

---

# State-Dependent Inflation Expectations and Consumption Choices

## Discussion

13 June 2024

František Brázdík (Monetary Department, CNB)



# My takeaways

---

- First thought: this is a very long paper
- Second thought: It is two papers in one, half of the paper in appendix
  - A comprehensive analysis of how inflation expectations influence households' expected durable consumption during periods of varying inflation dynamics.
  - Comparison of aggregate data available for EU countries
- Novelty:
  - Harmonized European Commission consumer survey for Slovakia, data covering 2009–2013

# Summary

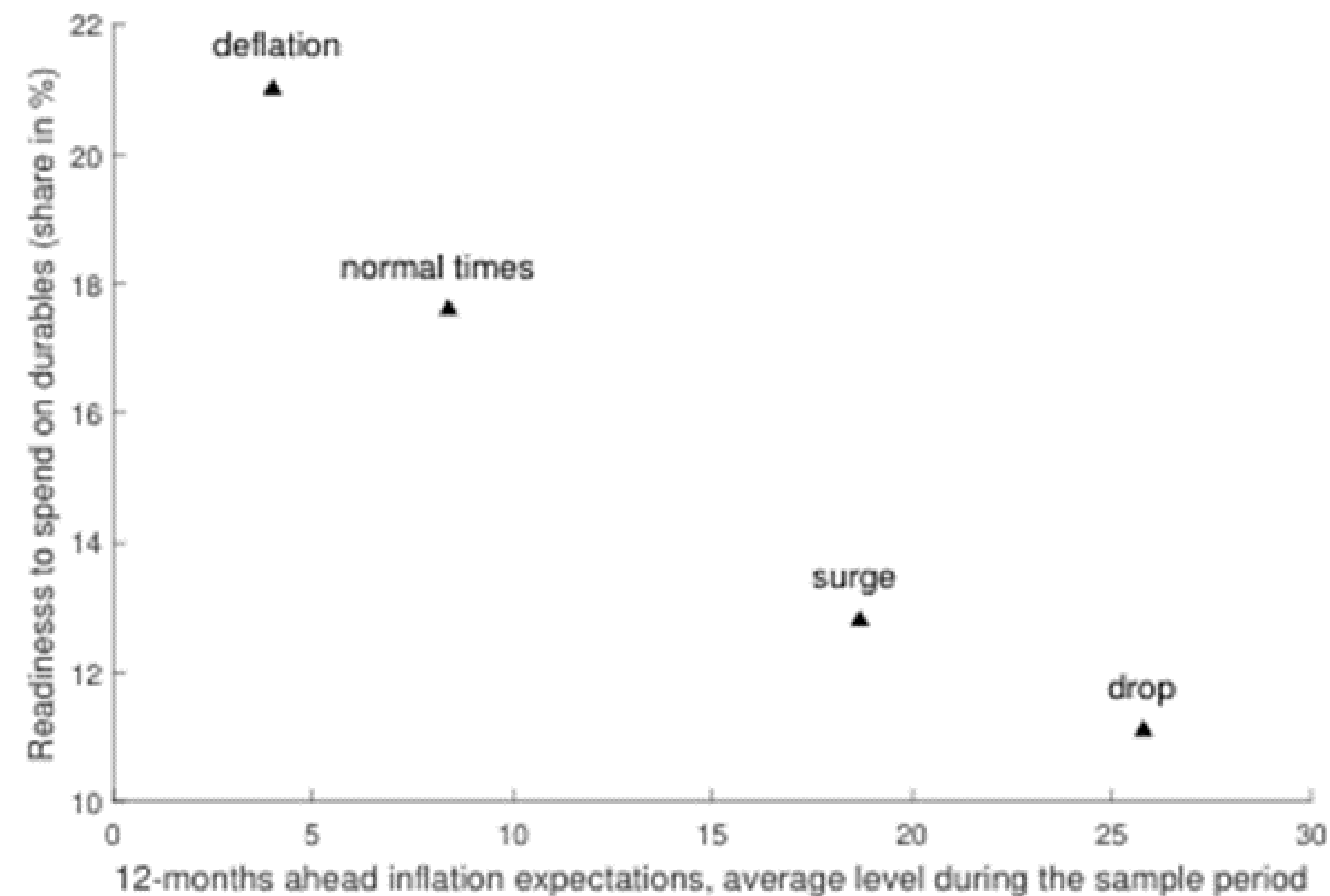


Figure 2: Unconditional correlation of inflation expectations with the readiness to spend

