

**THE INFLATION EXPECTATIONS OF U.S. FIRMS:
EVIDENCE FROM A NEW SURVEY**

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WHY EXPECTATIONS?

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Mario Draghi (2015): “*When inflation expectations go up with zero nominal rates, real rates go down. When real rates go down, investments and the economic activity improves. That’s the reasoning [of QE].*”

INFLATION EXPECTATIONS: STATE OF KNOWLEDGE

- Inflation expectations is a key object for central banks:
 - Alan Greenspan, “I am not saying what [inflation expectations] is a function of. We know it’s a very difficult issue, but **that is the key variable**. It’s important, but just because we can’t make a judgment as to what these driving forces are in an econometric sense doesn’t mean that it’s not real.”

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 - Ben Bernanke (2007): “How should we measure inflation expectations, and how should we use that information for forecasting and controlling inflation? I certainly do not have complete answers to those questions, but I believe that they are of **great practical importance**. ... Information on the price expectations of businesses--who are, after all, the price setters in the first instance--... is particularly scarce.”

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- Coverage
 - Manufacturing (55% of the sample)
 - Services (45% of the sample)
- Size distribution
 - Small (1-19 employees; 45% of the sample)
 - Medium (20-249 employees; 35% of the sample)
 - Large (250+; 20% of the sample)

SURVEY OF FIRMS' INFLATION EXPECTATIONS (SOFIE)

Q1: "What do you think will be the inflation rate (for the Consumer Price Index) over the next 12 months? Please provide an answer in an annual percentage rate."

Note:

- Respondents are asked to provide a point estimate \Rightarrow minimize priming effects
- We ask about the inflation rate rather than the general level of prices.
- We refer to a specific price index (CPI) to avoid any confusion about which inflation rate respondents should refer to in their forecasts.

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Test knowledge about the central bank's objectives

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Q2B (July wave). *“What do you think has been the annual inflation rate (for the Consumer Price Index) over the last twelve months? Please provide an answer in annual percentage rate.”*

Measure perceptions of inflation

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Q2C (October wave). *“What do you think will be the average inflation rate (for the Consumer Price Index) over the next 5 years? Please provide an average annual percentage rate.”*

Measure long-term inflation expectations (how anchored expectations are)

