

# Consumer Price Index

## July, 2014

**Tirana, on August 08, 2014:** Consumer Price Index in July 2014 result 115.9 % considerate December 2007 as base period.

**In July 2014 the annual rate of consumer price is 1.8 %.** A year before the annual rate was 1.6%. Compared to July 2013, prices increased the most in the group "Goods and different service" group by 8.5 %, followed by "Alcoholic drinks and tobacco" by 6.9 %, "Food and non-alcoholic beverage" group by 2.6 %, "Hotel, coffee house and restaurant" by 2.5 %, etc. On the other hand goods and service prices are lower in the "Health" group by 6.1 % followed by "Clothing and footwear" group by 2.2 %, "Communication" group by 0.7 %, etc.

Annual growth rate in July was push up mainly from "Food and non-alcoholic beverage" by 1.03 p.p. In this group prices of "vegetables" subgroup are increased by 27.1 % and price of "fruits" subgroup are increased by 4.1 %. Meanwhile prices of "oil and feat" are decrease by 6.5 %, followed by "sugar and desert" subgroup by 3.9 %, "coffee and tea" by 3.1 %, etc. Prices of "Goods and different services" group contributed by 0.41 p.p.. Higher prices of "Alcoholic beverages and tobacco" contributed by 0.25 p.p. in annual rate. Compared with one year before, price of tobacco is increased by 11.8 %. Prices of "housing, water, electricity, gas and other fuel" contributed by 0.21 p.p..

Low prices of "Health" group contributed by -0.21 p.p. in annual rate. "Clothing and footwear" groups contributed by -0.11 p.p.

**In July 2014 monthly rate of consumer price is -0.6 %.** Monthly rate of prices was push down mainly by "Food and non-alcoholic beverage" by -0.46 p.p. Prices of vegetables are decreased by 5.3 % and prices of fruits by 2.6 %. Prices of "Clothing and footwear" group contributed by -0.05 p.p. in monthly rate.

Prices of "Transport" and Communication" group contributed by 0.01 p.p. in monthly rate.

