



From Micro to Macro: Market Power, Firms' Heterogeneity and Investment

Dan Andrews

Chief Advisor – Macroeconomic Modelling and Policy

Australian Treasury

European Investment Bank | 19 March 2019

Overview – Macro and Methodological Issues

- Two great papers that demonstrate the importance of measurement to understand differences in the cross-section and over time:
 - a) Resource misallocation in the US and India
 - b) Industry concentration in Europe and the US
- 2. Implications of changing patterns of industry concentration

Cian: Misallocation or Mismeasurement?

- 1. Correcting for mismeasurement has non-trivial effects on HK misallocation estimates
 - Reallocation gains \downarrow (102% \rightarrow 61%) but remain large
 - Smaller \downarrow in AE (-1.75% \rightarrow -1%) but still a big drag on TFP
- 2. How to best measure misallocation? HK, BF, OP?
 - HK + model mis-specification (Haltiwanger et al 2018)
- 3. Assumption: measurement error is <u>additive</u> + orthogonal to true marginal product. Challenges?
 - Rising assortative matching (Song et al, 2019) →
 measurement error → overstate TFPR dispersion?

Chiara: Industry Concentration in Europe and North America

- 1. Uses OECD Multiprod and ORBIS to show that industry concentration has risen in Europe
 - Group structure + apportion group sales to cty*ind
 - Choice of denominator \rightarrow looms large



Paper #2: Industry Concentration in Europe and North America

- 1. Uses OECD Multiprod and ORBIS to show that industry concentration has risen in Europe
 - Group structure + apportion group sales to cty*ind
 - Choice of denominator \rightarrow looms large
- 2. A careful and nuanced interpretation
 - "Industry concentration is distinct from market concentration"
 - Use other metrics (mark-ups, profits, M&A and entry) to measure competition

National vs Local When Walmart comes town

Rising national concentration has been accompanied by falling local by falling local concentration as large firms opened new plants in new local markets.

05 Average Change in HHI from First Year 0 -.05 With Walmart Entering Without Walmart Entering -.15 -2 -3 -1 Years Since Walmart Opening in ZIP

Source: Rossi-Hanberg et al, (2019), "Diverging Trends in National and Local Concentration"

Figure 17: Effect on concentration when Walmart enters a local market

Implications of rising industry concentration

- 1. Rising industry concentration has coincided with rising mark-ups, declining biz and labour market dynamism
 - Symptomatic of \downarrow competition and policy weakness.
 - More innocuous technology story (but may be a concern for policy in the future)
- 2. Cross-country data (cty-ind-year) can help
 - Technology: how much of the rise in concentration can be accounted for by industry*year fixed effects?
 - Repeat this exercise for firm entry rates + job reallocation rates
 - If unexplained variation remains, has 个 concentration been associated with less jobs, investment, wages, innovation?

Concentration and young firms: *preliminary evidence from Downunder*

- If industry concentration was a problem, presumably young firms would find life more difficult in more concentrated environments (via barriers to entry).
- Within industries, how is changes in industry concentration associated with:
 - Entry rates
 - Survival of young firms
 - Post-entry growth of young firms

Modest negative relationship between changes in concentration and firm entry rates



Nuanced relationship between concentration and post-entry performance

Concentration (Top 10 share of sales), exit and post-entry growth			
	Probability of exit ↑	Firm employment growth	
Concentration	0.0077	-0.0629*	
Concentration*Young	0.0130**	0.0986***	
Concentration*Middle age	0.0131***	0.0124	
Observations	20,177,869	6,506,652	

*** p<0.01, ** p<0.05, * p<0.1; ΔSU = change in state unemployment rate Young is below 3 years old, middle age 3-5, and old above 5 All specifications include industry fixed effects, industry growth rates and year fixed effects as controls. Errors clustered at the industry level.

Higher concentration is also associated with a weaker the connection between exit and labour productivity

Faster post-entry growth for young firms: selection at entry?