

## Solving the owner-occupied housing puzzle

A group of researchers has outlined what they see as a better method of integrating owner-occupied housing into the CPI, as the EU's statistical agency wrestles with the problem

By Daniel Hinge 27 Feb 2018

The question of how to integrate owner-occupied housing (OOH) costs into headline inflation continues to bedevil European statisticians. But new research published by the Luxembourg Institute of Socio-Economic Research (LISER) suggests the current option favoured in Europe may not be the best one.

Housing accounts for a sizeable chunk of the typical household's monthly budget – <u>around 22% of disposable income</u> on average across the European Union in 2016 – and around <u>70% of the EU's population</u> lived in owner-occupied dwellings in 2015. The case for including it as a cost in the headline inflation index seems strong.

"Including OOH in the inflation rate actually has quite a large impact," says Sofie Waltl, an economist at LISER. "It is much more important than people thought."

Eurostat, the EU's statistical agency, has been studying how to integrate OOH into headline inflation for <u>several years</u>. Neither of the most common two options for calculating OOH costs is ideal for Europe, though.

Rental equivalence – estimating OOH costs based on the hypothetical cost of renting a dwelling – is widely used in headline consumer price index (CPI), in countries including the US, Japan and Mexico. However, some European countries hardly have a rental market on which to base the calculation. Romanian housing is nearly 97% owner-occupied, for example.

Instead, Eurostat's current preferred approach is acquisitions-based, determined by the cost of new dwelling purchases and an estimate of additional costs, such as maintenance.

The method has notable shortcomings, however, warn Waltl and co-authors Robert Hill and Miriam Steurer in <u>a paper</u> published in early February 2018. The acquisitions approach ignores land prices, "but land prices are generally the driving force in house price increases".

Instead they favour the "user cost" method. At first glance, the method looks daunting, requiring statisticians to estimate the interest rate, depreciation, transaction costs, a risk premium, expected inflation and capital gains, ideally using hedonic methods.

## Simpler calculation

However, the researchers argue the risk premium and capital gains can both be set at zero, leaving a much simpler calculation. Capital gains has proven particularly troublesome in the past, but the researchers say that, for a CPI, there is little need to measure the changing value of capital. Ignoring it retains the value of housing as a consumption good.

Three countries that use the user cost measure in their CPI calculations – Canada, Sweden and Iceland – all ignore capital gains and the risk premium, the researchers note.

The interest rate term remains knotty. Sveriges Riksbank <u>switched to a headline measure of inflation</u> <u>excluding interest costs</u> in 2017, as the old measure implied a policy rate hike would raise inflation in the short term. Hill, Steurer and Waltl propose using a long-run interest rate to minimise this issue.

The researchers test their method using Australian data, finding the inclusion of OOH costs has a significant impact on headline CPI, raising average annual inflation by nearly 0.5 percentage point in their sample.

The Australian data happens to be of unusually high quality. Indeed, the European Central Bank's chief economist, Peter Praet, noted the data issues for Europe in a recent Twitter Q&A. Responding to a question from *Central Banking* on including OOH in headline inflation, <u>he tweeted</u>: "Eurostat is working on this. So far, data is only quarterly and not timely enough."

WaltI believes the problem is surmountable: "The statistical institutes and central banks generally do have the data they need. It may not always be as frequently available as other components of the CPI and transmission of micro-data is still not very fast, but if they choose to use this approach, data availability will not be a major problem."

A spokesperson for Eurostat says work is continuing on adding OOH to the Harmonised Index of Consumer Prices (HICP), the eurozone's headline inflation measure: "The suitability for OOH to be integrated into the monthly HICP is being assessed, but so far there are no plans to change the status of the OOH." Eurostat does produce standalone indexes of housing costs based on the acquisitions method.

Waltl notes the challenge of producing a measure for all 28 members of the EU may lead to a certain amount of inertia. Nevertheless, "excluding OOH because we don't know how to include it is maybe not a very good idea", she says.