

Review of: "Differences in Regional Productivity and Imbalance in Regional Growth"

Federico Fantechi¹

¹ Polytechnic Institute of Milan

Potential competing interests: No potential competing interests to declare.

The manuscript proposed is well written, with a clear structure, well connecting the aim to the results of the model and their interpretation. The concluding paragraph summarizes well the results of the different forecasted scenarios and connects them to policy suggestions.

I have a few suggestions that I believe could improve the overall quality of the work.

- The “weakest” part of the manuscript is the literature review, which mostly focuses on classic contributions. The authors should consider recent contributions exploring the difference in productivity (and labor productivity) at the regional and intra-regional level.
- A few remarks and suggestions, regarding the empirical model, are:
 - both the selection of the study areas and the specific industrial sectors analyzed are well justified showing convincing trends and data; however, both the selection of Total Factor Productivity (TFP) and Gross Value Added (GVA) to proxy productivity and regional growth are not discussed or justified. This should be implemented, justifying the selection of indicators while also addressing their limits, criticisms, and/or possible alternative indicators (TFP, in particular, is a widely criticized indicator. For a very useful overview on the topic look at: Felipe and McCombie 2019).
 - Considering that is a “Denmark-specific model”, the manuscript could gain in international attractiveness with a more in-depth presentation of the SAM-K/LINE model, accompanied by some data.
 - Finally, considering that - if I am not mistaken - “social” data are available at the municipal level, the authors could perform the forecast at a smaller territorial unit. I understand that some indicators (GVA, to name one) might not be available at that level of spatial detail, but they could be changed to different indicators (e.g. employment levels) which are already used in similar research. Considering the manuscript is interested in the spatial dimension and the role of peripherality, it could benefit from employing a smaller spatial unit.
- A final consideration regards the concluding paragraph. While is well written, and able to summarize the results and connect them to policy indications, the authors should also discuss the limits and weaknesses of the employed model which could be improved or resolved in future research.

specific references:

- Felipe, Jesus and McCombie, John S. L., The Illusions of Calculating Total Factor Productivity and Testing Growth Models: From Cobb-Douglas to Solow and to Romer (April 24, 2019). <http://dx.doi.org/10.2139/ssrn.3377758>