

## Referee report on

Xavier Cirera, Daniel Lederman, Juan A. Máñez, María E. Rochina, and Juan A. Sanchis (2015). The Export-productivity Link for Brazilian Manufacturing Firms. Economics Discussion Papers, No 2015-26, Kiel Institute for the World Economy. <http://www.economics-ejournal.org/economics/discussionpapers/2015-26>

### *Summary*

This paper takes another look at the productivity-exporting relationship. The authors confirm that self-selection based on productivity governs export entry on the sample of Brazilian firms between 2000 and 2008. Evidence on learning-by-exporting is less convincing as Brazilian exporters only experience an initial spike in productivity once they start to export. The effect does not last beyond the first year of exporting, The key strength of the paper is that it employs an internally consistent productivity estimation algorithm akin to de Loecker (2013), by taking account of the past export experience in estimating future productivity. Secondly, the paper employs a novel dataset of Brazilian enterprises, which has so far not been explored by other studies.

### *Comments*

- The motivation seems at odds with itself. On one hand, the authors provide evidence that Brazilian productivity remained virtually constant in the last 30 to 40 years, yet they still end up looking for evidence of how exporting provided a lift to “increasing productivity”.
- A minor point, but Slovenia is not considered a developing country. The IMF has been classifying it as an advanced economy since 2007, before that it was classed as a transition economy.
- Perhaps some more time and space could be dedicated to explaining what kind of deflators were used and also a discussion on the impact of using industry-wide deflators on TFP estimates and the productivity-exporting link.
- The sample of firms is chosen in part on the number of employees exceeding 30. Firms below the cut-off are sampled, while the census is used for the firms above the cut-off. How are firms on the cusp (of the cut-off) treated? More generally, how are survival and sample selection controlled for?
- Are the statistics presented in Table 3 mean values? The table caption should state as much. Maybe the authors should consider presenting the numbers in a more straightforward way (by changing the unit of measurement) and also add standard deviations so that a comparison can be made between exporters and non-exporters. The numbers listed in the table appear to be enormous. The sales values are in million R\$, which would make the average sales for exporters in year 2000, 60.3 trillion R\$ or some 50 times the GDP of the country in 2000.
- Seven cohorts of export starters are compared with non-exporting firms. The export starter definition though is flexible with respect to the number of preceding periods of non-exporting. These may range from one period

of non-exporting to eight. It would make more sense to restrict the non-exporting period to at least two periods as that would eliminate firms that regularly (yearly) switch between exports and non-exports.

- The authors should provide evidence that the balancing property in matching is satisfied for the included regressors. Matching on unbalanced covariates namely means that the assignment of treatment may not have been completely random given the set of covariates.
- I cannot discern the value added of including Table 8. Table 7 namely provides exactly the same information, while offering more detail. I suggest dropping Table 8 from the text.
- The final point relates to the notion that the data indicates learning-by-exporting. Namely, the impact only appears in the first period after the start of exporting and its magnitude does not change subsequently. One would expect learning to have substantially different dynamics than a one period hike in productivity in the initial year of exporting. Learning-by-exporting implies that firms improve with the amount of goods they export.