Discussion of

On the Empirical (Ir)Relevance of the Zero Lower Bound

by Davide Debortoli, Jordi Gali, and Luca Gambetti

NBER Macro Annual 2019

CORRIGENDUM

Mark W. Watson Princeton University March 16, 2022 My discussion of Derbortoli, Gali and Gambetti (2019) included plots of the identified sets and prior/posteriors for impulse responses from a version of their four-variable SVAR. The computer program I used to compute the identified sets and prior/posteriors contained errors, leading to errors in those plots.¹

This corrigendum shows the original (erroneous) plots and their corrected versions.

I note two differences between the original and corrected results:

- (1) The corrected identified sets (see Figure 3) for IRFs from demand and supply shocks are similar to those originally reported. The corrected identified sets for monetary policy shocks are wider than reported in the original.
- (2) The priors for the IRFs that are implied by the uniform prior on the rotation matrix are less informative than originally reported. See Figure 4(b) and Figure 5.

Additional Reference

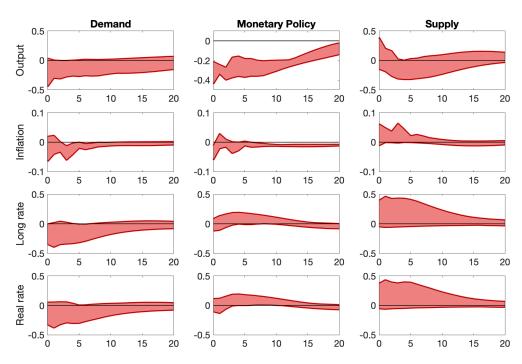
Rubio-Ramírez, J., D.F. Waggoner and T. Zha (2010), "Structural Vector Autoregressions: Theory of Identification and Algorithms for Inference," *Review of Economic Studies*, 77, pp. 665-696.

_

¹ These errors were graciously brought to my attention by Jonas Arias, Juan Rubio-Ramírez and Dan Waggoner. The new plots reported here use corrections suggested by them with draws from the rotation matrix *R* (see equation (3) in the published discussion) from the Harr distribution that are computed using the QR decomposition of a matrix of *i.i.d.* standard normal random variables as suggested in Theorem 9 of Rubio-Ramírez, Waggoner and Zha (2010).

Figure 3: Identified sets for the 4-variable SVAR

ORIGINAL:



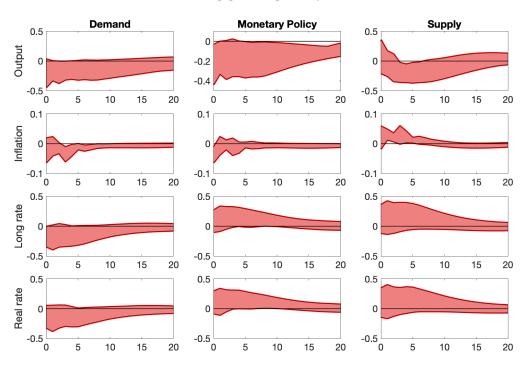
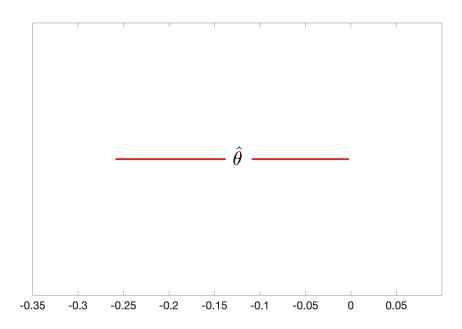


Figure 4: Inference about $\theta = \partial Output_{t+4} / \partial \varepsilon_t^{Demand}$ (a) Frequentist inference: the identified set

ORIGINAL:



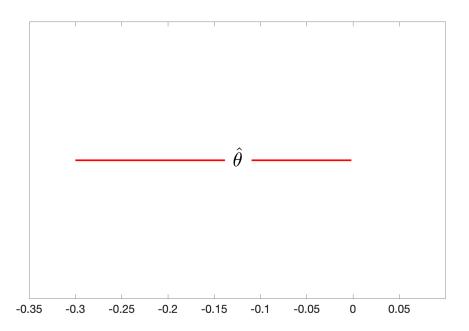
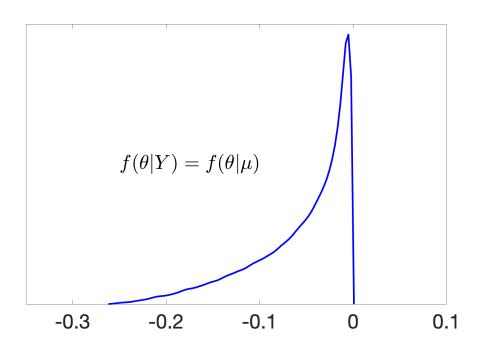


Figure 4: Continued

(b) Bayes inference: the truncated prior = posterior for θ

ORIGINAL:



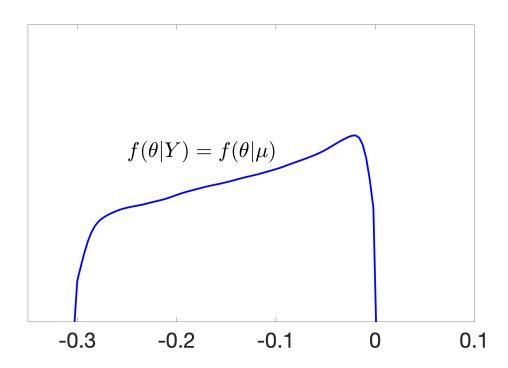


Figure 5: Truncated priors (= posteriors) for $\partial Y_{t+4}/\partial \varepsilon_t$

ORIGINAL:

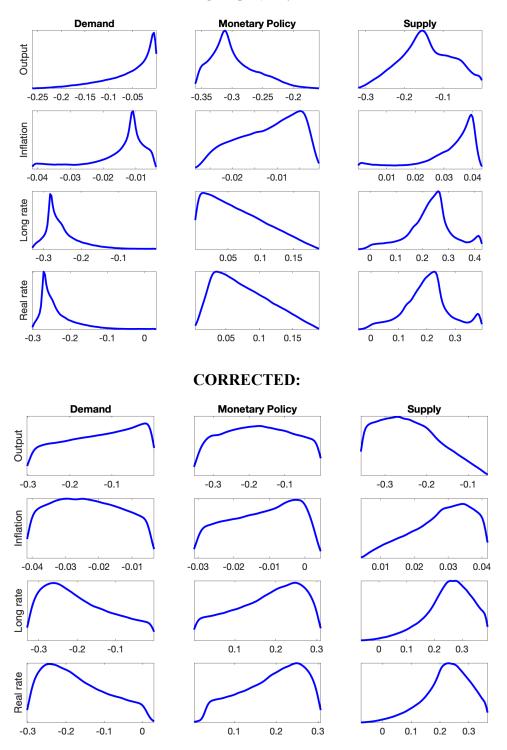


Figure 6: Impulse responses $(\partial Y_{t+h}/\partial \varepsilon_t)$ Identified sets and quantiles of truncated prior (= posterior) ORIGINAL:

