

ANSWERS AND COMMENTS

- 1. A table with descriptive statistics with the variables used in the regression seems adequate. It is the case that the dependent variables in the regressions are in logarithms. Therefore, given that these variables are mainly percentages we must be sure that none of them take the zero value, which is potentially possible.**

In order to be able to include zero values in the statistics and avoid any kind of problems related to it, we proceeded a $\log(x+1)$ transformation. Moreover, I have another paper which presents a deep descriptive analysis and literature review on these data and about the Manaus Free Trade Zone performances. I will think to include some of these descriptive analysis in a revised version of this paper.

- 2. I think that the dummy “state capital” is something redundant with the variable “distance from state capital”. Is it not the case that for the capital city the second one takes a value of 0, which is in fact informative? This is probably the reason why you obtain a counterintuitive estimated coefficient for the dummy variable.**

About the reason for the counterintuitive estimated coefficient for the dummy capital, I completely agree with you. However, the reason to include this dummy and also the variable “distance from state capital” is that the model was overestimating the capacity of capitals to generate better performances than the rest of the state. After performing some tests with and without the dummy capital, we observed more robust results when we included this dummy, which was capable to correct the overestimation of capitals capacity.

- 3. You provide relative positions of areas for 2010 but in order to know if the free trade area has had any relevant influence in improving labor and social conditions you should also provide result for previous years and, in particular, for the year before the establishment of this special zone. We suspect, given your results, that in fact there has been an improvement, but we must be sure. If no data exists, you have to make some convincing evidence about the relative worse position of Manaus with respect to that of 2010.**

Indeed we were unable to carry out analyzes from previous years to build a counterfactual of the situation without the MFTZ since the only Brazilian database that allows us to analyze at the municipal level is the census, which is carried out every ten years, and due to the unavailability of micro-data for the census prior to the creation of the MFTZ (from 1920 to 1960, there are only tabulations at state and municipal level for the main variables, being published in printed format). Facing such limitations, we have nevertheless tried to provide a framework for comparison by applying cross-sectional variations across municipalities instead of a temporal comparative analysis: residuals and social efficiency rankings of a subsample of municipalities with ‘similar’ characteristics (state capitals and the main Brazilian industrial poles). (See Castilho et al. (2015); Picarelli (2014)).

- 4. It seems to me that there is not endogeneous issues but some discussion about this point is convenient.**

We carried out endogeneity tests considering control variables from previous years (2008 and 2009), and no endogeneity problem was identified.

- 5. Table 5 is referred to 2015 although the analysis is for 2010. From my point of view, it is better that Table 5 gives information about 2010.**

Despite the fact that I wanted to show more recent data, the reason why I presented a table for 2015 and not 2010, I also have this data for 2010, which I could add in a revised version of my paper.

- 6. The paper does not present a clear methodological contribution, since the applied methods are standard. However, the use of OLS regression and the interpretation of its residuals in terms of measures of performance seems to be quite weak and should be considered as a benchmark or exploratory model. The stochastic frontier model is more standard for efficiency analysis and its results more reliable. However, the outcomes of both models seem to be mostly consistent.**

In this study, the lack of data limited our methodological possibilities. Thus, we opted for an analysis of cross-sectional performances. We then provided a framework for comparison by applying cross-sectional variations across municipalities. The idea to use the residues analysis as a benchmark to then evolve to the stochastic frontier method is to check robustness and consistency in the outcomes obtained.