



Eurostat's experience with estimating rental equivalence

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Owner-occupied dwellings in national accounts

- *In EU: principles for estimating owner-occupied dwelling services in national accounts regulated by Commission Regulation 1722/2005*
- *First preferred option: estimate rents for owner-occupied dwellings on the basis of actual rentals for equivalent privately rented dwellings*
 - **Needs a functioning rental market for equivalent dwellings**
- *Second option: user-cost method*
 - **To be used when privately rented dwelling < 10% of dwelling stock and**
 - **Disparity private rents / other rents > 3**



Imputed rents – basic methods

- *Stratification method: stratify in detail the rental stock and the o-o stock by rent-determining characteristics and apply average actual rentals per stratum to the o-o strata*
 - **Alternative: hedonic regression**
- *User-cost method: sum of*
 - **intermediate consumption**
 - **consumption of fixed capital**
 - **other taxes less subsidies on production**
 - **net operating surplus (rate of return 2.5%)**

Rents in PPP

- *Countries are split in two groups:*
 - **Those that apply rental equivalence in NA: price approach**
 - **Those that apply user costs in NA: quantity approach**
- *Three countries (AT, FR, FI) are in both groups and provide the link*

Four basic headings

- *A.04.1.0.0 Actual rentals for housing (in HFCE)*
- *A.04.2.0.0 Imputed rentals for housing (in HFCE)*
- *B.01.0.0.0 Housing – NPISH*
- *C.01.0.0.0 Housing – General Government*

PPPs for A.04.1.0.0 are used as reference PPP for B.01.0.0.0 and C.01.0.0.0

Price approach

- *Actual and imputed monthly rentals per m² are reported for the same 8 dwelling types:*
 - **Flat, 1-2 rooms, no central heating**
 - **Flat, 1-2 rooms, with central heating**
 - **Flat, 3 rooms, no central heating**
 - **Flat, 3 rooms, with central heating**
 - **Flat, 4+ rooms, no central heating**
 - **Flat, 4+ rooms, with central heating**
 - **House, all sizes, no central heating**
 - **House, all sizes, with central heating**
- *Data are to be used from same sources as used in national accounts*
- *Expenditure-weighted EKS used to calculate PPPs for the two BHs*

Quantity approach

- *Countries report:*
 - **Quantity indicators: number of dwellings and total surface in m2 for flats and houses broken down by number of rooms (finally only total m2 is used)**
 - **Quality indicators: shares of dwellings with electricity, running water, inside toilet and central heating**
- *Volume measure =*
(m2/capita)*(simple average of quality indicators)
- *PPP = expenditure/volume*
 - **For total housing! (no breakdown rented vs o-o)**
 - **Expenditure includes NPISH and GG!**

Linking price and quantity approaches

- *Three bridge countries*
- *Linking factor =*

geomean PPPs price approach

geomean PPPs quantity approach

- *Quantity approach scaled to level of price approach*
- *Same PPPs from quantity approach are used for actual and imputed rentals*

Differences with ICP

- *Different stratification of dwellings in price approach*
- *Collection of imputed rents per stratum*
- *Collection of total m2 and number of dwellings per stratum – for weighting of strata*
- *Use of expenditure-weighted EKS instead of unweighted CPD*

Options for ICP BH Imputed rents

- 1. Use direct PPPs calculated for actual rents for all countries within regions*
- 2. Use quantity approach (indirect PPPs) for all countries, based on quality-adjusted number of dwellings or number of rooms, if possible*
- 3. Mix: use direct PPPs from actual rents when sufficiently representative, otherwise indirect PPPs (need bridge countries)*

Note: imputed rents is 60-70% of expenditure on average

Reminder on ICP 2011

- *No BH breakdown of actual and imputed rents*
- *Most regions thus used the direct PPPs implicitly for imputed rents (cf option 1 of previous slide)*
- *Exceptions:*
 - **Asia that used reference volume approach**
 - **Eurostat/OECD with mixed approach**

References

- *Eurostat-OECD Methodological Manual on Purchasing Power Parities, chapter 6*
- *Commission Regulation 1722/2005 on the principles for estimating dwelling services for the purpose of Council Regulation (EC, Euratom) No 1287/2003 on the harmonisation of gross national income at market prices*