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CONSTRUCTION PRODUCER PRICE INDEX FOR CIVIL ENGINEERING

LEGAL BASIS

Annual report on prices of construction works for civil engineering (G GRADJ-PCG) is carried out pursuant to the Law on Statistics of Republika Srpska ("Official Gazette of Republika Srpska", No. 85/03) and in accordance with the Statistical Programme 2022-2025.

The obligation to provide the Republika Srpska Institute of Statistics (the Institute) with the data is based on Article 8 of the Law on Statistics of Republika Srpska ("Official Gazette of Republika Srpska", No. 85/03).

Pursuant to Articles 27 and 28 of the Law on Statistics of Republika Srpska and in accordance with the Rules of protection of confidential data, the Institute must protect the confidential data submitted. In this regard, the data collected for statistical purposes may not be used for other purposes nor published as individual data by the Institute.

METHODOLOGY

The methodology for the implementation of the Annual report on prices construction works for civil engineering complies with European statistical standards and its content is defined in the EU Methodology Short-Term **Business** Statistics of https://ec.europa.eu/eurostat/documents/3859598/5895945/KS-BG-06-001-EN.PDF/609c47c3-220a-48b4-874f-d9c589bf302c?version=1.0 and EU Regulation 1503/2006 https://eurlex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32006R1503&from=EN as regards definition of variables, list of variables and frequency of data compilaiton.

Aim and content

The aim or the result of this statistical activity are annual price indices for construction works performed while constructing civil engineering structures (main roads, highways, bridges and tunnels). Construction producer price indices for civil engineering are calculated based on collected prices, which are observed over time. These indices are mainly used as deflators; thus, it is possible to compare deflated values over a period (price effect is excluded).

Reporting units and observation units

Annual report on prices of construction works for civil engineering is submitted by economically active enterprises from the Statistical Business Register.

Observation units are actually contracted or invoiced prices of construction works for civil engineering. Prices are collected from construction enterprises engaged in civil engineering and main roads, highways, bridges and tunnels construction activities.

Coverage

The statistical activity (G GRADJ-PCG) covers active enterprises whose main activity, according to the Classification of Economic Activities KD BiH 2010 (NACE Rev.2) is classified in the section F - Construction in division 42 – Civil engineering – class 42.11 - Main roads and highways construction activities and class 42.13 - Bridges and tunnels construction activities.

Method and period of data collection

The data (prices) are collected using the reporting method, through the Annual report on prices of construction works for civil engineering, for main roads, highways, bridges and tunnels.

The form G GRADJ-PCG contains a different number of representative construction works (items) for which producer prices are monitored, broken down by specific type of civil engineering structures:

- Main roads five groups of works ,
- Highways seven groups of works,
- Bridges nine groups of works, and
- Tunnels ten groups of works.

The form also includes identification and address data, as well as data on type of activity.

Data processing

Construction producer price indices for civil engineering are calculated using the component cost method, which is commonly used to compile output price indices. This method regards construction/civil engineering output as bundles of standardised homogenous components. These components correspond to the supply of standard operations (abovementioned four types of works). A representative construction (project) is chosen to define a selection of construction works and the corresponding weights.

Price indices are compiled based on prices of standard components/construction works in the current year and in the previous year. The index is compiled for each instance of construction works at the enterprise level, thus obtaining the elementary index (index of elementary aggregates). The geometric mean for each instance of works is used to calculate the total construction producer price index for civil engineering. Indices for subgroups and groups and the total index are obtained by weighting. The weighting structure remains unchanged over a five-year period.

Aggregated (group) indices are calculated by weighting individual indices using the Laspeyres formula.

Weights

The system of weighting for the construction producer price index for civil engineering, for main roads, highways, bridges and tunnels, is based on the estimated bill of quantities for these four categories of structures in Bosnia and Herzegovina. Estimated bills of quantities contain specific types of works, for which construction specifications are also available. Weights at the level of groups of works are calculated using the ratio of the value of performed construction works at the group level to the value of all performed construction works for a typical civil engineering structure. Each group of works consists of a certain number of subgroups of construction works. Each subgroup of works consists of a certain number of construction works/items.

Definitions of main characteristics

Price is the unit value of construction works performed by construction enterprises in the observation year, i.e. the price that would have been offered for the given type of works in case the works were not performed in the observation period. The price includes the unit-invoiced value of used material, the labour expended and the contractor's margin for each type of construction works, by relevant unit of measure, expressed in KM (VAT excluded). Reporting units need to enter the price *most often realised* in the observation year for each individual type of works.

Construction producer price index for civil engineering is defined as the index of output price for a type of construction works performed by contractors. This index measures the rate of change in market prices of annual construction works, that is, it provides a weighted average of changes in prices of "relevant products" (construction works) in a group of products between two periods. The relevant price for the calculation of indices is the base price which excludes VAT and similar deductible taxes directly related to turnover.

Compliance with international recommendations

The implementation of this activity complies with the recommendations from EU Regulation 1503/2006 <u>https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32006R1503&from=EN</u> (for the division Construction producer price index for civil engineering – definitions of variables, list of variables and frequency of data collection), which ensures international comparability of Republika Srpska's data with other countries.

DESCRIPTION OF SURVEY ORGANISATION

Authorities implementing the statistical survey

The responsible producer of construction producer price indices is the Republika Srpska Institute of Statistics. The Division for Production Statistics collects the reports, enters and processes the data and produces the results. This Division also performs formal, computational and logical controls, result analysis, etc.

Implementation frequency

Two copies of the report are completed, one of which is submitted to the Republika Srpska Institute of Statistics, no later than 20 days after the end of the observation year. The data are published fifty days after the end of the observation year.

Survey instruments

The following methodological instruments are used for the implementation of the Annual report on prices of construction works for civil engineering:

- The form, which also contains instructions for completing the form, and
- Letter to reporting units.

Publishing

In accordance with European recommendations, construction producer price indices are presented at the level of four main groups of works, as well as for total civil engineering in Republika Srpska.

Annual release "Construction producer price index for civil engineering" is available on the website of the Republika Srpska Institute of Statistics: <u>www.rzs.rs.ba</u>

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Construction producer price index for civil engineering (PCG)