Synergies between CPIs and PPPs and integration of survey activities

The experience of Western Asia Region
Introduction

- The integration between the CPI and ICP activities is bilateral and can be achieved through:
  - The harmonization of classification
  - The use of one’s methodologies in improving the other’s structure
  - The overlap in the product lists
  - The use of ICP’s structured product descriptions in the CPI lists

- The integration effects:
  - Synchronization of data collection activities
  - Production of more frequent PPPs
  - Improvement of the quality of CPI

- The integration between the CPI and ICP activities has been explored in different dimensions in Western Asia; examples include the use of CPI in PPP computations (extrapolation and backcasting), the use of CPI national product lists in the construction of a regional ICP product list, the construction of a harmonized CPI, and the computation of sub-national PPPs.
A. Use of the CPI in PPP computations
Extrapolation of 2012/13 PPPs and back-casting of 2014/15 PPPs

- Building on the experience gained from the 2011 ICP round, ESCWA aspired to construct a PPP time series extending over the period from 2011 to 2016.

- ESCWA took on a new initiative to extrapolate PPPs for the years 2012 and 2013 from the 2011 PPPs obtained in the 2011 ICP round, and is currently conducting a regional ICP round for the year 2016 with a plan to perform a backcasting of PPPs for 2015 and 2014 from the obtained 2016 PPPs.
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✓ For HouseHold Consumption data:
  • Asked the participating member countries to provide their monthly or quarterly national CPIs at the most detailed level (product level).
  • Derived and applied the quarterly inflation levels to extrapolate quarterly average prices from the year 2011 to the years 2012/2013.
  • National annual average prices were then calculated for each of the years 2012 and 2013 for all goods and services comprising the HHC component of the ICP regional product list.

✓ For the Special Surveys’ data:
  • Data for 2012 and 2013 was provided by each country’s national statistical office. Where possible, countries provided actual data, either already available or through conducting new surveys; Others worked on extrapolating the prices from the 2011 available data using appropriate proxies/indices.

✓ The obtained data were afterward supplied to the regional office.
A. Use of the CPI in PPP computations
Extrapolation of 2012/13 PPPs and back-casting of 2014/15 PPPs

- The regional office at ESCWA performed intra and inter-country validations for the HHC data.
- Validation was also performed for the special survey data.
- Therefore, ESCWA validated the national annual prices for goods and services covering all the GDP components.
- Countries provided the GDP expenditure weights for each of 2012 and 2013 following the same methodology used for obtaining 2011 GDP Basic Heading weights.
- The final step consisted of the computation of PPPs for 2012 and 2013.
- After the computation of 2016 PPPs, the backcasting of 2015-2014 PPPs will be implemented following the same methodologies.

The extrapolation methodology developed by ESCWA enables the production of more frequent PPPs and the compilation of PPP time series through the integration with the CPI activities.
B. Use of the national CPI lists
Constructing a regional product list for the 2016 regional ICP round

- Since there was no global ICP round in 2016, ESCWA decided to carry out a regional round in order to sustain the production of PPPs in Western Asia (WA) region.

- ESCWA constructed a regional list for use in the 2016 regional ICP round by merging and incorporating the different participating countries’ national CPI lists with the updated global list and the previous 2011 regional list, hence integrating the CPI and ICP lists.

- The resulting regional list is thus a combination of the national CPI lists, the regional 2011 list, and the updated global list.
B. Use of the national CPI lists
Constructing a regional product list for the 2016 regional ICP round
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*Constructing a regional product list for the 2016 regional ICP round*

<table>
<thead>
<tr>
<th>WA 2016 Regional Product List</th>
<th>632 items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common with the Updated Global List</td>
<td>428</td>
</tr>
<tr>
<td>Available in 2011 Regional List (non- Global)</td>
<td>109</td>
</tr>
<tr>
<td>New and WA-Specific items</td>
<td>95</td>
</tr>
</tbody>
</table>
The regional team developed a regional product list and catalogue using the ICP methodology by applying structured product descriptions on global as well as regional items.

The catalogue was developed containing item specifications in both English and Arabic along with pictures illustrating each item in the household consumption list, in addition to catalogues for some of the special surveys. The national statistical offices can extract part of the catalogue containing the corresponding national items for their national use in CPI data collection.

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Constructing a regional product list for the 2016 regional ICP round

- The integration between the CPI and ICP activities achieved in this project will produce many benefits both on the regional and national levels:
  - Improving the CPI infrastructure and strengthening the national CPI product lists
  - The production of more frequent PPPs

- This integration activity paved the way for the implementation of a new regional ICP round for WA which will allow for the computation of PPPs for 2016 and will be followed by a backcasting of PPPs for 2015 and 2014, thus complementing WA’s PPP time series extending over the period 2011-2016.
C. Regional/Sub-regional CPI harmonization

 A new project is being implemented on a small group of countries to harmonize CPI.

 The participating countries were selected based on the similarities in their consumption patterns.

 The regional office compared the different national product lists classified according to the ICP basic headings for removal of incomparable items to construct the final product lists.

 While comparing and compiling the lists to be used in this project, the ICP basic heading structure was used, thus making the HCPI lists compatible with the format of the ICP list.

