



***JOINT RESEARCH BY THE EUROPEAN COMMISSION AND THE OECD***

# **THE UNEVEN IMPACT OF HIGH INFLATION IN THE EU**

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*Three main blocks of analysis*

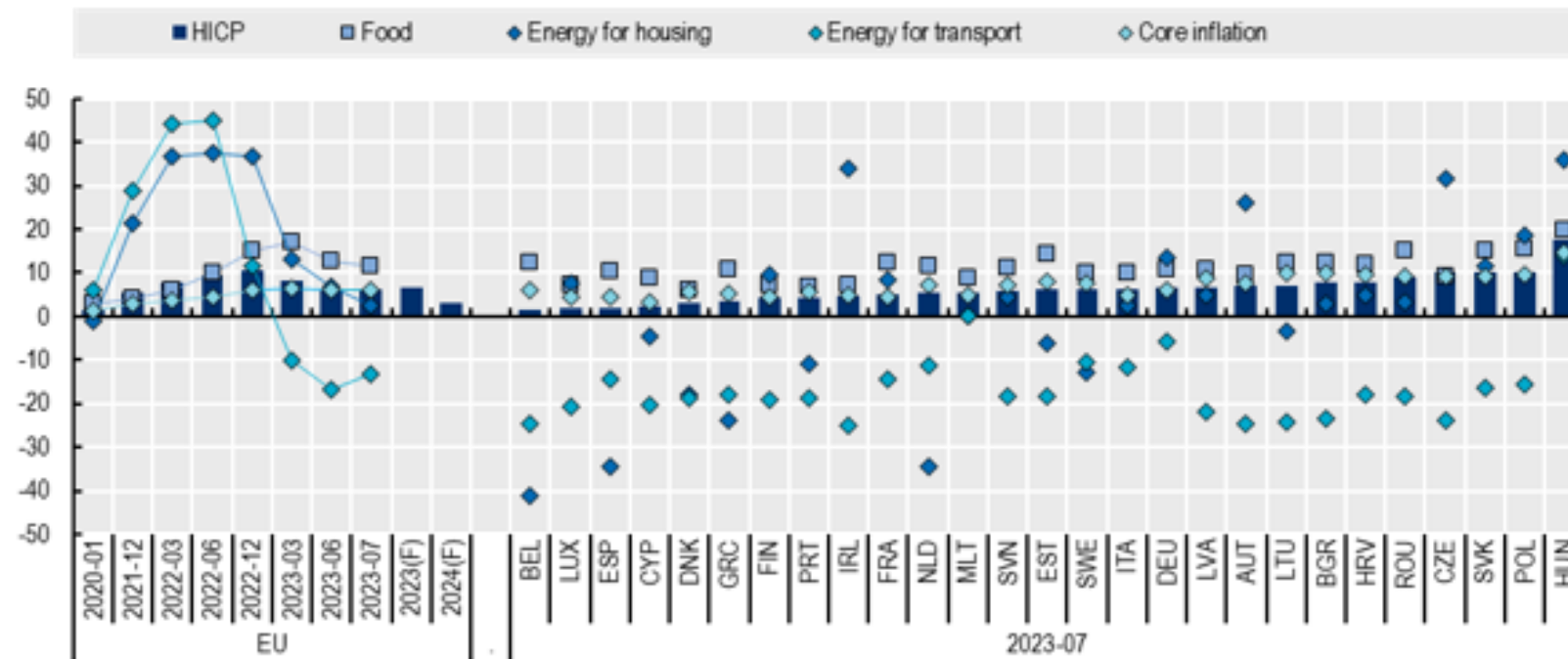
***1. Inflation developments across EU Member States***

***2. Uneven impacts of inflation across household types***

***3. Potential socio-economic consequences of inflation***

## Inflation surged in 2022, energy & food prices soared

Year-on-year inflation, selected months for EU average and July 2023 for EU Member States



Note: (F) Forecast.

Source: Eurostat (2023<sub>[25]</sub>), HICP Database; European Commission (2023<sub>[26]</sub>), European Economic Forecast Summer 2023.

