

Discussion of: “Fear of secular stagnation and the natural interest rate”

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All opinions expressed are personal and do not necessarily reflect the views of the European Central Bank

Motivation

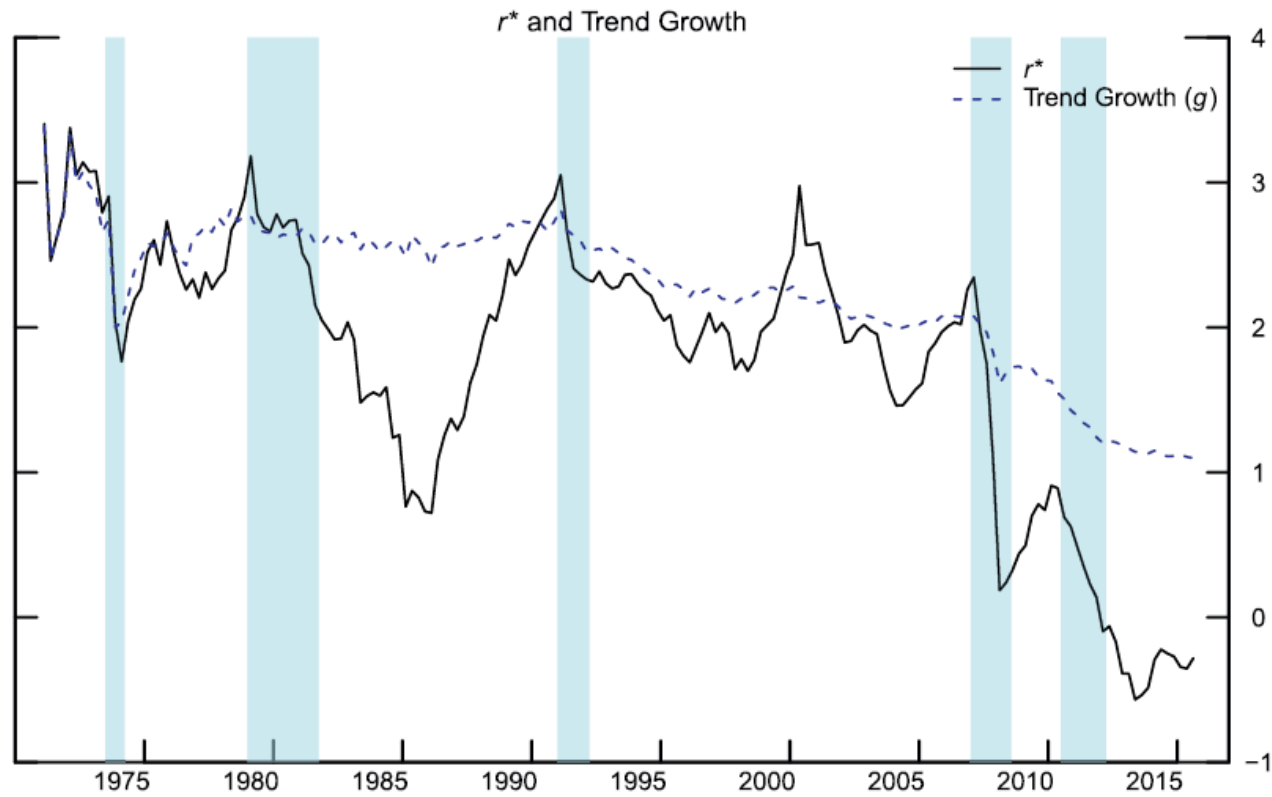


Fig. 3. Estimation results for the Euro Area.

Source: Holston, Laubach and Williams (2017)

This paper

- Productivity-related, demographic and pure risk factors tell an incomplete story. “Fears” may also play a role, hence:
 - construct a model with a well-defined notion of fear
 - find the approximate non-linear solution of the model
 - estimate the non-linear reduced form to make a quantitative assessment of the role of fear

Wow!

Comments/suggestions

1. Is there suggestive evidence that ambiguity (aversion) may be an explanation for the fall in the natural rate?
2. Does smooth ambiguity aversion have desirable properties?
3. Is the paper about the natural rate and does it matter?

1. Provide a compelling motivation

- Large uncertainty on estimates of r^* ; demographics and prod. growth are compelling explanations because measurable
- Proxies for ambiguity? Increasing risk premia! (more precaut. saving and lower real rates). But why?
 - Higher disaster risk (aversion) (Farhi and Gourio, 2019)?
 - Or higher ambiguity (aversion)? Does it make a difference?

