U.S. Market Concentration and Import Competition (2024) by Mary Amiti and Sebastian Heise

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Summary of Amiti and Heise (2024)

Question. How import competition (ΔIP_{it}) affected production concentration (ΔC_{it}^P) and market concentration (ΔC_{it}^M) ?

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

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

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_{it}^P ("selection"), but a \searrow in ΔC_{it}^M
- Foreign firms selling in the U.S.: an \nearrow in $\triangle C_{it}^{M}$

 $^{^{1}}$ Census of Manufactures & Longitudinal Firm Trade Transactions Database, UN COMTRADE

Key Results: Section 5 Table 1

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

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:
$$\Delta M_{ijkt} = \alpha_{ikt} + \beta_{ijt} + \varepsilon_{ijkt}$$
, (import FE + export FE),
 \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):

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

$$\equiv \beta_{ijt} + \sum_{k} \phi_{ijk,t-5}\alpha_{ikt} - (\bigstar)$$

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

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

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

Comment #2: Implications

The main implication is to assess <u>market concentration</u> for markups

- Amiti and Heise (2024) has done the first part, showing a stable aggregate market concentration
 - The first to study both domestic & foreign firms selling in the U.S.
- ullet What about the markups part? (stable mkt concentration $\stackrel{?}{ o}$ 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

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