

Discussion of

BUSINESS CYCLES

WITH PRICING CASCADES

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*The views expressed do not necessarily reflect those
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The paper (praise)

- **95 pages and 44 figures (with multiple panels!!)**
- **A paper that needed to be written**
- **Very ambitious paper, strong execution**

OUTLINE

- **Provide some context**
- **Spell out the main novel insights**
- **Points for discussion of for future work**
- **Few points on the paper**

CONTEXT

3 main strands on literature

1. State-dependent pricing

2. Roundabout/Network

3. Inflation dynamics

1. State-dependent pricing

- **Adjustment frequency is endogenous**
- **Non linearity: Large shocks travel fast**
(Alvarez & Lippi, 20XXa,b,c)
- **Demand shocks need real rigidity to have large real effects**
- **This goes back to Ball and Romer (1990, GS1176)**

2. Roundabout Production/Networks

- **Roundabout production can create these real rigidities and dampen marginal-cost increases after demand shocks (Basu,1995, Ascari et al, 2018, Nakamura and Steinsson, 2010, Ghassibe, 2021)**
- **Granular origin of business cycle fluctuations => Sectoral shocks and centrality matter for aggregates (Acemoglu et al. 2012, GS3716)**

3. Inflation and marginal cost

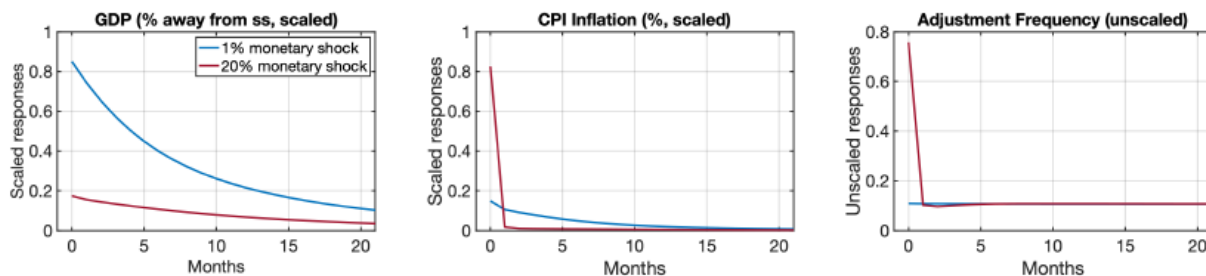
- **From Galí-Gertler (1999, GS4893)**
- **.... to Galí-Gertler 2.0 : the new micro evidence (Gagliardone at al., 2025, 2026)**
- **Price gaps are central objects and very sensitive to changes in marginal-cost**
- **This already hints at demand versus supply shock asymmetry => supply shocks pass through faster into prices**

