Discussion of "Uncertainty Shocks In a Model of Effective Demand" by Basu and Bundick

François Gourio

Boston University

October 2011

Plan of Discussion

1. Relation to uncertainty shock literature
2. Quantitative questions
3. Quantitative questions
4. Measures of uncertainty
5. Can we do it without sticky prices?

Background: uncertainty shocks

- Standard macro models: recessions caused by **deterioration** in productivity or in “demand”
- Recent literature: recessions caused by **increase in uncertainty** about productivity or “demand”
- Works whether or not the increase in uncertainty is realized or not – what matters is expectations
- **Micro vs. Macro uncertainty**

Different mechanisms

1. Real option effect "wait and see"
   [Bloom, Bloom et al., Bachmann and Bayer]
2. Financial frictions
   [Gichrist et al.; Arellano et al.; Chugh; Fukushima]
3. Others [Fernandez-Villaverde et al.; Schaal; ...]
4. Precautionary savings [This paper!]
5. Risk premia [Gourio]

Uncertainty about what?

- Could be uncertainty about TFP, “demand”, gov’t policy
- Paper suggests **object of uncertainty does not matter**
- Diagram:
  - marginal utility λ goes up with uncertainty
  - higher precautionary savings, and working.
  - may not always be true
  - suppose uncertainty is about a shock to capital **and** TFP
  - then, higher uncertainty will **increase** savings iff IES<1.
- What wedges does the model imply?

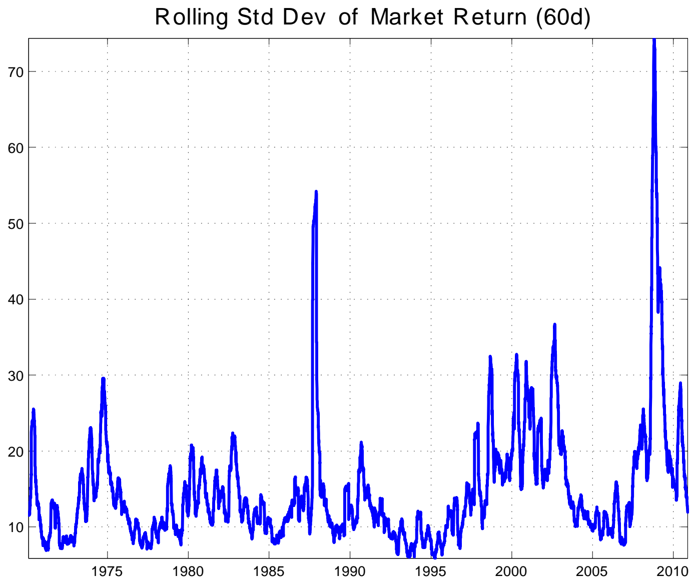
Quantitative issues

- What do asset prices look like in the model?
- Volatility of real vs. nominal rate?
  - Real natural interest rate is volatile (Jermann 1998)
  - Central bank smoothes the interest rate in the model
  - How much welfare do we lose because of this?

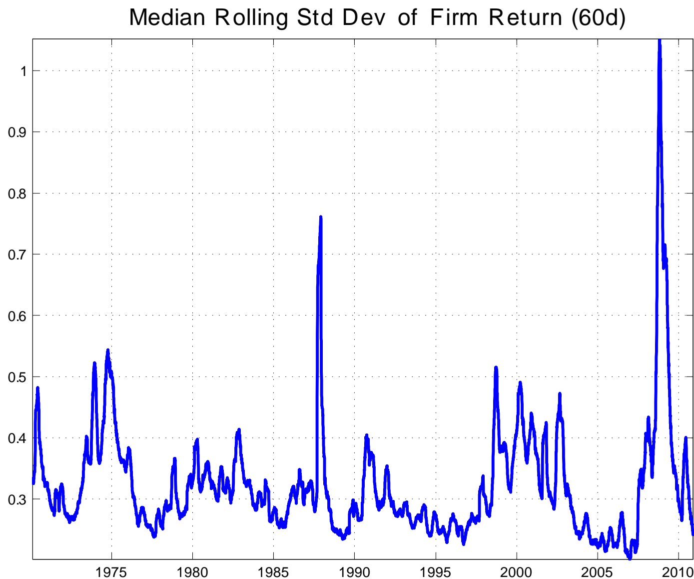
Monetary Policy Rule

- In the model, monetary policy is suboptimal.
- Optimal monetary policy can implement the flex price allocation.
- (At least if no additional friction)
- Requires decreasing interest rates when uncertainty goes up.
- Flavor: "cut Fed Funds rate if VIX / credit spreads go up"
- But should monetary policy directly target VIX or credit spreads?
- In the model, **no**! Target is the "natural interest rate"

