Housing in ICP

- Housing is an important component of household expenditures & a significant contributor to GDP.

- However, calculating PPPs for rents has proved to be problematic because:

  1. the rental market in some economies is so small that it is difficult to obtain realistic average prices.

  2. the prices reported for calculating PPPs have not always been consistent w/those underlying the values of rents in the national accounts.

- RESULT: The real value of housing services computed using PPPs derived from reported rental prices have been different from those derived from unit values estimated from national accounts sources.
The Global Office developed a questionnaire to obtain detailed data underlying the estimates of dwelling stocks used in the national accounts for both rented dwellings and owner-occupied dwellings (imputed rent):

1. The number of dwellings,
2. Number of rooms
3. Total square footage of each type (detached houses, apartments)
4. Classified by size, region, locality (urban or rural)
5. The facilities available (electricity, running water, private toilet)
Background: Housing in ICP 2005

Regions used one or a combination of different approaches:

- The quantity method: physical measures of the numbers and characteristics of dwellings are used to produce comparable real expenditures on housing.

- The direct rent approach: rental data for comparable housing types are used to compute the PPP for the dwelling basic heading.

- In the absence of detailed rental data and detailed information on the numbers and characteristics of dwellings, Asia-Pacific and Africa used the PPP for individual consumption expenditures by households (excluding rentals for housing) as a reference PPP for housing.

- South America and CIS used the quantity method.

- Western Asia and Eurostat-OECD used a combination of two methods.
Housing in ICP 2011: Issues & Objectives

- Two separate issues to be resolved:
  
  1. How should the expenditure weights be estimated so that they are more reliable and more comparable across countries than was the case for ICP 2005?
  
  2. What price and/or quantity information should be requested from countries in order to estimate PPPs?

- Main objective:
  
  to decide how the ICP 2005 guidelines on housing should be revised.
Expenditure Weights

1. Expenditure weights for countries other than those included in the OECD-Eurostat comparisons are poorly estimated: there should be a positive relationship between expenditures on housing and per capita GDP. However, Chart 1 shows NO significant relationship of this kind.

\[
y = 7E-07x + 0.0529 \\
R^2 = 0.0822
\]

However, Chart 1 shows NO significant relationship of this kind.
The OECD-EU chart shows the expected relationship meaning that the expenditure weights for this group of countries are relatively well based:

\[ y = 1E-06x + 0.0436 \]

\[ R^2 = 0.3788 \]
Expenditure Weights: Africa

For Africa, however, there is no relationship and similar results are found for the other regions:

\[ y = 5 \times 10^{-7} x + 0.0441 \quad R^2 = 0.003 \]

Rents for dwellings and per capita GDP.

Africa
Expenditure Weights: Explanations

Two possible explanations:

- The SNA: rents for owner-occupiers should be imputed by reference to rents actually paid for similar dwellings. This works for OECD-EU countries as in most of them enough dwellings of different kinds are actually rented to provide a good basis for imputing rents to owner-occupied dwellings. In many developing countries, however, relatively few dwellings are rented so that it is difficult to apply the SNA guidelines.

- In many non OECD-EU countries, people build their own houses from locally gathered materials. These dwellings are almost never rented so that in many developing countries, particularly in Africa, national accountants have no guidelines for estimating imputed rents for owner-occupiers. In many countries no imputations are made while in other cases the imputations appear to be based on actual rents paid for dwellings that may be quite unlike most of the owner-occupied dwellings.
User Cost as an Alternative

It’s been recommended that rents for owner-occupiers should be estimated by the user-cost method when

- too few dwellings were rented or
- those that were rented were only located in a few parts of the country or
- they were mainly rented by expatriate workers,
User Cost as an Alternative: are these still the rules?

START: Are more than 25% of dwellings rented?

Yes

Are most rented dwellings either occupied by foreigners or by employees paying subsidised rents?

No

Are rented dwellings distributed evenly throughout the country?

No

Yes

Obtain expenditure weights by:
- Estimating actual rents paid for rented dwellings;
- Applying the user cost method for owner-occupied dwellings.

Obtain expenditure weights by:
- Estimating actual rents paid for rented dwellings;
- Imputing rents for owner-occupied dwellings using rents actually paid for similar dwellings. If a comprehensive Rent Survey is already in place, supply information on average rents for the Modified SPD Approach (MSA).
User Cost as an Alternative

User cost can be used to estimate expenditure on rents by calculating each of the separate components of market rents:

- repair and maintenance costs, property taxes on dwellings,
- insurance service charges,
- consumption of fixed capital and net operating surplus.

If it is decided to focus on the user-cost method it would almost certainly be necessary to organise two workshops in each region:

- the first one to explain the method, and
- the second to review country estimates.
Price or Quantity Info for Calculating PPPs

Two alternatives recommended in ICP 2005:

- The modified SPD approach: in countries which meet the criteria and where there are nationwide rent surveys covering most kinds of properties

- The quantity method: in other countries
The Modified SPD Method

- “Modified” because the Structured Product Descriptions (SPDs) are less detailed than for other goods and services.

- Three Asian countries were identified as possible candidates for the modified SPD approach: Hong Kong, Malaysia and Philippines.

- They met the three criteria specified in the decision chart and they had regular surveys of rents covering at least the main population centres. Despite their best efforts and help from the ADB advisors, it proved impossible to apply the modified SPD method in practice.
The Quantity Method

- Involves calculating volume relatives which reflect both the quantity and quality of the housing stock.

- PPPs are derived indirectly by dividing the volume relatives into expenditure relatives.

- The quantity of dwellings in each country was measured by the total floor space of dwellings. If floor space is not available, the total number of rooms is used instead and if there is no information on the number of rooms, the total number of dwellings is used as the quantity measure.

- A quality index is calculated as the geometric average of the percentage of dwellings with electricity, the percentage of dwellings with inside toilets, and the percentage of dwellings with piped water.

- The quantity index for each country was multiplied by each country’s quality index to obtain the volume index for each country.
Survey follow-up of non-response and partial response

Data editing

All countries must report total number of rooms

All countries strongly recommended to report total living area

All countries must report electricity, water and toilet percentages

Persons per room as a fourth quality indicator

Separate calculations for:
  urban/ rural
  modern / traditional
  flats / houses
Questions

- Is it useful to circulate a questionnaire on country methodologies for rents?
- When is it appropriate to use the existing SNA guidelines for imputing rents for owner-occupiers? Should the rules adopted for ICP 2005 be retained?
- Should we encourage the user-cost method to estimate total expenditure on rents?
- Should we also recommend user-cost as a means of estimating rents for specific types of dwellings?
- Can two workshops be held in each region to explain the method and review results?
- Improvements to the quantity method would require greater involvement by the regional co-coordinators in checking and editing replies and following up non- and partial-response. Is this feasible?
Two web-sites relevant to housing in ICP:

1. *Habitat for Humanity*: gives information on the costs of constructing houses.

2. *Union des Banques Suisses*: gives data on rents in capital cities.