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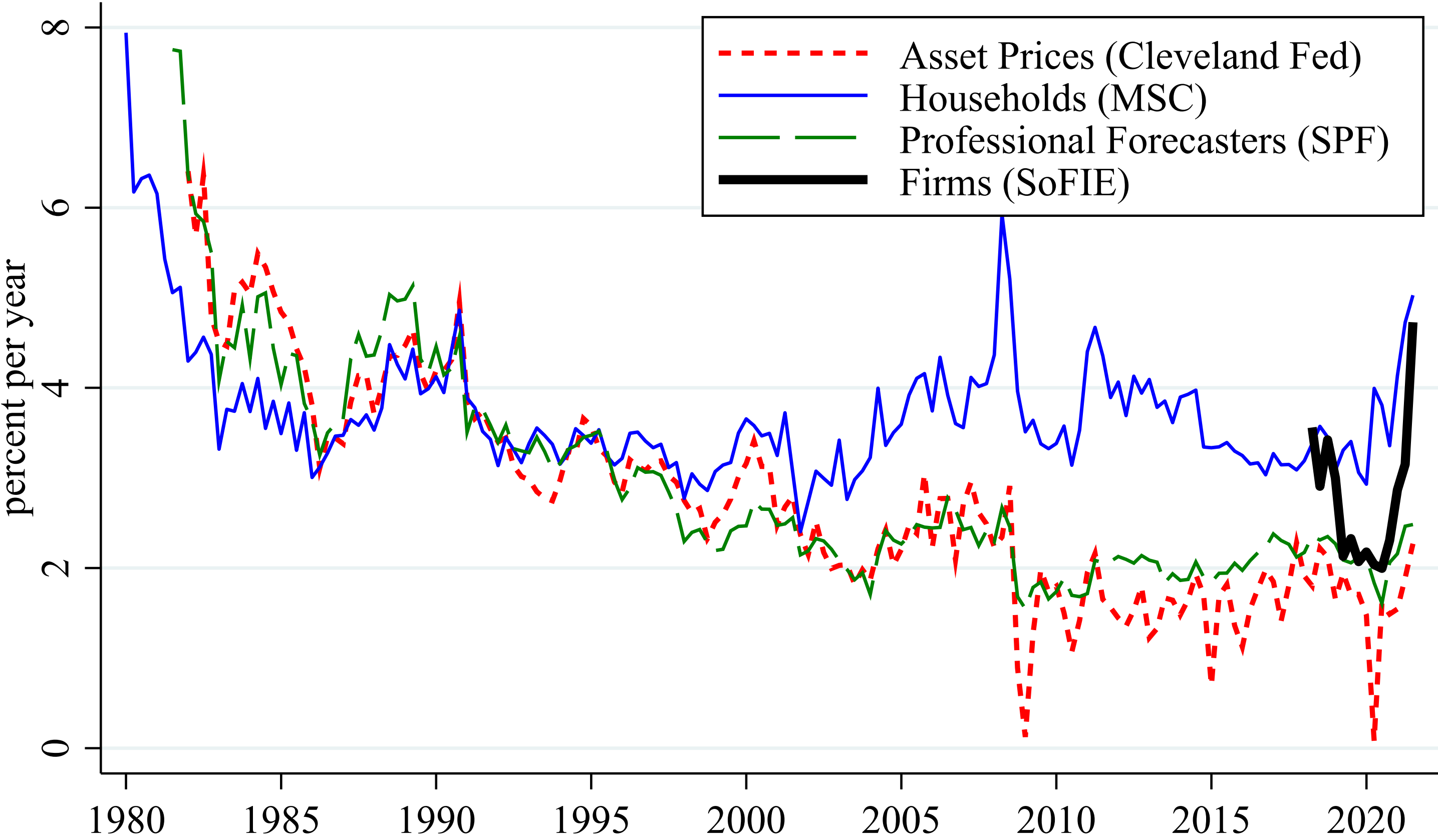
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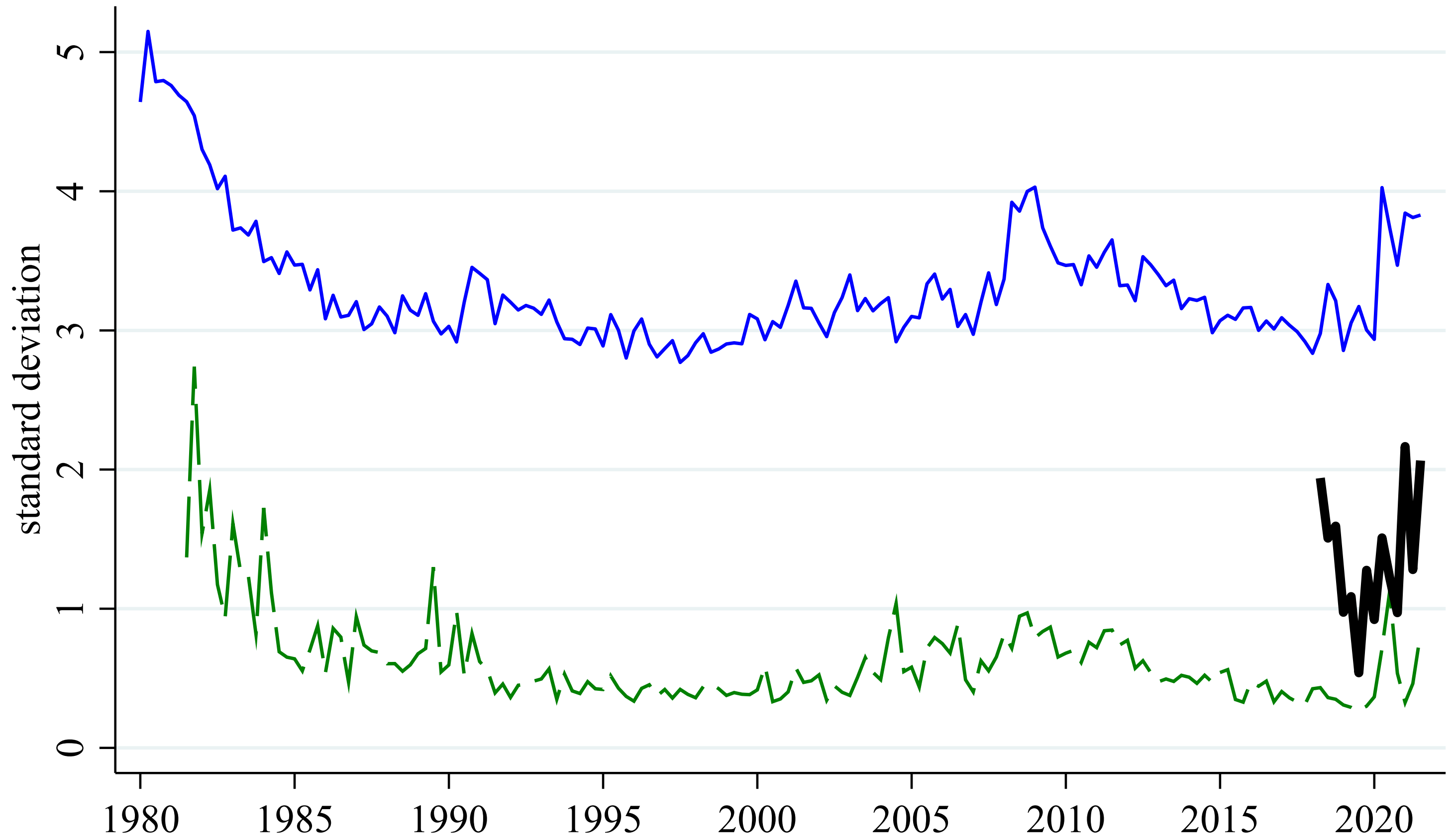
