NOTES ON METHODOLOGY

Introduction

Industrial producer price indices on the domestic, non-domestic and total market are presented on an interannual chain and on a month-on-month basis as well as on the fixed base year 2021 = 100 due to the harmonisation with the Regulation (EU) 2019/2152 of the European Parliament and of the Council of 27 November 2019 on European business statistics, repealing 10 legal acts in the field of business statistics.

Concepts, definitions and terminology are completely harmonised in this First Release with those used and regulated by the EU. Therefore, the term "industrial producers' price index" has been changed to "industrial producer price index".

According to the EU terminology, the term "industrial producer price index" is also known as the "industrial output index" and the term "industrial producer prices" should be considered its synonym. If not specified, the term "industrial producer price index" denotes the "total industrial producer price index" (on the domestic and the non-domestic market).

The concept of industrial producer prices and their purpose

Total industrial producer price index is composed of two sub-indices, that is, the industrial producer price index on the domestic market and the industrial producer price index on the non-domestic market. The combination of sub-indices for these two markets provides the changes in given products/services, while their aggregation provides the divisions of products and activities.

Industrial producer price index measures the changes of producer prices of manufactured goods produced in the Republic of Croatia and sold by producers on the domestic (Croatian) and/or the non-domestic (non-Croatian) market.

Industrial producer price index on the domestic market measures the changes of producer prices of manufactured goods that are produced and sold by producers on the domestic (Croatian) market.

Industrial producer price index on the non-domestic market, further subdivided into the euro area and the non-euro area, measures the changes of producer prices of manufactured goods that are sold by producers on foreign (non-Croatian) market.

The Decision on the National Classification of Activities 2007 – NKD 2007 will be used in the survey until 31 December 2027 in accordance with the transitional provision from Article 6 of the Decision on the National Classification of Activities 2025 – NKD 2025 (NN, No. 47/24): "For the statistical and analytical needs of official statistics of the Republic of Croatia in the transitional period until 31 December 2027, the Decision on the National Classification of Activities 2007 – NKD 2007 (NN, Nos 58/07 and 72/07 – correction) will be used simultaneously", and Regulation (EU) 2019/2152 of the European Parliament and of the Council of 27 November 2019 on European business statistics, repealing 10 legal acts in the field of business statistics.

The industrial producer price index is an important short-term indicator of the business cycle that shows monthly price changes in the total industrial sector (the NKD 2007 sections B, C, D and E – only division 36) on the domestic and the non-domestic market and further subdivided into the euro area and the non-euro area. According to the EU concept, it is an important business indicator that permits monthly monitoring of prices at different stages of the manufacturing process. It is also used for distinguishing effective growth of an activity due to price changes and provides information to the business community on particular markets of their interest. It can also indicate inflationary changes before they reach consumers.

Presentation of the industrial producer price index

All indices are presented in gross (unadjusted) form. They were calculated on the basis of data collected through the revised Monthly Survey on Industrial Producer Prices (IND-3/KPS/M form).

Legal and methodological framework

The Monthly Survey on Industrial Producer Prices (IND-3/KPS/M form) is carried out directly by the Croatian Bureau of Statistics on the basis of the Official Statistics Act (NN, Nos 25/20 and 155/23). The internet application (CAWI method) is used in data collection. The reporting units directly access this application and enter their data on the basis of the instructions given.

The concepts and definitions used in the IND-3/KPS/M Survey are harmonised with the EU concepts and definitions, especially with the Regulation (EU) 2019/2152 of the European Parliament and of the Council and the Commission Implementing Regulation (EU) 2020/1197.

Scope and coverage

The reporting units included in the IND-3/KPS/M Survey are selected enterprises (legal entities and tradesmen) that produce selected products as defined in the Nomenclature of Industrial Products – NIP, classified in the NKD 2007 (NN, Nos 58/07 and 72/07 – correction) activity sections B Mining and quarrying, C Manufacturing, D Electricity, gas, steam and air conditioning supply and E Water supply; sewerage, waste management and remediation activities (only division 36).

