THE MACROECONOMIC EXPECTATIONS OF FIRMS

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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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FACT #1: FIRMS ARE BETWEEN HHS AND PROFESSIONALS
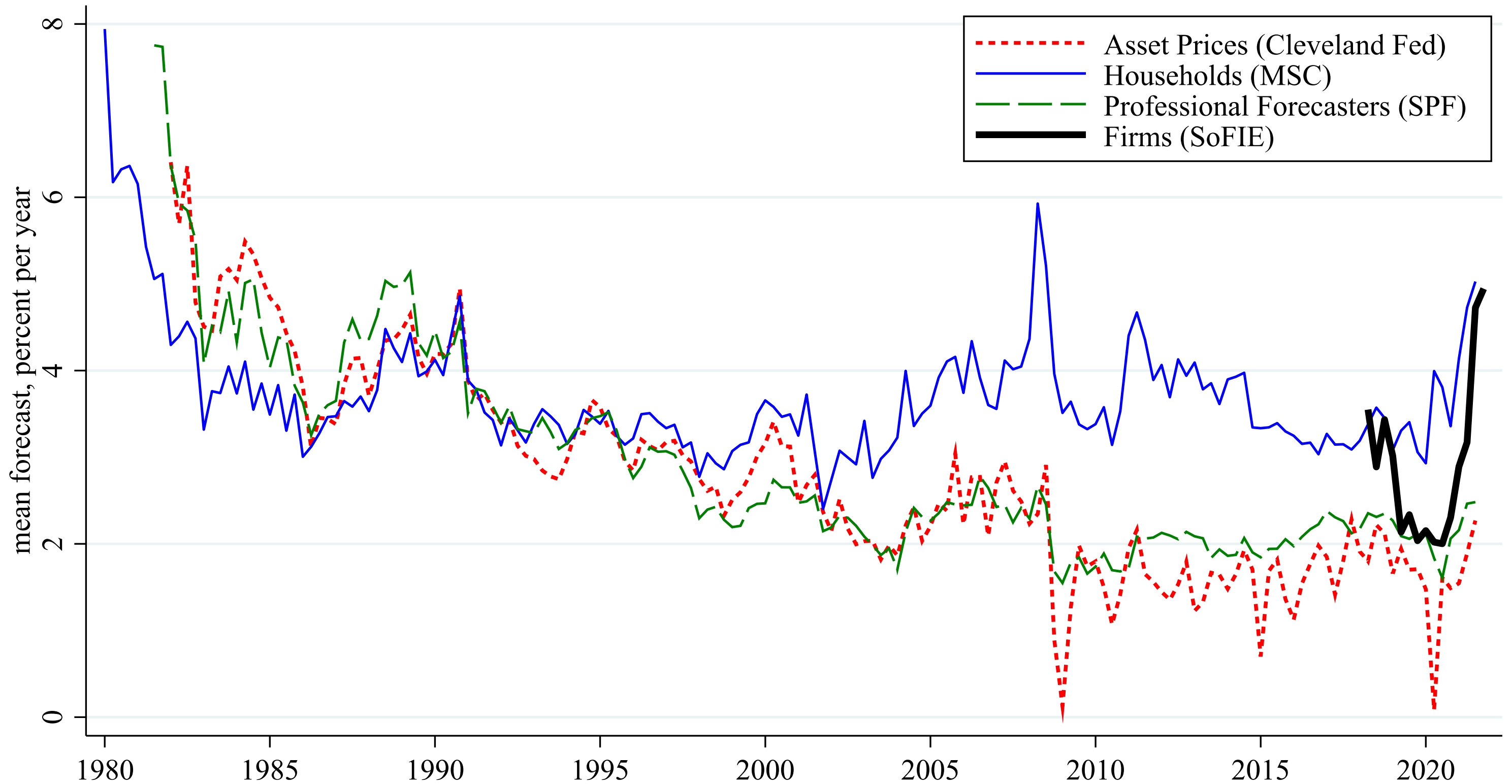
