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Housing costs: a final hurdle in the last mile of disinflation?

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Housing costs: a final hurdle in the last mile of disinflation?

Key takeaways

- *Inflation receded from recent peaks, but housing cost growth remains elevated. This strength reflects pandemic-induced changes in housing supply and demand which further aggravated existing pressures from long-standing housing shortages and demographic trends.*
- *Strong growth of the housing component of inflation can be a concern for monetary policy because it tends to be more persistent than components related to other services and goods, reflecting lags in measurement and infrequent changes in rents.*
- *In the short term, rents and housing costs may rise after a monetary policy tightening if landlords pass higher financing costs to tenants, property developers reduce new supply or more households opt to rent rather than buy.*

Housing costs represent a large portion of household expenditures, especially in advanced economies (AEs), and hence constitute a significant component of the consumer price index (CPI). These costs have continued to rise at a fast clip during the past two years in many economies, despite the intense monetary policy tightening phase. Has the housing component of the CPI (H-CPI)[1] evolved differently compared with past disinflation episodes? Is its strength a cause of concern for monetary policy? This Bulletin takes stock of the evidence and argues that the answer to both questions is "yes".

The housing component of the CPI: recent evolution and stylised facts

The evolution of H-CPI displays some differences from previous disinflations. Since inflation peaked, the median growth rate of H-CPI has moderated but remains elevated (Graph 1.A). By contrast, previous episodes saw a 2 percentage point decline 12 months after the peak. The latest readings follow a rapid increase in the 16 months prior to that peak.

That said, the stickiness of H-CPI is not universal. In AEs, H-CPI growth is running at around 4.5% on average, not far from its peak reached in the first quarter of 2023 (Graph 1.B). In emerging market economies (EMEs), H-CPI growth has fallen much more quickly (Graph 1.C). By contrast, the behaviour of other CPI components has been more similar across AEs and EMEs. Growth in services prices excluding housing remains elevated in both groups of countries, while that in goods prices has continued to decline.

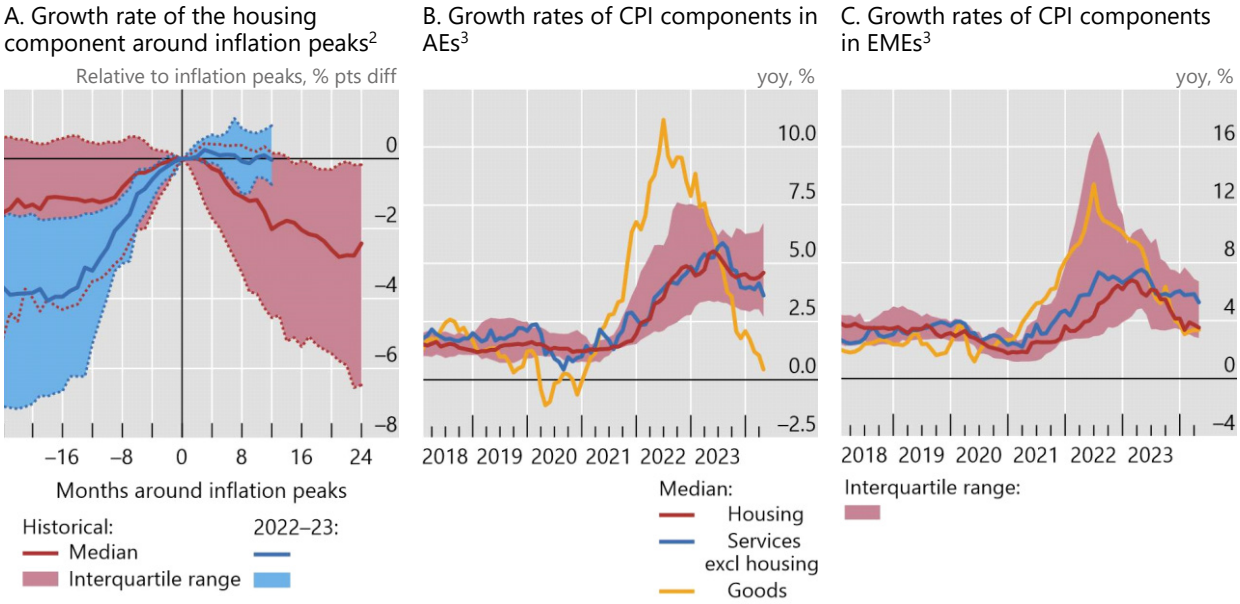
The relatively greater stickiness of H-CPI in AEs could be due in part to differences in economic structures and policy support. These could include more opportunities to work from home in AEs due to

