

Introduction

- There is heterogeneity in inflation expectations with respect to socio-demographics, financial and monetary policy literacy, and subjective macroeconomic models
 - It matters for central bank communication how information is incorporated into the expectation formation process
- Little evidence about similar heterogeneity with respect to risk and time preferences → [this paper](#)

Intuition

- Both risk and time preferences have been linked to information-seeking behavior in other contexts
- Risk-averse and impatient individuals are less informed about potential future risky outcomes due to their reduced likelihood of seeking information → does this dearth of information give rise to an uptick in inflation expectations?

Research Questions

1. Do inflation expectations by households and experts differ according to their reported willingness to take financial risk and their reported patience?
2. Can information close a potential gap between expectations by different preference groups? What type of information is most relevant in this respect?

Survey Experiment

- Two parallel online surveys with a RCT were conducted
- Respondents: 3,266 German households and 663 employees from German bank and insurance companies

Survey Design

Prior question

- Series of questions to measure monetary policy literacy, level of optimism etc.
- Prior expectation point forecast question

Treatments

Forecast

Forecast Risk

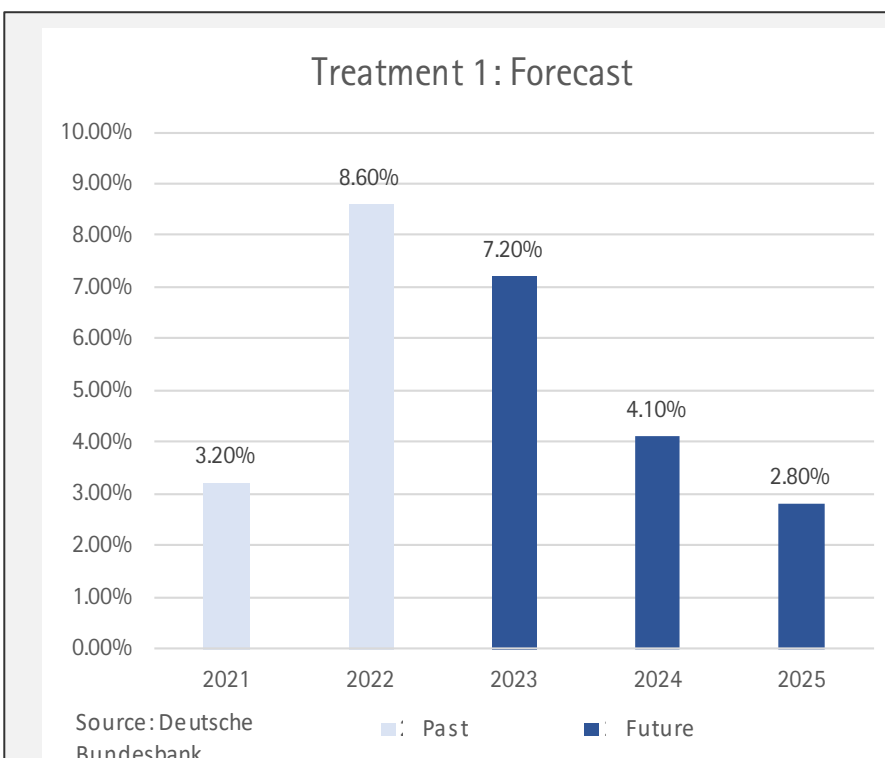
Energy Risk

Control Group

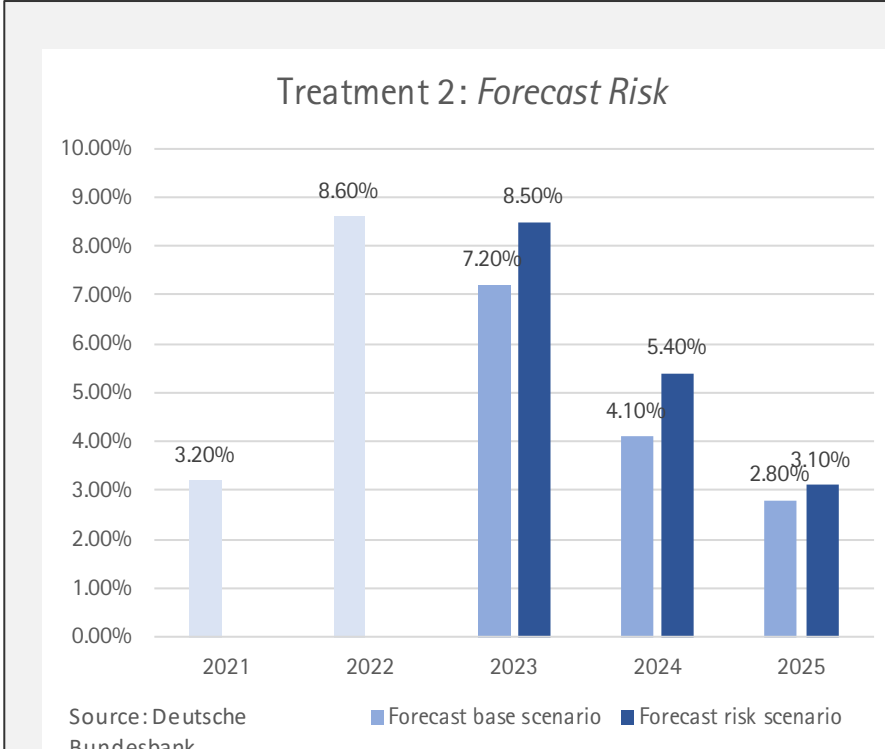
Posterior questions

- Posterior expectation distribution forecast question
- Qualitative question to measure willingness to take financial risk
- Quantitative staircase method to measure the level of patience

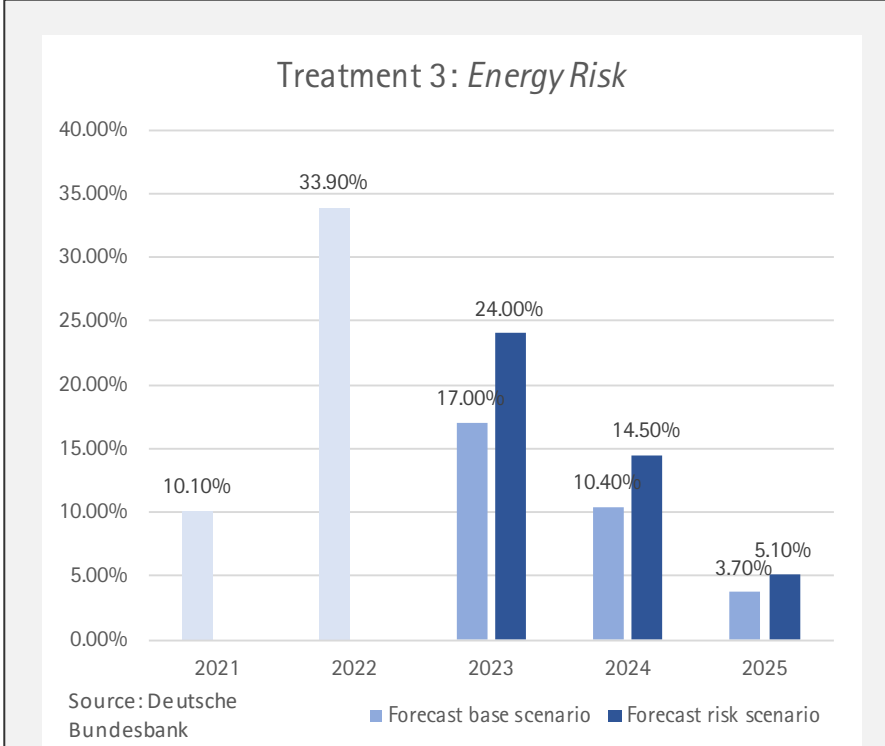
Treatments



In 2021, the inflation rate in Germany averaged 3.2% and in 2022 8.6%. The Deutsche Bundesbank expects average inflation rates in Germany of 7.2%, 4.1% and 2.8% for 2023, 2024 and 2025 respectively.



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In 2021, the energy prices in Germany increased by an average of 10.1% and by 33.9% in 2022. The Deutsche Bundesbank expects energy prices in Germany of 17%, 10.4% and 3.7% in 2023, 2024 and 2025 respectively. The Bundesbank emphasizes the high level of uncertainty in forecasting energy prices due to the war in Ukraine. In a risk scenario in which a sharper conflict with Russia and stronger political tensions are assumed, the expected average energy prices for Germany for 2023, 2024 and 2025 rises to 24%, 14.5% and 5.1%.

