3.36pt

IT Spillovers in TFP

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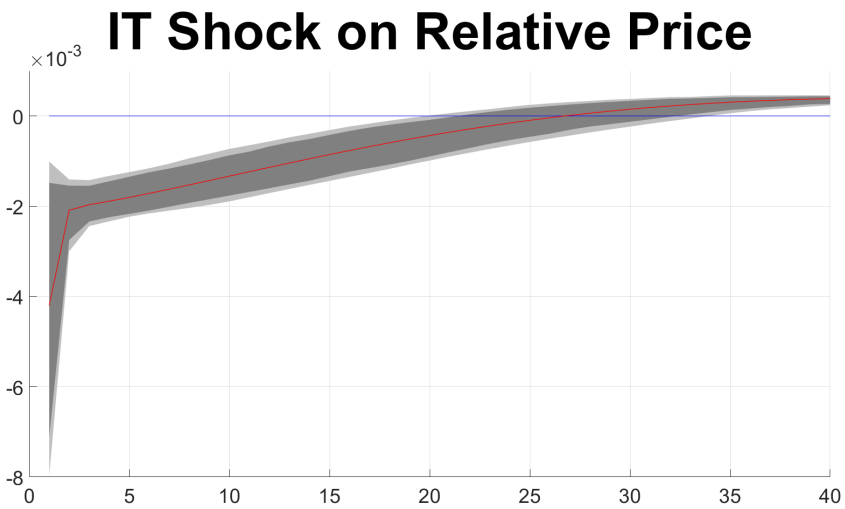
Topics of today's discussion

1. L'Huillier's structure-related comment: disentangling news shocks is just a robustness check
2. $\hookrightarrow$ taking up on that, a "just IT" identification in the VAR
3. the structural model: implementing a noise shock

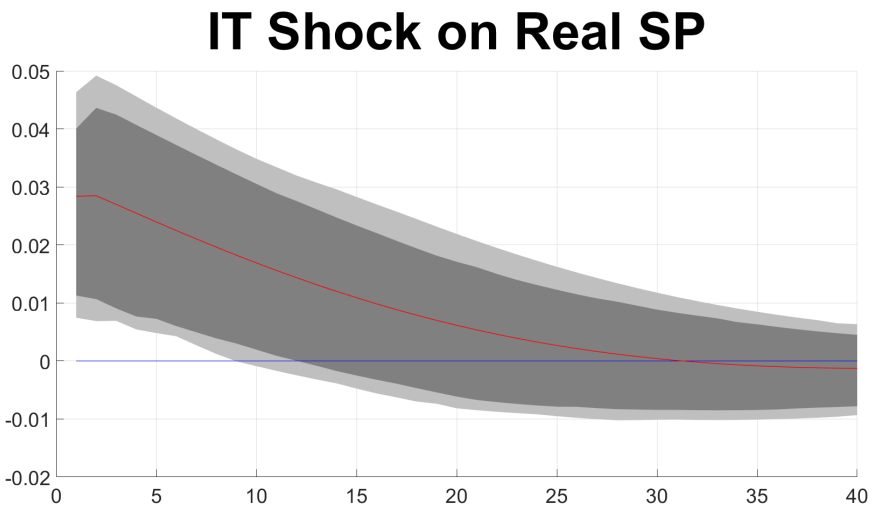
2) "Just IT" identification

A rotation of shocks that maximizes the impact effect on IT investment s.t. a 0 impact response on TFP.

VAR Responses



More VAR responses



$$y_{c,t} = N_t \quad \Gamma_{c,t} \quad k_{i,t}^{\gamma} \quad h_{1,t}^{1-a-b} k_{c,1,t}^{a} k_{i,1,t}^{b} \tag{1}$$

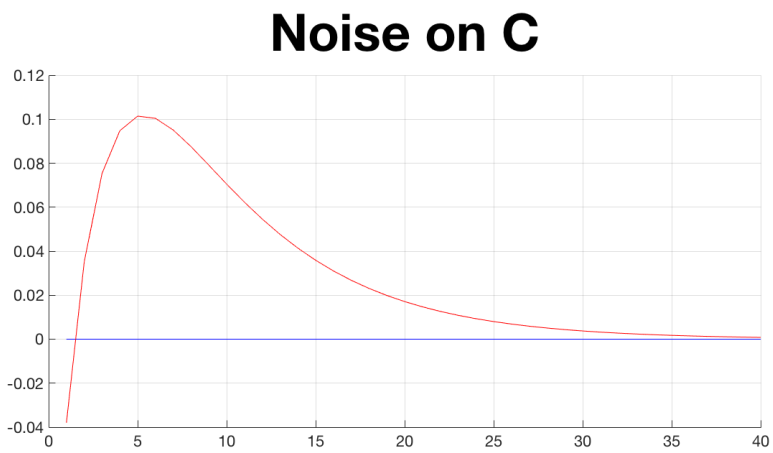
$$y_{i,t} = N_t \quad \Gamma_{i,t} \quad k_{i,t}^{\gamma} \quad h_{2,t}^{1-a-b} k_{c,2,t}^{a} k_{i,2,t}^{b} \tag{2}$$