- Subjective important findings:
  - Paper explores links between household consumption and inflation expectations
  - It emphasizes that this connection is state-dependent (inflation) and varies with inflation dynamics:
    1. Periods of rising inflation and high inflation expectations boost consumption
    2. In periods of disinflation, no positive effects on consumption are observed
    3. In deflationary periods, positive inflation expectations spur consumption
- Inflation uncertainty affects consumption choices:
  1. Increased uncertainty leads to reduced consumption propensity, particularly during inflation surges
- These observations can be rationalized with models and theory

- How to set thresholds for the states (surge, drop, normal times)?
  - How to set regimes threshold
  - Is it possible identify the switch of the states in real time from the used data?
- Paper emphasizes the inflation based state-dependency nature of inflation expectations and consumption choices:
  - This also reflects exploration of uncertainty and purchase of durable goods
  - Binder (2017) tries to explore this link: higher uncertainty, higher precautionary savings, lower consumption
  - Author suggests state dependent Euler Equation. How it should be dependent?
- Potential Omitted Variables:
  - Are the purchase intentions of durables purely based on the inflation expectations?
  - Optionally to consumption, household can save funds: Return on saving does not only depend on expected inflation but also on interest rate
  - This may be linked to stance of the monetary policy: Real interest rates?

# Further Questions and Suggestions

---

- Quite a lot of data removed due to missing answers:
  - I may be helpful to fill in missing data:
    - Dummy approach like filling in median, mode, ...
    - Advanced approach like K-Nearest Neighbors (KNN): Estimate missing values by finding similar data points using KNN. This method can preserve data integrity.
- This paper explores relation between inflation expectations and consumption
  - What data or model structure may be needed when we start questioning sources of inflation in terms of demand and supply shocks?
- Conclusions:
  - Nicely summarized paper, with interesting micro conclusions
  - Monetary policy implications can be drawn
- Sparks motivation for us:
  - Let's replicate and compare
  - Country comparison

