Series 3: Economic Statistics

Import Price Index
Q4 – 2016
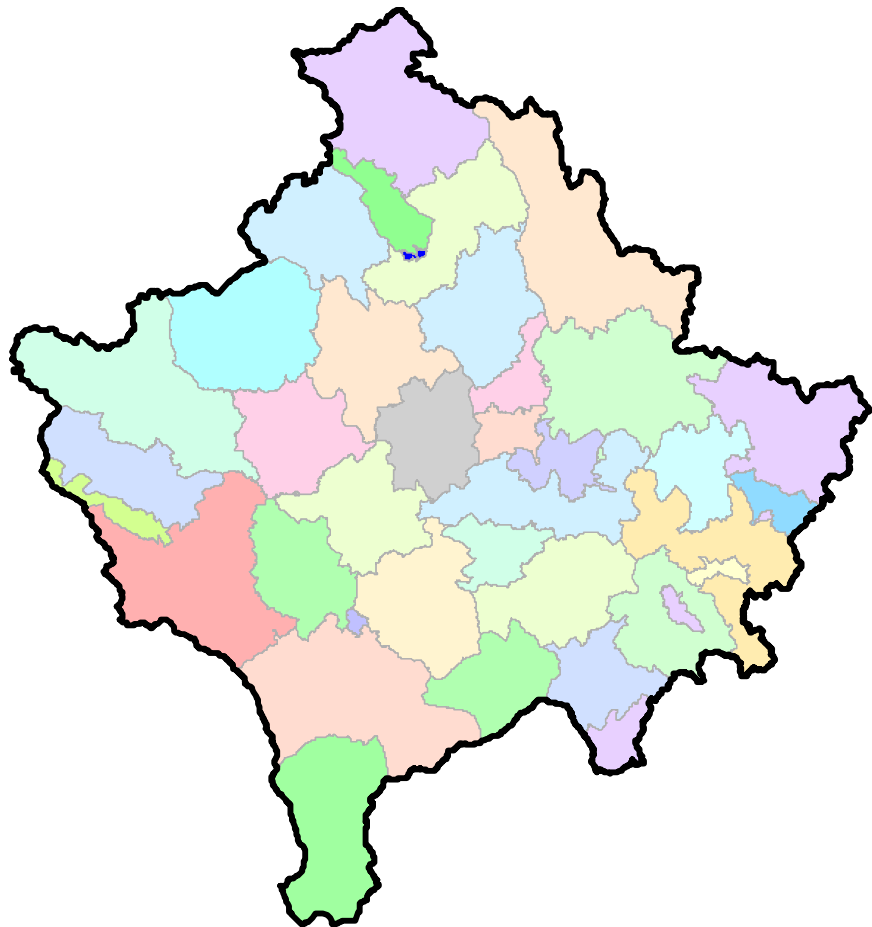
F o r e w o r d

Kosovo Agency of Statistics (KAS), the Departament of Economics and National Accounts, has started to publish the Import Price Index (IMPI) in June 2009. Import prices started to be collected in the beginning of 2006. Prices are collected quarterly and cover the most representative import companies which were active in the most of the municipalities for the period first quarter 2006 – fourth quarter 2016.

This publication contains the table of Import Price Index in Kosovo on a quarterly basis Q1 2006 – Q4 2016, annual average 2006 - 2017 (2010 = 100) with quarterly and annual changes in percentage, graphic presentation, the table for weights, quarter index for Q4 2016, quarterly changes (Q3 2016 – Q4 2016) and annual changes (Q4 2015 – Q4 2016) for sectors according to Harmonised System.

IMPI is developed in compliance with European standards and methodologies, in cooperation with experts from Statistics Sweden and Swedish International Development Cooperation Agency (SIDA). IMPI is under development and more price observations will be added in the future.

Suggestions, comments and remarks can be sent to e-mail: economic@ks-gov.net

Publication is prepared by,

Ilir T.Berisha - Director of Economic Department,
Ibish Asllani - Head of Price Statistics Division
Hamdi Jupolli - Head of Sector

March, 2017   Chief Executive Official, KAS
                                                                                              Isa Krasniqi

Symbols and abbreviations

IMPI	Import Price Index
WCO	World Customs Organization
KSA	Kosovo Statistical Agency
Q1	Quarter 1
Q2	Quarter 2
Q3	Quarter 3
Q4	Quarter 4
:	Figure not available
0	Less than half the unit used
-	Not applicable
%	Percentage
W	Statistical weight
Ø	Average

C o n t e n t s

Import Price Index (IMPI) for Fourth quarter 2016

Import price index in Kosovo increased by 2.0 % between Q3 2016 and Q4 2016. Compared to Q4 2015, the import prices increased by an average of 1.0 %.

