

# Monthly Report on Producer Price Index in Bosnia and Herzegovina

## Reference Metadata in Euro SDMX Metadata Structure

### Agency for statistics of Bosnia and Herzegovina

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2. Metadata update	
2.1. Metadata last certified	31.10.2017.
2.2. Metadata last posted	31.10.2017.
2.3. Metadata last update	31.10.2017.
3. Statistical presentation	
3.1. Data description	<p>Producer price index in Bosnia and Herzegovina is a short-term statistical indicator that shows a dynamics of change in prices of domestic producers of products. Producer price index is primarily intended to serve as a measure of general inflation. It can also serve as the indicator of macro economical performances. escalator for price adjustments in long-term contracts, deflator of nominal values of output or intermediate consumption in the realised volume of output and deflator of nominal value of capital expenditures in national accounts and as a important tool in creating monetary and fiscal policies as well as for making informed economic decisions in private sector.</p>
3.2. Classification system	<p>Industry classification (General Industrial Classification of Economic activities within the European Union-NACE) groups producer units according to their main activity, based on output criterion. At the beginning of the project, NACE classification was used, version 1.1. From 2010, NACE 2 classification was used. The products are classified by the national version of Classification of Product by Activity (PRODCOM-Eurostat Classification of Product by Activity).</p>
3.3. Sector coverage	<p>Producer price index in Bosnia and Herzegovina is limited to the industrial activities of B. Mining and quarrying, C. Manufacturing, D. Electricity, gas, steam and hot water supply, and E. Water supply; sewerage, waste management and remediation activities.</p>
3.4. Statistical concepts and definitions	<p><b>Producer price index</b> in Bosnia and Herzegovina is a short-term statistical indicator that shows a dynamics of change in prices of domestic producers of products. Producer price index is primarily intended to serve as the measure of general inflation.</p>
3.5. Statistical unit	<p>The observation unit in this survey is, in accordance with the basic concepts of SNA 1993, an individual, homogeneous, manufacturing plant or enterprise, which means that individual subsidiaries, sales units or administrative units are not included, due to the fact that these parts are not able to independently make decisions, perform all production operations or calculate prices independently.</p>