# Appendix

---

# Czech Inflation History

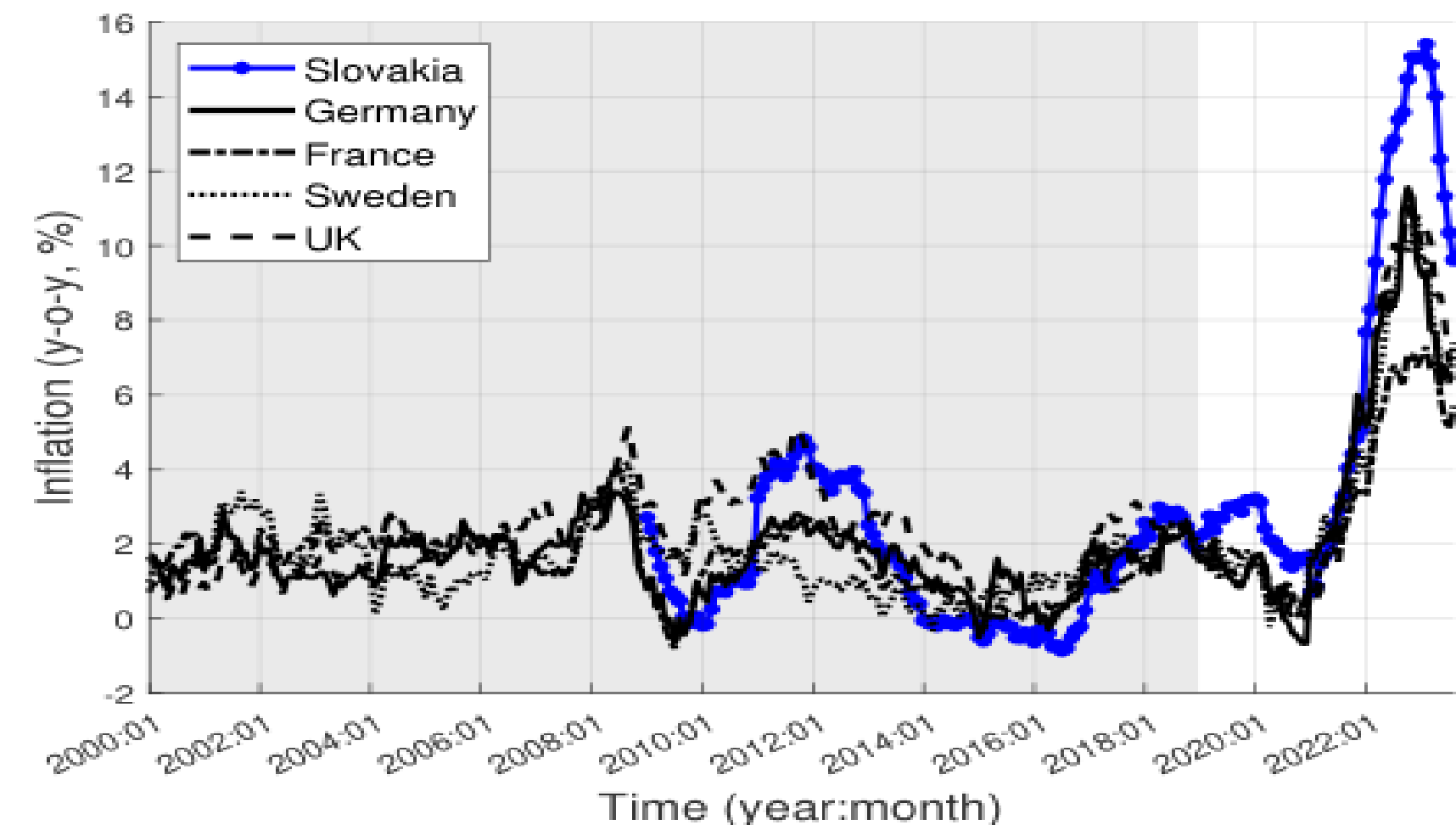
