

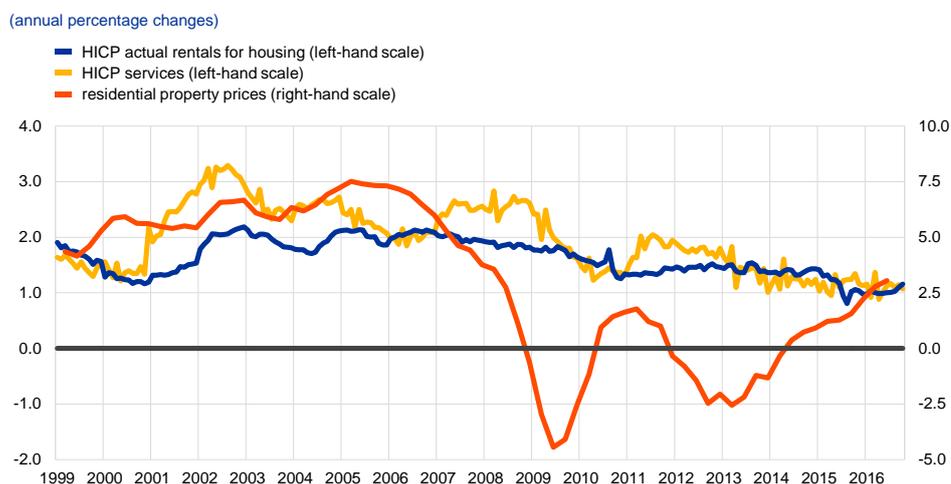
Assessing the impact of housing costs on HICP inflation

The euro area has recently experienced strong residential property price growth, while HICP inflation has remained subdued. Annual euro area residential property price inflation has successively strengthened over several quarters, and in mid-2016 returned to its long-term average of 2.9%.²³ This box addresses the question of why housing costs have not then been putting upward pressure on HICP inflation via the services component. Housing costs currently enter the HICP through actual rentals and minor repairs, but, ideally, the HICP would cover all housing-related consumption expenditures. With the aim of further improving the relevance and comparability of the HICP, the European Statistical System is developing a measure of owner-occupied housing (OOH) costs.²⁴ Against this background, this box first reviews the link between residential property prices and rentals and, second, assesses some experimental data on OOH published by Eurostat earlier this year.

Falls in housing rental inflation have contributed to the past decline in HICP services inflation. The HICP item “actual rentals for housing” accounts for 15% of the euro area HICP services basket, and its annual inflation rate is typically more stable than that of all services. After falling to a little under 1.5% in 2010, rental inflation declined further to around 1.0% in 2015, well below the long-term average of 1.7% (see Chart A). Developments in rental prices over the past few years have therefore not supported services inflation, but been an integral part of its decline.

Chart A

Euro area inflation rates of rentals, all services and residential property prices



Sources: Eurostat and ECB calculations.

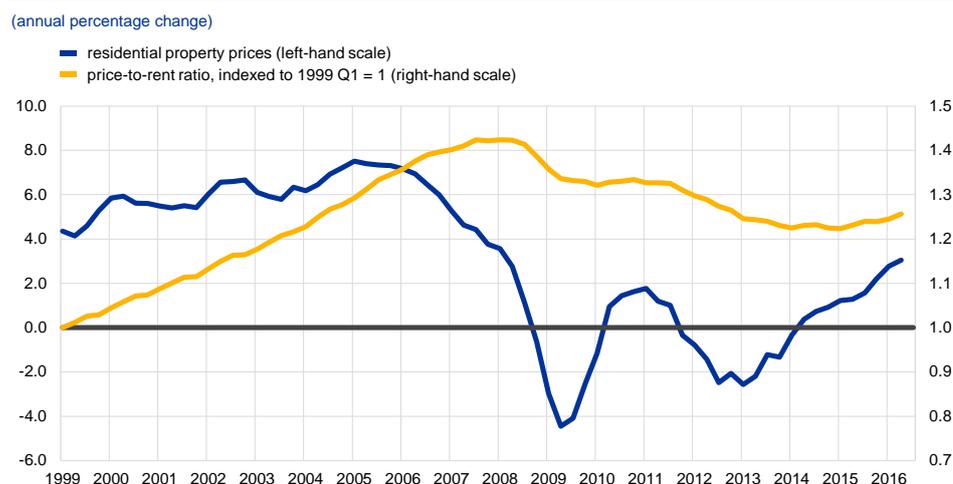
²³ See the box entitled “Recent developments in euro area residential property prices”, *Economic Bulletin*, Issue 7, ECB, 2016. Averages are calculated using data going back to 1999.

