Reinvigorating Competition Policy: What Can IO Contribute?

Nancy L. Rose, MIT

Heinz-Tepper IO Conference

Carnegie-Mellon

September 27, 2019

Concerns about competition on the rise



The Monopolization of America

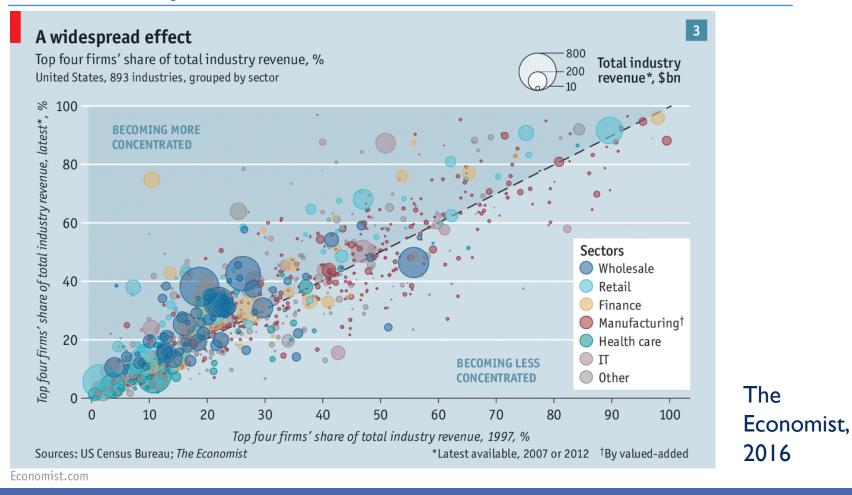
In one industry after another, big companies have become more dominant over the past 15 years, new data show. Nov. 25, 2018

THE WALL STREET JOURNAL. Wave of Megadeals Tests Antitrust Limits in U.S.

Analysis shows that in many industries, most firms are competing in highly concentrated markets

October 18, 2015

Amid evidence of growing "concentration" ... in the press



from think tanks....

America's Concentration Crisis: An Open Markets Institute Report

Monopoly power is all around us: as consumers, business owners, employees, entrep When we purchase everything from washing machines to groceries, website domain even when we select a coffin for a recently deceased loved one, we are constrained by increasingly control America's commerce.

November 26, 2018 | by Open Markets

"The Monopolization of America"

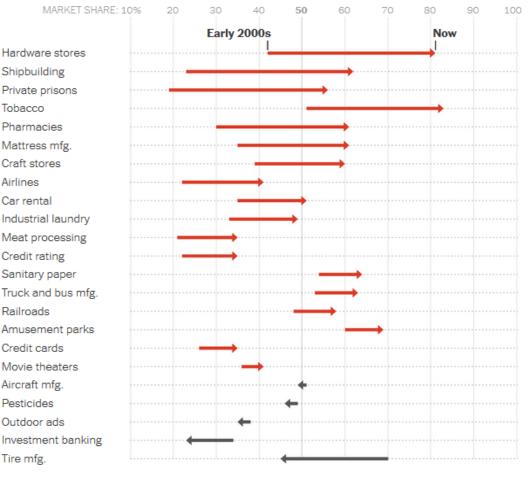
David Leonhardt

New York Times op-ed

November 25, 2018

Dominance of Corporate Behemoths

The combined market share of the two largest companies in many industries has grown in recent years, often because of mergers.





In academia...

From Good to Bad Concentration? U.S. Industries over the past 30 years

Matias Covarrubias, Germán Gutiérrez, Thomas Philippon

NBER Working Paper No. 25983 Issued in June 2019, Revised in September 2019

The Fall of the Labor Share and the Rise of Superstar Firms

David Autor, David Dorn, Lawrence F. Katz, Christina Patterson, John Van Reenen

> NBER Working Paper No. 23396 Issued in May 2017

Concentration in US Labor Markets: Evidence From Online Vacancy Data

José A. Azar, Ioana Marinescu, Marshall I. Steinbaum, Bledi Taska

NBER Working Paper No. 24395 Issued in March 2018, Revised in February 2019

Even some in IO (!) ...