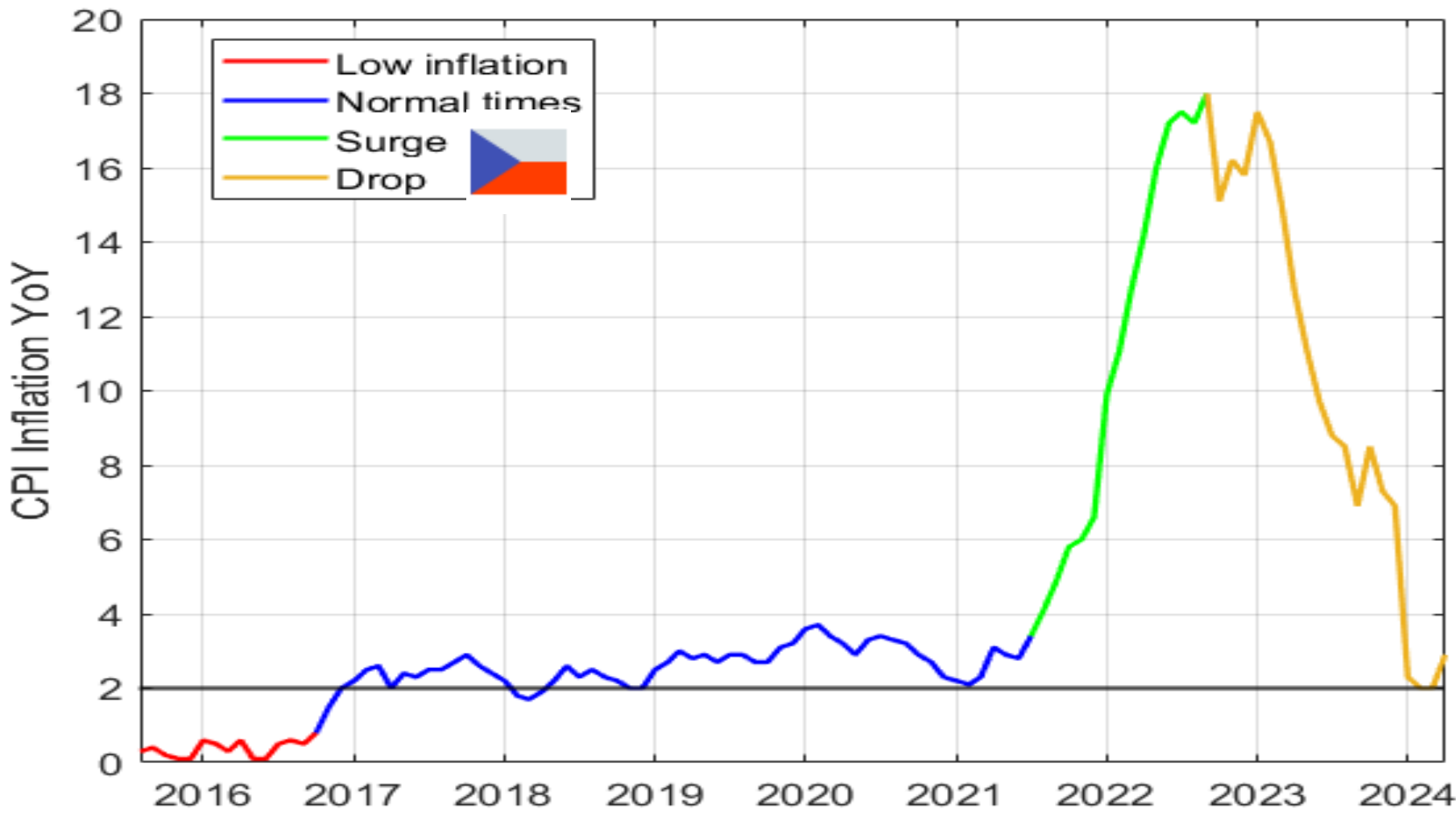
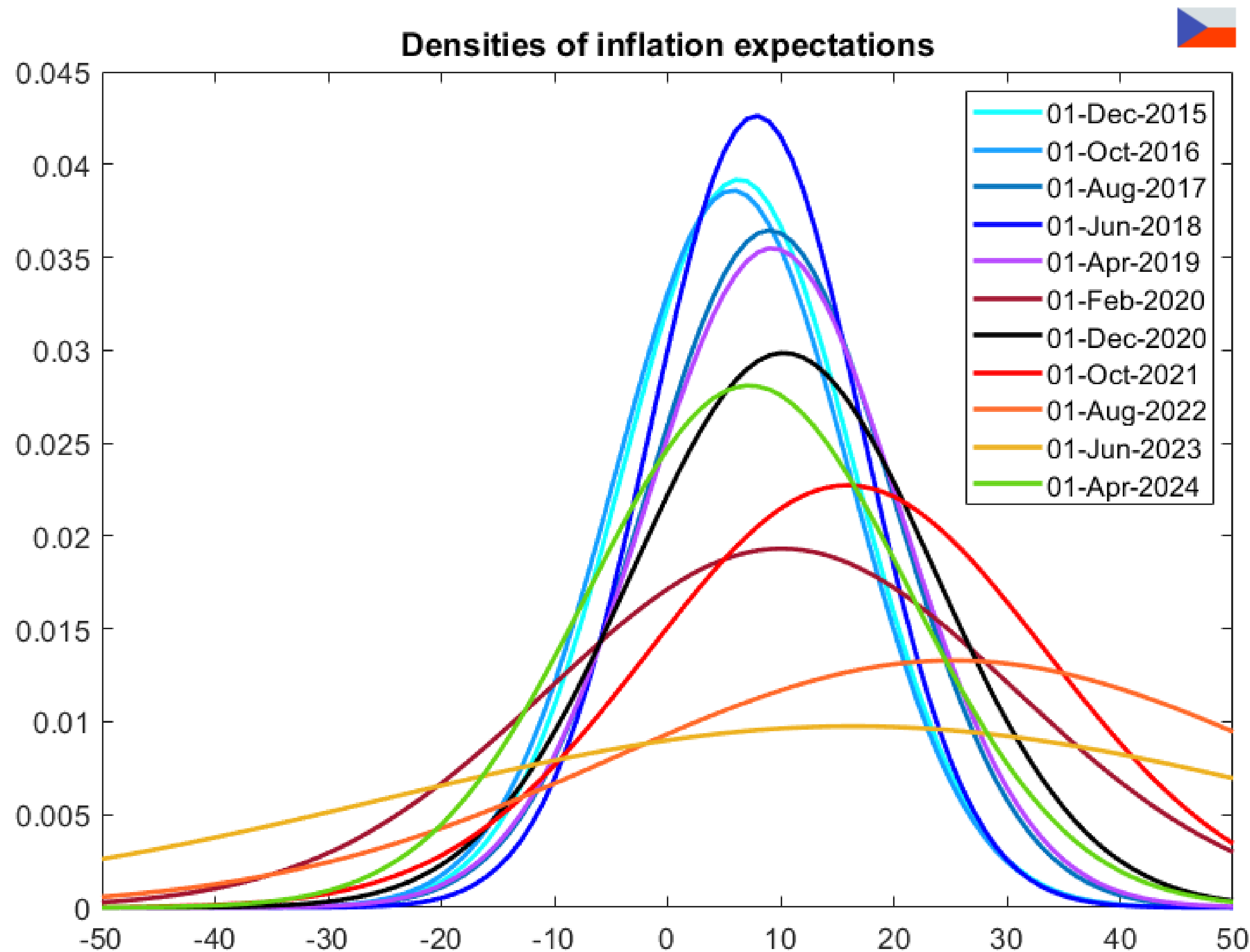


