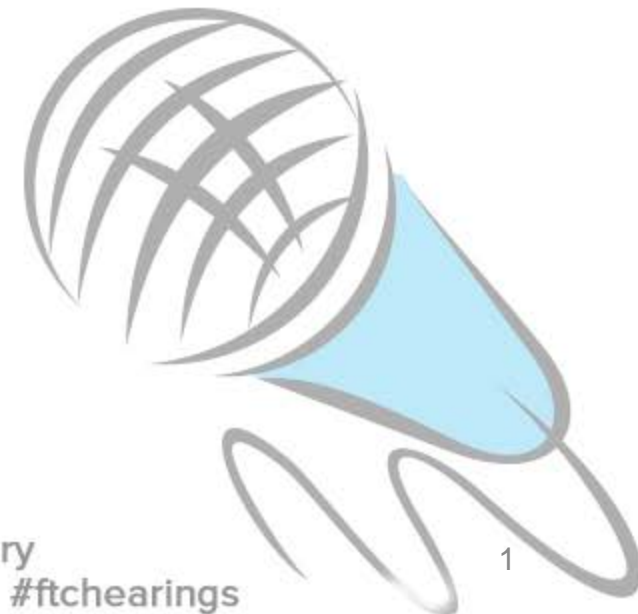


Hearing #8 on Competition and Consumer Protection in the 21st Century

New York University

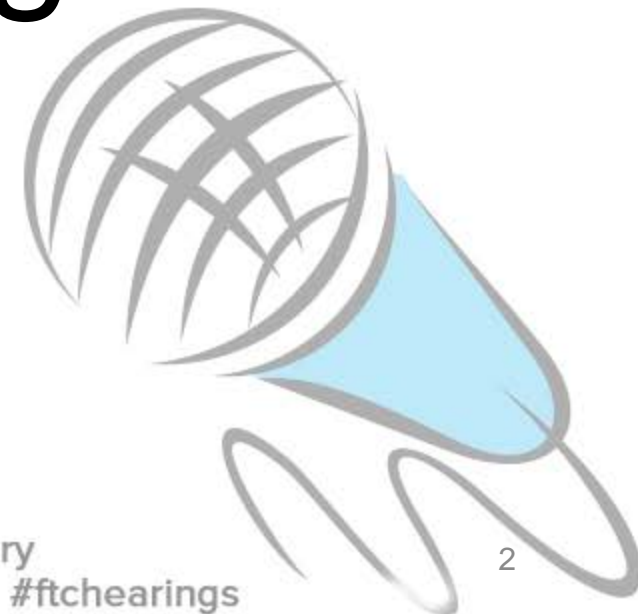
School of Law

December 6, 2018



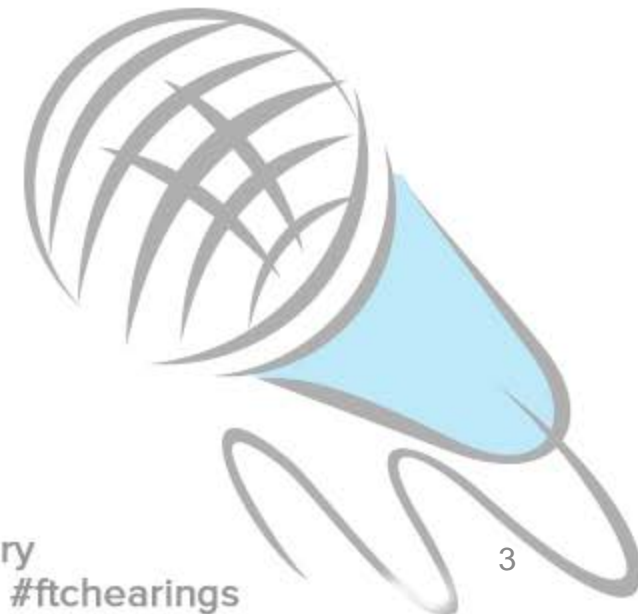
Welcome

We Will Be Starting Shortly



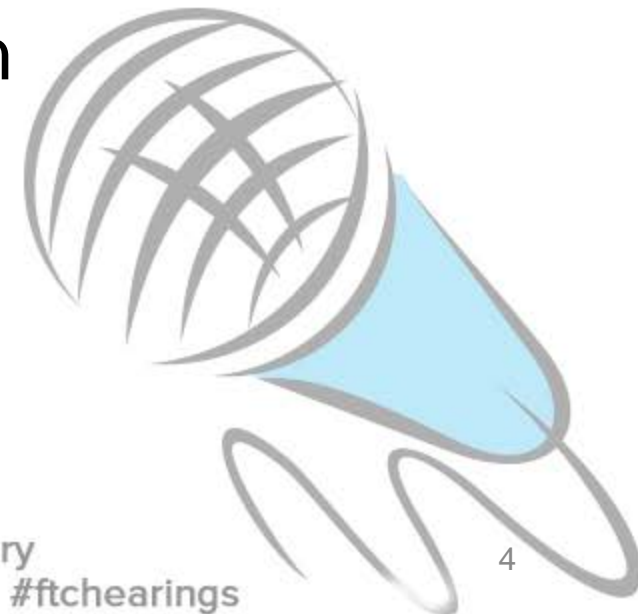
Welcome

Dean Trevor W. Morrison
New York University
School of Law



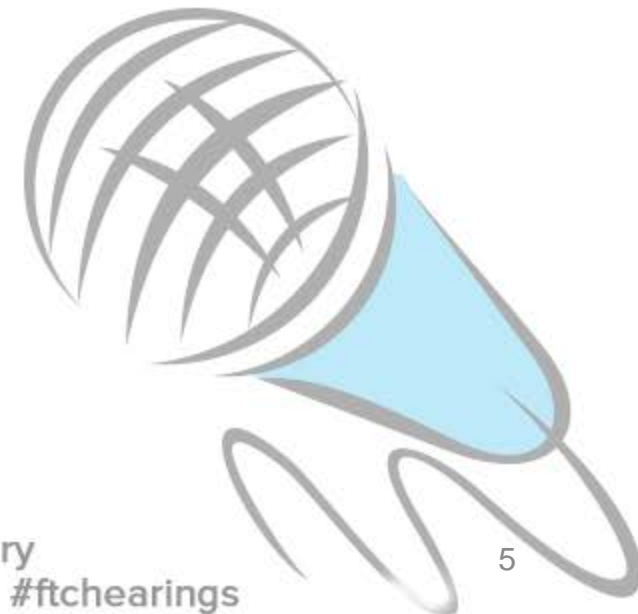
Opening Remarks

Commissioner Robert J. Jackson, Jr.
Securities and Exchange Commission



Opening Remarks

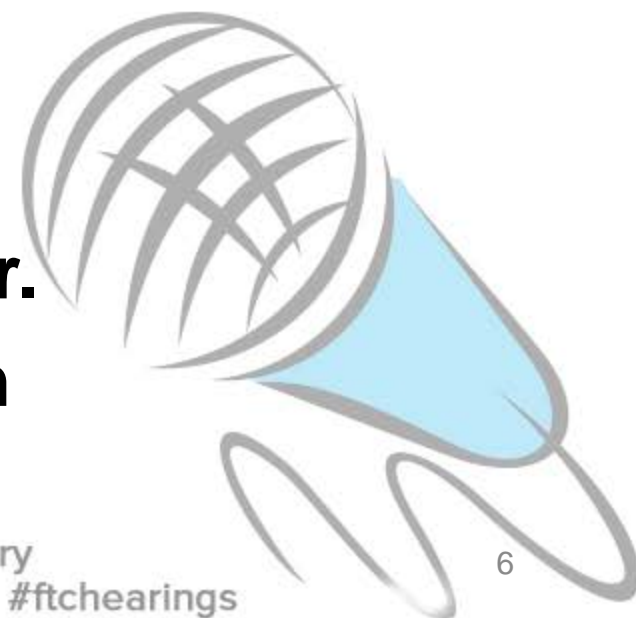
Commissioner Noah Joshua Phillips
Federal Trade Commission



Discussion

Commissioner Noah Joshua Phillips
Federal Trade Commission

Commissioner Robert J. Jackson, Jr.
Securities and Exchange Commission



Break

10:00-10:10 am



