

# Review of JAE 13999 , “A narrow and wide replication of mixed regressive spatially autoregressive model”

This replicates some of LF Lee’s GMM work with some extensions. It appears to be largely correct, but of limited scope (by design). I have some comments and suggestions below:

1. There should be some more information about  $W$ . Given the constraints introduced later it appears that  $W$  has a principal eigenvalue of 1, but this is not stated in the manuscript.
2. The manuscript uses the restriction  $\lambda \in [-1, 1]$  in several places. For the MR-SAR model a singularity exists if  $W$  has a principal eigenvalue equal to 1, the typical assumption.

$$y = \lambda W y + X\beta + \varepsilon \tag{1}$$

$$(I - \lambda W)y = X\beta + \varepsilon \tag{2}$$

$$|I - W| = 0 \tag{3}$$

Did the authors intend to use  $(-1, 1)$  as the interval or did they assume that the principal eigenvalue of  $W$  is less than 1?

3. “spatial independent parameter” should be “spatial independence parameter.”
4. I would use “unbalanced panel” and not “unbalance panel.”
5. “Without surprise” should perhaps be “Unsurprisingly.”
6. Should not use all caps for the Fell reference.