Referee report on:
"The export-productivity link for Brazilian manufacturing firms"

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1 Overview and main results

This paper uses Brazilian data to analyze the link between exports and total factor productivity of firms over the period between 2000-2008. Using Wooldridge (2009) GMM procedure to obtain TFP under two alternative assumptions (exogenous or endogenous law of motion for productivity), the authors implement stochastic dominance techniques and matching techniques to explore the self-selection and learning by exporting hypotheses. The authors find some evidence of a self-selection process into export markets. They also find a learning by exporting process during the first year in international markets. This extra TFP growth appears higher under the assumption of an endogenous law of motion for productivity.

The analysis presented in this paper tries to contribute to a growing literature which aims at a better understanding of the relation between exports and firms productivity. Despite the huge number of studies on the self-selection and learning by exporting process, there is always a need to learn more about such effects. Each country has a specific context and different firm characteristics and Brazil is a country that received little attention in the empirical literature.

2 Main Comments:

1. PIA *empresa* database is not a census database, it is crucial to have more information on the coverage of the data.

2. In table A.1. it is important to display standard-errors with the coefficients of the production function.

3. As there are some differences between PIA and SECEX in identifying exporters, it would be interesting to made a sensitivity analysis of the results depending on the different choices made on the export status of the problematic cases.

4. Whatever the model used, the authors find that the productivity of exporters is higher than that of non-exporters in all industries except publishing and printing (23), office machinery (30), electrical components and communication apparatus (32) and medical equipment (33). Why ? Do they have an explanation ?

5. The specification of the propensity score could be improved by adding more covariates such as experience of the firm, foreign ownership, location dummies, etc... The more disaggregated and richer the information is, the more likely is to hold the basic assumption underlying propensity score matching: that selection bias is based only on observed characteristics.

6. The paper should present balancing score tests in order to measure the match quality.

7. The authors present one algorithm for the matching technique. Other matching estimators are needed to justify the robustness of the results.

8. It would be interesting to use the construction of the two groups (treatment and control) with the propensity-score matching in a first step in order to combine in a second step a difference-in-differences estimator with propensity-score matching to understand if the performance of exporters compared with non-exporters is indeed different according to some firm characteristics like skills, experience, size, etc... This can be achieved with an entry variable interacted with some firm characteristics.

3 Other Comments:

1. It would be interesting to add descriptive statistics like the output, the number of workers, the capital, the materials and wages of the average exporting firm and the average non-exporting firm by year.

2. The authors need to specify the digit level of the sector deflators provided by the IBGE used to deflate the variables.

3. In a footnote at the end of Tables 4 and 5, the authors should define S1 and S2. We assume that it represent the so-called one-sided K-S test and two-sided K-S test but it need to be clarified.