The effect of monetary policy on inflation heterogeneity along the income distribution

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Discussion
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Context

- Central banks care about distributional effects of monetary policy
- Distributional effects via several channels
- Data availability still a problem

Monetary policy effect on inflation across the income distribution

- Set-up
    - Income-specific inflation based on
      i) consumption basket, broad coverage (HBS)
      ii) consumption and price, restricted to food and beverage (GfK/Kantar)
    - Germany, France, Italy, Spain, the Netherlands and Belgium, 2000-2018
   - Monetary policy surprises as in Jarocinski and Karadi (2020)

- Monetary policy effects go through two different channels
    - different consumption baskets: inflation of high-income households responds **less** to MP
    - different shopping behaviour: inflation of high-income households responds **more** to MP

# Inflation differences are sizable between income groups

- Inflation of low-income HH is higher than that of high-income HH (Laspeyres)
- Allowing for product substitution (Paasche index), is the opposite.
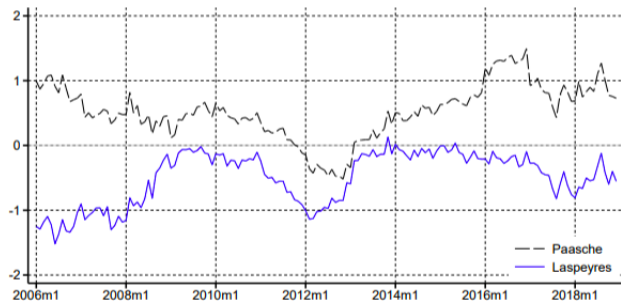
Note: Inflation difference between top and bottom income groups, based on Laspeyres (blue) and Paasche (black) indices in percentage points per year. The underlying inflation indices are the 12-months rolling averages of the six-country weighted average of $\pi_{t-1,t}^i$. COICOPs 01.1, 01.2, and 02.1, based on GfK/Kantar data. The sample grows over time until all six countries are in the sample, as shown in Table A1.

Inflation differences and levels of HICP inflation

- Low-income HH substitute more successfully than high-income HH
- ... not enough to offset larger price changes in Laspeyres inflation, as inflation increases
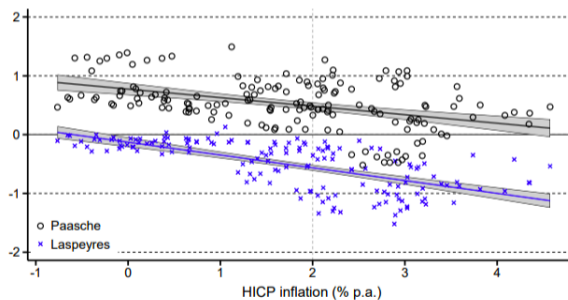

Note: Top- minus bottom-income FMCG inflation differential versus the contemporaneous level of euro area HICP inflation, in percentage points per year. Inflation differentials are based on transactions in COICOPs 01.1, 01.2, and 02.1 reported in the GfK/Kantar household panel. Difference of six-country-weighted averages, separately for Laspeyres (blue crosses) and Paasche inflation (black circles). 95% confidence bands of the respective linear regression are shaded in grey.
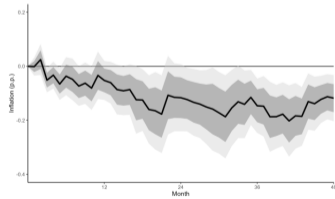
Different response of inflation differential to a MP surprise
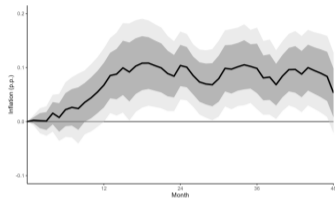
different consumption baskets: inflation of high-income households responds **less** to MP
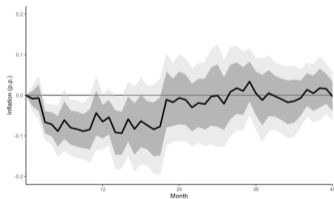
a.Laspeyres index

b. Paasche index

different shopping behaviour: inflation of high-income households responds **more** to MP

Questions I

- How relevant is income for inflation heterogeneity between households?
    - Income group with higher inflation changes several times over the sample
    - Effect of MP also ambiguous depending on the channel
    - Household shopping behavior seems important. How tightly is that linked to income?
- What about the source of inflation, demand vs supply based?

- Low-income HH substitute more. Do they have a higher attention to inflation?
    - HHs attention to inflation increases with inflation only after inflation exceeds a threshold of around 2-4% (Korenok et al. 2023).

Questions II

- Monetary policy effects
    - MP effects less precisely estimated for the sample period dominated by unconventional MP
    - Jarocinski and Karadi (2020) capturing target surprises rather than unconventional measures. Alternative MP surprises?
    - MP might also affect income distribution at the same time (i.e., Hubert and Savignac, 2023 on labor income and MP)

- For future investigation?
    - Inflation heterogeneity- vs inflation expectations- heterogeneity along income distribution?
    - Any implications for how central banks should communicate?

Overall

- Great paper, I learned a lot!
- A cliffhanger situation....looking forward to read the sequel!