SYMPOSIUM: MARKUPS

Are Price-Cost Markups Rising in the United States? A Discussion of the Evidence

Susanto Basu

(pp. 3-22)

Macroeconomics and Market Power: Context, Implications, and Open Questions

Chad Syverson

(pp. 23-43)

Do Increasing Markups Matter? Lessons from Empirical Industrial Organization

Steven Berry, Martin Gaynor and Fiona Scott Morton

(pp. 44-68)

SYMPOSIUM: ISSUES IN ANTITRUST

Protecting Competition in the American Economy: Merger Control, Tech Titans, Labor Markets The Problem of Bigness: From Standard Oil to Google

Naomi R. Lamoreaux

(pp. 94-117)

Carl Shapiro

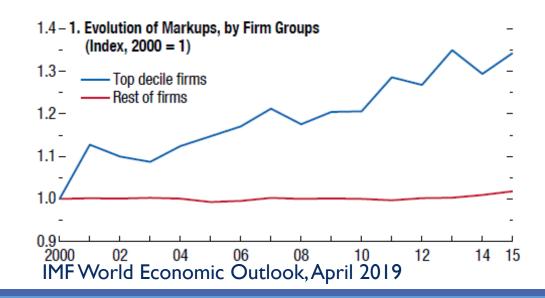
(pp. 69-93)

Many studies show profits/mark-ups are rising

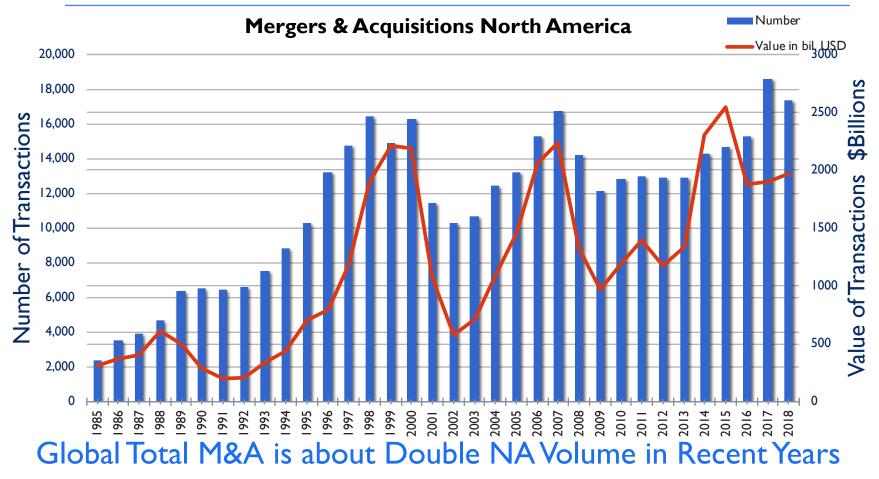
Especially at the top

Figure 2.5. Disconnect between Firms in the Top Decile and the Rest

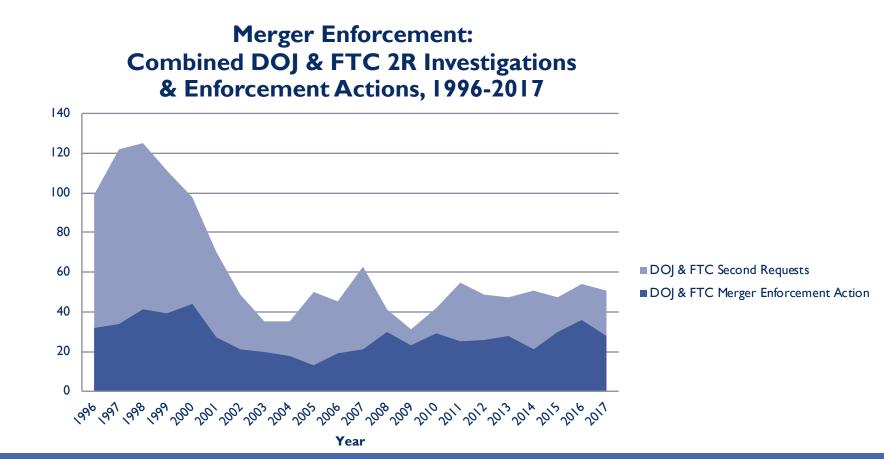
Markup increases have been largely concentrated in the top 10 percent of the markup distribution; most of these firms are small, but the larger ones account for most of the group's revenue; firms in the top decile tend to be more profitable, more productive, and make relatively more intensive use of intangibles than other firms.



