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 the EU standards"*

MISSION REPORT

Activity: 2.2.A "NACE conversion and calculation of CFC"

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List of Abbreviations

CFC	Consumption of Fixed Capital
EC	European Commission
EU	European Union
GFCF	Gross Fixed Capital Formation
HBS	Household Budget Survey
LFS	Labour Force Survey
MS	EU Member State
RTA	Resident Twinning Adviser
RTAA	Resident Twinning Adviser Assistant
SBS	Structural Business Statistics
SUT	Supply and Use table
ToR	Terms of Reference

1. General comments

This mission report was prepared within the EU Twinning Project "Strengthening the Capacity of Georgian Statistical System". It was the second mission within Component 2 of the project.

The main purpose of the mission was to:

- Follow up on the conversion of industry groups from 45 NACE 1.1 industries to 64 NACE 2 industries that was initialized after the June mission. Evaluation of the changes from old to new values for production and intermediate consumption by industries.
- Make available the data needed to fill a template for calculation of output from general government from the cost side. Specifically a calculation of consumption of fixed capital was missing from the old figures.
- Introduction of the proposed new Excel-based framework for supply and use tables. Presentation of a version with a detailed product-classification, industries based on NACE rev.2, household final consumption by COICOP, government final consumption by COFOG-groups and capital formation by types.
- It was originally planned to conduct a workshop on the use of an Excel-VBA based IT-tool for staff participating in SUT work. As some areas within the existing SUTs turned out to require comprehensive revisions, the time left for demonstration of a framework for future SUTs had to be cut down.

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

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

Geostat's plan to publish new national accounts figures according to ESA 2010 and NACE rev2 in November 2019 implies that the Georgian SUTs must be converted to new classifications and that some areas within the SUT-framework undergoes significant revisions as agreed with the IMF. At the time of the present mission the national accounts staff of Geostat was largely occupied by making data available for the series that shall be published in November. Within component 2 of this project assistance with the November version of national accounts series is covered by subcomponent 2.1. It has, however, been difficult to separate the issues that belong to the subcomponents 2.1 and 2.2 from one another.

During the present mission it has been acknowledged that solutions that can be used in the November version as well as in a future – more comprehensive – system should generally be preferred. The deadline in November will, however, require that some calculations are carried out by simpler methods that may be replaced later by a new system for SUTs developed within subcomponent 2.2.

SBS: The double-coded accounts statistic for 2015-2017 is the basis for conversion from the 45 industry groups of the present national accounts to the 64 industry level of NACE rev.2. In mid-July the Geostat staff had produced new industry totals for output, input and wages and salaries based on the detailed SBS-statistics for the years 2007 – 2017. A new system for calculation of changes in inventories has been developed. For the years 2016 and 2017 the changes are adjusted for holding gains and -losses, but for earlier years this correction was still missing.

Accounts statistics are based on a sample that is grossed up to cover all units in the register behind the SBS. Small enterprises and unregistered units are not included in the SBS-figures. These units are considered "non-observed" in the old system. The assumed size of non-observed economy within each industry relied on coefficients originally calculated by comparison of total employment according to the labour force survey (LFS) and employment behind the units covered by the SBS.

However, an attempt to reuse the method from the existing system did not produce credible results. A new comparison between LFS and SBS employment figures showed LFS-employment that was lower than SBS-employment in many years within several industries. It seems that there are problems in the way that the LFS (or alternatively the SBS) is grossed up to cover the population. It was concluded that there is an urgent need for an inquiry into the methods used for grossing up. It will be necessary to decide on the supplements for non-observed economy within the next two or three weeks if the deadline for new figures shall be met.

A file with SBS industry outputs distributed by detailed product-codes corresponding to CPA and NACE ver.2 had been prepared for the year 2017. The same program can be used to create similar files for the years since 2015. The results can be aggregated to a product-classification that is feasible for a new SUT-framework. For the November version it had been decided to use a new 2-digit CPA-based product nomenclature. It could, however, be supplemented by a number of new product codes for output of NPISH and general government and specific new products as FISIM and R&D.

Business accounting contains some differences from national accounts concepts. Significant differences can be expected in the treatment of insurance, financial intermediation, research and development. A special mission, 2.1.B, on FISIM, R&D and rent of dwellings is planned to take place in September. The system for distribution of insurance by uses (input, household final consumption) will also be needed before estimates of total input by industries are ready.

Trade margins: As a new product classification is chosen, wholesale and retail trade margins need to be distributed by the new product-groups. A new distribution can use the outputs of trade margins from the various detailed trade industries as a starting point. During the mission a file was created, where each output from a 4-digit NACE trade industry is distributed by one or more CPA-based products. The resulting margin percentages must – of course – be evaluated critically. Common sense will probably result in some adjustments to the assumed distributions of margins.