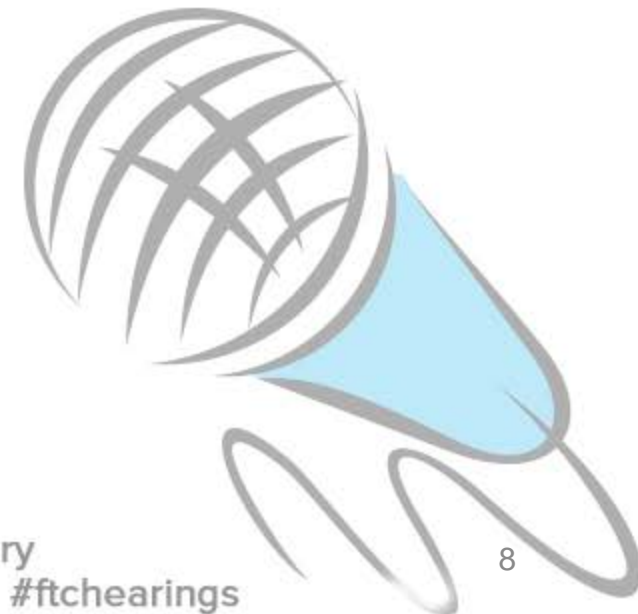
Institutional Investors, Diversification, and Corporate Governance

Session moderated by:

Edward Rock

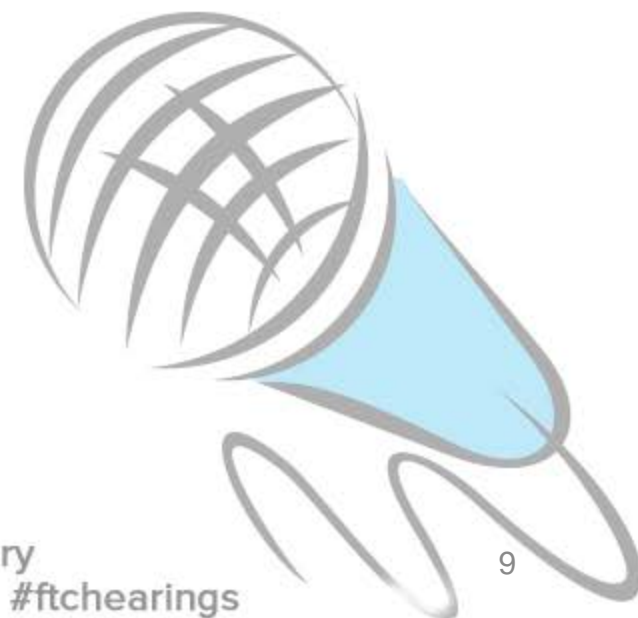
New York University

School of Law



Institutional Investors, Diversification, and Corporate Governance

Barbara Novick
BlackRock



The Investment Stewardship Ecosystem: Key Participants

Asset Owners

- Economic owner of assets
- Set asset allocation and investment policies
- Manage assets in-house OR outsource to asset manager
- Exercise right to vote shares OR outsource to asset managers

Asset Managers

- Manage assets as a fiduciary on behalf of asset owners
- Follow mandates specified by asset owners
- Portfolios often measured relative to index performance
- Investment stewardship function varies across managers
- Earn a basis point fee on total portfolio value