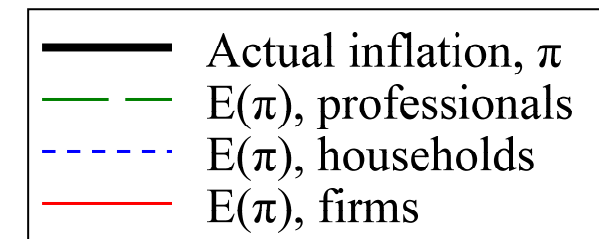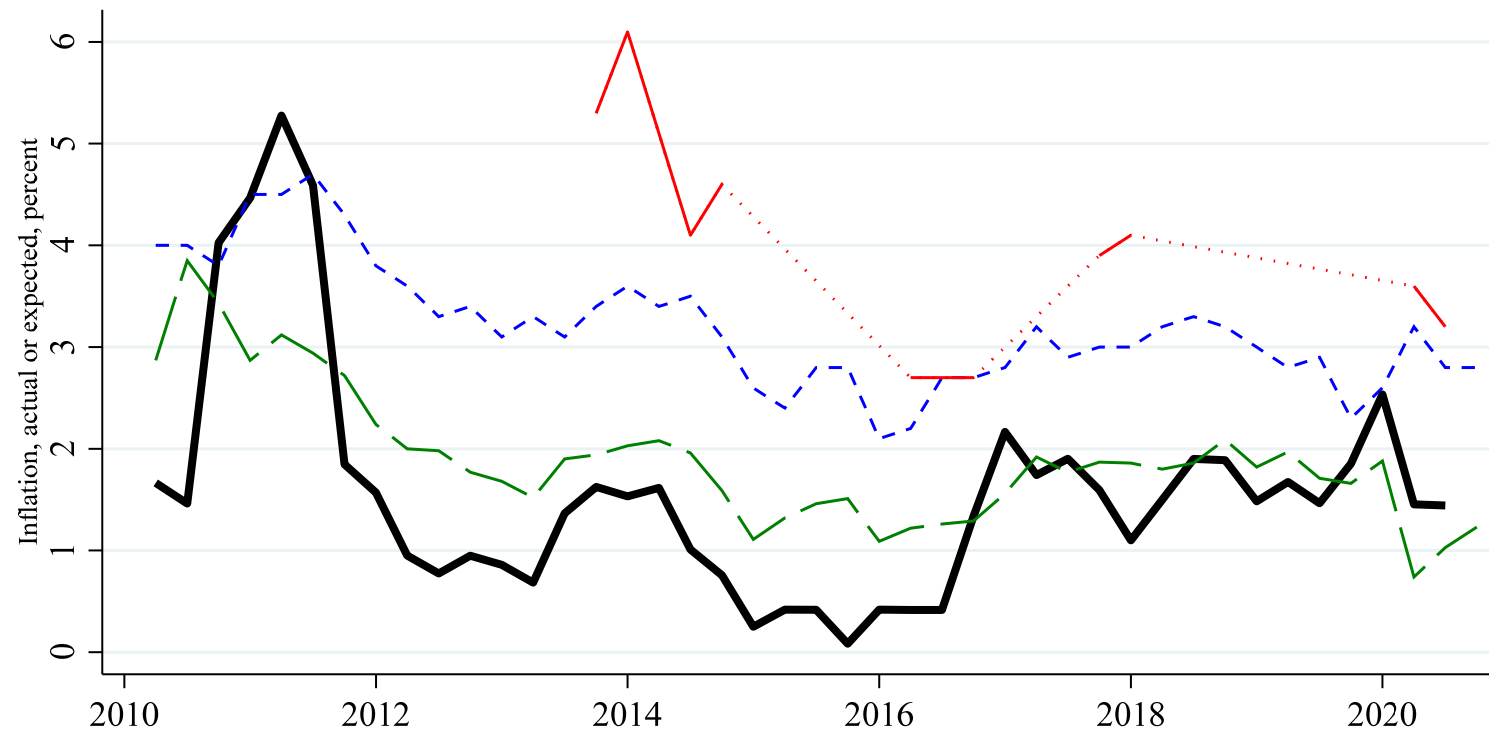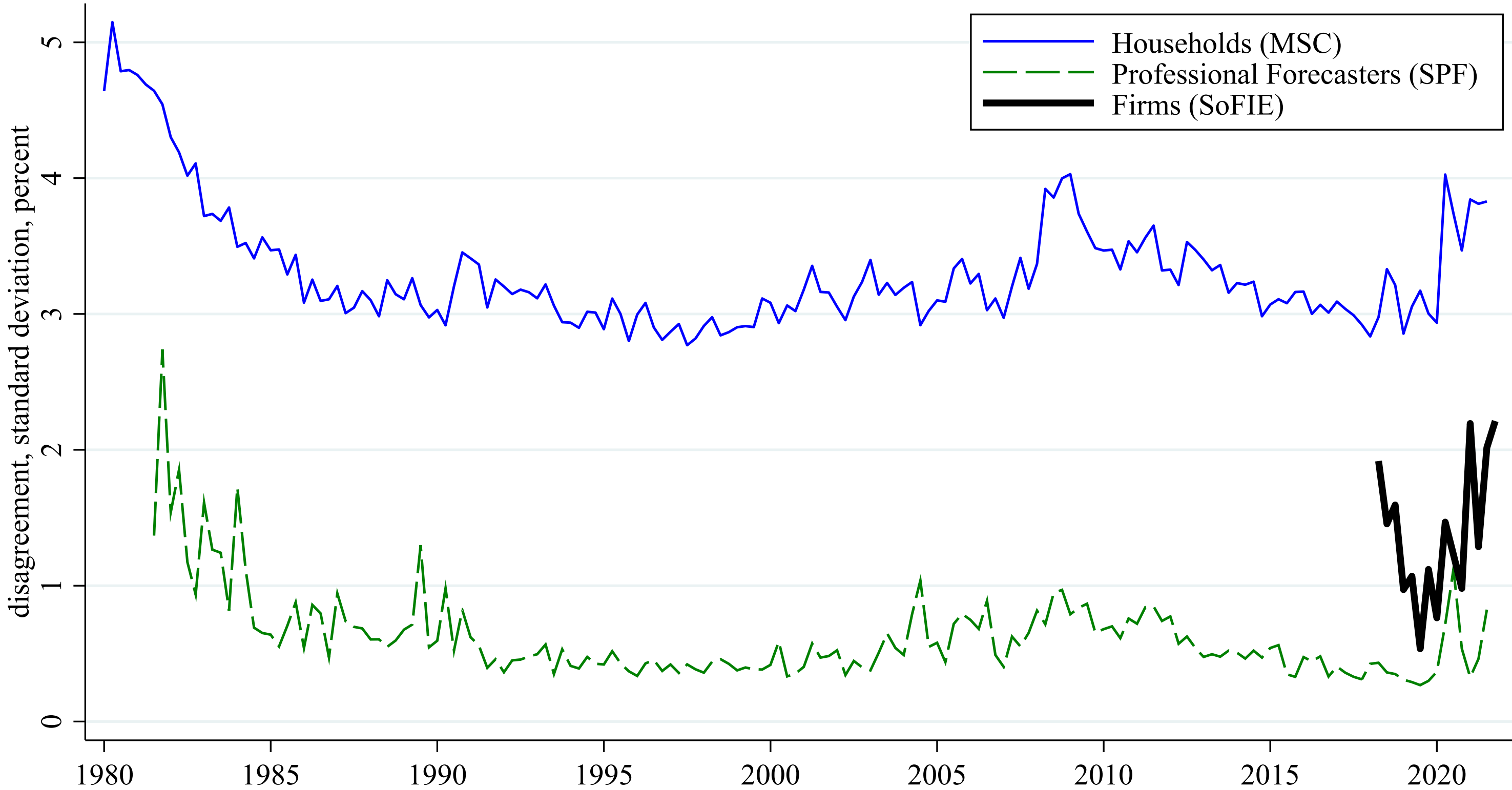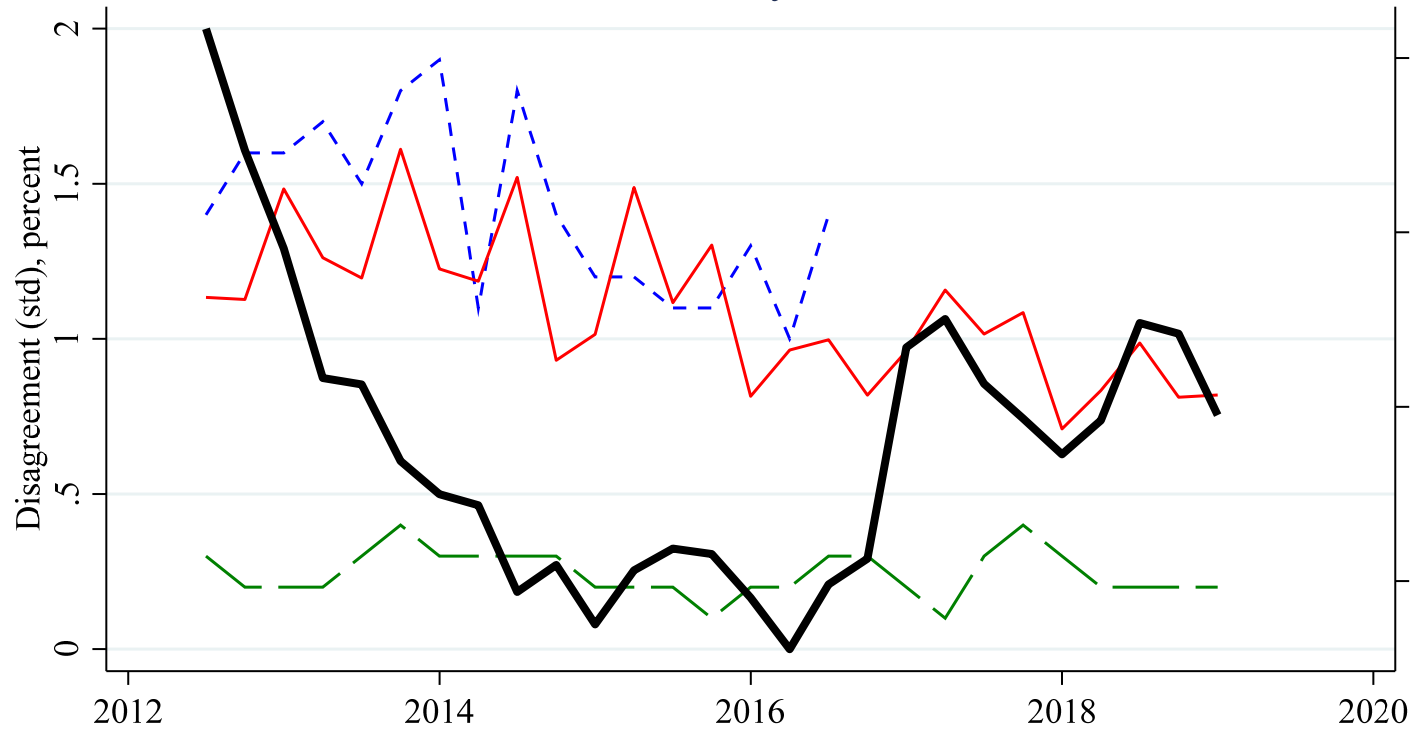# FACT #1: FIRMS ARE BETWEEN HHS AND PROFESSIONALS
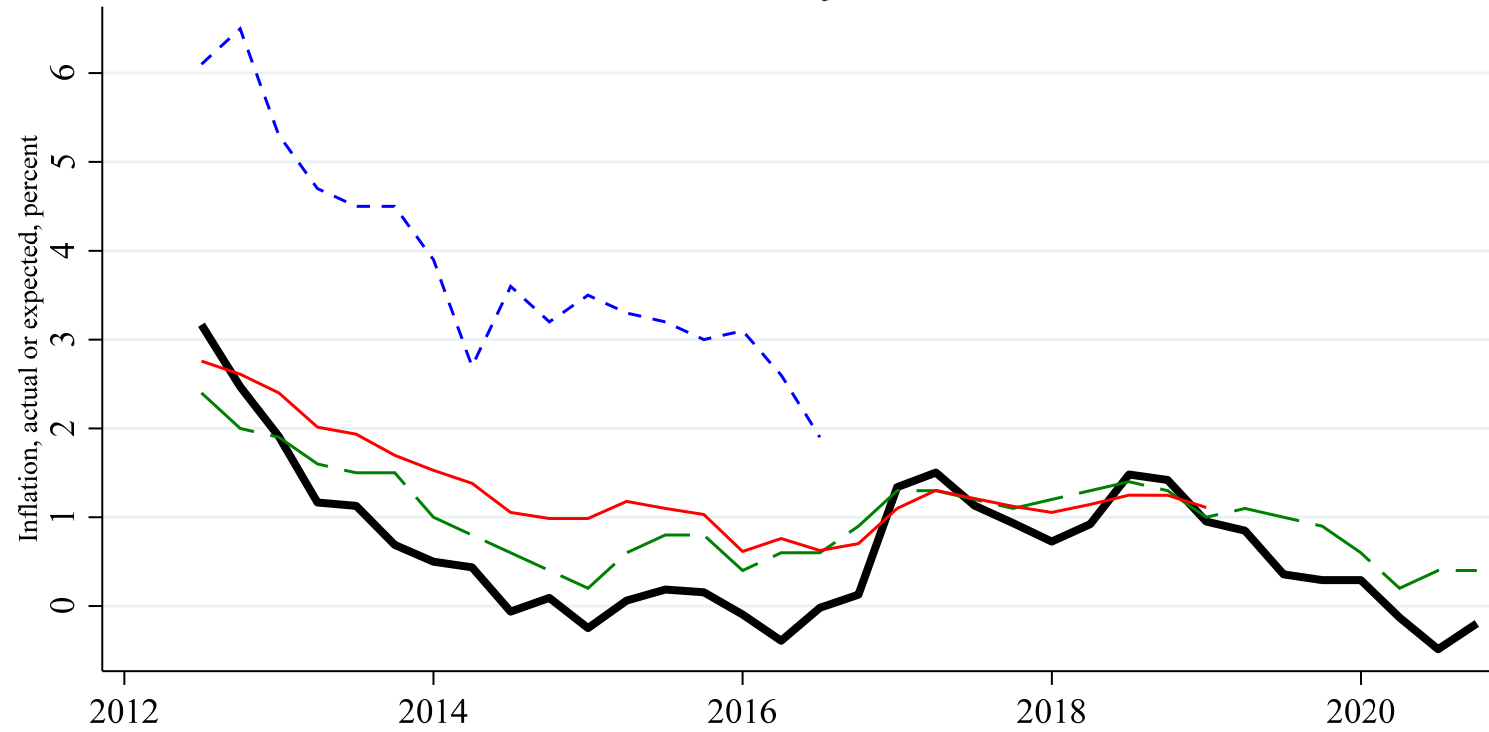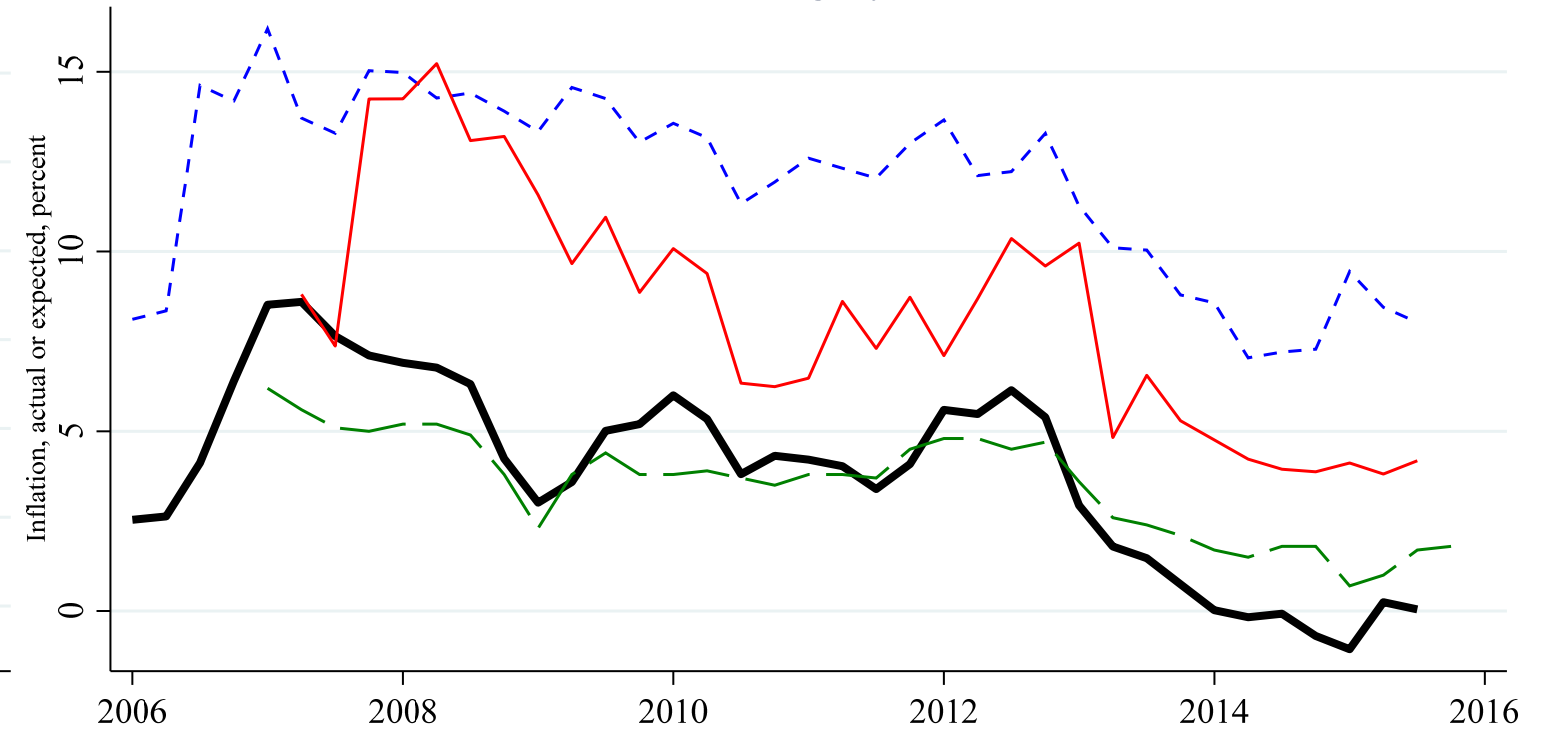
FACT #2: LARGE DISAGREEMENT ABOUT FUTURE INFLATION

