

Introduction

- De-anchored medium term inflation expectations challenge central banks' efforts to attain the inflation target.
- It matters for central bank communication how different types of information is processed by different segments in the general public in a high uncertainty environment like the recent inflation surge.
- Little evidence on anchoring under high inflation environment in advanced economies as well as on heterogeneity in terms of financial literacy and trust in the central bank.

Research Questions

- Which communication strategies, quantitative, qualitative, or a combination of both, are most effective in anchoring households' inflation expectations in time of high inflation?
- Does the effect of the treatment differ across different financial literacy or trust in the ECB levels?

Survey Experiment

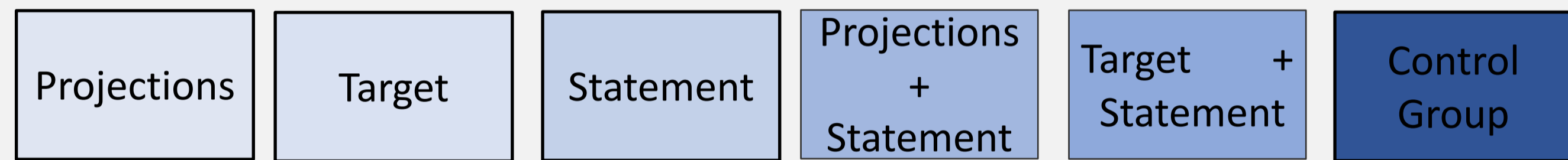
- Online survey with a RCT conducted in February 2023 close to peak of inflation in Germany (8.8% in November 2022)
- Respondents: 4,000 German households

Survey Design

Prior question

- Series of questions to measure financial literacy, level of trust etc.
- Prior inflation expectation point forecast question, for 3 and 5 years ahead.

Treatments



Posterior questions

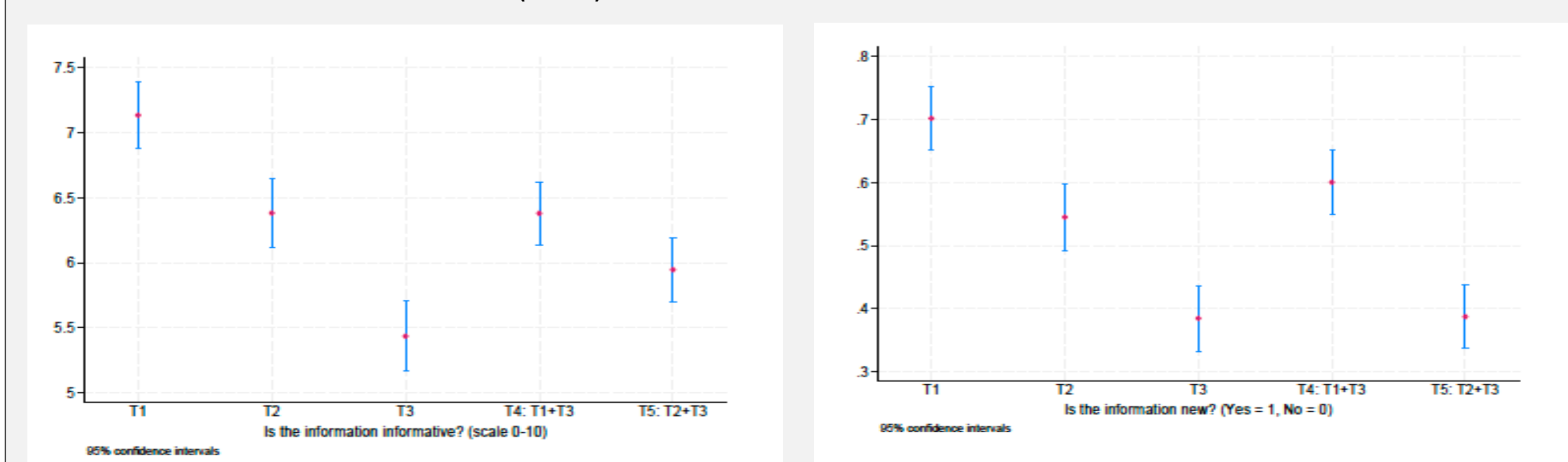
- Posterior inflation expectation question with min and max range and likelihood of average estimation being surpassed.
- Question about newness of the information (Yes-No).
- Question about informativeness level of the provided information (scale 1-10).

Treatments

- T1:** Average inflation in the euro zone in 2022 was 8.4%. The European Central Bank (ECB) expects average inflation in the euro zone to be 6.3% in 2023, 3.4% in 2024 and 2.3% in 2025.
- T2:** The European Central Bank (ECB) is committed to setting its monetary policy to ensure that inflation stabilized at its 2% target in the medium term.
- T3:** The chairwoman of the European Central Bank (ECB) said „Fighting inflation is our mantra, our mission, our mandate. We know that the current situation is tough for many people across the euro area – that is why we have to raise interest rates to tame inflation“.
- T4:** T1 + T3
- T5:** T2 + T3

Transmission channel: How informative was the provided information? Scale (1-10)

Transmission channel: Is the information new?(Yes-No)



Results

- Average Treatment Effects on: Distance from Target & Individual Forecast Uncertainty**

$$|\pi_{i,h}^{post} - 2| = \alpha + \beta|\pi_{i,h}^{prior} - 2| + \sum_{j=1}^5 \eta_j treatment_{j,i} + \zeta X_j + \epsilon_j \quad (1) \& (3)$$