Index Providers

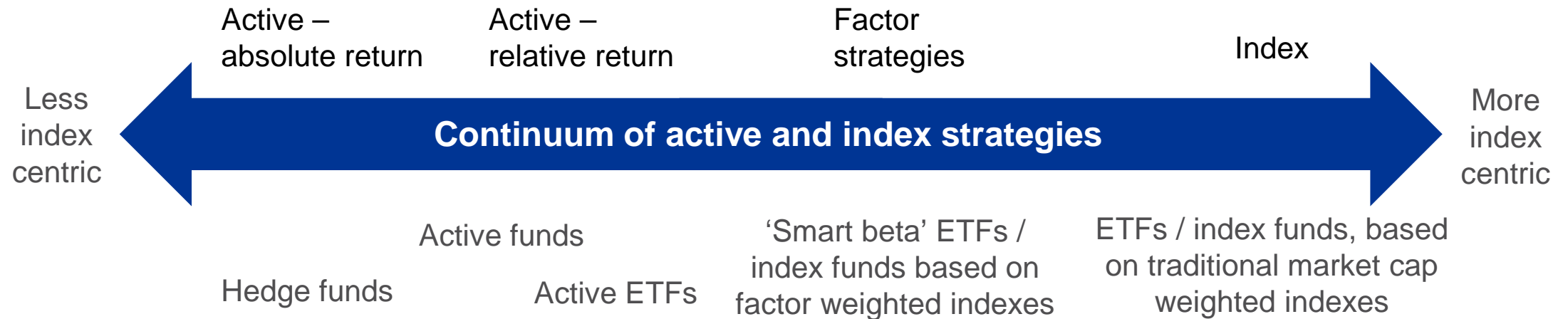
- Create indexes, including inclusion rules
- Maintain indexes, including periodic rebalancings
- Major providers: S&P, MSCI, FTSE Russell
- Used for both index investing and as benchmark for active investing

Proxy Advisors

- Provide research and recommendations to asset owners and asset managers on proxy ballot items
- Provide proxy voting infrastructure
- Reliance on recommendations varies significantly
- Global providers: ISS, Glass Lewis



Continuum of Active and Index Strategies



Index Strategies Closely Track Index Composition

Index inclusion rules and rebalancings are critical to index investing

- Indexes are rule-based, as determined by the index provider
- Indexes are intended to represent the investable market or a specific sector or asset class
- Index portfolios are adjusted when the index provider adds or drops a company from the index

Airline Company	Bankruptcy Filing Date	Exchange Delisting Date	S&P Deletion Date	Bankruptcy Exit Date	Exchange Relisting Date	S&P Addition Date
American¹	Nov 29, 2011	Jan 5, 2012	Dec 1, 2011	Dec 9, 2013	Dec 9, 2013	Dec 9, 2013
Delta²	Sep 14, 2005	Oct 13, 2005	Aug 19, 2005	Apr 30, 2007	May 3, 2007	Jun 18, 2007
Northwest³	Sep 14, 2005	Sep 26, 2005	Oct 3, 2005	May 31, 2007	May 31, 2007	Jun 18, 2007
United⁴	Dec 9, 2002	Apr 3, 2003	Feb 3, 2003	Feb 1, 2006	Feb 2, 2006	Oct 2, 2006
US Airways⁵	Aug 11, 2002	Aug 14, 2002	Jul 1, 2002	Mar 31, 2003	Oct 21, 2003	N/A
US Airways⁵	Sep 13, 2004	Sep 22, 2004	N/A	Sep 27, 2005	Sep 27, 2005	Oct 2, 2006

1. AMR Corp. 2. Delta Air Lines, Inc. 3. Northwest Airlines Corp. 4. UAL Corp. 5. US Airways Group Inc.



Investment Stewardship: Engagement and Voting

Objective is to maximize long-term value for clients

Engagement may include dialogue with companies in person and/or by phone as well as letters

Recent engagement priorities

- Governance
- Long-term corporate objectives
- Compensation
- Climate risk disclosure
- Human capital

BlackRock Global Voting Statistics*

- 17,151 annual meetings
- 154,482 management proposals
- 3,898 shareholder proposals

*July 2017 to June 2018



Stewardship Codes and Regulatory Guidance

Over the past two decades, public authorities and official sector entities have worked with the private sector to develop corporate governance principles and investment stewardship codes

- Today, there are close to 20 codes that have been issued in different jurisdictions

The US SEC and DoL have each provided guidance for asset managers to vote proxies

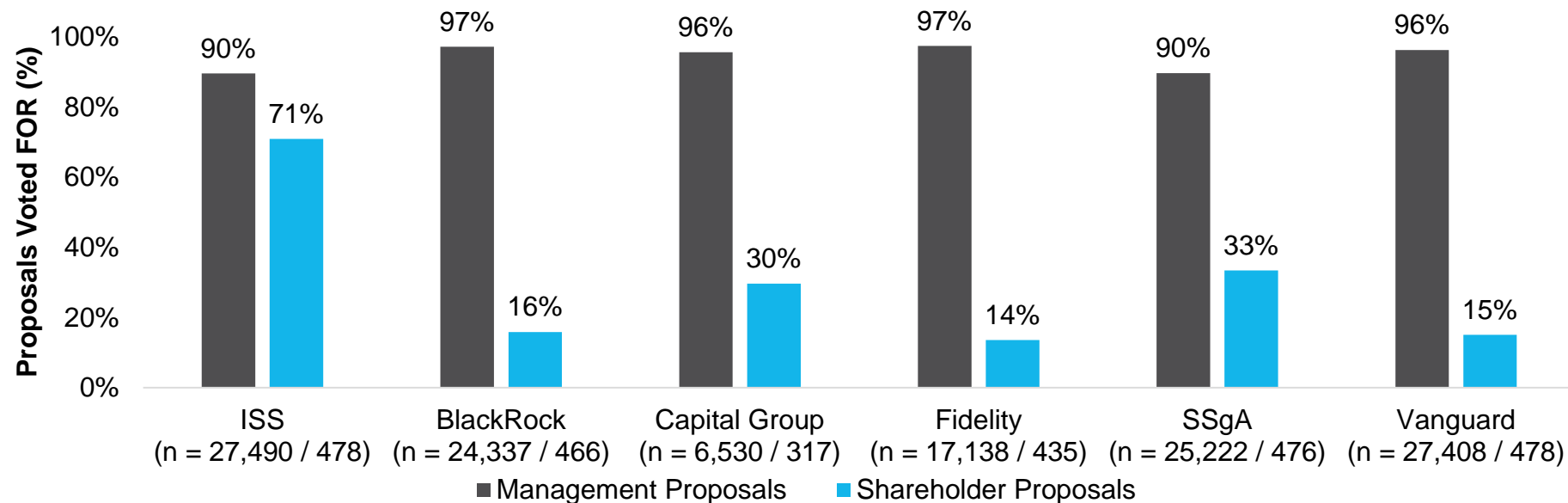
Representative Stewardship Codes	
Australia	Australian Asset Owner Stewardship Code
Japan	Japan's Stewardship Code
The Netherlands	Eumedion Best Practices for Engaged Share-Ownership
South Africa	South Africa Code on Responsible Investing
United Kingdom	The Financial Reporting Council's UK Stewardship Code