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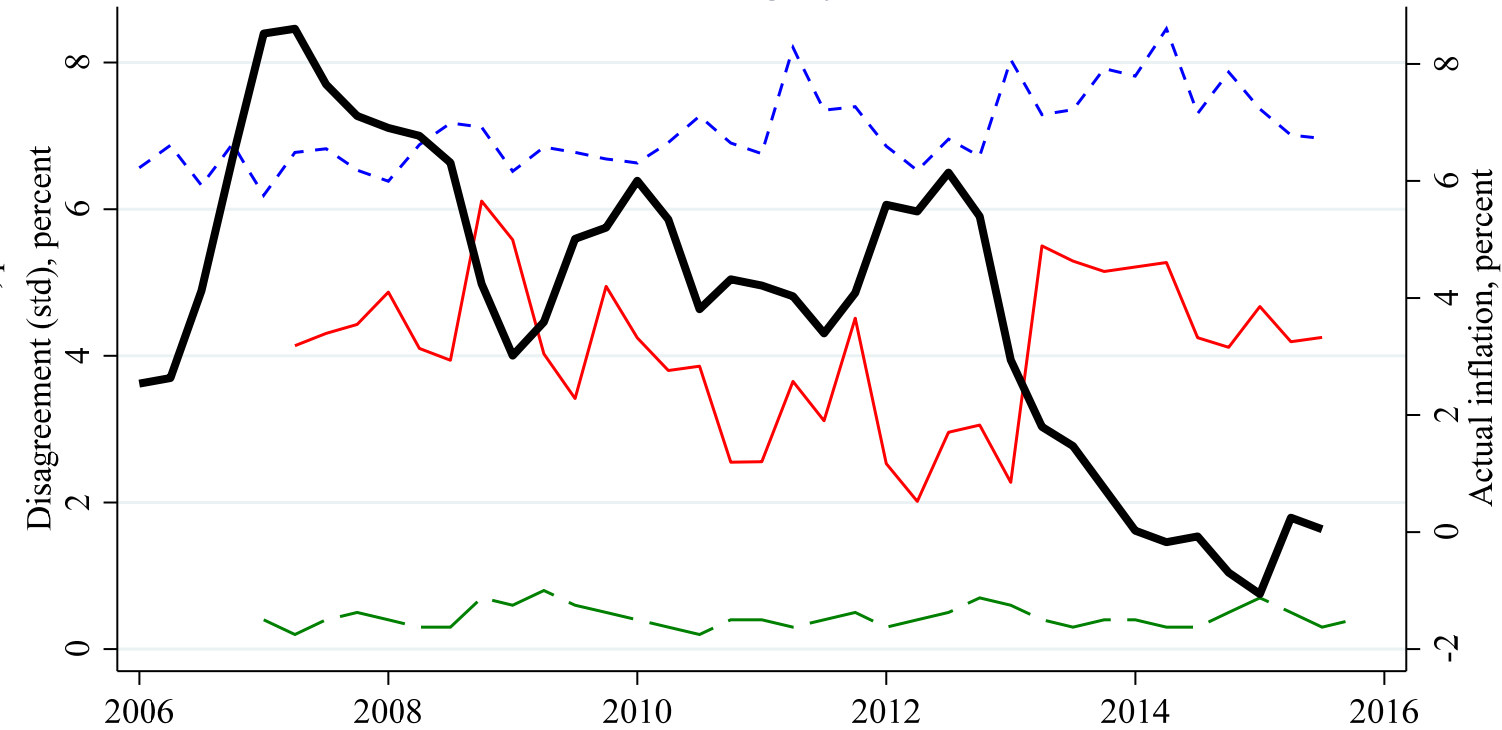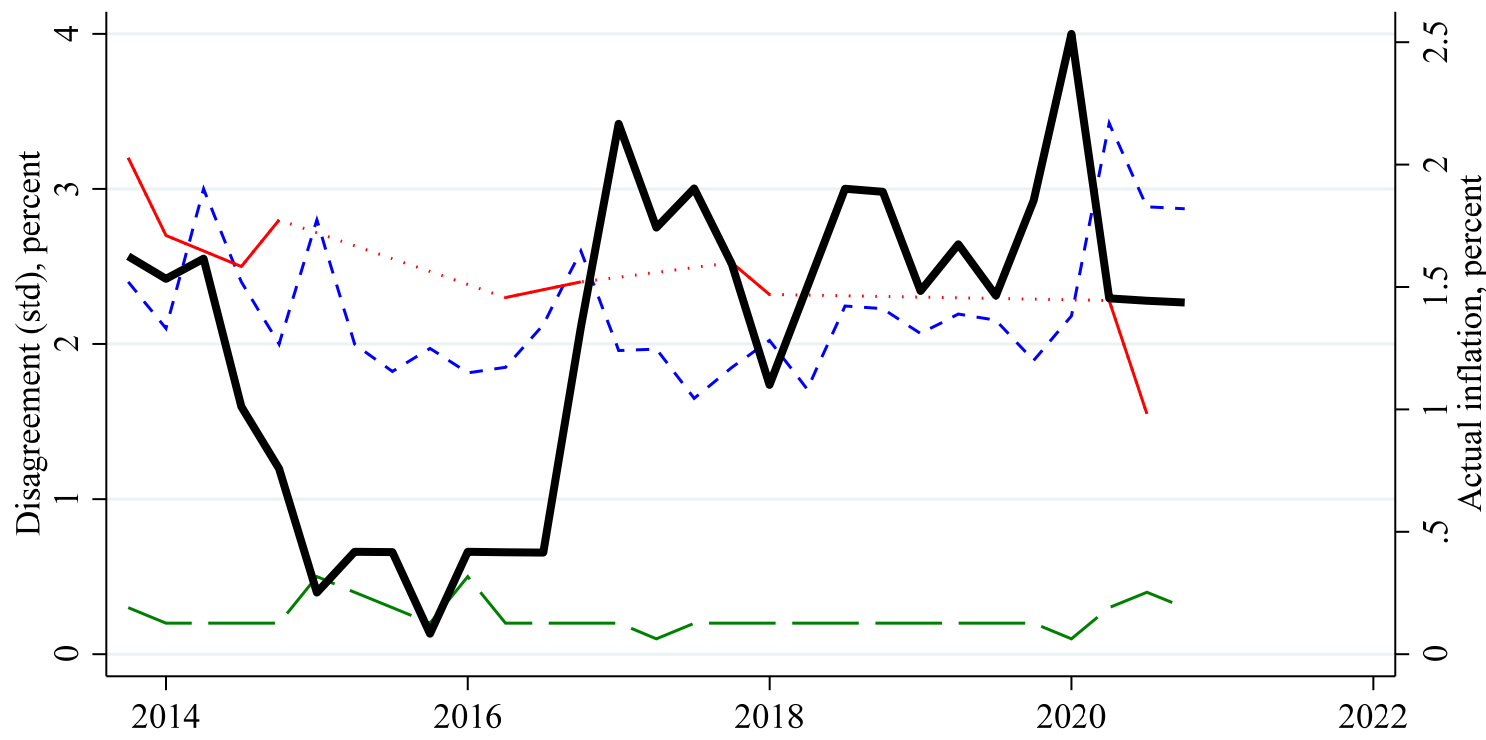
FACT #3. HIGH CORRELATION OF ST AND LT FORECASTS
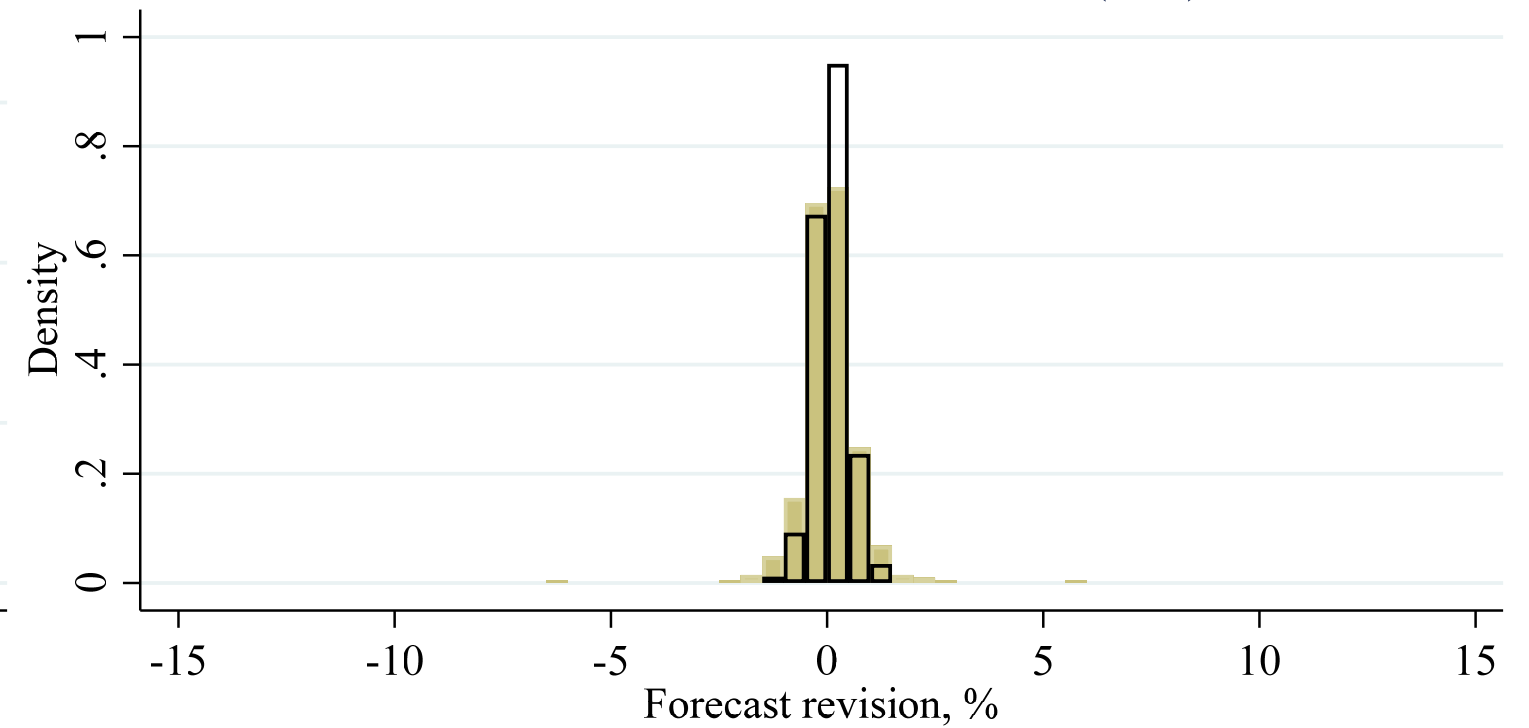
U.S. Firms (SoFIE)

