

# MINUTES OF THE SECOND INTERNATIONAL COMPARISON PROGRAM TECHNICAL ADVISORY GROUP MEETING

# MAY 23, 2018

## WASHINGTON, DC, USA

#### WELCOME AND OPENING REMARKS

The second meeting of the International Comparison Program (ICP) Technical Advisory Group (TAG) took place on May 23, 2018 at the Word Bank Group Headquarters in Washington, DC, USA.

The main objectives of the meeting were to i) inform the TAG on the progress with the ongoing ICP 2017 cycle; ii) inform the TAG on the progress with the work of the various technical Task forces; and to iii) discuss selected technical issues and proposals.

The meeting agenda is enclosed in Annex 1. In attendance were TAG members and staff from the World Bank Global ICP Unit, which serves as the TAG secretariat, as listed in Annex 2.

#### **ICP 2017 CYCLE: PROGRESS REPORT**

Nada Hamadeh, ICP Global Lead, World Bank, briefed the TAG on the progress with the ongoing ICP 2017 cycle. The related report is available here and the related presentation here.

The presentation on the progress with the ICP 2017 cycle covered i) the ICP 2017 cycle objectives and governance and capacity building activities; ii) data collection and submission status; iii) progress with the ICP Research Agenda items and related Task Forces; iv) outstanding risks and mitigation plans; v) plans for publication of results and data access; and vi) knowledge and outreach activities and purchasing power parity (PPP) uses.

The TAG made several comments and suggestions regarding the progress with the ICP 2017 cycle, including:

The importance of assessing the quality and comparability of ICP results, given the different regional country composition in relation to the ICP 2011 round, and the increased reliance on consumer price indices (CPIs) as extrapolators for PPP estimation. In addition, the TAG welcomed the various suggested quality assurance checks, such as the attempt to estimate the inter-regional linking factors based on capital-city prices.

- The need to develop a policy document showcasing various uses of ICP results (a topic dedicated to the Task Force on "PPP Uses") both from an international and from a national perspective. For instance, the ICP report for a given round could be accompanied with subject matter reports (e.g. health), based on the ICP data and results, or case studies to demonstrate how the ICP has helped strengthen capacity in national accounts and price statistics or has enhanced consistency between statistical areas in countries. This should help highlight a broad range of possible uses of ICP data and results.
- The importance of developing a country guideline document for estimation methods, practices and uses of sub-national PPPs (a topic dedicated to the Task Force on "Country Operational Guidelines and Procedures").
- The need to monitor the availability of potential alternative data sources for intra- and intercountry PPP estimation (a topic dedicated to the Task Force on "New Data Sources"). However, the challenges and limitations related to using non-survey data were also noted.
- The need to keep assessing the most reliable methodology for estimating housing, health and education PPPs (topics dedicated to the Task Force on "Housing", and the Task Force on "Non-Market Services").
- The benefit of developing online tools allowing users to create ad-hoc country and subject matter comparisons based on both published and unpublished ICP data and results.

#### TASK FORCE 1 – PPP COMPILATION AND COMPUTATION: PROGRESS REPORT

Marko Rissanen, World Bank, briefed the TAG on the progress with the work of the PPP Compilation and Computation Task Force. The related report is available here and the related presentation here.

The work by the Task Force addresses the following four topics (tenure in brackets):

- 1. Linking interim regional updates into a global comparison (2017-2019);
- 2. Building PPP timeseries for the interim period (2017-2019);
- 3. Fine tuning global linking procedures (2018-2019); and
- 4. Productivity adjustment for government and construction labor (2018-2019).

It was noted that the topics assigned to the Task Force overlap to a certain extent and that achievable progress depends on the availability and quality of the various required datasets, including the regional interim and ICP 2017 cycle results and the data required for extrapolating PPPs. To this end, the sixth <a href="Inter-Agency Coordination Group">Inter-Agency Coordination Group</a> (IACG) meeting and the third <a href="Iask Force">Iask Force</a> meeting, scheduled for September 2018, are foreseen to conduct an in-depth review of all datasets available to date.