Voting Data is NOT Correlated Across Asset Managers

Voting patterns vary significantly

- Management proposals receive very high approval with the exception of say-on-pay
- Shareholder proposals tend to be more controversial
- Notable variability between ISS and individual asset managers' voting on these ballot items

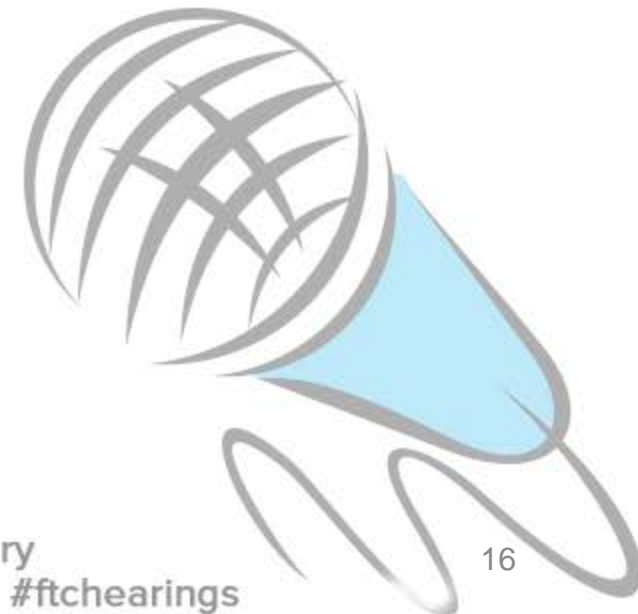


Source: ISS Analytics, BlackRock Analysis. Based on Russell 3000 company proposals between Jul 1, 2016 and Jun 30, 2017



