

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 2.1: “Compilation methods of National Accounts and new products”

MISSION REPORT

Activity: 2.1.H (RS) “Evaluation of work performed and finalizing of HICP”

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". The mission was held within the sub-component 2.1: "Compilation methods of National Accounts and new products". Due to COVID-19 the mission was carried out as a Remote Session in the period from May 17th to May 21st 2021. The mission was mainly devoted to follow up on the earlier identified necessary changes to the Georgian CPI to make it compliant with the HICP and thus make Geostat able to produce and publish a HICP.

The purposes of the mission were:

- Evaluation of work performed by Geostat since the former activity
- Assessment of quality and compliance with EU standards of the draft HICP
- Discussion of quality report and meta data
- Discussion of the publication of HICP

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

Evaluation of work performed by Geostat since the former activity

In the first mission devoted the HICP in October 2020 a number of necessary changes to the Georgian CPI were identified if it should be in compliance with the requirements for a HICP. These necessary changes were put into a work plan running from November 2020 to May 2021. This current mission started out with Geostat presenting the status on each point in the work plan. In general almost all the points are accomplished and the few remaining are all in process and are expected to be completed within 2021. All in all the new Georgian HICP will be in compliance with the HICP regulations when publication is expected to start in the beginning of 2022.

The below table shows the work plan as well as the current status and some comments on the work carried out by Geostat in connection with the work plan.

	Description	Status	Comments
Key for the 1999 COICOP and the ECOICOP	There should be a key/converter between the 1999 COICOP and the ECOICOP to make it possible to use the ECOICOP for compiling a HICP.	Accomplished	The conversion between the 1999 COICOP and the ECOICOP were established right after the first mission. All 6-digit codes covered within the current consumer basket have been converted to corresponding ECOICOP 5-digit codes.
Conversion of national account data to ECOICOP	In order to calculate the weights for the HICP the national account data for household consumption should be received on the ECOICOP codes	Accomplished	The established conversion table was used on the national accounts data. All 4-digit codes that are covered by the NA

	down to a four digit level.		weights data were converted to the 4-digit ECOICOP. Those codes that are converted "1 to n" ECOICOP codes, were broken down according to the HBS data, as usually done during the calculation of the weights.
Conversion of household budget survey data to ECOICOP	In order to calculate the weights for the HICP the household budget survey data should be received on the ECOICOP codes down to at least a five-digit level.	Accomplished	The established conversion table was used on the HBS data. All the expenditure data annually provided by the HBS were converted to the ECOICOP 5-digit codes.
It-system able to calculate using the new ECOICOP classification	The IT-system has to be adapted to work with the new ECOICOP classification.	In process	Currently the (experimental) HICP is calculated using an Excel tool (which is used for regular CPI backup calculations). The IT department has recently started working on implementing the HICP in the actual calculation system after the price statistics department has provided all the necessary data and guidance (weights, aggregation structure, etc.). The work will be finished by end of June.
Calculation of ECOICOP weights	The weights should be calculated using the ECOICOP classification.	Accomplished	Weights were calculated using the same technics as for the national CPI. Expenditures from period t-2 were used. The structure of HICP weights in general follows the CPI weights.
Price updating the ECOICOP weights	The weights for the HICP have to be price updated to December t-1 from year t-2.	Accomplished	Price updating of weights were also performed, using December 2020 national CPIs with reference period "average 2019 = 100".
Include services in the HICP when consumption commences.	Services like air tickets and package holidays that are booked before the actual consumption of the services, should be collected at the time the consumers book the services but included in the index the month where the services are actually consumed.	Accomplished	For air tickets and package holidays the price collection has been changed so that the price collection takes place one month before actual implementation in the calculations in the HICP. A one month lag is considered appropriate by Geostat but they are considering doing an actual investigation of the timing of the purchases of air tickets and package holidays.

