

Import price Index

Third quarter, 2016

Tirana, 06 December 2016: In the third quarter 2016, Import Price Index reached 96.7 % compared with base year 2012. (2012 = 100). In the current quarter index decreased by 1.6 % comparing with the third quarter 2015 and by 0.6 % comparing with the previous quarter.

Fig. 1 Monthly Import Price Index , January 2015 – September 2016



The annual change of index is -1.6 %. Import Price Index in “Mining and quarrying” and “Manufacturing” sections signed a decrease respectively by 6.1 % and 1.6 %.

Quarterly change of index is -0.6 %. Import Prices in manufacturing section signed a decrease by 0.5 % compared with the previous quarter. In this section we can mention the import prices decrease of the products in the activities “Manufacture of machinery and equipment” by 3.3 % and “Manufacture of papers and paper products” by 3.1 %. While the import prices of products in activities “Manufacture of textiles” and “Manufacture of transport vehicles, trailers and semi-trailers” increased respectively by 2.5 % dhe 1.5 %.

Import Price Index in “Mining and quarrying” section has signed a decrease by 0.5 %, where we can mention the highest decrease of other mining and quarrying products by 0.9 %.

Tab. 1 Import Price Index

2012=100

%

NACE	Description	Weights	07- 16	08- 16	09-16	III-16
	Total	100.0	96.7	96.9	96.5	96.7
B	Mining and quarrying	0.4	93.4	93.3	93.1	93.2
05	Coal and lignite	0.2	93.1	93.1	93.1	93.1
08	Other mining and quarrying	0.2	92.2	92.0	91.7	92.0
C	Manufacturing	95.5	97.7	97.7	97.5	97.6
10	Manufacture of food products	11.0	93.3	94.4	94.1	93.9
11	Manufacture of beverages	2.0	98.1	96.6	98.3	97.7
12	Manufacture of tobacco products	1.3	100.2	100.2	100.2	100.2
13	Manufacture of textiles	5.5	111.4	111.5	111.5	111.5
14	Manufacture of dressing; wearing apparel	5.6	105.6	105.0	104.1	104.9
15	Manufacture of leathers and leather products	5.2	91.9	91.9	91.9	91.9
16	Manufacture of woods and products of wood and oak, except furniture; manufacture of articles of straw and reed	1.4	103.2	103.9	103.9	103.7
17	Manufacture of papers and paper products	3.0	93.3	92.6	92.0	92.6
18	Paper printing and regrouping of recorded media	0.0	78.4	78.4	78.4	78.4
19	Manufacture of coke and petroleum products refinery	8.4	93.4	92.0	90.4	92.0
20	Manufacture of chemicals and chemical products	7.7	97.2	97.7	98.1	97.7
21	Manufacture of pharmaceutical products and pharmaceutical preparations	3.9	103.3	103.2	103.1	103.2
22	Manufacture of rubbers and plastic products	4.0	96.5	96.9	96.4	96.6
23	Manufacture of non-metallic mineral products	3.2	95.4	95.7	95.4	95.5
24	Metallurgy	5.2	90.9	90.8	90.8	90.8
25	Manufacture of fabricated metal products, except machinery and equipment	4.5	103.3	103.1	103.2	103.2
26	Manufacture of optics, electronics and computer products	5.0	100.4	100.5	100.3	100.4
27	Manufacture of electrical equipment	5.3	99.5	99.4	99.5	99.5
28	Manufacture of machinery and equipment	6.9	104.8	104.5	105.0	104.7
29	Manufacture of transport vehicles, trailers and semi-trailers	3.4	108.3	108.3	108.3	108.3
30	Other transport equipment	0.6	87.2	87.2	87.2	87.2
31	Manufacture of furniture	0.7	96.8	96.8	96.8	96.8
32	Other industries	1.6	99.3	99.5	99.7	99.5
D	Electricity, gas, steam and air conditioning	2.8	75.3	80.9	75.8	77.3
35	Electricity, gas, steam and air conditioning	2.8	75.3	80.9	75.8	77.3
E	Water supply, treatment activities and waste management	1.3	74.6	74.8	74.8	74.7
38	Activities of collection, treatment and disposal of waste, materials recovery	1.3	74.6	74.8	74.8	74.7