²⁴ For further information, see Recital 10 of [Regulation \(EU\) 2016/792 of the European Parliament and of the Council of 11 May 2016 on harmonised indices of consumer prices and the house price index, and repealing Council Regulation \(EC\) No 2494/95](#) (OJ L 135, 24.5.2016, p. 11).

In principle, there is a long-run relationship between residential property prices and rents. For example, if residential property prices were considered high relative to rents, then some property owners might decide to sell and instead rent, in anticipation of purchasing again later at a lower price. That would put downward pressure on property prices and upward pressure on rents, leading to an adjustment.

In practice, however, a number of frictions can lead to a protracted decoupling between the dynamics of residential property prices and rents. These frictions, such as transaction costs, credit constraints and the long-term nature of some rental contracts, limit the substitutability between renting and owning property. Moreover, in some euro area countries rent controls, including indexation, are important and can lead to a longer-lasting divergence between the two sets of prices. This is especially true of social housing, which accounts for a significant part of some countries' national HICP "actual rentals for housing" component. Where rents are indexed to a consumer price index, low inflation over the past few years may have exerted successively more downward pressure on rental inflation.

Chart B
Residential property prices and the price-to-rent ratio



Sources: Eurostat and ECB calculations.

The ratio between residential property prices and rental prices in the euro area has varied over time (see Chart B).²⁵ In particular, past falls in interest rates are likely to have had a bearing on this relationship. Falls in nominal interest rates imply lower yields on other benchmark investment assets such as bonds, and thereby also imply a lower required rental yield on residential property.²⁶ In practice, this downward adjustment to the rental yield is more likely to occur through faster increases in property prices than slower increases in rental prices. But the changes in the residential property price-to-rent ratio also illustrate that, in the run-up to the financial crisis, housing valuations had become stretched in many countries. In

²⁵ See the box entitled "House prices and the rent component of the HICP in the euro area", *Monthly Bulletin*, ECB, August 2014.

²⁶ The rental yield is defined as the ratio of a year's rent to the price of the property, i.e., it is the inverse of the price-to-rent ratio, so a lower rental yield means a higher price-to-rent ratio.

conclusion, the recent pick-up in residential property price inflation should not be expected to provide an automatic boost to housing rental inflation and thereby HICP inflation.

HICP inflation only partially reflects changes in housing-related prices, as it focuses on actual rents and does not include all OOH costs. This restriction reflects the difficulties involved in resolving the trade-off between two seemingly opposed conceptual objectives. The first is that the HICP should capture consumption prices rather than asset prices. However, it is more natural to consider residential property not as a consumption good, but rather as a form of investment asset that both serves as a store of wealth and provides an ongoing flow of consumable housing services.²⁷ This would suggest that residential property prices should not be incorporated directly in the HICP. The second conceptual objective is that the HICP should be based on only the prices of observable monetary transactions. This argues against using the rents of equivalent properties to measure the price of the ongoing dividend flow of housing services consumed by an owner occupier (known as the rental equivalence approach).