In order to collect data on industrial producer prices on the domestic and the non-domestic market, the IND-3/KPS/M Survey covers a representative sample of industrial products at the level of covered activity classes of the NKD 2007, that is, all products that generated sales **exceeding 3 million euro on the domestic market and 2 million euro on the non-domestic market** according to the results of the PRODCOM Survey on Industrial Production (IND-21/PRODCOM/G form), The selection of enterprises has been done according to their share in the production of selected products, separately for the domestic and the non-domestic market.

Reference point

All industrial producer prices are recorded as transaction prices in effect on the 15th day of the month indicated. The prices at which a producer sells products at the domestic and/or the non-domestic market in the largest quantities to known buyer are recorded.

Completed IND-3/KPS/M forms are delivered directly on the website of the Croatian Bureau of Statistics in the period from 16th to 26th of the current reporting month (<u>https://podaci.dzs.hr/en/</u>).

Definitions

Producer price indices on the domestic and the non-domestic market require a separate compilation according to the destination of a product in order to obtain the producer price indices on the domestic and the non-domestic market.

The residency of the third party that has ordered or purchased the product determines the destination. The domestic market is defined when both the third party/buyer and the reporting unit are residents of the Republic of Croatia, while the non-domestic market is defined when the third party/buyer is not a resident of the Republic of Croatia.

Industrial producer prices on the domestic market are either the prices at which a producer sells products on the domestic market in the largest quantities, loaded free on a rail (truck) at a factory gate at the location of the producer or the price charged to another company by the producer. The selling price is increased for the amount of the compensation obtained by the seller and deducted for the amount of the discount and rebate as well as the value added tax and excises.

Industrial producer prices on the non-domestic market are prices at which a producer sells products on the non-domestic market in the largest quantities at the national border, FOB (free on board). The selling price is increased for the amount of the compensation obtained by the seller and deducted for the amount of the discount and rebate as well as the value added tax and excises.

Reporting of data for the non-domestic market according to the euro area criterion

The territory of the European Union (EU-26) comprises the national territories of 26 EU Member States, and the data for producer prices of items sold on the **non-domestic market** are reported for the European Union market according to the criterion of the national markets of the Member States using the euro as currency (from the euro area) and those Member States not using the euro as currency (from the non-euro area). For the reporting of data, the following country composition of the euro area applies:

From the euro area (EA-19) – refers to the territories of 19 EU Member States that have adopted a common currency (euro), i.e. Austria, Belgium, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Portugal, Slovakia, Slovenia and Spain.

From the non-euro area (EU-7) – refers to the territory of the other seven EU Member States that have not yet adopted a common currency (euro), i.e. to Bulgaria, the Czech Republic, Denmark, Hungary, Poland, Romania and Sweden, and to other non-EU states.

Calculation method

Total industrial producer price index is composed of two sub-indices, that is, the industrial producer price index on the domestic market and the industrial producer price index on the non-domestic market.

Industrial producer price indices on the domestic market and the non-domestic market are calculated according to the Laspeyres formula for different levels of the NKD 2007.

Individual indices for each representative product are calculated from data on prices by dividing prices of the current period by prices of the base period (December of the previous year).

Aggregate indices, that is, indices of groups, divisions and sections of the NKD 2007. as well as the total industry index are calculated by a weighted arithmetic mean from individual indices according to the modified Laspeyres formula:

$$I = \frac{\sum \frac{P_n}{P_o} x W_o}{\sum W_o} x 100$$

Whereby:

I is an index of a group, division, section, subsection and the total index

Pn is a price in the current period (month)

Po is a price in the base period

Wo is the relative sale structure in the base period.

Weights

The weighting system for reference year is based on the value of products sold from the PRODCOM Survey on Industrial Production (IND-21/PRODCOM/G form). The weighting system is changed at the beginning of every reference year in relation to changes in prices.

Data publishing

The total industrial producer price indices, both on the domestic and the non-domestic market, are published for the total industry according to the NKD 2007 sections and divisions and according to MIGs 2009. aggregates (end use of products) grouped by the NKD 2007 activity groups and divisions. The total industrial producer price indices on the non-domestic market, subdivided into the euro area and the non-euro area, are published for the total industry according to the NKD 2007 and according to the MIGs 2009 aggregates, on the fixed base year 2021 = 100, in the STS database https://stsbaza.dzs.hr/en.