Institutional Investors, Diversification, and Corporate Governance

Allison A. Bennington
ValueAct Capital



Institutional Investors, Diversification, and Corporate Governance

Kenneth Bertsch

Council of Institutional Investors

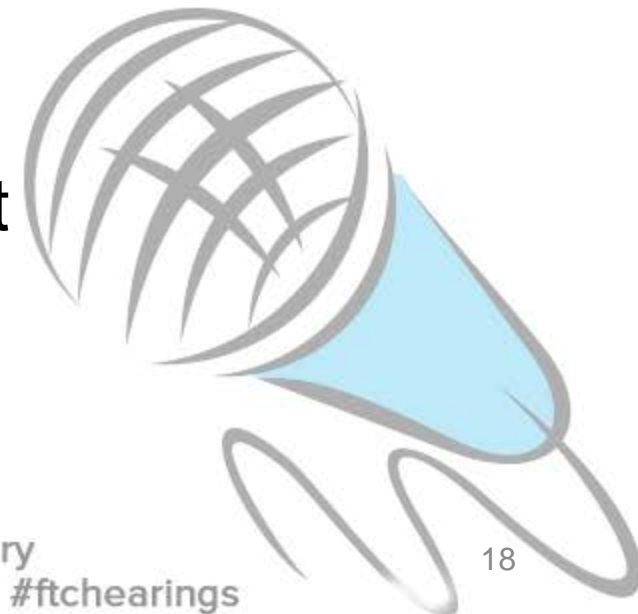


Institutional Investors, Diversification, and Corporate Governance

Heather Slavkin Corzo

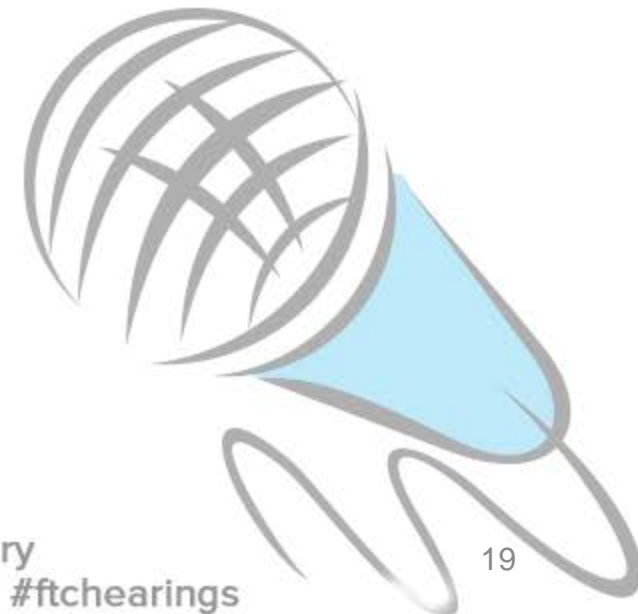
AFL-CIO

Principles for Responsible Investment



Institutional Investors, Diversification, and Corporate Governance

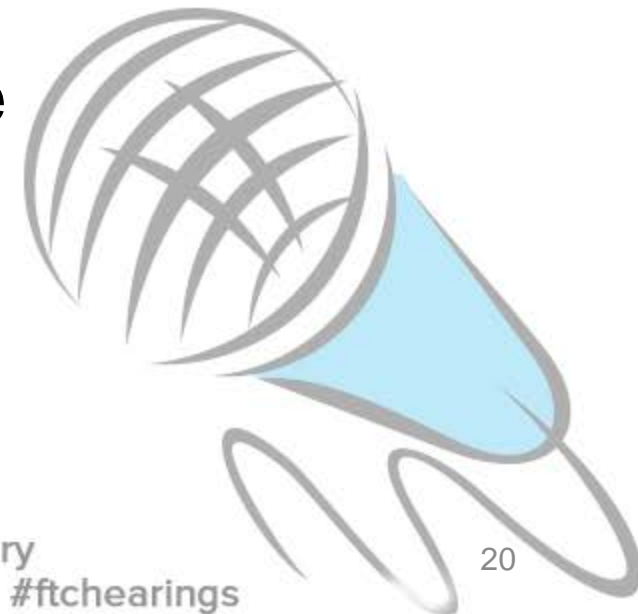
Holly J. Gregory
Sidley Austin LLP



Institutional Investors, Diversification, and Corporate Governance

David Hirschmann

United States Chamber of Commerce



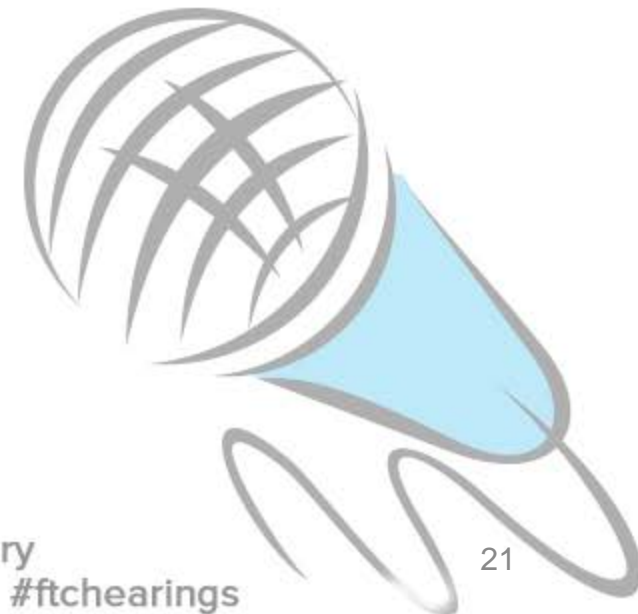
Institutional Investors, Diversification, and Corporate Governance:

The Unwarranted Claims of Common Ownership Alarmists

Scott Hirst

Boston University

School of Law



This Talk

Builds on our recent and current work:

- Lucian Bebchuk, Alma Cohen & Scott Hirst, [*The Agency Problems of Institutional Investors*](#) (2017).
- Lucian Bebchuk & Scott Hirst, [*Index Funds and the Future of Corporate Governance: Theory, Evidence and Policy*](#), available on SSRN.
- In our ongoing work we are further developing the implications of our analysis for the common ownership debate.



Focus of Our Work

- We focus on the stewardship decisions of index fund managers and other mutual funds managers: how they monitor, vote at, and engage with their portfolio companies.
- We provide a systematic theoretical, empirical and policy analysis of the stewardship decisions of investment fund managers.



The Promise of Institutional Investor Stewardship

- In publicly traded companies without controlling shareholders, a key economic problem is the agency problem between corporate managers and their shareholders.
 - The increasing size of institutional investor shareholdings, and the greater investor monitoring and engagement that this enables, represents a positive development that can contribute to reducing such agency problems.
 - Our work shows that institutional investor stewardship holds promise for improving corporate performance.
- ⇒ Public policy should seek to encourage and facilitate stewardship and engagement by institutional investors.



The Common Ownership Claims (and Mistakes)

- Common ownership alarmists argue that regulators should pay attention not only to the decisions of managers of public companies, but also to their level of ownership by institutional investors and, in particular, to whether institutional investors also hold shares in competitors.
- However, our analysis shows that understanding the decisions of institutional investors requires taking into account their own ownership structure, which common ownership alarmists fail to do!



The “Missing Mechanism”: The Unsupported Link between Common Ownership and Anticompetitive Effects (1)

- Can common ownership have anti-competitive effects because the Big Three (or other large investment managers) actively encourage anti-competitive behavior?
- Our work provides a detailed empirical account of the stewardship activities of large investment managers.
- We show that such active intervention in business strategy decisions is implausible and inconsistent with the evidence.



The “Missing Mechanism”: The Unsupported Link between Common Ownership and Anticompetitive Effects (2)

- Can common ownership have anti-competitive effects by inducing large investment managers to “do nothing” and tolerate competition-suppressing compensation schemes?
- Our ongoing research work suggests that this alleged mechanism is also implausible and unsupported by the empirical evidence.



The Costs of Focusing on Common Ownership (1)

- Our analysis indicates that the claims of common ownership alarmists are unwarranted.
- Regulatory attention to common ownership is not merely unnecessary; it is costly and counterproductive.



The Costs of Focusing on Common Ownership (2)

- Our analysis indicates that corporate managers, not institutional investors, currently play the key role in shaping the strategic decisions that determine sector competitiveness.
 - ⇒ The decisions of corporate managers (e.g., regarding mergers with competitors) should be the central focus of regulatory attention.
 - ⇒ Given constraints on regulators' attention and resources, diverting attention from the decisions of corporate managers to focus on institutional investors would be counter-productive.