Fig. 1 Annual rate of consumer price index

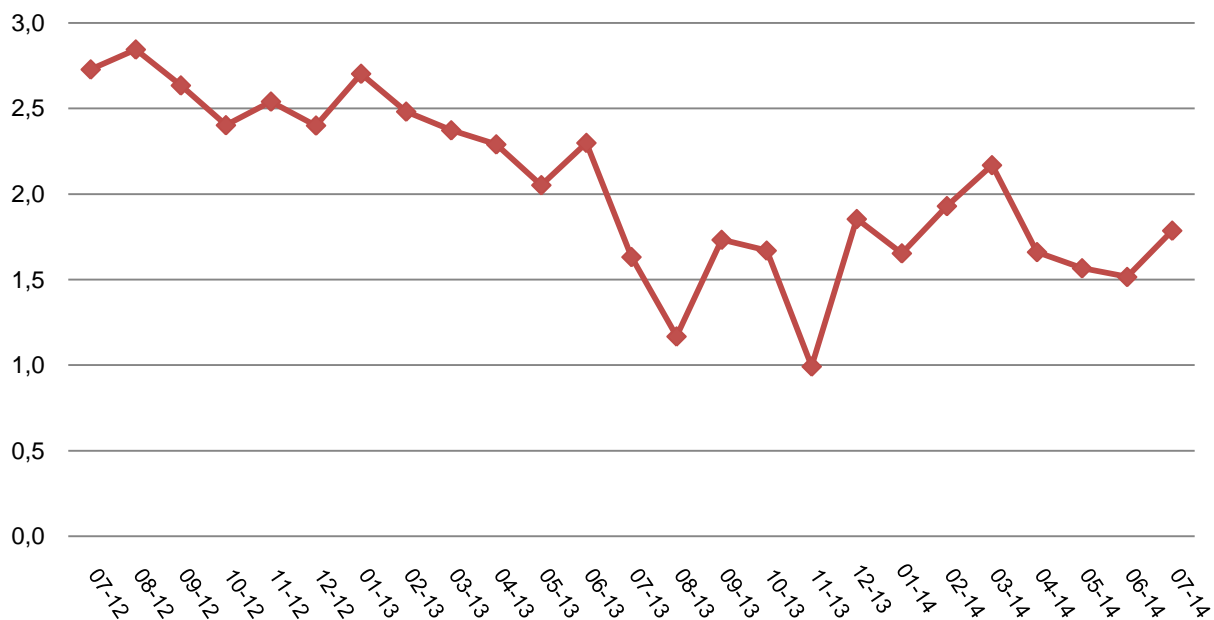
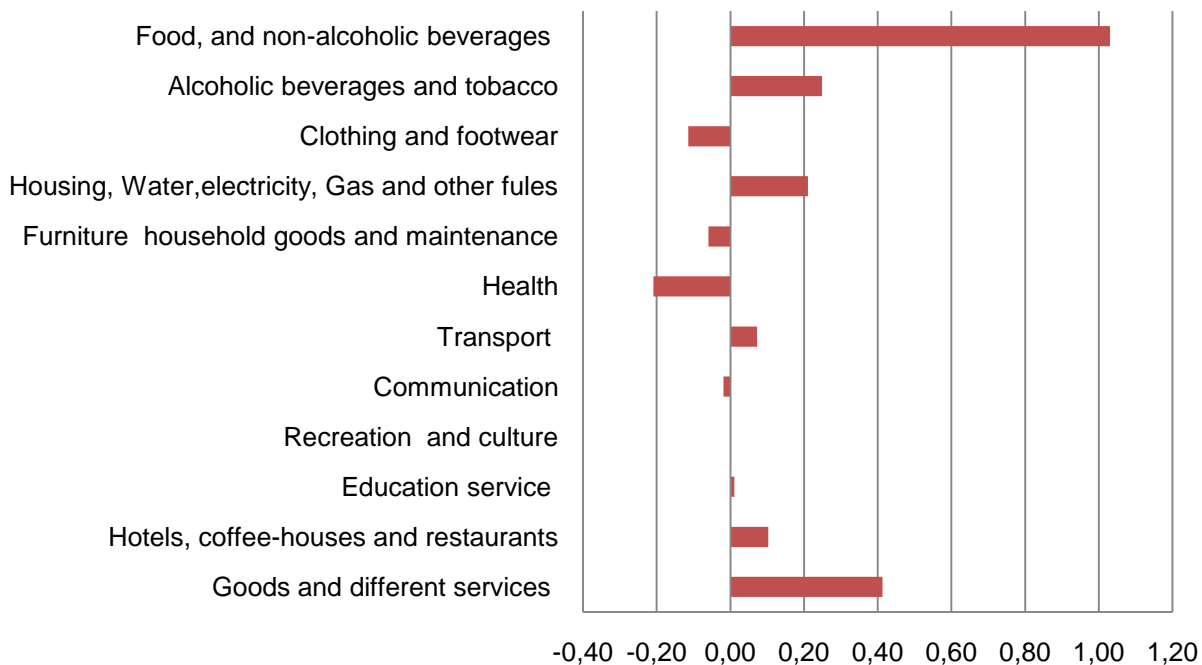


Fig. 2 Contribute of main groups in annual rate



Tab. 1 Consumer Price Index

December 2007=100 %

Code	Groups	Weights	07-13	08-13	09-13	10-13	11-13	12-13	01-14	02-14	03-14	04-14	05-14	06-14	07-14
<b>Total</b>		<b>100.0</b>	<b>113.8</b>	<b>113.7</b>	<b>114.6</b>	<b>114.8</b>	<b>114.2</b>	<b>116.2</b>	<b>117.1</b>	<b>118.7</b>	<b>119.3</b>	<b>118.6</b>	<b>117.3</b>	<b>116.5</b>	<b>115.9</b>
1	Food, and non-alcoholic beverages	39.3	121.1	120.7	122.6	122.4	120.7	125.3	127.1	130.7	132.2	130.4	127.5	125.8	124.3
2	Alcoholic beverages and tobacco	3.6	129.5	129.3	129.4	129.8	132.6	134.4	138.2	137.3	137.9	138.3	138.2	138.3	138.5
3	Clothing and footwear	5.1	85.0	84.9	85.1	85.5	85.5	85.6	85.5	84.3	84.3	84.6	84.2	83.9	83.1
4	Housing, Water, electricity, Gas and other fuels	16.3	112.7	112.8	113.9	114.0	114.3	115.2	115.0	115.0	114.9	114.7	114.4	114.2	114.2
5	Furniture household goods and maintenance	10.0	103.9	104.0	103.7	103.4	103.6	103.4	103.3	103.4	103.1	103.4	103.3	103.2	103.3
6	Health	3.4	122.3	121.7	121.9	121.9	121.9	121.7	122.0	122.0	121.9	118.8	117.0	115.6	114.8
7	Transport	6.1	118.7	119.2	118.5	118.3	118.0	117.9	119.3	119.6	119.5	119.6	119.7	119.9	120.1
8	Communication	2.6	82.2	82.2	82.3	79.9	79.9	79.9	80.0	80.0	80.0	81.1	81.2	81.2	81.6
9	Recreation and culture	3.1	114.6	115.0	115.3	115.0	114.8	114.7	114.5	114.7	114.8	114.8	114.9	114.9	114.7
10	Education service	1.4	109.3	109.3	109.1	109.0	109.0	109.0	109.3	110.0	109.9	110.2	110.2	110.2	110.2
11	Hotels, coffee-houses and restaurants	4.2	109.6	110.2	110.8	110.9	110.9	110.9	110.8	111.0	111.8	111.8	112.0	112.2	112.3
12	Goods and different services	4.9	107.1	107.5	107.0	112.2	111.9	112.2	112.4	116.9	117.2	117.0	117.1	116.8	116.1

