

Twinning Project

Contract: GE 16 ENI ST 06 18

Strengthening the Capacity of the Georgian Statistical System

Component 1: Development of External Sector Statistics

Sub-component 1.3: "Foreign trade (Export - Import) Unit Value Indices in IMTS"

MISSION REPORT

Activity: 1.3.D (RS): Progress, quality, metadata and finalization of calculations

Mission carried out by
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May 25th – June 23rd 2021

Version: Final

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1. General comments

This mission report was prepared within the EU Twinning Project "Strengthening the Capacity of Georgian Statistical System". This was the fourth mission within the sub-component 1.3: "Foreign trade (Export - Import) Unit Value Indices in IMTS". Due to COVID-19 the mission was carried out as a Remote Session in the period from May 25th to June 23rd 2021. It was initially scheduled as three remote sessions, however during the mission it was decided to add a fourth session. The mission was mainly devoted to finalization of the calculations of the UVI as well as metadata.

The purposes of the mission were:

- To discuss and to work on the following:
 - Finalize the sensitivity analysis
 - Prepare and finalize the code with the chosen statistical software for the calculation of UVI, taking into account the necessity of data analysis, the sampling procedure of representative product codes, data validation and editing
 - Present and discuss the concept of metadata, and prepare a Georgian version
 - Discuss dissemination

The consultants would like to express their gratitude to the Geostat staff who participated in the mission, for the kind support and valuable information received during the mission.

The views and observations stated in this report are those of the consultants and do not necessarily correspond to the views of the European Union, Geostat, Statistics Denmark, or other statistical institutions involved in the implementation of the project.

2. Assessment and results

As mentioned above the focus of this mission was to finalise the code for compiling UVI with the chosen statistical software. As well as prepare Geostat for the dissemination of the UVI. In order to achieve this goal, focus was first put on sensitivity analysis to identify the optimal parameters for the calculation of UVI for each HS-section, of which the UVIs will be disseminated. Once this was done, the code needed to be modified to be usable in a production environment, where new data is added each quarter.

Since this was the final mission for this component, and we have spent time on previous missions discussing the sensitivity analysis, we decided that Geostat should present a full sensitivity analysis of one HS-section, such that the experts would be confident that Geostat would make the best parameter choices for each section. Hereafter, Geostat should perform the sensitivity analysis on the other sections on their own.

Among others, the goal of the sensitivity analysis is to identify appropriate parameters to be used in the final compilation of unit value indices, and to check the robustness of the final results.

The experts recommended Geostat to compare their preferred section level UVI with actual unit values for the major product, traders and partners within the section. This is to verify whether or not the microdata support the underlying trends in the chosen final index.

If alternative import and export price indices are available from other offices, such as the national accounts, the resulting UVIs should be compared with these sources, provided they are comparable in terms of the basket of goods they represent. This helps to validate the UVI computed using the bottom-up approach based on the International merchandise trade data.

The experts introduced the necessary changes to the R-program in order to make it ready for production.

- To save time and avoid unnecessary changes to the historical UVIs without changes in the input data, the production code should compute UVIs for new observations only.

- However, the production code should also be general enough to accommodate revisions in the input data, and thus on the UVIs. Because of this, it is recommended to have overlapping periods of 2 or 3 years between the historical UVIs and the UVIs from the quarterly production.
- As long as there is no data revision, the historical UVI and the new UVI in the overlapping periods should be identical, apart from levels, and the levels should be corrected before publishing new observations in each quarter, an example is provided in annex 3 for a random UVI.

Finally, we discussed the dissemination of the UVIs. When disseminating official statistics one should also publish metadata related to the statistical product. This metadata should describe what the purpose of the statistical product is, the content, and how well it describes the phenomena it is intended to describe.

Geostat has a goal to disseminate their new UVIs by the end of the second quarter of 2021. However, the International merchandise trade statistics will be disseminated based on a new HS regime by mid-July. To avoid confusing the users of the new UVI, it was decided that the UVIs disseminated by the end of the second quarter should be published under the title “Experimental statistics”.

Alongside producing, the experimental UVIs Geostat should

- Convert microdata to the new HS regime
- Perform the full sensitivity analysis on each section
- Make UVIs for the entire period on the new HS regime
- Be ready to disseminate these UVIs quarterly from mid July
- Metadata for Geostats website should be ready
- Geostat should write a working document for internal use documenting the method used to compile the UVIs, including the different choices made throughout the process

This will ensure that Geostat is ready to disseminate import and export unit value indices that will be updated quarterly with new data.