Put the three together... and you get most of the intuition of the results

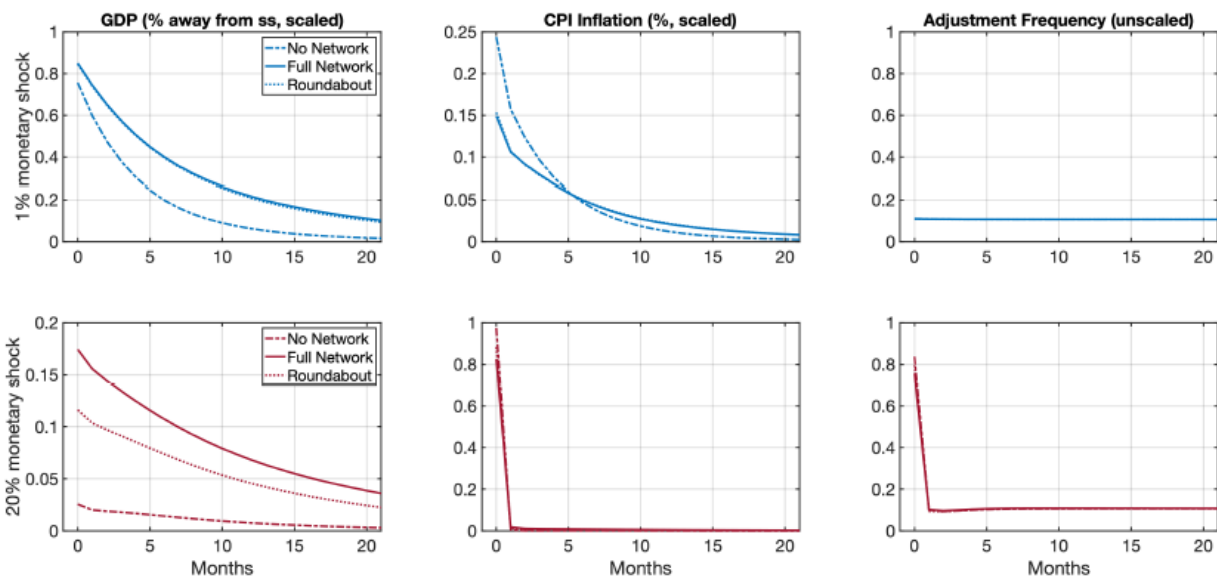
- **Study endogenous frequency through the network => Network amplifies the 'usual' non-linearities**
- **Different from roundabout => Network heterogeneity matters for aggregate adjustment frequency => position of the firm in the network**
 - **Customer centrality (exposure to suppliers/intermediates) for aggregate shocks**
 - **Supplier Herfindahl (who one supplies to) for sectoral shocks**
- **Marginal-cost shocks move price gaps more than demand shocks => Networks propagate shocks in an heterogeneous way**
 - **Demand shocks: networks dampen repricing cascades**
 - **Supply shocks: networks amplify repricing cascades**
- **Certain sectors can move aggregate adjustment frequency disproportionately (*Education?* 🤔)**

Monetary shocks

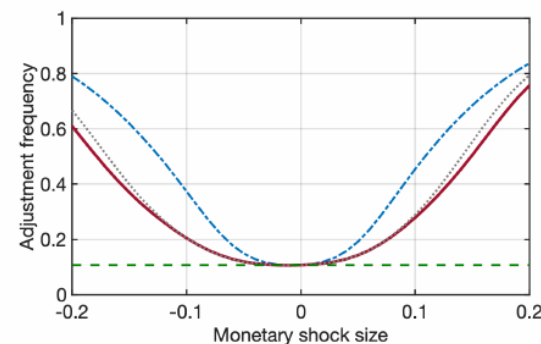
(a) Responses of aggregates to monetary shocks



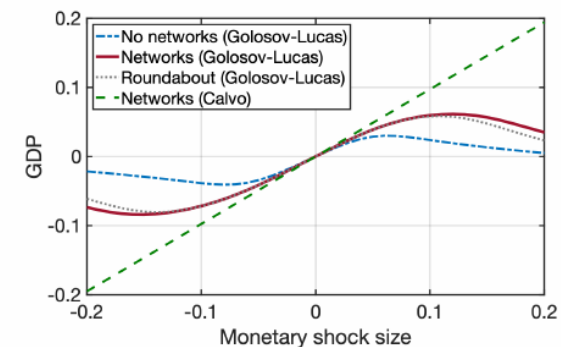
(b) Network contribution to aggregates' responses



(a) Aggregate frequency response

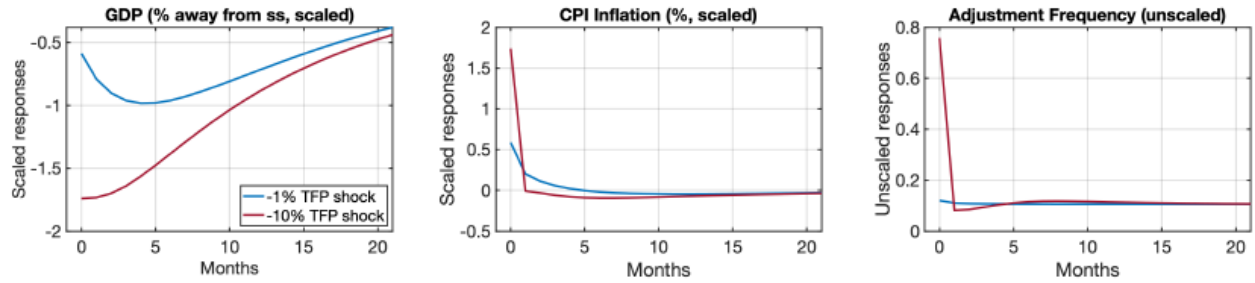


(b) Impact GDP response

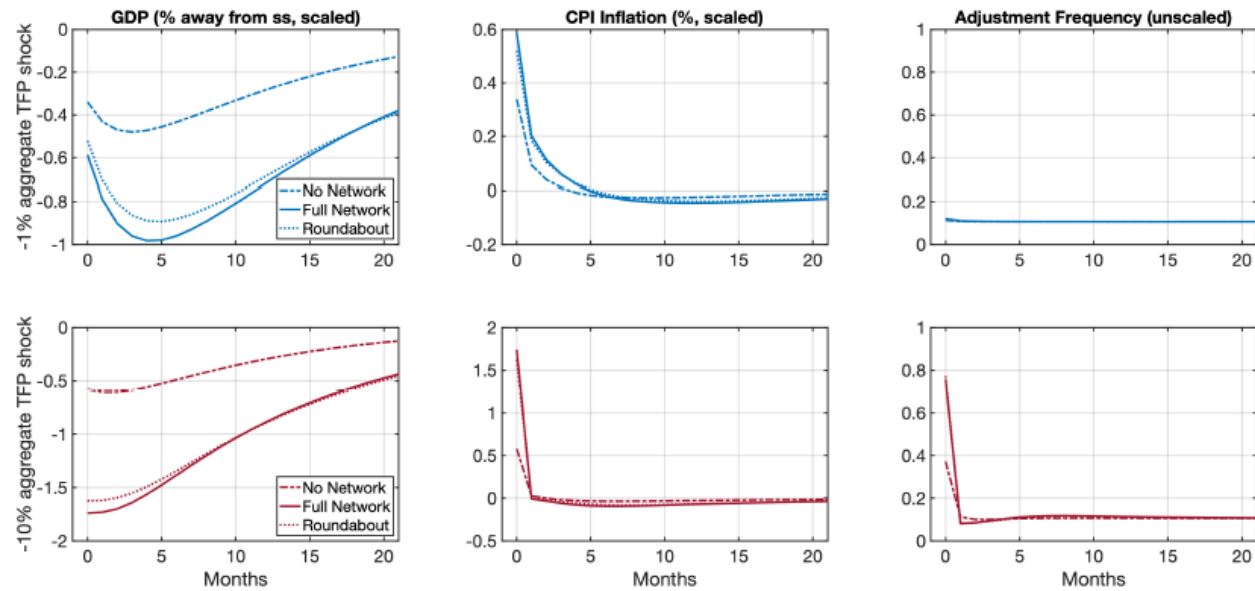


Supply shocks

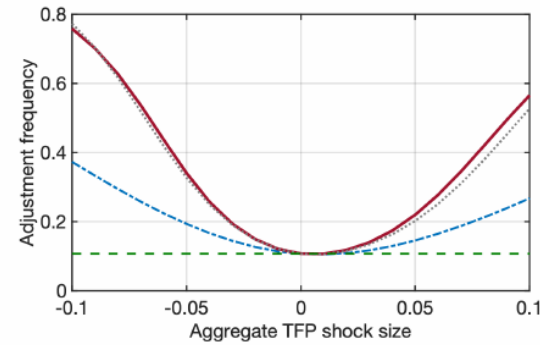
(a) Responses of aggregates to aggregate TFP shocks