Q2D (January wave). *“What do you think is the probability that the annual inflation rate (for the Consumer Price Index) over the next 12 months will exceed 5%?”*

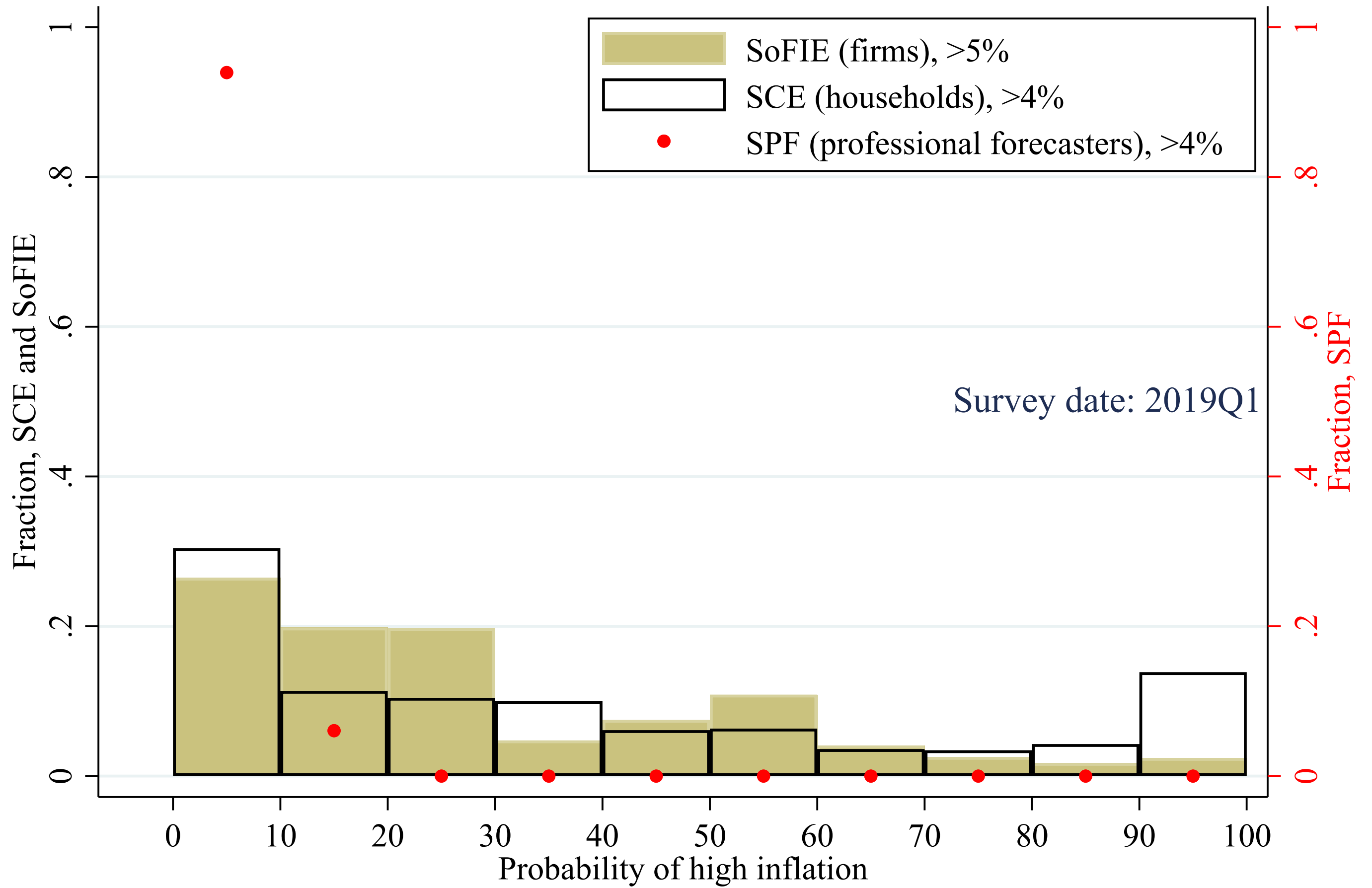
Measure uncertainty about future inflation