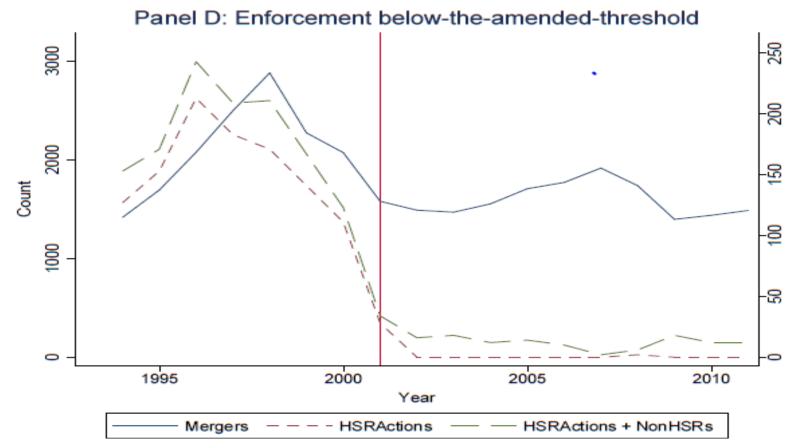
This is happening amid an ongoing wave of mergers



With relatively few antitrust investigations and challenges



Especially of small transactions



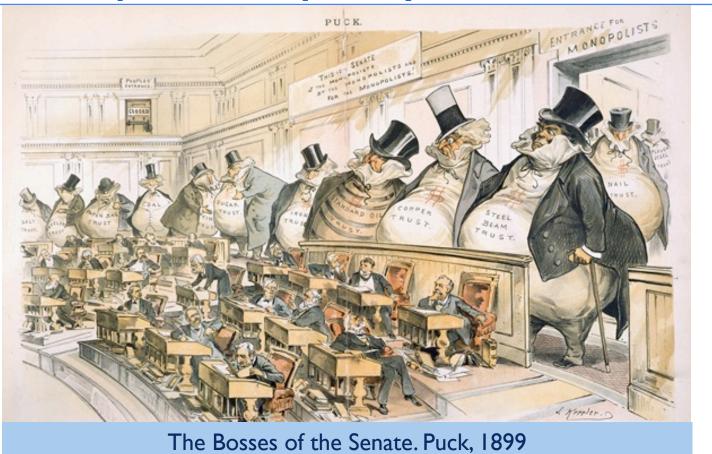
Number of mergers below HSR filing threshhold (left scale) v. DOJ Investigations Wollmann, 2018

What should we make of this?

And how can IO economists contribute?

NANCY L. ROSE - REINVIGORATING COMPETITION POLICY

Is competition policy to blame?



"Evidence" is less informative than we would like:

- National "industry concentration" measures may not reflect competition relevant to any consumers
 - "Industries" ≠ Product markets
 - Geography matters
- Levels of measures (C4 or HHI) are often at odds with degree of alarm
- And markup measurement is fraught

Measurement aside, what does it all mean?

It matters what drives these trends:

- Investment in efficiencies/economies of scale?
- "Winners" that are more compelling for consumers?
- Mergers / anticompetitive behavior?
- •Are successful incumbent outcompeting
 - Buying complementary assets to improve offerings?
- •Or buying up and driving out rivals?
- •Less competition? Or the rise of "superstar" firms?

Can we answer key questions?

Has concentration in most markets increased? • ...hard to say

Are markets less competitive? • You can't quite tell from these numbers

Is antitrust either the problem or the solution?

 Could lax enforcement be to blame? Do mergers make things worse or better?