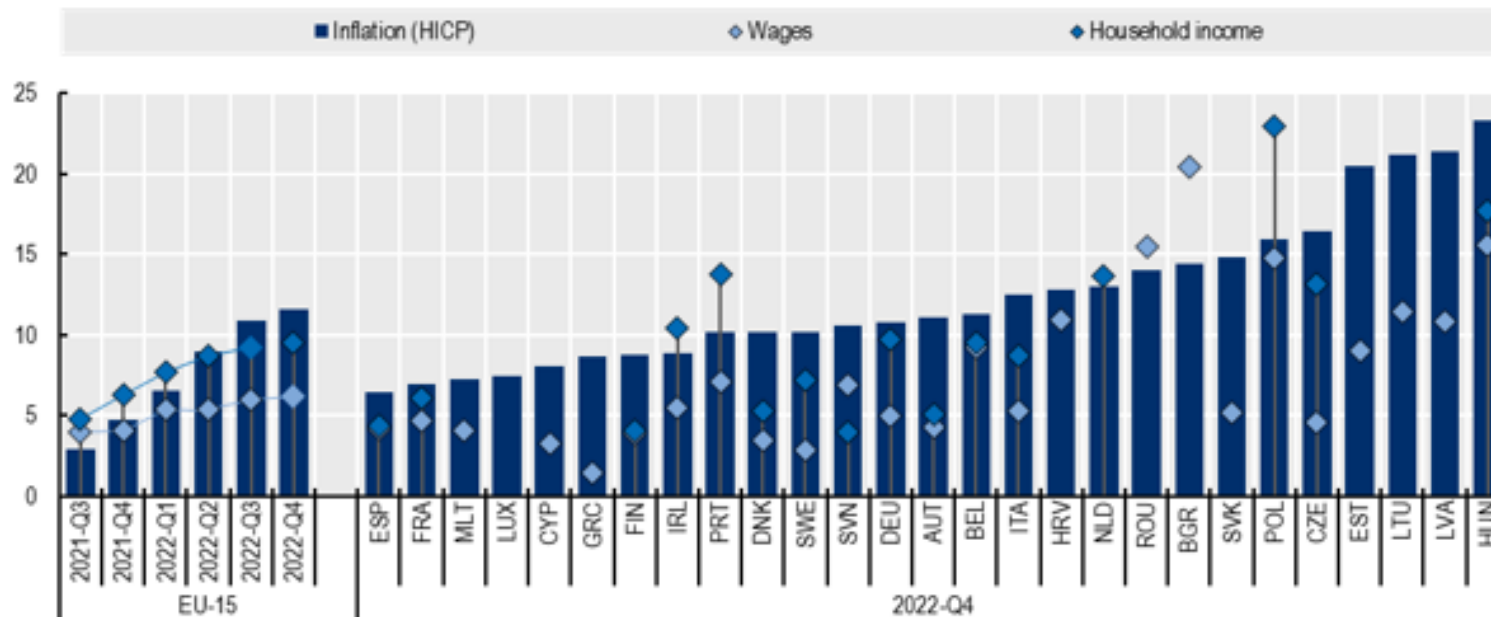
## Inflation outpaced wage and household income growth in 2022

Quarterly year-on-year growth of prices (inflation), nominal wages (labour compensation) and household income, selected quarters for EU average\* (unweighted) and fourth quarter 2022 for EU Member States

*Household purchasing power eroded, as wages and income did not keep up with increasing prices*

*The impacts of inflation were partly mitigated by employment growth, income support measures, and a rise in self-employment and capital income*