Figure 1: Periods covered by country studies

- Low inflation regime: until end of 2016
- Normal times
- Surge: COVID & war
- Inflation drops since 2023

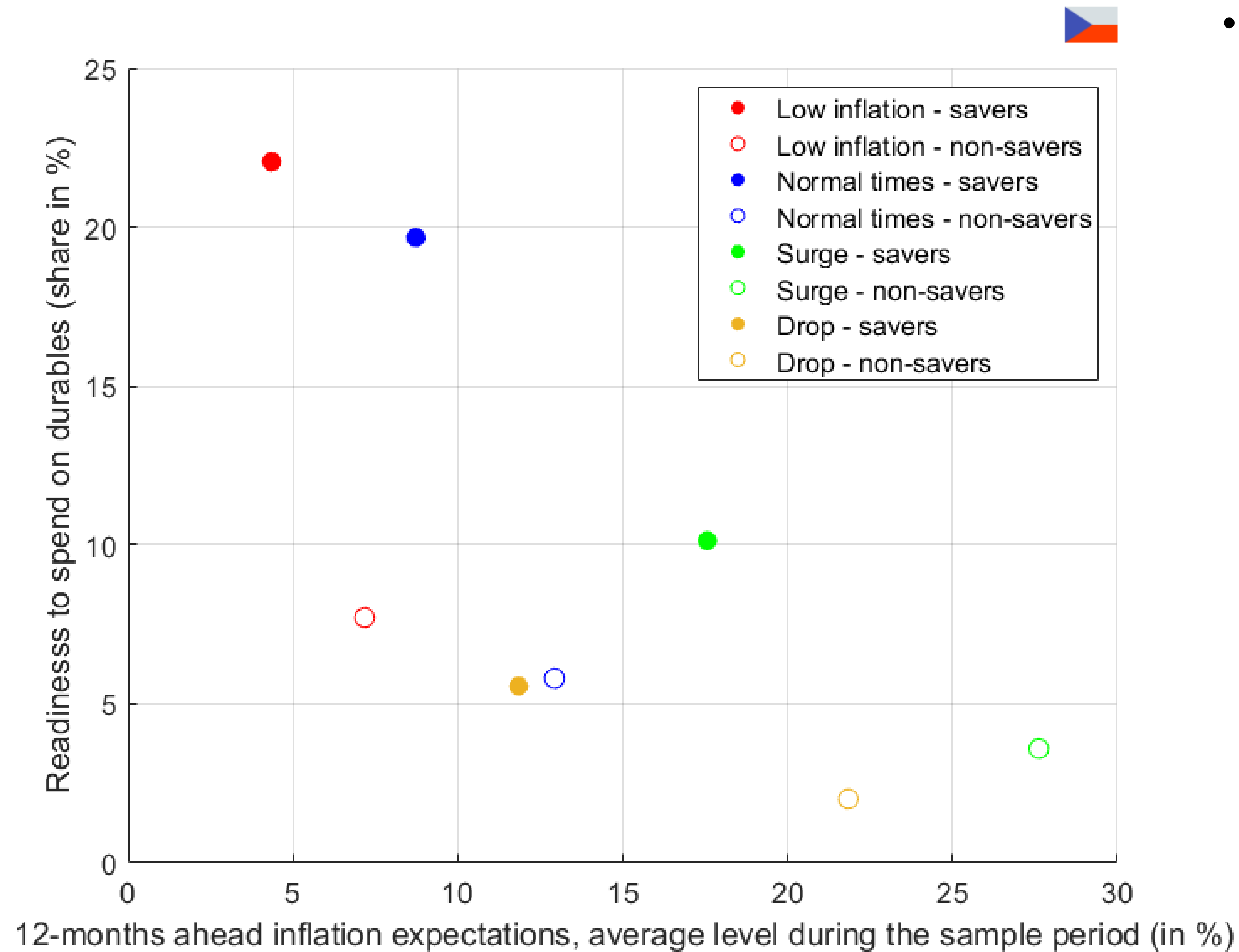
# Inflation Expectations Densities



- What can we learn from this?
  - First tails gets fatter – black line
  - Mode moves to right – red line
  - Tails gets very fat

