Concentration and Markups in International Trade

Alviarez, Fioretti, Kikkawa and Morlacco

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Preamble

- Growing macro interest on economy-wide changes in market power
- Markups are hard to recover $\Rightarrow$ use concentration measures
- Authors revisit this practice in the context of intermediate input markets, characterized by bilateral market power
  - $\Rightarrow$ Take *Alviarez et al (2022)* to the data using rich Colombian import transaction-level dataset.
- This is a partial equilibrium model of global value chains with:
  - (i) Finite number of buyers & sellers in fixed network
  - (ii) Sellers supply differentiated varieties (oligopoly) through a DRS technology (oligopsony)
  - (iii) Bilateral input prices are allocative and Nash-in-Nash
- Key model implication(s): aggregate markups are a function of **both** seller and buyer concentration measures
  - $\Rightarrow$ Requires **modified HHIs** because market $\neq$ industry

Summary of Paper

Model validation using aggregate unit values at the product level

- Unit values increase (decrease) with seller (buyer) concentration
- Effects are weakened as competition in the input matters increases: higher elasticity of substitution and lower scale elasticity

Trends in **model-implied vs standard** measures of market power

1. Modified HHIs:
   - Buyer concentration is more pronounced overall but seller concentration increases more over time
   - Both are positively correlated
   - These patterns do not hold for standard measures
2. Aggregate markups
   - Moderate increase driven by larger oligopoly power
   - Increase is smaller than predicted by Nash-Bertrand model

Some Remarks

Nice follow-up of *Alviarez et al (2022)*: timely question, neat theoretical result & interesting results

Summary of my comments

1. Limitations of focusing on imports
2. Disentangling the sources of bias
3. What drives concentration?

Comment I: Limitations of Focusing on Imports

- Empirical focus on the market for imported intermediate inputs
  - * Caveat: this might not be the final application!
- In my view, this is not the ideal application despite the availability of rich firm-to-firm data
- Two sets of actors are not observed in the data:
  - (i) Domestic firms supplying intermediate inputs
  - (ii) Non-Colombian firms also buying from the foreign exporters.

How to reconcile this with the theoretical framework?

- **Home bias in demand for intermediate input**
- **Varieties are differentiated across countries**
  - $\Rightarrow$ **Define market at the product x country of origin level**

Comment II: Disentangling Sources of Bias

- To what extent do network features shape aggregate markups?
- Two sources of potential bias in standard measures:
  1. Ignoring the degree of buyer concentration
  2. Wider scope of market definition
- The former emerges naturally from bilateral market power.
- The latter is the result of assuming the network of firm-to-firm relationships is **exogenous**
- From the current aggregate markup counterfactual, it is unclear **how far do each of these ingredients take us separately**
- The network is an equilibrium object that responds to changes in market power

  Use transaction level data to test whether the network has remained stable over sample period

Comment III: What Drives Concentration?

Perhaps the deepest conceptual problem with concentration as a measure of market power is that it is an outcome, not an immutable core determinant of how competitive an industry or market is [...] the conditions of competition drive concentration, not vice versa

Syverson (2019)

- While the model provides a unique mapping from concentration measures to markups

  ... it is still the case that concentration is an equilibrium object

- Thus, if structural parameters are taken to be time-invariant

  What economic forces drive the documented patterns in concentration measures?