

Financial intermediation and the macroeconomic effects of liquidity shocks

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- The big question addressed in this paper:

Macroeconomic effects of liquidity shocks.
- Liquidity shocks in a CIA model.

- ∞ horizon model with HH's, banks, firms and a central bank.
- Representative household
 - Supply labor to the firm and banking sector.
 - Hold money: Consumption subject to CIA.
 - Accumulate capital (convex AC).
 - Complex habit persistence in C and L as in Jaccard (2010).

- Representative bank
 - Uses L and K to create banking services (intermediate good) and the general good to create new money (?).
 - Supply money to HH's and firms.
 - Liquidity shocks: $\rho_t \frac{m_{T_t-1}}{1+\pi_t}$.
 - What are these shocks?
 - In Lucas (1972) these are monetary policy shocks.
 - Clarify the technology to create new money.
 - $\gamma m_{T_t} - \rho_t \frac{m_{T_t-1}}{1+\pi_t}$ are costs of creating new money.
 - Costs paid after the shock hits?
 - What is γ (shows up elsewhere as well)?

- Representative firm
 - Hires financial services and labor to produce output.
 - CIA similar to Jermann, Quadrini (2012):
 - Firm needs to pay inputs in advance.
 - JQ's financial shocks are shocks to (the tightness of) this constraint.
 - They recover the shock process from the data in a Solow decomposition-like procedure.
- Central bank
 - Taylor rule reacting to inflation.
 - Questions:
 - Why does CB not control money?
 - Is Friedman rule optimal?

Overview

- Calibrate a version of the model with liquidity shocks only (to match σ_I , equity premium and risk free rate).
 - Model with habit persistence.
 - Model w/o habit persistence (what exactly is the procedure?).
- Estimate the full model, focus on variance decomposition for 1995 - 2012.

- Calibration
 - Liquidity shocks generate business cycles, need habit persistence.
 - Question: No role for the TFP shocks?
 - Detailed discussion of the mechanism.
- Estimation
 - Liquidity shocks dominant for all variables but wages.

- Factor shares
 - No capital used in final good production.
 - Overall labor share (very) high: 83.5%.
 - K in final good production?
 - Use sectoral data to recover factor shares.
 - Could recover sectoral TFP shocks.
- Report the data.
 - High equity premium, high σ_q for quarterly frequency.
 - Labor 20% more volatile than output.

- Shocks
 - What are these shocks?
 - Are they big, small?
 - What does monetary policy have to do about them?
 - Jermann-Quadrini, Nezafat-Slavik: recover the process for financial shocks from observables so that data \sim model.
 - Could you do that too?
- Then could plug in TFP and MP processes.
Would facilitate comparison with estimation results.
- Model implied inflation 12x higher than in the data!

Estimation Questions and Comments

- What about other time periods?
- Why not report BC statistics?
- Figure 6: Report observables as well! Inflation?
- Report the behavior of variables not used as observables to check the performance of your model.

Summary

- Very interesting research topic and paper.
- Looking forward to more.
- What are financial shocks? Role for policy?
- Tighten the paper: What's the punchline?