Wholesalers in International Production Networks and Their Effects on Aggregate Productivity[a]

Bernardo Blum, Sebastian Claro, Kunal Dasgupta, Ignatius Horstmann, Marcos Rangel

Discussion by Federico Huneeus

Central Bank of Chile

[a]The views and opinions expressed are those of the authors alone and do not necessarily reflect those of the Central Bank of Chile.

Overview

- Very nice paper (and interesting agenda) on the role of intermediaries for input trade
  - Build firm-to-firm international linkages dataset between Chile and Argentina
  - Document useful facts about the relevance and distributional features of input intermediaries
  - Build a model around those facts and argue for its quantitative relevance
- Definitely a natural and relevant direction to push the frontier
  - Both in terms of understanding input trade and also the international margin of firm-to-firm trade
  - My comments will mostly focus on discussing priorities and emphasis of the paper's direction
- On top of all this, it is very well written, which is always appreciated
- Will focus my attention on three comments
  I. Model benchmark
  II. Market structure and price setting
  III. Empirical and quantitative implementation

I. Model Benchmark

- Paper aims at showing how the welfare gains from trade (WGT) change with intermediaries
- This is an ingredient of the paper that the authors could push more
- For example, show which are the sufficient statistics for the WGT in this model
  - It seems like a natural way to go is to extend Blaum et al. (2018) to include intermediaries
  - Authors discuss intuition but brief and without taking into account all the ingredients of the model
  - It seems that they have all the ingredients to do it
- This discussion is relevant for understanding the microfoundation of the trade elasticity
  - Authors argue that their model changes the trade elasticity
  - $\Rightarrow$ Trade elasticity in counterfactual model without intermediaries should be recalibrated
  - To understand how much of the WGT comes from that (some of this in the paper, but indirectly)

II. Market Structure and Price Setting

- Several modeling decisions that could be discussed (and justified) more (beyond tractability)
  - Eg, buyers are passive and suppliers active in choosing the mode of trade
  - Eg, buyers and suppliers bargain over surplus only in indirect trade
  - One can see that these decisions help in mapping to the facts
  - But would be good to see what are the limits of being more symmetric, unless for economic reasons
  - Such as the technology behind wholesalers, there are good reasons to be asymmetric there
- For example, adopt the structure of two-sided market power as in Alviarez et al. (2023)
  - Oligopolistic and oligopsonistic forces combined for direct international trade
  - Authors have (slightly) better data to do this
  - Is bargaining power different across modes of export? How do wholesalers affect market power?
  - How do these features affect the welfare gains from trade?
  - The authors focus on efficient equilibria, but abstracting from market power is a limitation

III. Empirical and Quantitative Implementation

1. Why not including capital in the analysis?
   - Capital good is an intermediate input without complete depreciation
   - How prevalent are wholesalers in capital trade? This could expand the role of intermediaries

2. Authors focus on cross-sectional patterns, they could also exploit panel dimension
   - Eg, what happens to firms when they switch from directly to indirectly exporting (or viceversa)?
   - Eg, how does mode of export vary over firm life cycle of exporting?
   - Eg, role of intermediation for pass-through analysis $\Rightarrow$ Inform role of intermediaries on market power
   - Is the model consistent with those patterns?
   - Also motivate with evolution of intermediaries relevance

3. One important fact that is missing: Size assortativity between suppliers and buyers
   - This moment is useful to discriminate between models of firm-to-firm linkages
   - Domestic firm-to-firm literature finds negative assortativity $\Rightarrow$ Models with fixed costs
   - Does it hold for direct versus indirect input trade to the same extent?
   - Some ingredients of this fact are in the paper, but would be useful to show it directly
   - Especially to benchmark directly with the domestic firm-to-firm literature

Less Relevant Comments

1. Data merge details and coverage could be discussed (at least discuss key results from other paper)
2. Return to initial facts after calibrating the model, to check the performance of the model
   - Eg, how mode of export varies across firm size, extensive vs intensive margin decomposition
3. Calibration presentation could be made more detailed and transparent
   - Either show more closely mapping of model to data, or show more the uncertainty around estimates
4. What is the role of vertical integration, eg, between manufacturers and wholesalers?
   - Do manufacturing exporters have affiliates in Chile that focus mostly on wholesaling?
5. Consider the case in which relationship fixed cost is denominated in intermediate inputs as well
   - This is important for amplification forces in these class of models
6. The paper gets into several digressions of the theory that could be synthetized and/or avoided
   - Eg, high versus low ability intermediaries
7. Discuss more the role of returns to scale for wholesalers, how much should this play a role?
8. Calibrate parameters across sectors to evaluate the relevance of that heterogeneity?

Final Remarks

- Relevant paper that expands our understanding of input trade, combining new facts and model
- Looking forward to next iterations of this paper and future research of this agenda

Thanks!