The Costs of Focusing on Common Ownership (3)

- The measures advocated by common ownership alarmists would, and are intended to, make the Big Three and other large investment managers less engaged and more passive.
- Indeed, the common ownership discourse might by itself chill engagement by such investment managers.
- While such consequences are favorably viewed by common ownership alarmists, the effects on investment fund stewardship would be counterproductive.
- As our work shows, “modern corporations do not suffer from too much shareholder intervention, but rather from too little.” (Bebchuk, Cohen & Hirst, 2017).
- Pushing large investment managers to do less would be a step backwards: it would exacerbate agency problems, and harm—rather than benefit—the economy.



Conclusions

- The rise in investor engagement over the past two decades is a positive development that contributes to a reduction in agency problems, and thereby contributes to economic performance.
- The incentives of investment managers make them insufficiently active and excessively deferential to corporate managers.
- The conceptual and empirical support for the alleged mechanisms for linking common ownership with anticompetitive effects is weak.
- The measures advocated by common ownership alarmists would likely be counterproductive.

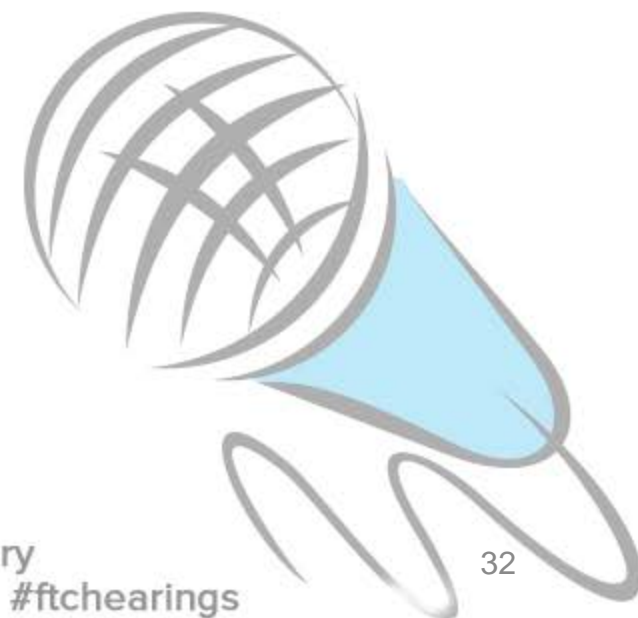


Institutional Investors, Diversification, and Corporate Governance

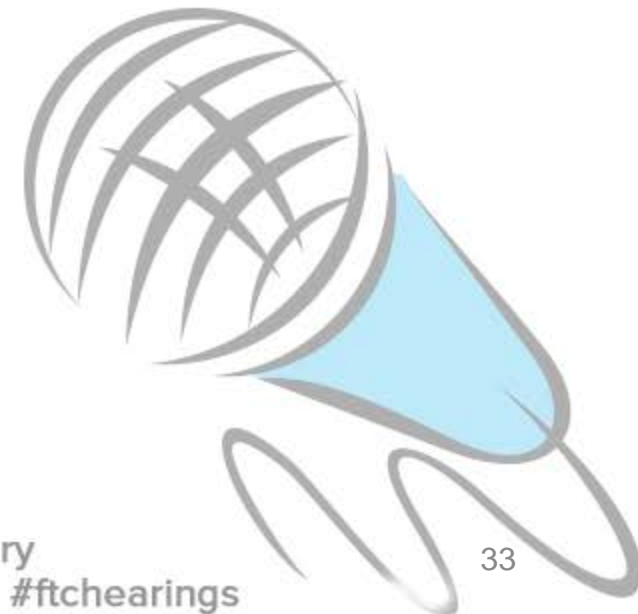
Panel Discussion:

Barbara Novick, Allison A. Bennington,
Kenneth Bertsch, Heather Slavkin Corzo,
Holly J. Gregory, David Hirschmann,
Scott Hirst

