

Quantifying Financial Stability Trade-offs for Monetary Policy

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Summary of the paper

Aims:

- Introduction of empirical framework based on quantile techniques to examine interaction between monetary policy and financial stability.
- Discussion of trade-offs faced by monetary authority (trade-offs involving financial stability) and risk
 management approach to monetary policy conduct.

Methods:

- · QVAR with real economy, monetary policy and financial stability block estimated for the euro area.
- Quantile IRFs, counterfactual scenarios and various loss functions for monetary authority.

Results:

- QIRFs: left tail of conditional GDP growth distribution sensitive to systemic stress, rise in systemic vulnerabilities increases the right tail of systemic stress conditional distribution (in medium term).
- Scenario analysis and risk management: leaning against the wind would work during 2004-2010, gradualism has been appropriate approach for 2022+, risk management could help.



Contribution

- Part of Macro-at-Risk literature (Growth-at-Risk, Inflation-at-Risk, Capital Flows-at-Risk,...)
- The upshot of the literature: we live in the world of asymmetric predictive distributions (of output growth, inflation,...) => there is a scope for trade-offs, risk management,...
- So, the next step is to discuss implications of asymmetric predictive distributions for policymakers.
- This paper represents one of the first attempts in this direction.



Comment 1: Motivation vs. model specification

Motivation of the paper:

- The role of interest rate policy before the GFC (lean against the wind).
- (Unintended) consequences of very loose MP (acting for very long time) after the GFC.
- Recent MP tightening and related financial stability concerns (gradualism vs. front-loading).

Two events concern unconventional monetary policies (quantitative easing and tightening).

- > The QE and QT represent an important part of interaction between MP and FinStab.
- ➤ Not captured by the short-term interest rate.

What about adding the spread between long and short rates (see e.g. Baumeister and Benati, 2013)?

(BTW: Why the interest rate enters the specification in differences?)



Comment 2: Structural identification I

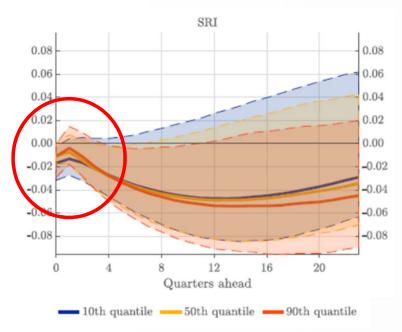
Recursive identification is employed:

- · Note that such identification is necessary assumption in the QVAR.
- But remember standard VARs used to examine MP whenever the exchange rate or some financial variable is added then the recursive assumption is too restrictive (and more fancy identifications like sign restrictions are employed).
- What about SRI (financial cycle) and CISS (financial stress)? SRI can be interpreted as tail of distribution (ex ante potential of financial crisis/tail event) and CISS as realization from that distribution (observed stress).
- Ordering CISS ahead of SRI implies that change in the tail of distribution does not affect realization from such distribution.



Comment 2: Structural identification II

Ordering empirically matters: QIRF of CISS shock on SRI provides the only statistically significant contemporaneous effect. Could be just implication of recursive assumption.



I suggest presenting QIRFs for specification with SRI ordered before CISS. So far, there is only robustness check wrt ordering of the whole 'financial stability block'.



Comment 3: Lucas critique (LC)

SVAR:

- Equations are linear approximations to the behavior of the private sector and monetary authority.
- What if there is nonlinearity present? (e.g. private sector expectations at the ELB)
- Sometimes LC seems not to be a big issue e.g. "modest policy intervention" (Leeper and Zha, 2003), Primiceri (2005).
- Testing homogeneity in slope coefficients over various quantiles in QVAR suggests the existence of nonlinearities, regime changes. QIRFs suggest economically significant departures from linearity.
- ⇒ SVAR estimated on the same data is subject to LC.

What about QVAR? If the model for conditional means (SVAR) is subject to LC, what about models for different quantiles? This is an open question (at least for me). Do arguments against LC employed for SVAR apply for QVAR?



Three final notes (and conclusion)

- 1) Dummies for COVID make sense in standard VARs if interest lies in (conditional) mean relations. However, if we are interested in tails (crises, panics,...), COVID episode is exactly what we want to model. Is it OK to "filter out" the episode by dummies? Note that QRs were originally used to deal with outliers they should handle COVID obs.
- 2) The number of lags in QVAR is chosen based on standard information criteria. I think quantile versions of the criteria should be employed if interested in data fit of a quantile (i.e. different specifications are possible for different quantiles).
- **3)** MacroPru is mentioned only briefly, but is an inherent part of discussed scenarios. I understand that the discussion on MP vs. MacroPru is not subject of the paper, but scenario with existing/more active MacroPru (lower SRI similar to imposed higher interest rate before 2008) could change the conclusions.

Conclusion: The paper represents an important (and interesting) contribution to the analysis of monetary and financial stability policies in uncertain times of changing economic landscape.