2008-02-13

PRESS RELEASE

Exports and productivity – comparable evidence for 14 countries
by The International Study Group on Exports and Productivity

NBB Working Paper No 128 - Research Series

The relationship between exports and growth has attracted the interest of policy-makers and researchers for a long time. However, the conclusions of more than two decades of macroeconomic studies on this issue are still under debate. Some have argued that exports promote growth, whereas others have questioned this conclusion. In the last ten years, our understanding about the cause and effect relationship between exports and growth has widened considerably thanks to the availability of new data sources based at the level of the firm or plant. These have allowed researchers to investigate the exporting choices of firms and their consequences in greater detail than before.

Following the seminal work of Bernard and Jensen published in 1995 for the United States, researchers in various countries have looked at differences between exporters and non-exporters in various dimensions of firms' performance. Regarding productivity, the main message arising from ten years of microeconometric research is that exporters are more productive than non-exporters. The main reason behind this is that more productive firms tend to self-select into export markets, as selling goods in foreign countries induces additional costs - for market research, transport, distribution network, etc. - that less productive firms cannot meet. The alternative "learning-by-doing" hypothesis, namely that export market entry leads to productivity improvements stemming from international competitors, has been corroborated only by a minority of studies. However, this broad conclusion masks a lot of heterogeneity across studies. Comparisons of results obtained using data from different countries, or even for the same country, are difficult because studies vary in the detail of the approach used.

To overcome this problem, this paper reports the findings of an attempt to obtain truly comparable results across countries. Teams working with micro-level data for 14 countries joined forces to form The International Study Group on Exports and Productivity, with the aim of producing a set of internationally comparable results based on identically specified empirical models and using the same computer programs. The National Bank of Belgium joined this international research project with the help of a comprehensive dataset of Belgian firms, obtained by merging firms' records from the Central Balance Sheet Office and foreign trade statistics. This data source makes it possible to identify exporters and non-exporters and to compare their performance characteristics according to the information provided in their balance sheets. A detailed description of the dataset for Belgium can be found in NBB Working Paper No 114[1].

This paper reports the results of this international comparison exercise and also provides an attempt to explain cross-country variations in the productivity differences using meta-analysis techniques. The overall findings from this are that: 1) exporters are more productive than non-exporters when observed and unobserved firm-level heterogeneity is controlled for; 2) the positive productivity difference between exporters and non-exporters tends to increase with the share of exports in total sales; 3) there is strong evidence in favour of the self-selection hypothesis for the less developed countries in the sample, and for all EU countries with datasets including a large enough number of export starters to investigate this issue, with the exception of Germany. On the other hand, we find evidence in favour of the learning-by-exporting hypothesis for Italy only. It is worth noting that this lack of evidence on learning-by-exporting might depend on the specific methodology used, as a number of recent works using more sophisticated estimation techniques find a positive impact of export experience on productivity.

[1] Muûls M. and M. Pisu (2007), "Imports and Exports at the Level of the Firm: Evidence from Belgium", NBB Working Paper 114.

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The main contribution to the literature added by this study is to document that the magnitude of productivity differences varies considerably across countries even when identically specified empirical models are used, as is the case here. In particular, we find that Belgian exporters have one of the largest differences in productivity with respect to non-exporters among all countries considered in the study, amounting to 9.8 p.c. on average.

We also find that countries that are more open - an important factor for Belgium - and have more effective government tend to report higher productivity differences between exporters and non-exporters. On the contrary, the productivity premium does not appear to be related to the degree of economic development of the countries – the order of magnitude being the same for Chile and China on the one hand, and France, West Germany, Ireland and Spain on the other hand. By conducting a meta-regression analysis of our results, we find that this is true even when controlling for other country and sample characteristics. Furthermore, although the exporter productivity premia tend to increase with the share of exports in total sales, this pattern is far from identical for the countries covered in our study.