b = 0.71 (0.06)

R2 = 0.62
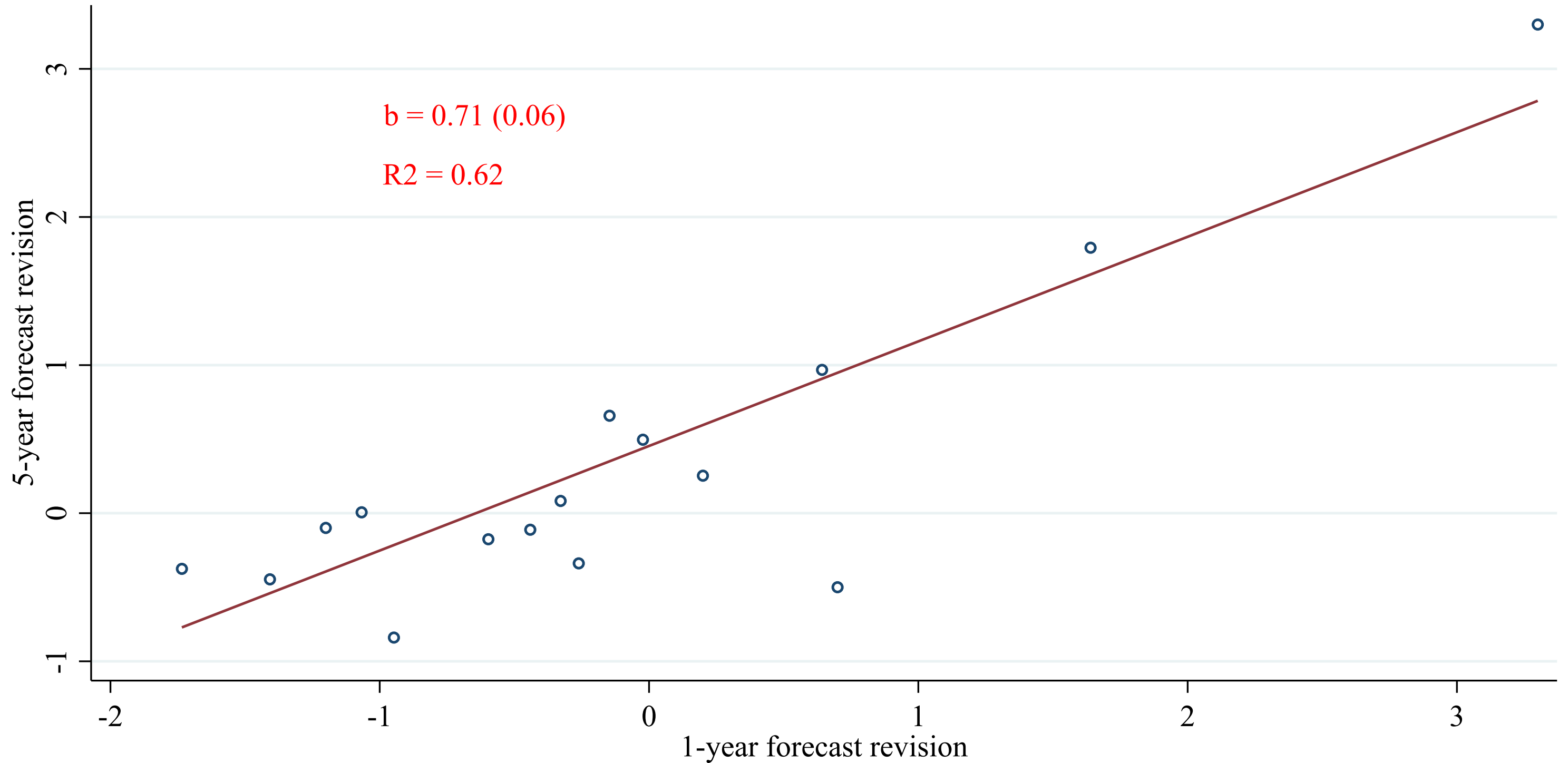
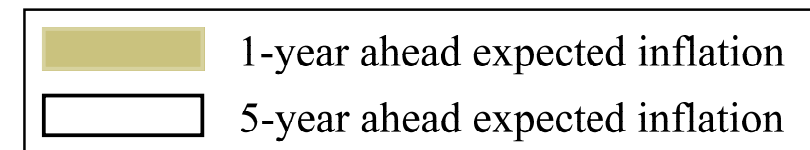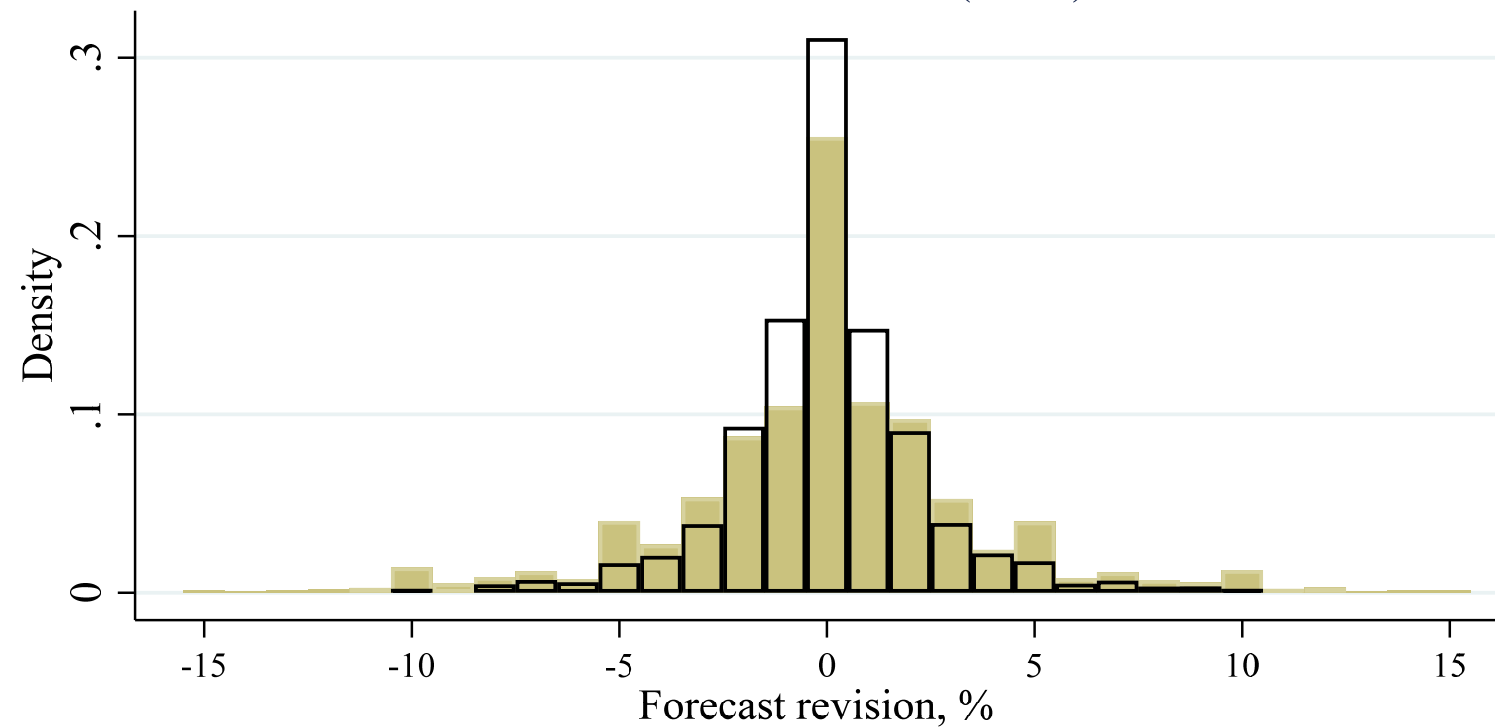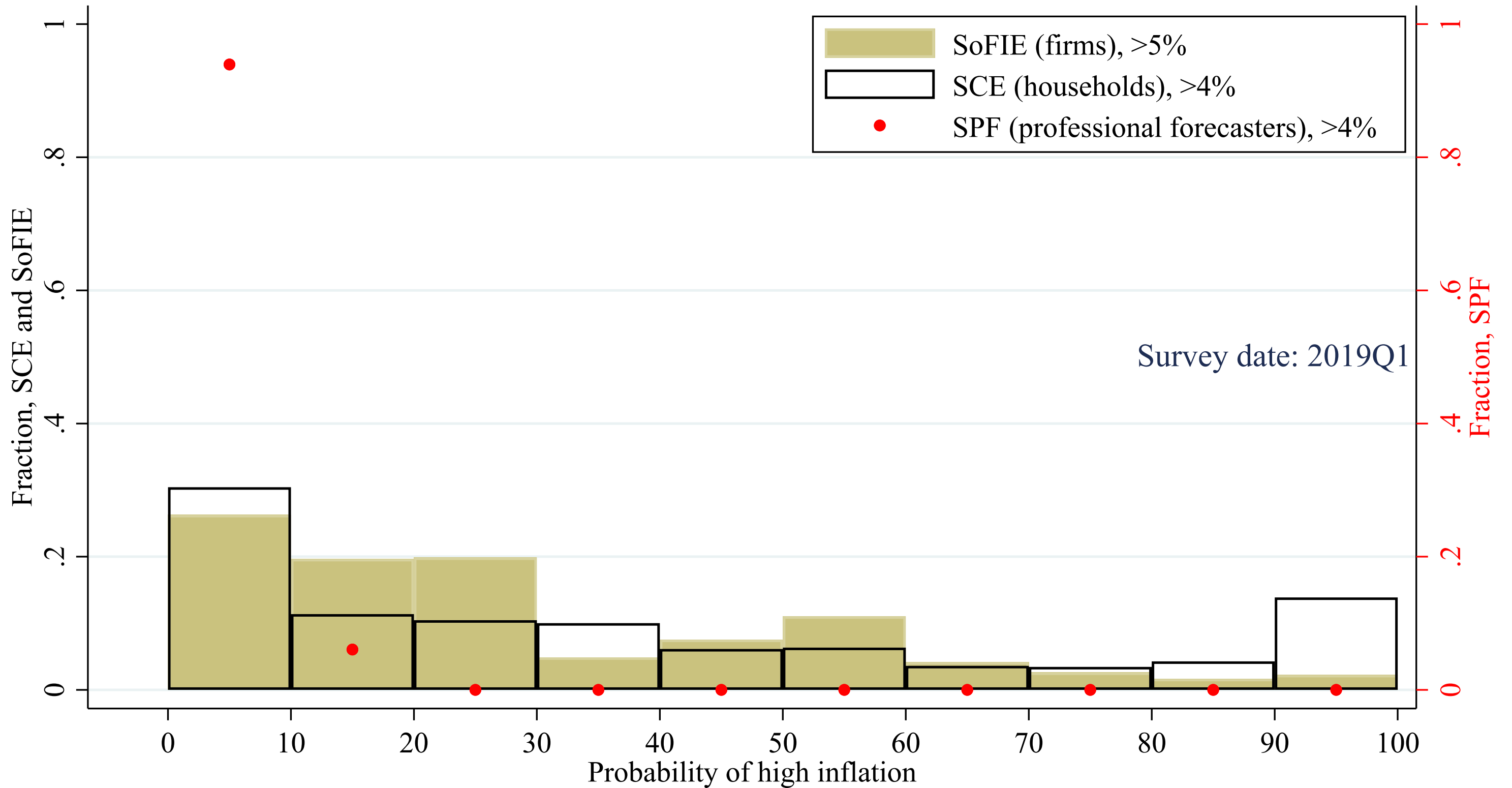# FACT #4: LARGE REVISIONS OF FORECASTS

Panel A. Firms (SoFIE)
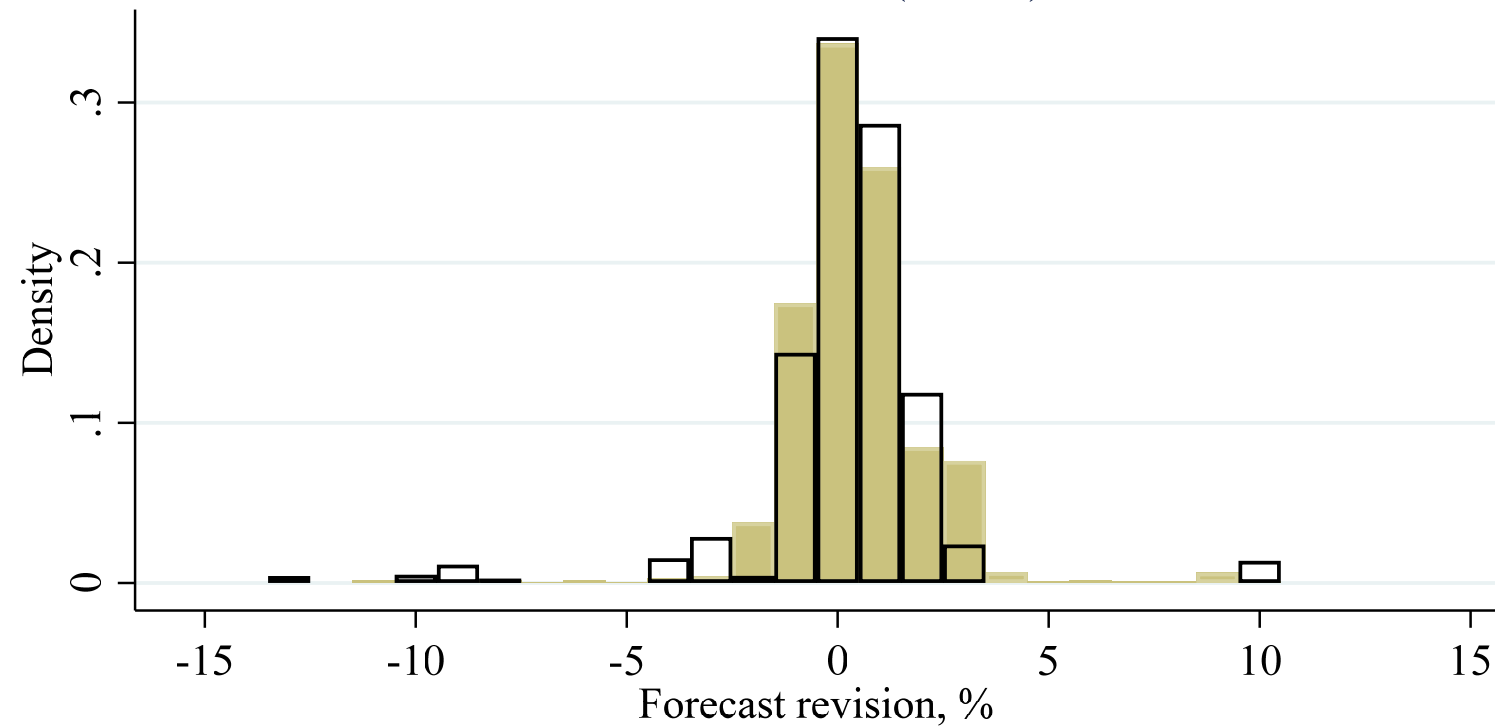
Panel C. Professional Forecasters (SPF)

Panel B. Households (MSC)

