



EUROPEAN CENTRAL BANK

EUROSYSTEM

ECB's Monetary Policy Strategy Review: OOH and inflation measurement

UN Network of Economic Statisticians
Sprint on OOH, 2nd meeting

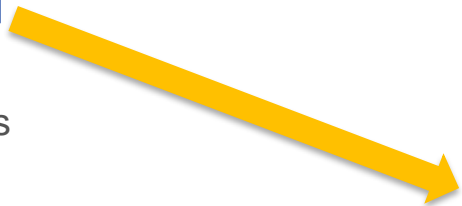
20 September 2022

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E. Bobeica, M. Eiglsperger, B. Goldhammer (all ECB)



➤ ***Inflation measurement***

- Price stability objective
- Monetary policy instruments
- Analytical framework
- Monetary policy and financial stability
- Climate change
- Monetary policy communication
- Digitalisation
- Employment
- Fiscal and monetary policy in a monetary union
- Globalisation
- Inflation expectations
- Productivity, innovation and technological progress
- Shadow banking



- The ECB's price stability concept
- HICP potential measurement bias and measurement uncertainty
- ***The role of OOH***
- Measuring the cost of living
- The role of underlying inflation

Workstream publications:
[ECB Occasional Papers](#)

Motivation for looking at Owner Occupied Housing (OOH)

ECB Strategy Review, 2021

- The HICP remains the appropriate index for quantifying the price stability objective
- Inclusion of owner-occupied housing (OOH) costs in the HICP would improve the representativeness of the inflation rate, i.e. better scope by including also home owner occupiers, and would improve cross-country comparability
- Changes in house prices considered important in context of overall inflation (e.g. in public ["ECB Listens" events](#))

Roadmap proposed by the ECB's Governing Council, while the competence of Eurostat and European National Statistical Institutes clearly acknowledged

Stage 1. Construct an internal HICP_OOH with approximated weights.

Stage 2: From 2023, start publishing an experimental HICP_OOH on a *quarterly frequency*.

Stage 3: By 2026, produce an official HICP_OOH on a *quarterly frequency*.

Stage 4: After 2026, construct and start publishing an HICP_OOH on a *monthly frequency*.

Statistical challenges related to including OOH in HICP

- The ECB's Governing Council favours the **net acquisition approach**, as the closest one to fulfil the requirement of being based exclusively on actual monetary transactions
- Reflecting house price developments in an inflation measure so that changes in house price pressures are signalled in a timely manner

... *two types of challenges:*

➤ **Conceptual**

- Consumption falls under the scope of the HICP, but not assets (e.g. related to land purchases, national accounts treatment of dwellings, consumption vs investment)

➤ **Practical** – related to the feasibility of producing an index according to HICP standards of frequency and timeliness

- The OOH price index (OOHPI) is currently compiled every quarter and released 100 days after the end of the reference quarter. To meet HICP requirements, the index would have to be produced every month, and released at the end of the reference month as a flash estimate and 15 days later with the full set of figures.

➤ **Monitoring**

- Data commentaries, assessment of latest developments in the documentation that goes to the Governing Council

➤ **Forecasting**

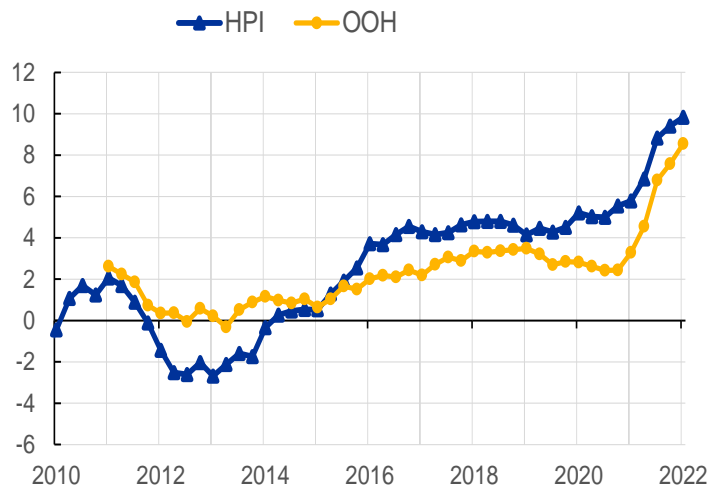
- Ongoing work together with the euro area National Central Banks (NCBs)

