Importing and Manufacturing Firm Performance in South Africa

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1. Focus

- Research focus on the *complementary* effects as opposed to *competitive effects* of imports on South African manufacturing firms
- Research structured around three relationships:
  - Heterogeneous traders: Descriptive picture of firms that trade
  - Direct importing and firm productivity in manufacturing
  - Direct importing and exporting in manufacturing
- Ignore effects of imports on firm outcomes via (i) indirect purchase of imports, (ii) effect of import competition on domestic prices

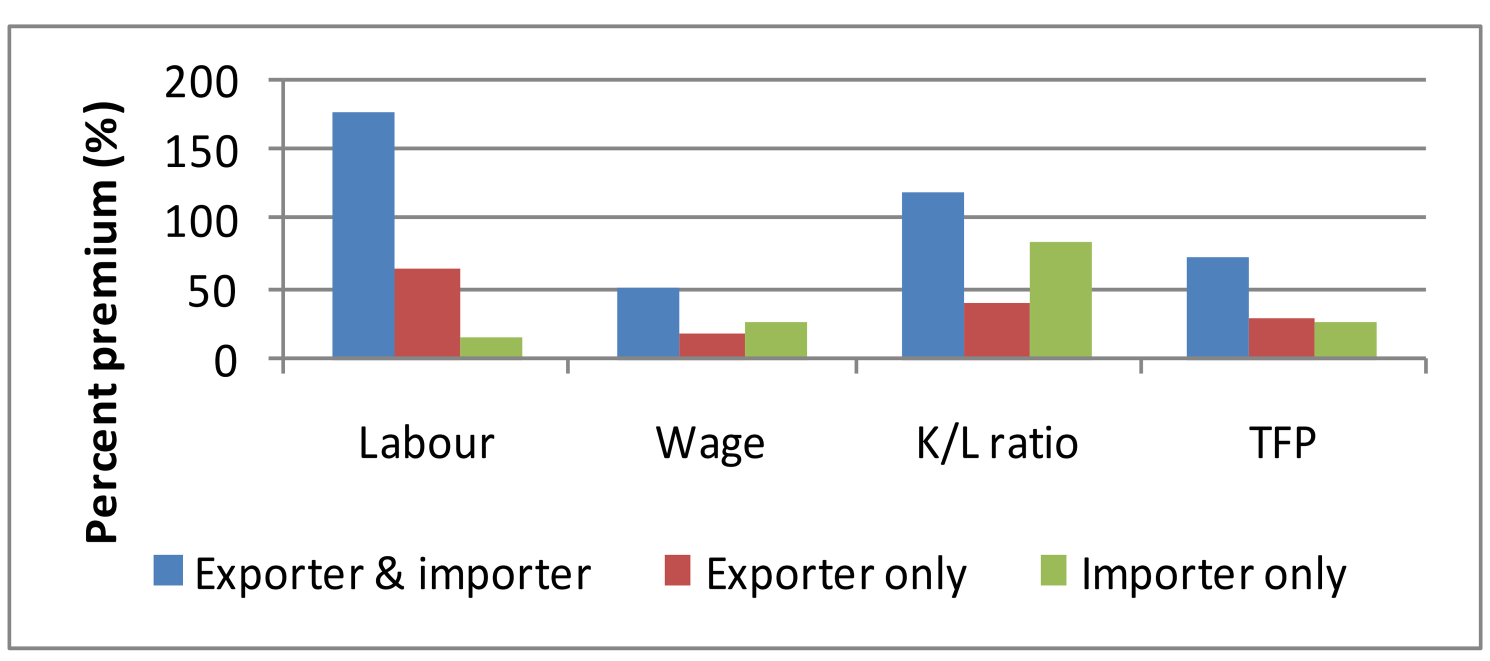
2. Data

- Use SA Revenue Services Customs transaction data for Exports and Imports
  - 2009 – 2014 by month
  - By HS8 digit and source/destination
  - A couple of million observations
- Match customs data to a panel of manufacturing firms using Company Income Tax data (2010-2013) and Employment Tax Certificate data
- Restrict sample to firms for which productivity can be calculated leading to 24,000 firm observations in each year between 2009 and 2013

3. Heterogeneous firms

- We find widespread simultaneous exporting and importing behaviour
  - One third of firms directly trade, half of which directly export and import
- Trading entities that export and import Employ more labour, pay higher wages and are more productive than firms that don't trade or only export or import