1-year ahead expected inflation
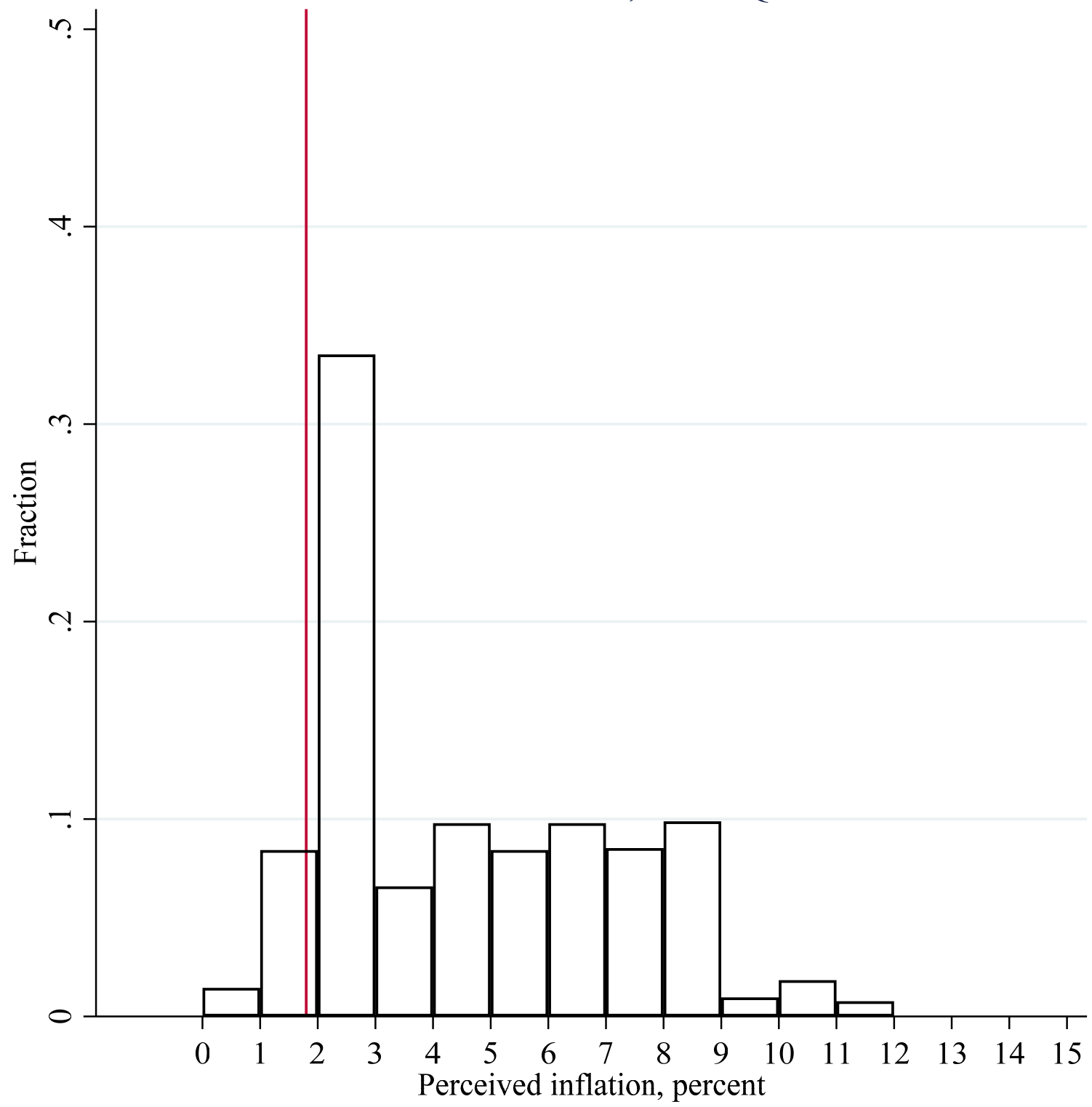5-year ahead expected inflation

FACT #5. HIGH UNCERTAINTY
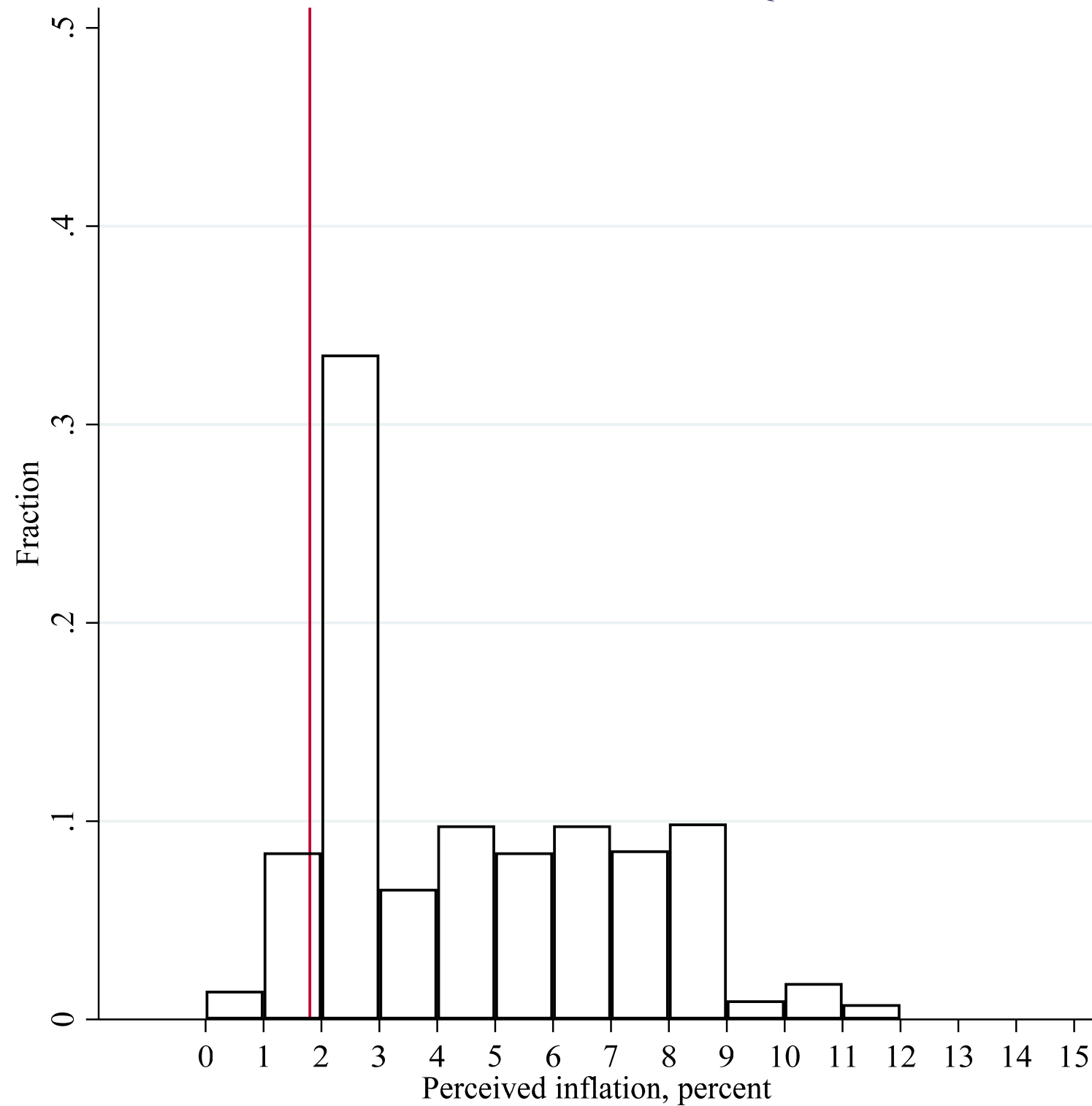

Survey date: 2019Q1

FACT #6: LARGE DISAGREEMENT ABOUT PAST INFLATION
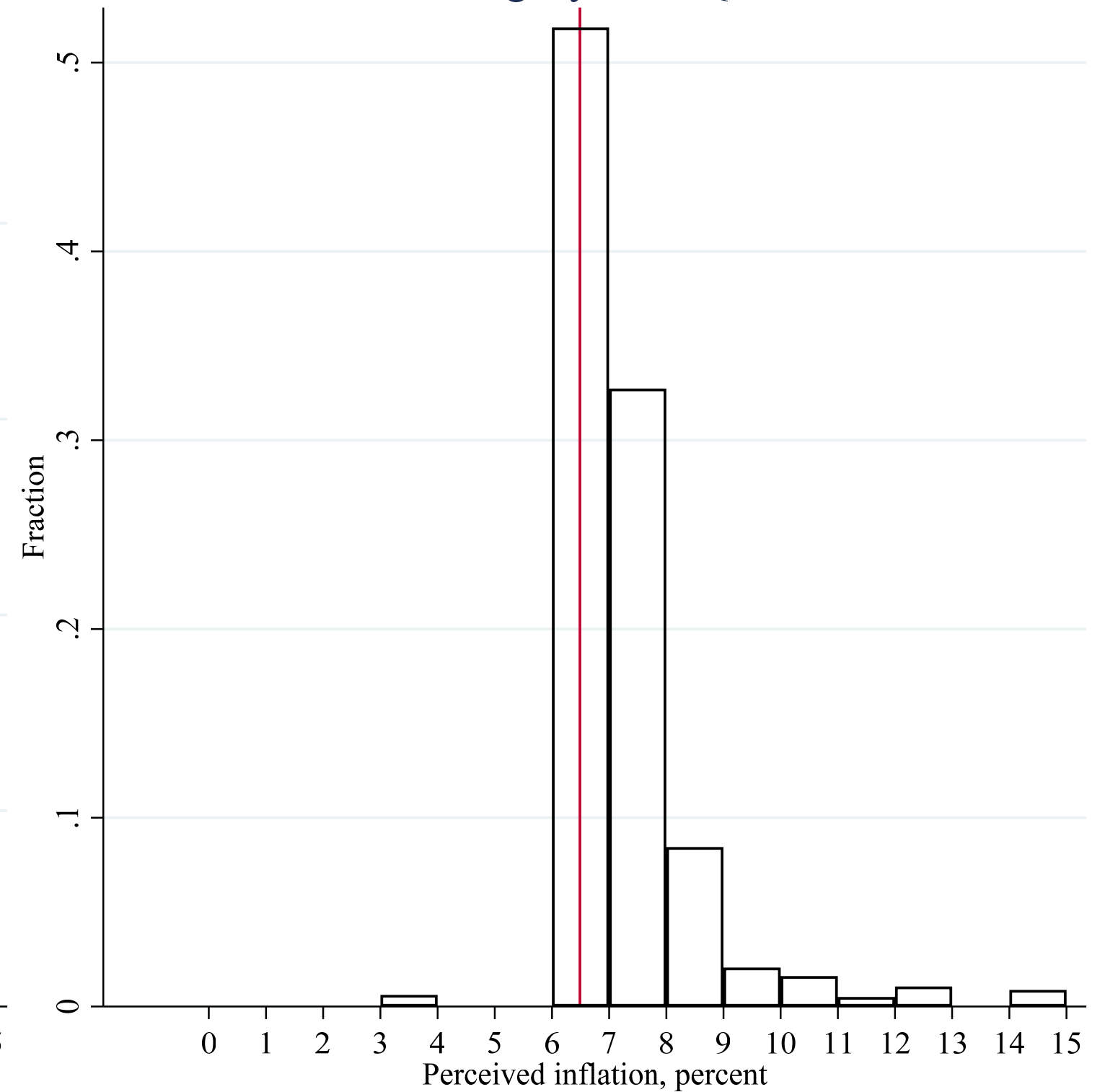
New Zealand, 2017Q4
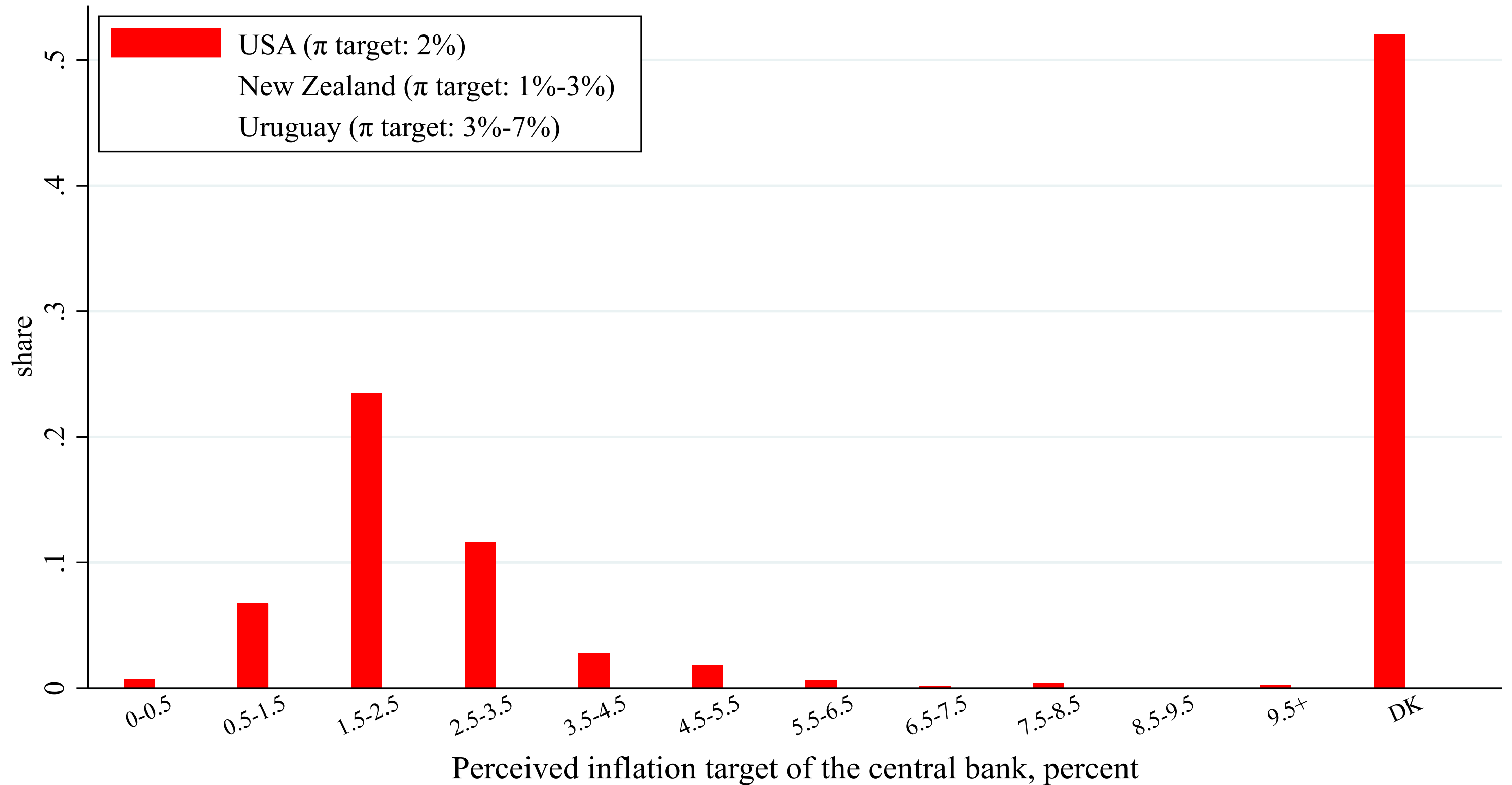
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New Zealand, 2017Q4