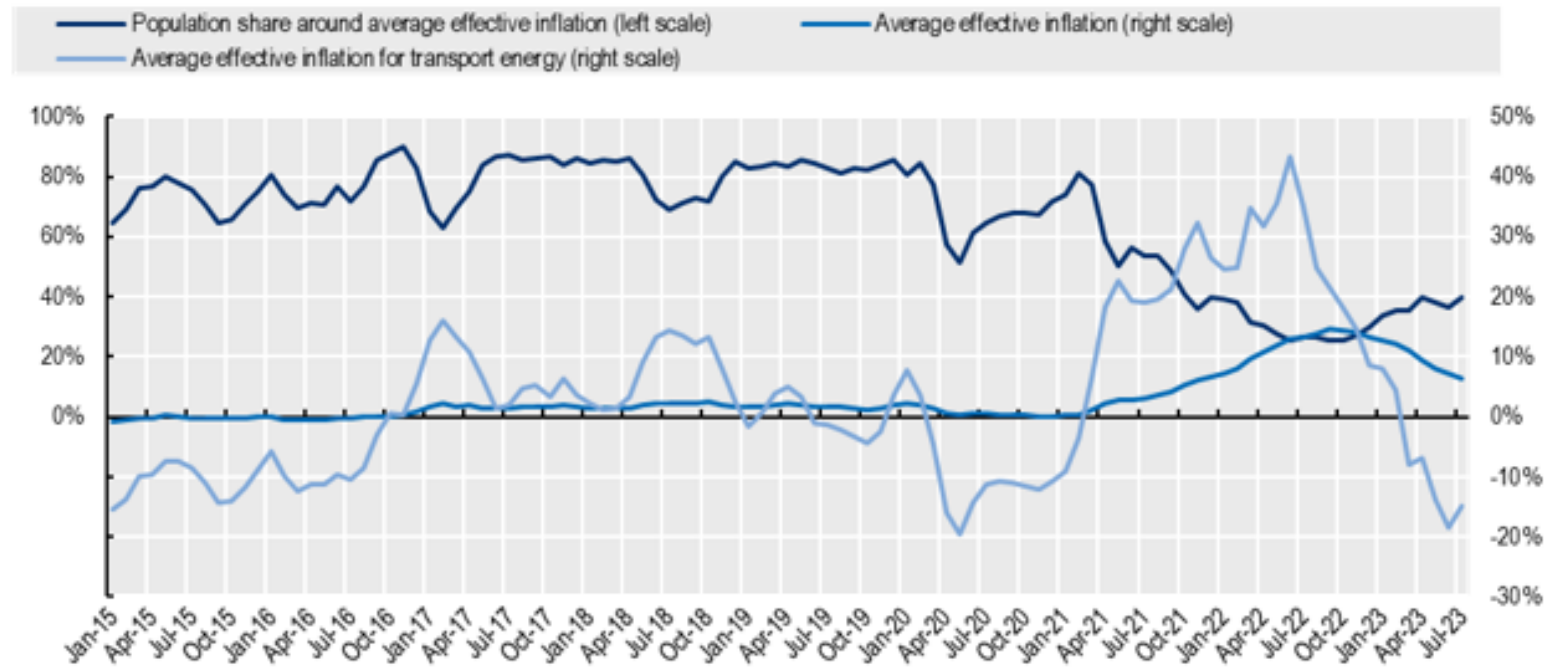
*High inflation affected people's ability to manage financially*



Note: \*Wage data not available for Luxembourg and the Netherlands. Household income data not available for Bulgaria, Croatia, Cyprus<sup>12</sup>, Estonia, Greece, Latvia, Lithuania, Luxembourg, Malta, Romania and Slovak Republic. Nominal gross disposable household income (GDHI) per capita calculated from real GDHI per capita and HICP.

## Fewer households experience inflation rates close to the average

Average effective inflation (for all items and for transport energy) and share of population in households outside 1 percentage point range from average effective inflation, January 2015-July 2023, EU

