

Inflation expectations and monetary policy design: Evidence from the laboratory

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Important paper

- Central banks follow consumers' inflation expectations because of their effect on consumers' financial decisions and macro-economic trends
- Median inflation expectations as reported on consumer surveys tend to follow official inflation estimates, but..
 - ... there is large heterogeneity
 - ... relatively little is known about how consumers form their inflation expectations

Strengths of present work

- Carefully controls the environment in which inflation expectations are made
- Presents all relevant information about previous periods, allowing for analysis of how it affects inflation expectations
- Examines effect of policy actions on inflation expectations

Main findings

- Formation of inflation expectations
 - 40% are rational
 - 35% extrapolate trend
 - 20% use adaptive learning and sticky information strategies
 - 5% behave adaptively
- Monetary policy can reduce heterogeneity in inflation expectations

Process data

- The paper compares people's behavior with model behavior to *indirectly* examine the processes used to form inflation expectations
- Hypotheses could have been *directly* tested with process-tracing measures
 - Think-aloud protocols
 - Eye-movement tracking
 - Mouse-click tracking (previously used by economists)
- Process-tracing data would likely support the indirect analyses

Experiment vs. real world

- The results of the controlled experiment are not replicated with the Michigan Survey of Consumers (Pfajfar & Sanotoro, 2010)
 - While 40% of participants acted rationally, only 7% of Michigan respondents did so
 - While 20% of participants used adaptive learning and sticky information models, 44% of Michigan respondents did so
- The controlled experiment gives an optimistic view of what people can do

In the experiment

- All relevant information was provided at no cost
- Irrelevant information that might otherwise confuse people was not provided
- Incentives for accurate expectations
- Highly educated (undergrad) sample
- Interested sample (216 of 2500 participated)

In the real world

- Cost of information search
- Irrelevant information might confuse people
- No (explicit) incentives for accurate expectations
- Less educated consumers
- Disinterested consumers

How people form answers to the Michigan question

- In *process-tracing* interviews, more than half of consumers thought of specific prices (gas, food) rather than official inflation estimates
- In follow-up surveys, participants who thought more of specific prices (vs. official inflation estimates) gave more extreme inflation expectations

Questions

- What can we do to help consumers form more accurate expectations of inflation?
- Would consumers benefit from having more accurate inflation expectations, in the sense of making better decisions?
- Do consumers actually act on their inflation expectations (including those with seemingly inappropriate expectations)?