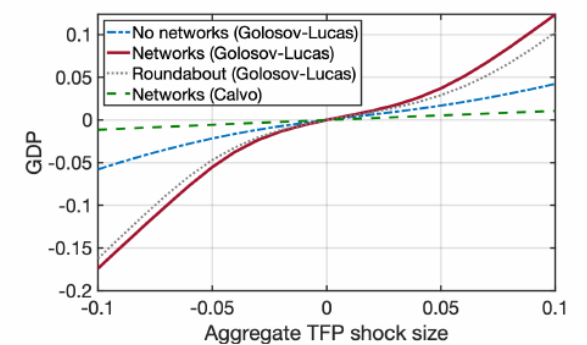
(b) Network contribution to aggregates' responses



(a) Aggregate frequency response



(b) Impact GDP response



Points for the discussion

- **Monetary policy implications**
- **Sign asymmetry**
- **State-dependency**
- **Wage and price response**
- **Trend inflation**

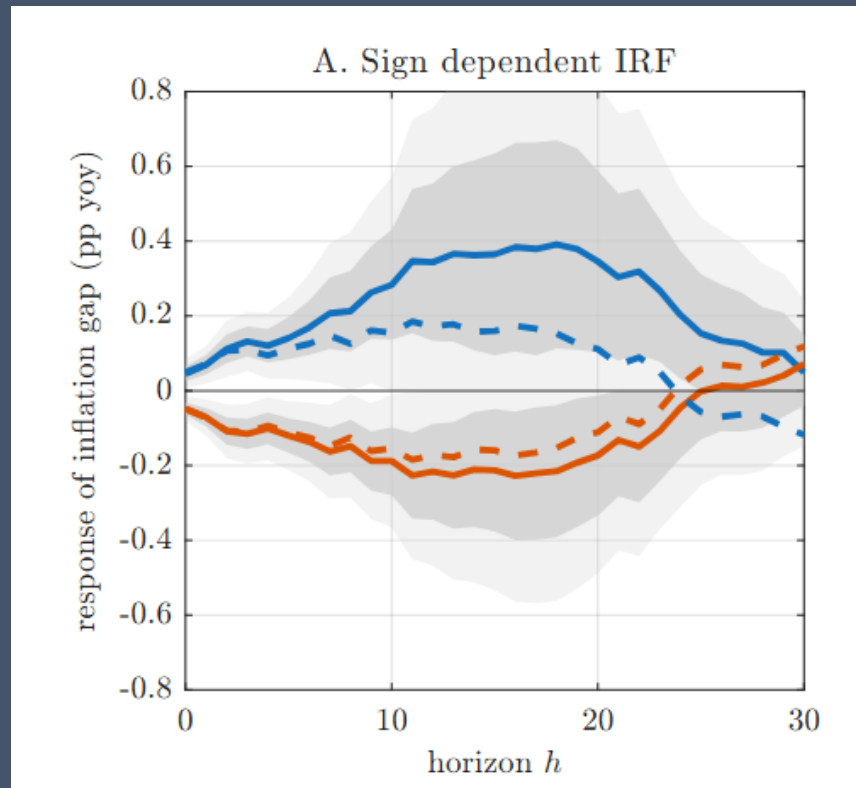
Monetary policy implications

- **not much spelled out**
- **Network: bad news!**
 - **Trade-off after a supply shock is worse with network (amplification of price response)**
 - **Mon pol becomes less effective in controlling inflation (dampening of price response)**
- **Compare to other Anton's paper: How network affects optimal policy? Shall it strike less when the iron is hot?**

