62	3,68
167	Pepper	1 kg	1,89	2,07	2,14
175	Sugar	1 kg	1,28	1,24	1,21
192	Ground coffee	1 kg	11,28	13,35	13,94
193	Tea	1 kg	9,08	9,29	9,29
195/1	Natural water	1.5 lit	0,35	0,37	0,37
196	Coca cola	2 lit	1,46	1,57	1,58
197	Fruit juice	1 lit	1,08	1,09	1,08
204	Beer	0.5 l	0,82	0,86	0,86
216	Cigarettes - Ronson	1 pack	2,08	2,09	2,10
217	Cigarettes - Marlboro	1 pack	3,06	3,09	3,10
416	Electricity (without fixed cost)	1 kwh	0,08	0,07	0,07
418	Firewood	1 m³	63,22	56,02	55,91
701	Petrol	1 lit	1,29	1,27	1,26
702	Diesel	1 lit	1,34	1,24	1,23

Methodological explanations

Definitions

HICP Kosovo, produced by Kosovo Agency of Statistics (KAS), is produced by methods of the Harmonized Index of Consumer Prices (HICP). Eurostat has defined the HICP as the European standard of consumer price indices. Index calculated and their results are presented by Classification of Individual Consumption by Purpose (COICOP), the international classification which classifies consumption in divisions, groups and classes of items. By COICOP, KAS has allocated 91 classes of defined consumption (at 4-digit level) further to 420 products (elementary aggregate). KAS has defined aggregation weight for each element and each month collects prices for each elementary aggregate.

Each month the HICP is calculated in two steps:

- 1. Elementary indices (elementary aggregate indicator) calculated from the collected prices by using the formula of unweighted geometric average (Jevon).
- 2. The indices of the highest level, including the HICP itself, are calculated by averaging the elementary indices by formula of weighted arithmetic average (Laspeyres).

Aggregate elementary weights are based on estimates of annual consumption expenditures. KAS, for 91 classes of consumption, estimates annual consumption expenditures from the Household Budget Survey (HBS) and National Accounts (NA); the weights within consumer classes come from KAS's internal resources. The specific weights, as of January 2013, were based on estimates of Household Budget Surveys (HBS) and National Accounts (NA) data referring to 2012, and since January 2015, specific refreshed weights are based on data from National Accounts (NA) and the Household Budget Survey (HBS) of 2013. From January 2016, the specific weights for items and services harmonized according to E-coicop (recommendations from Eurostat) are based on National Accounts data (NA) and the 2014 Household Budget Survey (HBS). As of January 2017, specific items and services weights are based on the National Accounts (NA) data for 2015. As of January 2018, specific items and services weights are based on the National Accounts (NA) data of 2016. As of January 2019, specific items and services weights are based on the National Accounts (NA) data of 2017. As of January 2020, specific items and services weights are based on the National Accounts (NA) data of 2018. As of January 2021, specific items and services weights are based on the National Accounts (NA) data of 2019. Annually updated weighing ensures that the HICP reflects current consumer trends. Annually updated weighing ensures that the HICP reflects current consumer trends.

Total annual consumption expenditure is defined as all domestic (within-country) monetary purchases of the household sector. This matches the NA category called Household Final Monetary Consumption (HFMC) and means the weights must exclude the value of consumption of own production and costs for owner occupied housing.

Until December 2014 the weights included expenditure of only domestic consumers, while from January 2015 are also include expenditure of non-resident consumers.

To estimate monthly price change, KAS staff collect prices for a set of specific items (often called a market basket) chosen to represent the elementary aggregates. The goal is to collect all prices of exactly the same items every month; whenever a price cannot be collected, carefully developed procedures must be applied to avoid a biased result.

KAS data collectors, who are based in seven regional centers, collect approximately 6800 prices during the period of 10th - 20th of each month. They obtain prices in stores, markets, service enterprises and other retail outlets in fourteen municipalities of Kosovo:

Gjakovë
Gjilan
Istog
Kaçanik
Kamenicë
Mitrovicë
Rahovec
Pejë
Podujevë
Prishtinë
Prizren
Suharekë
Ferizaj
Vushtrri

The KAS central office staff in Prishtina collects prices for items such as electricity, water, postal and telecom services, and rail transport.

Elementary Indexes

Elementary index for a month is equal to its index in the previous month multiplied by the price change measured on a monthly basis, calculated from collected prices. KAS uses the geometric mean formula (Jevon) to calculate monthly changes: geometric average rate of the current month in geometric average price collected for the previous month.

Index for elementary aggregate e for month m

Price index for elementary aggregate e for month m Price index for elementary aggregate e in month m-1 Price for item i in month m Price for item i in month m-1 Number of collected prices for elementary aggregate e

Higher-level indexes

In Kosovo's HICP, indexes are calculated first for groups (of elementary aggregates) and these are combined to obtain the total HICP.