➤ **Research**

- Focus on the investment-consumption split of OOH
- Looking at economic and statistical approaches

Euro area House Price Index and owner-occupied housing

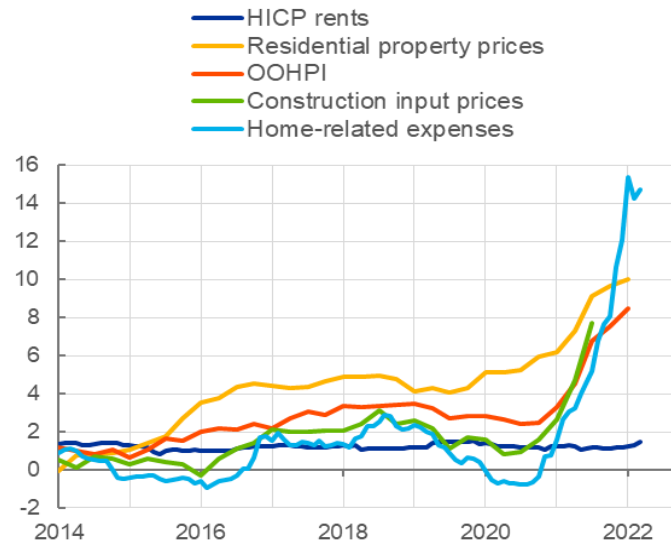
(annual percentage changes)



Source: Eurostat. Last observation: 2022 Q1.

