# Heterogeneity in Consumers' learning about Inflation

Discussion

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# **Objectives of the study**



- Evaluate how accuracy of one-year ahead inflation expectation differs from first interview versus second interview 6 months later
- Evaluate whether this difference varies systematically with observable characteristics
- Data from Michigan Survey of Consumer Attitudes and Behavior Series between 1983 and 1996
  - By about what percent do you expect prices to go (up/down) on the average during the next 12 months?
    - No information on uncertainty about inflation
  - Short rotating panel: 40% of respondents are re-contacted 6 months after first interview

## Findings



- Forecast error (measured by the absolute value of the difference between one-year ahead expectations and realized inflation) is <u>lower</u> at reinterview
  - By 0.5 percentage point on average
- Heterogeneity in how forecast improves
  - E.g., low income individuals improve their forecast more than middle income individual
  - Younger individuals (<34) improve their forecast more than those aged 34-55
- Individuals who are the least accurate at first interview tend to improve more
  - Less heterogeneity in expectations at second interview

### Implications



- Caution when using the inflation expectations data
  - In any given month, 40% of the sample is reinterviewed
- Accuracy of inflation forecast can be changed
- Evidence consistent with adaptive learning
  - Agents potentially learn from their forecast error and improve their forecast over time

#### What could generate lower forecast error at second interview?



- Selective attrition?
  - Respondents with more accurate expectations are more likely to be re-interviewed
  - Authors take into account attrition

#### What could generate lower forecast error at second interview?



- Adaptive learning / change in "forecasting equation"?
  - This would mean that only respondents who are interviewed make inflation forecast and learn from their mistakes
  - If inflations expectations are important for decision-making, most individuals should have expectations about inflations, and could learn from observing inflation realizations

#### What could generate lower forecast error at second interview?



- Change in information set (potentially combined with adaptive learning)?
  - Less heterogeneity in second interview due to more similar information set
    - Being asked about inflation in a survey may increase <u>attention</u> toward information related to inflation so difference in information set between the two waves of interview may be smaller across respondents
    - Do they pay more attention to news/announcement about inflation?
    - Do they pay more attention to price changes?
  - Maybe attention toward information leads respondents to also change their forecasting rules

# Why does a survey question lead to (potentially) more attention?

- Do respondents know that they will be reinterviewed?
  - Want to perform "better" at second interview
- Do respondents want to improve their forecast for decision-making?



# Implication from policies



- Good news: Limited intervention (one survey question) helps improve accuracy of inflation forecast
- What can be done to increase awareness / attention of consumers?
  - Depends on what individuals focus to make forecast?

# Can we learn more from the long panel?



Figure 1: Actual versus Forecast Inflation for First and Second Interviewees

