

Discussion of “Monetary Policy and Household Net Worth” by Martín Harding and Mathias Klein

Luca Guerrieri
Federal Reserve Board

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The research question

- How do financial conditions affect monetary policy?
- The authors investigate this question through the lens of a standard monetary macro model augmented with two groups of agents that borrow from and lend to each other, subject to occasionally binding collateral constraints on housing wealth.

What the authors do

- In the model, there are variable effects of monetary policy shocks, depending on whether collateral constraints are binding or slack.
- They identify household wealth as the key variable that governs the transition from non-binding to binding-collateral constraints, or vice versa.
- Using local projections on U.S. data, they show that depending on whether household wealth is high or low, monetary policy shocks have different aggregate effects.
- In line with the model predictions, they find evidence that monetary policy shocks have greater effects on GDP when household wealth is low (and collateral constraints are more likely to bind).

Some comments

- The authors use the model from Guerrieri and Iacoviello (2017) re-estimated on a longer sample.
- They increment the work with a novel exercise to delineate some key predictions of the model and test them on U.S. data.
- The exposition of the work is nicely polished, if you have not already read the paper, you will find it a rewarding read!
- The choice of model is (obviously) inspired, so the rest of my discussion offers some thoughts on matching the model with the additional empirical work.

Endogeneity issues

- The authors use the OccBin toolkit that approximates the model solution as:

$$X_t = P(X_{t-1}, \epsilon_t)X_{t-1} + R(X_{t-1}, \epsilon_t) + Q(X_{t-1}, \epsilon_t)\epsilon_t.$$

- This is almost a VAR with time varying parameters, with a big difference:
- The variation in the parameters is not exogenous, it depends on the realization of the shock process that governs ϵ_t .
- Also similar to a local projection, but not quite consistent with a local projection, because of the endogeneity issue.

Misspecification Error

- The authors have all the ingredients to check whether the misspecification error of the local projection they use is quantitatively important:
- They can run a Monte Carlo experiment using data from the model.

Probit

- The authors use a probit exercise to identify which variables are most important in governing whether the collateral constraint binds or not.
- Not really needed.
- After all, the authors have to compute:

$$X_t = P(X_{t-1}, \epsilon_t)X_{t-1} + R(X_{t-1}, \epsilon_t) + Q(X_{t-1}, \epsilon_t)\epsilon_t.$$

- Why not report importance based on the coefficients on the Lagrange multiplier for the collateral constraint from the decision rule?

Baseline local projections

- Rely on timing restrictions to identify monetary policy shocks.
- The DSGE model that motivates this further analysis does not have analogous restrictions.
- How do the identified shocks compare to the shocks retrieved from the DSGE model?
- Why not use the monetary policy shocks estimated from the model?

An alternative fix

- There is another easy fix: sensitivity analysis uses monetary policy shocks from the narrative approach of Romer and Romer (2004).
- Drop the baseline analysis and replace it with the results relegated to the sensitivity section.

Other possible changes

- The authors want to validate estimates based on aggregate data with alternative estimates also based on aggregate data.
- Why not attempt to use regional data?
- Differences across regional housing markets could elucidate the nexus between household wealth and the reaction to monetary policy shocks.
- This alternative approach would harness the greater variation at the regional level to refine the estimates based on aggregate data.

Thank you

- I am grateful to the organizers for inviting my discussion of this thoughtful paper.
- I am also grateful to the authors for taking seriously the work that Matteo and I developed, for keeping it alive, and extending it in interesting directions.