Regarding the possible recalculation of the ICP 2011 results, it was noted that the Eurostat-OECD region has revised their regional PPP timeseries, including the year 2011. In addition, several countries have revised, in some cases significantly, their gross domestic product (GDP) expenditure estimates since the publication of the ICP 2011 results.

Irrespective of whether the ultimate decision is to revise the ICP 2011 results or not, quantification of the impact of the revised base data will be useful. The TAG requested the Task Force to investigate the recalculation of the 2011 regional and global results, and report on the feasibility, results and implications of the recalculation, for further discussion by the TAG, and eventually by the ICP Governing Board. The

TAG also recommended the Regional Implementing Agencies to compile and provide the Global ICP Unit with revised 2011 GDP expenditure estimates, were applicable.

# **Topic 1.1 – Interpolation between benchmark years**

Prasada Rao, University of Queensland, briefed the TAG on the progress with the work on interpolating PPPs between benchmark years. The related paper is available <u>here</u> and the related presentation <u>here</u>.

Currently, the ICP as a program is not publishing PPP timeseries. As a result, several agencies, including the World Bank World Developing Indicators (WDI), are publishing their own PPP timeseries. The work done by the Task Force aims at developing a method to construct interpolated series of PPPs for the intermediate years between the benchmarks, taking into account all available data, including regional interim updates, where available.

Four methods for producing interpolated series of PPPs were presented, including a consideration on the desired level of disaggregation at which extrapolation should be undertaken. The TAG welcomed the work done by the Task Force and suggested that, in addition to theoretical considerations, empirical studies be conducted to quantify the differences between methods, especially after the first 2017 ICP cycle estimates become available. Lastly, it was noted that, as the selected method would need to be ultimately communicated to users, the simplicity of the method should be a factor when considering the various options.

### Topic 1.2 – Productivity adjustment factors for labor

Robert Inklaar, University of Groningen, briefed the TAG on the progress with the work on productivity adjustment factors for labor-associated headings of the ICP. The related proposal is available <a href="here">here</a> and the related presentation <a href="here">here</a>.

The adjustment for productivity differentials was introduced during the ICP 2011 round. The productivity adjustment factors (PAFs) were estimated based on the country's level of capital per worker and its share of capital income in GDP. Productivity adjustment was applied for government compensation related headings. Adjustment for construction related headings was also considered; however, it was unclear which adjustments for construction labor productivity would be feasible and appropriate.

For the ICP 2017 cycle, it was suggested to continue the same approach for estimating and applying the PAFs. However, it was also suggested to investigate the use of more comprehensive datasets underlying the estimation of the PAF. To this end, it was noted that the University of Groningen has already identified and used a few new data sources. For construction, it was noted that it remains unclear which factors should or could be applied for productivity adjustment between countries.

The TAG recommended to further estimate the impact of relying on new data sources for estimating and applying the PAFs during the ICP 2017 cycle. It was also noted that, if the ICP 2011 results would be recalculated, the use of revised PAFs should be considered in order to achieve better comparability between the reference year comparisons. The TAG also discussed whether a change in underlying dataset would be considered as a "change" in methodology. Lastly, it was noted that one reason for the Eurostat-OECD region to move from an input-approach to an output-approach for health and education was indeed the difficulty of adjusting for productivity; however, it remains unclear if the countries outside the Eurostat-OECD region would have the needed datasets for applying an output approach at this stage.

#### TASK FORCE 2 - HOUSING: PROGRESS REPORT

Alan Heston, University of Pennsylvania, briefed the TAG on the progress with the work of the Housing Task Force. The related report is available <a href="here">here</a> and the related presentation <a href="here">here</a>. The work by the Task Force addresses the topic on PPPs and real expenditures for dwelling services (tenure: 2017-2019).