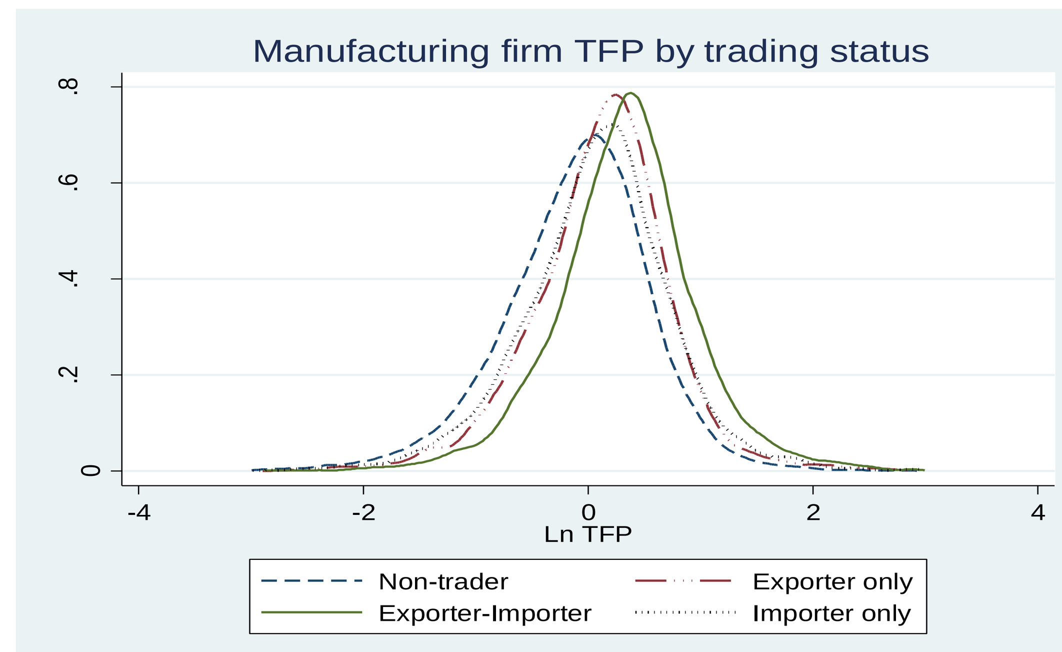
Figure: Trading premia over non-trading firms in manufacturing (2009-13) (percentage)



- Number and share manufacturing firms trading stagnant with high degree of persistence in trading status and low level of dynamism
  - Average survival rate of exporters and importers in each year is 91 per cent.
  - Only 3 per cent of non-trading firms enter into trading in the subsequent year.

4. Importing and productivity

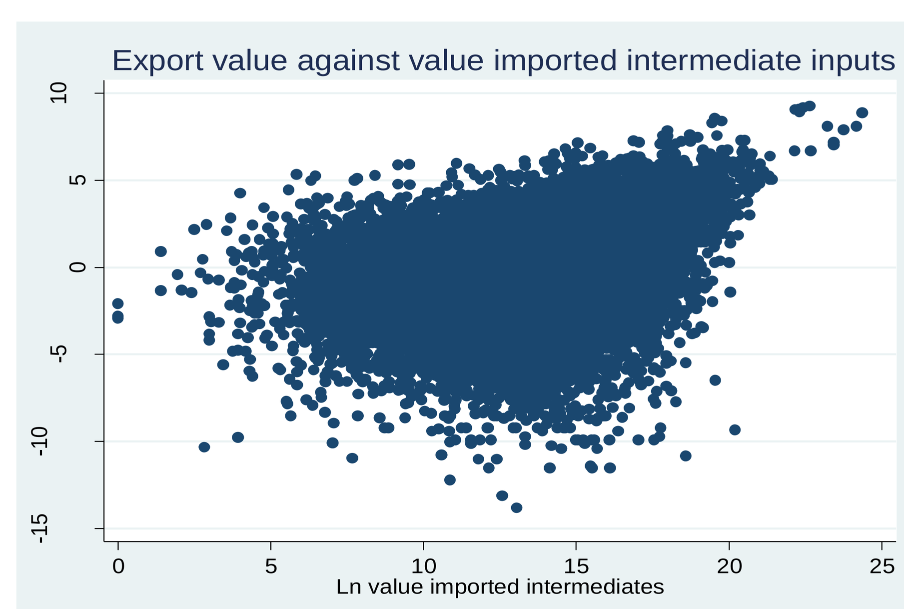
- In this section we test whether importing is positively related to firm productivity through various channels
- Kernel density estimates clearly illustrate a strong positive relationship between productivity of manufacturing firms and import status.



- Regression estimates where we control for various explanatory variables indicate that direct importers of intermediate inputs are between 10 to 46% more productive than other firms.
- In addition we find:
  - Imported varieties complement each other and enhance productivity. A 10% rise in the variety (number of product by source combinations) of imported inputs is associated with a rise in TFP of 0.3%.
  - There is no strong evidence of a diffusion of modern technologies embodied in inputs imported from high income countries to firm TFP.

5. Importing and exporting

- In the final section of the paper, we briefly assess the connection between imported inputs and firm export performance.
- A positive relationship is corroborated by the scatter plot between the value of direct imports (x-axis) and the value of exports (y-axis) presented in the scatter plot below.



- In addition, our detailed regression analysis controlling for firm and year fixed effects as well as TFP reveal evidence of:
  - *Export propensity*: Prior import status raises the probability that a firm exports in the subsequent period by 2.5 per cent.
  - *Complementarity effects*: Manufacturing firms that import more varieties of inputs export larger values and more products to more destinations.
  - *Technology transfer effects*: The relationship between direct imports from high income countries and export values and export variety is twice as strong as the relationship with imports from emerging economies.

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