Discussion of

Concentration and Markups in International Trade

by

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Workshop on Market Power in Supply Chains

February 2025

Introduction

Motivation:

- rising market power/markups in the US [De locker et al. (2020)]
- Yet: estimating markups requires data we often lack

$\Longrightarrow$ resorting to concentration measures (aka HHIs) instead

Stylized Facts

- US HHIs and markups are rising in tandem [Autor et al. (2020)]
- EU: 43% $\nearrow$ in concentration
  - ★ But: a stable markup - 1 p.p. $\nearrow$ [Bighelli et al. (2023)]

Question: Is concentration a good measure of market power?

- **This Paper:** No in the presence of GVCs!
  - ★ markups determination for firm-to-firm transactions $\neq$ (final) sales

This Paper

What: markup relevant concentration in international trade

$\Longrightarrow$ (re)establishing the link between concentration and markups

Why: limited gains from trade in the presence of dominant firms!?

How: progress guided by theory

1. incorporating: (1) network structure and (2) bilateral power
   - adjusting the HHIs to capture the network structure
   - bilateral market power: HHIs for both buyers and suppliers
2. focus on a specific empirical setting:
   - firms engaging in trade
   - at the product level

Preview of results

To a first order approximation:

$$\begin{aligned}\mu \approx & (1-\phi)\frac{\rho}{\rho-1}+\phi \\ & +(1-\phi)\left[\frac{\rho-\tilde{\nu}}{(\rho-1)^2}HHI^{suppliers}\right] \\ & -\phi\left[\frac{1-\theta}{2\theta}HHI^{buyers}\right], \end{aligned} \tag{1}$$

where $\tilde{\nu} \equiv (1-\gamma+\nu\gamma)$.

Results:

- markup inference guided by theory
- countervailing forces:
  - ★ oligopoly (supplier/exports) vs. oligopsony (buyer/imports)!

Concentrations

$$HHI^{suppliers} \equiv \sum_j \varphi_j HHI_j^{s_{ij}}, \text{ where } HHI_j^{s_{ij}} \equiv \sum_i s_{ij}^2.$$

where $\varphi_j \equiv \frac{\sum_j p_{ij} q_{ij}}{\sum_i \sum_j p_{ij} q_{ij}}$: share in total industry sales
and s_{ij}: supplier market share

$$HHI^{buyers} \equiv \sum_i \varphi_i MHHI_i^{x_{ij}}, \text{ with } MHHI_i^{x_{ij}} \equiv \sum_j x_{ij}^r x_{ij}.$$

with weights $x_{ij}^r \equiv \frac{p_{ij} q_{ij}}{\sum_k p_{ik} q_{ik}}$: share of buyer j in supplier i's revenues

Bias in standard HHIs if

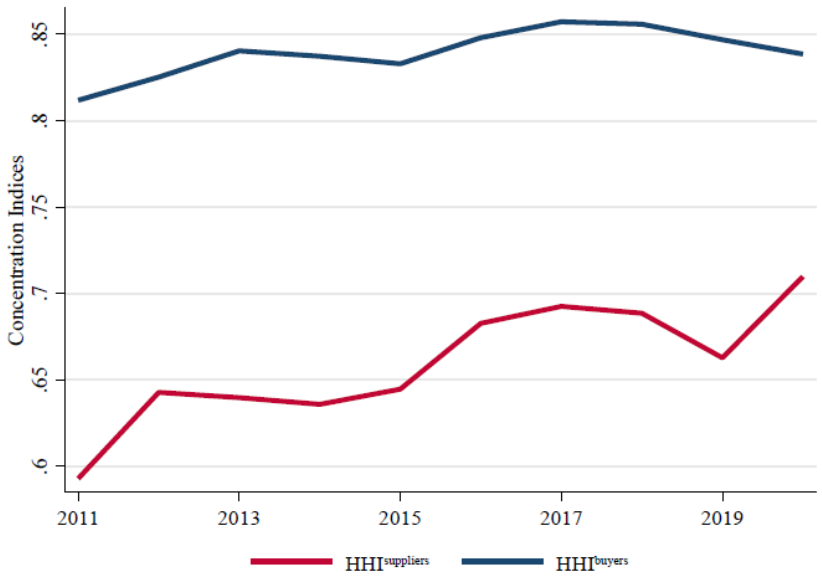
- $\phi > 0$
- large heterogeneity and $\#buyers/suppliers$ within industries