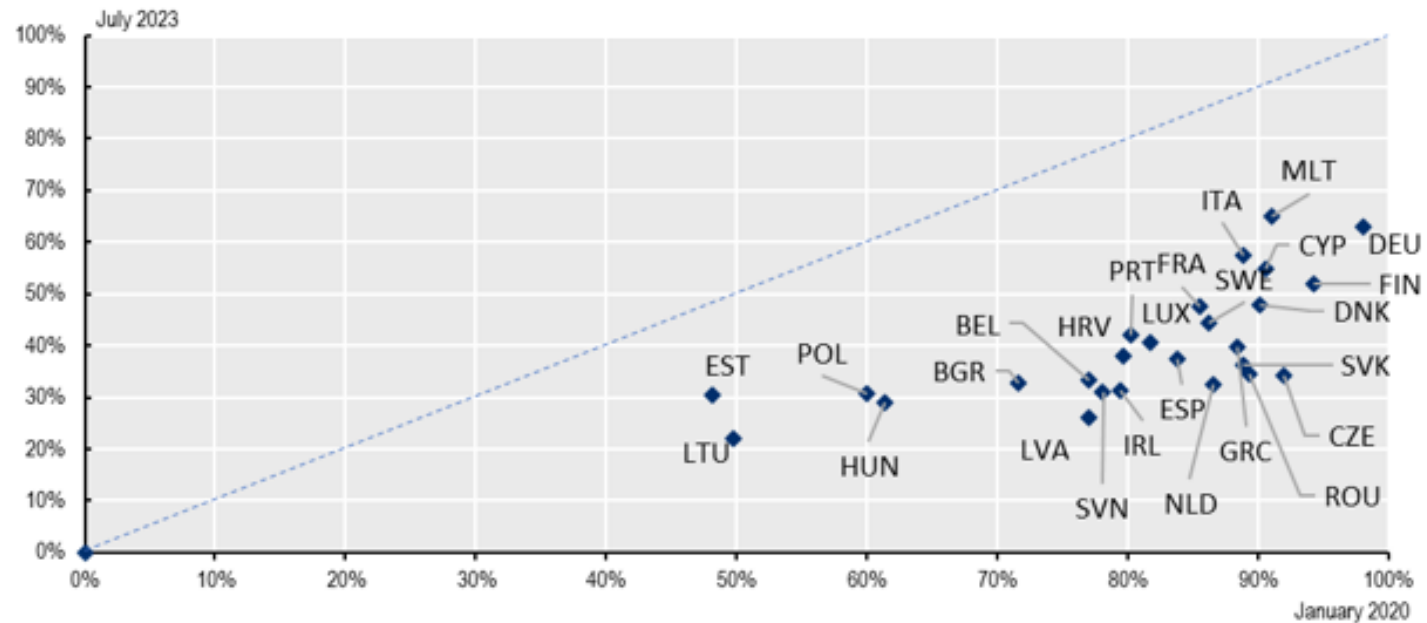


Note: Unweighted average for all EU Member States except Austria.

Source: Authors' calculations, based on EU-HBS 2015 and Eurostat (2023<sup>[25]</sup>), HICP Database.

## Differences in inflation experienced by households increased in all countries

Share of population in households within 1 percentage point range from average effective inflation, January 2020 and July 2023, EU



Note: All EU Member States except Austria. Countries below the 45-degree line have more inflation dispersion in July 2023 than in January 2020 (i.e. fewer people in households within 1 percentage point range from average effective inflation). Dispersion increases with distance below the 45-degree line.

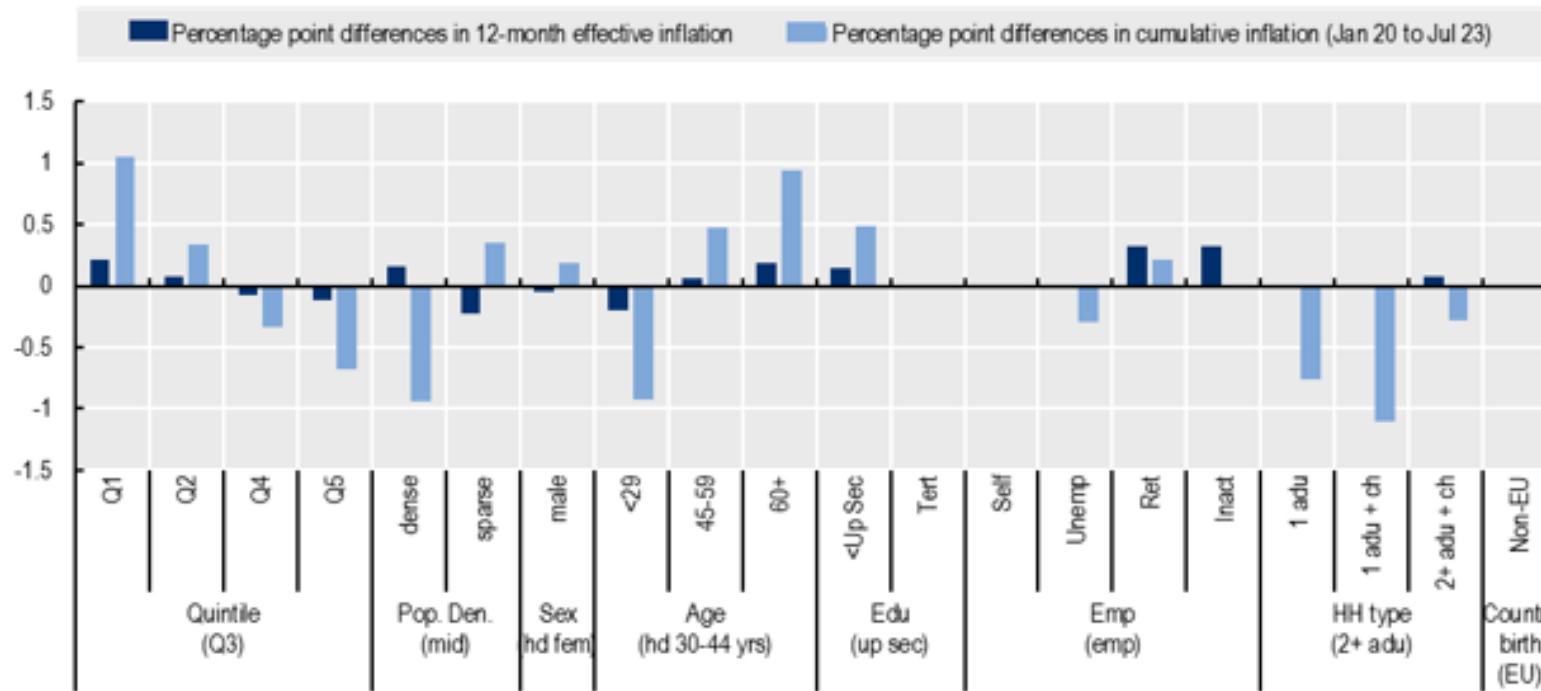
Source: Authors' calculations, based on EU-HBS 2015 and Eurostat (2023<sub>[25]</sub>), HICP Database.