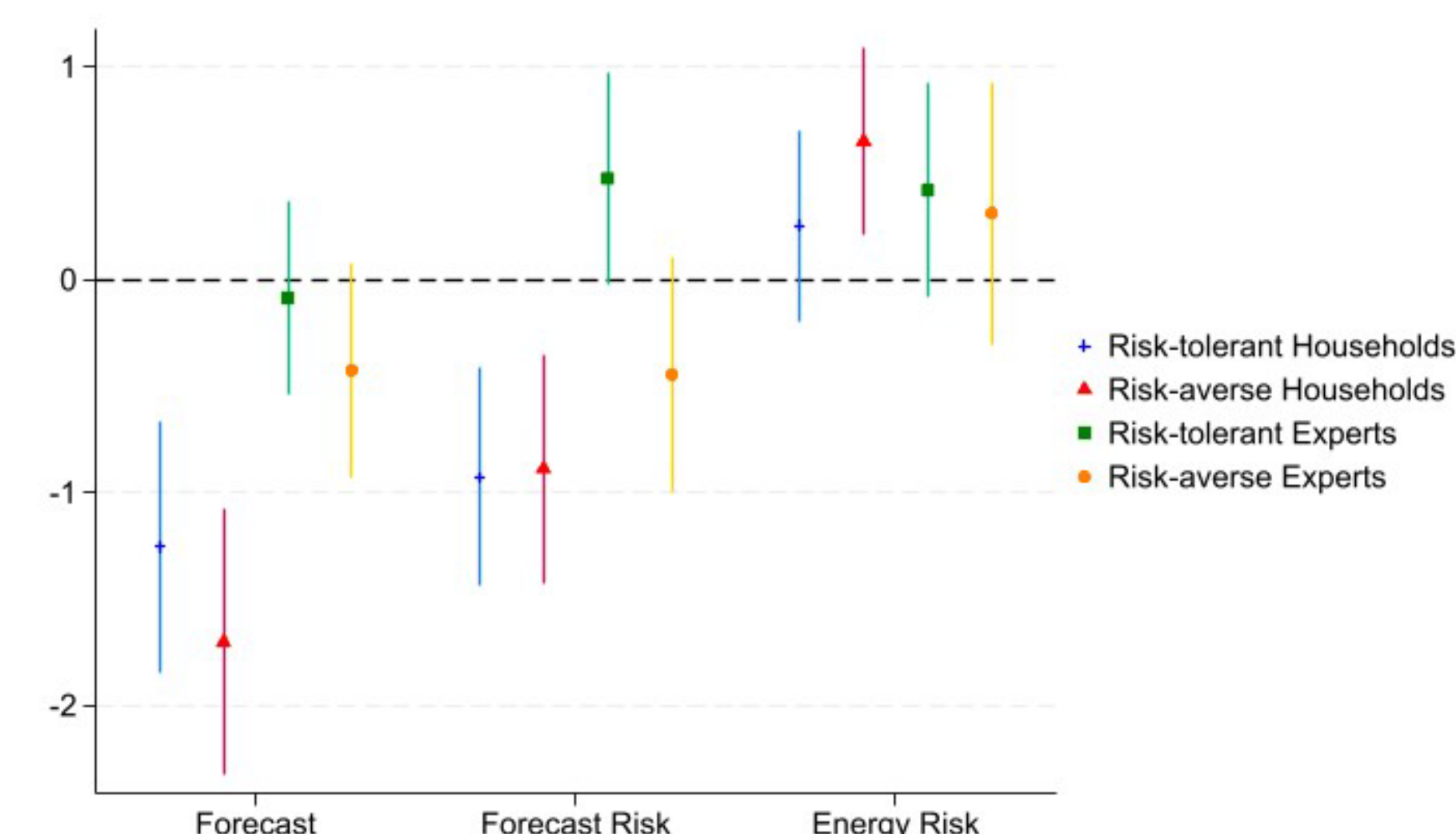
Results

Heterogeneity in Prior Inflation Expectations Across Preferences

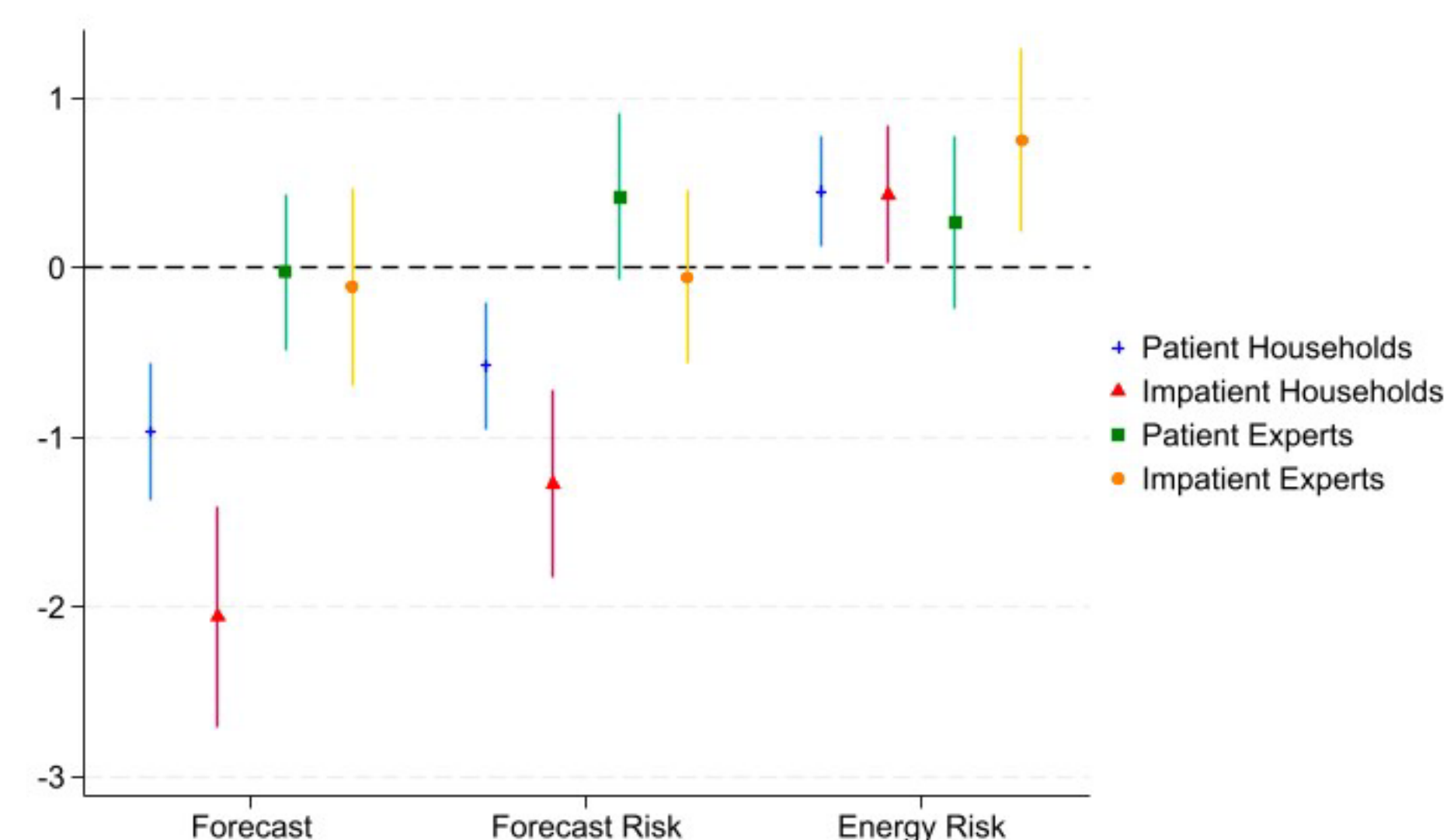
	Households			Experts		
	Risk-tolerant Mean/SD	Risk-averse Mean/SD	T-Test P-Value	Risk-tolerant Mean/SD	Risk-averse Mean/SD	T-Test P-Value
$\pi_{prior}^{e,12m}$	7.75 (3.56)	8.81 (3.77)	0.00***	6.38 (1.63)	7.42 (2.18)	0.00***
$\pi_{prior}^{e,5y}$	5.87 (3.97)	7.24 (4.30)	0.00***	3.93 (1.43)	5.20 (2.53)	0.00***
	Patient			Impatient		
	Mean/SD	Mean/SD	T-Test P-Value	Mean/SD	Mean/SD	T-Test P-Value
$\pi_{prior}^{e,12m}$	7.44 (3.02)	9.00 (4.08)	0.00***	6.43 (1.45)	7.10 (2.17)	0.00***
$\pi_{prior}^{e,5y}$	5.78 (3.58)	7.41 (4.39)	0.00***	4.02 (1.25)	4.96 (2.45)	0.00***

Treatment Effects on Short-Run Updates in Inflation Expectations Across Risk Tolerance

$$\pi_{j,post}^{e,h} - \pi_{j,prior}^{e,h} = \alpha + \sum_{i=1}^3 \eta_i treatment_{j,i} + \zeta X_j + \epsilon_j$$



Treatment Effects on Short-Run Updates in Inflation Expectations Across Levels of Patience



Conclusions

1. Prior inflation expectations differ systematically across risk tolerance and patience for both households and experts → Risk-averse and impatient respondents expect significantly higher inflation a priori
 2. Information about projections of overall inflation can close the gap between prior expectations by risk and patience groups → The group, whose prior inflation expectations are farthest from the presented forecasts, update more strongly towards the information
- Central bank communication about inflation forecast may contribute to closing this gap
 - Important for reducing cross-sectional disagreement about future inflation, biases in inflation expectations