

PROBLEMATIC ISSUES IN COMPILATION OF THE CPI-HICP

20-22 September 2021

TURKSTAT

REFERENCE PERIODS FOR THE CPI-HICP COMPUTATION

- In practice, there are three types of reference (base) periods used in the construction of CPIs:
 - The period based on which the expenditure for weights are obtained
 - The period in which reference prices are valued
 - The period in which the index base is set at 100
- There are differences between national CPIs in all these reference periods and different frequencies of updating the weights
- There are Member States which compile a ‘fixed base index’ and update weights every five years
- There are Member States which compile a ‘chain index’ with annual weights updating

REFERENCE PERIODS FOR THE CPI-HICP COMPUTATION

- Since HICPs are derived from national CPIs, in order to obtain a consistent set of HICPs with sub-indices allowing aggregations of several sub-indices and construction of indices for groups of Member States, EU as a whole etc, Eurostat needs the HICPs to be presented as if they are computed in the same way with the same formula
- Therefore, it is necessary to apply a **common index reference period and a common weighting reference period**
- **The HICP according to the macro-formula chosen for its computation is an annual chain index**
- In order to obtain a common weighting reference period, item weights have to be expressed at the same prices as the weights in the annual chain index
- It is necessary to 're-reference' or 'price-update' the HICPs and its sub-indices, that is, to express the movements in the HICPs and its sub-indices by reference to the average level of prices in the index reference period, and subsequently to each December

REFERENCE PERIODS FOR THE CPI-HICP COMPUTATION

- Price updating means that the products weights are adjusted according to the movement of the index and then rescaled
- Weights have to be presented in ‰
- HICPs should be compiled on the basis of common index reference periods in order to ensure comparability and relevance requirements
- It allows HICPs to be treated and presented in the same way and avoiding the problem of aggregating CPIs with different references and re-weighting frequencies

REFERENCE PERIODS FOR THE CPI-HICP COMPUTATION

- There are three types of common reference or base periods used in the construction of HICPs which may be chosen independently of each other:
 - The ‘weighting reference period’ is defined as a 12-month period of consumption or expenditure based on which weightings are estimated for the compilation of the HICP (definition in Article 2 of Commission Regulation (EC) No 2454/97)
 - The ‘price reference period’ is defined as the period from which the current price change is measured and for which prices are used as denominators in index calculations; it refers to the prices used for the volume valuation in the HICP weights
 - The ‘index reference period’ is defined as a period for which the index is set at 100 index points

REFERENCE PERIODS FOR THE CPI-HICP COMPUTATION

- The HICP common index reference period shall be set at 2015, i.e. $2015 = 100$
- The full time series of the HICP all-items indices and sub-indices shall be rescaled to the common index reference period
- Any additional COICOP/HICP sub-indices to be integrated within the HICP shall be linked in December at the level of 100 index points, i.e. December of the previous year = 100, and take effect with the index for the following January
- All-items indices and sub-indices shall be disseminated on the basis of a common index reference period, i.e. taking $2015 = 100$

REFERENCE PERIODS FOR THE CPI-HICP COMPUTATION

- It is considered good practice to update the index reference period of price indices when major revisions of the indices are taking place, whether in terms of items, geographical coverage, or both
- Updating of the HICPs to another common index reference period ensures that sub-indices integrated within the HICP at different points in time have a common index reference period
- Eurostat may update the index reference period
- All Member States have to produce and monthly transmit to Eurostat all sub-indices, taking 2015 = 100

SERVICES

- Services present conceptual and methodological difficulties for CPI (HICP) compilers
 - They are not tangible & can vary e.g. by being tailored to individuals
 - It can be difficult to obtain prices because there are either few or even no established outlets
- Finding a sample of items in accord with HICP procedures can be difficult
 - A “loose specification when sampling and a tight specification when pricing” is generally recommended

Health services

- Free medical care provided by Government & non-profit institutions is out-of-scope of HICP and CPI
 - ❖ Excluded are obligatory payments e.g. Employee's contributions to social security schemes and payments or rebates by government etc to reduce expenditure e.g. sickness payments.

- There are two approaches to pricing
 - ❖ Input approach – treats medical items as consumption items irrespective of their effectiveness to treat illness
 - ❖ Treatment approach – looks at cost of curing a particular medical problem by selecting an illness & then following the treatment

CPIs generally follow input approach which is used also in Turkey.

Education services

- HICP covers payments made by household (same principle as for health services)
 - ❖ Publicly-funded education is out of scope
 - ❖ But out-of-pocket expenditures (pens, paper etc), e.g. as reported in household budget survey, should be include
- The typical item to be priced is the cost of a term or semester at a sample of schools
 - ❖ Collect prices only in months when the terms begin and use that same price in other months (carry forward)
- To collect tuition fee
 - ❖ Select several students at random and use the average of their payments
 - ❖ Alternatively, collect posted or advertised tuition fees, directly from the institution or its website

PRACTICE IN TURKEY

- Treatment of services when there is a significant difference between the time of purchase, payment, delivery and consumption according to the rule laid down in the Commission Regulation
- There are two services covered by the Turkish CPI-HICP to which the respective rule is applied: air transport services

AIR TRANSPORT SERVICES

- Three airline companies have been selected
- Prices of tickets for one route and in one company prices of tickets for two routes are observed
- Prices for tickets purchased for selected category are collected. These selected categories are not changed all of the year.
- Collected prices are entered into the CPI-HICP for the month in which the consumption of the service at the observed prices can commence

Thank you...