## Effective inflation rates are unevenly distributed across population groups

Mean percentage point differences in effective year-on-year and cumulative inflation by household characteristics, July 2023, EU

*Effective inflation is higher among the following:*



*Lower income households*

*Household in sparsely populated areas*

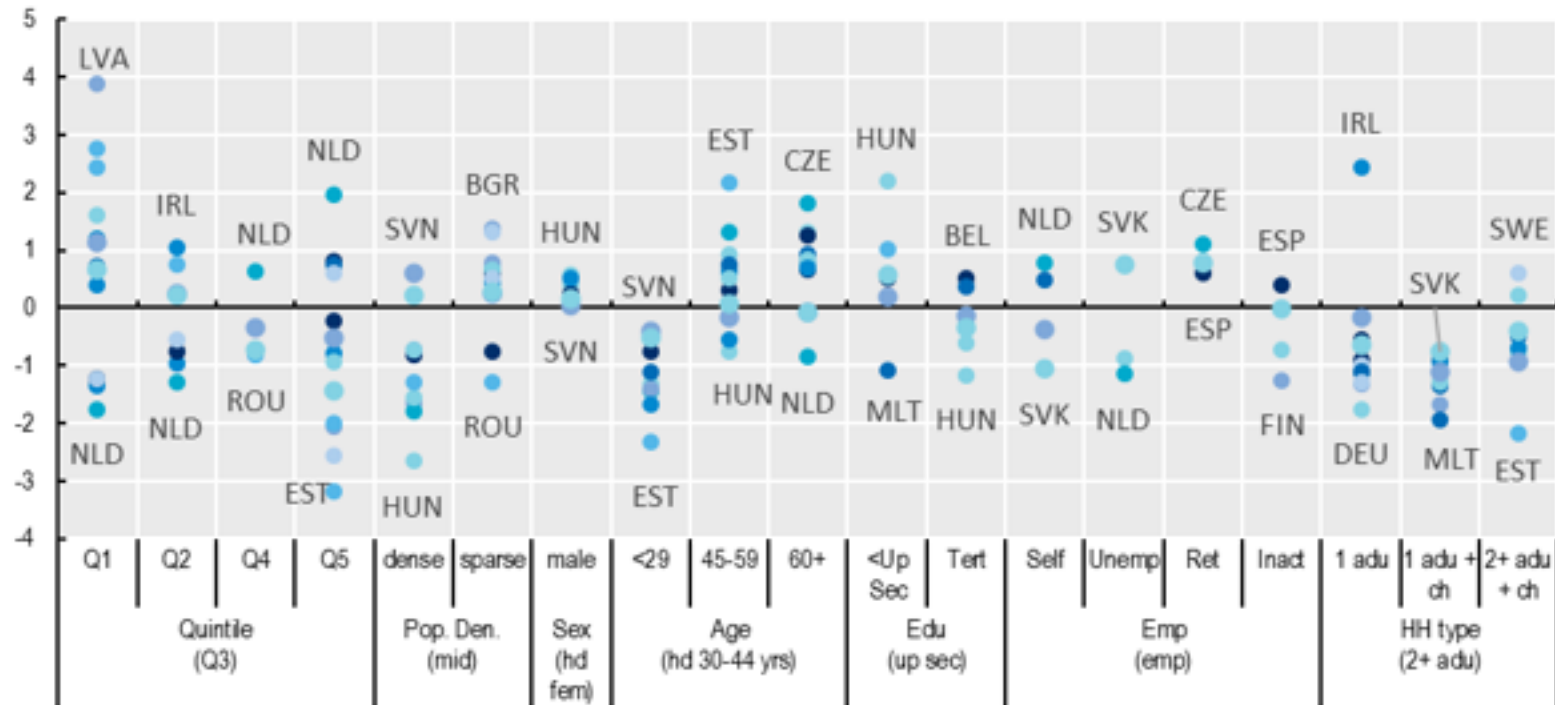
*Households headed by older and retired people*

