



ევროკავშირი
საქართველოსთვის
The European Union for Georgia



Twinning Project

Contract: GE 16 ENI ST 06 18

Strengthening the Capacity of the Georgian Statistical System

Component 2: “Enhancing Methodological Soundness in the National Accounts in line with EU standards”

Sub-component 2.2: “Compilation method of Supply – Use (SUT) tables and Input Output (I/O) Tables”

MISSION REPORT

Activity: 2. 2.F (RS) “Finalization of balancing of SUTs in current prices”

Mission carried out by
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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 sixth mission within the sub-component 2.2: "Compilation method of Supply – Use (SUT) tables and Input Output (I/O) Tables". Like the previous missions in June, September, December and February the mission was, due to COVID-19, carried out as Remote Sessions. The mission was originally planned to end at April 29th, but most of the second session had to be postponed due to IT-problems at Statistics Denmark and illness of an expert. The mission was devoted to adjustment of input and final use totals to target values and final balancing of supply and use of trade- and transport- margins and VAT in the SUTs for 2018.

The purposes of the mission were:

- To finalize adjustments needed to remove differences between supply and use of individual products.
- To ensure that the totals of calculated trade- and transport margins are sufficiently close to their supply values before further balancing.
- To update the targets for the system's column-totals taking into account experience from the balancing of supply and use of individual products.
- To determine to which extent targets for column-totals are based on more or less reliable data sources.
- To redistribute products between industry-inputs and final uses in a way that leave distances between column totals and their corresponding targets within acceptable limits.
- Adjustment of total use of trade-and transport margins to their supplies and adjustment of the calculated use of non-deductible VAT to the target value from the Ministry of Finance.

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 before and 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

This mission was carried out as Remote Sessions in the period from April 19th to May 21st 2021. COVID19 precautions still required that the Danish experts worked from their respective homes during the entire mission. The experts Maria Nilsson and Søren Larsen participated in the 1st, 2nd and 3rd session, Annette Thomsen participated in the 1st and 2nd session.

With some exceptions, the Geostat staff had balanced supply and use of products in the SUTs for 2018 before the present mission. Small remaining differences between supply and use still existed, but they might easily be removed automatically. A number of questionable product balances were discussed during the first meeting.

However, the "horizontal" balancing left the SUT-environment with significant differences between column totals and the targets for industry inputs and categories of final uses. The present mission concentrated on removal of such distances to reliable targets as well as reduction of similar differences to less reliable targets. Most targets for intermediate consumption as well as targets for final consumption of NPISHs and general government are considered reliable while targets for household final consumption expenditure and GFCF are more uncertain.

The first session was used to address outstanding problems in the balancing of products and to go through the steps needed to adjust column totals to their target values – referred to as "Balancing of columns".

A number “complexes” containing a number of columns for related industries and final uses were defined and within each complex responsibility for adjustment of totals to targets was assigned to a few members of the Georgian staff together with a Danish “coach”. The distribution of tasks was more or less a copy of the similar distribution of responsibilities for balancing of the products. The balancers’ task was now to redistribute to select products for redistribution between uses in a way that would remove or reduce distances between column totals and target values. Exercises were carried out using “breakout-rooms”.

Before further balancing, targets for column totals were updated to include a number of corrections caused by adjustments made during the balancing of supply and use of specific products. Furthermore some formulas used in the Excel-system for calculation of trade- and transport margin percentages were adjusted to bring these margins closer to their supply values.

Between second and third meeting Geostat staff had revised a number of targets, redistributed selected products and calculated a new version by adjusting column-totals to targets by an automatic vertical distribution followed by a new automatic balancing of supply and use for all products. This left rather small unbalanced residuals for the industry-inputs, but did not remove such differences completely. There also remained some differences between supply and use of trade and transport and calculated non-deductible VAT was somewhat lower than the revenue figure from the Ministry of Finance. The result was, however, an almost balanced SUT-workbook. This version was mailed to the Danish experts before the third meeting.