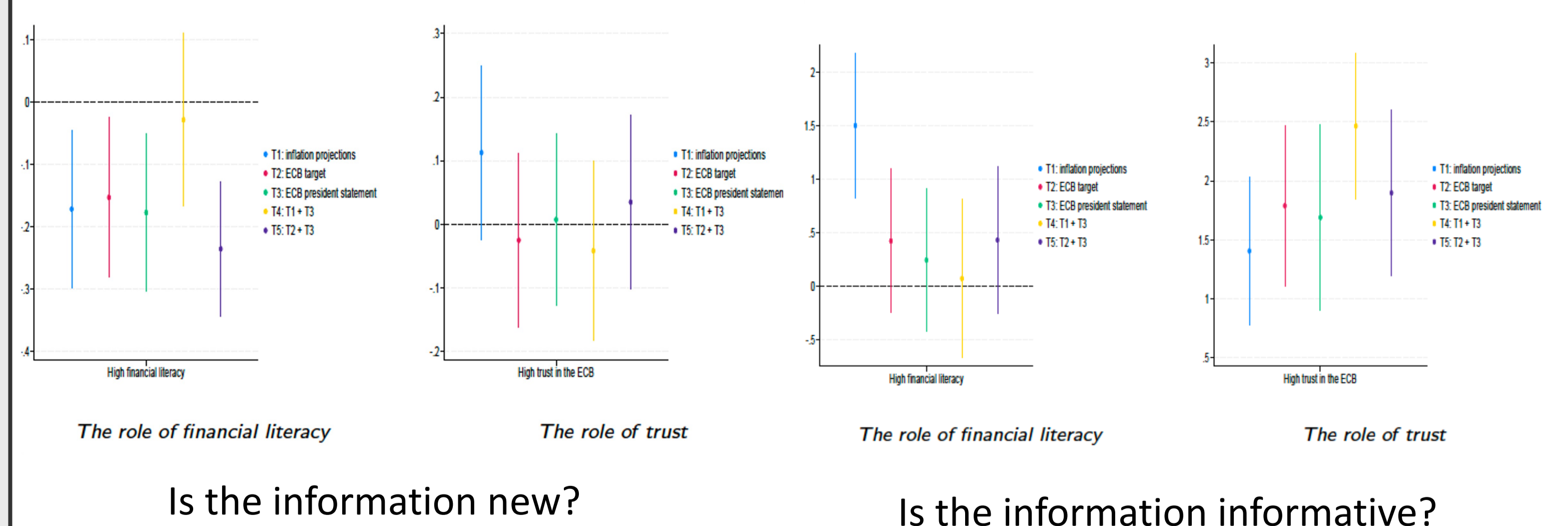
$$\sigma\pi_{i,h}^{post} = \alpha + \beta\sigma\pi_{i,h}^{prior} + \sum_{j=1}^5 \eta_j treatment_{j,i} + \zeta X_j + \epsilon_j \quad (2) \& (4)$$

	(1) 3 years ahead $ \pi_{post,3y} - 2 $	(2) $\sigma\pi_{post,3y}$	(3) 5 years ahead $ \pi_{post,5y} - 2 $	(4) $\sigma\pi_{post,5y}$
$ \pi^{prior} - 2 $	0.60*** (0.01)		0.68*** (0.01)	
π^{prior}		0.012*** (0.00)		0.018*** (0.00)
T1: Inflation Projections	-0.70*** (0.12)	-0.078*** (0.03)	-0.82*** (0.11)	-0.070*** (0.03)
T2: ECB Target	-0.17 (0.12)	-0.037 (0.03)	-0.18* (0.11)	-0.043 (0.03)
T3: ECB Statement	-0.0082 (0.12)	0.026 (0.03)	-0.18 (0.11)	-0.0014 (0.03)
T4: T1 + T3	-0.78*** (0.12)	-0.089*** (0.03)	-0.77*** (0.11)	-0.067** (0.03)
T5: T2 + T3	-0.37*** (0.12)	-0.069** (0.03)	-0.50*** (0.11)	-0.032 (0.03)

- Heterogeneous Treatment Effects: Trust in the ECB and Financial Literacy**

	(1) $ \pi_{post,5y} - 2 $ Low Trust	(2) $ \pi_{post,5y} - 2 $ High Trust	(3) $ \pi_{post,5y} - 2 $ Low Literacy	(4) $ \pi_{post,5y} - 2 $ High Literacy
$ \pi^{prior} - 2 $	0.69*** (0.02)	0.64*** (0.02)	0.62*** (0.02)	0.70*** (0.02)
T1: Inflation Projections	-1.02*** (0.22)	-1.13*** (0.17)	-0.51 (0.35)	-1.03*** (0.14)
T2: ECB Target	0.037 (0.22)	-0.57*** (0.17)	-0.56* (0.33)	-0.46*** (0.14)
T3: ECB Statement	-0.39* (0.22)	-0.61*** (0.18)	0.022 (0.36)	-0.46*** (0.15)
T4: T1 + T3	-0.64*** (0.22)	-1.10*** (0.18)	-0.53 (0.33)	-0.93*** (0.14)
T5: T2 + T3	-0.43* (0.23)	-0.81*** (0.18)	-0.067 (0.35)	-0.69*** (0.14)

- Transmission Channels: Newness and Informativeness Levels**



Conclusions

- Providing inflation forecasts is on average the most effective way to anchor inflation, providing the numerical target or a qualitative statement on their own have insignificant impacts however combining them does significantly improve the degree of anchoring.
- Highly financially literate and highly trusting individuals are more receptive to central bank messages:
 - This group of individuals tends to find the information more informative.
- Central bank communication even when inflation is far from target can reduce the level of de-anchoring of inflation expectations.