Source: Authors' calculations, based on EU-HBS 2015 and Eurostat (2023<sup>[25]</sup>), HICP Database.



## Effective inflation rates across population groups vary between countries

Mean percentage point differences in cumulative inflation between January 2020-July 2023, conditional on household characteristics, EU Member States

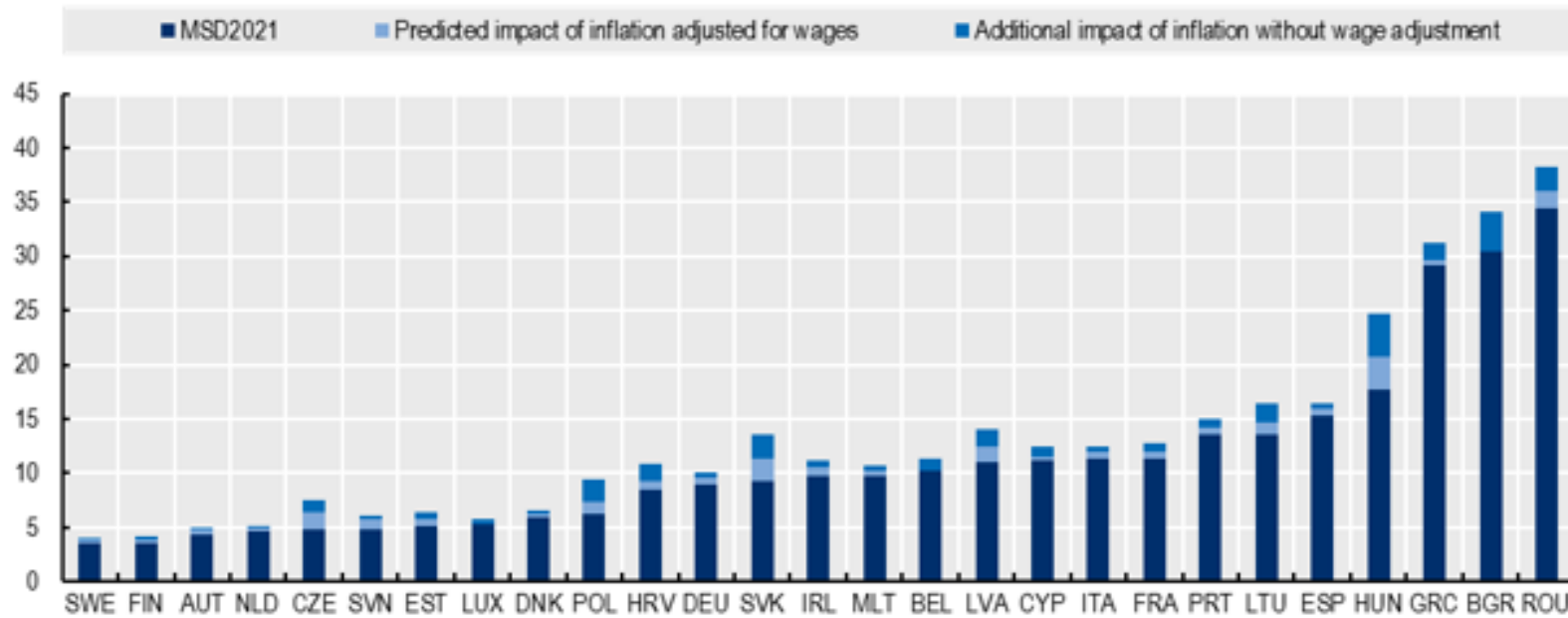


Source: Authors' calculations, based on EU-HBS 2015 and Eurostat (2023<sub>[25]</sub>), HICP Database.