Uruguay, 2018Q2

FACT #7: LITTLE KNOWLEDGE ABOUT MONETARY POLICY

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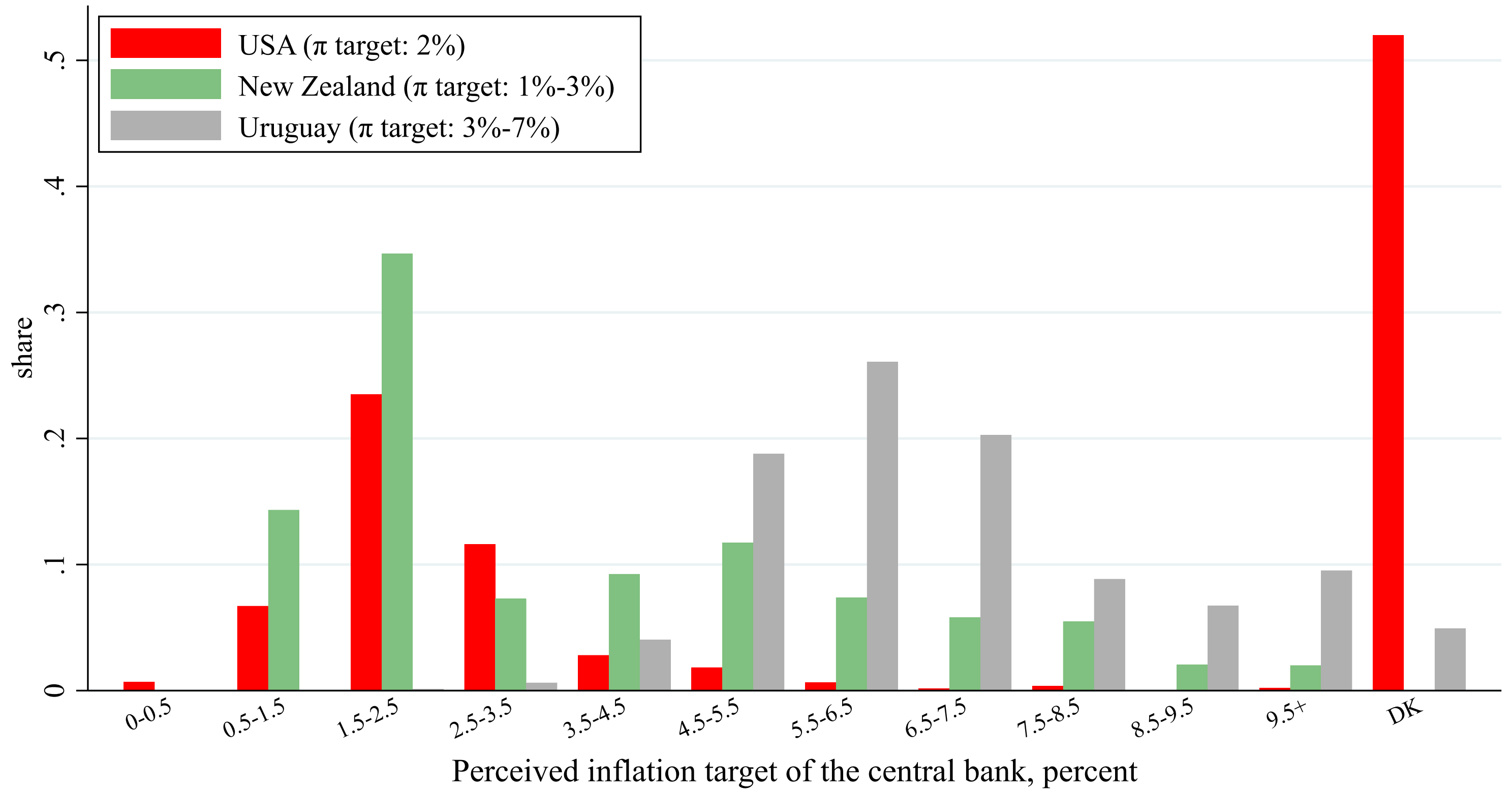
Legend:
- USA (π target: 2%)
- New Zealand (π target: 1%-3%)
- Uruguay (π target: 3%-7%)

y-axis: share

x-axis categories: 0-0.5, 0.5-1.5, 1.5-2.5, 2.5-3.5, 3.5-4.5, 4.5-5.5, 5.5-6.5, 6.5-7.5, 7.5-8.5, 8.5-9.5, 9.5+, DK

x-axis label: Perceived inflation target of the central bank, percent

FACT #7: LITTLE KNOWLEDGE ABOUT MONETARY POLICY

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.

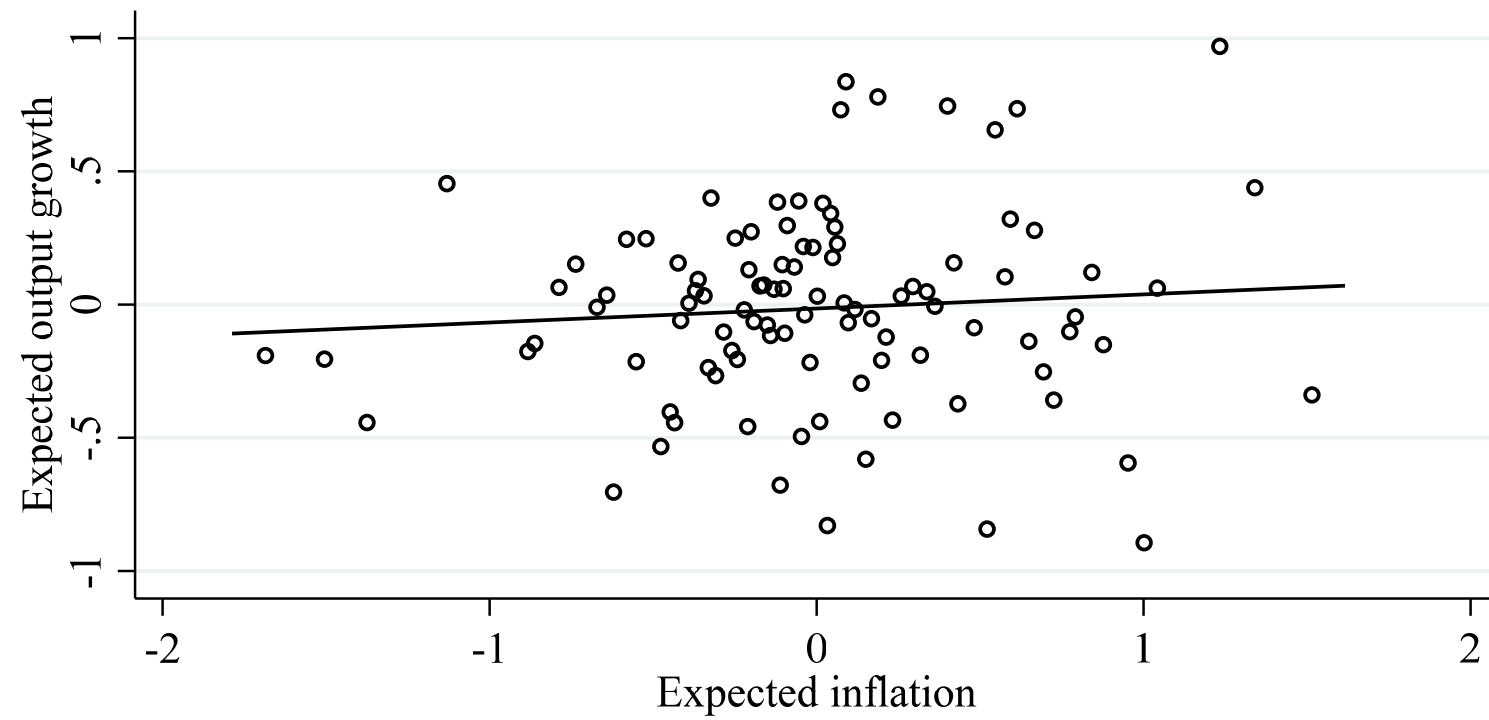- Short- and long-term inflation expectations are uncorrelated.

ARE EXPECTATIONS ANCHORED?
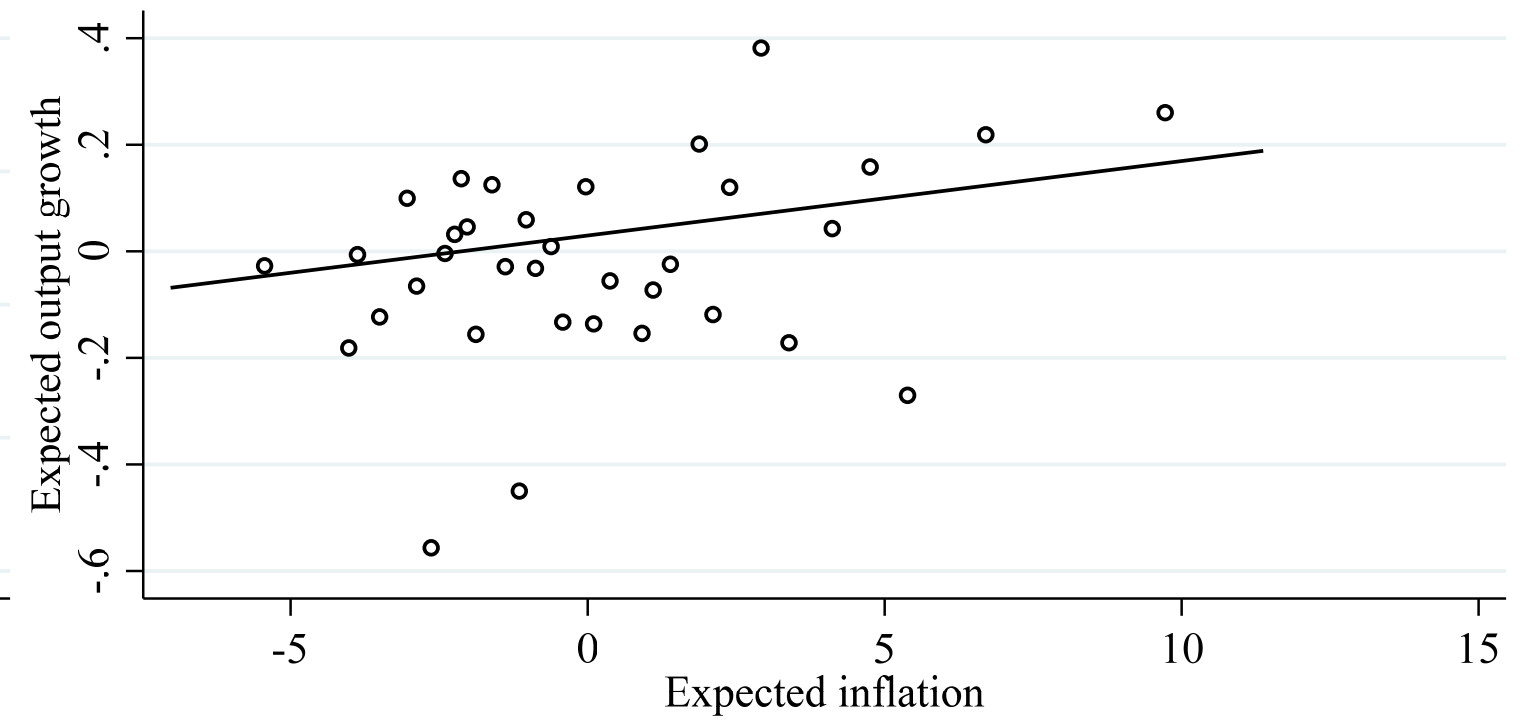
Five predictions:

- Inflation expectations are close to the target.   **NO**

- There is little disagreement in expectations.   **NO**

- Revisions in inflation expectations are small.   **NO**

- Firms show confidence in their forecasts.   **NO**

- Short- and long-term inflation expectations are uncorrelated. **NO**

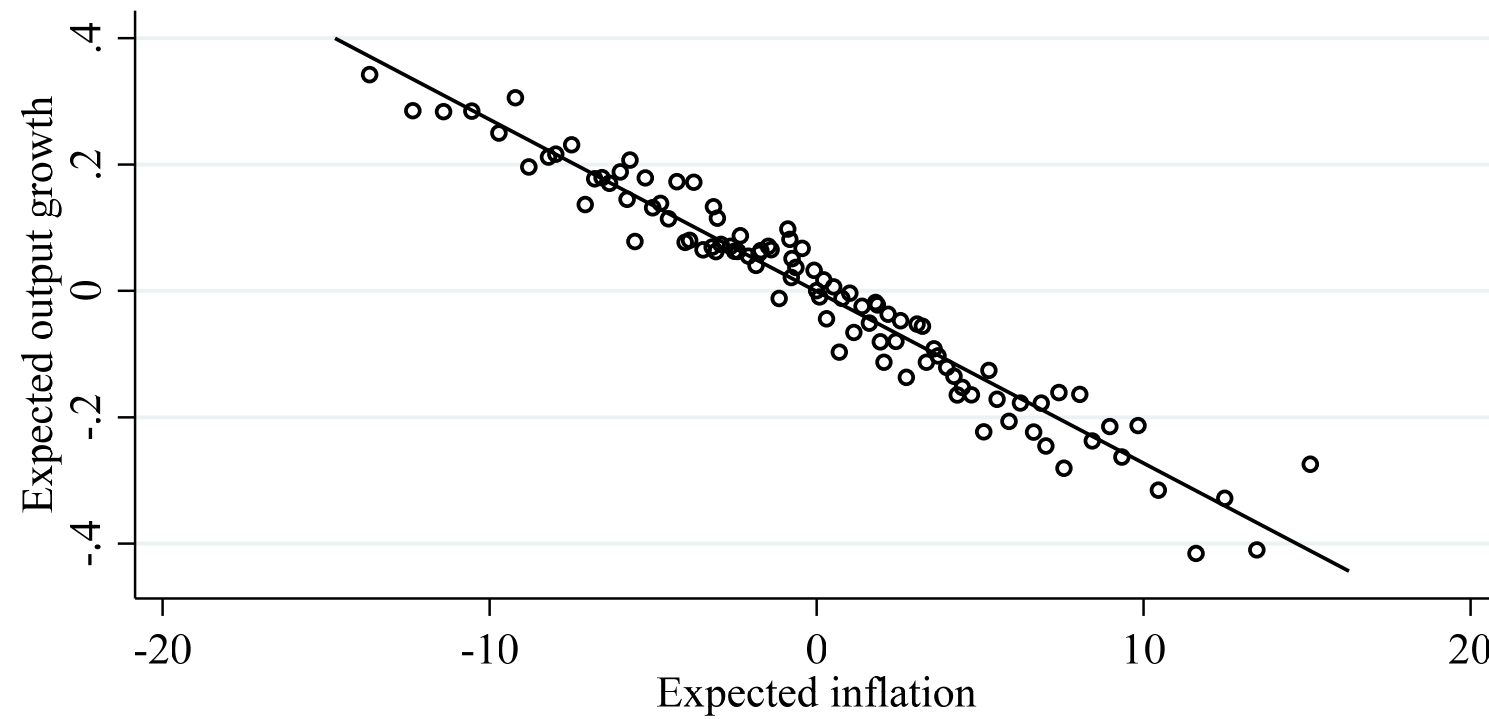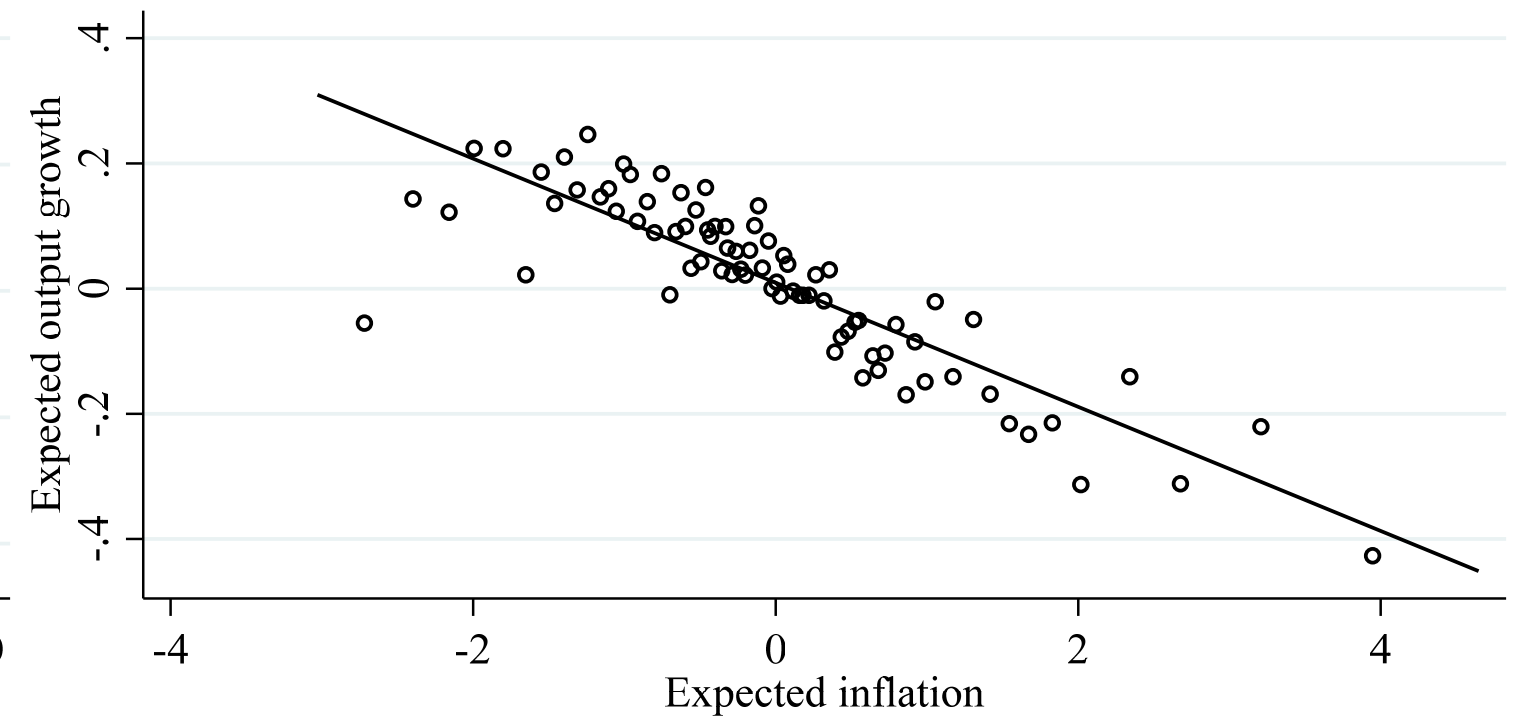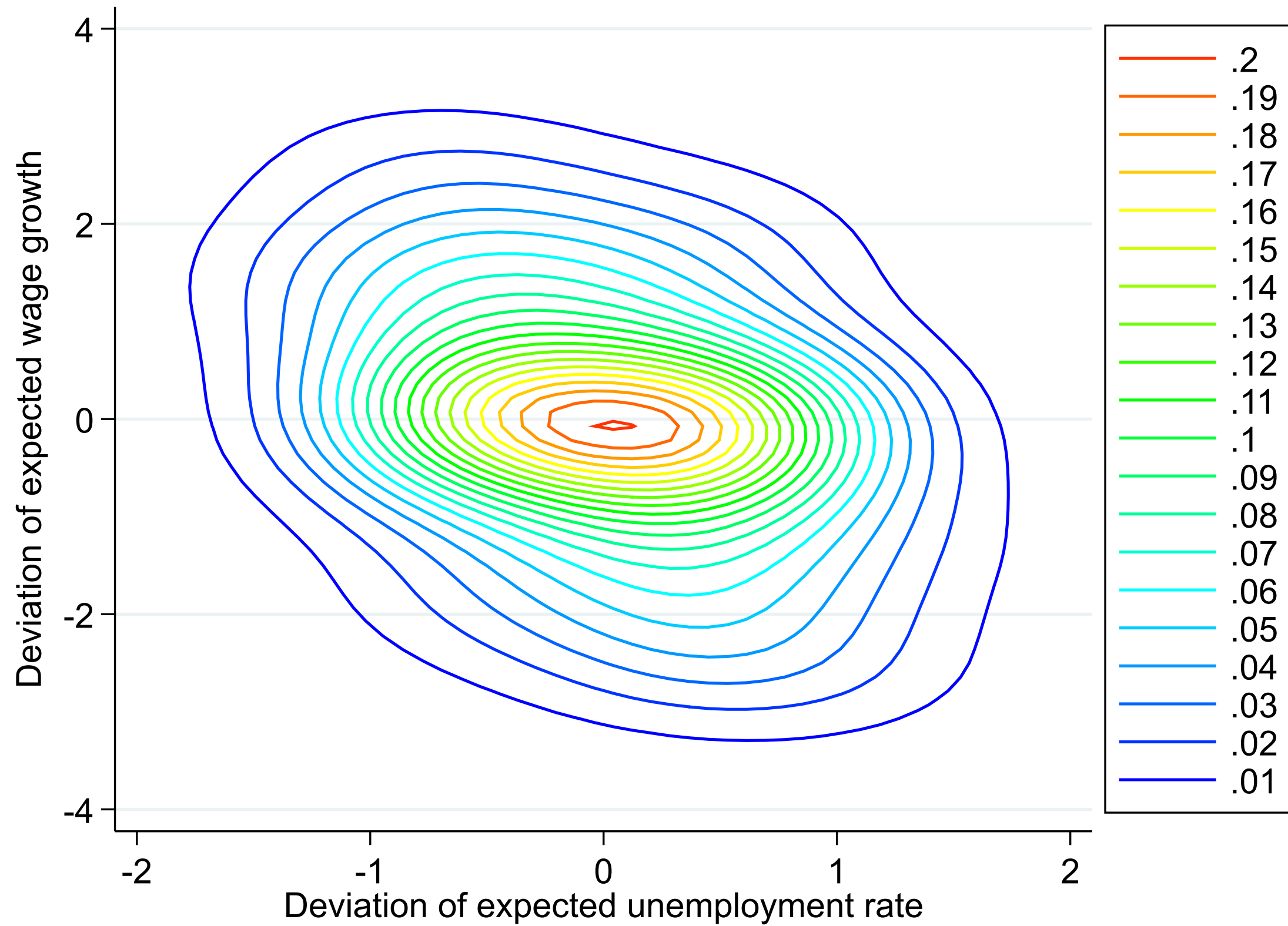# FACT #8: JOINT DETERMINATION OF EXPECTATIONS

