Discussion of:
Diverging Trends
in National and Local Concentration

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MOTIVATION

This is an interesting and thought-provoking paper

Main take-away
1. Dichotomy: National Concentration ↑ ↔ Local Concentration ↓
2. Main Conclusion: large national firms induce competition in local markets

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Main take-away
1. Dichotomy: National Concentration $\uparrow$ $\leftrightarrow$ Local Concentration $\downarrow$
2. Main Conclusion: large national firms induce competition in local markets

Some remarks to guide the discussion for future research
  I. Concentration Measures
 II. The 4 Facts revisited
III. Unobserved Market Structure in Macro

I. Concentration Measures

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- Market power:

    "the ability of a firm to profitably raise the market price of a good/service over marginal cost"

- Problem:
    - How to measure MC?
    - Profits? Accounting profits are not economic profits
    - $\Rightarrow$ Use indirect concentration measures: $\text{HHI} = \sum_i s_i^2 \in [0; 10,000]$

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- Concentration = Market Power?
    1. Depends on the model of firm behavior

        Yes, Cournot: Market Power increases HHI; Not in Melitz (2003), Melitz-Ottaviano (2008)

    2. Depends on the Market Definition: who are the competitors?

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    $\Rightarrow$ Answer:
    - IO: no, Bresnahan (1989), BLP (1995)
    - DOJ: yes, HHI > 3,000
    - Macro/Labor?

What constitutes a market in the Macro sense?

- HHI is mechanically related to number of firms/establishments
    - HHI increases in coarseness of market def: ZIP > county $\lessgtr$ MSA > State > Nation
      $\rightarrow$ Can normalize and use change
    - Missing data is a problem (NETS)
- Standard unit of market: "SIC $\times$ Geo"
    - One size doesn't fit all: Coffee shops (ZIP) vs Furniture (MSA) vs Manufacturing (Nation)
        - Cannot use same "SIC $\times$ Geo" market definition for all
    - Those markets are typically very large ($N > 10,000$) $\Rightarrow$ HHI is very small (< 1)
        - Imperfect Competition: $N > 20$ is perfect competition
        - DOJ starts at HHI$> 3,000$, $N = 3$...

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    $\rightarrow$ HHI is even more challenging in Macro than in IO

- Using fixed market definitions over time is a challenge

    The number of competitors changes for mechanical reasons

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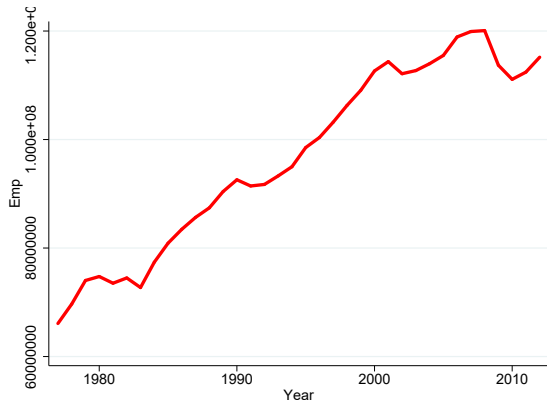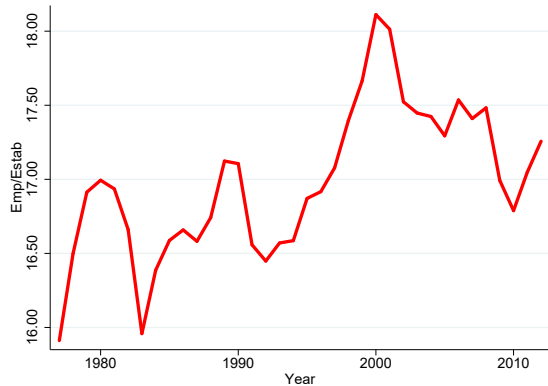
- 4 Premises about demographics:
    1. there is population growth
    2. the average establishment size is constant
    3. the ratio of establishments to firms has increased
    4. the industry-location grid (local market definition) is constant

