QUALITY REPORT FOR STATISTICAL SURVEY

Services Producer Price Indices

for 2020

Organisational unit: Service Statistics Department, Development of
Services and Service Price Statistics Unit

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0. Basic information

- Purpose, goal, and subject of the survey

The main purpose of the SPPI survey is to measure the dynamics of price movements that reflect the conditions of supply and demand on the services market. The data obtained by this survey are primarily used as deflators to convert the value of services output into volume measures, and they are also used for macroeconomic analyses. The survey results can also be used to compare average price movements with similar business entities and to analyse other aspects of business (costs, productivity, for creating an escalation clause in the contract, etc.). The goal of the survey is to monitor the prices of services that are important for selected enterprises, either in terms of frequency of performance or from the value point of view. One of the criteria is that the performed service (in the same form and volume) can be provided over a longer period (now and in the future).

- Reference period

Quarter

- Legal acts and other agreements

At the European level:

- Council Regulation (EC) No 1165/98 of 19 May 1998 concerning short-term statistics

- Regulation (EC) No 1158/2005 of the European Parliament and of the Council of 6 July 2005 amending Council Regulation (EC) No 1165/98 concerning short-term statistics

- Commission Regulation (EC) No 588/2001 of 26 March 2001 implementing Council Regulation (EC) No 1165/98 concerning short-term statistics

- Methodological Guide for Developing Producer Price Indices for Services, Theme: Industry, trade and services (ISSN 1725-0099, European Commission, OECD, Luxembourg, 2005)

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- Regulation (EC) No 1893/2006 of the European Parliament and of the Council of 20 December 2006 establishing the statistical classification of economic activities NACE Revision 2 and amending Council Regulation (EEC) No 3037/90 as well as certain EC Regulations on specific statistical domains.

At the national level, legal acts and other agreements for conducting the survey are as follows:

Official Statistics Act (OG, Nos 103/03, 75/09, 59/12 and 12/13 – consolidated text)

- Annual Implementation Plan of Statistical Activities of the Republic of Croatia.

Penalties for failing to provide information or for providing incomplete or inaccurate information are prescribed by the law, but are not currently applied in practice. The methodological basis consists of Eurostat regulations and national regulations.

- Classification system

National Classification of Activities, 2007 version (NKD 2007.)
Classification of Products by Activities of the Republic of Croatia, 2015 version − KPD 2015.

- Concepts and definitions

The SPPI survey provides information on two key variables: output prices and turnover. Output price is the transaction price, i.e. the price of the performed service that the business entity ("producer", i.e. service provider) achieved on the market. The price includes incentives received, but excludes taxes paid, discounts and rebates given. The price for a certain quarter is the average price in that quarter or the price collected on a certain day/week in the quarter. Turnover is the value of all goods and services sold on the market in a quarter, irrespective of whether they are paid for or not. Value added tax is excluded. In the first quarter of the current year, reporting units provide data on the total turnover in the previous year, the turnover from the observed activity in the previous year and the structure of the turnover in the previous year of the observed activity by groups of services. The turnover structure is used as a weight in the index calculation.

- Statistical units

Observation units are legal entities and natural persons that have their observed principal or secondary activity registered in the Statistical Business Register.

- Statistical population

The target statistical population are active legal entities and natural persons who have registered as their principal or secondary activity in the Statistical Business Register the activity that is the subject of the survey (activities are proposed in the STS regulations, Annex D under item 3.3.). In addition to the Statistical Business Register, other sources are used to update the population, such as Transport Statistics (for activities H51, H53, H521, H5224 and H502 according to the NKD 2007.), official lists of lawyers and notaries obtained from the Croatian Notaries Chamber and the Croatian Bar Association (for activity M691 according to the NKD 2007.) or the list of auditors obtained from the Croatian Chamber of Auditors (for activity M692 according to the NKD 2007.). For activity J61 according to the NKD 2007., the national legislation determines the population. Activities that are the subject of the survey according to the National Classification of Activities 2007 (NKD 2007.) are the following:

H494 Freight transport by road and removal services

H501 Sea and coastal passenger water transport + H502 Sea and coastal freight water transport

H51 Air transport

H521 Warehousing and storage

H5224 Cargo handling

H531 Postal activities under universal service obligation

J58 Publishing activities

J59 Motion picture, video and television programme production, sound recording and music publishing activities

J61 Telecommunications

J62 Computer programming, consultancy, and information service activities + J63 Information service activities

M691 Legal activities + M692 Accounting, bookkeeping and auditing activities; tax consultancy

M702 Management consultancy activities

M711 Architectural and engineering activities and related technical consultancy

M731 Advertising + M732 Market research and public opinion polling

N78 Employment activities

N79 Travel agency, tour operator reservation services and related activities

N80 Security and investigation activities

N812 Cleaning activities

N82 Office administrative, office support and other business support activities

There were about 45 000 units in the total population in 2020. There were cca 1 300 units in the sample.

1. Relevance

1.1. Data users

Users of the SPPI survey results may be:

Public sector: Government, Croatian National Bank, Croatian Chamber of Economy and its associations, other government institutions and organisations

Business sector: legal entities (companies and crafts), non-profit organisations

Scientific, research and educational sector: research institutions, universities and other educational institutions

Media

International users: European Direction for European Commission politics, other international organisations

Internal users: National Accounts Department, Structural Business Statistics Department, Services Statistics Department, Price Statistics Department

1.1.1. User needs

These indices measure changes in the prices of services in the activities that are the subject of the survey. The Croatian Bureau of Statistics uses these indices as deflators for measuring the volume of these activities in the Republic of Croatia and for determining the contribution of these services to the GDP of the Republic of Croatia. These indices can be used to compare price movements of similar enterprises and to analyse other aspects of business performance (costs, productivity, compilation of an escalation clause in agreements).

1.1.2. User satisfaction

Not available.

1.2. Completeness

According to the valid regulation for short-term statistics, two activities are still not covered by these surveys (H532 Other postal and courier activities and M712 Technical testing and analysis). The SPPI surveys for certain service activities are still in the experimental phase and are not ready for publication. All other SPPI data are regularly published and delivered to Eurostat.

1.2.1. Data completeness rate

94%

2. Accuracy and reliability

2.1. Sampling error

Sampling errors can be calculated for surveys in activities selected by the random sampling method. The SPPI surveys that are based on the random sampling method are conducted for the following service activities: H494, M691, M692, M702, M711 and M731. Since these samples are selected by a simple method in the form of the Excel workbook, it is currently not possible to calculate the sampling error. Other activities have a cut-off sample or a census.

2.1.1. Sampling error indicators

The indicator is not computed.

2.2. Non-sampling error

Non-sampling errors can occur for many reasons such as frame irregularities, misclassification of units in the sample, irregularities in the selection of units in the sample, errors in data collection resulting from misunderstanding, bias, neglect or insincerity of the researcher or reporting unit, data processing errors, etc.

2.2.1. Coverage error

The sample is selected from the population obtained from the Statistical Business Register, while for some activities it is supplemented from alternative sources. The coverage error may occur if the sample includes units that do not belong to the survey based on their activity or have ceased operating, but this information is not recorded in the Statistical Business Register or other source. Any such information subsequently obtained from reporting units during conducting the survey is forwarded to the Statistical Business Register Department of the Croatian Bureau of Statistics. Overcoverage error is defined as the ratio of the number of units that do not belong to the target population and the number of all units included in the survey. Units that are considered not to belong to the target population are inactive units, units that are not engaged in the activity that is the subject of the survey, units that are dormant or bankrupt or units that for some other reason cannot be included in the survey. In order to determine the status of a unit, the following codification of statuses is used: Statuses: 0 - operates, refused to submit the report; 1 - operates, submitted the report; 2 - does not operate, ceased to operate; 3 - does not perform any service activity; 4 - dormant; 5 - in bankruptcy, liquidation; 6 - undelivered form; 7 - does not perform the registered, but some other service activity; 8 - budgetary users; 9 - organisational changes (mergers, separations, etc.).

2.2.2. Overcoverage rate

Overcoverage rate is 22%.

2.2.3. Measurement errors

As an aid in detecting errors in the entered data, data verification is integrated in the application. This data verification shows the data that do not meet the given requirements, which refer to the following:

- too small reported turnover in relation to the size of the reporting unit

- large discrepancy between the turnover reported on the form and the turnover obtained from the administrative source

- reported price that is located outside the acceptable range – large differences in prices compared to the previous period, etc. Attention is also paid to checking price changes. If a reporting unit enters a price that differs from the price from the previous quarter, then it must choose one of the offered reasons for the price change. Reasons for the price change and lack of prices may be: new price list, demand exceeds supply, supply exceeds demand, discount, termination of discount, change in costs affected the price, other reasons for price change, service is temporarily not provided, service is no longer provided, new/supplement service, exchange rate differences. If the reporting unit chooses "other reasons for price change", it should be determined whether there was indeed a change in the price or it was just a change in quality.