Moderator: Edward Rock

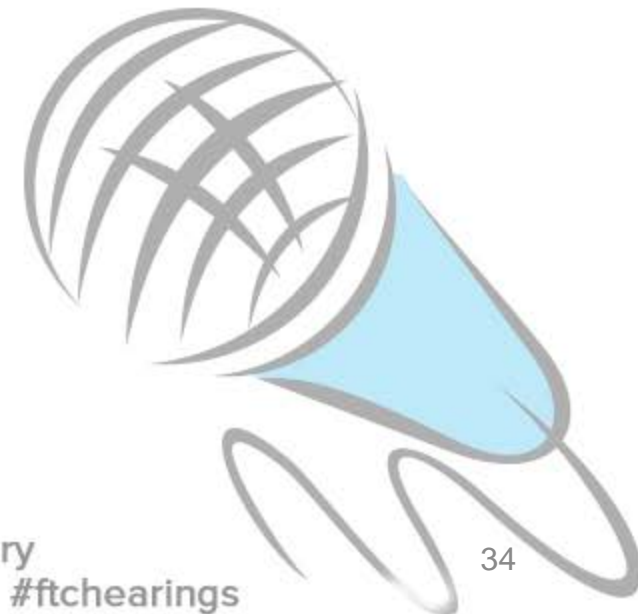


Break
12:10-1:00 pm



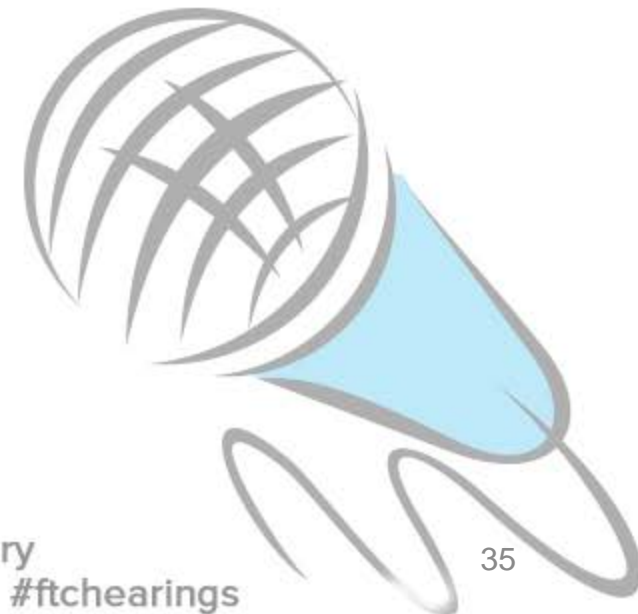
Remarks

Commissioner Rohit Chopra
Federal Trade Commission



Competitive Harm from Common Ownership: Theory, Applications, and Mis-Applications

Daniel P. O'Brien
Compass Lexecon



From Theory to Application

O'Brien, Daniel, and Steven Salop, "Competitive Effects of Partial Ownership: Financial Interest and Corporate Control," *Antitrust Law Journal*, 67, no. 3 (2000): 559-614.

Azar, José, Martin C. Schmalz, and Isabel Tecu, "Anticompetitive Effects of Common Ownership," *The Journal of Finance* 73, no. 4 (2018): 1513-1565. (hereinafter "AST")



The Theory of Partial Ownership

What is “partial ownership,” and why do we need a theory about it?

The theory of partial ownership provides a way to model the behavior and interaction of firms when a given firm’s owners have disparate interests.



Where Does “Common” Ownership Fit In?

Common ownership occurs when one or more owners of a company also owns one or more other companies.

A complete merger is a special case.

Interesting cases arise when common ownership involves partial ownership.

In situations with both partial ownership and varying degrees of common ownership among owners, the owners have divergent interests.



The Firm's Objective When Owners Have Divergent Interests

What does the theory assume about firms' strategies when owners have divergent interests due to common ownership?

Each firm's manager maximizes a "control-weighted" average of the owners' returns from their shareholdings in the relevant common ownership group.

In the remainder of my talk, I discuss how to apply the theory of partial ownership to questions about common ownership with reference to the elements in this assumption.



Scholarly Views on the Theory of Partial Ownership as a “Theory”

Generally positive.

But like any theory, it comes with warning labels.



Warning Labels

1. Control weights. Serious side effects may occur with improper control weights.
2. Relevant common ownership group. Consult your doctor before using this model if your relevant common ownership group includes antitrust markets beyond the market at issue.
3. Owners' investment returns as the manager's objective. Consult your doctor before using this model if owners' objectives differ from their investment returns.

All three warning labels raise troubling issues for using the theory of partial ownership to assess the competitive effects of common ownership by institutional investors.



Warning Label 1 – Control Weights

An owner's control weight is the weight the manager of the firm assigns in its profit objective to the owner's returns from owning firms in the relevant common ownership group.

What are the appropriate control weights?



Warning Label 1 – Control Weights

Under proportional, Banzhaf, or Shapley control, and with diffuse ownership by non-common owners:

- Non-common owners have no say in the direction of the firm—their control weights are zero.
- A common owner that holds even 1% of the firm has complete control of the firm.

Is this reasonable?

Experts in corporate law say no. Directors have a fiduciary obligation to the firm and to the owners of the firm as to their interests in the firm.



Warning Label 1 – Control Weights

In some applications, control weights are clear or have reasonable bounds that allow the theory to provide useful insight.

- Partial acquisition of one firm by another.
- Partial acquisitions by a large investor within a particular industry.
- Joint ventures.

In the institutional investing context, however, the appropriate control assumption is far from clear. It is an empirical issue.



Warning Label 2 – The Relevant Common Ownership Group

The relevant common ownership group is the set of firms that are commonly owned and whose profits are materially affected by the strategic decisions of other firms in the group.

AST treat the relevant common ownership group as airlines.

But institutional investors acquire shares across many industries that are interrelated. The relevant common ownership group in the context of institutional investing is much larger than just airlines or any single relevant antitrust market.



Warning Label 2 – The Relevant Common Ownership Group

Under AST's assumption, institutional investors ignore the impact of airline prices on

- Airline suppliers (Boeing, Rockwell, etc.)
- Business travelers (virtually every company in the asset manager's portfolio)

In the EC's use of the MHHI to analyze the Dow-Dupont merger, institutional investors ignore the impact of the agrochemical businesses' strategies on

- Suppliers to the agrochemical companies
- Agricultural companies that purchase agrochemicals



Warning Label 2 – The Relevant Common Ownership Group

In some examples not involving institutional investors, the relevant common ownership group is a single antitrust market, the theory is straightforward to apply, and the results are satisfying.

In the institutional investor context, the relevant common ownership group includes many interrelated industries. Empirical work to date does not account for this fact.



Warning Label 3 – Owner Objectives That Differ From Investment Returns

Institutional investors make money by attracting retail investors.

Is this accomplished by instructing company A to pull its competitive punches against company B to increase the value of the institutional investor's shareholdings in company B?

What if a rival institutional investor owns a bigger share of company B?



Warning Label 3 – Owner Objectives That Differ From Investment Returns

Institutional investors that purchase shares on behalf of retail investors have different incentives than investors that purchase their own shares.

The theory of partial ownership was built to capture the incentives of investors that purchase their own shares.

The theory was not built to capture the incentives of institutional investors.

More research is required to determine how to modify the theory to account for the incentives of institutional investors.



Concluding Remarks

The theory of partial ownership casts light on the competitive effects of common ownership when:

1. Control weights are clear;
2. The relevant common ownership group is properly defined; and
3. Owners' objectives are to maximize returns across the relevant common ownership group.