Tab. 2 Quarterly and annualy change of Import Price Index

			%	
NACE	Description	Weights	III-16 / II - 16	III-16 / III-15
	Total	100.0	-0.6	-1.6
B	Mining and quarrying	0.4	-0.5	-6.1
05	Coal and lignite	0.2	0.0	-10.7
08	Other mining and quarrying	0.2	-0.9	-1.7
C	Manufacturing	95.5	-0.5	-1.6
10	Manufacture of food products	11.0	0.8	-0.1
11	Manufacture of beverages	2.0	0.2	-1.7
12	Manufacture of tobacco products	1.3	-1.1	-1.6
13	Manufacture of textiles	5.5	2.5	2.3
14	Manufacture of dressing: wearing apparel	5.6	-1.1	3.7
15	Manufacture of leathers and leather products	5.2	0.1	1.8
16	Manufacture of woods and products of wood and oak, except furniture; manufacture of articles of straw and reed	1.4	0.9	-1.7
17	Manufacture of papers and paper products	3.0	-3.1	-3.2
18	Paper printing and regrouping of recorded media	0.0	0.0	-3.2
19	Manufacture of coke and petroleum products refinery	8.4	-0.9	-6.2
20	Manufacture of chemicals and chemical products	7.7	-0.3	-1.9
21	Manufacture of pharmaceutical products and pharmaceutical preparations	3.9	-0.5	0.3
22	Manufacture of rubbers and plastic products	4.0	-1.5	-0.8
23	Manufacture of non-metallic mineral products	3.2	-1.4	1.6
24	Metallurgy	5.2	-1.4	-5.9
25	Manufacture of fabricated metal products, except machinery and equipment	4.5	-0.2	-5.9
26	Manufacture of optics, electronics and computer products	5.0	-0.4	-0.6
27	Manufacture of electrical equipment	5.3	-0.5	0.1
28	Manufacture of machinery and equipment	6.9	-3.3	0.9
29	Manufacture of transport vehicles, trailers and semi-trailers	3.4	1.5	-1.9
30	Other transport equipment	0.6	0.3	0.8
31	Manufacture of furniture	0.7	-0.7	-0.6
32	Other Industries	1.6	0.5	0.3
D	Electricity, gas, steam and air conditioning	2.8	-0.4	-8.0
35	Electricity, gas, steam and air conditioning	2.8	-0.4	-8.0
E	Water supply, treatment activities and waste management	1.3	-8.6	-17.9
38	Activities of collection, treatment and disposal of waste, materials recovery	1.3	-8.6	-17.9

Metodology

The Import price indices measures changes in the prices of imports. Import is every product that is not produced in Albania but imported from a third country or supplied from another. All data under this heading are index data. Percentage changes are available.

Import price index is published at two levels of the CPA 2008, i.e. at the section level (one letter code; C-Manufacturing) and at the division level (two-digit numerical code; C10-Manufacture of food products).

This statistical survey is carried out on the basis of the National Official Statistical Program 2012 – 2016 and calculation and methodology used are based on the Council Regulation (EC) No 1165/98 of 19 May 1998 concerning short term statistics, the Regulation (EC) No. 1158/05 of the European Parliament and of the Council of 6 July 2005 amending Council Regulation (EC) No. 1165/98 concerning short term statistics.

Classification. The classification used for these statistics is the Statistical Classification of Economic Activities NACE Rev.2. Import prices are collected, processed and published on the basis of the Classification of Products by Activity (CPA 2008). Goods are classified into individual CPA activities from the field of products (classes, groups, divisions, subsections and sections). Products are classified by activity in which they are imported. Classification of products by activity in which they are imported allows accordance between classification CPA 2008 and NACE Rev.2.