The Housing Task Force has thus far reassessed the 2011 ICP methodology for estimating the housing PPPs and considered options to improve the estimates for the ICP 2017 cycle. In ICP 2011, two main approaches were used to estimate housing PPPs; direct quantity approach and direct rental or rental equivalence approach. Both approaches had their own challenges in terms of data availability and quality. In addition, the national accounts expenditures for housing exhibited weaknesses or inconsistences in several countries. Furthermore, it was noted that the Asia-Pacific region has applied a so-called reference-volume approach in their 2005 and 2011 regional comparisons. To this end, the Task Force is investigating avenues for using the common ICP approach(es) for estimating the housing PPPs in the region.

The Task Force suggested keeping the ICP 2011 estimation approaches in place; however, to conduct further data validation and verification activities, including checking the consistency of reported quantity and rental data, and to review the plausibility of the housing expenditures reported by the countries. It was also noted that a housing metadata questionnaire was introduced for the ICP 2017 cycle in order to obtain further information on the housing data reported by the countries.

The TAG welcomed the work done by the Task Force and suggested to conduct additional analyses, especially after the ICP 2017 cycle data become available.

## **Topic 2.1 – Housing quality indicators**

Alan Heston further briefed the TAG on the progress related to the work on housing quality indicators. The related report is available <u>here</u> and the related presentation <u>here</u>.

Due to the paucity or inconsistency of housing data for many of the countries in the 2005 and 2011 ICP rounds, a quality adjustment was made to compare housing volume measures. However, it was noted that the housing quality index had surprisingly low dispersion, especially in Asia, given the observable differences between the countries. This led to a review of international sources that could provide additional data for estimating the housing quality indicators. The research conducted by Kaushal Joshi, Asian Development Bank, identified several additional data sources, such as the Joint Monitoring Programme (JMP). Two electricity quality indexes were also examined; the Environmental Protection Index (EPI) and Global Competitiveness Survey (GCS), the latter appearing more promising. Initial studies indicate that the use of the additional data sources produce a measurable effect on the results for several countries.

The TAG welcomed the work done by the Task Force for improving the housing quality indicators and suggested to continue the analysis. Concerns were expressed about whether possible changes in the housing quality measure would affect the 2017 results compared to use of the 2011 methodology. For this reason, it was also suggested to investigate the feasibility of recalculating the regional and global ICP 2011 results based on the improved housing quality indicators for further discussion by the TAG.2011 results based on the improved housing quality indicators for further discussion by the TAG.

#### TASK FORCE 3 – COUNTRY OPERATIONAL GUIDELINES AND PROCEDURES: PROGRESS REPORT

Prasada Rao, briefed the TAG on the progress with the Country Operational Guidelines and Procedures Task Force. The related report is available <a href="here">here</a> and the related presentation <a href="here">here</a>.

The work by the Task Force addresses the following three topics (tenure in brackets):

- 1. Moving towards rolling price surveys (2017-2018);
- 2. CPI-ICP synergies to improve spatial and temporal price consistency (2017-2020); and
- 3. Sub-national PPPs (2018-2020).

The final deliverables of the Task Force will consist of three country guideline documents on the topics listed above. These documents will be submitted to the TAG for review and approval in Q4 2019.

Regarding the first topic, moving towards rolling price surveys, it was explained that areas to be explored include i) determining the frequency of the data collection for the rolling survey approach for each GDP aggregate; ii) determining the requirements and availability of national accounts deflators and price indices to extrapolate price data to the reference year; and iii) suggesting steps for increasing statistical capacity to enable greater consistency of CPIs and national accounts deflators over time and comparability across countries.

As part of the work on this topic, David Roberts prepared a <u>paper</u> on the Eurostat-OECD experience with the rolling price survey approach. The paper's main points were summarized during the meeting, and emphasized that the rolling price survey approach works in the Eurostat-OECD region because all countries have agreed a timetable which they strictly follow. In light of this, the ICP Global Implementing Agency and Regional Implementing Agencies were invited to develop concrete timetables for ICP activities beyond the 2017 cycle.

Furthermore, the current status of the 2017 ICP price surveys in different regions and for different GDP aggregates was presented. An important aspect was that the bulk of the household consumption price collection in two of the ICP regions will take place in 2018, not in 2017, which is the reference year for the current ICP cycle. Therefore, in a sense, rolling price surveys are already taking place within some ICP regions. This insight highlights the need to have reliable price indices across regions to extrapolate price data from 2018 back to 2017.