Tab. 2 Monthly rate of CPI

%

Code	Groups	07-13	08-13	09-13	10-13	11-13	12-13	01-14	02-14	03-14	04-14	05-14	06-14	07-14
<b>Total</b>		<b>-0.8</b>	<b>-0.1</b>	<b>0.8</b>	<b>0.1</b>	<b>-0.5</b>	<b>1.7</b>	<b>0.8</b>	<b>1.4</b>	<b>0.5</b>	<b>-0.6</b>	<b>-1.1</b>	<b>-0.7</b>	<b>-0.6</b>
1	Food, and non-alcoholic beverages	-1.7	-0.4	1.6	-0.1	-1.4	3.8	1.4	2.9	1.1	-1.4	-2.3	-1.3	-1.2
2	Alcoholic beverages and tobacco	0.0	-0.2	0.1	0.3	2.2	1.3	2.9	-0.7	0.4	0.3	-0.1	0.1	0.1
3	Clothing and footwear	-0.9	-0.2	0.3	0.4	0.0	0.2	-0.1	-1.4	-0.1	0.3	-0.4	-0.4	-0.9
4	Housing, Water, electricity, Gas and other fuels	-0.1	0.1	0.9	0.2	0.3	0.8	-0.1	-0.1	-0.1	-0.1	-0.3	-0.2	0.0
5	Furniture household goods and maintenance	-0.1	0.1	-0.3	-0.2	0.1	-0.1	-0.1	0.1	-0.3	0.3	-0.1	-0.1	0.1
6	Health	-1.0	-0.4	0.1	0.0	0.0	-0.1	0.2	0.0	-0.1	-2.6	-1.5	-1.2	-0.7
7	Transport	-0.1	0.5	-0.6	-0.1	-0.2	-0.1	1.2	0.2	-0.1	0.1	0.2	0.2	0.1
8	Communication	0.0	0.1	0.0	-2.9	0.0	0.0	0.1	0.0	0.0	1.4	0.1	0.0	0.5
9	Recreation and culture	0.1	0.3	0.3	-0.3	-0.2	-0.1	-0.2	0.2	0.0	2.6	0.1	0.0	-0.1
10	Education service	0.0	0.0	-0.2	0.0	0.0	0.0	0.2	0.7	-0.1	0.2	0.0	0.0	0.0
11	Hotels, coffee-houses and restaurants	0.0	0.6	0.5	0.1	0.0	0.0	0.0	0.2	0.7	0.0	0.2	0.1	0.0
12	Goods and different services	-0.8	0.4	-0.5	4.9	-0.2	0.2	0.2	4.0	0.3	-0.1	0.0	-0.3	-0.5