[1] The definition of H-CPI used here covers actual rents, maintenance and repair of dwellings and, when they are included in headline CPI, imputed rents of owner-occupied housing (OOH). It excludes utilities (electricity, gas, other fuels and water), the dynamics of which are linked to commodity prices.

better telecoms infrastructure, more telework-able jobs as well as greater fiscal support and high saving rates amid negative real interest rates.[2]

H-CPI growth is stickier than in the past, and elevated in AEs[1]

Graph 1



[1] Based on standardised measures of the housing, services excluding housing, and goods components of CPI, thus can differ from national measures due to the exclusion of energy and other utilities in housing. [2] Each disinflation episode is identified based on a statistical criterion to ensure there are no nearby peaks within 12 months, the peak inflation rate is above 3 and it is at least 3 percentage points higher than the lowest trough in the preceding and following 12 months. Sample of 23 AEs and 18 EMEs since 1960. [3] Sample of 11 AEs and 13 EMEs.

Sources: OECD; LSEG Datastream; Macrobond; national data; BIS.

Strong H-CPI growth is potentially a cause for concern for monetary policy as it tends to be very persistent. In AEs, the persistence of H-CPI growth is higher than that of goods and of services excluding housing (Graph 2.A). This means that once H-CPI growth jumps higher, it can remain elevated for a protracted period. Given the current 4.5% H-CPI growth rate in the median AE, in two years' time, the H-CPI growth rate could still be around 0.5 percentage points above its long-run mean. By contrast, services and goods price growth would both be in line with their long-run means. H-CPI is also persistent in EMEs, though less so.

This high persistence reflects two factors: first, how housing costs are measured and second, how market rents – a key underlying variable for housing costs – evolve over time.

Measurement methodology for rents introduces persistence in the data of around six months. To ensure comparability over time, statistical agencies sample rents from the same dwellings. To limit data collection costs and since rents change infrequently, they do not gather data for the same unit every month. Instead, they divide the sample into subgroups and typically sample each subgroup every six months. Then, if the rent of a dwelling increases one month after the sampling date, it will take another five months (the next sampling date) for this to appear in the index. The influence of this staggered sampling is evident: H-CPI growth peaks at least six months after an increase in market rents on newly rented properties (Graph 2.B).

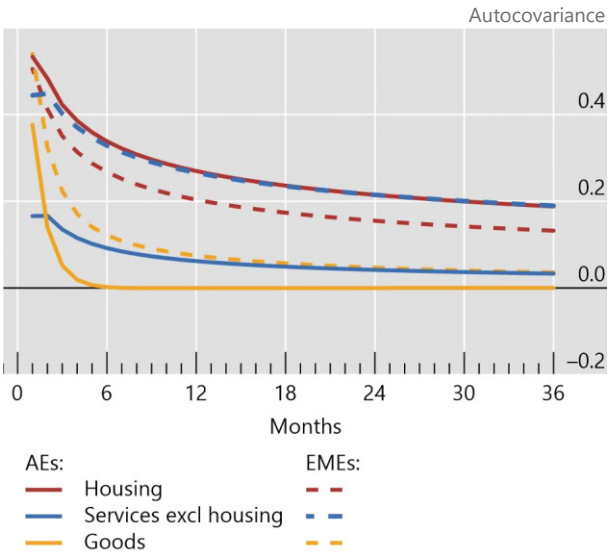
As well as the persistence resulting from measurement lags, the underlying latent variable is also subject to persistence. The persistence in the underlying variable reflects a mix of economic and institutional features of rental markets. These include indexation, multi-year contracts and caps on annual

[2] See Igan et al (2022) for an analysis of strong housing demand and house price growth after the pandemic, especially in AEs.

