DISCUSSION OF "THE INTERPLAY BETWEEN FINANCIAL CONDITIONS AND MONETARY POLICY SHOCKS," BY BASSETTO, BENZONI AND SERRAO

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OVERVIEW

- Big and important question: how do monetary policy conditions and financial conditions interact?
- ▶ "Sub-questions":
 - Does monetary policy respond systematically to credit conditions, in particular credit booms?
 - If so, is the response "adequate"? What role did the Fed's stance play in the run-up to the 2007-2009 crisis?
 - When monetary policy tightens exogenously, how do financial conditions respond?
 - Long literature on the credit channel of monetary policy
- ▶ Very nice paper that provides some simple and robust evidence, using recent innovations in measures of financial stress
 - ▶ Gilchrist and Zakrajšek (2012), NFCI from the Chicago Fed

RESULT 1: MONETARY POLICY RESPONDS TO FINANCIAL SHOCKS (WITH A LAG)









$$Y_t = \begin{pmatrix} log(RGDP_t) \\ log(BFI_t) \\ EBP_t \\ FFR_t \end{pmatrix}, \quad Y_t = A(L)Y_{t-1} + B\epsilon_t, \quad B \text{ lower triangular.}$$

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Result 2: Financial conditions worsen after a monetary tightening



- Fed Funds innovations lead to a increase in EBP about 8 quarters out
- Lags output and investment response (slightly different with extended VAR)

Result 3: MP "leans against the wind" of credit booms



- Without the systematic MP response (red line), financial shocks would lead to more sustained expansions in output and investment
- Toward the end of the 2004-2008 credit boom, the systematic response contributed to stabilizing output

- 1. How "systematic" is the response of monetary policy to financial shocks? Does it contribute substantially to FFR movements?
- 2. Is it robust to identification schemes?
- 3. How should we interpret the result are FC a part of the policy rule?
- 4. Other (non-VAR) evidence?

Comment 1: The FEV of variables wrt the FC shock



Extremely persistent contribution to FEV of FFR; point estimate is positive and large, but not significant.

Comment 1: Historical decomposition



"Systematic," but only since the mid-1990s?

Comment 2: Alternative identification scheme

- Cholesky identification: "agnostic" about the response of monetary policy
- ▶ More restrictive approach: document impulse reponses to shocks that are associated with
 - 1. a fall in the financial conditions index on impact
 - 2. an increase in the Federal Funds rate at any point in the next 2 years
- Sign-restricted VAR in a Bayesian framework Arias, Rubio-Ramirez and Waggoner (2014)
- More direct answer to the question: does monetary policy tighten after a credit boom?
- Leaves the response of output and investment (or anything else you would want to include in the VAR) unrestricted.

Comment 2: Sign-identified policy response



- Essentially **identical** impulse responses, except for the short-run response of monetary policy.
- Probably suggests could just have fit an AR model variable by variable, with innovations in EBP as an impulse variable.

Comment 3: Interpretation

What to make of the (lagged) response of FFR to FC innovations?

$$\hat{i}_t = r_t^n + \phi_\phi \pi_t + \phi_y \log\left(\frac{y_t}{y_t^n}\right) - \Phi(L)f_t$$

▶ H1: it's an artefact of the (lagged) response of output and inflation to FC innovations

- $\Phi(L) = 0$ simple Taylor rule
- "Passive" leaning against the wind
- At a very basic level, consistent with the timing of the responses
- ▶ H2: monetary policymakers respond to financial conditions independently from inflation & output
 - $\Phi(L) \neq 0$ augmented Taylor rule
 - "Pro-actively" leaning against the wind
 - Lag structure?

Curdia and Woodford (JMCB, 2010) could provide a framework to test H1 and H2.

Important to understand deviations from optimality (i.e. construct an estimated rule); could shed light on the mid-2000's experience.

Comment 4: other evidence

Broader question: historically (and setting aside 2007-2009), what role have financial conditions played in monetary policymakers' rate-setting decisions?

Can we answer this question with another tool than VARs?

- ▶ Very large litterature examining financial markets' reaction to FOMC decisions / statements, starting (at least) with Cochrane and Piazessi (2002) and Bernanke and Kuttner (2005)
- Typically uses high-frequency data; not clear whether it applies here (high-frequency measure of financial market stress?)
- Romer and Romer (2004) narrative approach potentially more promising
- Simple question: when there are large and persistent changes in financial conditions (as measured by e.g. the EBP), do FOMC minutes make more consistent mention of it?
- ▶ Parse FOMC minutes, as in Boukus and Rosenberg (2006)