Quality changes	<p>When there are quality differences between an old and new product in a replacement situation, a quality adjustment method should be used. If on the other hand there are no quality differences then the method direct comparison should be used. Each replacement situation should be treated case by case and there should not be a default method.</p> <p>This should be implemented for the product groups electronics and cars. After those two product groups, it should also be implemented for other product groups where it is not currently the case.</p>	In Process	<p>For mobile phones and used cars Geostat has developed hedonic indices based on web scraped data. These quality adjusted hedonic indices will be analyzed during the rest of 2021 by looking at among other things indices calculated on earlier periods. If the indices turn out to be considered valid, the hedonic methods will be implemented in the beginning of 2022. If it turns out not to be the case Geostat will instead use direct comparison and other implicit methods on a case by case basis in compliance with the HICP regulations.</p>
When the price is a percent of an amount	<p>In cases where the price of a product is a percent of the amount, the amount has to be adjusted with an appropriate index once a year. An appropriate index is often the total CPI/HICP. The resulting price change as a result of the adjusted amount should be included as a price change in the HICP.</p> <p>The task here is to ensure that this adjustment will take place once a year for the relevant prices in the HICP basket.</p>	Accomplished	<p>This was implemented for financial services where the fee for a loan depends on the amount of the loan. The amount of the loan in the sample will be adjusted once a year with the development in the total HICP.</p>
Number of prices for each product group	<p>Once a year it should be controlled if the distribution of collected prices is ideal or if a redistribution of the collected prices can improve the quality of the indices.</p>	Accomplished	<p>The distribution of the sample for the CPI was already analyzed on a continuous basis. However the analysis mainly took the price variance of the product groups into account. From now on this analysis will also take the weights of the different product groups into account.</p>
Analyze coverage of Georgia	<p>It should be analyzed whether or not the six cities also are representative for the rural areas of Georgia. This is probably especially centered around food. Maybe prices from the</p>	Accomplished	<p>The sample behind the CPI and HICP covers approx. 82 per cent of Georgia. Using farm prices for food products Geostat has analyzed whether there are</p>

	agriculture statistics could be used to analyze whether or not the data collected in the six cities are representative for the rural areas as well. Depending on the outcome of the analysis further actions regarding price collections in rural markets might have to be taken.		significant differences in price developments between rural areas not covered in the sample and the rest of Georgia. The analysis shows that the price trends are rather similar. Furthermore a study from 2010 directly found out that the price development in the six cities currently covered in the price collection appropriately covers all of Georgia for the CPI. Hence the regional coverage is deemed satisfactory.
Metadata	Fill in the HICP inventory and the Standard quality report from Eurostat and update them once a year going forward.	Accomplished	The HICP inventory including the annex has been completed after a review together with the Danish experts.
Calculation of indices	The calculation of the HICP will take place each month just after the calculations of the national CPI. The first month with calculations is February with the calculations of the HICP for January. The calculations will be evaluated at the last activity of this project or bilateral when needed.	Accomplished	Currently the (experimental) HICP is calculated using an Excel tool but will be included in the CPI IT-calculation system before the end of June. This will enable a smoothly monthly production of the HICP. Furthermore the conversion to the ECOICOP including change of weights has been completed in a way that will make the yearly weight update easy to carry out in the future.
Dissemination	At the last activity of this project the possible dissemination of the HICP will be discussed. Before the last activity, there should be a proposal for the dissemination.	In Process	Geostat will continue to produce monthly (experimental) HICPs throughout 2021. They expect to start publishing the HICP from the beginning of 2022 with 2021=100. The HICP will at that time be published on a monthly basis a few days after the publication of the national CPI (to avoid confusing the users) but within the deadlines set in the HICP regulation.

At the first mission it was decided to only focus on the HICP and not on other related statistics covered by the HICP regulations. The HICP Regulations covers the production of the HICP but also the production of some related statistics, namely a HICP with constant taxes (HICP-CT) and a price index for owner-occupied housing (OOH) as well as a House Price Index (HPI) and finally an administered prices HICP. However Geostat has worked not only on a HICP but also a HICP-CT as well as identifying administered prices of the level of

indices. Hence Geostat will be able to produce a HICP-CT alongside the HICP when going into regular publication as well as the determination of administered prices. The HICP-CT can and will be calculated in the excel calculation system and the administered prices are determined in the annex to the HICP inventory. The OOH and HPI is still not a part of this project.