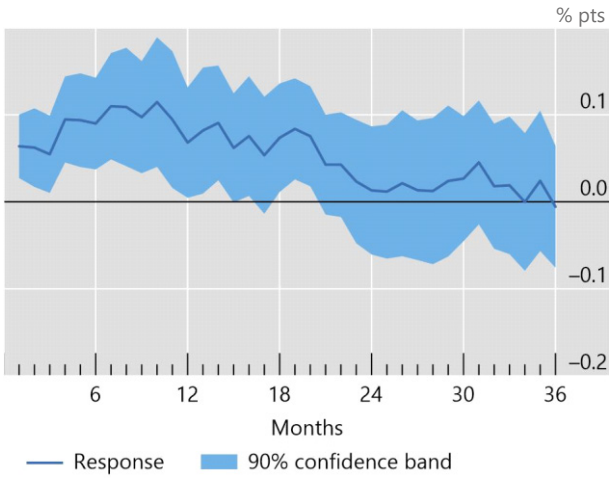
increases for existing tenants, search and informational frictions (see Genesove (2003) and Gallin and Verbrugge (2019)). Many of the same factors tend to introduce a degree of staleness or backward-lookingness in H-CPI, since rents on existing contracts adjust more slowly than those on new ones.

H-CPI is persistent, reflecting both measurement and intrinsic factors[1] Graph 2

A. H-CPI growth is more persistent[2]



B. A rise in market rents takes time to appear in H-CPI[3]



[1] Based on standardised measures of the housing, services excluding housing, and goods components of CPI, thus can differ from national measures due to the exclusion of energy and other utilities in housing. [2] Autocovariance of the month-on-month growth in housing, services excluding housing, and goods components of CPI estimated using a fractionally integrated autoregressive moving average model on 11 AEs and 12 EMEs. [3] Impact of a 1% rise in market rents on H-CPI growth based on local projections that control for lagged growth of H-CPI over the previous month and 12 months, and lags of market rent growth.

Sources: OECD; LSEG Datastream; Macrobond; national data; BIS.

Determinants of the recent evolution of housing costs

Why has housing cost growth been so strong and sticky in the recent inflation episode? To some extent, this buoyancy is part of the buoyancy of services prices as a whole, due to the unwinding of the sharp rotation of demand from services to goods at the onset of the pandemic (Amatyakul et al (2024)). But there are also several housing-specific demand-supply factors at work.

On the demand side, the pandemic-induced changes (eg remote work) typically translated into stronger demand for housing services. These developments occurred against the backdrop of longer-term demographic shifts and migration patterns (see García and Paciorek (2022) and Gravelle (2023)). The millennial generation reaching adulthood has substantially boosted the number of people at household formation age in AEs after 2020. And a higher incidence of foreign-born workers has been associated with higher H-CPI inflation in AEs after 2020 (Graph 3.A), while there was little positive correlation between the two prior to the pandemic.

On the supply side, the "terming out" of household mortgage debt at fixed rates during the low-for-long period has curtailed housing supply in the existing home segment (Graph 3.B). Homeowners have locked longer-term mortgage contracts with substantially lower interest rates than those on new originations. This has incentivised them to postpone moving, thereby reducing the supply of available homes for sale (Fonseca and Liu (2023), Liebersohn and Rothstein (2023), Batzer et al (2024)). The pandemic also exacerbated the housing shortages that had already been visible for some time in quite a

few countries.[3] Construction work disruptions and spiralling input costs reduced the number of new homes entering the market (Graph 3.C).

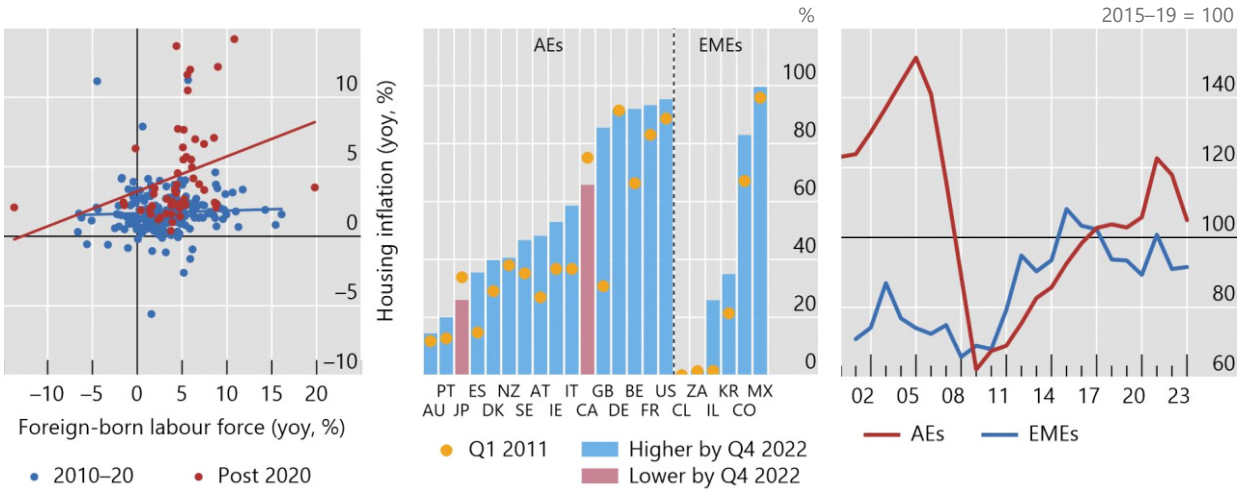
Demand and supply factors keep H-CPI elevated