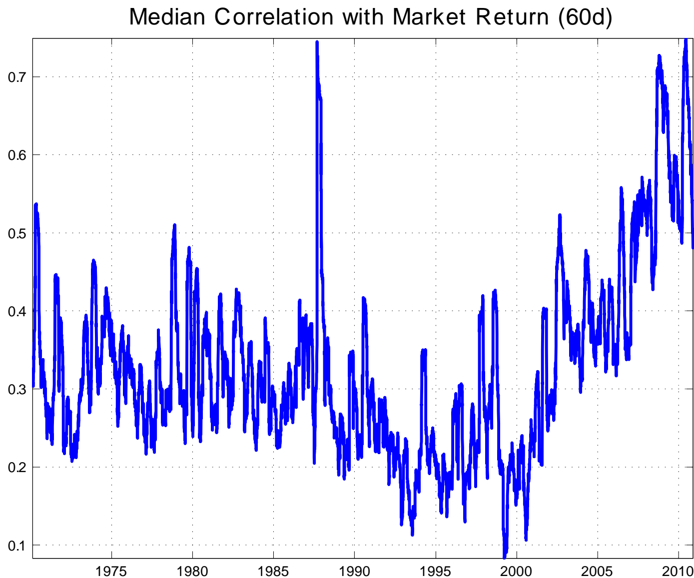
Rolling Std Dev of Market Return



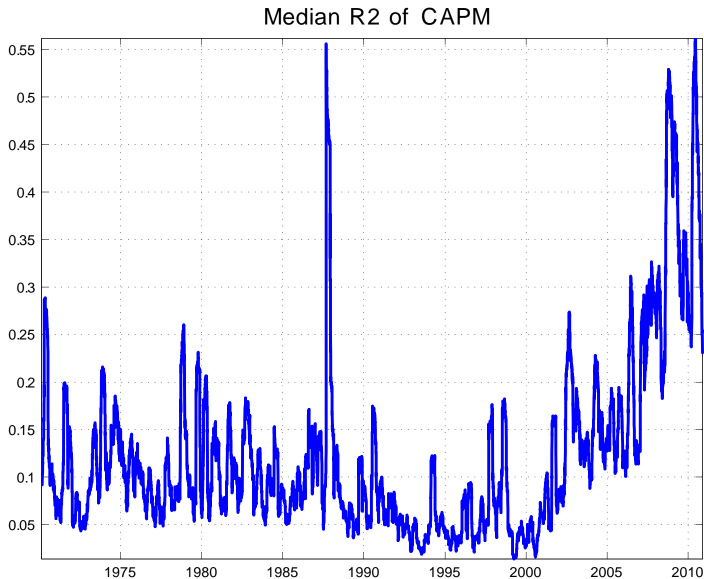
Median Rolling Std Dev of Firm Return



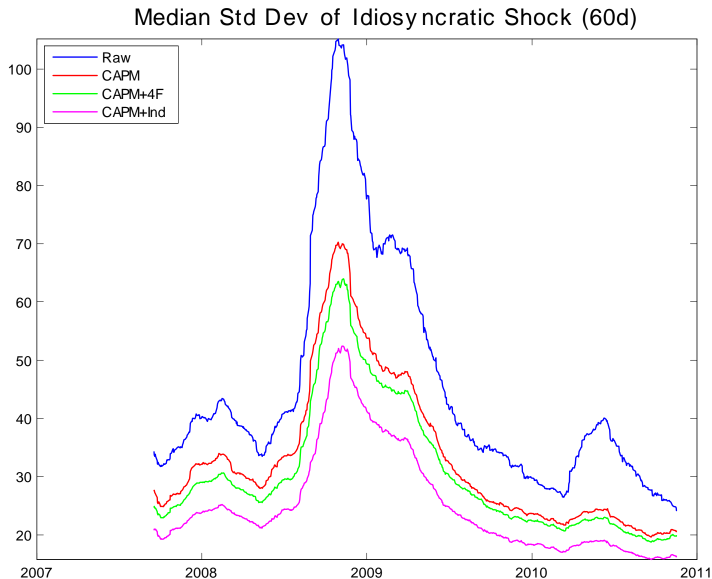
Median Correlation w/ Market Return



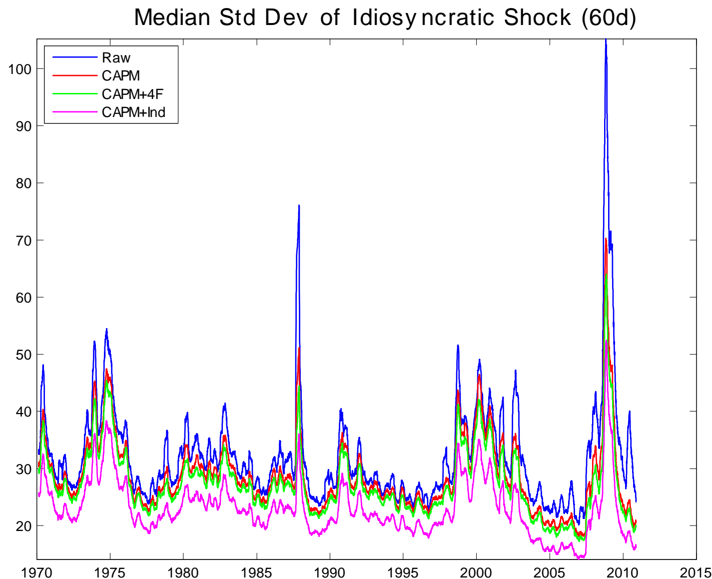
Median R2 of CAPM

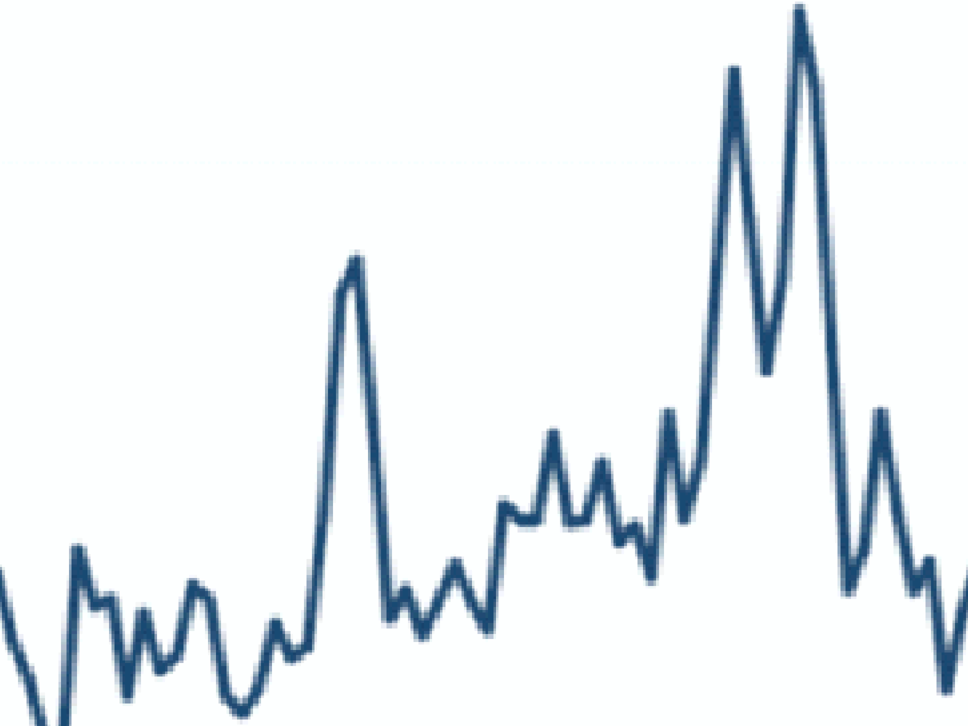


Idiosyncratic risk vs. common factors: 2008



Idiosyncratic risk vs. common factors: full sample





Can we do it without sticky prices?

- Time-varying markups? Evidence mixed.
- Intuitively, there seems to be a lot of sales in recessions...
- Conundrum:

$$\begin{aligned} F_2(K, zN^d(K, z, w)) &= w \\ N^d(K, z, w) &= N^s(\lambda, w) \end{aligned}$$

- To break it, need a different model of labor demand, e.g. forward looking b/c of adjustment costs, capacity utilization, etc.

Conclusion

- Very nice and "effective" paper!
- Does uncertainty affect the economy through precautionary savings?
  - or through the other mechanisms?
  - through micro or macro uncertainty?
- Alternative mechanisms to generate comovement??