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**A HARMONIZED PRICE INDEX FOR OWNER OCCUPIED HOUSING
EXPERIENCES FROM THE EUROSTAT PILOT STUDY***

Invited paper submitted by Eurostat**

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A HARMONIZED PRICE INDEX FOR OWNER OCCUPIED HOUSING

Experiences from the Eurostat pilot study*

I. HISTORY

1. The history of the Harmonised Index of Consumer Prices (HICP) starts in the early 90'ies with the Maastricht treaty which stated that “inflation shall be measured by means of a consumer price index on a comparable basis¹ [for Member States of the European Union]”. Today it is the main indicator of price stability in the euro-zone serving the needs of the European Central Bank.
2. During the harmonisation process coverage has been extended in a number of phases. Harmonisation focused initially on areas where comparability could be achieved on the basis of existing data collection, i.e., mainly for product groups where existing methodology did not seem to be a reason for non-comparability between countries or where smaller modifications of price collection or methodology would lead to sufficient improvements for comparability purposes. In 2000/2001 the coverage definitions were harmonised for the population and geographical dimensions, and the product dimension was extended to cover the difficult areas of health, education, and social protection services.
3. It was clear early in the harmonisation process that Owner Occupied Housing (OOH) would be a difficult area. The difficulties were both of conceptual and practical nature. The EU Member States, which already compiled some type of OOH index, aimed at measuring different aspects of OOH price development using significantly different methodologies. An analysis of the options² led to the conclusion that the OOH index should be based on a net acquisition principle of houses new to the household sector.
4. In 1998-2000, a Eurostat Task Force with the participation of several EU Member States elaborated on the theoretical concepts showing that it might be feasible to implement such a measure within the EU and under the HICP. As a result of this initial feasibility study, it was decided to set up a pilot project covering Germany, Spain, Poland, Finland and the United Kingdom. This pilot project is still under way and the results reported here are preliminary.

II. FEASIBILITY

5. Council Regulation (EC) No 1688/98 defines the expenditure covered by the HICP to be Household Final Monetary Consumption Expenditure. The Regulation states in particular that the HICP shall only cover expenditure in monetary transactions on goods and services that are used for the direct satisfaction of individual needs or wants. Thereby imputed rents and mortgage interest payments are excluded from the HICP coverage. Only expenditure for the acquisition of new dwellings into the household sector may be considered as possibly

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falling within the spirit of the definitions given by this Regulation - though it should be noted that ESA95 classifies such expenditure as fixed capital formation, not consumption.

6. It should be noted that expenses typically incurred by tenants for, e.g. maintenance and minor repairs are covered by the HICP for both tenants and owner-occupiers. It is only shelter costs and related expenditure (for materials and services for major repairs, maintenance, extensions and conversions of the dwellings, and insurance for the dwelling typically taken out by landlords) which are currently not covered for owner-occupiers

7. Based on the current findings of the pilot study, it seems feasible to compile an index on the net acquisitions principle although some difficult problems still have to be solved. The main concerns are that EU Member States should be able to produce comparable OOH indices and that the OOH index has a quality which would make it possible to incorporate it into the present HICP.

III. COVERAGE

8. The following coverage elements have been identified:

- (a) Dwellings new to the household sector
 - Newly built houses sold to the household sector (e.g. dwellings built by construction companies)
 - Houses built by OO-self-builders
 - Existing houses transferred from other sectors to the household sector
- (b) Major repairs³
- (c) Transfer costs related to OOH transactions
- (d) Insurance (only the types taken out for OOH) and other related costs

9. It should be noted that several other expenses that owner-occupiers incur, for example house content insurance, water, sewerage, etc. are already covered by the HICP.

IV. PRICES AND PRICE CHANGES

Newly built houses

10. – Measuring price change for dwellings is difficult because virtually no dwellings purchased in a given month will be available again on the market next month⁴. This is in contrast to other goods and services in a CPI where similar or identical products are available for longer periods making it relatively easier to measure price developments.

11. The index compiler may use stratification, hedonic regressions, or a combination thereof for constructing an index. The aim of the stratification and hedonic regression is to compensate for differences in the characteristics of the dwellings observed between time periods.

12. – Prices entered into the HICP are monetary transaction prices⁵.

13. – For the HICP, prices for goods, such as dwellings, should be recorded in the month in which they are observed⁶. However, this still needs clarification in the context of OOH because the purchase of a dwelling may be a staged process depending on the national legal and administrative rules, and traditions. The view, for the moment, is that the price should be recorded at the time when the dwelling is no longer available for other consumers. It seems possible to implement this concept in all EU Member States.

14. A related problem is that the price should be available in time for the production of the monthly HICP. The delay for administrative registers may be significant in some countries. If the delay is significant compared to the needs, other sources should be used for the price collection or complement the price collection.

15. – Land should in principle be excluded from the HICP. There are, however, situations where it seems impossible to exclude or to quality adjust for the land component because the information is not directly available, or because the land component of a dwelling cannot be estimated reliably since it is confounded with other descriptive variables. This problem could probably be ignored if the price of land would be much smaller than the price of the building itself but this is not the case, for example, in attractive areas in bigger cities. Hence more research may be needed using concrete examples to establish the reliability of the estimated price for the land component.