Assessment of quality and compliance with EU standards of the draft HICP

Geostat showed the Danish experts their IT-calculation system and gave a demonstration regarding the aspects of producing the CPI/HICP from price collection in the field to validations and calculations of the price indices at the central office. This demonstration showed that the CPI/HICP is of a high quality and that many good procedures and methods are in place when producing the CPI/HICP. For instance the price collectors use CAPI that are linked online to the database through the internet and hence the price collectors get immediate automatic feedback on the prices collected. At the central office, the prices are controlled as well both regarding price changes from last month but also across regions. Furthermore product replacements are indicated by the price collectors and the necessary quality adjustments are then handled afterwards by the central office. The validation of indices is supported by graphical tools. This means that the new Georgian HICP will not only be in compliance with the HICP regulations but also that it will be produced with a high quality.

Discussion of quality report and meta data

A draft of the HICP inventory filled in by Geostat was presented to the Danish experts and in a few cases changes were suggested. These changes have been implemented and hence a final version of the inventory including annex is ready when the HICP is published for the first time. The inventory describes in a detailed way the methods etc. behind the Georgian HICP.

The inventory will be published in Geostats website when the publication of the HICP starts. The inventory will be updated on a yearly basis going forward.

Discussion of the publication of HICP

Geostat will continue to produce monthly (experimental) HICPs throughout 2021 as was the case for January to April 2021. Even though Geostat is in principle ready to start publishing a compliant HICP already it suggested that Geostat wait until the ongoing work regarding implementation in the IT-system and quality adjustment procedures is completed. This will also give Geostat good time to prepare the coming publication of the HICP. Geostat expects to start publishing the HICP from the beginning of 2022 with 2021=100. The HICP will at that time be published on a monthly basis a few days after the publication of the national CPI (to avoid confusing the users) but within the deadlines set in the HICP regulation.

3. Conclusions and follow up

The structured discussions of the legal HICP requirements identified 8 numbers of instances where the current Georgian CPI deviates from the HICP requirements at the mission held in October 2020. These instances were put into a work plan running from November 2020 to May 2021 and Geostat has been busy working on the HICP since. Almost all the points have been accomplished and the few remaining are all in process and are expected to be completed within 2021. All in all the new Georgian HICP will be in compliance with the HICP regulations when publication is expected to start in the beginning of 2022. Furthermore the Georgian HICP will be of a high quality.

This was the last mission devoted to the HICP but Geostat is fully in a position to publish a HICP in compliance with the HICP regulations on a monthly basis going forward from 2022.

Annex 1. Terms of Reference

EU Twinning Project GE 16 ENI ST 06 18

17th May – 21st May 2021

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 for activities 2.1.G (RS) and 2.1.H of sub-component 2.1:

- The Harmonized Consumer Price Index is developed and disseminated by the Geostat
- Expert assessment about the quality of the created index is in place

Activity 2.1.H (RS) “Evaluation of work performed and finalizing of HICP”

1. Purpose of the activity

- Evaluation of work performed by Geostat since the former activity
- Assessment of quality and compliance with EU standards of the draft HICP
- Discussion of quality report and meta data
- Discussion of the publication of HICP

2. Expected output of the activity

- The work performed by Geostat since the former activity has been evaluated
- The quality and compliance with EU standards of the draft HICP has been assessed
- Revisions to be implemented in the draft HICP has been outlined
- The HICP quality report and meta data has been discussed and advises has been given
- Draft publication has been discussed and evaluated
- Mission report written

3. Participants

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Mr. Martin Sædholm Nielsen, Statistics Denmark



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Annex 2. Persons met

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