Discussion of Quint & Rabanal: Should Unconventional Monetary Policies Become Conventional?

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Disclaimer: The views expressed are mine and do not necessarily reflect those of the Federal Reserve Bank of New York or the Federal Reserve System

Nice paper!

- Technically ambitious *GMM estimation of non-linear DSGE model* – and competently executed
- Interesting and relevant question

A timely question

Should central banks still make use of unconventional monetary policy once interest rates are off the ZLB?

From the November 2016 FOMC Minutes:

"Committee participants continued their discussion of potential long-run frameworks for monetary policy implementation ... "

"The staff discussed the possibility that changes in the size and composition of the Federal Reserve's balance sheet ... could be used to help achieve policymakers' macroeconomic goals when short-term interest rates had declined to their effective lower bound-and conceivably when short-term interest rates were above that bound. "

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"Most participants did not indicate support for using the balance sheet as an active tool in other situations [outside the ZLB] ... although a few expressed support for undertaking further study of this possibility."

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This paper's answer

Should central banks still make use of unconventional monetary policy once interest rates are off the ZLB?

• Yes ... with almost all gains coming from "financial shocks"

Gains from optimal unconventional monetary policy (consumption equivalent, in %)

All shocks	1.41	
Demand	.13	
Supply	0	
Financial	1.33	

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Under optimal conventional monetary policy			
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• **But** ... only if the FOMC does a poor job with conventional policy, or there are limits to it (e.g., ZLB)

Some questions

• How much would the central bank have to buy?

- Most of the costs are proportional to the **size** of the balance sheet, e.g.
 - Variability of remittances to the Treasury/political economy
 - Actual fiscal costs: reserves are a costly way of financing federal debt (3 month Tbill rate < IOER)
 - ...
- According to Fig. 2, balance sheet response is **huge**: almost 100% of GDP for one st. dev. financial shock
- Show how large the balance sheet has to be (and for how long) under the optimal unconventional policy rule using simulations
- Show gains from sub-optimal rules that involve less balance sheet action
- Provide an average *term premium reduction for 100bn* of balance sheet

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Some questions

- Under optimal conventional policy there is no role for unconventional policy ... but there is plenty of evidence that the FOMC did not follow an "optimal" monetary policy in the past (Justiniano, Primiceri, and Tambalotti, 2013, find that most output fluctuations have been "inefficient") → potential role for unconventional policy
- Yet, the interest feedback rule assumed (and estimated) in this paper is arguably not a very good one: it responds only to output growth, not to level (little history dependence); weak response to inflation; not much smoothing
- What are the gains from LSAP/QE under a more "conventional" interest feedback rule?
 - e.g., see the "estimated rule" in Kiley and Roberts, 2017, or a first difference rule

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 - e.g., see the "estimated rule" in Kiley and Roberts, 2017, or a first difference rule
- What are the gains considering periodical ZLB spells (low *r** world)
 - Alternative to higher inflation target or history-dependent rules (again, see Kiley and Roberts, 2017)

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Do the financial shocks bite?

- Unconventional monetary policy in this model works only for financial shocks.
- How important are these shocks to the macroeconomy?



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Very little persistence. Compare with



 Compare also with Girlchrist and Zakrajšeck, 2012, responses to excess bond premium shocks





• or to the responses to spread shocks in the FRBNY DSGE model

Financial shocks are not Gaussian

 Absolute value of spread shocks (in st. dev. units) in the FRBNY DSGE model



Source: Cúrdia, Del Negro, Greenwald

- It may matter for welfare evaluation
- Should not be too hard to incorporate in the GMM estimation (use third/fourth moments of spreads) maybe for another paper

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Do the financial frictions bite?

- Where is the BGG financial accelerator?
- Financial frictions seem to *dampen*, rather than amplify, responses to technology and other shocks



How do the financial frictions work?

• Constraint on maturity transformation

$$\mathscr{V}_t \geq \lambda_t (len_t + \Delta_t b_t)$$

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• Constraint on maturity transformation

$$\mathscr{V}_t \geq \lambda_t \left(len_t + \Delta_t b_t \right)$$

- For exogenous reasons, maturity transformation is costlier for private lending government debt gets a "discount" Δ_t
- Corporate spreads (relative to Treasuries) are *proportional* to the Treasury term spread, except for exogenous variations in Δ_t

$$(R_t^L - R_t^G) = (1 - \Delta_t)(R_t^G - R_t)$$

• Unconventional policy does not affect corporate spreads

Implications for the supply of safe/liquid assets

• Increases in the supply of safe/liquid assets (Treasuries) *increase corporate spreads* in this model



- Contrary to the evidence in Krishamurthy and Vissing-Jorgensen, 2012
- ... or to the effects in models such as Kyiotaki and Moore, 2012, or Caballero and Fahri, 2016, where more safe/liquid assets "grease the wheels" of the financial system

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Implications for unconventional policy

- The paper models why the kind of uncoconventional policy focused on maturity transformation (Operation Twist/MEP) works, but perhaps not really why the liquidity facilities (e.g., PDCF, CPCF, ...) or MBS purchases work
- Does the exogeneity of Δ_t matter for evaluating the impact of the second set of policies (swapping illiquid/unsafe privately issued securities for safe/liquid ones)?
- Probably unconventional policy interventions arguably work by changing the Δ_t (\rightarrow corporate spreads), at least in, say, Kyiotaki and Moore's type of models
 - GE effects: investors will be less liquidity constrained next period and hence are willing to accept a lower spread this period

Conclusions

- Nice, ambitious paper with an important question
- Surprising that financial shocks/frictions do not have more bite
- Unconventional monetary policy in this paper works along the maturity transformation dimension – as opposed to the liquidity/safety dimension