

**Discussion of  
“Supply Shocks and Monetary Policy Responses in Emerging  
Economies”**

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# This paper

## Very important Question

- How is the Monetary Policy (MP) reaction function after a supply shocks in EM?
- Which factors influence the MP response?

## Motivation

- Supply shocks cause a dilemma in MP
  - Trade-offs may be larger in Emerging Markets

## Methodology:

- Empirics: Analysis via Bayesian PVARs & Short-run identification.
  - Sample: 21 Advanced economies (AE) & 24 Emerging economies(EM). 2004Q1 - 2019Q2.

**Results:** After a temporary TFP shock ( $\uparrow a$ )

- EM: Monetary policy is procyclical ( $\downarrow r$ ).
- Fixed Exchange rate and more open EMs are more procyclical.

## Dilemma of supply shocks

- What is a supply shock?

A reduction in the cost of production due to lower input costs or improving technology.

Ocampo and Ojeda-Joya think on the latter.

- MP Dilemma after a supply shock: Not stable Phillips curve

$$\pi_t = \mathbb{E}\pi_{t+1} + \kappa(y_t - y_t^n) + u_t \quad (1)$$

- Ocampo and Ojeda-Joya think on shocks to  $y_t^n$
- But, are all supply shocks equally problematic?
- In general,  $u_t$  is more problematic than  $y_t^n$ . (Galí and Gertler(1999)).
- Shocks to technology (or shocks to  $y_t^n \rightarrow r_t^n$ ) may not be problematic if the central banks track adequately the natural rate of interest,  $r_t^n$ . e.g

$$i_t = r_t^n + \phi_\pi \mathbb{E}_t \pi_{t+1} + v_t \quad (2)$$

## How does the natural rate respond to a supply shock?

- Consider a simple close economy model determination. From the Euler equation:

$$r_t^n = \rho + \sigma E_t (y_{t+1}^n - y_t^n) \quad (3)$$

$$y_t^n = a_t \quad (4)$$

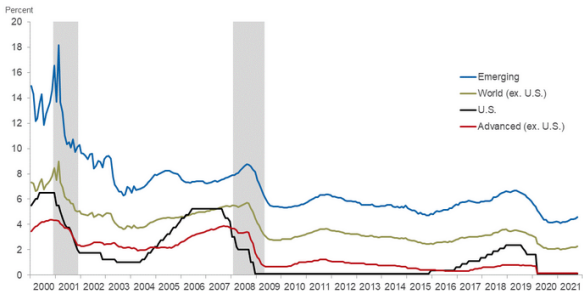
- Given the behavior of  $a_t$ 
  - Permanent change in  $a_t \Rightarrow \uparrow r_t^n$
  - Transitory change in  $a_t \Rightarrow \downarrow r_t^n$
- Ocampo and Ojeda-Joya think the latter is happening Thus,  $\uparrow a_t \Rightarrow \downarrow r_t^n \Rightarrow \downarrow i_t$
- In other words, Ocampo and Ojeda-Joya is showing us the real interest rate in EM is moving in the right direction of a temporary TFP shock. Central banks are doing what they should do.
- Results under Fixed Exchange rate & more financially open economies confirm this result.

# Why we do not see this in developed economies?

Database of Global Economic Indicators

## Short-Term Official/Policy Rates

Short-Term Official/Policy Rates



NOTES: Calculations are based on a representative sample of 40 countries. Aggregated using U.S. trade weights. Shaded bars indicate global recessions (Grossman, Mack and Martinez-Garcia (2015): "A Contribution to the Chronology of Turning Points in Global Economic Activity (1980-2012)," *Journal of Macroeconomics*, Vol. 46, pp. 170-185). Last updated November 2021.

SOURCES: Database of Global Economic Indicators; Haver Analytics.

Figure:

## Conclusion

- Nice paper and with a very interesting question.
- However, maybe monetary policy is reacting as it is supposed to do.

## Additional comments

- Why not working in levels instead of growth rates. A shock to a growth rate is a permanent shock to the level.
- Working with Solow residuals may be not good. It may be picking up demand shocks (Evans 1992, Basu and Kimball 1997)
- Regarding the identification: better way to recover TFP is to use the Max-Share strategy (Uhlig 2003)