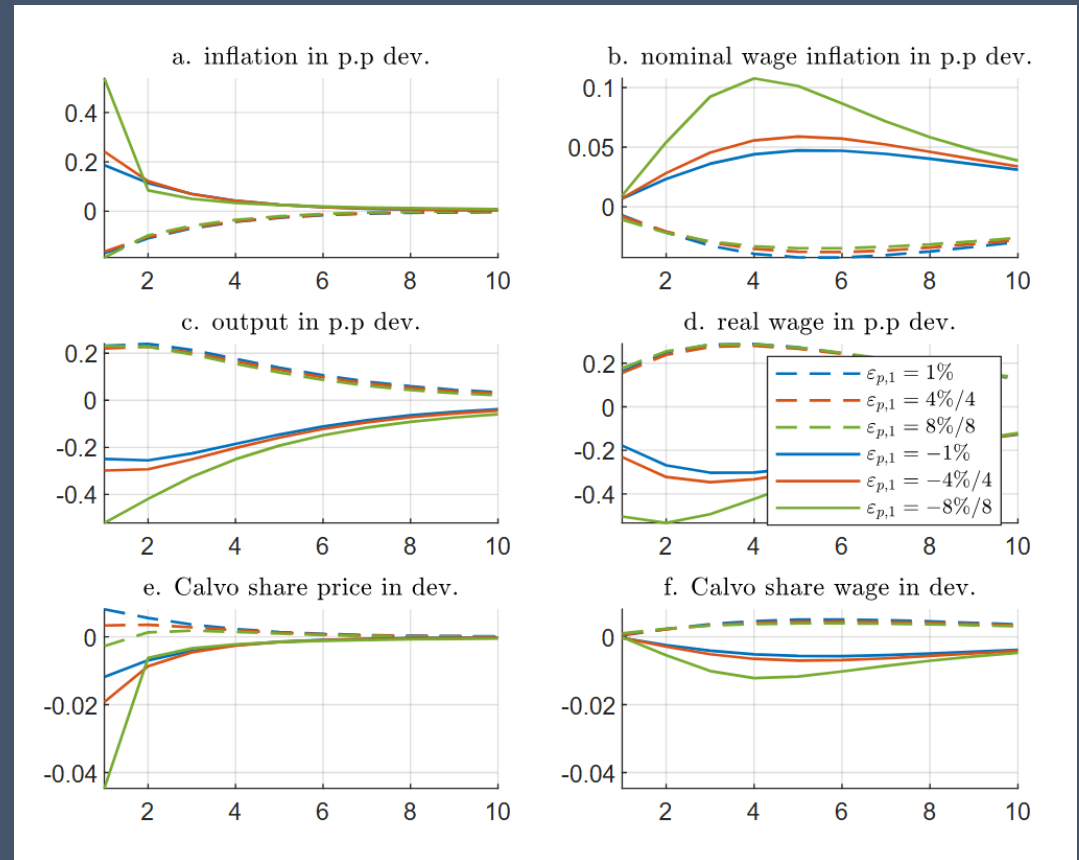
Sign asymmetry and **State-dependent responses**

- **Useful comparison with Ascari et al. (2025)**
- They estimate a euro-area model with state dependent prices **and wages** but without production networks
- **This paper has richer network propagation**

