Discussion of "A Simple Explanation of Countercyclical Uncertainty" by J. Bernstein, M. Plante, A. Richter & N. Throckmorton

Luminita Stevens
University of Maryland

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  - define uncertainty as conditional volatility of forecast errors, aggregated across many series ($\sim$Jurado, Ludvigson, Ng, '15)
  - distinguish financial from macro uncertainty
  - financial uncertainty seems to cause declines in production
  - macro uncertainty seems to be endogenous to level shocks and does not appear to cause declines in economic activity

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4. Quantitatively, the endogenous mechanism is strong enough to account for 43% of the variance in uncertainty and for the entire correlation between output and real uncertainty

5. A recursive identification method that puts uncertainty first erroneously identifies transmission from uncertainty to output

Discussion

The paper offers a valuable, concrete, thorough contribution

My discussion is geared toward where we can go from here

I will focus on

1. The mechanism
2. Implications
3. Types of uncertainty

Mechanism

- Consider a positive productivity shock in the DMP model.

  A higher unemployment state

  (a) dampens the increase in the mg cost of hiring $\Rightarrow$ increases responsiveness of vacancies (and hence emplt) to the shock

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  $\Rightarrow$ Employment is more sensitive to level shocks

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  $\Rightarrow$ Larger conditional standard deviation – uncertainty – of employment growth

$$\mathcal{S}_t \left[\frac{n_{t+1}}{n_t} \right] = \left(\frac{\xi}{\kappa^{1-\phi}} \right)^{\frac{1}{\phi}} \cdot \left(\frac{u^s_{t+1}}{n_t} \right) \cdot \mathcal{S}_t \left[\lambda^{\frac{1-\phi}{\phi}}_{n,t+1} \right]$$

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- One possibility: exploiting cross-sectional heterogeneity
  - For example, high-skill vs. low-skill workers or regional differences in unemployment rates
  - But tricky: structural differences likely affect both long-run unemployment and short-run sensitivity to shocks
- Another possibility: exploiting aggregate shocks
  - Consider plotting the response of employment to monetary policy shocks in different aggregate unemployment states

Comment 2 – Broader Implications

- Once you make the link from state-dependence to endogenous uncertainty, it becomes clear that any endogenous variable that has a state-dependent response to exogenous shocks will also have state-dependent uncertainty

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  - but response to tax cuts is stronger when unemployment is low Demirel (2021), Sims & Wolff (2018)
  - and so on...

Comment 2 – Broader Implications

⇒ Many drivers of endogenous uncertainty, with potentially conflicting effects

- conditional on different shocks
- potentially specific to certain series
- sensitive to various state variables

⇒ Value to systematizing these effects?

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- What is perhaps surprising is that the effect of level shocks on uncertainty is quantitatively big enough to generate fluctuations and correlations of macro uncertainty of the same order of magnitude as those seen in the data
- It may be useful to exclude at least $correl(Y, \mathcal{U})$ from the list of targets, to see what you get from an estimation that does not target it specifically
- Going further, since exogenous uncertainty does not drive economic activity in your model, you could remove the uncertainty shocks from the model and remove all uncertainty-related moments from the targets – again, to report what the "pure" model implies for uncertainty statistics

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- Without any such mechanisms, I am not sure the paper provides standalone support for the hypothesis that macro uncertainty fluctuations do not feed into real activity, or for the conclusion that there is little role for policy
- Support for that point rests, in my mind, on the evidence of Ludvigson et al. (2021)

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- Consider Bianchi, Ludvigson, Ma (2021):

  - use machine learning in data rich environment to construct a machine-efficient forecast ($\sim$ your forecasts)

  - then measure deviations of a variety of subjective forecasts from the machine-efficient forecast

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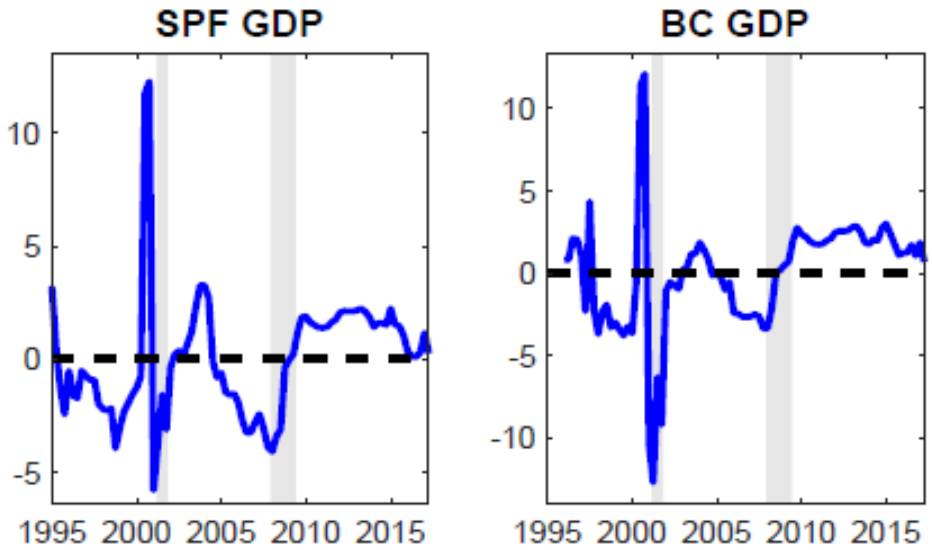
- Consider the estimated common component of biases for SPF and Blue Chip GDP forecasts relative to the machine forecast:



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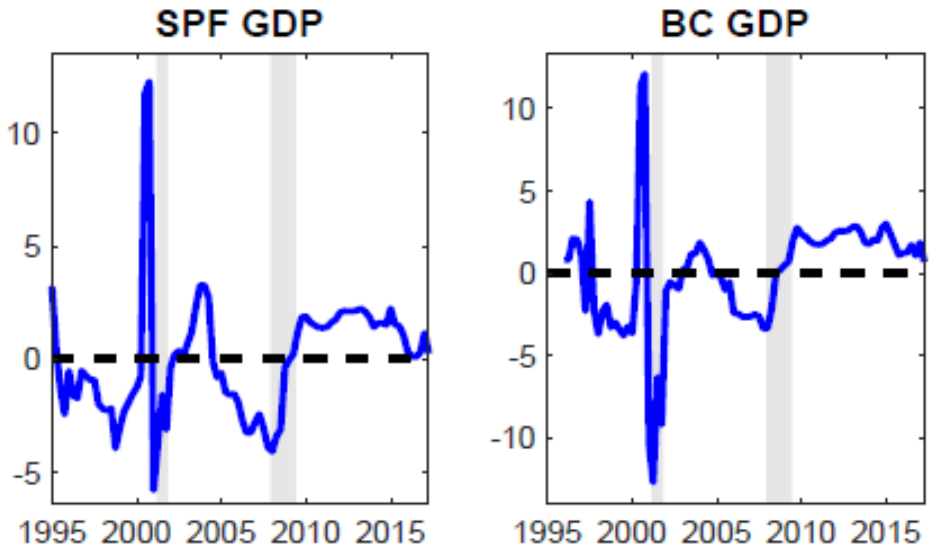

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  - biases are volatile and persistent

$\Rightarrow$ Subjective uncertainty may be more harmful for real activity than a constructed measure of objective uncertainty

Conclusion

- A very nice paper, both because of the clarity of its analysis and contribution, and also because of the avenues for further research that it opens.