

TWINNING CONTRACT

BA 15 IPA SR 01 17

Support to the reform of the statistics system in Bosnia and Herzegovina



MISSION REPORT

Activity 2.4.7:

Analysis of regular survey on producer (output) prices in services

Component 2: Business Statistics

Sub-component 2.4: Services Producer Prices Index

Mission carried out by
Anna-Riikka Pitkänen, Statistics Finland
Jean-Marie Fournier, INSEE

11-15 November 2019

Version: Final

Expert contact information

Anna-Riikka Pitkänen

Statistics Finland

Helsinki, Finland

Tel:

Email: anna-riikka.pitkanen@stat.fi

Jean-Marie Fournier

INSEE

Paris, France

Email: jean-marie.fournier@insee.fr

Table of contents

| | |
|--|--|
| Executive Summary | Fejl! Bogmærke er ikke defineret. |
| 1. General comments | 4 |
| 2. Assessment and results | 4 |
| 3. Conclusions and recommendations | 7 |
| Annex 1. Terms of Reference | 8 |
| Annex 2. Persons met | Fejl! Bogmærke er ikke defineret. |

List of Abbreviations

| | |
|------|--|
| BHAS | Agency for Statistics of Bosnia and Herzegovina |
| BiH | Bosnia and Herzegovina |
| CBBH | Central Bank of Bosnia and Herzegovina |
| EC | European Commission |
| EU | European Union |
| FBiH | Federation of Bosnia and Herzegovina |
| FIS | Institute for Statistics of Federation of Bosnia and Herzegovina |
| MS | EU Member State |
| RSIS | Institute for Statistics of Republika Srpska |
| RTA | Resident Twinning Adviser |
| ToR | Terms of Reference |

1. General comments

This mission report was prepared within the EU Twinning Project "Support to the reform of the statistics system in Bosnia and Herzegovina". It was the sixth mission to be devoted to SPPI within Component 2 of the project.

The purposes of the mission were:

- Follow up from the previous mission
- Quality of first results from the regular survey
- Agreement on output tables (publication forms, transmission formats, etc.)
- Presentation of EU Member State experience on metadata
- Development of draft methodology
- Experimental calculation of trade deflators
- Preparation of draft quality report

The consultants would like to express their thanks to all officials and individuals met for the kind support and valuable information which they received during the stay in Bosnia-Herzegovina and which highly facilitated the work of the consultants.

This views and observations stated in this report are those of the consultant and do not necessarily correspond to the views of EU, BHAS, FIS, RSIS, CBBH, Statistics Denmark, INSEE, Statistics Finland and Croatian Bureau of Statistics.

2. Assessment and results

Day 1

The BC experts presented the RSIS results of calculation from 2017Q4 to 2019Q2 on 71.11 "Architectural services" and 71.12 "Engineering services and related technical consulting services", two NACE classes especially challenging when collecting prices. Indeed, many services on these categories are bundled or are not unique in their composition. Moreover, most of them are not produced or repeated regularly: many price observations remain unchanged for a long time and some big companies declare prices changes, at best, only once a year. It appears also that some of the enterprises are reluctant to answer according to the calendar of the survey, which is a problem for the reliability of first results.

We discussed about index calculation: Imputation strategy (for non-responses, partial or total), treatment of outliers, quality adjustment and replacement strategy for disappearing or new services. The MS experts recommend to define clear guidelines on these topics.

There are also some challenges with the IT application. Currently, it does not define any variable for quality adjustments. They have to be made outside of the system, which could be a source for errors. MS experts recommend to avoid the quality adjustment outside the application, and suggest to add modified price or some kind of quality adjustment in the IT application.

Day 2

MS experts presented metadata provided by their respective National Statistical Institute (NSI), according to the requirements of Eurostat and also for their national use. Like each statistical institute of the Member States (MS), Statistics Finland and Insee fill every year metadata files presenting how short term business statistics are made and disseminated. This metadata meets the international SDMX standard (actually an ISO standard) designed to describe statistical data and metadata, to help the exchange of public data and metadata among organizations. In this framework, concepts and terminology are harmonized. These metadata are available on the Eurostat [web site](#). These files are produced by MS NSI and validated by Eurostat. They could be used as examples for defining metadata of SPPI in BiH. Statistics Finland and INSEE publish also metadata on their websites. Statistics Finland publishes a handbook for users on SPPI, which could be a reference for writing a methodology guide on SPPI in BiH. Other references can also be used, like metadata already disseminated by PPI on BiH.