Imports and custom duties: In the existing SUTs the column for import of goods is valued FOB. It may be assumed that the original data from customs authorities were actually valued CIF and that the differences are constructed by distributing transport and insurance costs by products. If this is the case, it should be possible to get the original CIF values (or the distribution of the difference between CIF and FOB values) from foreign trade statistics. Usually imports of goods are valued CIF in supply and use matrices. If it is decided to retain the FOB valuation, differences between CIF and FOB should be distributed as margins on the imported products to ensure that domestic supply and use is valued consistently.

Taxes and subsidies on products other than VAT: Taxes on products are known from the Ministry of Finance. The legislation is used to assign each tax to specific products. It is recommended that the same method is used to distribute these taxes by the new product classification. In the old system information on subsidies was available in a similar form. These values were, however, only used for a proportional distribution of a subsidy-total that was a result of an extrapolation from previous year's subsidies. It is now recommended that the values of subsidies that are received from the Ministry of Finance are used without further adjustments.

Non-deductible VAT: In the old SUTs the revenue from VAT was distributed by products in proportion with the supply of VAT-liable products. During the mission it was demonstrated by a simple example that a better distribution is possible when an initial version of the use table exists. The VAT-revenue is the sum of non-

deductible VAT on inputs, consumption and investment. For each cell at the uses side the value of non-deductible VAT depends on the average VAT-rate on the specific product and the share of VAT that cannot be deducted (as ingoing VAT) by the industry that has purchased the product in question. Usually households cannot deduct any ingoing VAT. The VAT-legislation does typically also contain a number of specific exceptions to the general rules. Hence the distribution of VAT depends heavily on where each specific product is used. A model based on an initial use matrix will probably produce results that differ significantly from the results from the old method.

Household final consumption: The Household Budget Survey (HBS) contains household final consumption distributed by a detailed COICOP classification. The consumption figures can be aggregated to any product-classification used in a SUT-framework. While household final consumption is shown as a single column in the existing use-table, it is recommended that in a future framework it shall be distributed to a number of columns – for instance – by 3-digit COICOP codes.

For the use in national accounts the HBS figures are received in a version that should be grossed up to cover the entire population. There are, however, suspiciously great differences between consumption according to the existing national accounts and the figures from the HBS. Even if household consumption may be revised by a new balancing of supply and use, it is incredible that it will be as low as the HBS seems to indicate.

The methods used for grossing up the HBS should be examined closely. It should be considered if the HBS-office has any knowledge about uncertainties/underreporting in specific COICOP groups. It should furthermore be investigated whether other sources can be used as indicators for specific areas of COICOP.

General government: The template for calculation of production value of general government and government final consumption was drawn up during the mission in May. While information of central government seems reliable, data for local government and specifically extrabudgetary units seem less complete. In the June-mission it was stressed that some of the missing information is urgently needed if the November-deadline shall be met!

The system for calculation of consumption of fixed capital will be provided by the Danish experts, but it still requires information on investment at least for some recent years – preferably by type and COFOG groups. We need figures for sales revenue and own-account investment as these values must not be included in the production of services for final consumption of general government.
We need estimates of "Social benefits in kind", that are not production of general government, for instance health services that are purchased from market producers and made available for free to the public.

The Ministry of Finance can probably provide most of the needed data. If some areas are not fully covered by the statistics, the missing figures must be assessed one way or another. It has been stressed that it is of crucial importance that figures for production, intermediate consumption of general government as well as final consumption of government non-market services can be made available within the next few weeks.

Framework and dimensions of a future Georgian SUT-system: An example of a new comprehensive Excel-framework for SUTs based on aggregated Danish figures had been presented in the June mission. In the present mission, the framework was adjusted as a proposal for Georgian SUTs, with 64 industries, columns for household consumption by 3-digit COICOP groups, columns for individual consumption of NPISH and general government, 10 columns for collective consumption by GOFOG groups, columns for 10 types of GFCF and 6 types of inventory changes and a column for valuables. A final decision on how many – and which – columns should be retained in the Georgian SUT-system will depend on the availability of detailed source data and the quality of these sources.

An example showing how new more detailed products may be defined was presented, but a final decision on how to split a number of the new 2-digit product groups into more detailed products will have to await the finalization of the November version of the SUTs in current prices for 2017.

The results, recommendations and conclusions were presented for the GEOSTAT project leader Mr. Gogita Todradze, Executive Director of GEOSTAT, at the end of the mission.