Third quarter 2016 – Fourth quarter 2016   2.0 %

Import prices in Kosovo increased by an average 2.0 % between the Q3 of 2016 and the Q4 of 2016. The largest increases by sectors were by mineral products (9.0 %), optical, photo, measuring, medical & musical instruments & timepieces (3.7 %), leather and articles thereof (3.6 %), stone, plaster, ceramic products and glass (3.2 %), wood and articles thereof (2.5 %), vegetable products (2.4 %), miscellaneous manufactured articles (2.1 %), plastics, rubber and articles thereof (1.8 %), live animals; animal products (1.3 %), machinery and electrical appliances (0.8 %), edible oil (0.5 %), paper and articles thereof (0.4 %) and prepared foodstuffs, beverages and tobacco (0.1 %).

The increase was counteracted mainly by decreases of prices of metals and articles of base metals (-0.8 %), transport means (-0.8 %), footwear (-0.8 %), textile and textile articles (-0.5 %), and products of chemical industries (-0.1 %).

Fourth quarter 2015 – Fourth quarter 2016   1.0 %

Import prices in Kosovo increased by an average 1.0 % between the Q4 of 2015 and the Q4 of 2016. The largest decreases by sectors were leather and articles thereof (4.6 %), mineral products (4.3 %), optical, photo, measuring, medical & musical instruments & timepieces (3.7 %), wood and articles thereof (2.5 %), live animals; animal products (2.3 %), miscellaneous manufactured articles (2.3 %), machinery and electrical appliances (1.5 %), products of chemical industries (1.2 %), prepared foodstuffs, beverages and tobacco (1.0 %), stone, plaster, ceramic products and glass (0.9 %), paper and articles thereof (0.2 %) and transport means (0.1 %).

The increase was counteracted mainly by decreases of prices of textile and textile articles (-5.0 %), metals and articles of base metals (-2.5 %), footwear (-2.2 %), edible oil (-0.8 %), plastics, rubber and articles thereof (-0.7 %), vegetable products (-0.3 %).

Table 1: Import Price Index (IMPI) First quarter 2006 – Fourth quarter 2016 (2010=100), quarterly and annual changes in percentage

Quarter	Quarter	Index (2010 = 100)	Quarterly change in per cent	Annual change in per cent
2006	Q 1	86.2	:	:
	Q 2	88.7	2.9	:
	Q 3	89.1	0.5	:
	Q 4	87.7	-1.6	:
	Annual average 2006	**87.9**	**:**	**:**
2007	Q 1	89.4	1.9	3.7
	Q 2	92.1	3.1	3.9
	Q 3	91.1	-1.1	2.2
	Q 4	91.6	0.6	4.5
	Annual average 2007	**91.1**	**:**	**3.6**
2008	Q 1	95.0	3.6	6.3
	Q 2	100.9	6.2	9.5
	Q 3	102.5	1.6	12.5
	Q 4	96.9	-5	5.8
	Annual average 2008	**98.8**	**:**	**8.5**
2009	Q 1	93.7	-3.3	-1.3
	Q 2	94.2	0.5	-6.6
	Q 3	94.0	-0.2	-8.3
	Q 4	94.3	0.4	-2.7
	Annual average 2009	**94.1**	**:**	**-4.8**
2010	Q 1	95.7	1.5	2.1
	Q 2	99.0	3.4	5.1
	Q 3	101.4	2.5	7.9
	Q 4	103.9	2.5	10.2
	Annual average 2010	**100.0**	**:**	**6.3**
2011	Q 1	107.8	3.7	12.6
	Q 2	108.4	0.5	9.5
	Q 3	109.9	1.4	8.3
	Q 4	111.0	1.0	6.8
	Annual average 2011	**109.3**	**:**	**9.3**
2012	Q 1	113.9	2.6	5.6
	Q 2	114.9	0.9	6.0
	Q 3	115.4	0.5	5.0
	Q 4	115.8	0.3	4.3
	Annual average 2012	**115.0**	**:**	**5.2**
2013	Q 1	116.1	0.3	2.0
	Q 2	115.0	-1.0	0.1
	Q 3	114.8	-0.1	-0.5
	Q 4	114.8	0.0	-0.8
	Annual average 2013	**115.2**	**:**	**0.2**
2014	Q 1	115.5	0.6	-0.6
	Q 2	114.3	-1.0	-0.6
	Q 3	114.8	0.5	0.0
	Q 4	114.4	-0.4	-0.3
	Annual average 2014	**114.7**	**:**	**-0.4**
2015	Q 1	113.8	-0.5	-1.4
	Q 2	114.1	0.3	-0.2
	Q 3	113.9	-0.2	-0.8
	Q 4	111.8	-1.8	-2.3
	Annual average 2015	**113.4**	**:**	**-1.2**
2016	Q 1	108.8	-2.6	-4.4
	Q 2	109.6	0.7	-3.9
	Q 3	110.7	1.0	-2.8
	Q 4	112.9	2.0	1.0
	Annual average 2016	**110.5**	**:**	**-2.5**