2.2.4. Non-response errors

The unit non-response rate is calculated as the ratio of the number of units that did not respond to the total number of valid units (unweighted rate). Turnover from activities is used in calculating the weighted unit non-response rate. In some cases, a value that reflects the importance of the reporting unit is also used, such as the number of employees.

Item non-response rate This indicator is not applicable to SPPI because reporting units are forced to provide both key variables: turnover from activities for the previous year (collected once a year) and prices of selected services (collected quarterly). Otherwise, the unit cannot successfully send the online form due to technical settings. The lack of price may occur rather due to the fact that the reporting unit has stopped providing the service (temporarily or permanently) than due to non-response; in such situation, the reporting unit selects the appropriate reason for the lack of price.

2.2.5. Unit non-response rate

Unweighted non-response rate is:

%

Domain	Domain value	Notice	1st QTR	2nd QTR	3rd QTR	4th QTR	On average
Croatia	Croatia		10.2	10.2	10.2	10.2	10.2

2.2.6. Item non-response rate

The indicator is not applicable.

2.2.7. Processing errors

The collected data go through a series of processes before the final results are calculated: coding, linking, editing, weighting, etc. Most of this is done automatically within the IT application. Currently, it is not possible to calculate processing errors as these calculations do not exist within the application.

2.2.8. Imputation rate

The indicator is not computed.

2.2.9. Model assumption error

The entire estimation process is defined and embedded in the application. The process that has once been embedded into the application does not change unless there was a flaw in the development of the process, so revision and additional processing is required.

2.3. Data revision

2.3.1. Data revision – policy

The users of statistical data are informed about revisions (preliminary data, final data), if any, on the website of the Croatian Bureau of Statistics.

2.3.2. Data revision – practice

Provisional figures are not published in this survey and therefore regular revisions are not planned.

2.3.3. Data revision – average size

The indicator is not applicable.

2.4. Seasonal adjustment

The seasonal adjustment for SPPI is not foreseen in the regulations concerning short-term business statistics. Therefore, it is not applicable to these surveys.

3. Timeliness and punctuality

3.1. Timeliness

The results are released within 90 days after the reference period. The indices are regularly calculated and sent to Eurostat on a quarterly basis.

3.1.1. Timeliness – first results

The indicator is not applicable.

3.1.2. Timeliness – final results

Timeliness of final results is T + 90.

3.2. Punctuality

There is no time lag between the date when the data are sent to Eurostat and the time when they should be submitted, that is, the data are sent within the set deadlines.

3.2.1. Punctuality − delivery and publication

Punctuality is 0.

4. Accessibility and clarity

Available sets of SPPI indices with the notes on methodology are published on the website of the Croatian Bureau of Statistics (www.dzs.hr) under Statistics in Line. Dissemination method is specified in the Calendar of Statistical Data Issues and the Publishing Programme of the Croatian Bureau of Statistics.

4.1. News release

Data are regularly released on the website of the Croatian Bureau of Statistics in the part entitled STS databases.

4.2. Online database

Not applicable.

4.3. Microdata access

Conditions under which certain users can have access to microdata are regulated by the Ordinance on the Conditions and Manner of Use of Statistical Data for Scientific Purposes.

4.4. Documentation on methodology

The methodology for the SPPI survey is based primarily on the Eurostat-OECD Methodological Guide for Developing Producer Price Indices for Services (https://ec.europa.eu/eurostat/web/products-manuals-and-guidelines/-/KS-04-14-661). There are also internal methodological documents that describe in detail the process of conducting the survey, control, processing and calculations.

5. Coherence and comparability

5.1. Asymmetry for mirror flows statistics

Not applicable.

5.2. Comparability over time

One part of the SPPI indices have been comparable since 2006 and the other part since 2010.

5.2.1. Length of comparable time series

Domain	Domain value	Notice	1st QTR	2nd QTR	3rd QTR	4th QTR
Croatia	Croatia		42	43	44	45

5.2.2. Reasons for break in time series

There is no break in time series.

5.3.   Coherence – short-term and structural data

The indicator is not applicable.

5.4.   Coherence – national accounts

The indicator is not computed.

5.5.   Coherence – administrative sources

The indicator is not applicable.

6. Cost and burden

6.1.   Cost

The cost is expressed in working hours spent on conducting the SPPI survey by the employees of the Croatian Bureau of Statistics and it amounts to about 2 500 hours per year. It includes the work of eight employees on 21 surveys.

6.2.   Burden

The burden on reporting units can only be monitored for the surveys conducted via a web interface. Reporting units provide information on the time spent completing the web form, and only in the first quarter. Most frequently, reporting units spend 30 minutes completing the SPPI form.