Discussion of "Empirical Properties of Inflation Expectations and the Zero Lower Bound"

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Challenges for Macroeconomic Policy in a Low Inflation Environment
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Disclaimer: The views expressed in this presentation are my own and not those of the Bank of England

Contribution of the paper

- In NK models with a binding ZLB, expectations are important for the effects of monetary and fiscal policy
- Build a model with dispersed information on the household side that can account for some stylized facts of survey inflation expectations
- Stylized facts:
  - Heterogeneity
  - Sluggishness
- Model properties:
  - Recessions under dispersed information are less severe
  - CB communication about the state of the economy affects consumption
  - Forward guidance is less powerful
  - Government spending multiplier is smaller
- A great paper!

Comments

1. What about other (more realistic) forms of forward guidance?
2. Why households and not firms?
3. At the ZLB, the nonlinear equilibrium conditions can admit richer dynamics compared to their log-linear counterpart

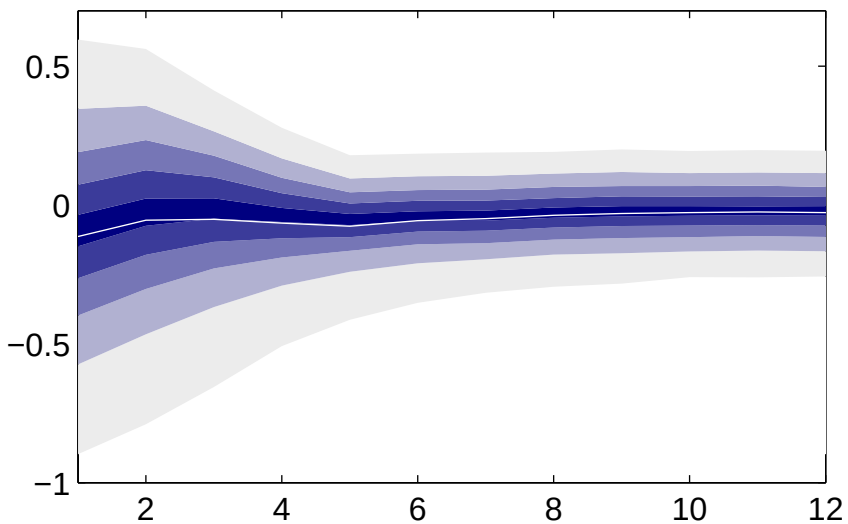
Comment 1:

What about other (more realistic) forms of forward guidance?

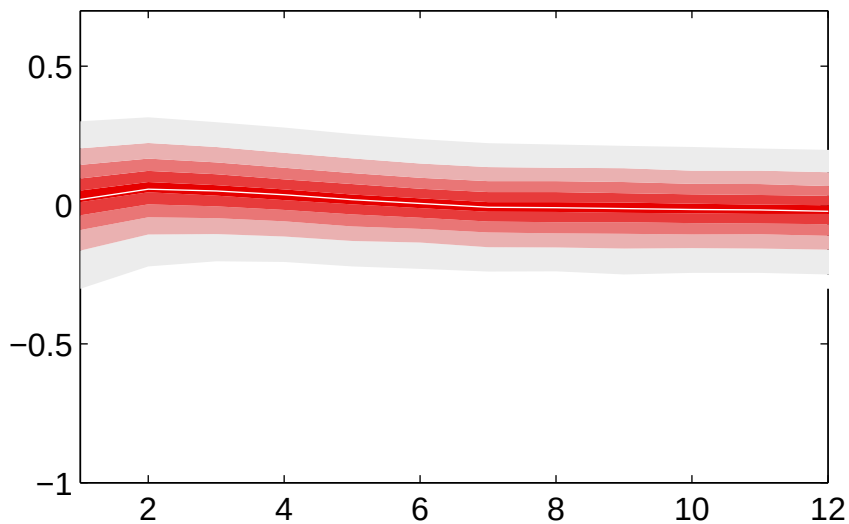
- This paper: Odyssean forward guidance = increase in π^*
- Raising π^* can be an effective tool to stimulate the economy at the ZLB (Krugman, 1998, Chattopadhyay and Daniel, 2014)
- But:
  - Changing the inflation target is outside of the remit of many CB
  - Risk of deanchoring of inflation expectations (Ascari et al., 2014)
- Other forms of forward guidance:
  - Forward guidance as a means to clarify the reaction function (Masolo and Monti, 2015)
  - Calendar- or threshold-based forward guidance (Del Negro et al., 2012, McKay et al., 2015)