Higher-level indexes are weighted by arithmetic averages of elementary indexes. In the current CPI, which uses the Young formula until December 2013, the weights are shares of the unadjusted weight-period expenditures. Since January 2014, the index will use the Lowe formula, with weights that are shares of weight-period expenditures that have been updated for price change. (The Lowe formula is closer to the actual Laspeyres formula).

Both the Young and Lowe formulas are weighted by arithmetic averages with weights that are shares of consumption expenditure and so both are Laspeyres-type index formulas. Currently HICP uses the Young index formula whose weights are shares of expenditures during the weight period (year 2010). New weights from NA data and from the 2012 HBS and are applied since January 2014. CPI has passed in calculating indexes by Lowe's formula; (the weights were part of the 2012 expenditures calculated with the price changes of December of 2013. From January 2015, are applied specific weights from NA and HBS data for 2013 calculated with the price changes of December 2014. From January 2016, the specific weights are based on the data of the National Accounts (NA) and from the Household Budget Survey (HBS) of 2014 calculated with the price changes of December 2015. From January 2017, specific items and services weights are based on the National Accounts (NA) data for 2015 calculated with the price changes of December 2016. From January 2018, the specific items and services weights are

based on the National Accounts (NA) data of 2016 calculated with the price changes of December 2017. From January 2019, the specific items and services weights are based on the National Accounts (NA) data of 2017 calculated with the price changes of December 2018. From January 2020, the specific items and services weights are based on the National Accounts (NA) data of 2018 calculated with the price changes of December 2019.

Index weights

Young formula weights for elementary aggregates within groups

$$w_{e,g}^{b} = \frac{x_{e}^{b}}{\sum_{g=1}^{k_{g}} x_{e}^{b}} \qquad \sum_{e=1}^{k_{g}} w_{e,g} = 1$$

 $W_{e,g}^b$ = Weight for elementary aggregate e within group \boldsymbol{g} in weight-period \boldsymbol{b}

 x_e^b = expenditure for elementary aggregate **e** in weight-period **b** (Currently **b** = 2012)

 k_o = Number of elementary aggregates in group g

Young's formula weights the groups within the overall HICP

$$w_g^b = \frac{\sum_{e=1}^{k_g} x_e^b}{\sum_{e=1}^{h} \sum_{e=1}^{k_g} x_e^b} \qquad \sum_{g=1}^{h} w_{e,g} = 1$$

 w_o^b = Weight for group g in weight period b

h = Number of groups in CPI

Lowe Formula Weights for Elementary Aggregates within Groups

$$w_{e,g}^{b} = \frac{x_{e}^{b} \times a_{e}^{b \to v}}{\sum_{e=1}^{k_{g}} \left(x_{e}^{b} \times a_{e}^{b \to v} \right)} \qquad \sum_{e=1}^{k_{g}} w_{e,g} = 1$$

 $w_{e,g}^b$ = Weight for elementary aggregate e within group \mathbf{g} in weight-period \mathbf{b} (Effective January 2014, \mathbf{b} = 2012)

 $a_e^{b \to v}$ = weight adjustment factor for elementary aggregate **e**

$$a_e^{b \to v} = I_e^v / \frac{1}{12} \left(\sum_{m=Jan}^{Dec} I_e^{m/b} \right)$$

 I_e^v = Price index for elementary aggregate **e** for month **v**

(Effective January 2014, v = December 2013)

 $I_e^{m/b}$ = Price index for elementary aggregate ein month $m{m}$ in year $m{b}$

Lowe Formula Weights for Group within Overall-CPI

$$w_g^b = \frac{\sum_{e=1}^{k_g} \left(x_e^b \times a_e^{b \to v} \right)}{\sum_{e=1}^{h} \sum_{e=1}^{k_g} \left(x_e^b \times a_e^{b \to v} \right)}$$

$$\sum_{g=1}^{h} w_{e,g} = 1$$

Indexes for higher-level groups

$$I_g^m = \sum_{e=1}^{k_g} w_{e,g}^b * I_e^m \qquad I_e^0 = 100$$

period 0 is May 2002 for most items,

but later for items that entered at a later date

Total HICP

Total HICP is a weighted arithmetic average of the indexes of groups. CPI used in the formula of Young, but since January 2014 has passed in using Lowe formula.

Because the groups have different bases indexed (most have a base May 2002 = 100, but the groups added later have otherwise, since January 2016 the indices are calculated with base year 2015 = 100), indices of groups should be re-based on a common period, which is the month \mathbf{v} (previous month before new weights being put into use).

$$HICP^{m} = HICP^{v} \times \sum_{\varepsilon=1}^{h} w_{\varepsilon}^{b} \times \frac{I_{\varepsilon}^{m}}{I_{\varepsilon}^{v}} \qquad \qquad HICP^{0} = 100$$

HICP m = Harmonized index of consumer prices for the month m v = previous month before new weights being put into use. (Currently v = December 2020)

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