16. – For smaller countries the number of new dwellings transactions may be (very) low – especially in periods of depression and in certain months during the year. This may lead to high volatility due to a small sample, or an actual current sample that is not representative of the transactions in the base period (e.g. only new flats in the current sample while the base period contained both houses and flats).

17. It is clear that all EU Member States should produce a monthly index but it is not clear whether this should be published and how it should be published. Possible solutions include: not to publish an OOH index at all for smaller EU Member States, to publish a quarterly or annual OOH index, or to estimate price movements using some other sources. In the latter case, prices for dwellings new to the household sector could be estimated using the price movements of dwellings purchased within the household sector.

Self-builders and major repairs

18. Price changes for major repairs and maintenance can to some extent be based on construction price indices. Construction of dwellings by self-builders can be considered as an (admittedly long) process of major repairs and price changes may, thus, be based on the same sources.

19. Most EU Member States already produce construction price indices but their usage is normally not aimed for the household sector. Hence they must be examined in detail and their components and their internal weighting may have to be adapted for the purposes of the OOH index since the expenditure share of the various components in a CPI may be different than that for a pure construction price index. Furthermore, the price collection process should be examined in order to ensure that the prices actually reflect consumer prices and not ‘factory’ or large scale prices.

Transfer costs and second hand houses new to the household sector

20. Transfer costs including estate agent fees for OOH are currently not covered by the HICP. This must be considered within the coverage of the future OOH index. Such transfer costs are usually measured as a percentage of the purchaser prices and it is necessary to follow the price dwelling purchases whether new to the household sector or not.

Other related costs

21. Other related costs cover several different expenses such as house conveyancing fees (solicitors), surveyors' fees, and government fees, all of which may not be proportional to the price of the dwelling. The sub-indices for these items are constructed using normal CPI procedures.

V. PUBLICATION ISSUES

Timeliness

22. Most consumer price indices are published once a month, normally with a delay of 2-5 weeks after the end of the reference period. For the HICP the delay is around the 17th of the month for most of the year.

23. The compilation of an OOH index may require extensive use of administrative sources. These may have the data available with a delay considerably longer than one month. Even if some data would be available with a short delay, there is a need to ensure that these data are representative. It is easy to imagine that information about purchases of smaller dwellings or dwellings in particular regions of a country may be available faster than for the rest of the market. But it is equally easy to imagine that this would bias an early estimate or simply be too noisy to be used as an early estimate for the OOH index for dwellings. Thus, there is a need to seek alternative sources that could provide the necessary data in time.

Revisions

24. The question of revisions is related to the timing and delay of publication. Depending on the sources used for the data collection, it is likely that revisions may need to take place up to several years after the first published index because not all data were available at the time of the first publication.

25. Normally HICPs may be revised one month back. HICPs may also be revised if new and better information has become available. This option should not be used as a tool to revise a series a long time back every month. The OOH index would probably be more affected by late arrival of data than other HICP indices and it seems appropriate to define a general policy for revisions of the future OOH index. For example, it could be decided that a comprehensive revision of the OOH index should take place once a year. The final decision should take into account the trade-off between timeliness, providing the most accurate information to users each month, and publishing only one index figure for a given month.

VI. PLANS

26. Although the principles are clear for the approach taken for the HICP, it is a complex task to implement an OOH index that will produce comparable results across EU Member States.

27. Those EU countries which already compile some kind of OOH index have usually adopted an approach that takes account of the specific nature of their national data sources. However, a harmonised approach will set additional requirements for the data collection and compilation procedure. It seems that appropriate solutions could be found for most of these practical problems if time and resources would be available.

28. The plans for the immediate future is to review the findings of the pilot study as summarized here (including the additional issue of costs). Where necessary, the approach should be modified before the pilot project would continue.

29. According to current plans the pilot study should be expanded to cover all EU Member States in the next phase. The aim of the next phase would be to clarify and improve on the methodological aspects as well as to ensure that all EU Member States would be able to produce a monthly OOH index. The next phase is expected to start in 2004 and run over a period of two years.

¹ Protocol No 6 developing Article 121 of the Treaty of Amsterdam

² Peter Hill, "Owner Occupied housing in the HICP", HICP 96/80, Luxembourg, June 1996.

³ Minor repairs are already covered by the HICP.

⁴ There are important exceptions to this rule. As reported in 'Hedonic house prices without characteristics: The case of new multiunit housing' by Bover and Velilla (EBC Working Paper, 2002), multiunit property developments play an important role on the Spanish housing market. It is shown that it is possible to construct price indices by following the price development over time of virtually similar dwellings in this type of multiunit property developments. The same report also contains several references to more traditional application of hedonic methods in the area of dwelling prices.

⁵ Commission Regulation (EC) No 1749/96 as amended by Council Regulation (EC) No 1688/98.

⁶ Commission Regulation (EC) No 2601/2000.