• Wait! We have looked at that... sort of

Merger retrospectives and policy analysis



Kwoka finds, first and foremost, that most of the studied mergers resulted in some competitive harm, usually in the form of higher product prices but also with respect to various non-price outcomes.

Antitrust enforcement by the numbers

Recent merger investigations resulting in enforcement actions by number of remaining significant competitors (measured by percentage that were enforced), 1996–2011

And it looks like enforcers don't worry much until we are down to 4 or fewer competitors

U.S. antitrust and competition policy amid the new merger wave

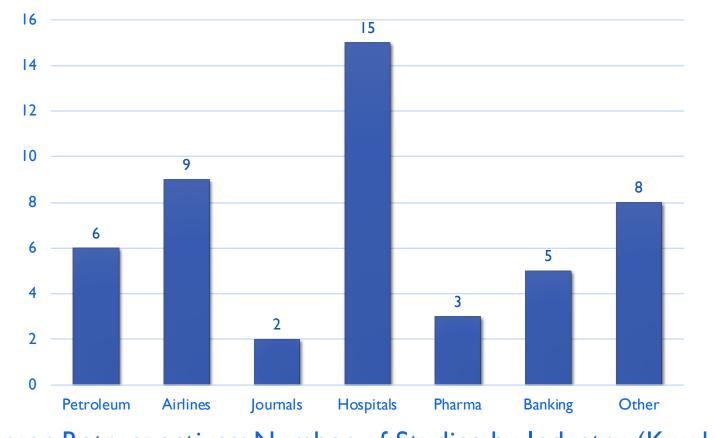
Number of remaining significant competitors	Percent enforced 1996-2003
1	98.0
2	89.2
3	77.3
4	64.1
5	35.2
6	12.0
7	24.0
8	0

Source: Federal Trade Commission, "Horizontal Merger Investigations Data, Fiscal Years 1996-2011" (2013), available at https://www.ftc.gov/sites/default/files/documents/reports/horizontal-merger-investigation-datafiscal-years-1996-2011/130104horizontalmergerreport.pdf.



July 2017 John E. Kwoka

But retrospective studies seem like looking for the keys under a penlight spot



Merger Retrospectives: Number of Studies by Industry (Kwoka, 2015)

Perspective on the debate: A view from the antitrust trenches

DOJ and FTC career staff are motivated-

But that may not be enough

• Even when leadership wants to enforce antitrust

What are the challenges to vigorous enforcement? Where have IO economists advanced the ball? What more do we need to do?

Focus on merger policy

How does US enforcement work?

- Pre-notification (Hart Scott Rodino)
- Investigation
 - Articulate the theory of competitive harm Grounded in market facts and institutions
 Collect evidence for and against the theory Data, docs, & testimony from all participants
 - If these suggest harm, attempt to quantify impact
- Sue to block in court
- All on a very tight time clock

Challenges for enforcement

Blocking a merger requires evidence sufficient to convince a court of likely harm to competition

- With non-economist judges
- Who may never have seen an antitrust case before

In adversarial proceedings where the government has the burden of proof

• Analytic complexity and fragility are big disadvantages

And merging firms argue for precise quantification • Curse of the CSI effect! And economics hubris?

With bad decisions making bad precedent (Amex)
The Chicago School "theory as fact" reigns in the judiciary

Compare merger enforcement to the way many of us write and teach

Academics' idealized merger enforcement • Demand estimation & retrospectives in Aetna/ Humana

Attorney General's warning: Most cases are not your advisors' merger sim!

Aetna/Humana: "Textbook" merger enforcement

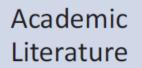
Aetna Agrees to Acquire Humana for \$37 Billion in Cash and Stock



U.S. Sues to Block Anthem-Cigna and Aetna-Humana Mergers New York Times JULY 21, 2016

I. Define the market

Economic evidence shows that Medicare Advantage is a relevant product market



Low pass-through rates imply market power

Demand estimates show preference for MA Empirical Analysis of Demand

All estimates agree that many seniors have a distinct preference for MA

Analyzes realworld choices made by both new and existing consumers Hypothetical Monopolist Tests

