Discussion of "Oil Price Elasticities and Oil Price Fluctuations" by Caldara, Cavallo, and Iacoviello

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What does this paper do?

- Identification of structural oil shocks
  - focus on short-run oil price elasticities of supply and demand
  - disentangle global demand shocks
- Examination on sources and impacts of oil price fluctuations
  - oil supply shocks are the main driver of price changes
  - supply shocks decrease IP in AE but raises IP in EE

What is driving the results compared to Kilian (2009)?

1. Sample periods (1973 – 2007 vs. 1985 – 2015)
2. Economic activity index
3. Identification scheme

What is driving the results?

Kilian (2009): 1973 – 2007
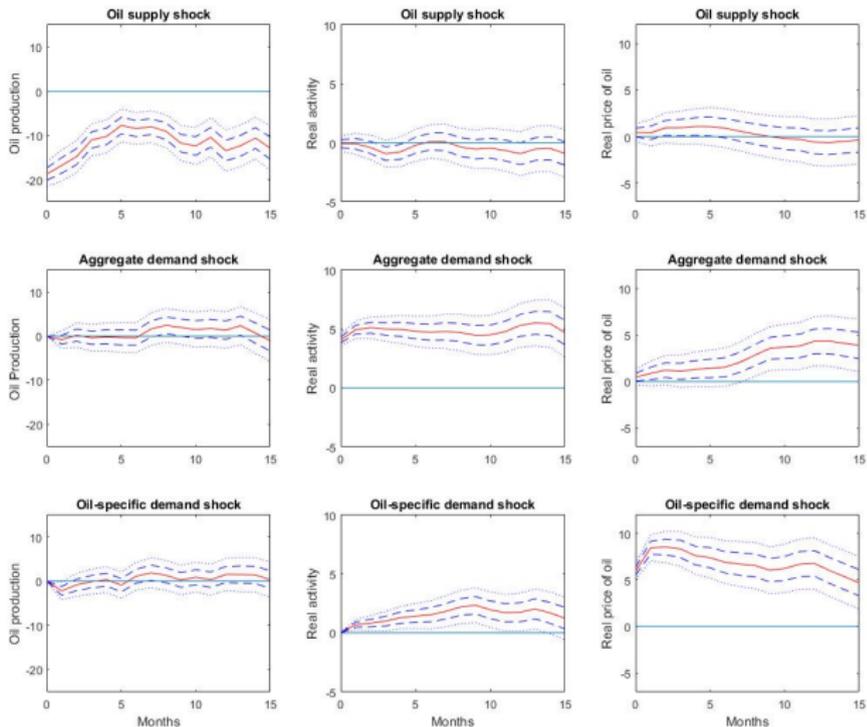
What is driving the results?

Kilian (2009): updated sample (1985 – 2015)
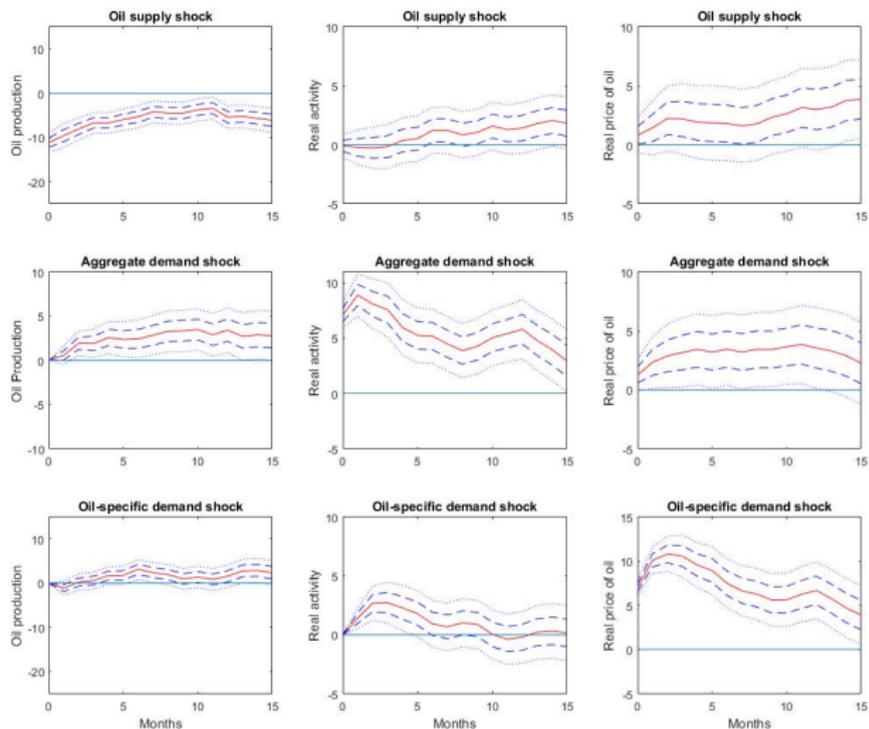
What is driving the results?

