

COMPNET WORKSHOP
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Competitiveness and Global Value Chains: Can Micro Data Help (More)?

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CompNet and GVCs

- Background: emergence of global value chains (GVCs), trade in intermediate goods and tasks
- Gross flows of goods and services crossing borders back and forth are hardly informative of value added, factor income and factor content generated in a country
- Direct impact on the assessment of the country's "competitiveness" (i.e. ability to generate value added, income, employment, ultimately welfare for its citizens)

CompNet and GVCs

- CompNet: comprehensive set of indicators to assess integration of countries into GVCs and the implications for country performance
- Research questions:
 - Which firms take part in GVCs?
 - Which countries are net gainers/losers from participating in GVCs?
 - What are the effects of GVCs on the interdependencies between economies and external imbalances?

How Can Micro Data Help (More)

Three directions:

- *Two-sided data*: Exporter-importer matches
- *Actual matching*: Intermediaries vs. Direct Trade
- *Networks*: 'key players'

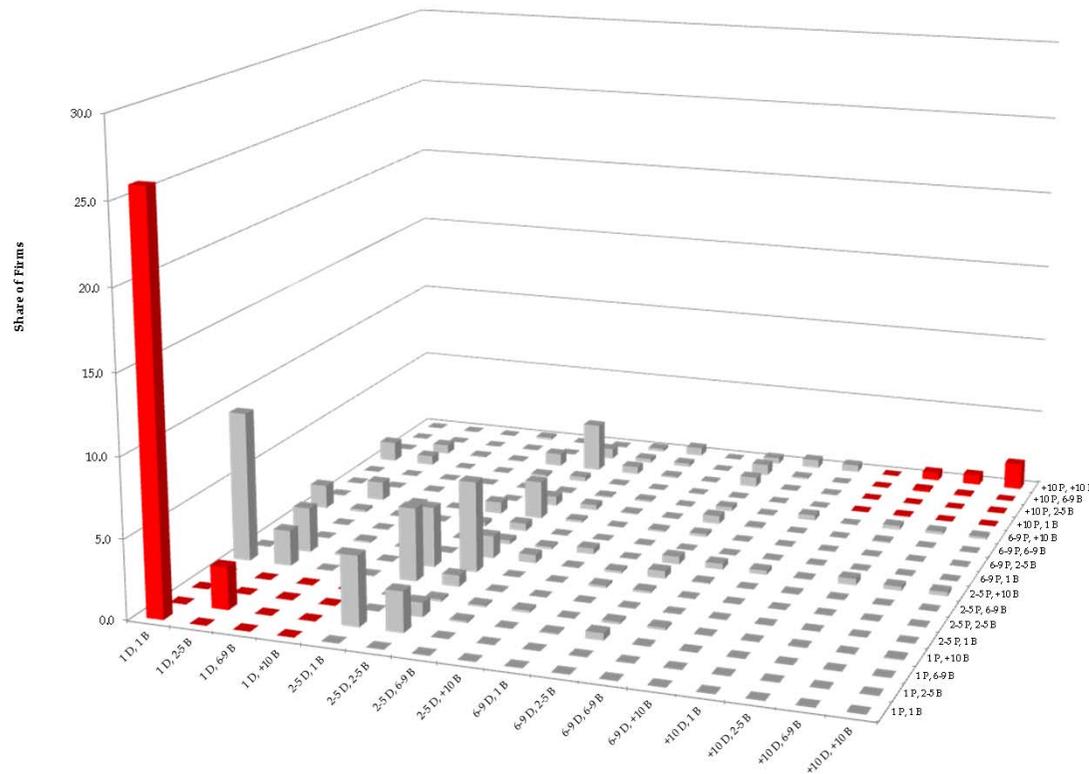
Two-Sided Data

- Existing firm-level analyses of trade flows are based on ‘one-sided data’: for a shipment they identify either the seller *or* the buyer, but *not* simultaneously *both* (beyond being or not related companies)
- They do not provide a complete picture of trade relationships as these are two-sided: little evidence on the number of actual partners across products and countries as well as on the distribution of firm-level trade across partners
- Does this matter?

Carballo, Ottaviano, Volpe (2013)

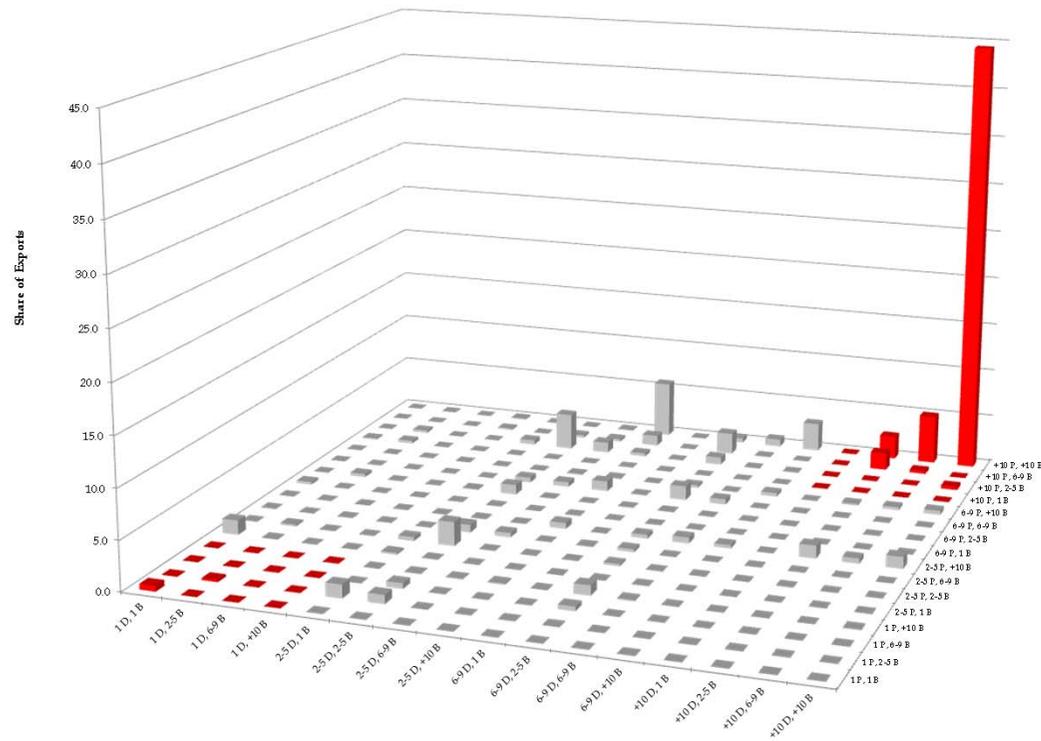
- Matched dataset of highly disaggregated firm-level data on manufactures for Costa Rica, Ecuador and Uruguay from 2005 to 2008
- *Exporter-product-importer-country* level info: value of each shipment from each exporter of each product (10-digit HS level) to each importer in each destination country
- Matched with basic balance sheet info
- Virtual coverage of the whole population and not just a sample of exporters

Buyers & Sellers: Share of Firms (CR)