Panel A: Mean forecast

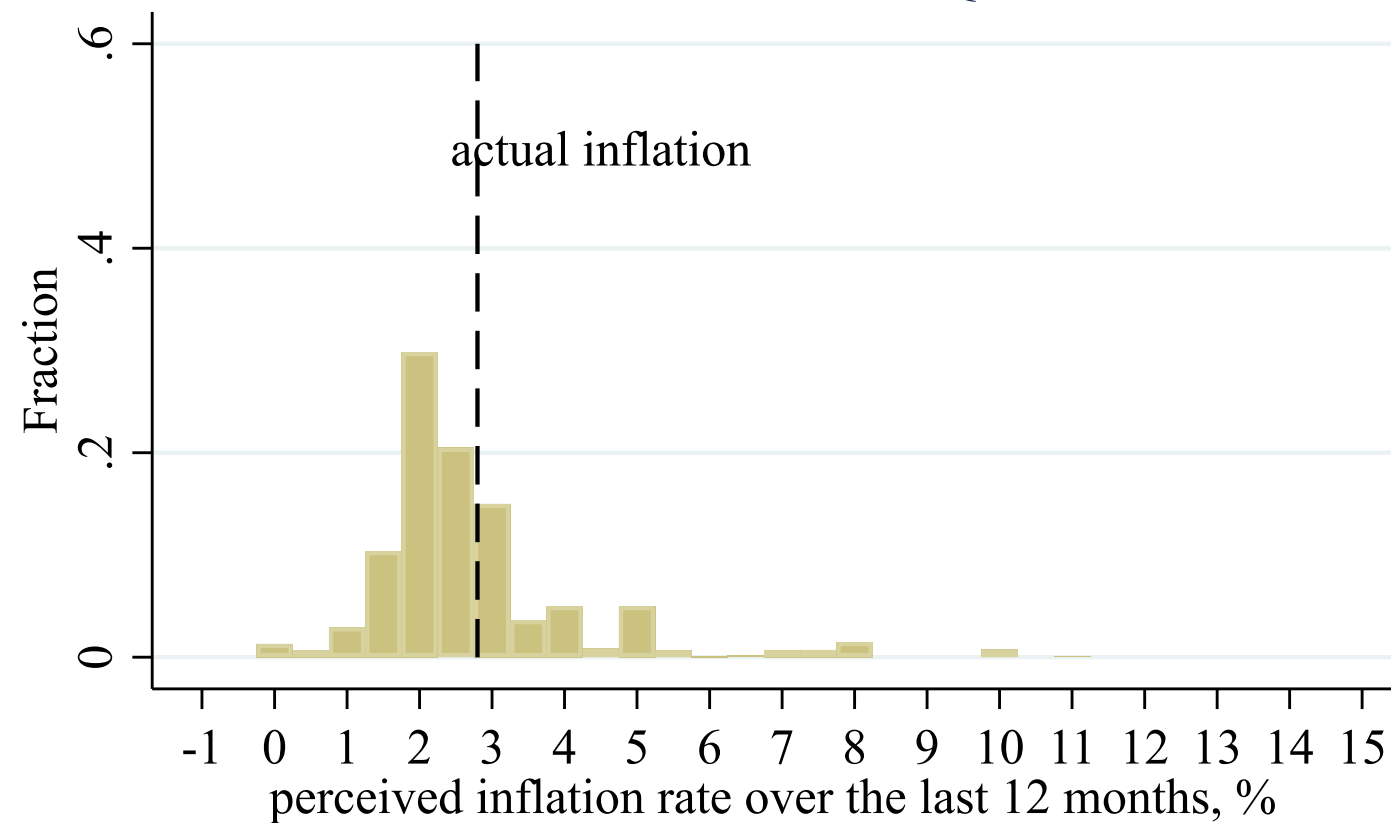


Panel B: Disagreement (standard deviation)