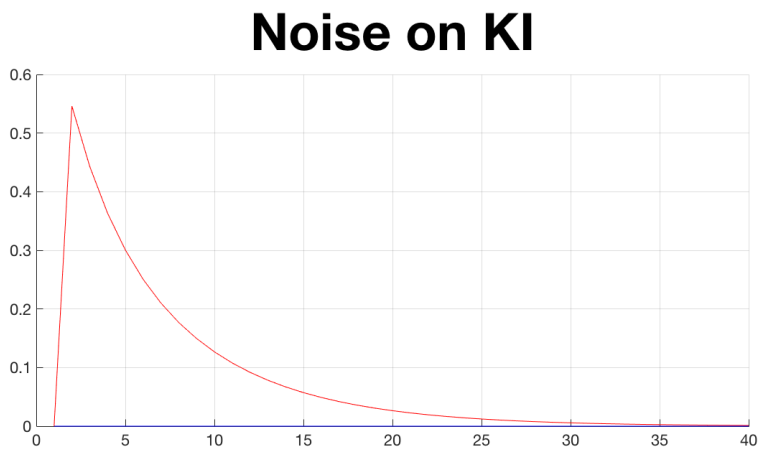
The uses of the outputs are

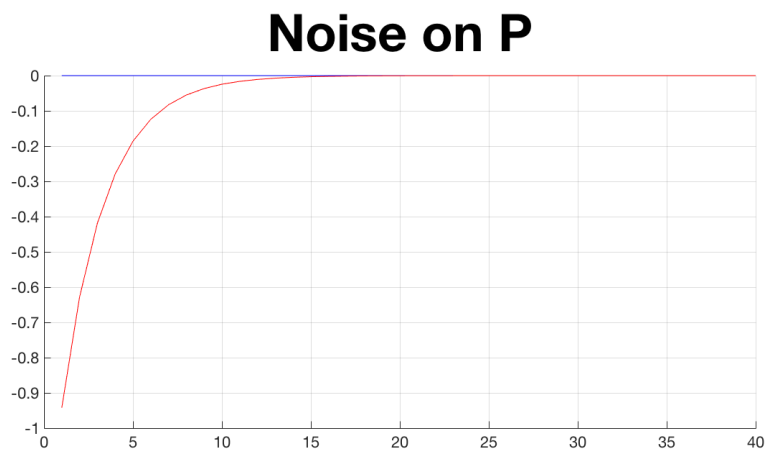
$$y_{c,t} = c_t + i_{c,t} \quad \text{and} \quad y_{i,t} = i_{i,t}$$

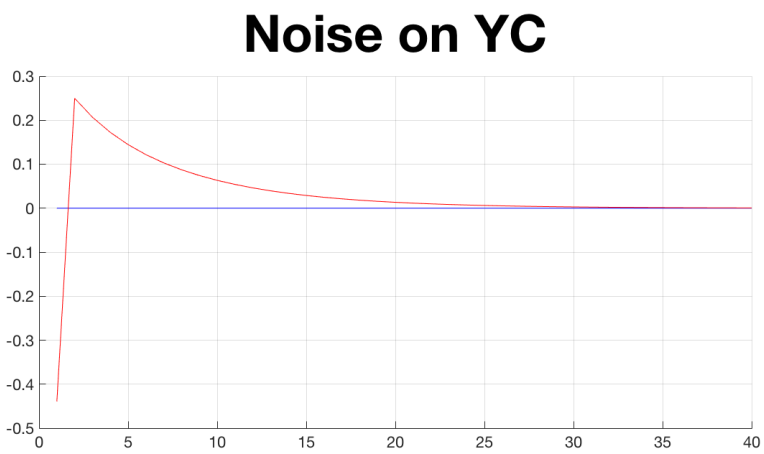
- Noise shock (contemporaneous) is η, $E_t \Gamma_{i,t} = \Gamma_{i,t} + \eta_t$

Model responses









Next steps

- Estimate the spillover parameter γ through IR-matching
- Robustness checks / improving the VAR / completing the VECM
- Your thoughts?