Distribution of inflation under (Odyssean) forward guidance

- Environment: NK model with ZLB, full information, negative demand shock
- One-off, fully credible forward guidance experiment:
  - Calendar-based forward guidance: Liftoff depends on time
  - Threshold-based forward guidance: Liftoff depends on the state



(a) Calender-based FG



(b) Threshold-based FG (π threshold)

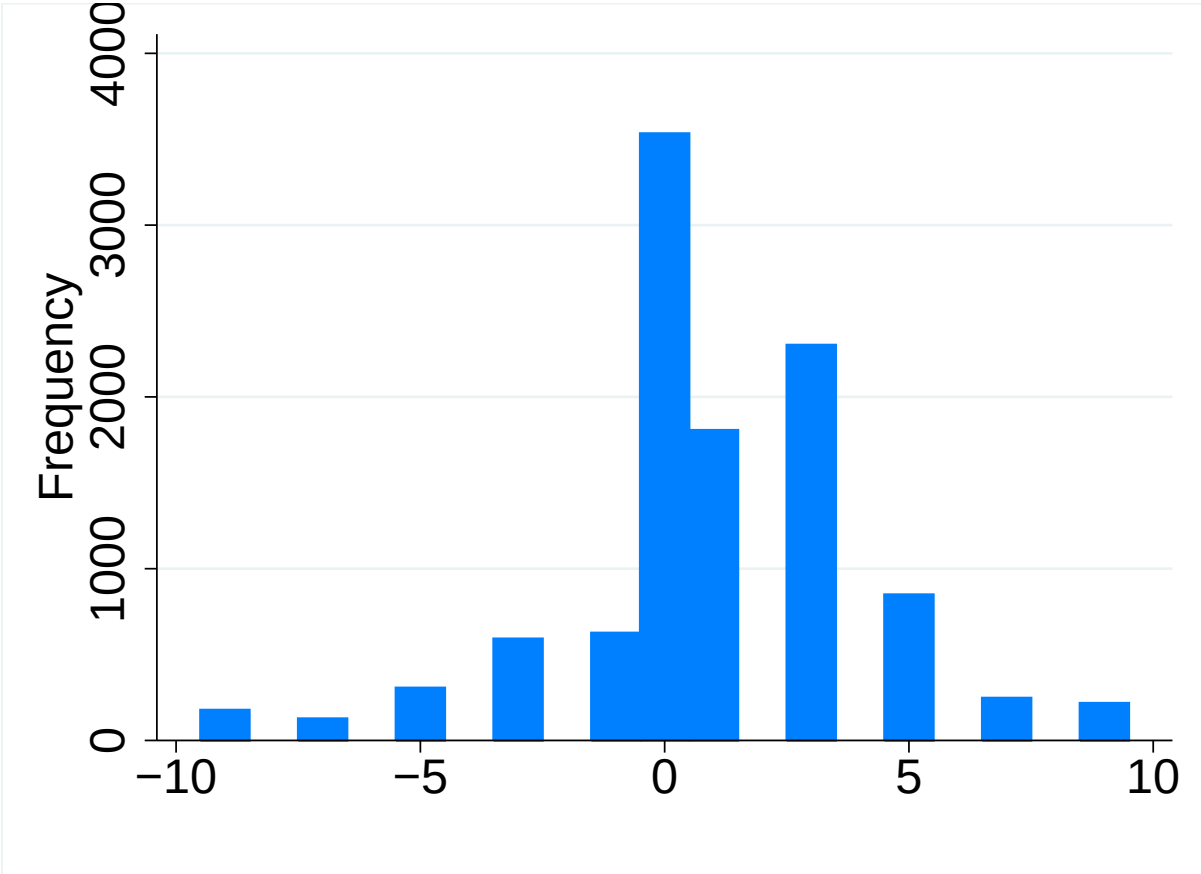
Comment 1:

Threshold-based FG with dispersed information?

- How does dispersed information change the effects of threshold-based forward guidance?
- How to calibrate thresholds such that forward guidance does not depress consumption?

Why households and not firms?

- Stylized facts apply to firm's inflation expectations as well (Coibion and Gorodnichenko, 2012, Coibion et al., 2015)



Notes: 1 year ahead inflation expectations of UK manufacturing firms, 2008-2014.

Comment 2:

Why households and not firms?