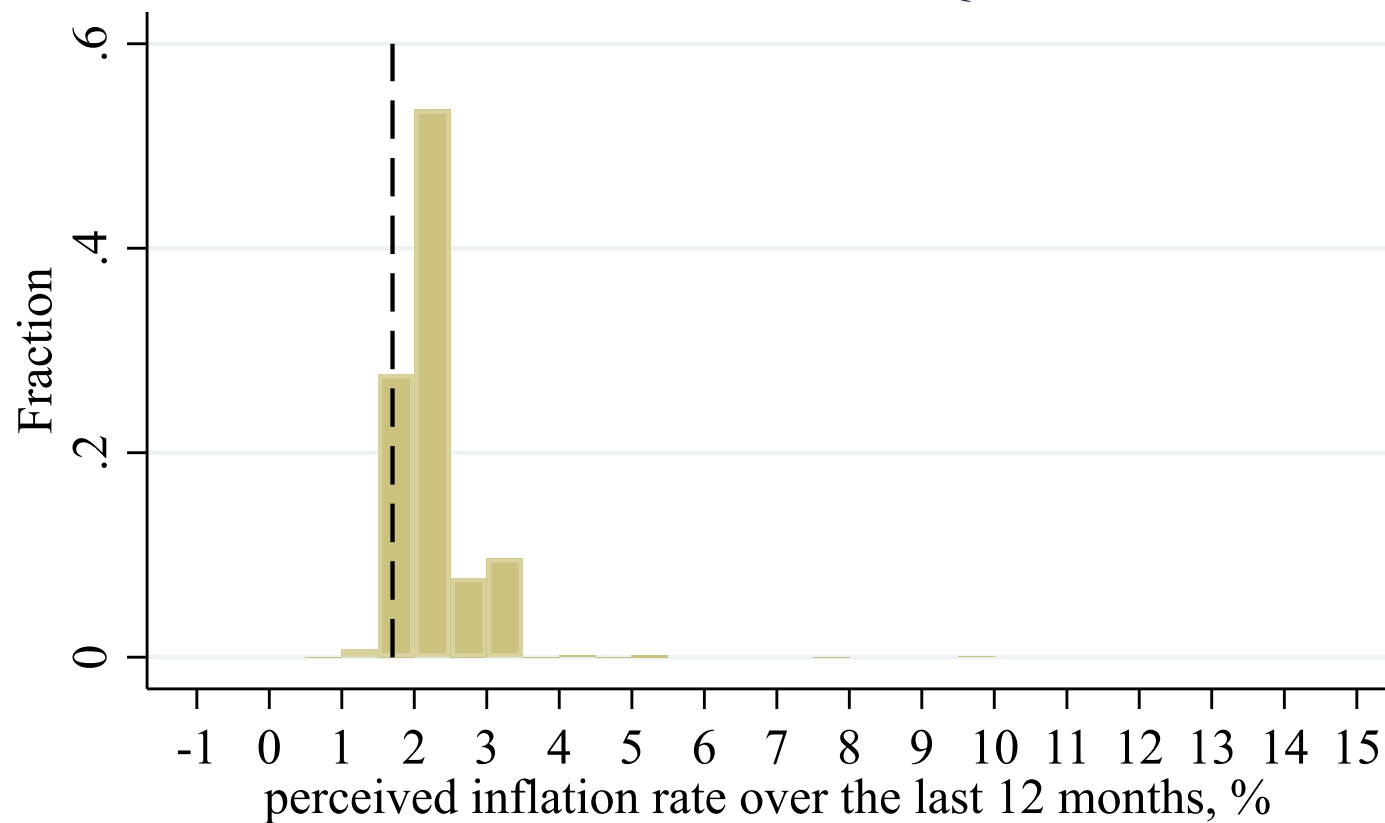




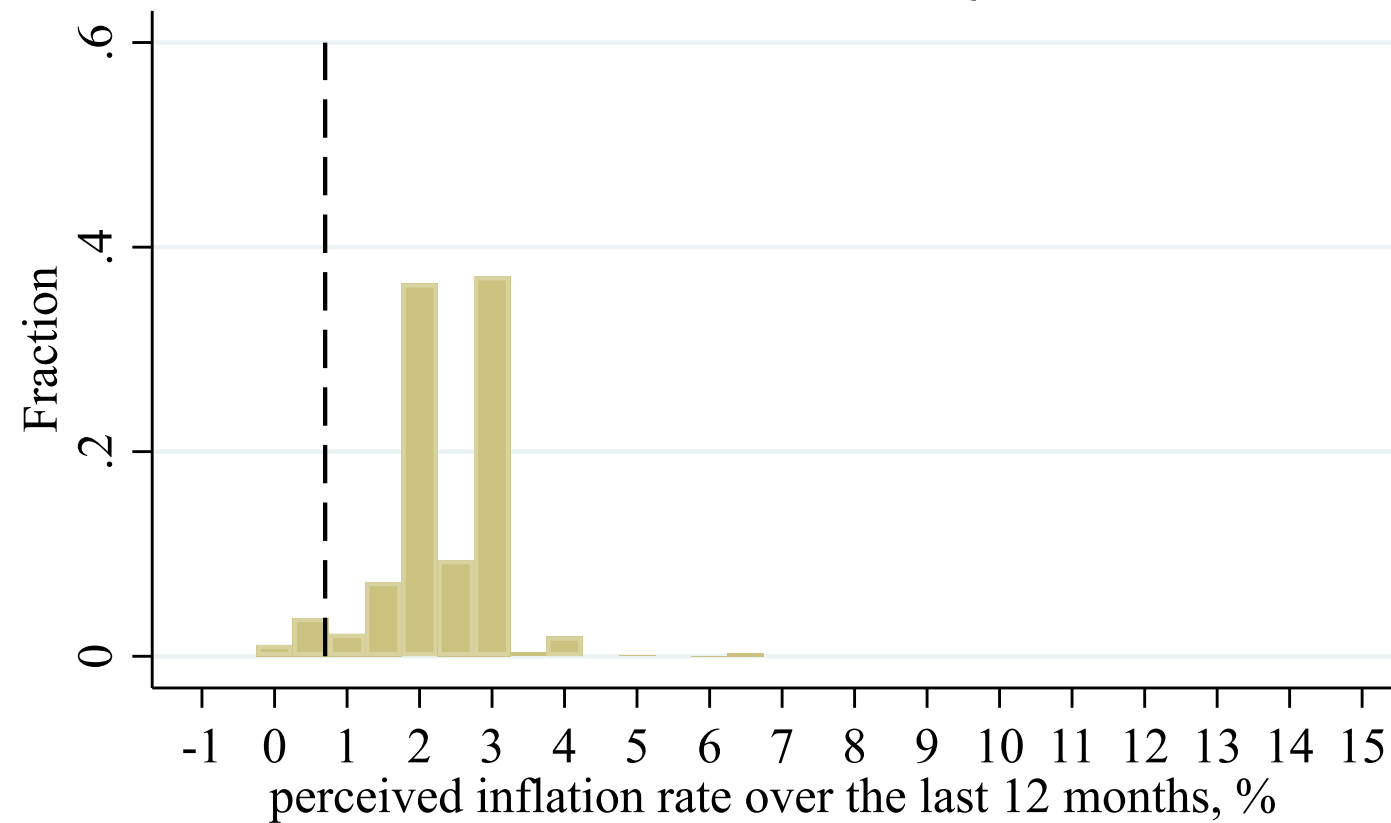
Panel A: 2018Q3



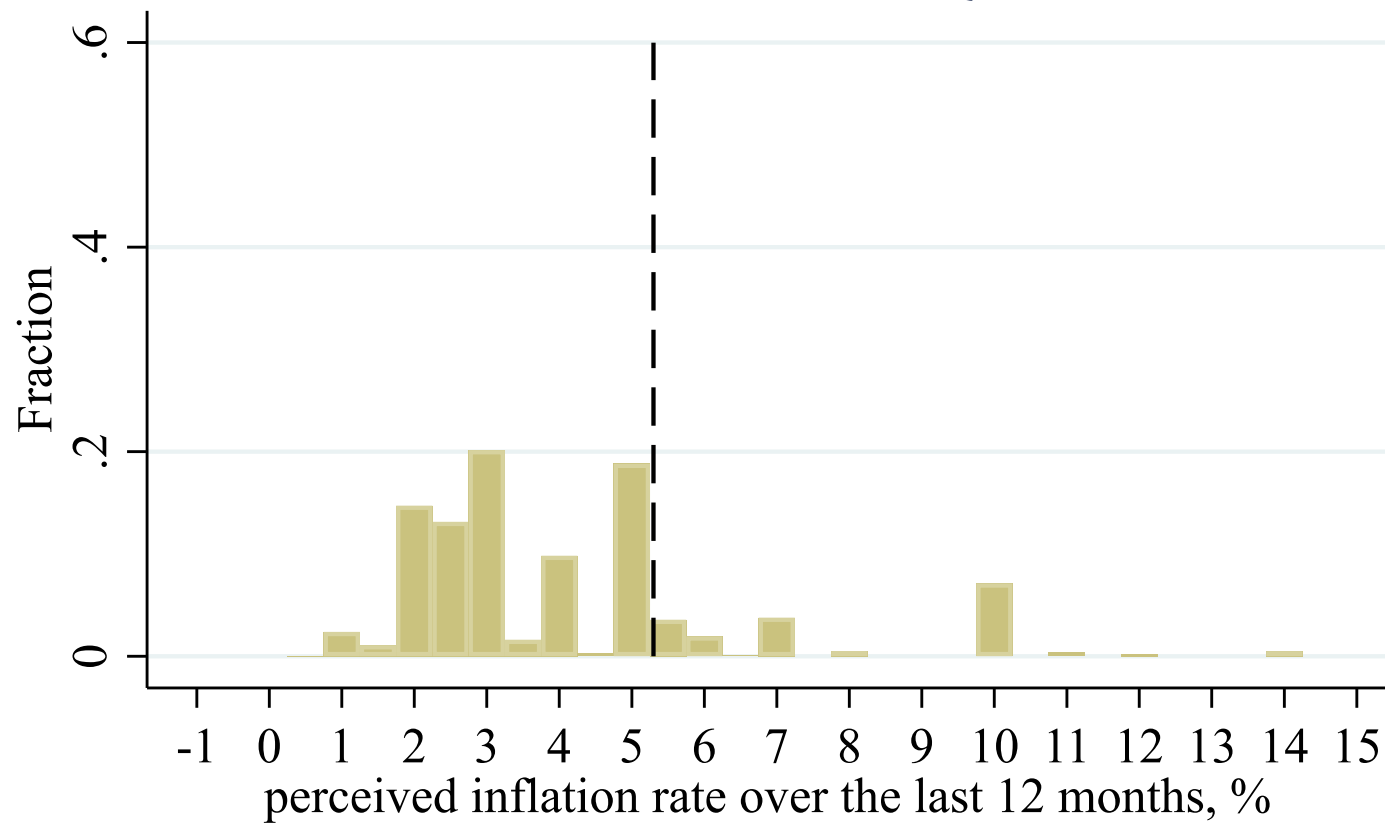