Application

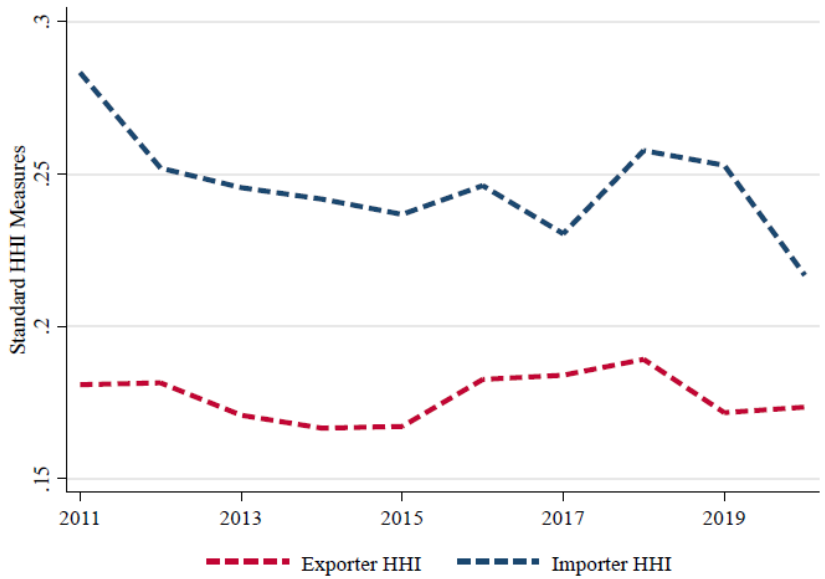
Construction of product level (HS10) HHIs

- using firm level Colombian trade data
  + literature parameters ($\rho, \gamma, \nu, \theta$): varieties subst. elasticity, input cost share, demand elasticity, returns to scale
  + and estimated ϕ: bargaining power

(a) 'Network-based' measures



(b) Standard Measures



Comments

Main comments: 2 important caveats

1. The market: firm-level exports/imports
   - ★ leaving out non-exporters/importers
2. Sources of power:
   - ★ Exports' HHI. But no domestic sales or other domestic IO links

Q: Is this the markup we should be interested in?

- relevance?
  - ★ UK (ONS, 2022): 11.6% of firms export
  - ★ Does exporter market power affect domestic buyers?

Further comments

1. The importer's buyer share: the quantity (not value) of i's exports of product h in total h exports to Colombia.
   - Colombia might be a small market for its suppliers!
2. Alternative mechanism/endogeneity: HHI ↗ rewarding high product/ty firms (not due to market power) [Baqaee and Farhi (2017)]
3. Final or intermediate goods?
4. Robust to alternative market definitions - regions, industries?

Suggestions

1. Ideally you need VAT data matched to imports to capture all the domestically relevant firm-to-firm transactions
2. No detailed domestic sales data? → drop importers/exporters w/ domestic sales
3. Can you estimate buyer and supplier markups to validate your measures?
4. Implications:
   - What is the effect of GVCs (e.g exp. power) on domestic markups?
   - What are the implications of market power on trade? Evidence of trade reduction?

Conclusion

Main Takeaway: Inputs' (Buyer) concentration can change the effect of exports (Supplier) concentration on markups

Bottom Line: Very interesting!

★ See Carr and Davies (2022) for a UK study on producers vs. sellers concentration

- featured in CMA's SoC (2022)
- consistent evidence! Even with a different approach and data.