USA — New Zealand — Ukraine — South Africa. Scatter plots of Expected output growth (y-axis) against Expected inflation (x-axis) with fitted regression lines.
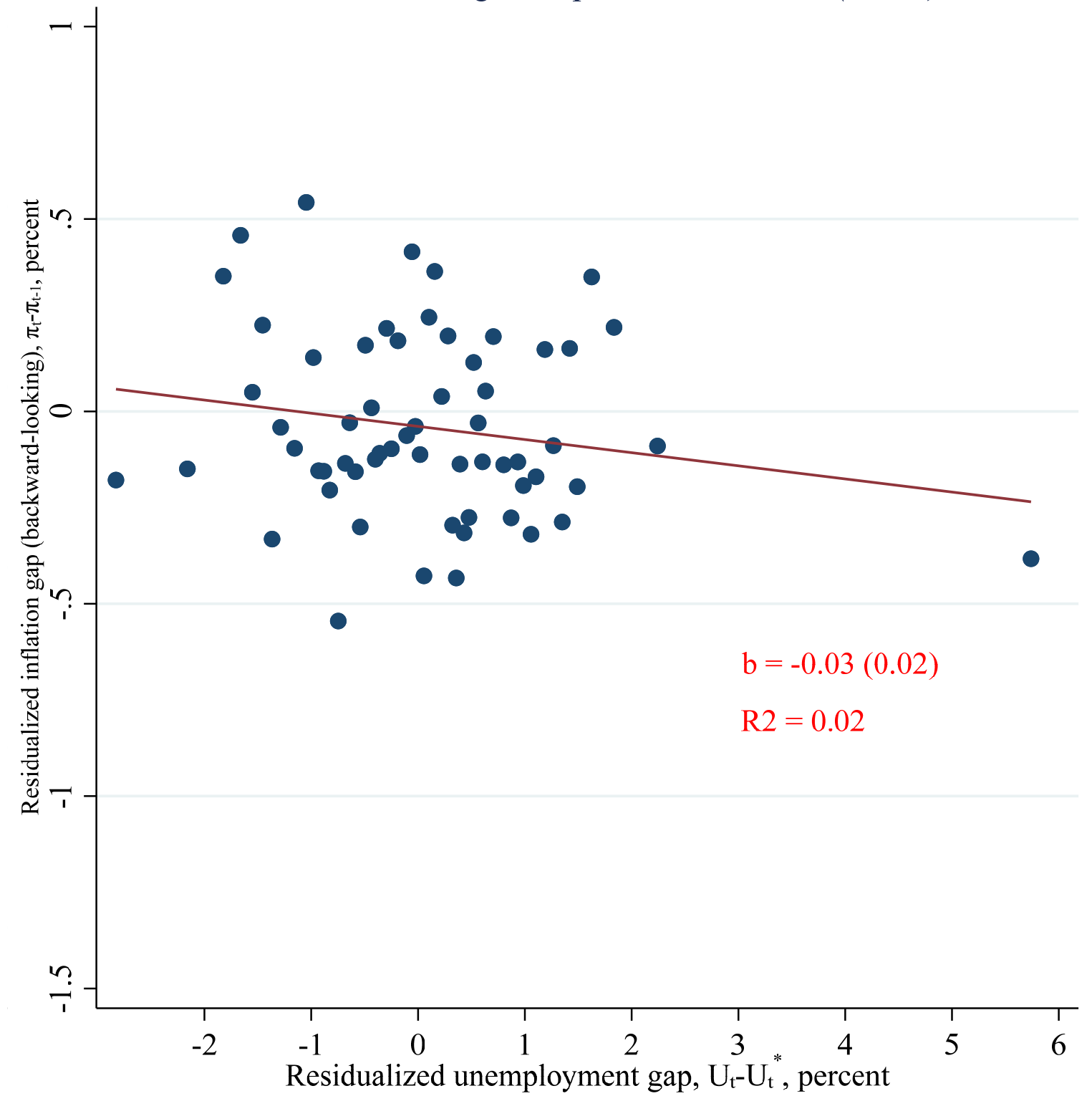
FACT #8: JOINT DETERMINATION OF EXPECTATIONS

FACT #9: EXPECTATIONS MATTER

Backward-looking Phillips curve: $\pi_t - \pi_{t-1} = \kappa(U_t - U_t^*)$

Residualized inflation gap (backward-looking), $\pi_t - \pi_{t-1}$, percent

Residualized unemployment gap, $U_t - U_t^*$, percent

b = -0.03 (0.02)

R2 = 0.02

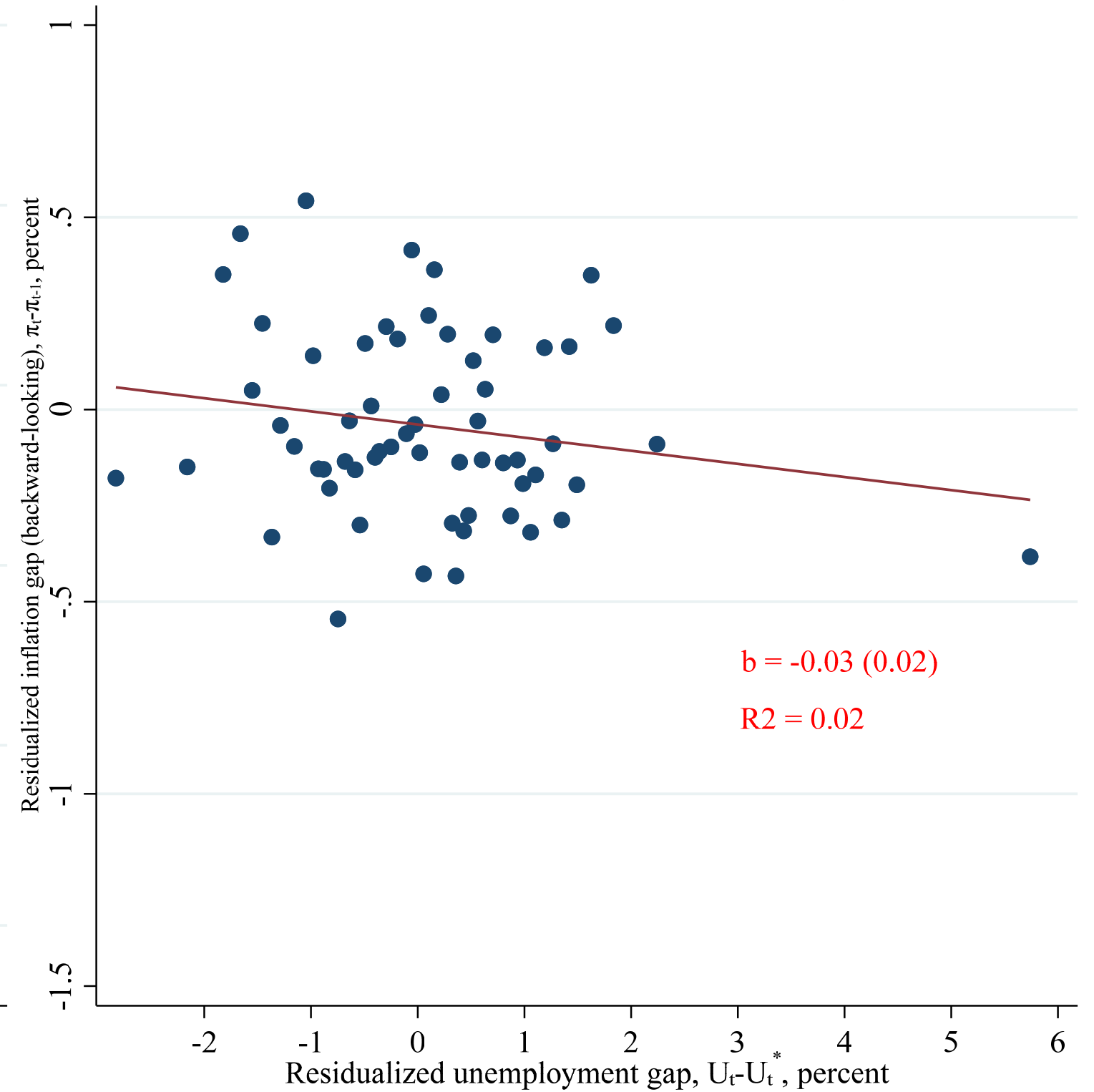# FACT #9: EXPECTATIONS MATTER

Forward-looking Phillips curve: $\pi_t - E(\pi_t) = \kappa(U_t - U_t^*)$
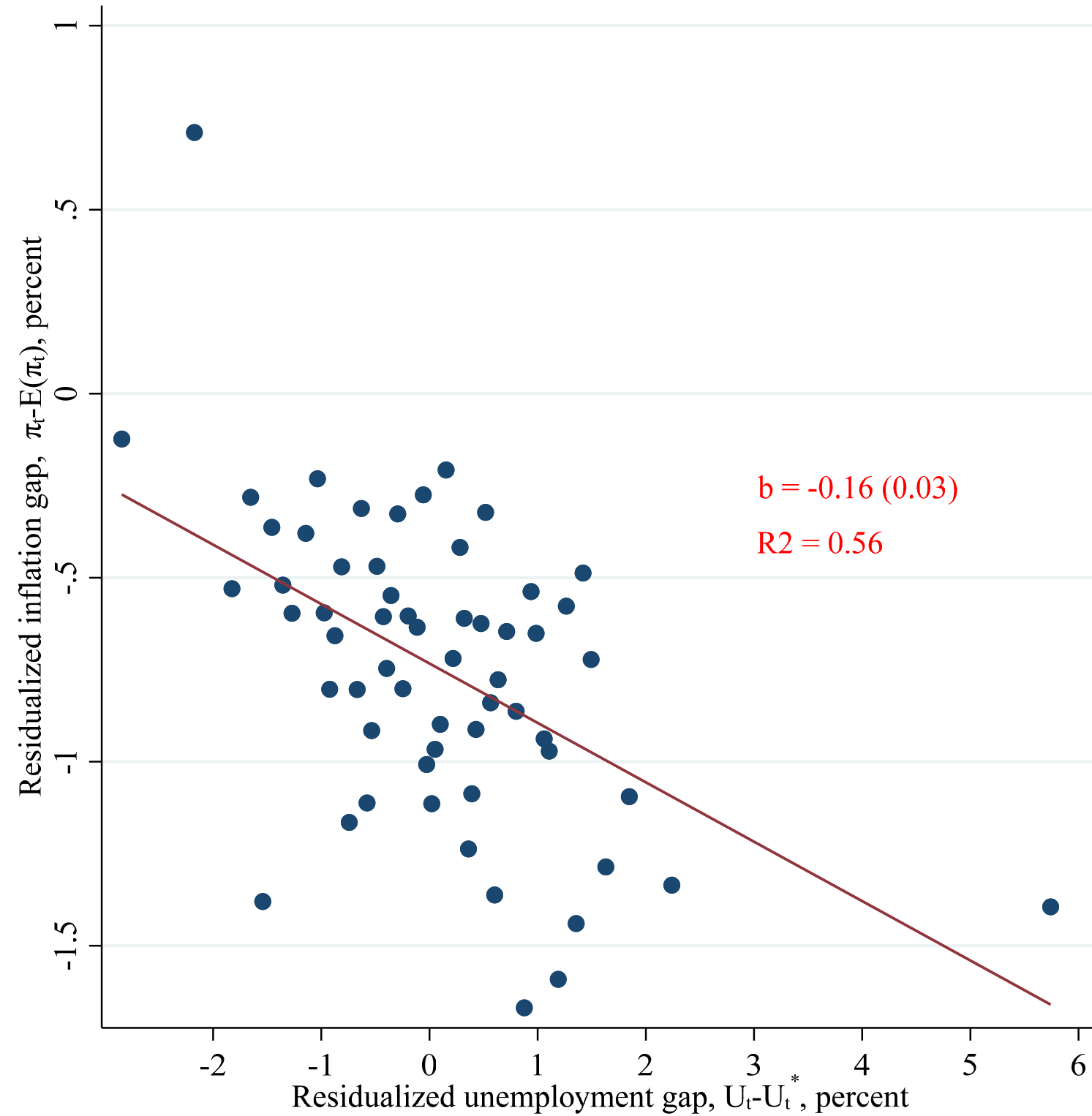
Backward-looking Phillips curve: $\pi_t - \pi_{t-1} = \kappa(U_t - U_t^*)$

b = -0.16 (0.03)
R2 = 0.56

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R2 = 0.02

CONCLUDING REMARKS

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- Need good measurement (especially for firms) $\implies$ 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