## The estimated effect of inflation on material and social deprivation (MSD)

Predicted effect of inflation on MSD rates compared to pre-inflationary MSD levels (%), by country, with or without adjustment for wage developments, February 2022-February 2023



*Inflation is estimated to lead to increases in material and social deprivation*

*Increases in deprivation vary substantially from country to country*

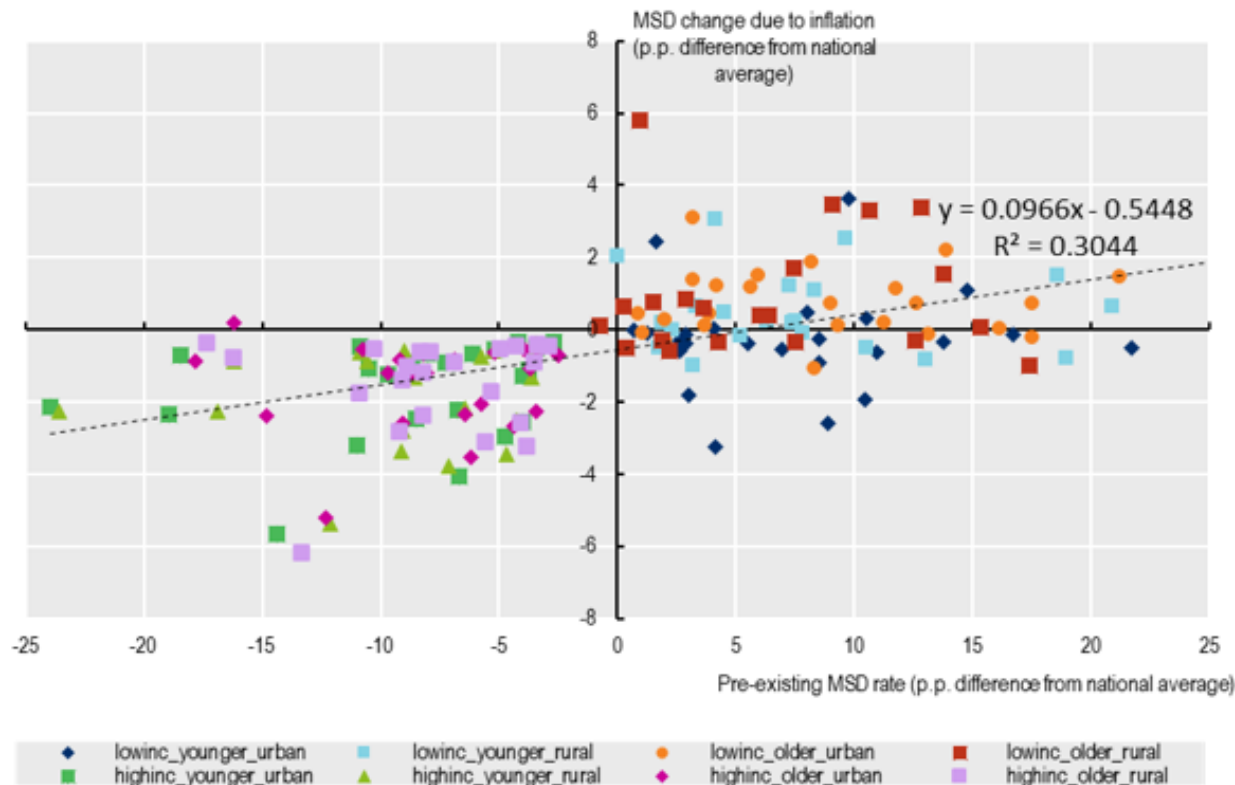
*Wage adjustments can mitigate increases in deprivation*

Note: For simplicity, observed wage adjustments at national level were assumed to translate into equal and proportionate changes in the income of all households in the sample.

Source: Authors' calculations, based on EU-SILC microdata from the 2021 cross-sectional wave.

