

# DISAGREEMENT ABOUT EXPECTED INFLATION AND THE TRANSMISSION OF MONETARY POLICY IN THE CZ

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## IMPORTANCE

- Crucial role of inflation expectations in monetary policy
- Relevance for the Czech Republic's inflation targeting policy regime
- The recent inflationary wave (2021 - 2023)
- Evidence of weak inflation anchoring (Brázdk et al., CNB WP, 2024)
- Gaps in understanding the impact of disagreement on inflation expectations
- Evidence of lower effectiveness of monetary policy at times when disagreement about inflation expectations is higher (Falck, Hoffman, Hürtgen, JME, 2021)

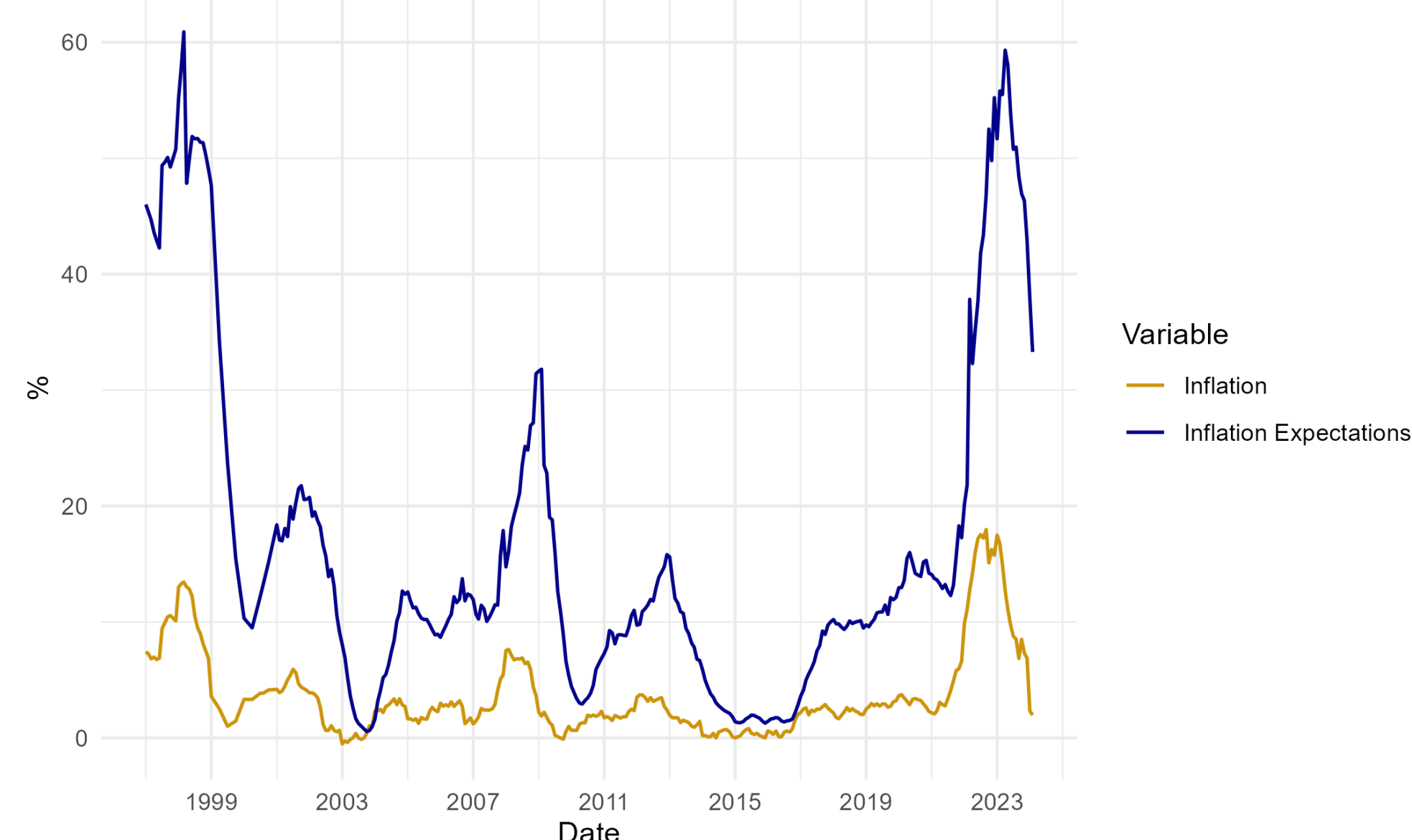
## PROBLEM STATEMENT

Does disagreement about inflation expectations impact the effectiveness of monetary policy transmission in the Czech Republic, and if so, how do the effects differ between periods of high and low disagreement?