Panel B: 2019Q3



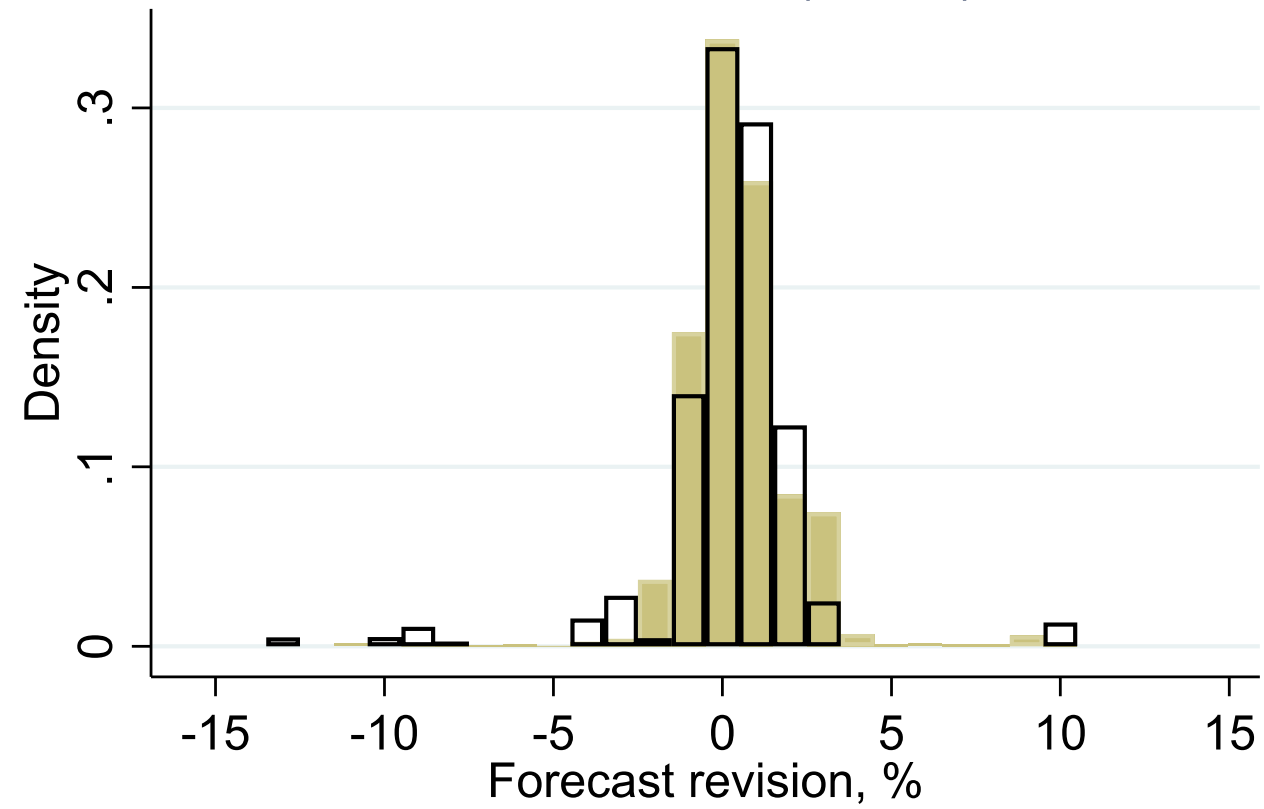
Panel C: 2020Q3



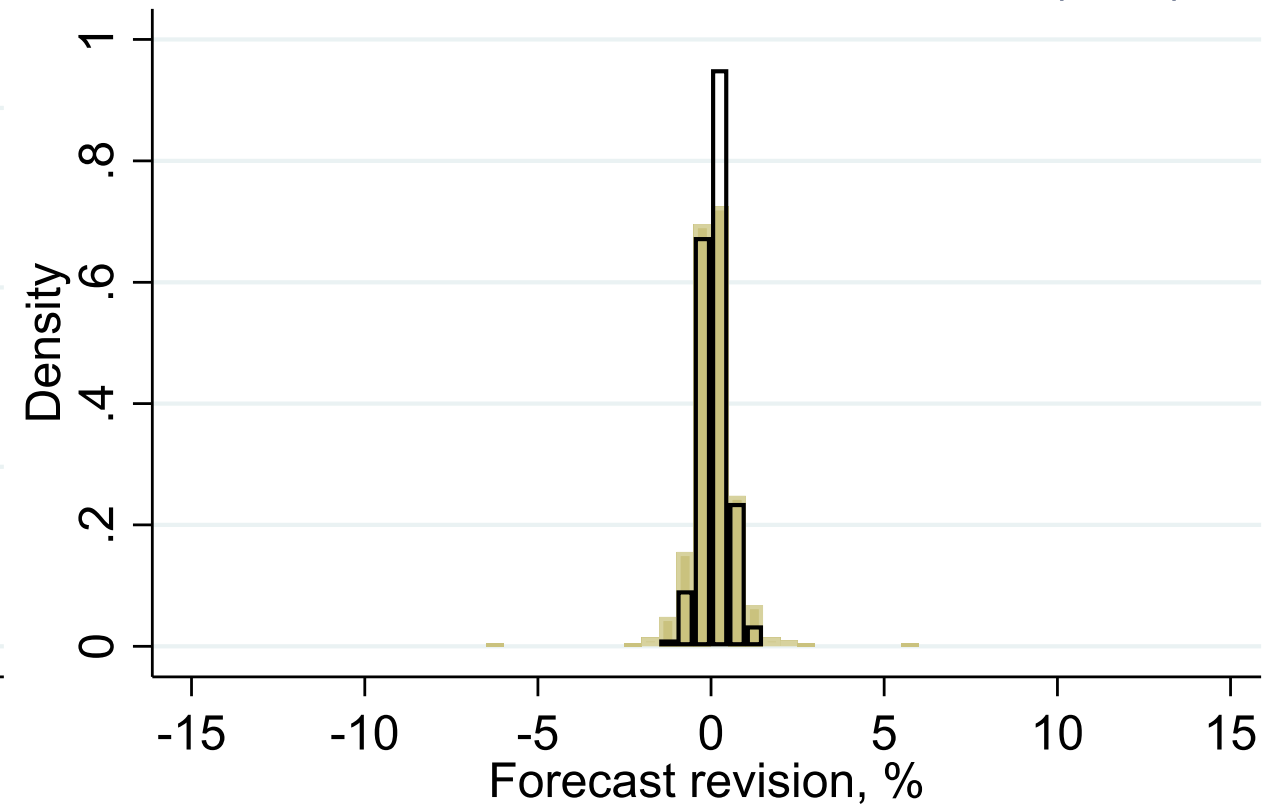