House prices and OOH vs. rents and home-related expenses

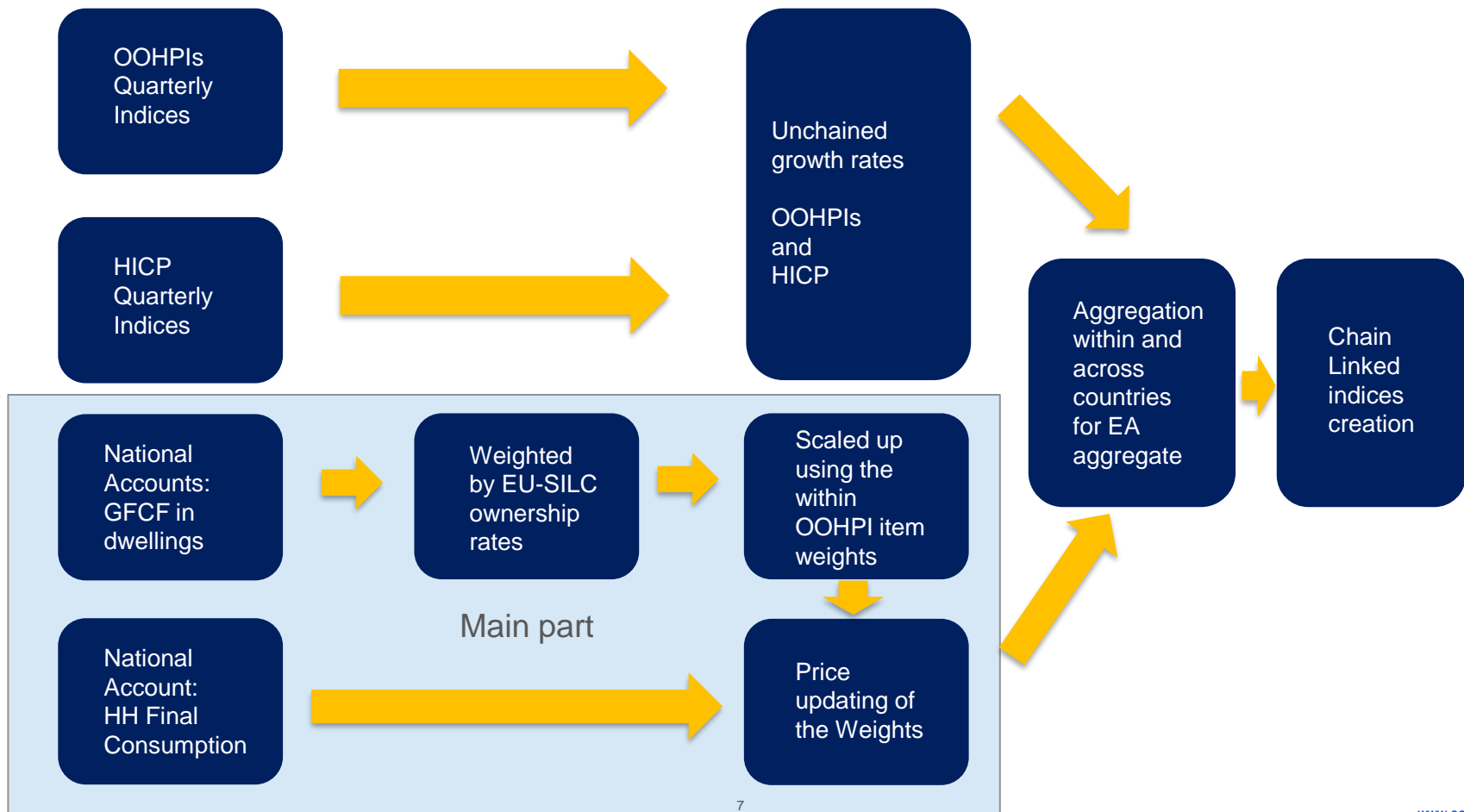
(annual percentage changes)



Sources: Eurostat, ECB and ECB staff calculations.

Latest observations: 2021Q3 for construction input prices, 2022Q1 for residential property prices and OOHPI and May 2022 for HICP rents.

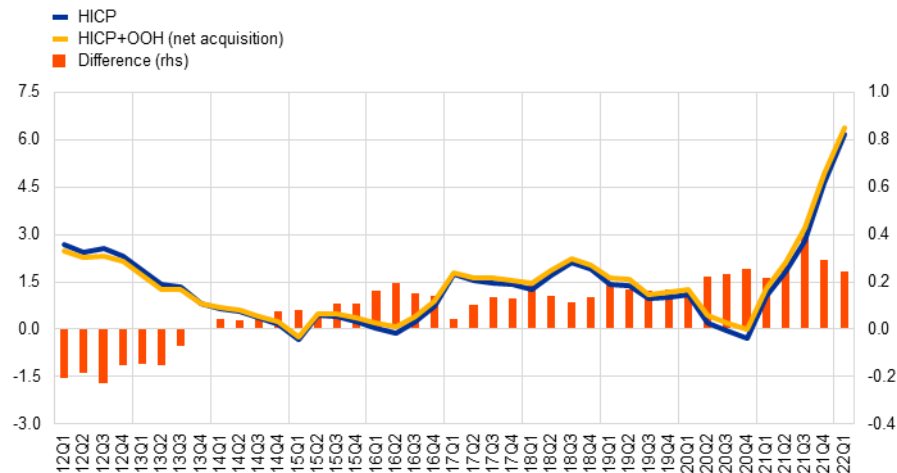
ECB analytical combined HICP-OOHPI index: calculation steps



ECB analytical combined HICP-OOHPI index: results

Index using the net acquisition approach to OOH

(left-hand scale: annual percentage changes; right-hand scale: percentage point differences)



