Reply to Invited Referee Report

First of all, we would like to thank to the Referee for his/her valuable comments. We are honored by the effort made to understand something that we tried to develop. Our responses are provided below,

COMMENTS

With respect mayor comment:

"This methodology could be improved by defining a test statistic, applying a bootstrap procedure to S, and interpret the banks' efficiency from the p-values. See, for example, Toma et al (2017, doi: https://doi.org/10.1016/j.ecolind.2017.07.049)."

R/ Thanks for the comment. We use a similar approach to Toma et-al (2017) in order to apply bootstrap technique over banks´ efficiency. Also, compute bias for the bootstrap results. In this way the results for each bank are:

Bank	Mean	Bootstrap-Std. Err.	Bias
1	0,0021417	0,0001480**	-0,0000233
2	0,0009333	0,0000900**	0,0000028
3	0,0237167	0,0014193**	-0,0003504
4	0,0000000	0,0000000	0,0000000
5	0,0007667	0,0000721**	-0,0000176
6	0,0114083	0,0008701**	-0,0002340
7	0,0395750	0,0187765**	-0,0006481
8	0,1272417	0,0278332**	-0,0006401
9	0,0152667	0,0066776**	0,0002670
10	0,1990417	0,0229417**	0,0001338
11	0,0484083	0,0119314**	-0,0004098
12	0,0000000	0,0000000	0,0000000
13	0,0000000	0,0000000	0,0000000
14	0,0813750	0,0228869**	-0,0004770
15	0,0090500	0,0008819**	0,0003258
16	0,0740000	0,0215878**	-0,0004013
17	0,0000000	0,0000000	0,0000000
Foreign	0,0333575	0,0066089**	0,0002017
No foreign	0,0427643	0,0078747**	-0,0001505

**Statistically significant at the 0.01 percent level

Also, we include the reference of Tomaa, P.P Migliettaa, G. Zurlinib, D. Valenteb, I. Petrosillo. (2017) "A non-parametric bootstrap-data envelopment analysis approach for environmental policy planning and management of agricultural efficiency in EU countries" Ecological Indicators, Volume 83, December 2017, Pages 132-143 in the references section.

Whit respect minor comment

1." mu_1 and mu_2 are not defined in the equation of PTE (after Eq.7) "

R/ Thanks for the comment, and we agree. We include a definition of mu_1 and mu_2 in the final version.

2. "It may be good to check the robustness of the results."

R/ We consider that our result in panel probit is robust. However, thank you for the comment.

3. "In Conclusion section, the authors mention "Tobit regression" which may be wrong".

R/. We agree with the referee and delete this mention of the Conclusion section.

Cordially,

Jhon James Mora, PhD
*Universidad Icesi, Colomb*ia
Camilo Almanza, PhD.
Universidad del Norte, Colombia