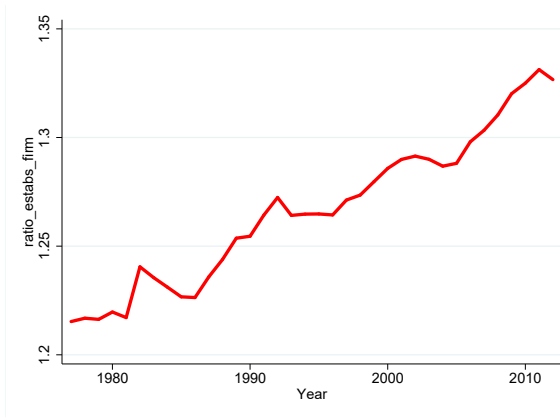# I. Concentration Measures

Intertemporal Comparisons

1. Employment

2. Establishment Size

I. Concentration Measures

Intertemporal Comparisons

3. Ratio of Establishments to Firms

1980 – Baseline Economy

	SIC×Geo 1	SIC×Geo 2	Aggregate Local	National
	1,000 est	1,000 est	2,000 est	
Markets (10 est)	1,$\cdots$,100	1,$\cdots$,100	1,$\cdots$,200	
Local HHI				
$HHI_{SIC \times Geo}$	10	10	10	5
HHI_{true}	1,000	1,000	1,000	1,000

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Intertemporal Comparisons: A Toy Example

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2020 – Increase Population; Decrease Competition; Multi-est Firms

	2,000 est	2,000 est	4,000 est	
Markets (5 est)	1,$\cdots$,400	1,$\cdots$,400	1,$\cdots$,800	
Local HHI				
$HHI_{SIC \times Geo}$	5	5	5	$10^{\star}$
HHI_{true}	2,000	2,000	2,000	2,000

$\rightarrow$ Local $HHI_{SIC \times Geo}$ $\downarrow$ – National $HHI_{SIC \times Geo}$ $\uparrow$

II. The 4 Facts Revisited

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Fact 1 Diverging Trend on Local vs. National
       Divergence of HHI for SIC×Geo $\not\Rightarrow$ divergence in market power
Fact 2 Pervasive Diverging Trends
       Services: role of national chains
Fact 3 The Role of Top Firms: makes the effect more pronounced
       Superstar firms + Reallocation: Rising market power may be welfare enhancing
Fact 4 When a Top Firm Comes to Town
       Walmart opens where population grows (Holmes 2011)

III. Unobserved Market Structure in Macro

- Problem: market structure not observed
  - # competitors
  - firm behavior
  - preferences/technology
  - geography,...
- Able to do it for cement and breakfast cereal, but not for the macro economy

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- Comparison with Productivity:
  - model + observe inputs and prices
  - $\Rightarrow$ TFP is the residual

- Market Power in model of the Macroeconomy:
  - Observe: Revenue, inputs, wages,...
  - Can estimate model to match macro moments: markups, profits,...
  - ⇒ 'Residual' is market structure (# competitors, entry costs,...) – through lens of model
- Can evaluate why markups change, do counterfactuals, policy interventions,...

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- Can evaluate why markups change, do counterfactuals, policy interventions,...

$\Rightarrow$ Treat Market Structure like a Solow Residual: in Macro, admit we cannot observe it

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Take Away

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   - Demographics mechanically lead to local-national divergence in HHI
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2. What we learn
   - Divergence in Market Power Local vs National? More work is needed
   - Superstar firms + reallocation: evidence hints technological change is driver: rise of MP can enhance welfare (e.g. chain-v-chain competition): crucial productivity dispersion

$$\Delta \text{ Welfare} = \underbrace{\Delta \text{ Reallocation}}_{+} + \underbrace{\Delta \text{ Deadweight loss}}_{-} + \underbrace{\Delta \text{ Selection}}_{+/-}$$

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3. In Macro: market structure (demand, # competitors, conduct) is not observable
   ⇒ Like TFP, estimate market structure

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$\therefore$ This paper has and continues to stimulate new research

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