- The euro area HICP combined with the OOHPI show inflation rates that do not differ greatly from those of the HICP without OOH-related costs
- Largest estimated difference vis-à-vis HICP over the period 2011-2021: **0.4 p.p.**
- The combined index with net acquisition OOHPIs **amplifies the cyclicity of inflation**

Source: ECB Economic Bulletin, Issue 1/2022, Article entitled "Owner-occupied housing and inflation measurement", by Martin Eiglsperger, Rodolfo Arioli, Bernhard Goldhammer, Eduardo Gonçalves and Omiros Kouvaras

Note: Eurostat and ECB staff calculations; last observation: 2022 Q1

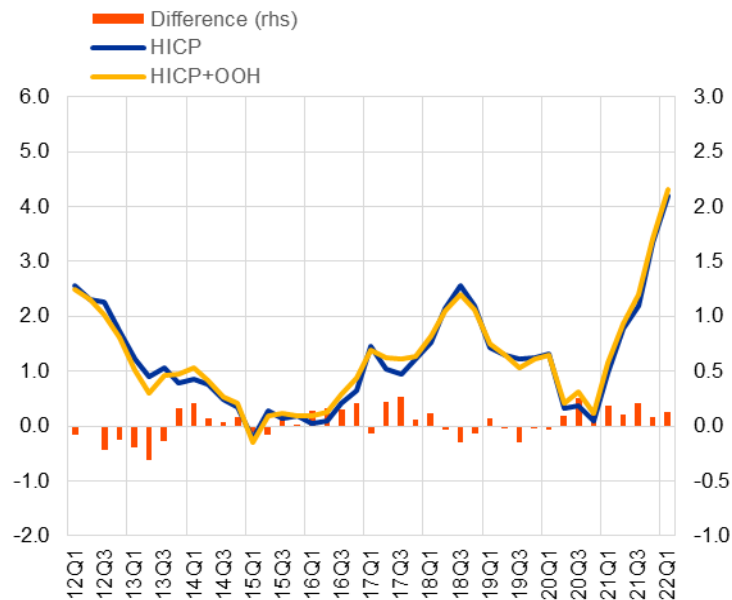
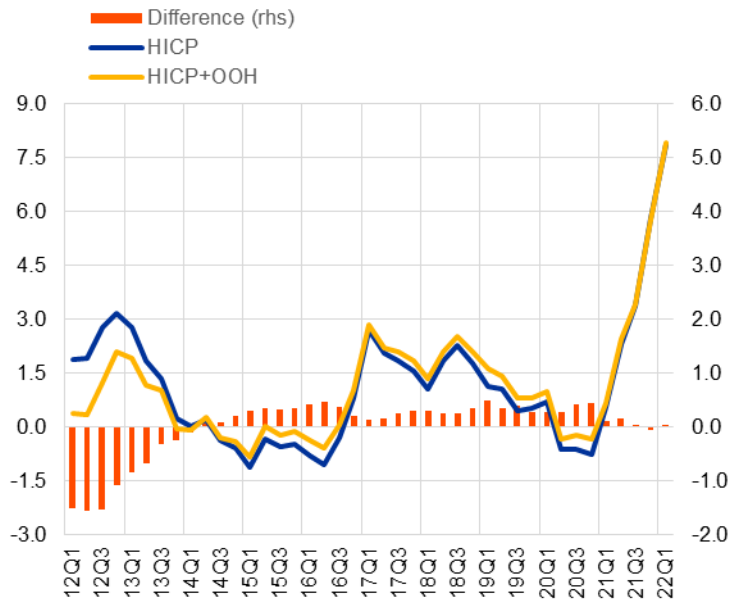
HICP-OOHPI index: Heterogeneity across Member States

HICP and HICP+OOH

(annual percentage changes and percentage point differences)