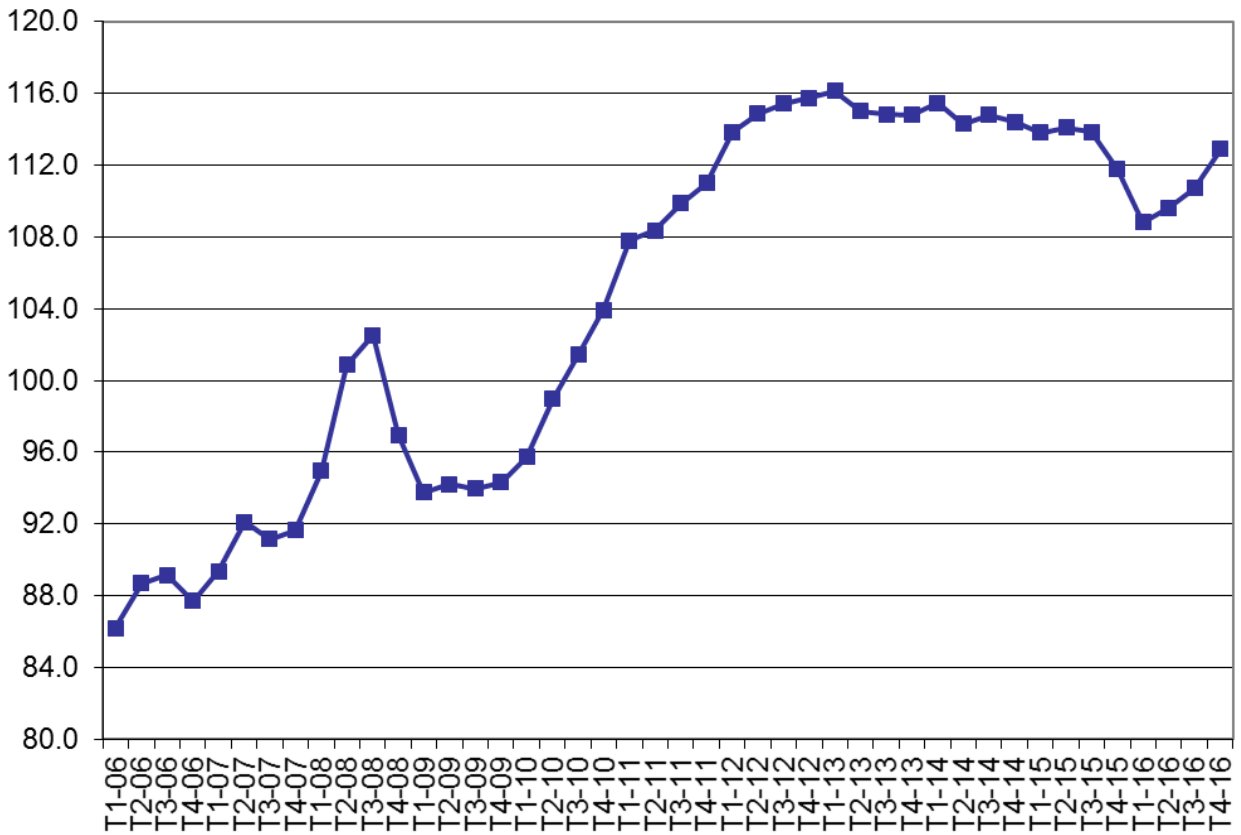**Figure 1: IMPI development, Q1 2006 – Q4 2016 (2010=100)**