## QUANTIFIED CONSUMER INFLATION EXPECTATIONS

- Focus on consumer inflation expectations as they reflect a broader spectrum of societal beliefs (D'Acunto, Weber et al., ECB WP, 2024)
- Challenge: Lack of detailed microdata on inflation expectations in the Czech Republic
- Solution: Reconstructed quantitative inflation expectations and disagreement from qualitative EC Consumer Survey data
- Methodology:
  - Followed Lyziak et al. (2014, 2023)
  - Used Carlson and Parkin (1975) probability method, modified by Batchelor and Orr (1988)
- Consumer inflation expectations consistently higher than actual inflation and CNB target:

Figure: Quantified Inflation Expectations vs. Actual Inflation



Source: CSU, EC Consumer Survey, Authors' calculations

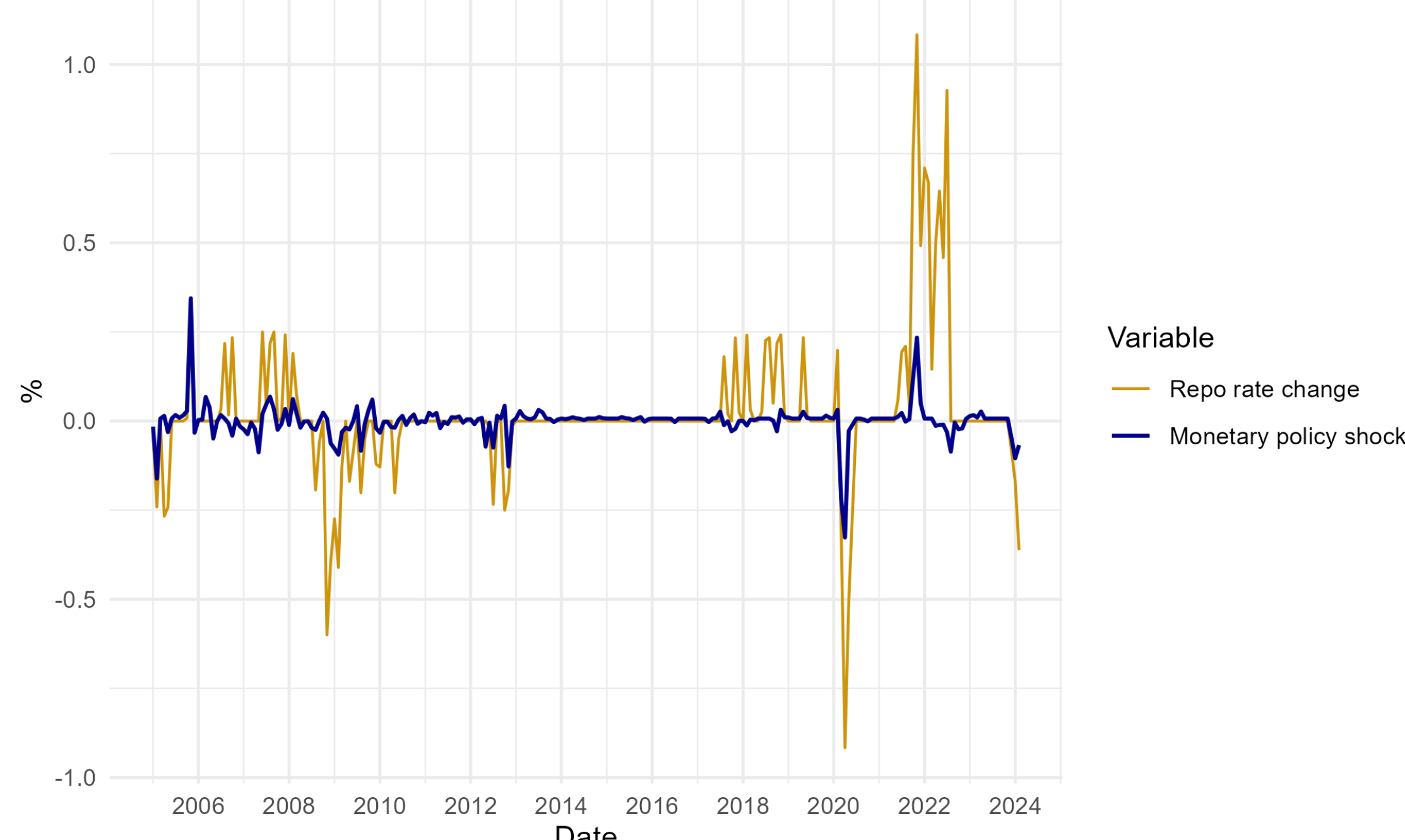
## RESEARCH METHODOLOGY

- Identification of low and high disagreement periods from the quantified cross sectional variance of consumer inflation expectations;
- Identification of monetary policy shocks using high-frequency financial market instruments (CZK FRAs);
- Estimating the impulse responses of key macroeconomic variables to the identified monetary policy shocks using a (smooth) regime-switching local projection model.