MS experts recommend to use Eurostat SDMX standard to establish the metadata of SPPI in BiH. They can refer to the [COMMISSION RECOMMENDATION on reference metadata for the European Statistical System](#).

Concerning quality reports, the practices are different in Finland and in France. The approach is more transparent in Finland. It consists of providing users with all the necessary information about the conditions of surveys and the possible methodological issues. In France, the quality review of surveys takes place in an institutionalized framework with the regular review of their production process by a technical committee, involving statistical methodologists, users but also representatives of the surveyed units (professional unions in the case of production price surveys for example). The committee's evaluation is published on its website. It could include recommendations in order to improve quality of surveys.

MS experts recommend to start the drafting of a quality report, to be published with the first publication of SPPI in BiH.

MS experts suggest the team in responsible for SPPI in BiH to look for synergies with their colleagues responsible of other producer price indices as soon as the production processes and working practices will be fully operational.

Day 3

The BC experts presented the FIS results of calculation from 2017Q4 to 2019Q2 on 71.11 "Architectural services" and 71.12 "Engineering services and related technical consulting services". FIS has around 60 price observations from 17 respondents, and during year 2019 they have added new respondents to the price collection using the cut-off sampling. They faced the same challenges than RSIS - many services of these categories are bundled or are not unique in their composition etc. (see day 1). MS experts are very pleased by the effort put in recruitment of respondents and the data collection – especially the recruitment letter and

the general communication with the respondents. If the situation is particularly difficult with some respondents, written agreements may be used to assure the respondents about data confidentiality.

We discussed briefly about index calculation formulas. If the market is changing rapidly and weights are available when prices are collected (for every quarter), Fisher index formula is a good option to calculate unit value prices for example in “Telecommunications”.

BC experts presented their ideas on publication, output tables and the dissemination of data. For publication and output tables, they take example on Slovenian and Croatian SPPI publications. They will have a graph and a table about index point figures and quarterly and annual changes. Indices will be published in 2 digits levels. They will start to publish in 2020, and the indices will start from Q1/2018. The base year should not be 2015 because the available indices are computed only starting from 2018. The MS experts recommend to begin publication when the actual index series are available, without using backward estimation back to year 2015. The reason is, the backward estimation might not be reliable enough.

For data dissemination, it would be efficient to use also the SDMX format. BC experts could set up this procedure with the support from other BiH statisticians who are using already that procedure.

BC experts expressed their intention to continue to develop the scope of SPPI in the near future. MS experts were pleased to hear this and encourage to keep up the good work and good co-operation between the BC experts.

Day 4

MS experts presented trade indices in volume calculated and disseminated according the FRIBS regulation. These presentations were meant especially to explain how deflators were compiled for the industries G45 & G46 NACE division. In Finland and in France, these volume indices are compiled mostly from VAT declarations, covering all population, received on a monthly basis. In Finland, also the sales inquiry is used. In Finland and in France, SPPI does not have the trade margins (only some countries have those, like US, Canada, Japan or Australia), so deflators has to be calculated using other methods. In Finland and in France, the volume index of trade produces those deflators using price indices (CPI, PPI, building construction index, agricultural PPI) and weight those together to approximate the sales deflators. Import prices needs also to be taken into account when deflating trade. The deflating should be done at the lowest level possible. In the case of the volume index of trade, the variable is meant to describe the volume of sales rather than the value added of the trade industry → NA needs deflators for trade margins only, so NA can not use the same deflators because the concepts are different → NA needs to make their own adjustments to the deflators.

The objective assigned to the volume index of sales is to answer to national and European requests and measure the monthly changes of activity in every sector of activities. As IPI and SPI, the volume index of sales is used to define a primary information to monitor the business cycle in EU and MS.