Table 2: Weght, index numbers, monthly and annual changes in percentage by sector according to Harmonised System (HS)

Code	Group	Weight	Q4 - 2016 2010=100	Q4 - 2016 Q4 - 2016	Q4 - 2016 Q4 - 2015
01-21	**TOTAL IMPI**	**1000**	**112.9**	**2.0**	**1.0**
01	Live animals; animal products	42	123.1	1.3	2.3
02	Vegetable products	54	164.2	2.4	-0.3
03	Edible oils	10	151.5	0.5	-0.8
04	Prepared foodstuffs, beverages, and tobacco	135	112.5	0.1	1.0
05	Mineral products	155	108.4	9.0	4.3
06	Products of chemical industries	85	108.5	-0.1	1.2
07	Plastics, rubber and articles thereof	63	110.6	1.8	-0.7
08	Leather and articles thereof	2	105.7	3.6	4.6
09	Wood and articles thereof	24	123.9	2.5	2.5
10	Paper and articles thereof	14	114.3	0.4	0.2
11	Textile and textile articles	40	108.9	-0.5	-5.0
12	Footwear	12	151.7	-0.8	-2.2
13	Articles of stone, plaster, ceramic products and glass	40	110.1	3.2	0.9
14	Pearls, precious stones, metals etc.	:	:	:	:
15	Base metals and articles of base metals	99	92.1	-0.8	-2.5
16	Machinery appliances and electrical appliances	119	110.5	0.8	1.5
17	Transport means	63	110.4	-0.8	0.1
18	Optical, photo, measuring, medical & musical instruments, & timepieces	12	111.9	3.7	3.7
19	Arms and ammunition	:	:	:	:
20	Miscellanous manufactured articles	30	117.4	2.1	2.3
21	Works of art	:	:	:	:

Methodology

Prices were collected quarterly in seven regional centers of Kosovo: Gjakova, Gjilan, Mitrovica, Peja, Prizren, Prishtina and Ferizaj and which cover the most representantative import companies which were active in most of the municipalities.

Starting from first quarter 2006, prices for around 180 items from seventy companies have been collected on quarterly basis. During 2006 many new price observations were added and for the period 2007-2008 the number of prices collected was around 250. Since 2009 the number of prices collected was around 300 and from 2015 the number of prices is about 500.

The results are presented in accordance with the Harmonized System of the World Customs Organization (WCO).

Price data is collected for a sample of typical transactions relating to goods imported in Kosovo.

Sampling and calculation of weights

The sample is drawn from external trade data. Those data have been also used for the calculation of weights. The weights are based on information from trade data from Y-1 (previous year) and are updated annually. By updating the weights each year, the IMPI basket will reflect changes in trade patterns. The IMPI will be affected by both price changes and changes in the import structure.

Variables

The main variable is the price; it can be reported in any currency. Prices reported in foreign currencies are converted into EUR. The invoice currency and the reporting currency are, therefore, complementary variables. Where prices are reported in foreign currencies, the Swedish Central Bank's quarterly average exchange rates are used for converting into EURO.

Index formulas

The Import price index can be described as a Laspeyres-type chain index with annual links. A Laspeyres index is defined as

$$I^t = \frac{\sum_{i=1}^{n} P_i^t Q_i^0}{\sum_{i=1}^{n} P_i^0 Q_i^0} = \sum_{i=1}^{n} \frac{P_i^0 Q_i^0}{\sum_{i=1}^{n} P_i^0 Q_i^0} \times \frac{P_i^t}{P_i^0}$$

Where P^0 and P^t are the price per unit in the base period (0) and the comparison period (t), respectively, and Q^0 is the quantity in the base period. Summation is across the n products. In the centre element above, the index is expressed as the ratio between the summated value of the baseperiod quantities at the comparison-period and base-period price level, respectively. The index can also be expressed, as in the final element, as an average of the goods' price relatives weighted with the base-period values.

The index links are calculated with the current quarter q in year y as the comparison period, and with the fourth quarter in year **y-1** as price reference period. The weighting period is the year **y-1**. A link is thus defined as:

$$I^{y,q}_{y-1,q4} = \sum_{s=1}^{k} \frac{V_s}{\sum_{s=1}^{k} V_s} \times \frac{p_s^{y,q}}{p_s^{y-1,q4}}$$

Where the value weight **V_s** is the value of the transactions in year **y-1** that are represented by the specification **s**. Summation is across the **k** specifications.