3.6. Statistical population	<p>Producer price index in Bosnia and Herzegovina is also classified by product and industrial divisions, and includes domestic and non-domestic market divided into euro and non-euro zone. The prices observed in this survey represent actual transaction prices that show the producer's income from goods sold to actual customers. These are not catalog prices or prices from a pricelist, as they are intended to reflect all possible discounts, rebates, taxes and other charges that may be included in the prices. Therefore, the subject of the observation are prices recorded at the time of the transaction, not the price from the time of order submission because large orders can take a lot of time between the order moment and the moment of delivery of the goods.</p>
3.7. Reference area	<p>Producer price index in BiH covers the whole territory of BiH, and it is published for the level of entity and for the level of BiH.</p>
3.8 Time coverage	<p>2007-ongoing.</p>
3.9. Base period	<p>2011</p>
<b>4. Unit of measure</b>	<p>Units of measure used: Index (index numbers), percent of change in comparison with the same month of previous year (rate) and percent of change in comparison with the</p>
<b>5. Reference period</b>	<p>Month (indices and rates).</p>
<b>6. Institutional mandate</b>	
6.1. Legal acts and other agreements	<ul style="list-style-type: none"> <li>• Law on statistics of Bosnia and Herzegovina,</li> <li>• Multiannual statistical programmes and work plans of Bosnia and Herzegovina,</li> <li>• Methodology of the Producer price index in BiH,</li> <li>• International recommendations and manuals (Eurostat, IMF, UN).</li> </ul>
6.2. Data sharing	<p>Agency for Statistics of BiH as a producer of official statistics is an institution authorised for the production of producer price index.</p>
<b>7. Confidentiality</b>	
7.1. Confidentiality-policy	<p>The confidentiality of statistical data is regulated by law and the staff carrying out statistical survey has the obligation, according to the same legal basis, to protect confidentiality. The Law on Statistics of Bosnia and Herzegovina (Official Gazette BiH 26/04 and 42/04 - Chapter XI - Articles 23-29) establishes the principle of confidentiality as one of the main principles.</p> <p>Agency for Statistics of BiH distributes statistics in line with the statistical principles of the European Statistics Code of Practice, and in particular in line with the principle of statistical confidentiality.</p>
7.2. Confidentiality-data treatment	<p>The document "Rules on the Protection of Statistical Data in the Agency for Statistics" lists procedures for ensuring confidentiality during collection, processing and dissemination - including protocols for securing individual data being accessed, rules for defining confidential cells in output tables and procedures for the detection and prevention of subsequent disclosures as well as access to microdata for research purposes.</p>
<b>8. Release policy</b>	
8.1. Release calendar	<p>At the end of December every year, BHAS announces the Release Calendar with the precise date and time of publication of the statistics for the following year.</p>
8.2. Release calendar access	<p><a href="http://bhas.ba/statistickistandardi/KALENDAR_PUBLIKOVANJA_en.pdf">http://bhas.ba/statistickistandardi/KALENDAR_PUBLIKOVANJA_en.pdf</a></p>
8.3. User access	<p>The principle that all users have equal access to statistical data on an impartial basis is set out in Article 8, paragraph 2, point h, and Article 19 paragraph 2 of the Law on Statistics of Bosnia and Herzegovina and BHAS consistently implements it in practice.</p>
<b>9. Frequency of dissemination</b>	<p>Producer price index is disseminated on a monthly basis.</p>
<b>10. Accessibility and clarity</b>	
10.1. News release	<p>Monthly release on Producer price indices in BiH, as well as the Thematic bulletin, are available at web site of the Agency for Statistics of BiH.</p>
10.2. Publications	<p><u>Thematic bulletin "Producer price indices in BiH" and the publication "BiH in figures"- section Prices.</u></p>
10.3. On-line database	<p>At web site of the Agency for Statistics of BiH there are all releases and thematic bulletin, published since 2007 up to date.</p>
10.4. Micro-data access	<p>/</p>

10.5. Other	/
10.6. Documentation on methodology	Methodological document: Producer price indices in BiH.
10.7. Quality documentation	/
<b>11. Quality management</b>	
11.1. Quality assurance	BHAS follows the recommendations on organization and quality management provided in the European Statistics Code of Practice (CoP) and implements the guidelines given in the European Statistical System Quality Assurance Framework (QAF). More details in terms of quality assurance and all procedures that describe the quality policy in BHAS can be found in the document: Quality management policy and mechanisms in BHAS. <a href="http://www.bhas.ba">http://www.bhas.ba</a> .
11.2. Quality assessments	/
<b>12. Relevance</b>	
12.1. User needs	Key users of the statistical survey data are: Ministry of Foreign Trade and Economic Relations of BiH, BiH Directorate for Economic Planning, Central bank of BiH, Eurostat, World bank, IMF, and Statistical division of UN (UNSD), embassies and consular representations of foreign countries. Users of the data are also business entities-enterprises media and general public. Internal user is a statistics of national accounts for the purpose of production of gross domestic product.
12.2. User satisfaction	Producer price index is primarily intended to serve as a measure of general inflation. It can also serve as the indicator of macro economical performances. escalator for price adjustments in long-term contracts, deflator of nominal values of output or intermediate consumption in the realised volume of output and deflator of nominal value of capital expenditures in national accounts and as a important tool in creating monetary and fiscal policies as well as for making informed economic decisions in private sector.
12.3. Completeness	Data completeness rate is 100%. For this statistic all key indicators, which are required by international standards, are calculated.
<b>13. Accuracy and reliability</b>	
13.1. Overall accuracy	/
13.2. Sampling error	/
13.3. Non -sampling error	<b>Coverage error:</b> The producer price survey in Bosnia and Herzegovina is based on a sample of products and their producers, i. e. production units located on the territory of Bosnia and Herzegovina, which market their products on domestic or non-domestic markets (euro and non-euro zone). The design of the sample was carried out in two stages: In the first stage, respondents were selected (production units) in accordance with the data obtained by the Annual Survey on Industry (IND-21), after which in the second stage specific products to be observed were selected. Product identification was carried out according to the national version of PRODCOM nomenclature of
<b>14. Timeliness and punctuality</b>	
14.1. Timeliness	Time lag - first result: T+20. A full set of indices is published each month, on average 20 days after the reference period due to a complicated procedure of data delivery between the entity offices and BHAS. We do not publish preliminary data.
14.2. Punctuality	Punctuality rate of the data release is $12/(12+0) = 1.0$ or 100 %. All 12 results of the monthly survey of price statistics were published on the date announced in the Release calendar. Punctuality - delivery and publication: T+0. There is no discrepancy between announced and real date of publishing (according to the Release calendar), considering that the published calendar is tailored to the speed of data delivery and data processing.
<b>15. Coherence and comparability</b>	
51.1. Comparability-geographical	Despite some differences in the methodologies used by countries, PPI can be used for international comparisons of inflation rates. However, it is primarily used at the national level.

