The productivity and export spillovers of the internationalisation behaviour of Belgian firms

(Dumont, Merlevede, Piette and Rayp)

Discussion by
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What the paper does

- The paper analyses to what extent the decision to start exporting may be subject to spillovers coming from the internationalisation modalities (export or FDI) of other (foreign and domestic) firms in the Belgian manufacturing industry, over the period 1998-2005:
  - in the same region
  - in the same industry
  - in the upstream or downstream industry
- The paper aims at distinguishing between two possible channels of spillovers:
  - idiosyncratic effects on (domestic) firm-level productivity
  - ‘structural’ effects on the export threshold (via a reduction of the export sunk costs)
What the paper finds – productivity spillovers

- Positive correlation between domestic firms’ TFP growth and the share of exporters in the same region, but not in the same industry, or in upward or downward industries
  - Rationale for spillovers from exporters to domestic firms’ TFP?

- Negative or not significant horizontal spillovers from MNEs
  - Consistent with the literature, although here MNEs includes both local and foreign MNEs => reverse spillovers? (Mathieu & Blanchard, 09)

- Positive backward linkages
  - Consistent with the literature

- Negative or not significant forward linkages
  - Why buying inputs from MNEs would be associated to lower productivity?
What the paper finds – threshold spillovers

- The presence of exporter/multinational firms in the same region / industry has no effect on the (unconditional) probability of export of domestic firms
  - Consistent with the literature (Bernard & Jensen, 04)
- Looking at the firm-destination probability of export, instead, spillovers from exporters in the same region & same industry, same region & other industries, or same industry & other regions are positive and significant
- Similar results are found when considering firm-product-destination probability of export, with the exception of spillovers from firms in the same industry but operating in other regions (not significant)
  - Consistent with the literature (Koenig et al., 2010)
The setup of the paper

- The idea of combining two different channels of spillovers (productivity and threshold) is interesting, but needs more structure.

- Currently, the paper presents two *per-se* interesting sets of results, but does not combine them together, which would bring value-added.
  - E.g. consider domestic firms operating in the upstream industries which serve MNEs. We know these firms benefit from productivity spillovers (as you have evidence of backward linkages). Are these firms more likely to export in the future?
  - And if yes, are these firms still benefitting from threshold spillovers?
  - Or consider domestic firms with high absorptive capacity: as you find that they differ significantly from other firms in their ability to benefit from productivity spillovers, are they also more likely to export?

- Conversely, you might want to incorporate your productivity spillover variables in your threshold spillover estimation to control for the latter.
Productivity estimation

- Descriptive statistics on the sample of firms have to be provided

- The ACF + De Loecker(09) algorithm is mentioned but not described in details. How exactly you control for the demand structure? Do you have information on price and quantities produced? De Loecker(09) was able to control for that only in the Belgium textile sector...

- Is TFP-OLS the only viable alternative to any semi-parametric algorithm? What about the other firm-level papers on Belgium?

- If ACF + De Loecker(09) is too demanding, why not restrict the results to the ‘standard’ ACF routine? If instead the omitted price variable bias is supposed to significantly affect the results, you can try to trace the within-industry source of the bias and control for that in alternative ways:
  - International prices: Olley & Pakes controlling for the export and import status (Amiti-Konings, AER09)
  - Regional differences: Levinsohn & Petrin + regional dummies (Altomonte & Colantone, JoEG09)
Evidence of a very strong geographic concentration of exporters: is this due to regional characteristics, or to the historical development of a product specific expertise in these areas (e.g. diamonds in Antwerp)?

If the latter is the case, you might want to control for region*product specific FE, rather than separate region & product FE (e.g. Koenig et al. 2010)

Also, introduce size of regions (total employment) to control for the (time-varying) effects of more economically dense areas on the productivity/export relation

Check for the linear effect of the threshold spillovers: is having one exporting ‘neighbor’ the same as having two or more ‘neighbors’?

Control for the sensitivity of your results to different level of territorial aggregation (e.g. NUTS 2 versus NUTS 3)

As you only measure extensive margins, control for the sensitivity to the definition of exporter: it is much wider in the Extra-EU statistics (bounded to 1000€ of exports) vs. the Intra-EU one (bounded to 250.000€ of exports)
Sample selection

“The sample is restricted to feasible proportions by first selecting only those combinations of destinations and 4 digits product categories that were exported by at least ten firms on average over the period 1998-2005. We then further reduced the sample by selecting only those combinations of NACE 5 digits manufacturing industries, destinations, and products where we observe at least 1 export starter over the period 2000-2005” (p. 22-23)

- What is ‘feasible proportions’? Why at least ten firms? Are the zero export flows really not informative? Is there an issue of sample selection bias?

- More in general, since your goal is to try to combine different channels for the import spillover, you want to have the same control group throughout the paper, which is currently not the case.