Panel D: 2021Q3



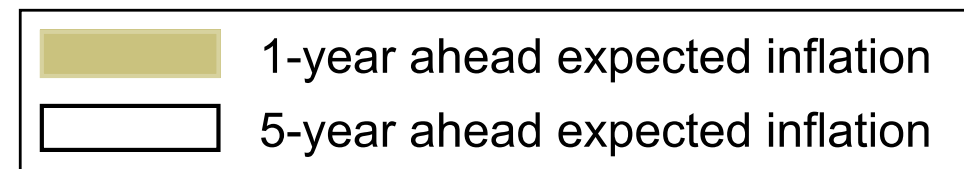
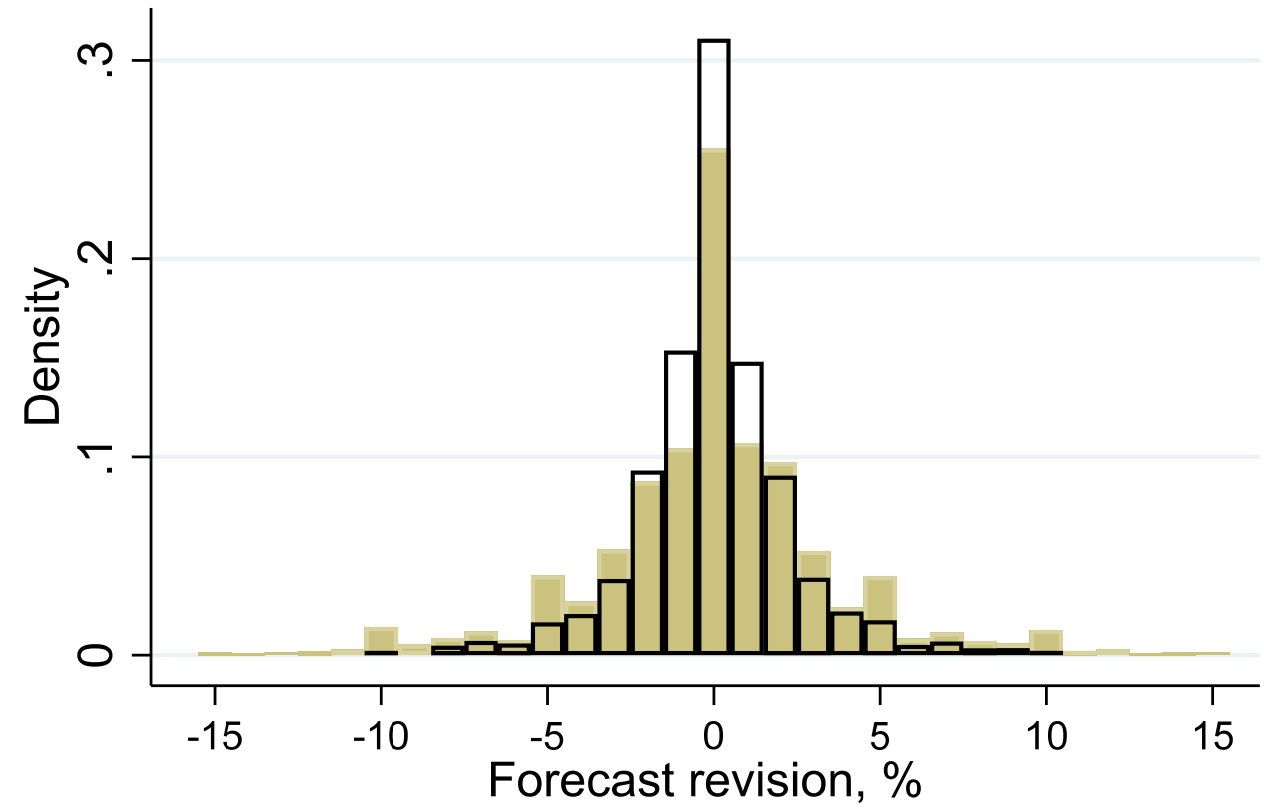
Panel A. Firms (SoFIE)