$$y_{i,t} = (\alpha_i^H + \beta_i^H \epsilon_t + \gamma_i^H y_{t-1})F(z_{t-1}) + (\alpha_i^L + \beta_i^L \epsilon_t + \gamma_i^L y_{t-1})(1 - F(z_{t-1})) + u_{i,t}$$

## ESTIMATED HFI SHOCKS

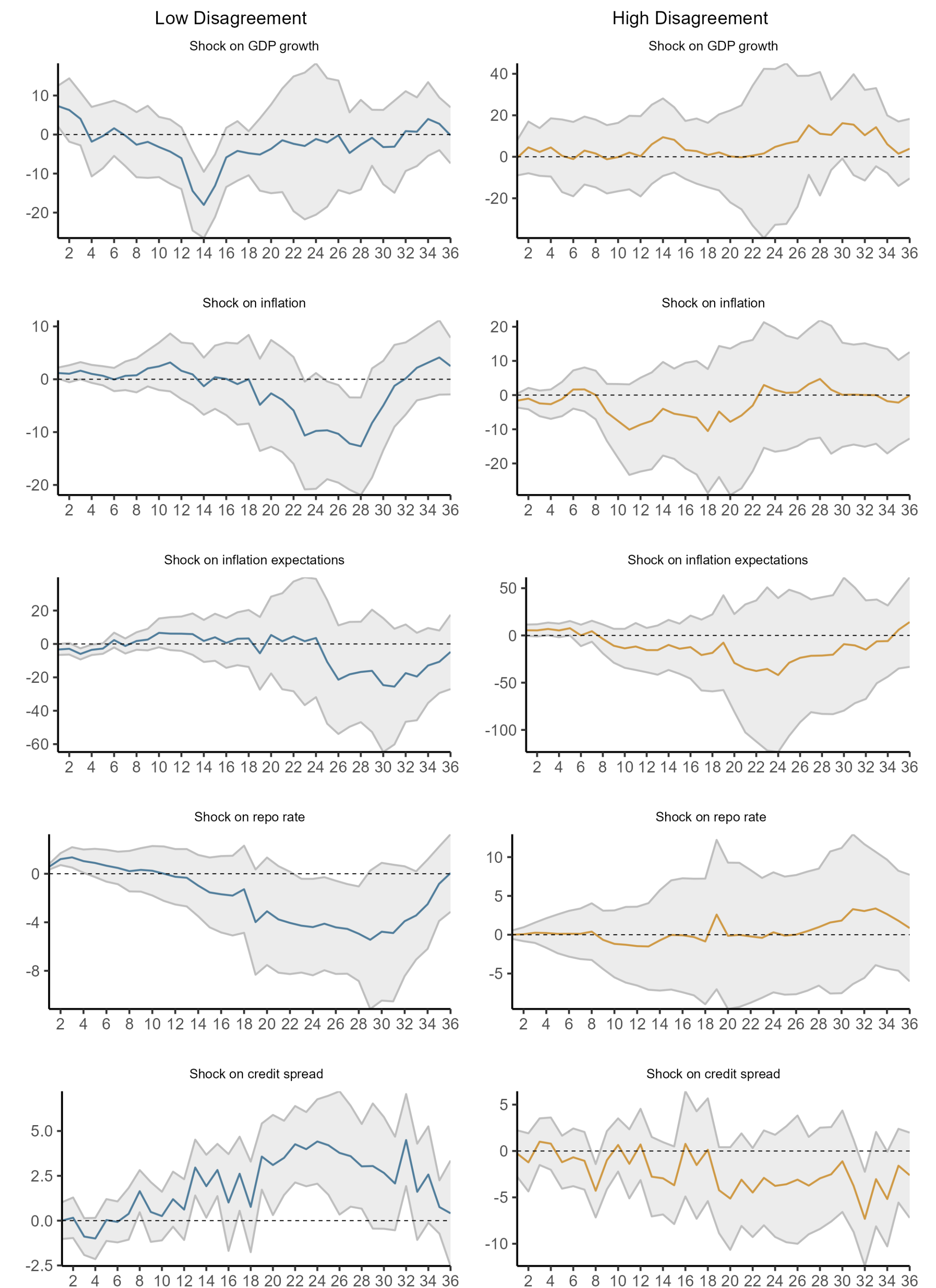
Figure: Monthly Monetary Policy Shocks estimated with FRA 1X4 IV



