

Comment on "Monetary policy and housing prices in an estimated DSGE (model) for the US and the euro area"  
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# General overview

- Analyze the role of housing and in particular, the collateral channel in macroeconomic fluctuations and (optimal) monetary policy in the open economy model featuring Euro area and the US.
- Framework is a fairly large two country DSGE model of which structural parameters are estimated using Bayesian Maximum Likelihood Methods.
- Toolkit is standard (does not mean it is easy...)
- The 2-country DSGE model is build on existing contributions from Iacoviello and Neri (2007) and Adjemian et. al (2008), as well as Notarpietro (2007), which in turn build on many other earlier contributions of NOEM.
  - Key new features: *Constraint and unconstrained households, collateralised hh debt + open economy*
- Novelty of the paper is to study *the international spillovers of housing related shocks* and to consider optimal monetary policy coordination in the open economy setting.
- Paper provides a comprehensive, systematic and detailed description of propagation mechanisms in the model.

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- 4 Housing related shocks generate a negative correlation between real housing prices and residential investment across countries.
- 5 Some degree of direct monetary policy reaction to house prices is welfare improving.

- General overview
- Main results
- Comments - The modelling strategy
- Comments - The results



# Comments - The modelling strategy I

- A very wise man (A. Einstein) once said that "*Make everything as simple as possible, but not simpler*".
- Authors have not quite followed this approach but included in the their model almost everything from the DSGE modellers "Wish List".
- This is not necessarily bad, but for the purpose of the paper, less would have been better
- Could concentrate just on the following issues
  - Propagation and international spillovers of shocks originating from the housing markets (H preference shock, H technology shock, LTV shock)
  - Optimal monetary policy coordination in the presence of housing markets and collateral channel

# Comments - The modelling strategy II

- NOEMs, like the one in the paper, typically do *not* generate strong international spillovers, so the authors decided to introduce correlated structural shocks.
- But international spillovers seem still rather small:

	Corr	Data	Model (baseline)	Aug. Taylor
Non-residential production	$Z, Z^*$	0.22	0.09	0.14
Residential production	$Z_D, Z_D^*$	-0.47	0.00	0.00
Real house prices	$T_{Dt}, T_{Dt}^*$	0.15	-0.03	-0.01

Table: Cross-correlations across countries - abstract from Table 5

- Moreover, across sector correlations turn out to be on small side.
- Inappropriate common trends of the shocks or Indications of model misspecification  $\Rightarrow$  No financial intermediation?

- *Claim:* Housing markets play an important role in macroeconomic fluctuations.
  - Weak identification of shares of borrowing constrained households
  - Low share of borrowers improve empirical fit  $\Rightarrow$  collateral effects are not important
  - However, Marginal Log likelihoods are sensitive to priors which makes model comparison less straightforward.
- *Claim:* Some degree of direct (coordinated) monetary policy reaction to house prices is welfare improving.
  - "By construction" in the specification where  $\omega > 0$  : Need to mute house price fluctuations due to collateral channel.
  - More interesting is the result that even if  $\omega = 0$ , it would still be optimal to put additional weight on house prices.
  - However, note that the model has difficulties to capture international spillovers related to housing market shocks. This may bias the welfare conclusions.
  - Moreover, monetary policy coordination in practical terms would be a difficult issue.