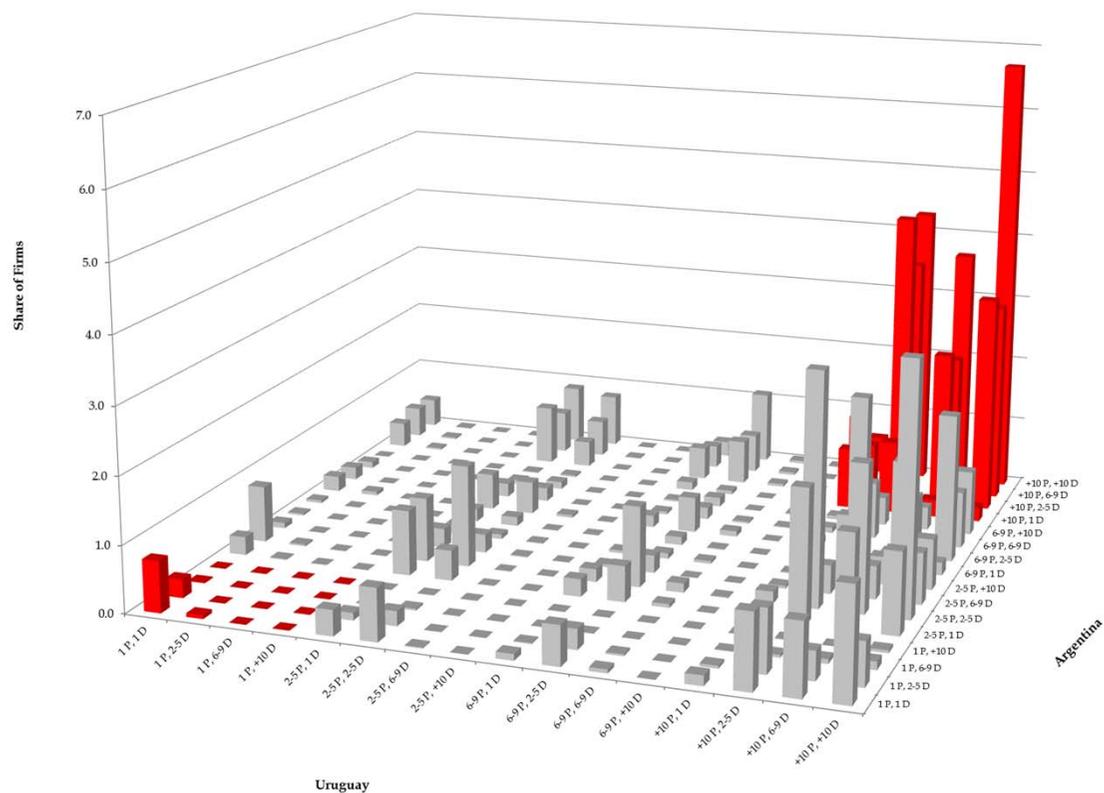
- For each cell (m D -- n B; r P- s B) the figure reports the share due to exporters that have no less than n Buyers in at least one of their m Destinations and no less than s Buyers of at least one their r Products

Buyers & Sellers: Share of Exports (CR)



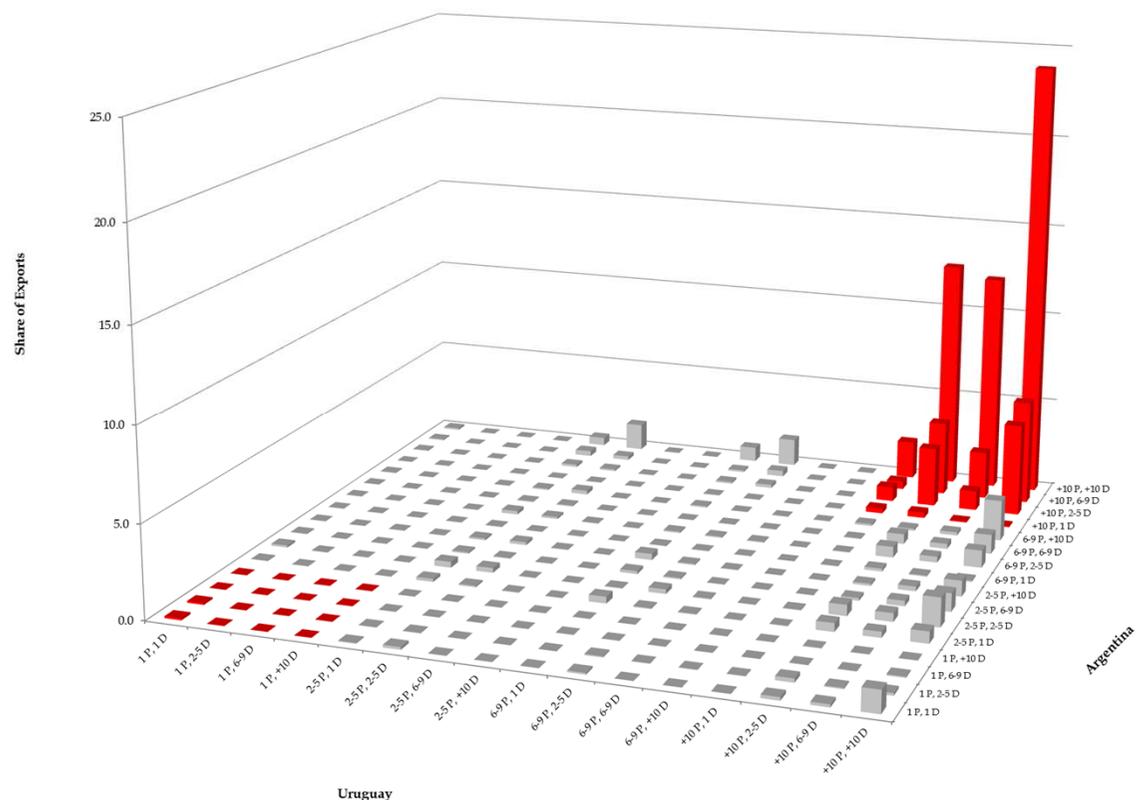
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Buyer-Seller Matches: Share of Firms