Source: Refinitive Eikon, Authors' calculations

## MAIN RESULTS: REGIME SWITCHING MODEL

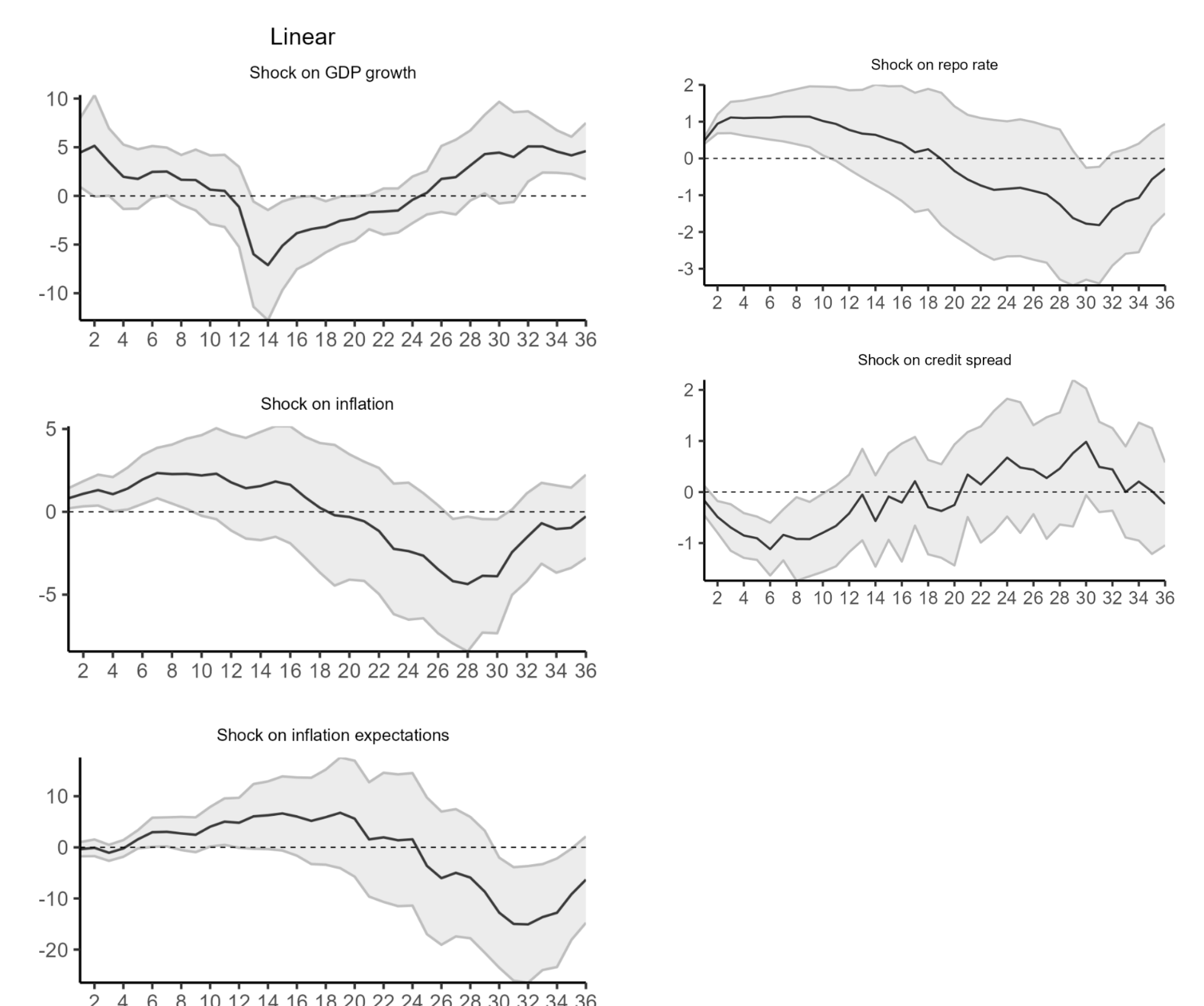
Figure: State-dependent Effects of a 25 bps Unexpected Monetary Policy Shock



Note: 95% CI. Jan 2004 - Feb 2024 sample. Newey & West (1986) standard errors and covariance matrix estimators adjusted for finite sample.

## ROBUSTNESS CHECK: LINEAR MODEL

Figure: Linear Effects of a 25 bps Unexpected Monetary Policy Shock



Note: 95% CI. Jan 2004 - Feb 2024 sample. Newey & West (1986) standard errors and covariance matrix estimators adjusted for finite sample.

## CONTRIBUTION

- The first estimates of the CNB's monetary policy shocks using high frequency identification;
- One of the first empirical attempts to study possible non-linearities, when analysing the transmission mechanism of Czech monetary policy;
- Showing, using a data-driven approach, that the CNB interest rate policy remains effective, which has not been shown with more recent data for more than a decade.

## CITATIONS

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