Spain

France



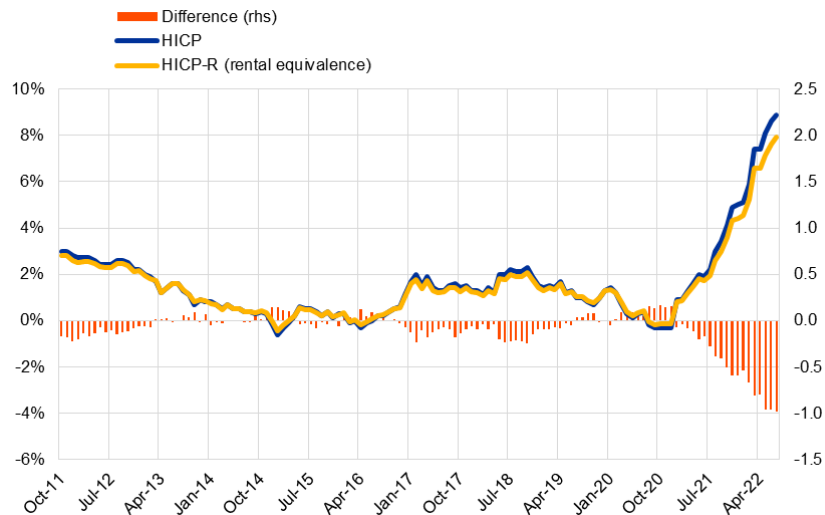
Source: Eurostat and ECB calculations.

Note: Unpublished data

HICP and OOH using rental equivalence

Index using the rental equivalence approach to OOH

(left-hand scale: annual percentage changes; right-hand scale: percentage point differences)



Source: ECB Economic Bulletin, Issue 1/2022, Article entitled “Owner-occupied housing and inflation measurement”, by Martin Eiglsperger, Rodolfo Arioli, Bernhard Goldhammer, Eduardo Gonçalves and Omiros Kouvas

Note: Eurostat and ECB staff calculations; last observation: July 2022

- HICP-R calculated as **monthly price index**; simplified approach (using imputed rents from national accounts as weights; but HICP rents price index)
- The euro area HICP combined with the imputed rents for OOH show **inflation rates that do not differ greatly from those of the HICP without OOH-related costs in the periods of low inflation**
- Amplified differences since mid-2021
- Largest estimated difference vis-à-vis HICP over the period Oct2011-Mar2022: **0.9 p.p.**

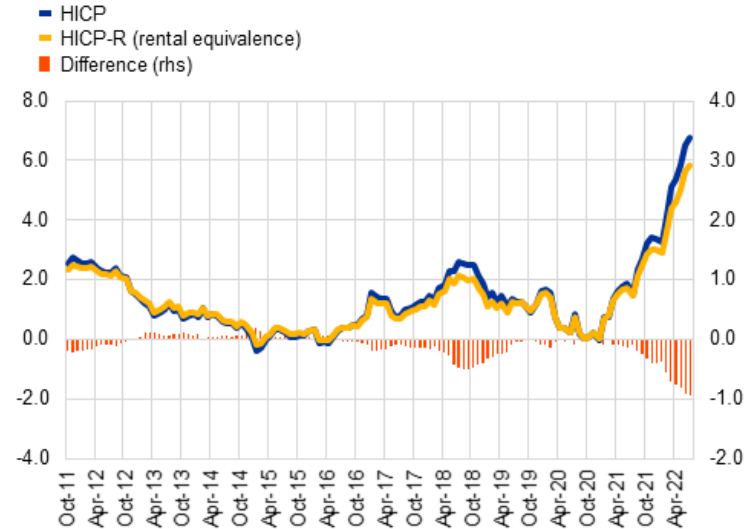
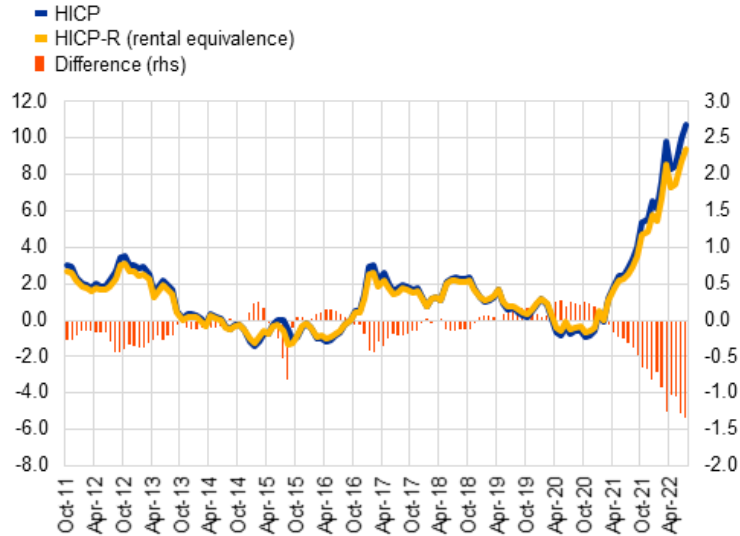
HICP and OOH using rental equivalence: Heterogeneity across Member States