Before the final meeting, a Danish expert made further preparations for a final balancing. “Masks” with selections of cells to include in the final adjustments were drawn up: One for adjustments of industry-inputs to their targets, and one for removal of those differences between supply and use of products caused by the first adjustment. The latter would select cells within uses with less reliable column targets.

During the meeting the Geostat staff and Danish experts looked at specific areas of the SUTs where further corrections could be needed. Specific attention was given to areas where the calculated values for non-deductible VAT seemed undervalued. A number of proposals for changes to average VAT-rates and assumed VAT-registered shares of industries were made.

3. Conclusions and follow up

- During the mission the SUTs were brought close to a final balanced version, but some issues were still outstanding.
- A few product balances still needed further examination and seemingly, unrealistic distributions of some products may lead to adjustments to the size and composition of non-observed activity within specific industries.
- Some parts of the model used to calculate the use table’s non-deductible VAT need to be reconsidered. Changes to VAT-calculations should be implemented before a new final balancing can take place.
- It is the impression that the Geostat staff now has a good understanding on how to use the VBA-tools for adjustments within the Excel-environment. However, the Danish experts still expect to follow the last adjustments and to give advice on how to remove the last differences between supply and use.
- A final balanced set of SUTs for 2018 should be finished before the next step: Construction of SUTs in constant (previous years) prices.

Next mission is planned to take place in late June and July and to be dedicated to constant price calculations. It will require that price indices are assigned to all products of the SUTs. It will probably be necessary to use the similar indices for deflation within groups of related products. On the other hand, several products may have



different price information for import, domestic production and/or export. A particular problem is, that a correct calculation in previous years prices requires knowledge on margin- and tax-percentages from the price base-year. It may be difficult to produce such information for 2017 as the new benchmark-tables for 2018 do not yet have similar tables for the previous year. Some simplified assumptions will probably be needed for calculation of SUTs for 2018 in 2017-prices.

An outstanding issue is the value-added part of the SUTs for 2018. There is here a need for figures for compensation of employees, other taxes less subsidies on production and operating surplus/mixed income by industries. This table will also be needed for the construction of a new input-output table for 2018 that is planned to be the issue for the mission following the coming mission in July.

Actions needed for moving forward before next mission:

Action	Deadline	Responsible person
If necessary, introduce the necessary corrections to product balances that seem unrealistic	As soon as possible	Geostat, if in doubt exchange data with Danish experts.
Make the needed corrections to VAT-rates and assumptions on VAT-registered shares of industries.	As soon as possible	Geostat, if in doubt exchange data with Danish experts.
Finalize SUTs for 2018	As soon as possible	Geostat + Danish experts
Propose format for input of price indices	June 10 th .	Danish expert
Assign price indices to all SUT-products	July 1 st .	Geostat
Add functions to the VBA-macros that are needed for deflation using the price indices.	July 1 st .	Danish expert

Annex 1. Terms of Reference

EU Twinning Project GE 16 ENI ST 06 18

19th – 29th April 2021

Component 2: Enhancing methodological soundness in the National Accounts in line with the EU standards

Sub-component 2.2: Compilation method of Supply – Use (SUT) tables and Input Output (I/O) Tables

Mandatory results and benchmarks for sub-component 2.2:

- Compilation method of Supply-Use (SUT) tables improved and Input-Output (I/O) tables implemented

Indicators of Achievement (baseline and targets):

- Availability of Supply Use Tables (SUT) as a statistical product according to SNA08
 - **Baseline:** 2019 – SUT is produced in current prices
 - **Target:** November 2021 – SUT produced in current and constant prices according to SNA08
- Availability of I/O Tables as a statistical product
 - **Baseline:** 2019 – I/O tables are not available
 - **Target:** November 2021 – I/O tables available

Activity 2.2.F (RS) “Finalization of balancing of SUTs in current prices”

1. Purpose of the activity

- Presentation of results from initial balancing of products and industries/final uses
- Solutions to outstanding questions in product-balances
- Balancing of industries and final use
- Balancing of trade- and transport-margins and VAT

2. Expected output of the activity

- Progress made in the purpose items
- Input provided to the ToR of next activity
- Mission report written
- Updated road map for sub component 2.2



Annex 2. Persons met

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