Discussion of "Optimal Monetary Policy Rules and House Prices: The Role of Financial Frictions

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[1] The views expressed herein are those of the authors and do not necessarily reflect the views of the Federal Reserve Bank of San Francisco or the Federal Reserve System.

Should monetary policy rule respond to house price fluctuations?

- General view: "No"
  - Theoretically inappropriate (Aoki, 2001; Woodford, 2003)
  - Practically infeasible (Bernanke-Gertler, 1999)

- This paper: "It depends"
  1. Ad hoc loss function: shouldn't stabilize house prices
  2. Social welfare maximizing: should respond to house prices, but optimal response either negative or close to zero
  3. Slightly positive policy response if house prices are sticky or financial frictions larger
  4. If policymaker uncertain about magnitude of financial frictions, then robust policy should assume large frictions

- Important and timely policy issue: Should monetary policy stabilize house prices?

- Coherent multi-sector DSGE model with credit constraints

- Some issues remain to be addressed . . .

Comment 1: Why should monetary policy react to housing prices?

- Standard one-sector NK model: price stability optimal (Woodford, 2003)

- Multiple sources of nominal rigidities: policy should target sectors with sticky prices (Aoki, 2001; Erceg, Levin, Henderson, 2000; Benigno-Woodford, 2003; Huang-Liu, 2005)

- House prices are flexible and their fluctuations reflect efficiency responses to underlying shocks → policy should not stabilize house prices

- Absent financial frictions, small weight on housing rental prices optimal if rents are sticky (Jeske-Liu, 2013)

- With credit constraints, house price fluctuations could be inefficient, leaving potential room for policy intervention (this paper)

Comment 2: Do credit constraints introduce policy tradeoff?

- Phillips curve in simple NK model:

$$\pi_t = \beta \mathrm{E}_t \pi_{t+1} + \kappa \tilde{y}_t + \mu_t$$

- "Divine coincidence:" $\pi_t = 0 \Rightarrow \tilde{y}_t = 0$ (absent markup shock)

- Does divine coincidence break down with credit constraints?

    - Probably not. Simulations of optimal policy under quadratic loss function suggests no role for stabilizing house prices

    - But if policy objective is social welfare, the paper reports that optimal policy rule should respond to house prices. Why?

Comment 3: Welfare benchmark

- Welfare loss measured relative to steady-state welfare in paper: maybe inappropriate because SS is inefficient

    - Credit constraints generate inefficient credit booms and busts because of pecuniary externality (Lorenzoni, 2008)

- Social planner needs to respect credit constraints, but can undo pecuniary externality

- Welfare benchmark should be second-best outcome (e.g., Ramsey policy)

    - Macro-prudential policy (Pigouvian tax on borrowing) helps internalize credit externality (Jeanne-Korinek, 2010)

    - Absent state-contingent macro-prudential policy, monetary policy may play a role (Liu-Spiegel, 2013)

1. Credit constraints:
   - Credit constraints for households $\rightarrow$ wealth effect of house price on consumption $\rightarrow$ hard to get comovement between house prices and investment (Iacoviello-Neri, 2010)
   - Credit constraints for investors/firms needed to fit data (Liu, Wang, and Zha, 2013)

2. Shocks:
   - In estimated DSGE models, house (land) prices mostly driven by housing demand shocks (LWZ, 2013; IN, 2010)
   - Housing Euler equation (with $U(C, H) = C_t + \varphi_t H_t$)

   $$q_t = \beta \mathrm{E}_t q_{t+1} + \varphi_t$$

   - For other shocks such as TFP that don't drive house prices, issue of stabilizing house prices relatively moot

Comment 5: Expositional issues

- Model is very complicated. Can you explain intuition in a greatly simplified version?

- In baseline model, optimal policy lowers interest rate when house price rises.

  - Wouldn't such policy exacerbate inefficient credit booms and busts?

- Paper interprets results as supporting "systematic [monetary policy] reaction to house price variations"

  - But optimal rule assigns 98% of weights to non-housing price inflation

- Other issues with the model:
  - In what sense is the DSGE model a model of the euro area?

  - Are house prices sticky?

Conclusion

- Overall, very nice paper, addressing important policy question

- To do list:

    1. Provide more details about how credit frictions introduce tradeoff for monetary policy: use simple model to explain intuition before going to full-blown calibrated model

    2. Use appropriate welfare benchmark (such as Ramsey policy)

    3. Explain more about contributions relative to recent literature on credit frictions and role of policy (e.g., Is monetary policy or macro-prudential policy more appropriate to respond to house prices?)