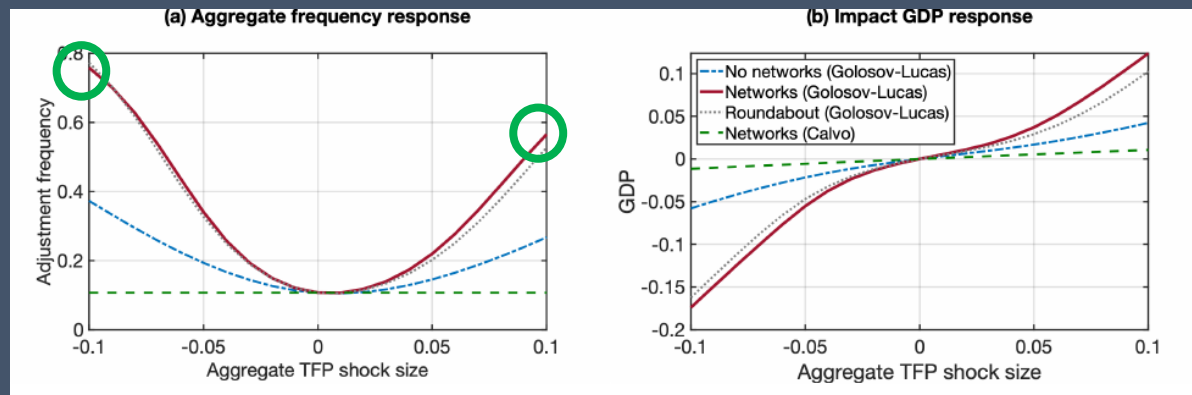
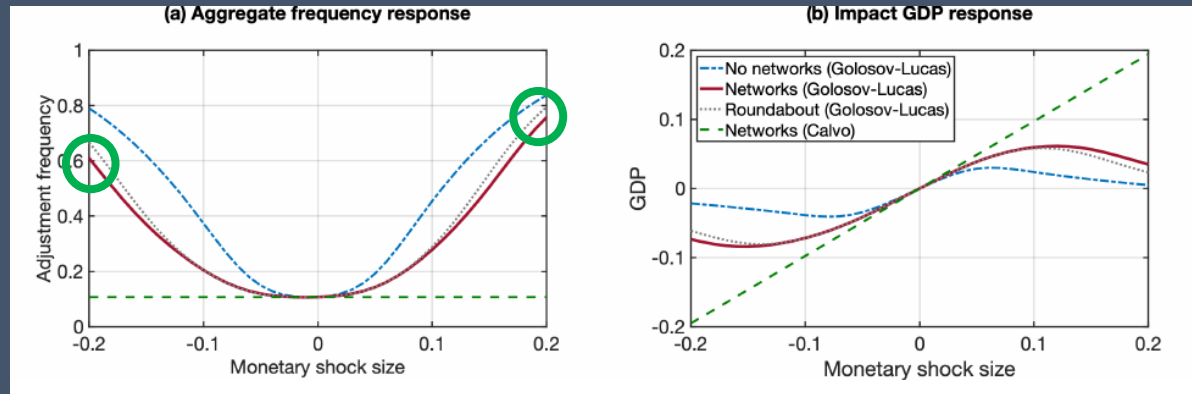
Sign asymmetry (Ascari et al., 2025)



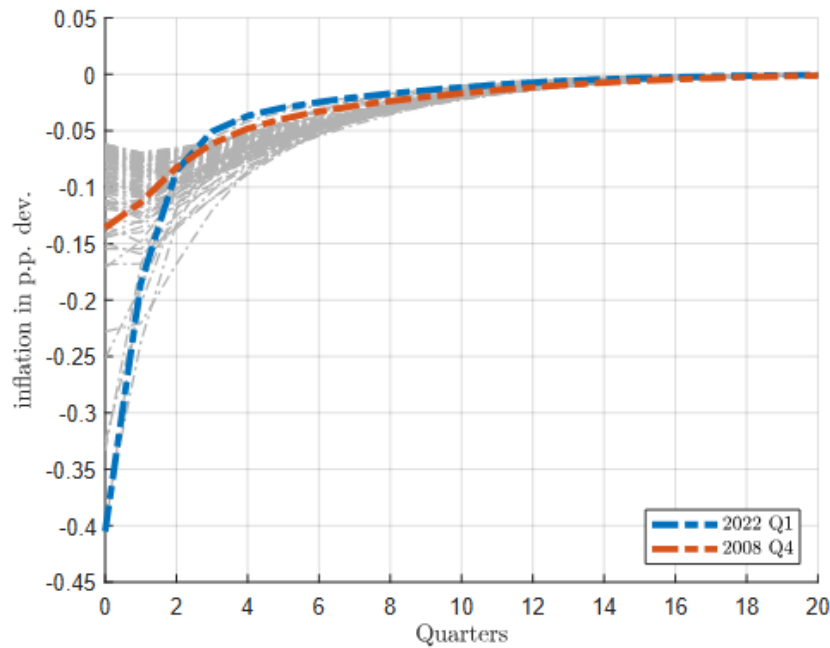
— Positive shock (baseline) - - - Positive shock (linear)
— Negative shock (baseline) - - - Negative shock (linear)



