U.S. Market Concentration and Import Competition (2024)

by Mary Amiti and Sebastian Heise

Discussion by Eric Hsienchen Chu

Fall 2024 ECON 871

Summary of Amiti and Heise (2024)

Question. How import competition (ΔIP_{it}) affected production concentration (ΔC^P_{it}) and market concentration (ΔC^M_{it})?

- Why to care? Market concentration ($\approx$ power) $\implies$ Markups
- 2SLS: Instrument for ΔIP_{it} with $Inst_{\Delta IP_{it}} = \sum_{j \neq US} w_{ij,t-5} \tilde{\beta}_{ijt}$ ("Bartik"),

$$\Delta C_{it} = \gamma \underline{\Delta IP_{it}} + \delta_t + \varepsilon_{it}, \tag{1}$$

where ΔC_{it}: 5-yr change in concentration in industry i (t: 1992-2012)[1]

Contribution. Stable aggregate market concentration (theoretical-consistent):

- Domestic U.S. firms: an $\nearrow$ in ΔC^P_{it} ("selection"), but a $\searrow$ in ΔC^M_{it}
- Foreign firms selling in the U.S.: an $\nearrow$ in ΔC^M_{it}

[1] Data: Census of Manufactures & Longitudinal Firm Trade Transactions Database; UN COMTRADE

Key Results: Section 5 Table 1

[2SLS] $\Delta C_{it} = \gamma \underline{\Delta IP_{it}} + \delta_t + \varepsilon_{it}$, where $\Delta IP_{it} = \eta Inst_{\Delta IP_{it}} + \zeta_{it}$

Table 1: Change in Concentrations and Import Competition (Simplified)

	Production Concentration	*Market Concentration*		
	ΔC_{it}^{P}	$\Delta C_{it}^{M,dom}$	$\Delta C_{it}^{M,all}$	$\Delta C_{it}^{M,for}$
ΔIP_{it}	0.209^{**}	-0.289^{***} ↓	0.041 →	0.381^{***} ↑
	(0.089)	(0.083)	(0.074)	(0.053)
First stage	ΔIP_{it}	ΔIP_{it}	ΔIP_{it}	ΔIP_{it}
$Inst_{\Delta IP_{it}}$	0.383^{***}	0.390^{***}	0.390^{***}	0.390^{***}
Predicted effects on ΔC_{it}	0.005	-0.008	0.001	0.010
Actual effects	0.033	-0.016	0.003	0.023
N	500	500	500	500

Note: Regressions for ΔC_{it}^{P} is weighted by industry shipments in 1992; regressions for ΔC_{it}^{M} are weighted by industry absorption in 1992.

Two Major Comments

Comment #1: Export Supply Shocks (Bartik IV)

Starting from FE model: $\Delta M_{ijkt} = \alpha_{ikt} + \beta_{ijt} + \varepsilon_{ijkt}$, ($importFE + exportFE$),

$\Rightarrow$ **Want.** Construct $Inst_{\Delta IP_{it}} = \sum_{j \neq US} w_{ij,t-5} \tilde{\beta}_{ijt}$; shifter $\tilde{\beta}_{ijt} = \hat{\beta}_{ijt} - \text{med}(\hat{\beta}_{it})$

Strategy. Estimate $\hat{\beta}_{ijt}$ (**how?**) $\rightarrow$ compute $\tilde{\beta}_{ijt}$ $\rightarrow$ construct $Inst_{\Delta IP_{it}}$

① Define $D_{ijt} \equiv \sum_k \Delta M_{ijkt}$ (total Δ Exports of j of industry i to k):

$$\Rightarrow \sum_k \alpha_{ikt} + \sum_k \beta_{ijt} + \sum_k \varepsilon_{ijkt} = \sum_k \left(\frac{M_{ijk,t-5} \alpha_{ikt}}{\sum_k M_{ijk,t-5}} \right) + \sum_k \left(\frac{M_{ijk,t-5} \beta_{ijt}}{\sum_k M_{ijk,t-5}} \right)$$

$$\equiv \beta_{ijt} + \sum_k \phi_{ijk,t-5} \alpha_{ikt} \quad \text{——} \quad (\bigstar)$$

② Similarly, define $D_{ikt} \equiv \sum_j \Delta M_{ijkt}$ (total Δ Imports of k of industry i from j):

$$\Rightarrow \sum_j \alpha_{ikt} + \sum_j \beta_{ijt} + \sum_j \varepsilon_{ijkt} = (skip) \equiv \alpha_{ikt} + \sum_j \psi_{ijk,t-5} \beta_{ijt} \quad \text{——} \quad (\bigstar\bigstar)$$

③ By acct $(\bigstar) = (\bigstar\bigstar)$, we have $J + K$ eqns & unknowns $\Longrightarrow$ unique $\hat{\beta}_{ijt}$ $\square$

Comment #2: Implications

The main implication is to infer markups from market concentration

- Amiti and Heise (2024) got half the job done, showing us a stable aggregate market concentration
  - ⊛ The first to study **both** domestic & foreign firms selling in the U.S.
  - ⊛ Identify foreign suppliers by the Manufacturer ID in LFTTD

- What about the markups part? (stable mkt concentration $\overset{?}{\rightarrow}$ stable markups)

- Several prior studies for markups (but domestic firms only):
  - ⊛ How do markups distribute **by industry**? (De Loecker et al., 2016)
  - ⊛ How do markups distribute **spatially**? (Atkin & Donaldson, 2015)
  - ⊛ How do markup distribute via **retail chains**? (DellaVigna & Gentzkow, 2019), (Gopinath et al., 2011), (Atkin et al., 2018)

- I found it particularly interesting to think about trade-associated domestic sales; may be a great mix of Trade/IO/Urban!

References

Amiti, M., & Heise, S. (2024). **U.s. market concentration and import competition.** *The Review of Economic Studies*, forthcoming. https://doi.org/10.1093/restud/rdae045

Atkin, D., & Donaldson, D. (2015, July). **Who's getting globalized? the size and implications of intra-national trade costs (Working Paper No. 21439).** National Bureau of Economic Research. https://doi.org/10.3386/w21439

Atkin, D., Faber, B., & Gonzalez-Navarro, M. (2018). **Retail globalization and household welfare: Evidence from mexico.** *Journal of Political Economy*, *126*(1), 1–73. https://doi.org/10.1086/695476

De Loecker, J., Goldberg, P. K., Khandelwal, A. K., & Pavcnik, N. (2016). **Prices, markups, and trade reform.** *Econometrica*, *84*(2), 445–510. https://doi.org/10.3982/ECTA11042

DellaVigna, S., & Gentzkow, M. (2019). **Uniform pricing in u.s. retail chains.** *The Quarterly Journal of Economics*, *134*(4), 2011–2084. https://doi.org/10.1093/qje/qjz019

Gopinath, G., Gourinchas, P.-O., Hsieh, C.-T., & Li, N. (2011). **International prices, costs, and markup differences.** *American Economic Review*, *101*(6), 2450–86. https://doi.org/10.1257/aer.101.6.2450