Test #1: Critical loss using Nevo and Orszag nesting parameters

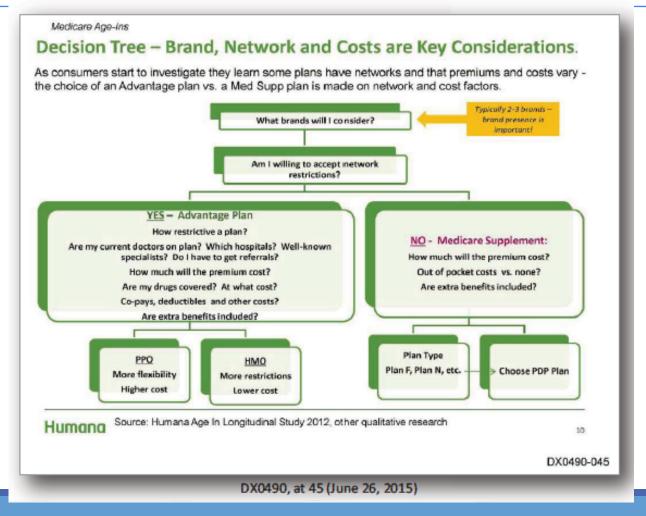
Test #2: Critical loss using nesting parameter from literature

Test #3: Merger simulation using both Nevo and Orszag demand estimates

Medicare Advantage Market Definition Competitive Effects Proposed Remedy

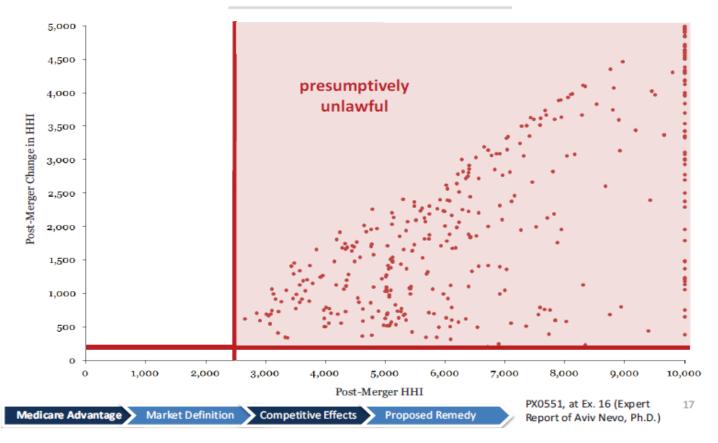
7

Business docs and academic literature both flash "nested logit"!



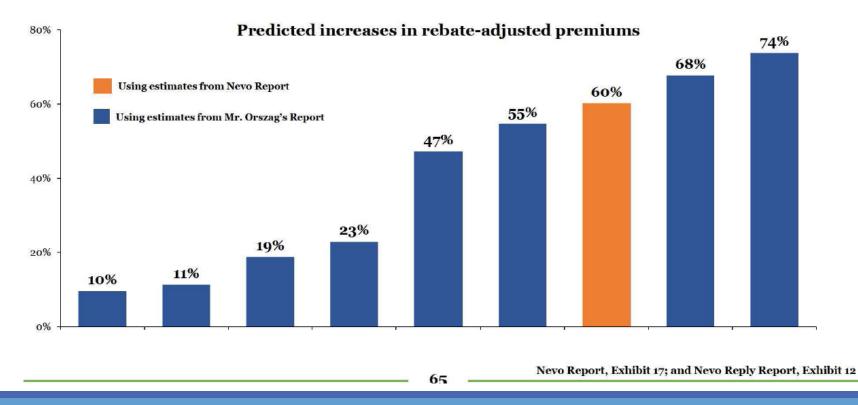
2. Measuring impact: Structural presumptions reign