The nature of this dichotomy means that national statistical institutes tend to compromise between these two objectives regarding their own consumer price indices. There is, however, no international consensus on the optimal form of compromise; often the individual characteristics of each country and the main purposes for which the consumer price index is used are a key factor. Many countries with uniformly well-developed rental markets have opted to take the rental equivalence approach.²⁸ Other countries, especially those where data distinguish between the prices for the housing structure (reflecting the part of the property related to a consumption good) and prices for the land (reflecting the part related to an investment asset), derive their OOH price index directly from the price of the housing structure. In the euro area, there is great heterogeneity in property markets across member countries, with owner-occupancy ratios ranging from below 50% to over 90%; for over 15 years the European Statistical System has therefore been pursuing an approach based on the observable price of residential property. This does, however, mean that the index still includes an asset price element.

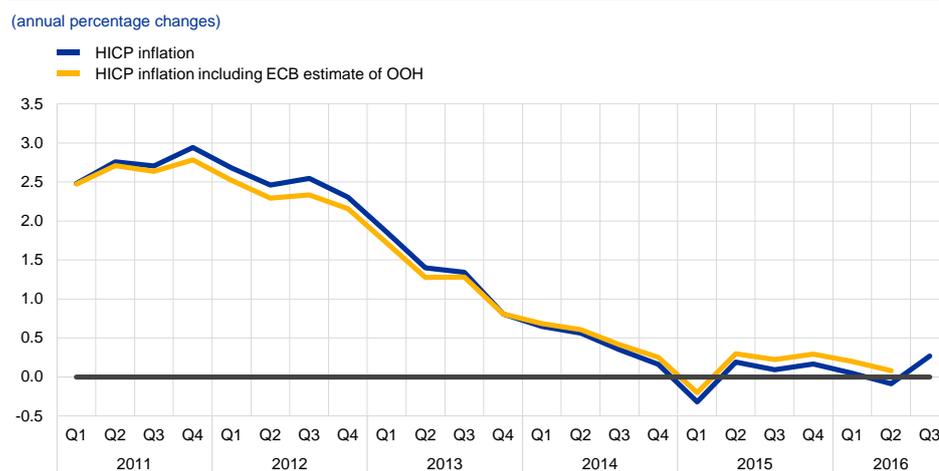
Eurostat released new, experimental data on OOH earlier this year, provided by EU national statistical institutes. These OOH price indices reflect changes in the price of *net* purchases of residential property by the household sector, i.e., transactions between households are excluded. Indicative ECB calculations, made to illustrate the scale of the potential effect of including the national OOH indices into the euro area HICP, imply absolute differences in the inflation rates of up to 0.2 percentage points in any individual quarter, but no difference on average over the past five years. These national OOH price indices are only available quarterly with a

²⁷ In this sense, a house could be likened to a share: an asset which also generates a dividend stream.

²⁸ For instance, the United Kingdom's Office for National Statistics has recently announced that a rental equivalence-augmented consumer price index will become the Office's main measure of inflation.

lag (the most recent data refer to the second quarter of 2016).²⁹ At this juncture, an estimate including OOH would point to an inflation rate that is slightly higher than the HICP, but not significantly so (see Chart C). The experimental nature of these data should, however, be kept in mind because Eurostat is still assessing the approach and methodology.

Chart C
Euro area inflation and OOH costs



Sources: Eurostat and ECB calculations.

Overall, housing costs are currently providing little support to HICP inflation.

The housing components currently included in the HICP, namely rental prices, are still weighing down on inflation, partly because they are indexed to inflation. An illustrative ECB calculation based on the national OOH price indices published by Eurostat shows that expanding the coverage of HICP to take account of OOH costs would not materially affect the inflation assessment.

²⁹ Specifically, these quarterly, experimental OOH indices are only released alongside the HICP data for the last month of the quarter following the reference quarter. This means that data for Q3 2016 will be released alongside the December 2016 HICP data in January 2017. More information on these new, experimental data is available at http://ec.europa.eu/eurostat/cache/metadata/en/prc_hpi_oo_esms.htm