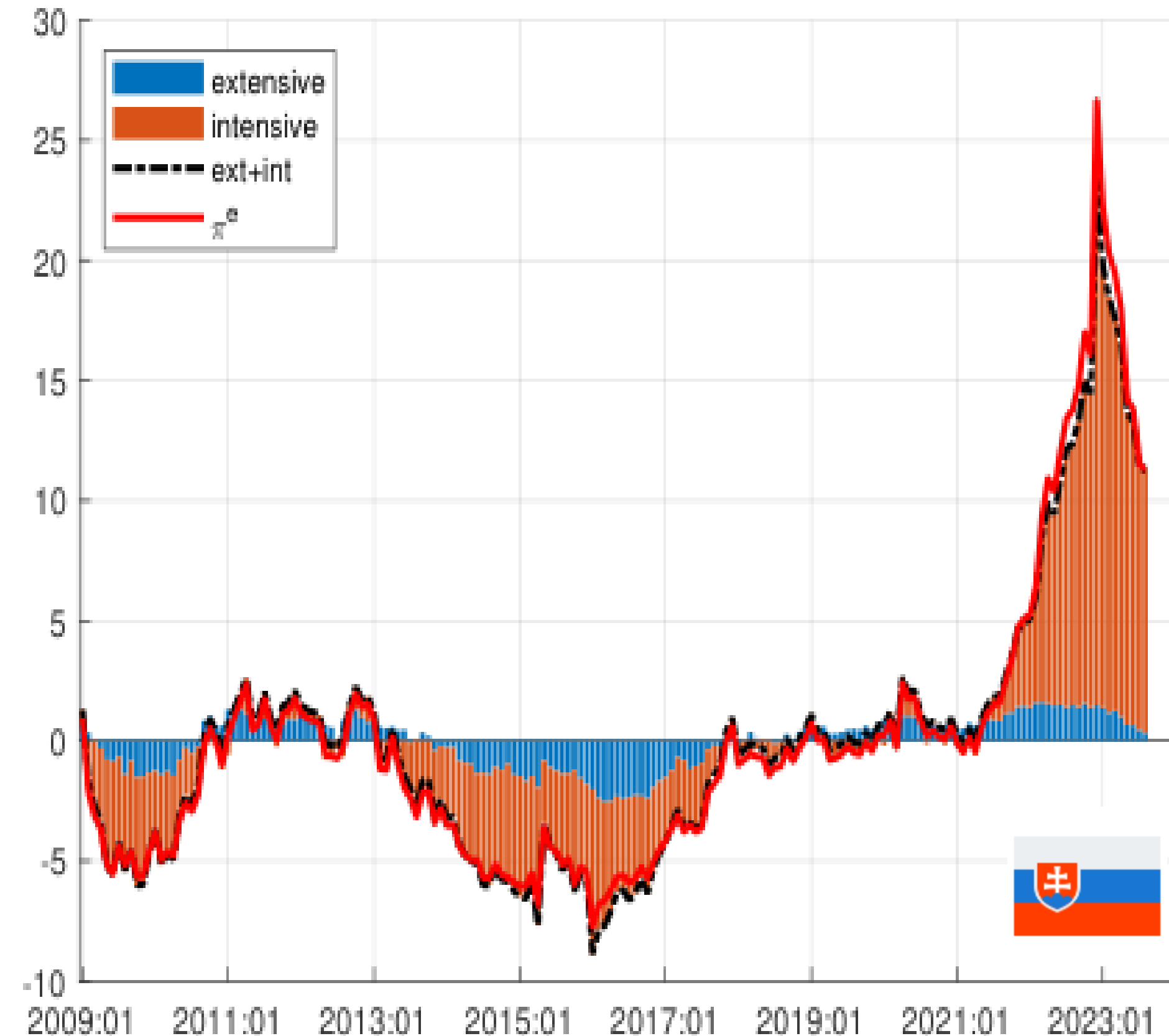