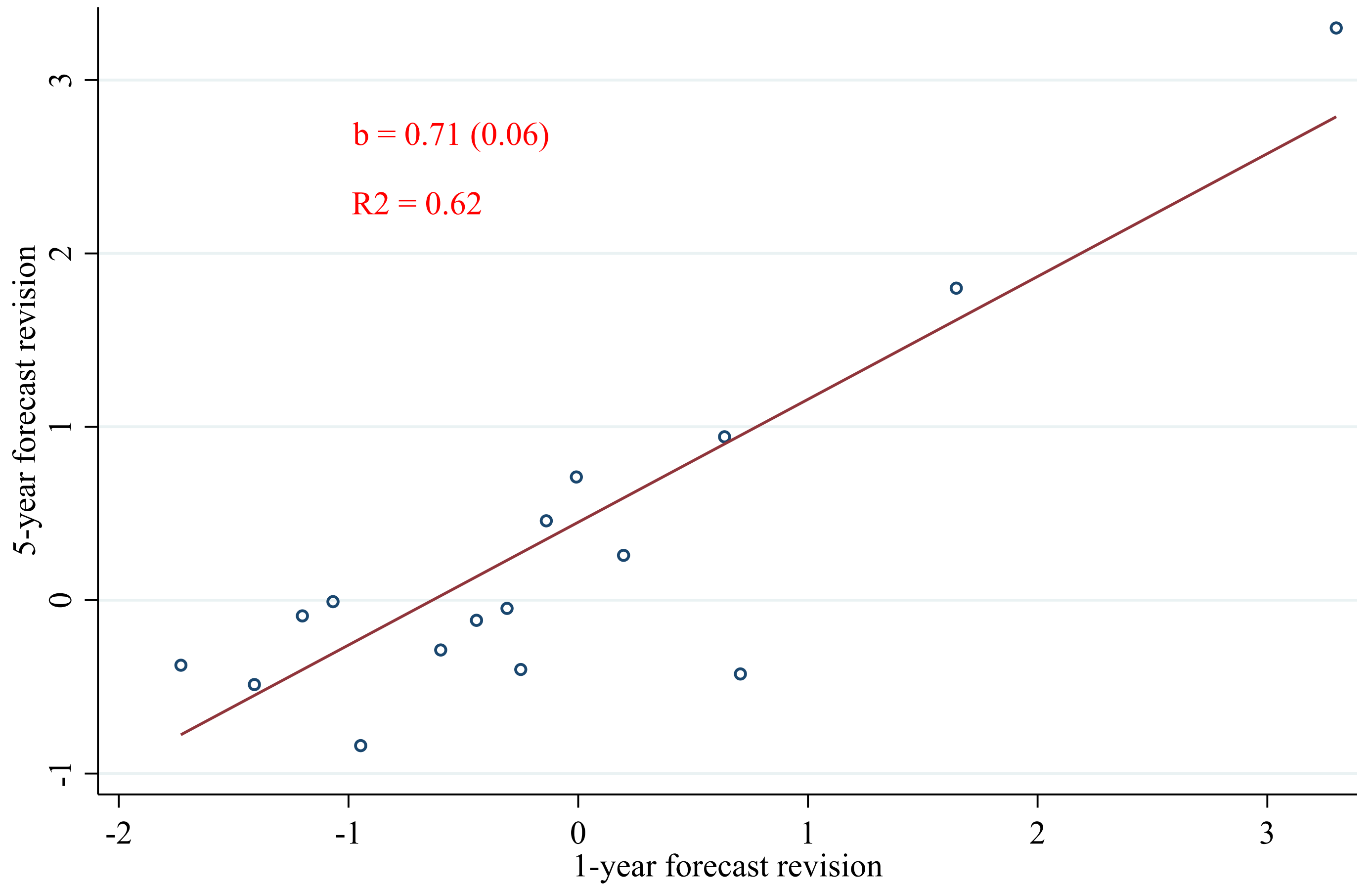


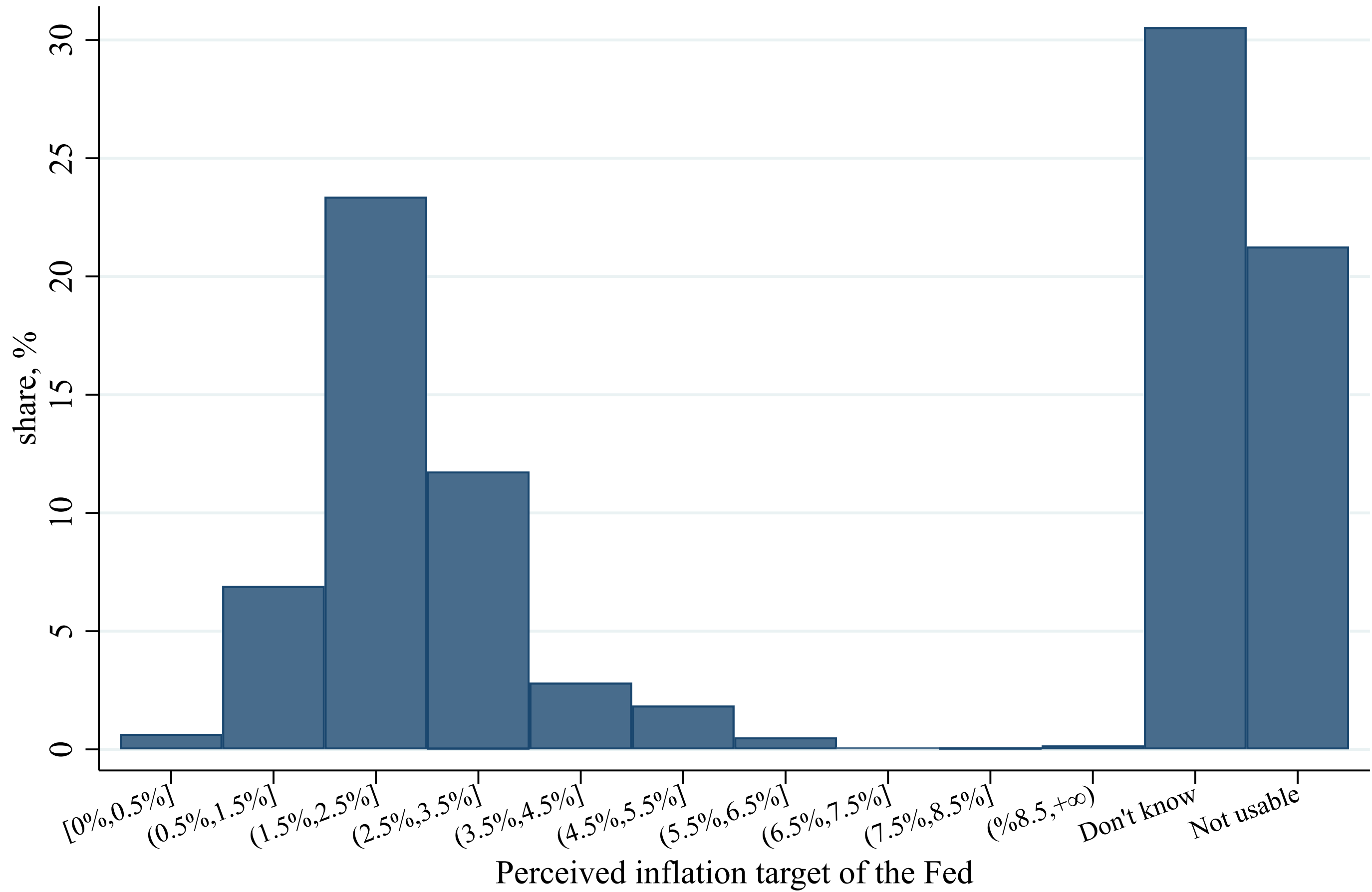
Panel C. Professional Forecasters (SPF)



Panel B. Households (MSC)







ARE EXPECTATIONS ANCHORED?

Five predictions:

- Inflation expectations are close to the target.
- There is little disagreement in expectations.
- Revisions in inflation expectations are small.
- Firms show confidence in their forecasts.
- Short- and long-term inflation expectations are uncorrelated.

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Five predictions:

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- Expectations don't seem to be particularly anchored (sign of success?)

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- Management of expectations is potentially a very powerful tool
- Need good measurement (especially for firms) \Rightarrow SoFIE
- Expectations are far from full-information rational expectations (FIRE)
- Expectations don't seem to be particularly anchored (sign of success?)
- Invest resources to have infrastructure for measurement and communication
- Build frameworks that explicitly model information rigidities