2. A model of mild paranoia?

- TFP, $\exp a_t$, made of two unobservable components

$$a_t = l_t + f_t$$

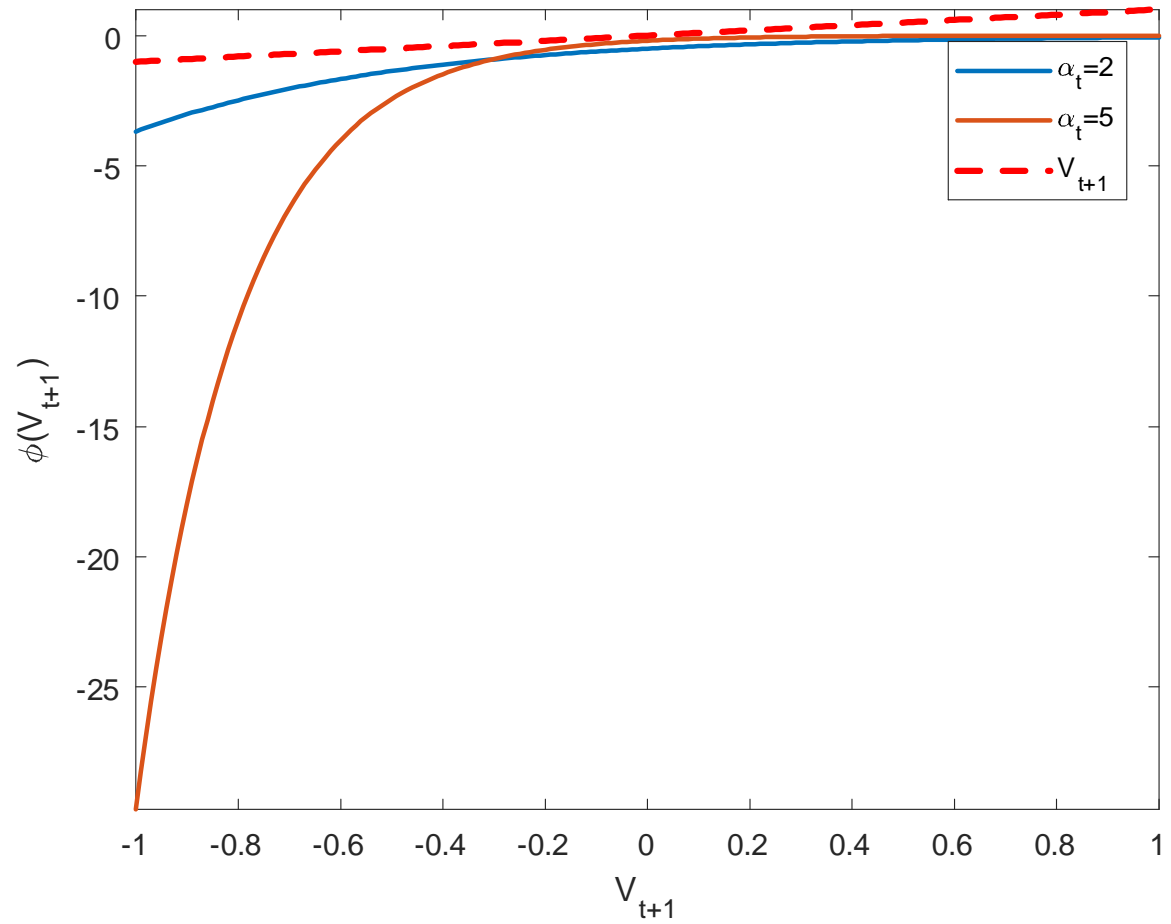
where l_t is a random walk with AR drift and f_t is AR

- Preferences

$$V(C_t) = u(c_t) + \beta \phi^{-1} \left[\int_{\Theta} \phi \left(\int_X V(C_{t+1}) d\pi_{\theta}(x_{t+1}) \right) d\mu(\theta_t) \right]$$

for a convex function ϕ

2. A model of mild paranoia?



2. A model of mild paranoia?

- Good times more likely to be temporary, bad times more likely to be permanent
- A shift from high to low TFP causes a smooth revision, perhaps consistent with the observed gradual decline in r^*
- ... also thanks to time varying ϕ_t (ambiguity aversion) and Q (“ambiguity”). Too many degrees of freedom?

3. A model of r^* ?

- Not at the moment. The model has no nominal rigidities, hence *actual*, not *natural*, real rate.
- Add nominal rigidities? Often wild estimates of the short-term natural rate
- Or focus on long-term real rates?

Conclusions

- Ambitious paper
- Provide more motivation for some key assumptions
- I am looking forward to seeing the empirical results