

Discussion of "An Estimated DSGE Model for Sweden with a  
Monetary Regime Change" by Cùrdia and Finocchiaro

Discussant: Efrem Castelnuovo

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## The paper

Estimated DSGE model for Sweden under a regime change, i.e. from "target zone" to "free floating" (inflation targeting), to understand the impact of such change on

- i) Different monetary policy rules, i.e. exch. rate realignment under TZ, standard TRule under FF;
- ii) Drivers of the economy under the two regimes.

## Model and methodology

- "Manipulated" Kollman (2001,2002)'s model, main features: Physical capital, deviation from LOP, Calvo price/wage setting, habit formation, frictions in financial mkts, ...
- TZ modeled as a linear managed float (without an explicit band) a la Svensson (1994).
- 33 parameters, 11 structural shocks, 10 time series involved: Bayesian techniques for "feasible" estimation.

## Results

- 1980-1992: Focus on exchange rate stabilization vs. 1993-2003: Focus on price stabilization (from estimated distributions for TRules' coefficients).
- TZ: More exposure to foreign shocks vs. FF: Stronger reaction to domestic shocks.
- Monetary policy shocks important in the short run, lab supply/pref shocks important in the long run.
- Foreign shocks not important for the dynamics, but foreign sector plays a role in the propagation of shocks.

## My reaction

- Nice paper! Bayesian techniques applied to a modern NKOE model under TZ vs. FF to get a sense of how limiting is TZ for hitting domestic target, informative exercise indeed.
- Monetary policy rules misspecification, identification.

## Monetary policy under FF: Any role for the exchange rate?

- CGG (2001): Theoretical paper, not providing info on the empirical relevance of the nominal exchange rate in TRule vs. CGG (1998): Empirical, exchange rate sign. in TR for Germany, Japan, UK, France.
- Lubik and Schorfheide (2005): Empirical, Bank of Canada and BoE include the nominal exchange rate in their policy rules.
- Worth testing the null!

## Monetary policy under FF (I)

- $\Gamma_{y,TZ} = .54$  vs.  $\Gamma_{y,FF} = .12$  (means). Authors' interpretation: Riksbank under FF more concerned with inflation stability than with the real economy. Can we really back out *preferences* from  $\Gamma_y$ ?
- Svensson (2000)'s open economy output gap model. TZ: targeting on  $\sigma_{\Delta e}^2$  (Castelnuovo, 2005) vs. FF: SIT (CPI infl.)

$$\sigma_{\Delta e}^2 + .2\sigma_{\Delta i}^2, \quad i_t = .27\pi_t^{dom} + .22y_t + .85\varphi_t + i_t^* + \dots + .06i_{t-1}$$

$$\sigma_{\pi CPI}^2 + .2\sigma_{\Delta i}^2, \quad i_t = .50\pi_t^{dom} + .25y_t + .21\varphi_t + .50i_t^* + \dots + .42i_{t-1}$$

- Nominal exchange rate - "capturing"  $\varphi_t$  and  $i_t^*$  - might be important under FF.

## Monetary policy under FF: Point estimates (II)

- $\rho_{m,TZ} = .94$  vs.  $\rho_{m,FF} = .76$  (means). Authors' interpretation: More stability of the interest rate in the TZ for maintaining credibility.
- Svensson (2000)'s open economy output gap model, TZ: targeting on  $\sigma_{\Delta e}^2$  (Castelnuovo, 2005) vs. FF: FIT (CPI infl.)

$$\sigma_{\Delta e}^2 + .2\sigma_{\Delta i}^2, \quad i_t = .26\pi_t^{dom} + .22y_t + .85\varphi_t + i_t^* + \dots + .06i_{t-1}$$

$$\sigma_{\pi_{CPI}}^2 + .5\sigma_y^2 + .2\sigma_{\Delta i}^2, \quad i_t = .42\pi_t^{dom} + .65y_t + .23\varphi_t + .53i_t^* + \dots + .34i_{t-1}$$

- TZ calls for reaction to foreign interest rate, risk-premium fluctuations, ... *lower* interest rate smoothing degree!

## Identification issue

- 33 parameters in your model: How does the likelihood look like?
- Canova and Sala (2005): Serious identification issues in estimating much smaller scale models: (tight) priors may provide an illusory solution to identification problems.
- Do you have a sense on the "degree" of identification of the model?  
More diffuse priors, more diffuse posteriors?