

Discussion of "Testing Block Recursive Economic Theories  
by Looking for Structural Breaks" by John W. Keating

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## Context

- Block recursive representation of the economy: Quite widely employed assumption in the VAR literature popularized by Sims [1980]. Reasons: No strong imposition of any theoretical a-priori on the dynamics of the system. Drawback: Just-identified system, textbook would suggest that "no test on the 'recursivity' assumption is possible in such a framework ..."
- ... but John shows that it is possible if the sample is featured by variables affected by structural breaks!

## This paper's contribution

- N&S conditions for exploiting structural breaks to test the 'recursivity' assumption in economies where i) the number of the equations and variables is arbitrary and ii) the focus is on blocks of equations (vs. just single variables). In particular ...
- Th. 1: Block recursivity & breaks in one block  $\Rightarrow$  Certain empirical distributions are stable
- Th. 2: Certain empirical distributions are stable  $\Rightarrow$  The structure is block recursive
- Th. 3: Long run block recursiveness can be tested as well

## My reaction

- Block recursiveness is pervasive in economics ... wide applicability of these results! Moreover, John's results apply to models with time series, panel or cross sectional data.
- Focus of monetary policy: Quite appropriate, given the emphasis placed by the SVARs monetary policy literature on the study of the effects of a monetary policy shock. Also, long-run neutrality is rarely discussed, and even more rarely tested ... John's paper may really trigger a huge number of empirical contributions dealing with these issues!
- Just a couple of considerations ...

## 1) Taylor rules in a VAR-framework

Rudebusch vs. Sims (IER, 1998) on monetary policy analysis with SVAR ... disagreement on (almost) all but one key-point: It is difficult to measure a policy shock! Structural shock form SVAR almost orthogonal to policy shock from TRule ...

... Rudebusch's point: We should exploit all the knowledge we have accumulated since Taylor (1993)'s contribution: Go for TR in SVAR, i.e. impose restrictions on the ffr equation such that

$$\dot{i}_t = \alpha_\pi \pi_t + \alpha_y y_t + \varepsilon_t$$

In other words, restrictions on  $\gamma(L)$ . I wonder: Are John's theorem still applicable with such a restriction (and, in general, when restricted VARs are employed)?

## 2) Indeterminacy, Regime-Switching VARs

- Indeterminacy ... suppose the DGP is the standard NK AS-AD-Taylor rule model: CGG (1999), Woodford (2003) show that when the Taylor principle is not satisfied, multiple equilibria! But the econometrician estimates the VAR with just one of the N-different samples given the same vector of parameters  $\gamma$  ... should we care?
- Regime-Switching VARs: Is John's methodology still applicable?