3. Conclusions and recommendations

- To reach the goal of publishing new SNA2008 / NACE rev.2 based NA-figures by November 2019 the Danish experts together with staff from Geostat drew up plans for solutions to outstanding issues in the mission in June.
- As planned industry turnover and purchases for intermediate consumption based on SBS for 2007 – 2017 was made available to the Danish experts in July.
- For the years since 2016 changes in inventories are cleaned for holding gains and losses. For earlier years only the changes – according to business accounting principles – are available. A simple method for adjustment for price changes should be developed for use in these years.
- Within industries covered by SBS, non-observed activity contains small enterprises and other units that are not represented in the register behind the SBS register. In principle an estimate of employment in these units should be estimated as the difference between total employment according to the labour force survey (LFS) and employment of the enterprises covered by SBS. In practice this comparison has produced many incredible results, often with negative differences, and new estimates for employment, production and inputs for non-observed units are not yet ready.
- The investment figures needed for calculation of consumption of fixed capital have not yet been obtained from the Ministry of Finance. It is urgently necessary that this calculation can take place soon and that the values other cost components, sales revenue and social benefits in kind are completed.
- Series for FISIM, imputed rent of owner occupied dwellings and production and investment in R&D are planned to be the outcome of a mission in September whose dates are yet unknown. It seems unrealistic that series of annual figures in current and constant prices can be fully completed before the end of September if these series become available later than mid-September. It should, however, be possible to finish other series and perform a partial balancing of supply and use.
- The plan below with its action points and deadlines is an attempt to outline the requirements if annual figures shall be completed within September or – maybe more realistic – early in October. The sequence of finalization of the various components will ultimately depend on when each data source becomes available.

Actions needed for moving forward as well as for preparing the next mission:

Action	Deadline	Responsible person
By contact to the Ministry of Finance: a) Get access to figures for investment in general government for as many recent years as possible with specification by the different types of investment. Make it available to the Danish experts for calculation of consumption of fixed capital.	28th August	GEOSTAT / DST
b) Complete the figures for the different types of costs within government branches with COFOG classification.	2nd September	

Get missing data for public schools from Ministry of Education.	2nd September	GEOSTAT
Investigate the method used to gross up the LFS. Consider whether the values for total population are underestimated.	6th September	GEOSTAT (with advice?)
Decision on coefficients for estimation of the size of non-observed activities.	10th September	GEOSTAT / SHL
Investigate the method used to gross up the HBS. Look primarily for systematic errors. Look for alternative sources for Household consumption in specific COICOP groups.	10th September	GEOSTAT (with advice?)
One way or another: Construct initial distributions of household final consumption by products.	12th September	GEOSTAT (With some advice?)
Construct a system for distribution of production of Insurance services on Intermediate Consumption and Household Final Consumption Expenditure	12th September	GEOSTAT
Distributions by products of trade and transport margins	12th September	GEOSTAT
Distributions by products of taxes and subsidies by products	12th September	GEOSTAT
Add specific products (rows) to the system: Insurance, FISIM, R&D, housing, outputs of NPISH and general government, investment in weapon systems	13th September	GEOSTAT
System for distribution by products of non-deductible VAT	16th September	GEOSTAT
Start balancing of the first year's annual data in current prices	16th September	GEOSTAT
Start balancing of the first year's annual data in previous year's prices	20th September	GEOSTAT

Terms of Reference

EU Twinning Project GE 16 ENI ST 06 18

5-9 August 2019

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

Sub-component 2.1: Compilation methods of National Accounts and New Products

Mandatory results and benchmarks for sub-component 2.1:
- Compilation methods of National Accounts improved and new products implemented

Indicators of Achievement:
- Recommendations on revision according to SNA 2008 and availability of estimation methods of the GDP components
- Preparation of methodological documentation for selected topics

Activity 2.2.A:

1. Purpose of the activity
- Update and further assessment of the current situation
- General discussions regarding the transition to SNA2008.
- Follow-up on the transformation of NACE, rev.1 to NACE, rev.2
- Problematic issues in the transition will be identified, prioritized and worked on. The work will be coordinated with work done by GEOSTAT.

2. Expected output of the activity
- SUT framework developed in a new format based on NACE 2.
- Methods for estimating coefficients of non-observed economy elaborated.
- Estimation methods of market and non-market output for particular industries finalised.
- Discussion performed and decisions made of the role of SBS-statistics as the basis for the new SUT and the SNA2008 transition
- Estimation of individual and collective government expenditures.
- The transformation of NACE, rev.1 to NACE, rev.2 has been discussed.
- Methods for calculation of price indices needed for deflation of Output and Intermediate consumption finalised;
- Work to be done before next mission and issues to be addressed on the next mission has been identified.
- Input provided to the ToR of next activity
- Mission report written

3. Participants

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