## **Exporting Firm Dynamics and Productivity Growth - Evidence from China**

Manuscript 1640-1

Submitted to *Economics*.

Report sent on January, 25, 2016

This paper uses the Dynamic Olley and Pakes Decomposition (DOPD) methodology recently developped by Melitz and Polanec (2015) in order to identify resource misallocation across Chinese exporters over the period 2005-2009.

Data are drawn from the Annual Survey of Industrial Production and cover the universe of state owned firms and all non-state owned firms with sales above 600000 \$ sales.

## I have methodological concerns with this piece of research.

*Major concern 1. Concepts.* The paper is about the dynamics of exporters' aggregate productivity. However the meaning of the concept of "aggregate productivity of exporters" is not clear to me.

The estimation of an exporter productivity is based on its global value added (including both the value added originated from its domestic sales and the value added originated from its export sales). Also, when an exporter stops exporting, its productivity record is no more considered even if the firm continues to serve the domestic market. Inversely, when a firm start exporting, its productivity record enters in the decomposition based on the share of its *domestic and export* value added.

So basically, I am skeptical with the meaning of *Exporters Aggregate Productivity*. This makes me even more skeptical when the authors derive policy implications from their findings (see below). Indeed, China should be concerned by its Aggregate Productivity (as a policy objective) not by exporters' aggregate productivity *per se*.

*Major Concern 2. Econometrics.* In section 5.2, the authors present the results of their productivity decomposition for different sub-samples of exporting firms depending on their ownership, location, and main industry. The differences are interesting but I would recommend to use an econometric framework to test the statistical significance of the differences. For instance is a reallocation effect of 58% found for the Agricultural and Sideline food processing industry statistically different from a reallocation effect of 55% found for the Food Manufacturing industry (Table 9)? Also, in Table 7, 8, 9, it is not clear whether the reported values are average values of yearly productivity decompositions or the values of a single decomposition exercise performed over the whole five years period (2005 to 2009)?

## I also have concerns with the literature background and the clarity of exposition.

The authors claim that their paper is the first one to investigate firm dynamics on foreign markets. However, there is an established literature which investigate the determinants of firm survival on export market and/or the determinant of occasional exports. The key role of Demand-side factors is emphasized in this literature. Those factors are totally absent from the present study.

The description of the data is not comprehensive enough. What is an exit ? For instance what happens when a firm passes below the threshold of 600000\$ of sales?

Table 1 is not commented. The authors should at least say a few words on the declining trend in the export participation rates over the 2005-2009 period.

Table 2 is unclear. Is it about survival in the database or survival on export market?

Figure 1 is unclear. How should we read the figure 48% in the last column? Is it the rate of survival *in the database* for all firms after 4 years? If this is the case, this rate is not easily comparable to the rate 34% which is defined *as the rate of survival on export markets* after 4 years for exporting firms.

In the paragraph which comments Figure 1, the authors make the claim than "*exporting firms are on average larger than domestic firms in all respect*" but there is no evidence to support this claim. It would be worthwhile to give some statistics as this basic claim has been challenged in the literature on Chinese exporters (Lu, 2010, Dai and Maitra and Yu 2012)

In the description of decomposition methodologies, one important issue is not discussed: what difference does it make to take employees shares instead of value added shares to weight the firm productivity?

Table 8. There is a mistake in the cell "Entry Effect/Western Region" should be "-4%" and not "4%"

In the conclusion, and more generally everywhere in the paper, the authors have to make clear whether they are dealing with "the surviving ability of exporters" or with "the surviving ability of exporters" or *export markets*". Considering that there are a lot of shifters and occasional exporters it is very important to distinguish both.

## Finally I have concerns with the policy implications.

The authors derive very strong policy implications from their study: First, they recommend that the government substitutes R&D subsidies to export subsidies for low-end products and that it cuts tax rebates for low-end exporters. Second, they recommend than the Government pick up "promising exporting firms" and discriminate their finance, tax, R&D and trade policy in for of those selected firms. Third, they recommend that the government reduces protections to state-owned firms. Finally, they recommend that underdeveloped regions receive special support from the government.

I think that nothing in the paper allows to derive any of these recommendations. I would discard them from the current version of the paper.

Cited Reference

Lu, Dan [2010] "Exceptional Exporter Performance? Evidence from Chinese Manufacturing Firms." Manuscript, University of Chicago.

Dai, Mi, Madhura Maitra, and Miaojie Yu. [2012]. "Unexceptional Exporter Performance in China? The Role of Processing Trade." Mimeo, Peking University