Discussion of *Measuring the Natural Rate of Interest: A Note on Transitory Shocks* by Kurt F. Lewis and Francisco Vazquez-Grande

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Highlights of the paper

- **What this paper is about**: measuring r^*.
- Usually done by assuming two main drivers:
  - (g) aggregate supply shock which directly affects potential output;
  - (z) aggregate demand shock
- **Contribution**: Using looser set of prior parameter restrictions in order to to let the data determine the statistical properties of r^*, g and z $\Rightarrow$
  - z turns out to be **stationary** in contrast with previous literature;
  - This implies: (i) a **more volatile** r^* and (ii) a **higher** r^* after the GFC wrt what is commonly estimated.

Comments

Disclaimer: I am a theorist so my comments/suggestion will be driven/biased by that.

1. How do your results square with increasing evidence of permanent effects of (some) demand shocks?

2. What if g and z are correlated?

3. Cross country evidence?

Comment I: Hysteresis and persistent demand shocks

In principle there is no clear theoretical justification why both drivers of r^*, g and z, need to be non-stationary processes. In fact, theory suggests that shocks to aggregate demand, such as fiscal or financial shocks, may weigh on aggregate demand only temporarily.

- This view is consistent with the tradition of treating growth and business cycle independently. However there is mounting evidence of **hysteresis**: the dependence of GDP levels on its history of shocks.
  [Cerra et al., 2020]

- Growing **theoretical literature** showing permanent effects of demand shocks. [Benigno and Fornaro, 2018]

- Evidence of permanent effects of monetary policy.
  [Òscar Jordá et al., 2020]

Comment II: Demand and Supply shocks loops

- Covid-19 shock generated interest in modelling feedbacks and loops between supply and demand shocks. [Fornaro and Wolf, 2020], [Guerrieri et al., 2020]

- Can you generalize the model to allow for this?

Comment III: Cross country evidence?

- Are your results and implications for r^* specific to the US or do they apply to other advanced economies?

- Adding cross country evidence would be interesting and also constitute a cross check given that the available evidence so far points towards a similar pattern for advanced economies. [Del Negro et al., 2019])

Conclusions

- Really enjoyed reading the paper.
- Extremely relevant for current policy discussion.

1. Compare and contrast your results against recent evidence of hysteresis.
2. Can you generalize your model to allow for demand-supply loops?
3. Cross country evidence.


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