## Effect of inflation on deprivation by household type

Predicted effect of inflation on MSD rates compared to pre-inflationary MSD rates, selected household types, 27 EU Member States



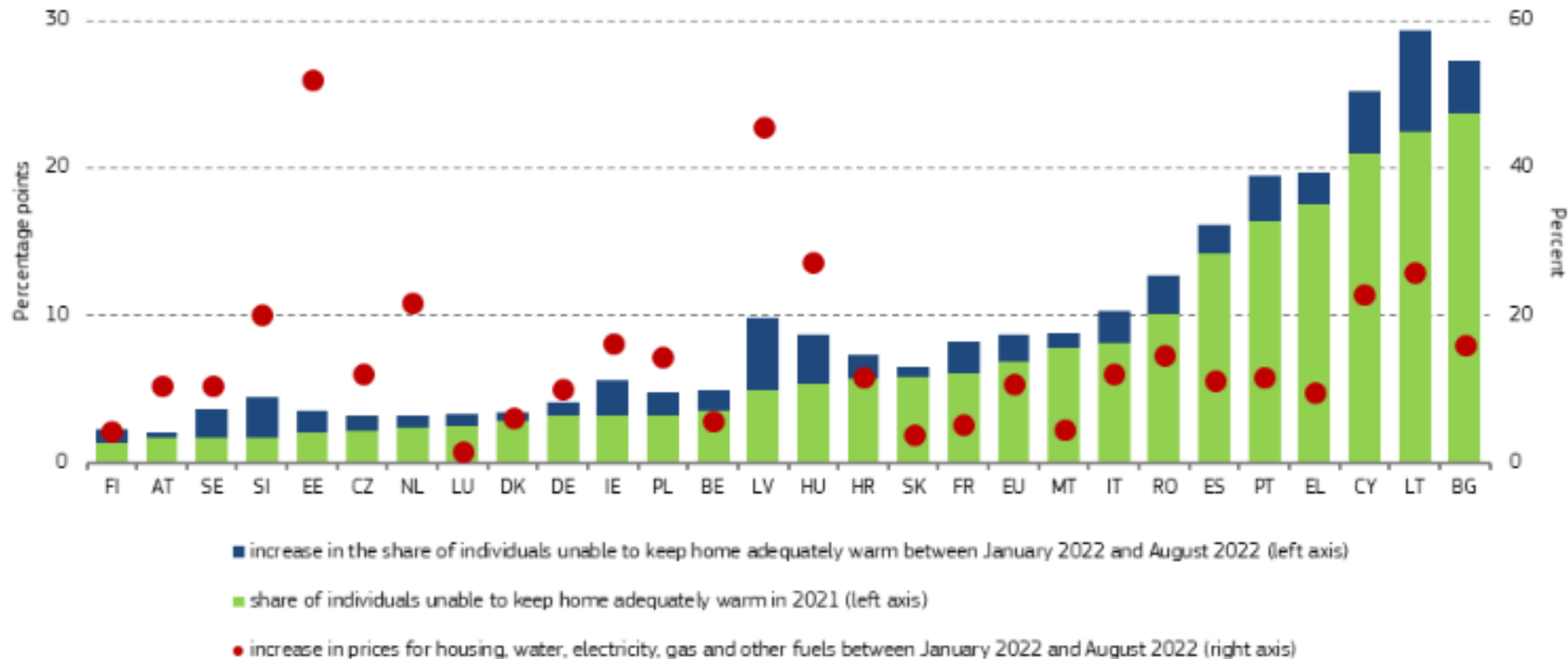
*Inflation is estimated to lead to higher increases in MSD for households with higher pre-existing deprivation rates*

*E.g. low-income households that faced high initial deprivation rates also experience high increases in MSD due to rising prices*

*Higher MSD increases among low-income households are due to strong sensitivity of deprivation to income changes in this group*

## Effect of inflation on energy poverty, by household type

Chart 13: Estimated impact of rising prices on energy poverty





- *EU governments quickly adopted price-related and income support measures; these were often not targeted*
- *Given the uneven and irregular impact of inflation across population groups and over time, targeted support to most affected households with limited resources may have been more cost-effective*
- *In case of future inflationary shocks, temporary targeted income support could secure more resources for those who need them most and be more cost-effective for the government budget.*



## THE UNEVEN IMPACT OF HIGH INFLATION

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- *ESDE quarterly from October 2022*