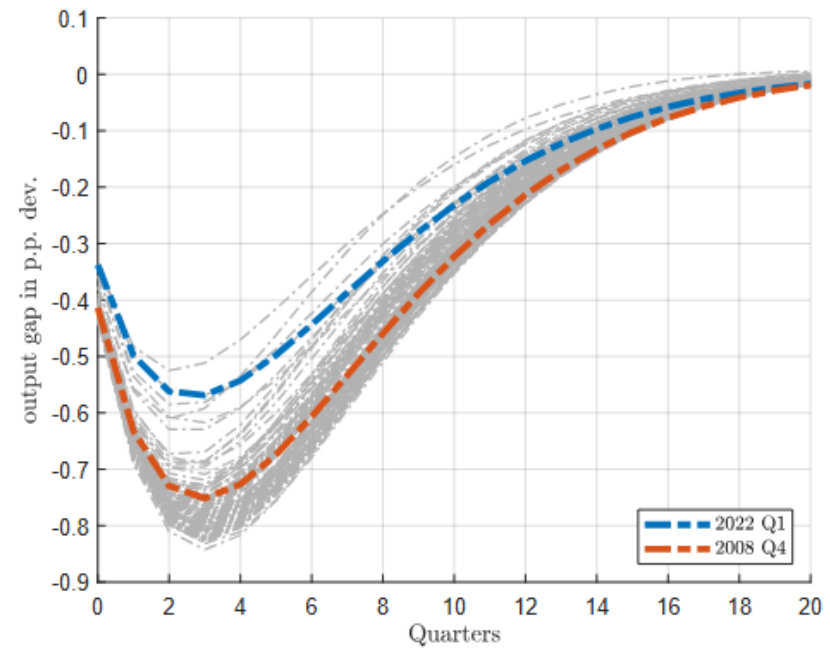
Sign asymmetry (Ascari et al., 2025)



State Dependent Responses (Ascari et al., 2025)