15.2. Comparability-over time	Data on producer price indices have been produced and published since 2007 in a monthly dynamics. Length of comparable time series: Data on producer price indices have been produced and published since 2007 in a monthly dynamics. Length of comparable time series, considering the monthly time series, is $9 \times 12 = 108$ (months).
15.3. Coherence-cross domain	/
15.4. Coherence-internal	/
<b>16. Cost and burden</b>	Considering the paper format of questionnaires filled in by business entities in several copies and delivered monthly to the entity offices and considering that there is several similar surveys that request same data for different statistical purposes, the respondent burden is not negligible, while costs include costs of preparation and printing of large quantity of forms.
<b>17. Data revision</b>	
17.1. Data revision-policy	No data revision is done, except in cases of mistakes in data dissemination caused by significant methodological interventions.
17.2. Data revision-practise	Data on indices are published monthly as final data for previous month. Data are not subject of revisions.
<b>18. Statistical processing</b>	
18.1. Source data	Survey on producer price index in Bosnia and Herzegovina is based on the sample of products and their producers or production units located in the territory of Bosnia and Herzegovina, which market their products on domestic or non-domestic market (euro and non-euro zone). The observation unit in this survey is, in accordance with the basic concepts of SNA 1993, an individual, homogeneous, manufacturing plant or enterprise, which means that individual subsidiaries, sales units or administrative units are not included, due to the fact that these parts are not able to independently make decisions, perform all production operations or calculate prices independently. Purchasing price of the producer of industrial products on the domestic market is the price at which the producer sells the products to regular customers on the domestic market in the largest quantities, franked on a wagon (truck) at the site of the producer. This price includes regressions if the producer realizes them, and excludes trade rebates and discounts that the seller approves to the buyer, VAT and excise. The price of the product for the non-domestic market is the price at national border - FOB (free on board), which means that the seller pays the freight transport to the port of shipment and the costs of loading and the buyer pays transportation, insurance, unloading costs and transportation from the port of destination to the final destination of use . The aforementioned price excludes VAT and similar taxes directly linked to turnover, as well as all taxes and charges on the products and services that enterprises pay until possible subsidies on products are added.
18.2. Frequency of data collection	All prices are collected monthly in the collection period from the 21 <sup>st</sup> of the month until the 20 <sup>th</sup> of the month. The form is distributed to the manufacturing enterprises that fill it up and send it to the central offices of the entity statistical institutions for data processing. After the data processing, entity offices deliver calculated indices to the Agency for Statistics of BiH for their aggregation for the level of Bosnia and Herzegovina.
18.3. Data collection	The data is collected by direct filling in of paper forms by the business entity covered by the survey. The form consists of a pre-filled section containing data that identify the survey respondent (according to the data from the register), data on specific products which prices are observed and the manual for filling in the form. In addition, the form contains a section that is filled by the reporting unit (eEnterprise) and refers to the prices and necessary notes related to their change. Thus, the enterprise for the selected items defined by the description, unit of measurement and quantity, fills in the prices at which the item is sold on a domestic or non-domestic market (euro or non-euro zone) which is called price collection according to concrete specifications (specification pricing).

