The Macroeconomic Effects of Macroprudential Policy: Evidence from a Narrative Approach

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> Discussion David Papell

Macroeconomic Effects of Central Bank Policy

- Monetary Policy Shocks
 - Short-Term Interest Rate (IR)
- Macroprudential Shocks
 - Legal Reserve Requirements (RR)
- Three Major Contributions to the Literature
 - Construct Improved Measure of Effective Reserve Requirements
 - Narrative Methods to Construct RR Shocks
 - Identification of Exogenous RR and IR Shocks
- Examine Macroeconomic Effects of RR and IR Shocks

Traditional Identification Strategies

- Structural Vector Autoregressions (SVAR)
- Local Projections
- Variables
 - Real GDP Growth Rate
 - Inflation
 - Change in Effective Legal Reserve Requirement (∆ECRR)
 - Change in Central Bank Interest Rate (ΔIR)
- Results with Both Methods
 - Negative Effect of Higher IR on Economic Activity (Expected)
 - No Negative Effect of Higher RR on Economic Activity (Puzzling)
- Issues with Both Methods

Narrative Method for Reserve Requirement Shock

- Reserve Requirement Shock
- Based on Romer and Romer (2010)
 - IMF reports and Central Bank Documents
 - Changes in Reserve Requirements
 - Endogenous Motivated by Current or Projected Fluctuations in Output
 - Exogenous Triggered by Other Reasons
 - Use Exogenous Changes for Estimation

New Measure of Central Bank Interest Rate Shock

- Interest Rate Shock
- Based on Romer and Romer (2004)
 - Regress Δ IR on:
 - Lagged Interest Rates
 - Lagged and Forecasted Inflation
 - Lagged and Forecasted GDP Growth
 - Residuals are the Interest Rate Shock

Identification with Exogenous Shocks

- Local Projection Method
- Same as with Traditional Identification Except
 - Exogenous Macroprudential and Monetary Shocks
- Macroprudential Shocks
 - Negative Effect of Higher RR on Economic Activity
- Monetary Shocks
 - Negative Effect of Higher IR on Economic Activity
- More Convincing than Traditional Methods
- No Results with Structural VARs
 - Why?

Identification of RR Shock with Narrative Methods

- Most Important Result of the Paper
 - Identification Method Matters for the RR Shock
 - Identification Method Does Not Matter for the IR Shock
- □ The Narrative RR Shock Cannot be the True Unobserved Shock
 - Classification into Exogenous and Endogenous Cannot be Correct
 - Model is Misspecified
 - Problem with all Applications of the Narrative Method

Identification with External Instruments

- RR Shock is a Good Candidate for an Instrument
 - Plausibly Correlated with the Unobserved Shock
 - Plausibly Uncorrelated with the Other Shocks
- □ Use Narrative RR Shock as an Instrument for the True Shock
- Structural VAR
 - Method of External Instruments
 - Ramey (Handbook of Macroeconomics, 2016)
- Local Projections Instrumental Variables
 - Stock and Watson (Economic Journal, 2018)
- Possible Issues with Weak Instruments
 - Olea, Stock, and Watson (Journal of Econometrics, Forthcoming)

Conclusions

- Very Interesting Paper
- Several Important Contributions
 - Improved Reserve Requirements Series
 - Narrative Method for Identifying RR Shocks
 - Solves "Puzzle" with Traditional Identification
- Can be Improved by Better Identification of the Shocks