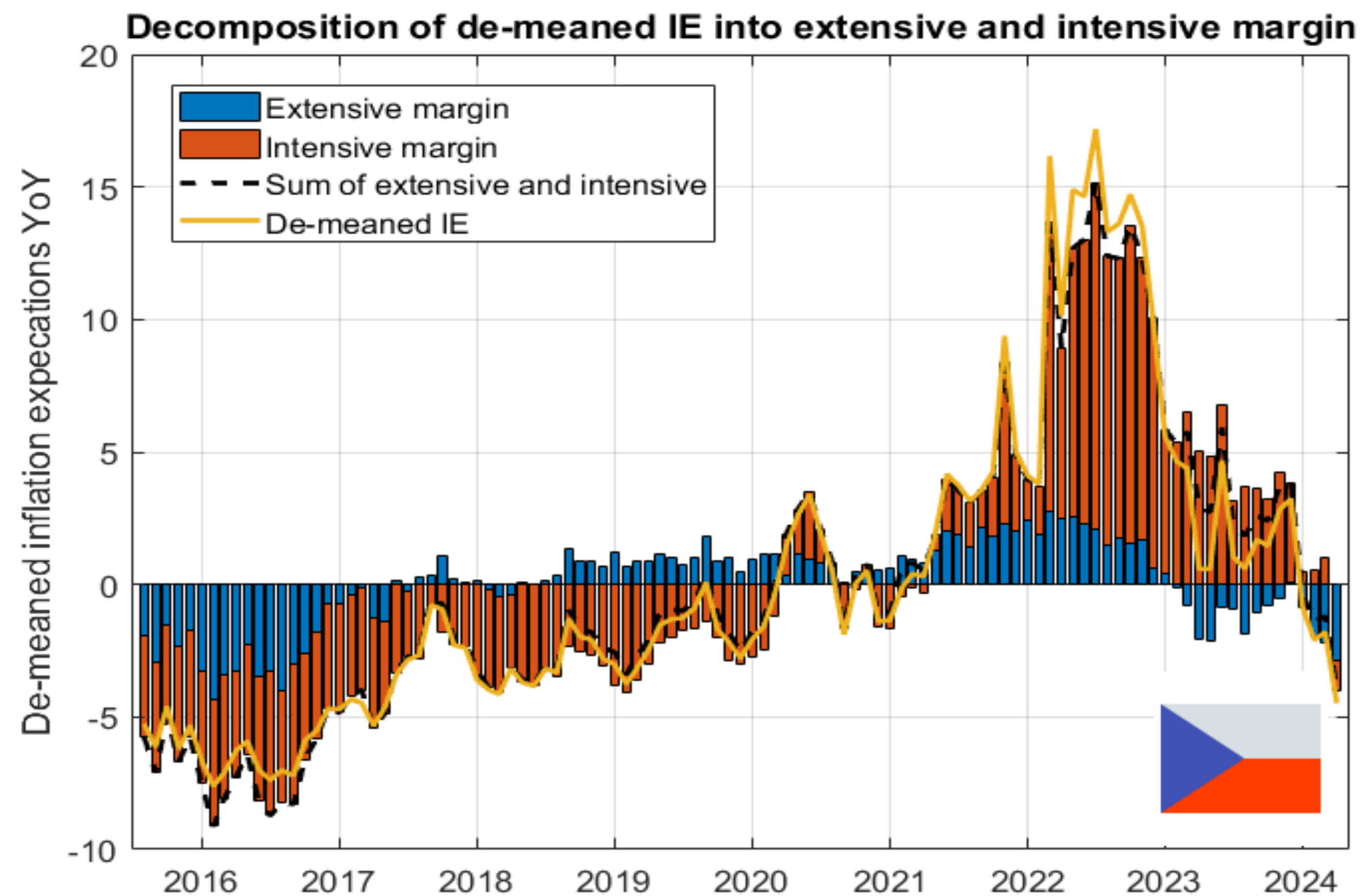