Kilian (2009): with metal price index (1985 – 2015)
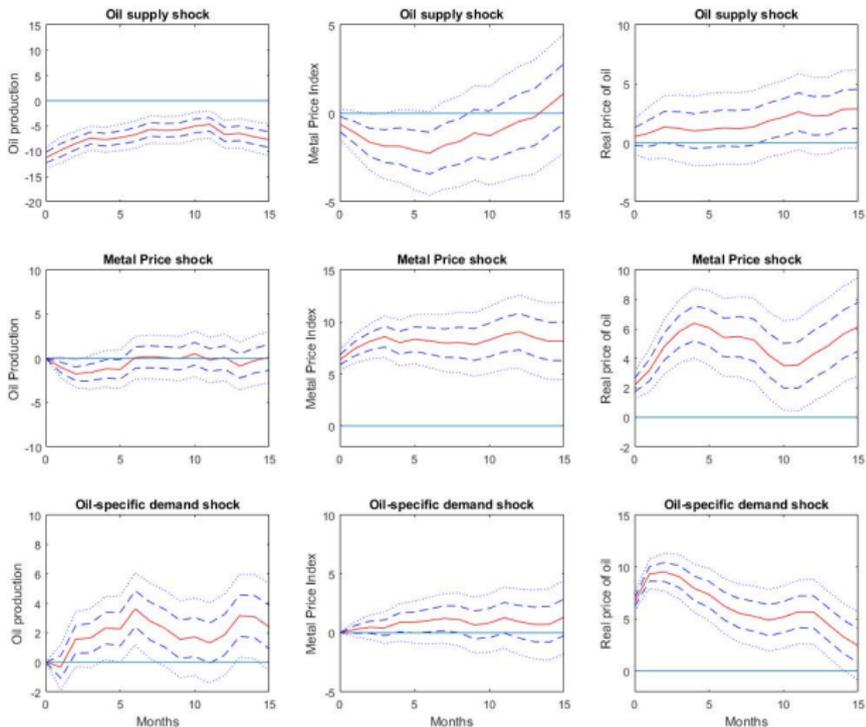
Identification scheme in the baseline model
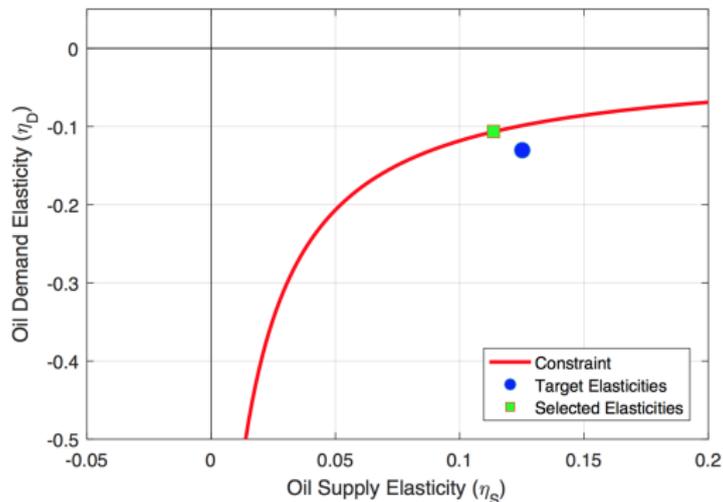
▶ The blue dot is the median estimates from many different models

Identification scheme in the baseline model (without inventory)

$$\underbrace{\begin{bmatrix} 1 & -\eta_S & 0 & 0 & 0 \\ 1 & -\eta_D & -\eta_A & -\eta_E & 0 \\ -\nu_Q & 0 & 1 & 0 & 0 \\ -\mu_Q & 0 & -\mu_A & 1 & 0 \\ -\psi_Q & \psi_P & -\psi_A & -\psi_E & 1 \end{bmatrix}}_{\hat{}} \begin{bmatrix} q_t \\ p_t \\ ya_t \\ ye_t \\ m_t \end{bmatrix} = \sum_{j=1}^{p} \boldsymbol{\alpha}_j \mathbf{X}_{t-j} + \begin{bmatrix} u_{s,t} \\ u_{d,t} \\ u_{ya,t} \\ u_{ye,t} \\ u_{m,t} \end{bmatrix}$$

- ► Some zero restrictions are questionable
  - ► the relationship between ya_t and ye_t?
  - ► why does oil demand not repond to Δm_t?

- ► Why not imposing prior distributions as in Baumeister and Hamilton(2015)?

Diverging effects of a supply shock

Cunado, Jo, and Perez de Gracia (2015)
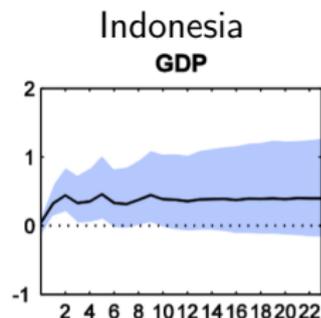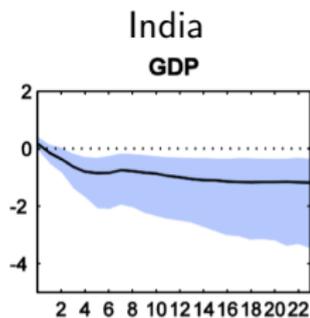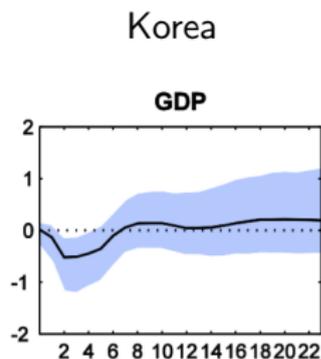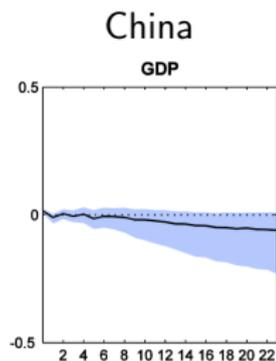
conclusion

- ▶ Very interesting paper

- ▶ Main Challenges:
  - ▶ How does the identification scheme compare to Baumeister and Hamilton (2015)?
  - ▶ What are the factors driving the key results different from previous studies?