HICP and HICP-R

(annual percentage changes and percentage point differences)

Spain

France



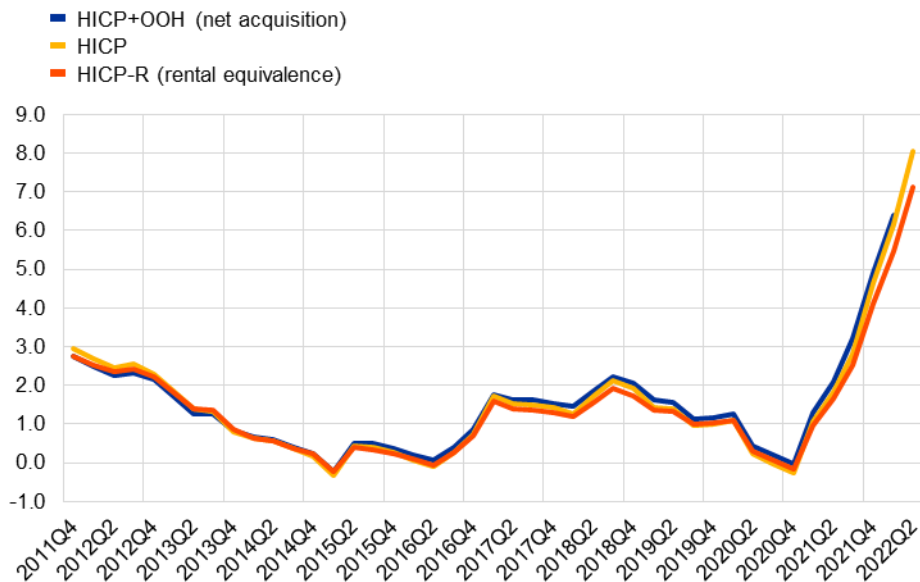
Source: Eurostat and ECB calculations.

Note: Unpublished data

Estimated impact of including OOH in HICP

Net acquisition vs Rental equivalence approaches

(left-hand scale: annual percentage changes; right-hand scale: percentage point differences)



	HICP+OOH (net acquisition)	HICP-R (rental equivalence)	HICP
Ave	1.5	1.3(1.4)	1.4(1.5)
Min	-0.2	-0.2	-0.3
Max	6.4	5.5(7.1)	6.2(8)
Stdev	1.255	1.118(1.413)	1.261(1.602)

Source: Eurostat and ECB staff calculations; last observation: June 2022 for HICP and HICP-R; 2022 Q1 for HICP+OOH

Notes: for the Table: calculations refer to 2011 Q4 – 2022 Q1 (values in brackets include 2022 Q2).