# State Dependency



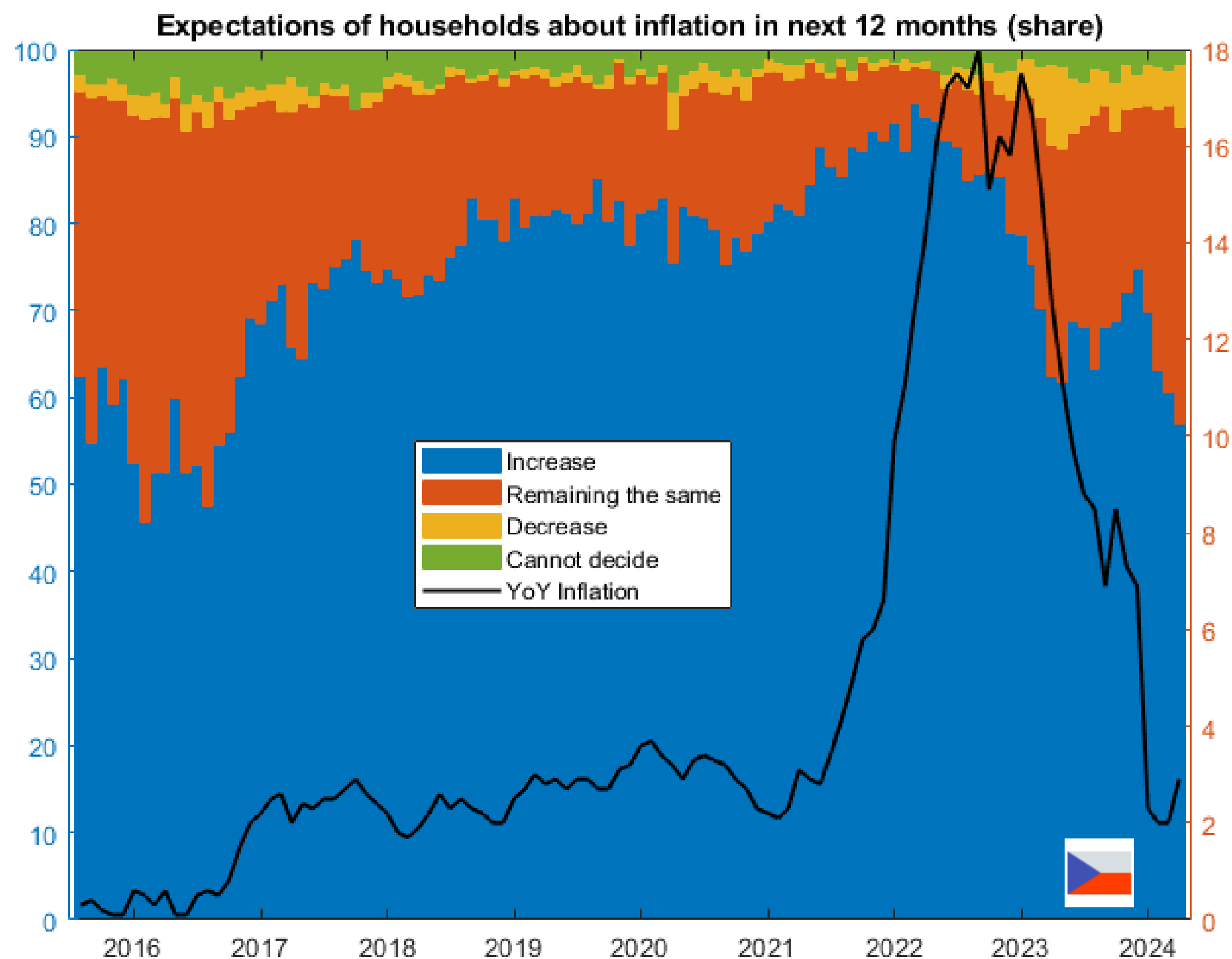
- Propensity to spend on durables differs significantly between savers / non-savers

# Inflation Expectations Decomposition



- Comparing extensive/intensive margins decompositions:
  - Which direction is more important for defining the state dependence?
  - I Believe extensive margin
  - Intensive margin copies the actual stance of economy: Less important for Slovakia than Czechia

# Uncertainty



- This may be national difference:
  - Very low share of responders answers “I do not know” in Czechia
  - Does not work well as uncertainty measure