The data are published at 2-digit level of the NACE Rev.2 classification (an EU standard classification of economic activities) for:

- Section B Mining and quarrying
- Section C Manufacturing
- Section D Electricity, gas and steam supply
- Section E Water supply, sewerage and waste.

Observation unit. Observation units are enterprises which supply or import products from foreign markets. The survey covers all the enterprises engaged in production activity, and also those engaged in trade activity. One of the conditions that must be fulfilled in order for an enterprise to become included in the survey is that it supplies the products on the Albanian market.

The survey is conducted for the first time in 2012. This year is considered as the base year of index calculation (2012 = 100). The time series is 2012 – Q.3.2016.

The sample selection of products and enterprises is based on statistical data of Foreign Trade Statistics and Import Custom declarations. The weights and all data are calculated automatically in SQL programming.

In 2016 the IPI survey covered about 620 reporting units, which reported every month the prices for around 1054 products.

Data collection The IPI data are based on import prices reported by establishments of all sizes selected as being representative of the whole population. Enterprises fill in prices in the questionnaires every quarter with the information for each month by a face to face interview of enumerator with contact person of establishment. The questionnaire is individually prepared for each enterprise. The type of price is an average price of current month. The average price of previous month is pre-printed in the quarterly survey. The questionnaires include only the representative import products selected by enterprises. Each representative import product has a six-digit code from CPA, description of product, unit of measure for which the price is stated and country of origin.

Calculation of the index The IPI is a chain-index with yearly links of Laspeyres type (2012 = 100). When using a “chain-index” new weights could be assigned each year if felt necessary. In this chain-index each transaction will be compared with its previous year December price. These price relatives will be weighted together to give index numbers for each 6-digit product group. These index numbers are aggregated to give index numbers for the 2-digit NACE and so on to give the total IPI. Hence, is ended up with monthly indices having as a base December of the previous year.

Calculation formula

$$I_0^t = \frac{\sum_k P_{t;k} Q_{0;k}}{\sum_k P_{0;k} Q_{0;k}} = \sum_k \frac{P_{0;k} Q_{0;k}}{\sum_k P_{0;k} Q_{0;k}} \times \frac{P_{t;k}}{P_{0;k}}$$

where P₀ and P_t is the unit price at the base period (0) and the comparison period (t), and Q₀ denotes the quantity at the base period. The summation is done over products (indexed by k). The index in the middle stage above is written as the ratio by the sum of the value of the quantity at the base period at the comparison period and the base period prices. The index could also, as in the last stage above, be written as one where the price ratios are weighted by the values in the base period. [Actual quantities will never be used in the calculations]

Price concept Import prices are prices at which importers buy products in largest quantities. Prices do not include duties and taxes on imports but they include discounts and rebates which supplier approves to buyers. Reporting units give the price in the currency in which the transaction was conducted. For calculating the index, the price is converted into the national currency on the basis of the reference exchange rate of the Albanian Central Bank.

Price ration is calculated automatically whenever price is entered, adjusted or imputed. The price ratio is also automatically adjusted when the base price is adjusted. One price ratio is calculated for each product each month. It is the current price divided either by the actual base price or by an adjusted base price.

Weighting Arithmetically weighted averages of individual observations will form the index numbers. The index (short-term-link) for a 6-digit NACE is calculated by multiplying all weights by their corresponding index numbers (price ratio) then divide by the sum of the weights.

Imputation. The normal imputation method is targeted mean imputation. That is imputing the current price change with the closest higher level of aggregation. The imputation is done by multiplying the previous reported price by the average monthly price movement of the closest higher level of aggregation (6-digit or 2-digit).

Measures of index

The annual change measures the price change between the current quarter and the same quarter of previous year.

Quarterly change measures the price changes between current quarter and previous quarter.