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Export destinations and learning-by-exporting: Evidence from Belgium

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A vast range of academic literature based on macroeconomic data has documented a positive link between exports and economic growth. More recently, the use of data at the level of the firm has enabled new light to be shed on this issue at a more disaggregate level. The most robust finding that has emerged from this literature so far is that exporters are larger and more productive than non-exporters.

There are two possible explanations for this phenomenon. According to the first, the so-called self-selection hypothesis, only the most productive companies will find it profitable to become exporters because of some irreversible investment needed before starting to ship goods abroad. Under the second explanation, learning-by-exporting, new exporters may learn the best technologies and management practices used by other firms in international markets and, as a result, enjoy an acceleration in productivity growth after breaking into foreign markets. Thus far, the empirical evidence has found self-selection to be the more robust and ubiquitous explanation, whereas for the learning-by-exporting hypothesis the evidence is more mixed.

This study takes another look at the effects of exports on productivity using a dataset of Belgian manufacturing firms from 1996 to 2005. The main novelty of this study with respect to most of the papers already available on this subject is that the data contains information on which countries firms export to. This is of relevance to distinguish between the two hypotheses outlined above since learning-by-exporting effects are likely to depend on the characteristics of destination countries. Rather intuitively, exporting to more technologically-advanced and rich countries is supposed to offer more productivity-enhancing learning opportunities than exporting to poor and technologically-backward economies. Recent research using Slovenian and Chinese firm-level data has found evidence consistent with this conclusion.

The results of this paper firstly indicate that the productivity differentials between new exporters and non-exporters the year before the start of exports rise with the level of development of destination countries. This suggests that the sunk costs that firms have to meet before shipping goods to other countries may be higher in advanced and sophisticated markets. Secondly, simple descriptive regression analyses indicate that companies beginning to sell abroad experience significant productivity gains with respect to those that stay focused solely on the domestic market. These efficiency gains are larger for firms beginning to export to more developed countries. Although these findings tend to suggest there are learning-by-exporting effects, they cannot be interpreted as causal relationships since the regression analysis on which they are based can only identify simple correlations, and not causal directions.

To formally evaluate the causal effects of exports on productivity, this study applies matching methodology. This involves matching each newly-exporting firm, the year before the start of exports, to one or more non-exporting companies having similar, ideally the same, characteristics to the former. This makes it possible to compare two sets of firms that are similar to each other, the year before the start of exports, across many dimensions, except for the fact that one started to export whereas the other did not. Thus, any productivity difference arising after the start of exports could be ascribed to the choice of whether or not to move into export markets.

This methodology yields not significantly different productivity growth paths between new exporters and non-exporters. This suggests that in Belgium, unlike in Slovenia and China, as recent evidence has shown, the positive association between the productivity of exporters and the development level of countries they export to can not be attributed to learning effects. This relationship is most probably caused by the selection of the best firms into the most developed export markets.

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