The grouping of the NKD 2007 activity groups or divisions according to the MIGs 20091), using alphabetic marks of abbreviations, was done as follows:

- AI Intermediate goods: the NKD 2007. divisions and groups: 07- Mining of metal ores (excl. 07.21 - Mining of uranium and thorium ores), 08 - Other mining and quarrying, 09 - Mining support service activities, 10.6 - Manufacture of grain mill products, starches and starch products, 10.9 - Manufacture of prepared animal feeds, 13.1 - Preparation and spinning of textile fibres, 13.2 - Weaving of textiles, 13.3 -Finishing of textiles, 16 - Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials, 17 - Manufacture of paper and paper products, 20.1 - Manufacture of basic chemicals, fertilisers and nitrogen compounds, plastics and synthetic rubber in primary forms, 20.2 - Manufacture of pesticides and other agrochemical products, 20.3 -Manufacture of paints, varnishes and similar coatings, printing ink and mastics, 20.5 - Manufacture of other chemical products, 20.6 - Manufacture of man-made fibres, 22 - Manufacture of rubber and plastic products, 23 - Manufacture of other non-metallic mineral products, 24 - Manufacture of basic metals (excl. 24.46 - Processing of nuclear fuel), 25.5 - Forging, pressing, stamping and roll-forming of metal; powder metallurgy. 25.6 - Treatment and coating of metals; machining, 25.7 - Manufacture of cutlery, tools and general hardware, 25.9 - Manufacture of other fabricated metal products, 26.1 -Manufacture of electronic components and boards, 26.8 - Manufacture of magnetic and optical media, 27.1 - Manufacture of electric motors, generators, transformers and electricity distribution and control apparatus, 27.2 - Manufacture of batteries and accumulators, 27.3 - Manufacture of wiring and wiring devices, 27.4 - Manufacture of electric lighting equipment and 27.9 - Manufacture of other electrical equipment
- AE Energy: the NKD 2007. divisions: 05 Mining of coal and lignite, 06 Extraction of crude petroleum and natural gas, 19 Manufacture of coke and refined petroleum products, 35 Electricity, gas, steam and air conditioning supply and 36 36 Water collection, treatment and supply
- BB Capital goods: the NKD 2007. divisions and groups: 25.1 Manufacture of structural metal products, 25.2 Manufacture of tanks, reservoirs and containers of metal, 25.3 Manufacture of steam generators, except central heating hot water boilers, 26.2 Manufacture of computers and peripheral equipment, 26.3 Manufacture of communication equipment, 26.5 Manufacture of instruments and appliances for measuring, testing and navigation; watches and clocks, 26.6 Manufacture of irradiation, electromedical and electrotherapeutic equipment, 28 Manufacture of machinery and equipment n.e.c., 29 Manufacture of motor vehicles, trailers and semi-trailers, 30.2 Manufacture of railway locomotives and rolling stock, 32.5 Manufacture of medical and dental instruments and supplies and 33 Repair and installation of machinery and equipment
- CD Consumer durables: the NKD 2007. divisions and groups: 26.4 Manufacture of consumer electronics, 26.7 Manufacture of optical instruments and photographic equipment, 27.5 Manufacture of domestic appliances, 30.9 Manufacture of transport equipment n.e.c., 31 Manufacture of furniture, 32.1 Manufacture of jewellery, bijouterie and related articles and 32.2 Manufacture of musical instruments
- CN Consumer non-durables: the NKD 2007. divisions and groups: 10.1 Processing and preserving of meat and production of meat products, 10.2 Processing and preserving of fish, crustaceans and molluscs, 10.3 Processing and preserving of fruit and vegetables, 10.4 Manufacture of vegetable and animal oils and fats, 10.5 Manufacture of dairy products,10.7 Manufacture of bakery and farinaceous products, 10.8 Manufacture of other food products, 11 Manufacture of beverages, 12 Manufacture of tobacco products , 13.9 Manufacture of other textiles, 14 Manufacture of wearing apparel, 15 Manufacture of leather and related products, 18 Printing and reproduction of recorded media, 20.4 Manufacture of soap and detergents, cleaning and polishing preparations, perfumes and toilet preparations, 21 Manufacture of basic pharmaceutical products and pharmaceutical preparations, 32.3 Manufacture of sports goods, 32.4 Manufacture of games and toys and 32.9 Manufacturing n.e.c.