The merger is presumptively unlawful in all 364 counties



Medicare data enabled demand estimation, merger simulation

Prices consistently increase under all estimates in this matter



3. Past mergers help answer "mitigating factors" defenses

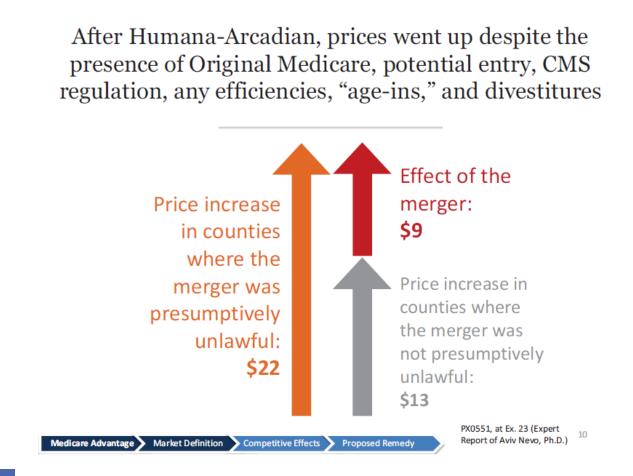
Are efficiencies sufficient to offset P increase? Will rivals reposition products to defeat any price increase?

Are entry barriers low?

Will sector **regulators** block price increases? Would a **divestiture** replace lost competition?

Not surprisingly, parties almost always argue these are more than sufficient to eliminate harm– often very hard to evaluate ex ante

Retrospectives (used with caution)



Result?

Federal judge blocks Aetna-Humana health insurance megamerger

A U.S. federal judge blocked Aetna's proposed \$34 billion merger with rival Humana, saying it was illegal under antitrust law. (Reuters)

Washington Post, Jan 23, 2017





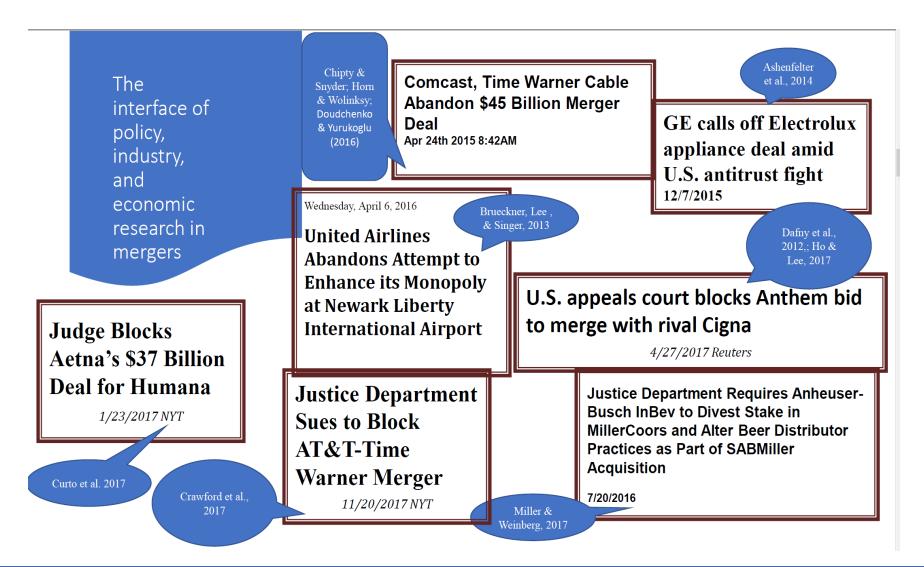
- Or was it?
- A year-long investigation
- ~5 months of trial preparation
- A month-long trial
- Judge issues block in January 2017
 - 20 months after deal was announced

And they aren't all like that!

- Few problematic mergers impact only price in well-defined markets with standardized data where merging parties have significant overlap. **More challenging when:**
- •Demand estimation infeasible or takes years
- •Harms are non-price, such as innovation
- •Competition is nascent or potential
- •Risk is "coordinated effects" (tacit collusion)

How can IO scholars help?