Tab. 3 Annual rate of CPI

Code	Groups	07-13/07-12	08-13/08-12	09-13/09-12	10-13/10-12	11-13/11-12	12-13/12-12	01-14/01-13	02-14/02-13	03-14/03-13	04-14/04-13	05-14/05-13	06-14/06-13	07-14/07-13	%
	<b>Total</b>	<b>1.6</b>	<b>1.2</b>	<b>1.7</b>	<b>1.7</b>	<b>1.0</b>	<b>1.9</b>	<b>1.7</b>	<b>1.9</b>	<b>2.2</b>	<b>1.7</b>	<b>1.6</b>	<b>1.5</b>	<b>1.8</b>	
1	Food, and non-alcoholic beverages	4.0	2.8	3.9	3.5	2.1	3.5	2.7	2.9	2.8	1.8	2.1	2.1	2.6	
2	Alcoholic beverages and tobacco	4.1	3.9	2.4	1.2	3.2	4.2	7.3	6.3	6.8	7.2	6.6	6.9	6.9	
3	Clothing and footwear	-4.4	-3.8	-3.7	-3.8	-3.7	-3.4	-2.7	-3.4	-3.2	-2.8	-2.8	-2.0	-2.2	
4	Housing, Water, electricity, Gas and other fuels	-0.5	-0.5	1.5	1.6	1.5	2.3	2.0	2.0	2.1	2.0	1.8	1.2	1.3	
5	Furniture household goods and maintenance	0.4	0.5	0.2	-0.1	-0.1	-0.5	-0.7	-0.7	-1.0	-0.8	-0.8	-0.8	-0.6	
6	Health	-1.0	-1.5	-1.4	-1.5	-1.6	-1.5	-1.3	-1.3	-1.4	-3.9	-5.3	-6.3	-6.1	
7	Transport	0.5	0.3	-0.9	-1.0	-1.0	-1.2	0.6	0.9	0.9	0.5	0.6	1.0	1.2	
8	Communication	1.2	1.3	1.3	-1.4	-1.4	-2.9	-2.8	-2.8	-2.8	-1.4	-1.2	-1.3	-0.7	
9	Recreation and culture	0.9	0.8	0.6	0.4	0.1	-0.2	-0.2	0.1	0.3	0.3	0.4	0.3	0.0	
10	Education service	2.2	2.2	2.0	0.1	0.1	0.1	0.3	1.0	0.9	1.1	1.1	0.8	0.8	
11	Hotels, coffee-houses and restaurants	2.1	2.7	3.1	3.0	2.5	1.9	1.8	1.9	2.7	2.6	2.7	2.4	2.5	
12	Goods and different services	-2.4	-2.0	-3.0	1.8	-1.2	3.3	1.6	5.6	11.0	10.8	8.0	8.2	8.5	

# Methodology

Consumer Price Index (CPI) is calculated with a new basket of product from December 2007. Weights are based on the results of the Household Budget Survey, carried out during October 2006 – September 2007. December 2007 is considered as the base period (December 2007 = 100). Previous change of the product basket was from January 2002, where the number of the products was increased from 221 to 262 products. In the new basket the number of product is 272. The international classification, COICOP, with 12 main groups was introduced to the previous product basket and it will continue to be used with the new product basket. The index covers all Albanian (rural and urban) territory. The previous index covered only the urban area. The product weights will be different for each region. Prices are collected in main cities of 11 prefectures where Kukës is within the prefecture of Diber.

The Consumer Price Index of Albania is a Laspeyres type index:

$$I_{0,i}^t = \frac{\sum_i P_i^t * Q_i^0}{\sum_i P_i^0 * Q_i^0}$$

With weights ( $w = P*Q$ ) from base period this is approximated to:

$$I_{0,i}^t = \sum_i w_i * \left( \frac{P_i^t}{P_i^0} \right)$$

In more detail, a price relative is calculated for each item and region with geometrical mean on the sample of outlets:

$$PR_{t-1,ij}^t = \prod_{k=1}^n \left( \frac{P_{ijk}^t}{P_{ijk}^{t-1}} \right)^{1/n}$$

Monthly chaining gives the price relative from the base period:

$$PR_{0,ij}^t = PR_{0,ij}^1 * \dots * PR_{t-1,ij}^t$$

Regional CPI is calculated:

$$RI\check{C}KI_{i,0}^t = \sum_i r_{ij} * PR_{0,ij}^t$$

The price relatives are aggregated geographically to form product indices on items for whole Albania:

$$I_{0,i}^t = \sum_j r_{ij} * PR_{0,ij}^t \quad \text{Where: } \sum_j r_{ij} = 1 \quad : \quad \forall_i \text{ (for all cases)}$$

Aggregation over items then gives the CPI of Albania:

$$CPI_0^t = \sum_i w_i * I_{0,i}^t \quad \text{Where: } \sum_i w_i = 1$$

#### Acronyms

P	price
PR	price relative
I	index
CPI	Consumer Price Index
t	time period t
t=0	base period
r	geographical weights
w	item weights
j	numbering of regions
i	numbering of items

The annual rate measures the price change between the current month and the same month of the previous year. This measure is responsive to recent changes in price levels but can be influenced by one-off effect in either month

The monthly rate measures the price change between current month and previous month. Although up-to-date it can be affected by seasonal and other effects.

The 12-month average rate compares average Consumer Price Indices ant the latest 12 month to the average of the previous 12 months.