The fact that, in some ICP regions, the bulk of price collection is taking place in 2018, rather than 2017, prompted two questions during the meeting. First, whether 2018 provides a "cleaner" reference year than 2017. Second, given that in many ICP regions prices will be collected in both 2017 and 2018, should there be an attempt to have reference year results for two consecutive years, 2017 and 2018. On the first question, the TAG concurred that the use of price indices to extrapolate prices from 2018 to 2017 is the result of price surveys starting late and not an inherent design feature. Hence, the TAG agreed to keep 2017 (the UNSC stipulated reference year) as the reference year for the current cycle. However, the TAG did recommend that the availability and reliability of price indices should be carefully scrutinized. In response to the second question, the TAG raised the possibility that the PPP Compilation and Computation Task Force could explore the feasibility of calculating PPPs for both 2017 and 2018, based on the ICP 2017 cycle data.

Regarding the second topic, *CPI-ICP synergies to improve spatial and temporal price consistency,* it was explained that the Task Force will work on i) exploring areas where harmonizing CPI and ICP processes can

create synergies; ii) conducting a case study of selected countries to evaluate the use of structured product definitions (SPDs) to better define their national CPI product specifications; and iii) preparing a set of guidelines for countries to facilitate the process of harmonizing CPI and ICP activities. To this aim, a note by Patrick Kelly, Statistics South Africa, on CPI-ICP synergies and integration, and case studies by India's Ministry of Statistics and Programme Implementation (MOSPI) and United Nations Economic and Social Commission for Western Asia (UN-ESCWA), were commissioned by the Task Force. As a next step, the Task Force will prepare a short survey document to assess current CPI-ICP integration practices in different ICP regions.

Regarding the third topic, *sub-national PPPs*, the TAG was informed that many countries, particularly large ones, are interested in producing results at sub-national level. It was noted that the Task Force hopes to first have a better understanding of what countries are doing in terms of ICP-CPI integration then focus on more elaborate steps, such as preparing country guidelines to produce sub-national PPPs. It was noted that a key step for building sub-national PPPs is to ensure that item codes are properly standardized across regions within a country. Furthermore, the TAG noted that, while subnational PPPs would not affect the PPPs in the ICP, they can be of considerable interest to countries, which in turn can be beneficial for the ICP program in general as they represent an application of ICP methodology at national level.

#### **CLOSING REMARKS AND NEXT STEPS**

The implementation of the ICP 2017 cycle and the work of the ICP Task Forces will continue per the established timelines. The <u>World Bank ICP website</u> will continue to be the main repository for all ICP related information, including meeting documentation. The next meeting of the TAG is foreseen to be held in the spring of 2019.

# **Annex 1: Meeting Agenda**

# **International Comparison Program Technical Advisory Group Meeting**

May 23, 2018

World Bank Headquarters J Building, Room J 4-044 Washington, DC

# Agenda

08:30 – 09:00	Breakfast
09:00 – 09:15	Welcome and opening remarks
09:15 – 09:45	ICP 2017 Cycle: Progress Report
09:45 – 10:15	Task Force 1 – PPP Compilation and Computation: Progress Report
10:15 – 11:15	Topic 1.1 – Interpolation between benchmark years
11:15 – 12:15	Topic 1.2 – Productivity adjustment factors for labor
12:15 – 12:45	Lunch Break
12:45 – 13:15	Task Force 2 – Housing: Progress Report
13:15 – 14:15	Topic 2.1 – Housing quality indicators
14:15 – 14:45	Task Force 3 – Country Operational Guidelines and Procedures: Progress Report
14:45 – 15:00	Closing remarks and next steps

# **Annex 2: List of Participants**

# **ICP Technical Advisory Group**

Sir Angus Deaton, Chair

W. Erwin Diewert

Robert Feenstra

Alan Heston

Walter Radermacher

D. Prasada Rao

Paul Schreyer, Alternate Chair

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# ICP Global Unit, World Bank

Haishan Fu

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## **Observers**

Yun Shen