

Joint ECB-IMF-IMFER conference 2024

Discussion of:

The distributional effects of oil shocks

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## The paper in a nutshell

What is the effect of supply shocks on the economy? how does it depend on monetary policy?

**New:** use micro administrative matched employer-employee data in Germany.

Contributions:

- ▶ disentangle the role of “pure” oil shocks from the monetary policy response;
- ▶ characterize distributional effects of aggregate shocks.

Findings:

1. oil shocks increase inflation and decrease output;
2. output drop is not driven by monetary response;
3. low-wage workers more negatively affected (earning growth, probability to find a job).

# Methodology

1. Baseline empirical model (local projections with instruments)

$$y_{t+h} - y_{t-1} = \alpha_h + \beta_h z_t + \sum_{i=1}^I \gamma_{i,h} X_{t-i} + \varepsilon_{t,h} \quad (1)$$

- ▶  $y$  is employment, earnings, or macro aggregates
  - ▶  $z$  is an aggregate (exogenous) shock: **oil** or **monetary policy**
2. Effect of oil shocks under **policy rate counterfactuals**
  3. **Heterogeneous effects**: eq. (1) by income deciles

## Context: supply shocks and monetary policy in theory

Should monetary policy respond to supply shocks? *Bandera et al. (2023)*

- ▶ in the most standard model: no (“looking through”);
- ▶ in more complex models, it depends...
  - ▶ second-round effects (inflationary);
  - ▶ in an open-economy, boost in demand for domestic goods (inflationary);
  - ▶ with HtM agents, lower aggregate demand through negative income shock (deflationary).

Unclear qualitative and quantitative answer. Labor market response depends on dominant force.

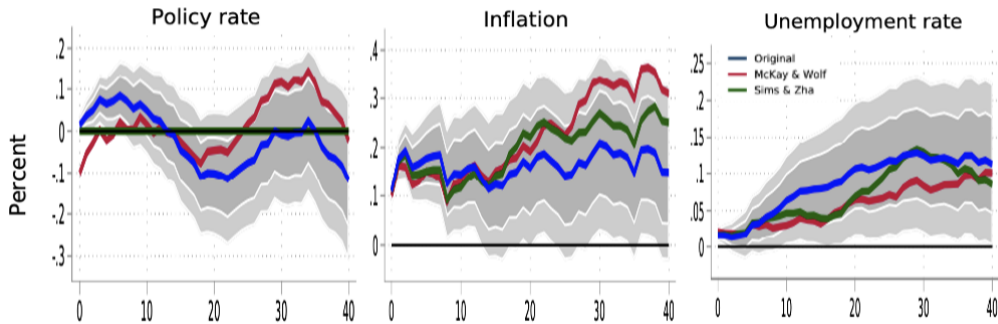
Recent quantitative contributions:

- ▶ Chan, Diz, and Kanngiesser (2024); Bobasu, Dobrew, and Repele (2024)

## Context: supply shocks and monetary policy in the paper

Authors use a new methodology developed by McKay and Wolf (2023):

- ▶ can construct any policy counterfactual (given the availability of shocks series);
- ▶ robust to Lucas critique.



## Comments: supply shocks and monetary policy in the paper

1. Would be interesting to bridge empirical evidence with the existing theoretical evidence.
  - ▶ pick counterfactuals to follow e.g. Taylor rule / muted interest responses,...
  - ▶ use other estimated MP shocks (e.g. Jarociński and Karadi (2020))?
2. Could leverage almost 10 years of ZLB period (see e.g. Miyamoto et al., 2024).
  - ▶ fixed interest rates, only monetary policy tool was QE;
  - ▶ ECB was (arguably) not responding to supply shocks with QE.

## Comment: unified time sample (1974-2020)

3. The policy framework and labor market changed a lot in Germany since the 1970s.
  - ▶ Bundesbank had different objectives (and tools) than ECB
    - ▶ e.g. secondary objectives, targeted money growth.
    - ▶ Reaction function to oil price shock may be motivated by exchange rate considerations.
  - ▶ Labor market underwent major liberalization reforms
    - ▶ e.g. decentralization of bargaining agreements, Hartz reforms.
    - ▶ Trade-off between stabilizing the output-gap and inflation may have improved over time.
    - ▶ Effects of shocks on wages and employment may be different.

How do main results change if split between pre and post-1999?

## Suggestion: heterogeneity and transmission mechanisms

4. One novelty is to use micro data. It would be interesting to dig deeper in the heterogeneity.
  - ▶ Low-income workers are more affected. Can we learn more?
    - ▶ education / socio-demographics groups;
    - ▶ industries;
    - ▶ occupations.

Related literature, transmission of MP shocks to labor markets

- ▶ Bobasu, Repele (2024) find an important role of firms
- ▶ Coglianesi, Olsson, Patterson (2023) find an important role of wage rigidities

Thank you!



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**Thank you!**

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