 The integration between the CPI and ICP activities by using the ICP characteristics in this CPI harmonization exercise will allow the national statistical offices to merge the data collection processes, given that the HCPI and ICP lists share the same basic headings and considering the overlapping products in both lists.
C. Regional/Sub-regional CPI harmonization

- This integration activity allows for the production of spatial and temporal comparisons of inflation levels across different countries through the production of a time series of HCPIs using harmonized methodologies and unified definitions, and will reduce the countries’ burden by merging the data collection processes, thus resulting in a more frequent production of PPPs.
D. Computation of sub-national PPPs

- ESCWA is implementing a national project for the computation of sub-national PPPs at the GDP level in a couple of countries in the region, one of which is the UAE, capitalizing on the experience gained from the ICP.

- Unique geographical structure of the UAE
- Federation of seven Emirates
- Demographic diversity

Significant differences in the consumption patterns and prices of goods and services across the Emirates, which inspired the choice of the UAE as a pilot country for the implementation of this project.

- ESCWA is leading the project implementation, walking the UAE through the various steps of the project.

- Work has been conducted to integrate the ICP work into UAE’s existing CPI work, resulting in many benefits on the national and sub-national levels.
For this project, ESCWA worked on unifying the different sub-national CPI lists and deriving a common list.

The list was constructed by merging the sub-national CPI lists and developing the specifications using the regional ICP list.

Some special surveys were also developed by integrating the 2011 ICP special surveys with the existing national surveys, such as the construction survey, while other special surveys, like the rentals survey, were developed using existing sub-national surveys with improvements using the ICP 2011 surveys.
**D. Computation of sub-national PPPs**

- A comprehensive data collection covering all components of GDP expenditures was conducted.

- National validations were carried on by price experts who employed their already existing expertise in the market and the CPI in this exercise, and regional intra and inter-Emirate validations followed ensuring the production of accurate PPP estimates.

- The next step involves the computation of sub-national PPPs for 2015 which is planned to be released in the last quarter of 2016.
**D. Computation of sub-national PPPs**

- **Benefits of this exercise:**
  - Improvement of the CPI infrastructure at the sub-national level (for example, Abu Dhabi’s statistical office adopted the unified list prepared for this activity to be used as the sub-national CPI list)
  - Increased coordination between the sub-national statistical offices
  - Unification of methodologies
  - Expansion of the frame and coverage of price data collection

- The incorporation of the ICP classification and methodologies in the CPI work and the use of the CPI ongoing processes for the production of PPPs at the sub-national level highlight the dual nature of the integration process.
Palestine’s experience in the CPI-ICP integration

- One of the key outcomes of the integration between the CPI and ICP activities is the improvement in the CPI infrastructure through the incorporation of ICP methodologies, as was demonstrated through Palestine’s experience.

1. **Basket selection and data collection:**
   - Item selection in the ICP differs from item selection on the national level in being more elaborate and consisting of multiple steps: selection of a global basket; selection of a regional basket including global products and regional products; determination of item importance according to the national CPI.
   - The CPI and ICP baskets were merged into a database consisting of a 50% common items shared between the CPI and ICP, 20% National CPI items, and 30% ICP items.

   This initiative allows the ICP work to be conducted by the national CPI team, enables the use of the same equipment for data collection of both indicators, and enables skipping the repetition of the data entry process thus saving time, efforts, and money.
Palestine’s experience in the CPI-ICP integration

2. **Product update and unspecified items**
   - Application of structured product descriptions in the national CPI enabling the identification of products

   This practice facilitates data collection and ensures that the same item is being priced between the different governorates

3. **Catalogue for data collection**
   - A catalogue for the consumer products basket similar to the ICP illustrated catalogue was introduced at the national CPI level
   - This exercise facilitates data collection, improves data quality, ensures that all the field workers are pricing the same product, and solves the problem of unidentified items

4. **Data validation**
   - Implementing the ICP validation rules at the national CPI level:
     i. Specifying upper and lower average price limits during the same round
     ii. Specifying an acceptable rate of change for the same product between different periods
   - Improving calculation tools using the ICP software rules in the evaluation of outcomes
Palestine’s experience in the CPI-ICP integration

- Palestine gained a very good experience through the participation in the 2011 ICP round helping it improve its price statistics through:
  - Improving the electronic checks at the different work stages, which improved data collection, data validation, data processing, and evaluation of outcomes
  - Application of ICP tools, which improved the calculation of the CPI
  - Development of a single common database for the CPI and ICP

Smooth implementation of the next ICP round with few updates in the current database according to the new international requirements

- Data for sub-regional HCPI will be available during 2016 due to the development of a comprehensive price database.
Conclusion

The multiple benefits of the integration overthrow the possible challenges.

Integration benefits:

• Strengthening the national CPI product lists and improving the national CPI infrastructure
• Synchronizing the data collection activities
• Producing more frequent PPPs and compiling PPP time series

Production of better price statistics, sound evaluation of the economic situation, formulation of appropriate economic and financial policies, and economic development in general.
• Wholeness of price comparisons can only be achieved through the integration of spatial and temporal ones.

Thank You!