Graph 3

A. Increased immigration boosts demand for housing in AEs[1]

B. Growing share of fixed rate mortgage locks in households[2]

C. New supply does not meet higher demand post-2020[3]



[1] Based on data for 18 AEs. [2] Dots show Q1 2011 or earliest available, bars show Q4 2022 or latest available values. Blue (red) bars denote countries for which the share of fixed rate mortgages in stock increased (decreased) between Q1 2011 and Q4 2022. [3] Residential housing starts; definition may differ across economies. Seasonally adjusted. GDP-PPP weighted average for 14 AEs and eight EMEs.

Sources: Eurostat; IMF; OECD; LSEG Datastream; Macrobond; national data; BIS.

The impact of monetary policy on housing costs

Strong H-CPI growth could pose a specific challenge to monetary policy if it is less responsive than other categories. To be sure, as for any other expenditure category and by restraining aggregate demand, a monetary policy tightening will also reduce the demand for housing services.[4] However, other channels could offset at least some of this effect, especially in the short run.

First, rents may rise to the extent that landlords can pass higher opportunity costs through to tenants. This effect may be reinforced by institutional factors, such as partial indexation of rents to interest rates. Second, higher policy rates can also increase the financing costs of real estate developers and, hence, reduce supply.[5] Third, housing tenure choices may shift, with implications for the price of rented dwellings compared with owner-occupied property. More households, especially first-time buyers, would turn to renting rather than owning following an increase in mortgage rates, thereby pushing up demand for rental properties. A partial equilibrium effect of such housing choices would mean that rents rise. Limited or sluggish supply response in build-to-rent segments could exacerbate the impact.

There is some evidence that the forces pushing up rents when monetary policy is tightened can indeed offset the negative effect coming through aggregate demand. As a result, rents and H-CPI may increase following a contractionary monetary policy shock (Dias and Duarte (2019), Koeniger et al (2022)). At the very least, there appears to be a long lag between monetary policy tightening and a subsequent decline in H-CPI. In AEs, H-CPI does eventually respond in a statistically significant way, but it takes 18 months to

[3] See, for instance, Macklem (2024) for a discussion on structural shortages of housing in Canada.

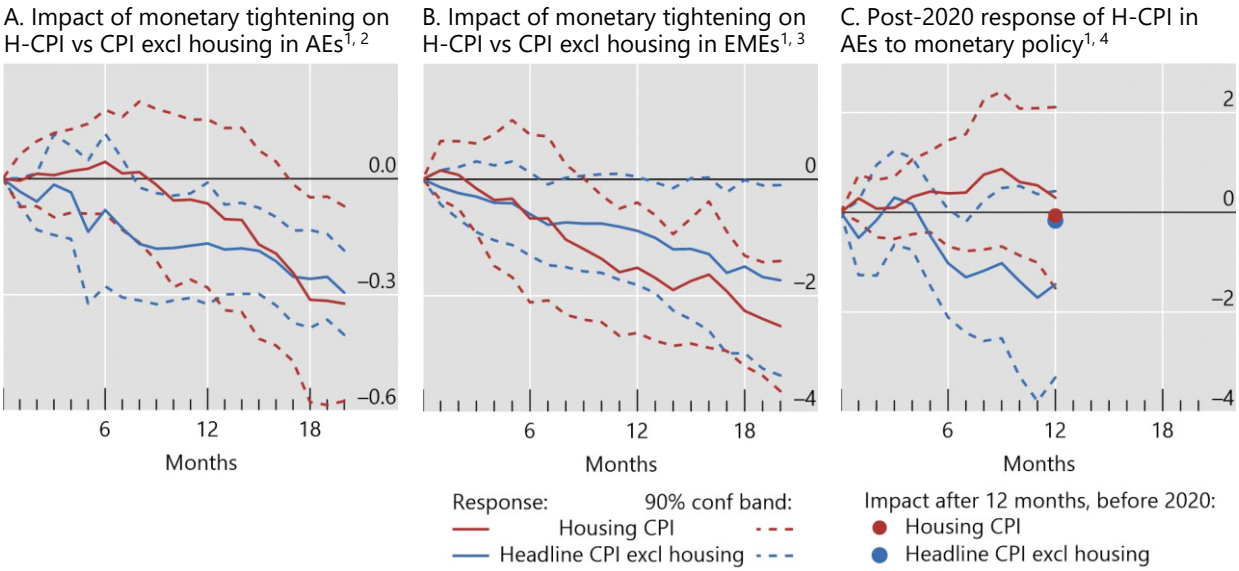
[4] See Andaloussi et al (2024) for an overview of the housing channels of monetary policy transmission.

