

Discussion of  
Barnett, Mumtaz, Paustian and Pezzini:  
“Household inflation expectations in the UK:  
exploiting the cross-sectional dimension”

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# Key contribution

- ▶ Several tests of **sticky info (SI)** framework
- ▶ Uses UK household-level inflation expectations
- ▶ Moderate support for SI: **Hhs update once a year**
- ▶ SI better than rest, but underestimates X-section dispersion

# Data

- ▶ Barclays Basix survey: 1987+
- ▶ Bank of England/GfK NOP Inflation Attitudes Survey: 1999+

# Methodology

Follows Mankiw, Reis, Wolfers (2003)

- ▶ Approximate rational forecasts with (B)VAR
- ▶ Denote  $\theta$  share of Hhs with up-to-date info
- ▶ Given  $\theta$  generate distr of Hh exps
- ▶  $\theta(1 - \theta)^j$ : share of Hhs with info outdated by  $j$  quarters
- ▶ Estimate  $\hat{\theta}^{SI \text{ model}} = \arg \min \sum_t (E\bar{\pi}^{\text{data}} - E\bar{\pi}^{SI \text{ model}}(\theta))^2$   
where  $E\bar{\pi} =$  mean infl exp
- ▶ Test SI: Does  $\pi^{SI \text{ model}}(\hat{\theta})$  match variance observed in data?

# Results

- ▶  $\theta^{\text{SI model}} = 0.28$
- ▶ Baseline SI underestimates dispersion
- ▶ Need more fcst heterogeneity than just SI  
Hhs draw from posterior dstrbtn? (rather than point fcsts)
- ▶ SI/geomtrc weights performs better than RI or uniform weights

# Use more moments $g(\cdot)$

- ▶  $\hat{\theta} = \arg \min \sum_t (g(E\pi^{\text{data}}) - g(E\pi^{\text{SI model}}(\theta)))^2$
- ▶ # of moments  $\uparrow \Rightarrow \text{Efficiency}(\hat{\theta}) \uparrow$

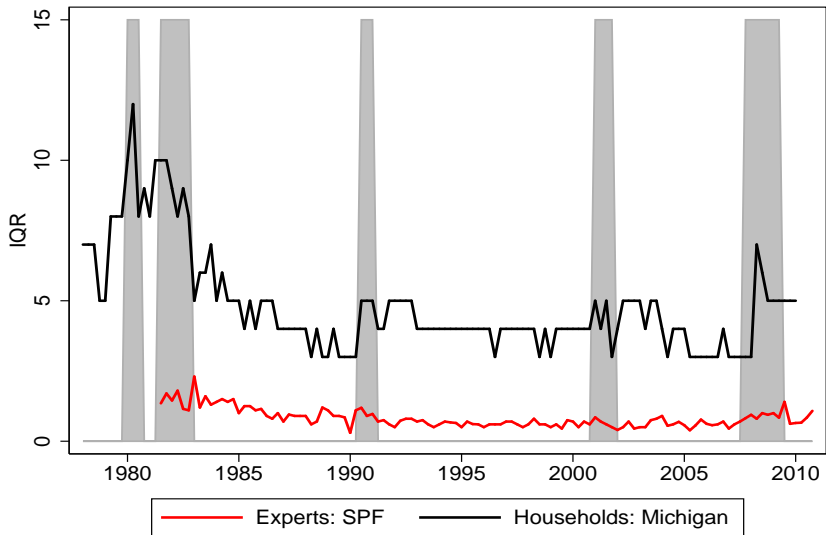
## Likely consequences

1. Mom cond for variance  $\Rightarrow \uparrow\uparrow \hat{\theta}$  substantially  
 $\text{var}(E\pi^{\text{SI model}}(\theta)) \uparrow$  as  $\theta \uparrow$   
Because baseline model underestimates var
2. Over-identification will reject SI