3. Conclusions and recommendations

- The MS experts recommend to define clear guidelines for the following topics:
 - ✓ Imputation strategy (for non-responses, partial or total),
 - ✓ treatment of outliers,
 - ✓ quality adjustment and replacement strategy for disappearing or new services.
- MS experts recommend to avoid the quality adjustment outside the application, and suggest to add modified price or some kind of quality adjustment in the IT application.
- MS experts recommend to use Eurostat SDMX standard to establish the metadata of SPPI in BiH. They can refer to the [COMMISSION RECOMMENDATION on reference metadata for the European Statistical System](#).
- MS experts recommend to start the drafting of a quality report, to be published with the first publication of SPPI in BiH.
- MS experts suggest the team in responsible for SPPI in BiH to look for synergies with their colleagues responsible of other producer price indices as soon as the production processes and working practices will be fully operational.
- MS experts recommend to start the publication when the actual index series are available, without using backward estimation back to year 2015. The reason is, the backward estimation might not be reliable enough.
- BC experts expressed their intention to continue to develop the scope of SPPI in the near future. MS experts were pleased to hear this and encourage to keep up the good work and good co-operation between the BC experts.

| Action | Deadline | Responsible person |
|---|--------------|--------------------|
| Presentation of first results from all quarters of 2019 | Next mission | BC experts |
| Presentation of metadata and quality report | Next mission | BC experts |
| Presentation of the methodology document | Next mission | BC experts |

Annex 1. Terms of Reference

Terms of Reference

EU Twinning Project BA 15 IPA ST 01 17

Component 2: Business Statistics

Sub-component 2.4: Services Producer Prices Index

11-15 November 2019

Hosting institution:

Hosting institution: FIS – Zelenih beretki 26, Sarajevo

Activity 2.4.7 Analysis of regular survey on producer (output) prices in services

1. Mandatory result and benchmarks for the component

Mandatory result:

- New indicators for producer prices in services produced by 8th project quarter

Benchmarks:

- Plan for development of producer prices in services produced by 1st project quarter
- Draft questionnaire and supporting documents for pilot survey prepared by 1st project quarter
- Pilot survey conducted by 2nd project quarter
- Criteria for an IT application defined by 2nd project quarter
- Results of pilot survey analyzed by 4th project quarter
- Plan for regular production of producer prices in services developed by 4th project quarter
- Indices on producer prices in services compiled by 6th project quarter
- Indices on producer prices in services made available to users by 8th project quarter
- Methodological document on producer prices in services developed by 8th project quarter
- Quality report for producer prices in services developed by 8th project quarter
-

2. Purpose of the activity

- Follow up from the previous mission

To be prepared by the BC Counterpart

- Presentation on first calculations based on results of collected data from q1/2019 and q2/2019
- Draft output tables

To be prepared by the MS experts

- Presentation on quality reports and methodological dissemination and metadata
 - Presentation on deflators for G45 and G46
-
- Quality of first results from the regular survey
 - Agreement on output tables (publication forms, transmission formats, etc.)
 - Presentation of EU Member State experience on metadata
 - Development of draft methodology
 - Experimental calculation of trade deflators
 - Preparation of draft quality report

3. Expected output of the activity

- First calculation of new SPPIs made
- Quality of first results assessed
- Output tables defined (publication forms, transmission formats, etc.)
- EU experiences presented on metadata
- Input to a draft methodology made
- Input to a draft quality report made

4. Participants**Agency for Statistics of BiH (BHAS)**

Alen Bajramović

Institute for Statistics of Federation of BiH (FIS)

Merima Hadžalić

Institute for Statistics of Republika Srpska (RSIS)

Jelena Glamočika

Aleksandra Donlaga

Vanja Đuran

MS Experts

Anna-Riikka Pitkänen (FI)

Jean-Marie Fournier (FR)

Twinning Project Administration

Katja Møller Hjeltvang, RTA

Đemka Šahinpašić, RTA Assistant

Adisa Okerić-Zaid, Interpreter

Signatures

For the approval of the contents of this report, representatives from BHAS, FIS and RSIS as well as MS experts and the RTA sign here:

Date: 15 of November 2019

Component leader, BHAS

Component leader, FIS

Component leader, RSIS

RTA

MS Expert

MS Expert