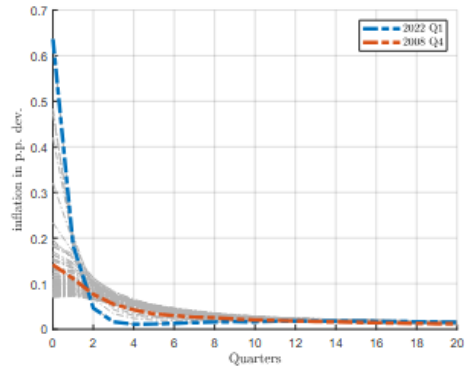


(a) Inflation responses

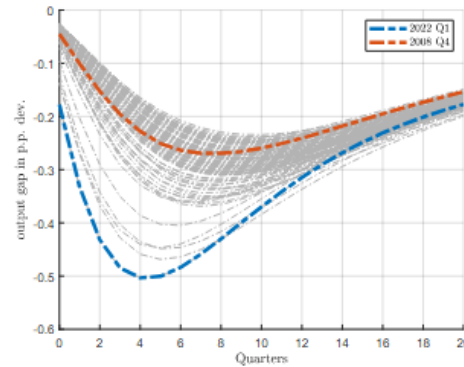


(b) Output responses

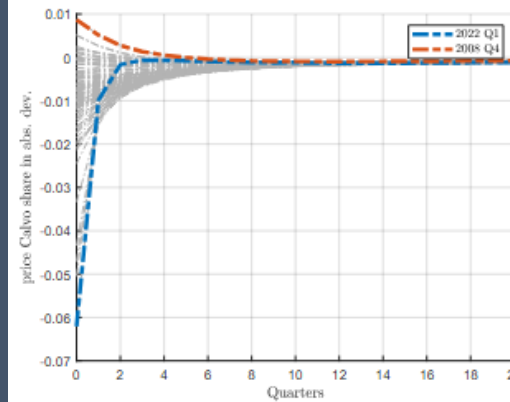
Wage and Price Responses (Ascari et al., 2025)



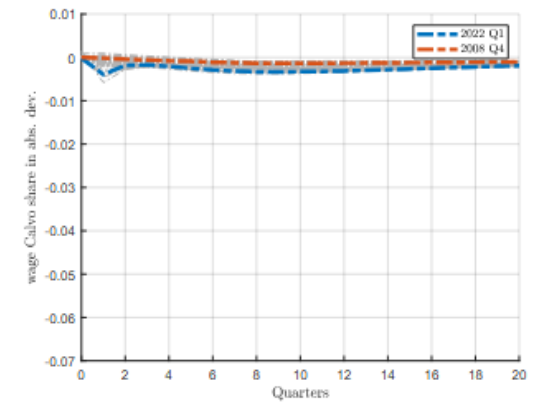
(a) Inflation responses



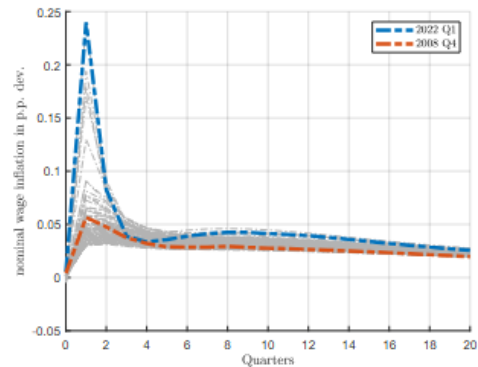
(b) Output responses



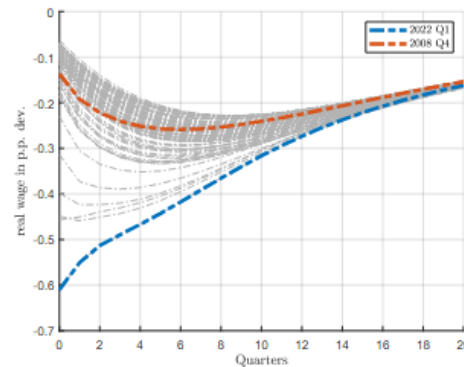
(e) Calvo share prices responses



(f) Calvo share wages responses



(c) Nominal wage inflation responses



(d) Real wage responses

Contractionary Cost-Push shock
What triggers wage frequency?
Second second-round effects

Trend Inflation

- **Trend inflation affects substantially the frequency of adjustment** (L'Hullier and Schoenele, 2025)
- **It affects also the non-linearities and asymmetries**
- **It will also affect the interaction between state-dependent pricing and network, possibly making the network structure (and the dampening vs amplification) less relevant**
- **Is network affecting the optimal inflation rate?**

Minor Comments

➤ Mechanism validation

- More direct validation of the network-cascade mechanism
- Network position should predict sectoral frequency and prices response: use LPs?

➤ Commodity shocks as sectoral TFP shocks

- This is useful as a cost shifter, but a commodity price shock is not literally productivity
- Aggregate nominal-demand path is also imposed

➤ The discussion of price gaps could be more explicit

- How network structure affects sectorial price gaps?

➤ Uncertainty might matter for pricing decisions: how would that affect results?

➤ Implications for mark-ups

GREAT PAPER

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