Research meets enforcement...a start



A former enforcer's wish list

Probe the "priors" on mergers

- Displacing "theory as fact" requires new empirical analyses:
- Establish facts, especially
- Merger motivations (informs on loss function)
- Ex post merger efficiencies
- Consequences of mergers & market power harms

Divestitures & Conduct Remedies

- Lessons from asymmetric info & behavioral econ
- The persistence of incentives

Change the burdens in court

Rebalance the threshold for proof of anticompetive mergers

We have gone from Vons Grocery 1966 ban on #3 buying #6, total 7.5% mkt share To proposed mergers to monopoly

Re-emphasize structural presumptions $(\Delta HHI/market share)$ and non-numeric harms

Nocke/Whinston 2019

Tighten the standard for efficiencies

Tackle big challenges in merger enforcement

Potential competition • Facebook/Instagram/Whats App? • Prevalent in pharma, consumer goods • The airlines mistake? **Bargaining** leverage **Innovation & other nonprice harms** Tacit collusion/ coordinated effects Vertical mergers Horizontal merger buy-side harm (incl labor)

And this addresses only mergers!

Conduct cases and regulation are even more fraught

Conduct cases face huge headwinds & skeptical judiciary

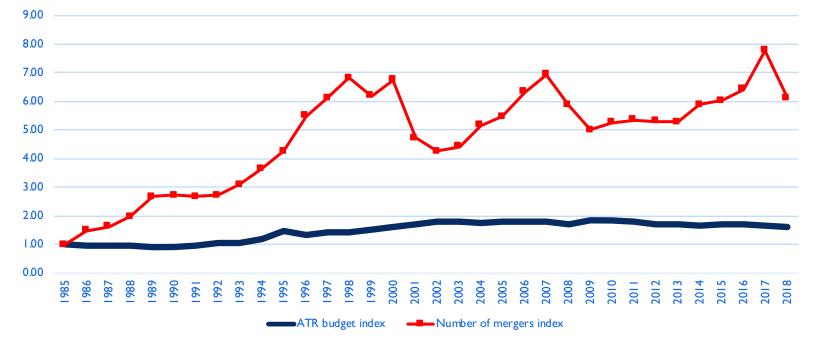
IO today is ill-prepared to engage on regulation proposals

- Few IO economists, especially in US, have any training in regulatory economics, and fewer still study regulation
 - especially outside energy/enviro and health space
- This leaves us poorly positioned to inform a growing debate with huge potential consequences
- •What are the risks?
 - Rose (2014 NBER), Joskow & Rose (1989 Handbook of IO)



Enforcement agencies need increased resources

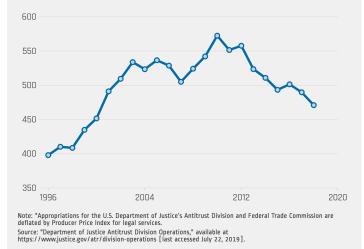
Merger Activity v. Antitrust Division Budget Growth (in 2018 dollars) (1985 = 1.00)



To keep up with growth of economy & real costs of legal and economic expertise

U.S. antitrust enforcement resources have fallen recently

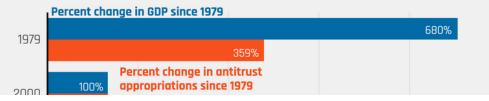
Appropriations for the two federal antitrust agencies in 2018 dollars*



🔜 Equitable Growth

GDP growth has outpaced growth in antitrust appropriations

Percent increase in funding for the Federal Trade Commission and Department of Justice's Antitrust Division vs. percent increase in GDP growth over four time periods



https://equitablegrowth.org/research-paper/the-state-of-u-s-federal-antitrustenforcement/?longform=true#antitrust_resources

Enforcers need new tools and benchmarks

Hearings on Competition and Consumer Protection in the 21st Century

Hearings on Competition and Consumer Protection in the 21st Century



September 22, 2017

Klobuchar Antitrust Legislation Nods to Progressives

And they need your work! Some inspiration to get us going

- •Retrospective reviews: Kwoka, 2015; FTC staff (lots)
- •Structural presumption: Nocke & Whinston (2019)
- •Stealth Acquisitions: Wollmann
- •Killer Acquisitions: Cunningham et al.
- •Market power in health care: E.g., Cooper et al.
- Monopsony & mergers: Prager and Schmitt
- •Tacit collusion & mergers: Miller/Weinberg, M/Sheu/W
- •Vertical: Crawford et al, Ho & Lee

Roll up your sleeves!