The experts have advised Geostat not to revise historical UVIs each time they disseminate, but only when the International merchandise trade statistics are revised.

3. Conclusions and follow up

At the time of writing this report Geostat has not yet published new import and export unit value indices. However, the experts are confident that they will succeed. Throughout the four missions and the one study visit, Geostat and the experts from Statistics Denmark have discussed methods for compiling unit value indices based on international merchandise trade statistics. After covering the theoretical and practical aspects of unit value computation with the experts from Statistics Denmark, Geostat has learned to compile unit value indices on their own. They know how to assess the quality of the unit value indices, and when to update and rebase the indices.

As mentioned above the following steps need to be performed before Geostat can disseminate their UVI by mid-July:

- Convert microdata to the new HS regime
- Perform the full sensitivity analysis on each section
- Make UVIs for the entire period on the new HS regime

- Write metadata for Geostats website

Annex 1. Terms of Reference

EU Twinning Project GE 16 ENI ST 06 18

May 25th – June 8th 2021

Component 1: Development of External Sector Statistics

Sub-component 1.3: Foreign trade (Export - Import) Unit Value Indices in IMTS

Mandatory results and benchmarks for sub-component 1.3:

- Foreign trade (Export-Import) Unit Value Indices in IMTS calculated

Indicators of Achievement (baseline and targets):

- Availability of Unit Value Indices (UVI) as a statistical product
 - **Baseline:** 2019 – UVI in IMTS is not produced
 - **Target:** November 2021 – UVI in IMTS available
- Number of staff capable of producing UVI
 - **Baseline:** 2019 – 0
 - **Target:** November 2021 – At least 3 staff members trained and capable of producing UVI

Activity 1.3.D (RS): Progress, quality, metadata and finalization of calculations

1. Purpose of the activity

To discuss and work on the below mentioned subjects:

- Discussion and further work on sensitivity analyzes
- Preparation and finalizing of software for the compilation of UVI taking into account the necessity of data analysis, the sampling procedure of representative product codes, data validation and editing
- Metadata presented, discussed and a Georgian version drafted
- Dissemination discussed
- Future work and points of attention

2. Expected output of the activity

- Discussion and further work on sensitivity analyzes
- Preparation and finalizing of software for the compilation of UVI taking into account the necessity of data analysis, the sampling procedure of representative product codes, data validation and editing
- Metadata presented, discussed and a Georgian version drafted
- Dissemination discussed
- Future work and points of attention
- Mission Report is written



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საქართველოსთვის
The European Union for Georgia



Annex 2. Persons met

Geostat

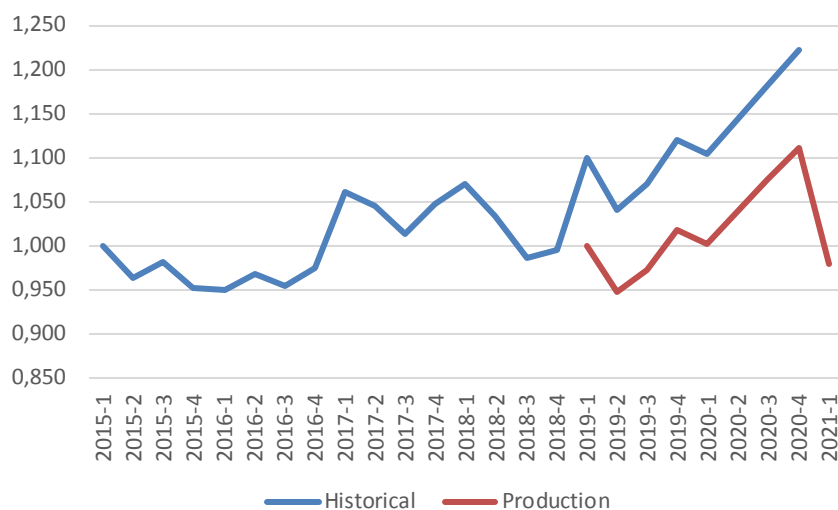
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Annex 3.

Historical vs. Production



Quarterly dissemination

