Discussion of “Local sourcing and production efficiency”
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Disclaimer: The views herein are those of the discussant and not of the institution represented.
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Firms’ **domestic** sourcing decisions (described in Dhyne & Duprez 2018, henceforth DD) share several **common features** with **global** sourcing decisions (described in Antràs, Fort & Tintelnot 2017, henceforth AFT).

**#1** Firms’ performance **premia** are increasing in the **number of** …

… supplier countries (AFT) … domestic suppliers (DD)

There are sizeable **fixed costs** of …

… offshoring … outsourcing
Stylised facts

#2 There is divergence between the intensive and the extensive margins of sourcing

...globally (AFT) ...domestically (DD)

The fixed costs of offshoring/outsourcing are heterogeneous across source...

...countries ...domestic sectors

...and possibly across sourcing firms
#3 In their sourcing behaviour, a significant share of firms follow a pecking order across source…

… countries (AFT; see also Eaton et al. 2011) …domestic sectors (DD)

Both «source» characteristics, which make certain source countries/firms more appealing, and buyer firm-specific idiosyncracies contribute to shaping a firm’s domestic/global sourcing strategy.
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The model

- Variation of the AFT model
- The **key passage** is that, similarly to Bernard, Moxnes & Saito (2018), a firm can choose between producing a task in-house or outsourcing it, s.t. the price of a task $t$ paid by firm $i$ is:

$$z_i(t) = \min_{j \in J_i} \{ a_i(t), \tau_{ij} a_j(t) \}$$

where $J_i$ is the set of sellers for which firm $i$ has paid the **fixed cost** of outsourcing $f_{ij}$, $\tau_{ij}$ is the buyer-seller-specific **iceberg trade cost** and $a(t)$ is the unit labour requirement to produce task $t$

- This choice reflects **heterogeneity in firms’ core efficiency** ($\varphi_i$) to perform a given task

2 strong assumptions:

1) $\sigma - 1 > \theta$, only verified when demand is elastic and efficiency is heterogeneous across suppliers

2) Firms sell tasks at their marginal costs...yet possibly **imperfect competition in intermediate goods markets** (e.g. Grassi 2017; Kikkawa et al. 2018)?
The model

- **2 testable predictions**

  #1 **Suppliers** that are **more efficient** and that “charge” **lower trade costs** are more likely to be chosen.

  #2 The **share of tasks** a firm sources from a given supplier is increasing in the **supplier’s productivity** and decreasing both in **trade costs** and in the **buyer’s productivity**.

- **Tasks** are proxied by trade in goods and services.

- Only the set of **domestic suppliers** is considered.

- **Trade costs** are proxied by geographical distance and common language.
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The dataset

- The **NBB B2B dataset** documents all domestic transactions between any pair of Belgian VAT affiliates, providing transactions exceed 250EUR in a given year; then merged with firm-level **balance sheets** and **custom records/intra-EU declarations** a unique, comprehensive dataset

- Within the universe of firms (≈750,000), the sample is restricted to 311,590 firms for which sector of activity is known, from which only firms for which location, employment and TFP known in at least 1 year are analysed... how **representative** is this final sample?

- Is the **government** an important customer (presumably not recorded)?

- Are firms in **international** (vs. domestic) **groups** any different in their sourcing strategies? How are **foreign firms** treated?

- Is the geolocation known only for firms’ headquarters (i.e. issue of **multi-plant firms**)?
The empirical setup

• Only 5% of Belgian firms in 2012 directly sourced inputs from abroad. Why are so few Belgian firms offshoring? According to WIOT in 2012 41.1% of Belgian intermediate goods and services were sourced from abroad.

• Inclusion of foreign suppliers in the model
  - Borrowing from AFT, supplier country characteristics (e.g. technology, wages) also kick in
  - Additional proxies of trade costs (trade barriers/agreements; institutional differences…)

• Displacement or complementarity btw. foreign and domestic suppliers?
  - Furusawa et al. (2017): a rise in offshoring leads to an increase in the scope of domestic sourcing, especially from the more proximate domestic suppliers; offshoring reduces the average distance in domestic production networks
  - Bernard, Moxnes & Saito (2018): Most supplier-customer connections cover relatively short distances, although large and more productive firms have both more and more distant suppliers; the trading partners of these large firms are less well-connected (i.e. negative degree assortivity, found also in international trade; Bernard, Moxnes & Ullveit-Moe 2018)
The empirical setup

• Link to analyses of «extended» IO tables, which include firm heterogeneity
  - E.g. Michel, Hambýe & Hertveldt (2018) on 2010 Belgian IOT and SUT broken down by firms’ export orientation

• Panel 2002-2012 data
  - Assess any changes in local sourcing decisions before and after the GTC, also in conjunction with changing offshoring patterns: has the recent rentrenchment in GVCs (Timmer et al. 2016) been offset by the intensification of local production networks? Or have firms moved back to producing tasks in-house?
THANK YOU
FOR YOUR ATTENTION