- For each cell ($m P -- n D$; $r P- s D$) the figure reports the share due to Uruguayan firms importing no less than m products from at least one their n Destinations *and* Argentinean firms exporting no less than r products to at least one of their s Destinations.
- Exports from Argentina to Uruguay in 2005

Buyer-Seller Matches: Share of Exports



- For each cell ($m P -- n D$; $r P- s D$) the figure reports the share due to Uruguayan firms importing no less than m products from at least one their n Destinations *and* Argentinean firms exporting no less than r products to at least one of their s Destinations

- Exports from Argentina to Uruguay in 2005

Blum, Claro, Horstmann (2009)

- Matched data on Chilean exporters and Colombian importers from 2004 to 2006
- In virtually every exporter-importer pair at least one of the parties is a 'large' international trader
- More than half of the Chilean exporters sell to only 1 Colombian importer
- These exporters sell smaller amounts and fewer HS codes to Colombia and to the world but sell large amounts and more HS codes per importer
- They also sell to importers that purchase larger amounts and more HS codes

Blum, Claro, Horstmann (2009)

- Findings suggest that efficient trading involves large volume matches
- Small exporters match with large distributors (economy of scale in finding customers); small importers match with large customers (easier to find: 'indivisible visibility')
- Trade reform in a country has external benefits for other countries by reducing the cost of direct-to-market vs. intermediated sales
- Analyses of GVCs should pay more attention to the role of export intermediaries

Bernard, Grazzi, Tomasi (2011)

- All cross-border transactions performed by Italian firms from 2000 to 2007
- Export intermediaries (e.g. wholesalers) serve different markets and export different products than manufacturing exporters
- High market-specific fixed costs of exporting, the (lack of) quality of the general contracting environment and product-specific factors play important roles in explaining the existence of export intermediaries

Bernard, Grazzi, Tomasi (2011)

- The ability of export intermediaries to overcome country and product specific fixed costs means that they can more easily respond along the extensive margin to external shocks
- For instance, intermediaries and direct exporters respond differently to exchange rate fluctuations
- Both in terms of the total value of shipments and the number of products exported as well as in terms of prices and quantities

Bernard, Grazzi, Tomasi (2011)

- Aggregate exports to destinations with high shares of indirect exports are much less responsive to changes in the real exchange rate than are exports to countries served primarily by direct exporters

Ballester, Calvo-Armengol, Zenou (2006)

- Who's who in networks: 'key player' in peers effects
- The 'key player' is the player who, once removed, leads to the optimal change in aggregate activity
- In criminal networks, this is the player who, once removed, leads to the maximum in aggregate activity
- In GVCs, the 'key player' can be seen as the player whose removal causes the maximum disruption in aggregate activity
- Extension to 'key groups' and 'key links'

Thank you for your attention
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