# Measurement error

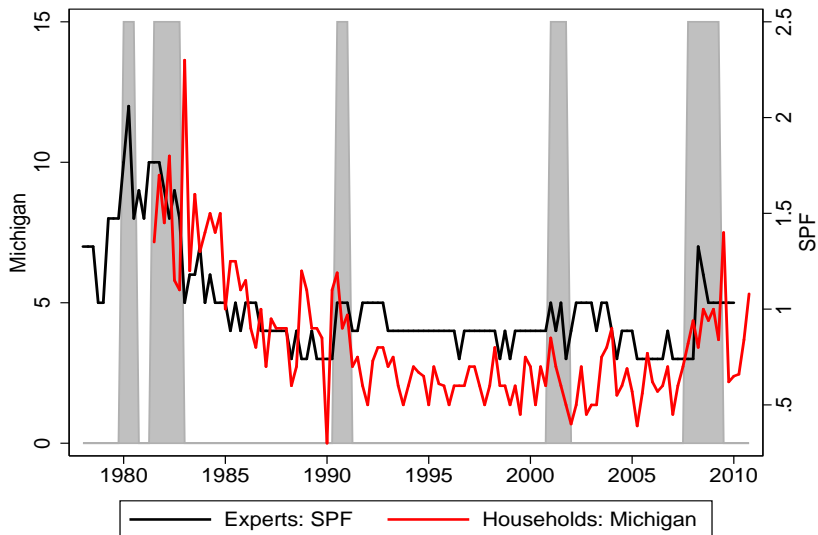
- ▶ Adding classical meas error helps match SI&  $\hat{\theta} \approx 0.25$  with data
- ▶ Substantial evidence about  $\hat{\theta} \approx 0.25$  for Hhs
- ▶ Different (macro) setups:  
Carroll 2003; Khan, Zhu 2006; Carroll, Slacalek, Sommer 2009; ...
- ▶ More moments  $\Rightarrow$  can in principle test OI restr  
Or estimate more params
- ▶ Meas error needs to be substantial
- ▶ Non-classical? (varies across Hhs and in time)
- ▶ Is not necessarily unrealistic!

Fact I:  $\text{IQR}(\text{Hhs Expns}) \approx 5 \times \text{IQR}(\text{Experts Expns})$





Fact II: Profile(IQR(Hhs Expns))  $\approx$  Profile(IQR(Experts Expns))



# Why use (B)VAR as benchmark?

- ▶ Paper effectively tests SI jointly with Hhs' use of BVARs
- ▶ Little idea on how the BVAR forecasts perform
- ▶ Lots of specification issues (lags, variables, priors, factors?, ...)
- ▶ Why not use expert survey forecasts?
- ▶ Better than model fcsts (Ang, Bekaert, Wei 2007; Wright 2010)
- ▶ More easily accessible to Hhs (than estimating BVARs)

## Section on micro data

- ▶ Ideally use **panel**
- ▶ Partitioning by updating intensities using BVAR a bit ad hoc
- ▶ More natural to look at **fcst errors** à la Souleles (2004)  
van der Crujsen, Jansen, de Haan (2010)
- ▶ Likely finding: more educated/rich have better forecasts
- ▶ Implications for CB communication

# How about other variables?

## Economic activity (GDP)

- ▶ Disagreement more counter-cyclical (than about  $\pi$ )  
Doern, Fritsche, Slacalek (2009)
- ▶ Matters more to Hhs? Higher variance?  $\Rightarrow$  Higher  $\theta$ ?
- ▶ Carroll (2003) estimates  $\theta = 0.32$  (for unemployment)
- ▶ In line with rational inattention (Mackowiak, Wiederholt 2009)
- ▶ But hard to ask Hhs, hard to scale

# Summary

- ▶ Nice, policy-relevant paper with interesting data
- ▶ Some support for SI
- ▶ But not enough heterogeneity to match micro data
- ▶ More work to do