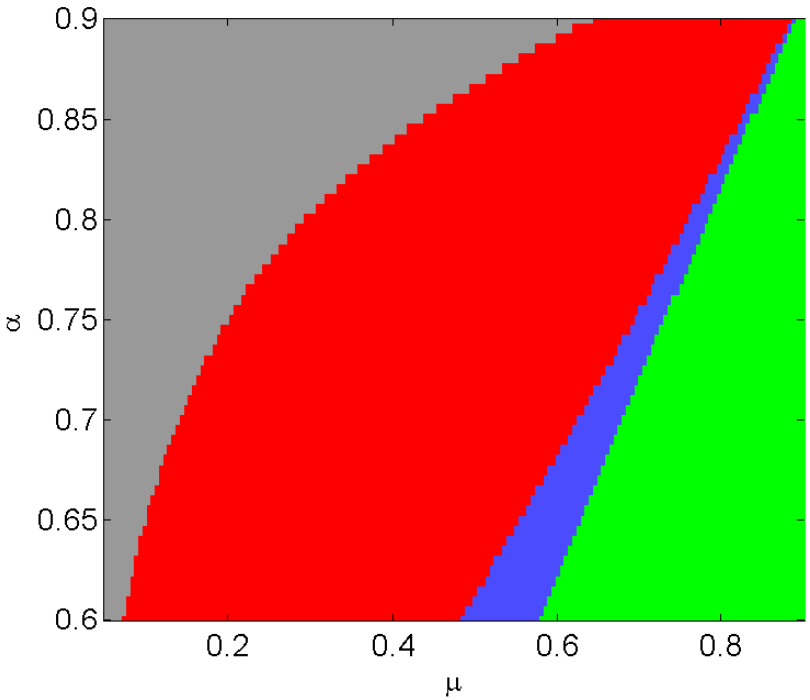
- The share of households who either don't know about CB policies or know but don't react is large (Hori and Shimizutani, 2004)
- Central bank communications presumably have larger effects on firm's behavior

Equilibrium dynamics of the NK model at the ZLB

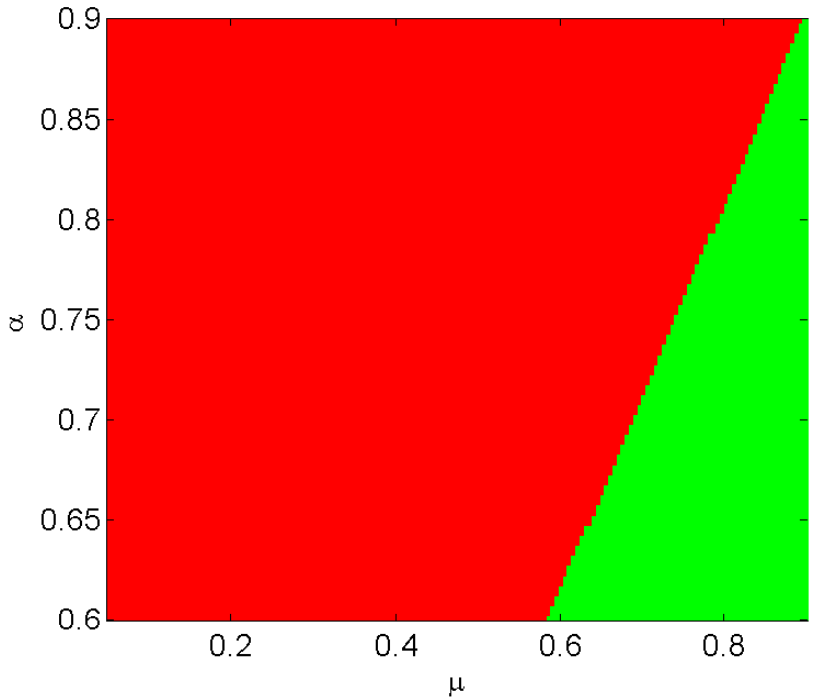
- Environment: NK model with ZLB and Rotemberg pricing, full information, negative demand shock, small shock calibration
- There is an additional shock (technology) and an additional target ($\pi^L = -0.01$) to avoid multiple targeted equilibria in the true model

Comment 3:

Types of ZLB equilibria for the small shock calibration



(a) True equilibrium dynamics



(b) Loglinear equilibrium dynamics

μ is the probability of remaining at the ZLB in the next period and α is the probability that a firm cannot adjust its price. Red: $slope(AD) > 0 > slope(AS)$; green: $slope(AS) > slope(AD) > 0$; gray: $slope(AS) > 0 > slope(AD)$; blue: multiple zero bound equilibria.

Comment 3:

Equilibrium dynamics of the NK model at the ZLB

- Nonlinear and loglinear equilibrium dynamics can be very different at the ZLB
- Equilibrium dynamics have important implications for monetary and fiscal policy
- Which nonlinear equilibrium dynamics does the dispersed information model admit?
- What about multiple equilibria?

Conclusion

- A great paper that bridges the gap between macroeconomic models and evidence on survey inflation expectations
- The model is used to answer important questions about monetary and fiscal policy
- But there are more questions to be answered and I am looking forward to the next paper on this research agenda