Calculating the chained index of IMPI

The chained index number is calculated for quarters and indicates the particular quarter's price level compared with the average price level in 2008 (2008=100).

$$I^{y,q}_{2010} = \frac{100}{\frac{1}{4}\sum_{q=1}^{4} I^{2010,q}_{2009,q4}} \times \prod_{Y=2010}^{y-1} I^{Y,q4}_{Y-1,q4} \times I^{y,q}_{y-1,q4}$$

Calculating changes

The quarterly change is calculated as:

$$\left[\left(\frac{IMPI_0^{Y,q}}{IMPI_0^{Y,q-1}}\right) - 1\right] * 100 = \text{Quarterly percentage change}$$

$IMPI_0^{Y,q} = $ Import price index for the current quarter q

$IMPI_0^{Y,q-1} = $ Import price index for the previous quarter q-1

The yearly change is calculated as:

$$\left[\left(\frac{IMPI_{2010}^{Y,q}}{IMPI_{2010}^{Y-1,q}}\right) - 1\right] * 100 = \text{Yearly percentage change}$$

$IMPI_{2010}^{Y,q} = $ The chained Import price index for the current quarter q

$IMPI_{2010}^{Y-1,q} = $ The chained Import price index for the previous year and quarter q

Kosovo Agency of Statistics

short description

Kosovo Agency of Statistics is a professional institution which deals with collection, processing and publication of official statistical data. As such acts since 1948 and has passed through several historical stages, structured according to state regulation of those times.

On 2 August 1999, the Agency has resumed his professional work (after nine years of interruption of all statistical series detrimental to the interest of Kosovo), as an independent institution under the Ministry of Public Administration. Since 12.12.2011 the Agency operates in the frames of the Prime Minister's Office. Office is funded by the Kosovo Consolidated Budget, but also by donors for specific projects and for technical professional support.

Kosovo Agency of Statistics acts according to the Law No. 04/L-036 which entered into force on 12.12.2011. Strategic development plan 2009-2013 is the middle term implementation for the development of statistical system in correlation with the European Union statistics (EUROSTAT).

Kosovo Agency of Statistics has this organizational structure: production departments; (Department of Economic statistics and National Accounts, Department of Agriculture and Environment statistics and Department of Social statistics. **Support Departments**; Department of Methodology and Information Technology, Department of Policy Planning, Coordination and Communication, Department of Census and survey and Department of Administration. **Within the Agency are also established Regional Offices;** Gjakove, Gjilan, Mitrovica, Peja, Prizren, Pristina and Ferizaj

Number of employees and budget are still limited. In KAS are employed in total 143 workers, of whom 98 (68,58 %) at the headquarters of the Agency, while in the Regional Offices, 45 (31,5%). Agency's educational qualifying structure is as follows: 61,7% with university education,15,4% with with non-tertiary education, and 17.5% with secondary education.

We have professional and technical cooperation with all Ministries of the Government of Kosovo, especially with the Ministry of Economy and Finance, Central Bank of Kosovo, with international institutions, EUROSTAT, International Monetary Fund, World Bank, Sweden's SIDA, DFID, UNFPA, UNDP, UNIVEF, and with the statistical institutions of the countries in the region.

Kosovo Agency of Statistics almost completely covers the territory of Kosovo, based on the statistical structure of the enumeration areas as the basic unit and sole in the country from which it gets first hand information. All surveys conducted in the field use the extension of the samples in these enumeration areas but also a statistical methodology according to international recommendations. During the collection of statistical data and reports from reporting entities are involved professionals, technicians, administrators, servants of the country offices, field enumerators from regional offices, etc.

In 2011, the project of Population Census , Households and Dwellings was successfully implemented, and in 2014 was successfully carried out the Agriculture Census. The result obtained from these censuses will have an important role in the development policies.

The mission of the Agency; to meet the needs of users with qualitative statistical data, objective, in time and space so that users have reliable base to conduct regular analysis in the interest of planning and project development at the municipal and country level. To support government institutions, scientific institutes, research academies, businesses in order to provide proper information for decision-makers and other users in Kosovo.

- o **Address: KOSOVO AGENCY OF STATISTICS**
       Street. "Zenel Salihu", No. 4, 10000 Pristina
- o **Telephone:** +381 (0) 38 200 31 129
       CEO: +381 (0) 38 200 31 112
- o **Fax:**:   +381 (0) 38 235 033
- o **E-mail:**   **infoask@rks-gov.net**
- o **Web:**   **http://ask.rks-gov.net**