18.4. Data validation	<p>Quality plays a key role in the process of calculating the index and determining the accuracy of the data obtained on the changes in prices on the observed market. Data editing includes checking data quality in terms of completeness, coherence and continuity of basic information obtained from reporting units, and presents one of the most important preparatory phases of calculating and publishing the index. The first phase of the preparation for the entry is a logical check of submitted data, which takes place in the entity statistical offices and branch offices of BHAS in Brčko District. This verification relates to checking whether the forms have been submitted in a timely manner, whether they are fully filled in according to the instructions, whether the information is coherent and whether the price has been submitted in accordance with the previously submitted prices for those items. If a form does not pass this stage, the person in charge of the control contact the respondent. After this phase comes the phase of the data entry of the submitted prices and related information from the form in the software application which also contains certain logical controls, by which the submitted data are additionally automatically filtered. The application has predefined change intervals of the entered prices and automatically recognizes out of the range (outlier) prices. These outlier prices are re-checked by staff by contacting the reporting unit, comparing it with similar products or producers, or analyzing time series depending on which product or producer is in question. If it is found that the reporting unit does not submit the forms for a longer period of time, it is necessary to determine the reason why this is so. Some reasons for the non-response may be: the transfer of production outside the territory of BiH, production discontinuity, refusal of cooperation, closure of the enterprise or disrespect of the importance of statistics. Once the reason is found, it is necessary to find an adequate replacement for the company that will provide prices for similar items. If it is determined that for a particular item a longer period of time (longer than three months) a form is submitted with the indication "there was no sale" it is necessary to</p>						
18.5. Data compilation	<p>The producer price index is a weighted arithmetic mean of the simple geometric means, i.e. producer price indices are the aggregate Laspeyres type of indices based on the Jevon approach. The first step in calculating the index is to calculate the relation between the prices, i. e. the ratio between the current and the base price. Since it is a chain index, the base price is always that of December of the previous year. After calculating these ratios for each item falling under one product, a simple geometric mean of the calculated ratios is calculated, since we do not have information about the relative share of each individual item to weight them. Furthermore, the indices are aggregated using the appropriate weights, i. e. the Laspayers formula. For the state index at every level, the indices are calculated by multiplying the index of that level obtained from entities with the participation of that entity in the state and their aggregation. In Bosnia and Herzegovina, the weights are specific because of the fact that the entity statistical offices and branch of BHAS are offices that calculate weights according to PRODCOM values for specific products and total turnover as a weight for enterprises (according to data from IND 21). After that, these weights are used to create a weighting structure at a state level, which means that state-level weights represent the participation of individual entities and Brčko District. Thus, at the state level, three weighting vectors are linked by a weighted arithmetic mean, based on the absolute values of the entity weights whereby the ratios of the weights are in fact the ratios of absolute values of the individual aggregate and the total value all the aggregates. So the sum of the state-level weighs is a total of the sum of the weights of two entities and Brčko District. At all levels, the hierarchical structure of classification of the products consists of six aggregates:</p> <table data-bbox="619 1724 941 1825"> <tr> <td>LEVEL</td> <td>AGGREGATE</td> </tr> <tr> <td>8 digits</td> <td>PRODUCT</td> </tr> <tr> <td>4 digits</td> <td>PRODCOM product</td> </tr> </table>	LEVEL	AGGREGATE	8 digits	PRODUCT	4 digits	PRODCOM product
LEVEL	AGGREGATE						
8 digits	PRODUCT						
4 digits	PRODCOM product						
18.6. Adjustment	<p>Statistical procedures for series adjustment (methods for seasonal adjustment) are not used. No seasonal adjustment is done.</p>						
19. Komentar	/						