[5] Residential structures tend to be the component of investment that responds fastest and most negatively to a monetary policy tightening. See, for instance, David and Gourio (2023).

do so, almost twice as long as the other CPI components (Graph 4.A). In EMEs, the response appears quicker and larger than in AEs, and roughly on par with the rest of the CPI (Graph 4.B).

H-CPI response to monetary tightening seems weaker in AEs, and post-2020

In percentage points — Graph 4



[1] Estimates from local projections which regress the cumulative percentage change in H-CPI and headline CPI excluding housing on monetary policy surprises of 100 basis points. [2] Unbalanced sample of 20 AEs between 1974 and 2019. [3] Unbalanced sample of 18 EMEs between 1991 and 2019. [4] Unbalanced sample of 20 AEs between 2020 and 2024. The red (blue) dot denotes the corresponding response of H-CPI (headline CPI excluding housing) in the baseline sample (Graph 4.A) at the 12-month horizon.

Sources: OECD; Bloomberg; Global Financial Data; LSEG Datastream; Macrobond; national data; BIS.

Whether the effect of monetary policy on H-CPI has been different since the pandemic is difficult to determine definitively. The available post-pandemic data span too short a period for robust statistical inference. The pandemic-related disruptions add extraordinary volatility to the data and complicate matters further. With these caveats in mind, the evidence suggests a weaker effect of monetary tightening on H-CPI in AEs post-2020 (Graph 4.C).[6] The effect on the non-housing component has the expected negative sign and is larger, albeit at a low level of statistical significance. In contrast, the response of H-CPI is statistically insignificant and has the wrong sign. The point estimate is *positive* 12 months after the tightening, whereas it is already negative at the same horizon in the pre-2020 sample.

Policy considerations

The complex relationship between housing costs and inflation raises many considerations. Two seem to be particularly relevant at the current juncture.

First, the evolution of housing costs could give clues regarding the future path of inflation. On the one hand, measurement and adjustment lags in rents mean that there is a strong backward-looking element in current readings of H-CPI growth. This would suggest downplaying those readings. On the other hand, the high intrinsic persistence suggests that H-CPI reveals information about underlying near-term trends. Moreover, the salience of this item in the cost of living may heighten its role as a source of

[6] Estimates for EMEs using post-2020 data similarly point to a weaker effect for H-CPI, as well as for CPI excluding housing, but the estimates are less precise in this case because of outliers.

second-round effects.[7] Related, as central banks consider easing policy in the near term, shifts in housing demand and supply might introduce additional bumps into inflation readings. For instance, there may be more pent-up housing demand than meets the eye in several cases. Households that are locked into their fixed term mortgages as well as those stuck as renters because rates are too high may jump back into the market once rates fall. If so, policy may wish to be alert to this possibility and factor it into decisions.

Second, a larger contribution to inflation from housing costs could inform the calibration of monetary policy. A lower sensitivity of housing costs to monetary policy compared with other CPI components would call for a stronger policy tightening to achieve the same outcome. And the higher inertia would suggest keeping a tight stance for longer.

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[7] Some recent studies find that inflation expectations rise in response to higher house prices and rents. See Dhamija et al (2023).

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