For common ownership by institutional investors, (1) control weights are not clear, (2) research has not identified relevant common ownership groups, and (3) there is a mismatch between the owners' objectives assumed by the theory and asset managers' objectives.

We do not currently have theoretical or empirical evidence that “macro-level” common ownership, as occurs through institutional investors, is likely to harm competition.

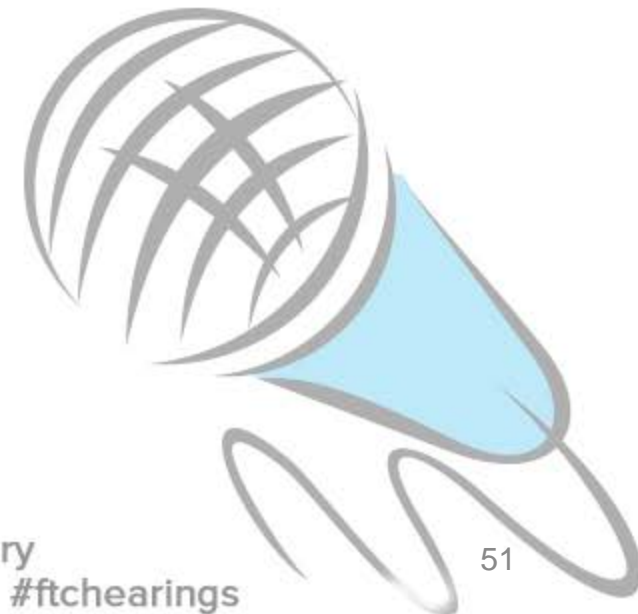


Competitive Harm from Common Ownership:

Common Ownership Theories, Governance “Mechanisms” & Policy

Martin Schmalz

University of Michigan
Ross School of Business



Textbook model of competition à la Adam Smith

- Self-interested firms undercut each others' prices, innovate, thus compete for market share
 - Leads to maximization of welfare (aka Wealth of Nations)
- Assumption that each firm wants to maximize its own value is naturally satisfied when
 - firm is owner-managed, and
 - owner's wealth is concentrated in one firm



But by which mechanism can non-managing owners get corporate *managers* to compete aggressively?

Virgin America (2016 Q2)	
Shareholder	Stake (%)
Richard Branson	30.99
Cyrus Capital Partners	23.69
Vanguard	2.91
BlackRock	2.27
Alpine Associates Advisors	2.12
Hutchin Hill Capital	2.10
Société Générale	1.85

- Media reports point to explicit direction by Branson to use IPO cash for capacity expansion, new routes, new airplanes, expansion of **market share**.
- Has the power of the vote, incentive, to back up voice



Illustration of an active, dedicated owner's effort to increase market share



Who plays that role at Delta & United ...?

Delta Air Lines	%	Southwest Airlines	%
Berkshire Hathaway	7.25	Berkshire Hathaway	15.03
Vanguard	6.13	PRIMECAP	11.87
BlackRock	5.84	Vanguard	6.28
Landsdowne	3.90	Fidelity	5.41
PRIMECAP	3.75	BlackRock	5.04
State Street gA	3.68	State Street gA	3.69
United Continental	%	American Airlines	%
Berkshire Hathaway	9.11	T. Rowe Price	12.89
Vanguard	7.33	PRIMECAP	10.46
PRIMECAP	7.19	Berkshire Hathaway	9.54
BlackRock	6.72	Vanguard	6.15
PAR Capital	5.26	BlackRock	5.20
T. Rowe Price	3.37	Fidelity	3.71
State Street gA	3.33	State Street gA	3.58

- Warren Buffett or Charlie Munger? Larry Fink? Bill McNabb?
 - Seems unlikely
- At all 4 airlines?
 - Absurd. No incentives. Market share is zero-sum.
- AFAIK no evidence of similar efforts to promote competition for market share at even *one* airline.
 - (Alas.)



There are almost no non-common owners left

- At United, among top-100 owners, which hold >91% of shares, only 5 don't also hold stock of another top-four airline
 - The largest of them is #42
 - *Cumulatively*, the undiversified top-100 investors hold 1% of stock
- Similar for American, Delta, Southwest
 - Rock & Rubinfeld (2017)'s claim that most (17/26) top-10 shareholders in the largest six U.S. airlines hold "0" competitor stock is factually incorrect
- Few investors have incentives to act as 'Adam-Smith' entrepreneurs



What happens when no (or few) powerful shareholders have incentives to promote aggressive competition?

- **Answer: reduced competition**, compared to the textbook model.
 - Selection of theories: Kotz (1979); Rubinstein & Yaari (1983); Rotemberg (1984); Reynolds & Snapp (1986); Farrell & Shapiro (1990); Gordon (1990, 2003); Macho-Stadler & Verdier (1991); Admati, Pfleiderer & Zechner (1994); Hansen & Lott (1996); O'Brien & Salop (2000); Gilo (2000); Rubin (2006); Kraus & Rubin (2011); Azar (2012, 2017); Brito, Ribeiro, Vascandelos (2014); de Haas & Paha (2016); Lopez & Vives (2018); Brito, Osorio, Ribeiro, Vascandelos (2018); Neus & Stadler (2018); Antón, Ederer, Giné & Schmalz (2018). Schmalz (2018) has a more comprehensive list.
- Logic: competition for market share reduces common owners' **portfolio** profits.



Details on theories

- Assume firms act, to some extent, in owners' financial interest: portfolio value
 - Makes sense if managers are optimally (dis-)incentivized to compete (literature in AER) by **asset owners or asset managers**. (By **incentive**, or by **fiduciary duty**.)
 - Common shareholders like own-firm profits, but less if at the expense of commonly owned firms
- Shareholders with heterogeneous portfolios **don't agree on own-firm profit maximization** as an objective, except when firms are perfect competitors (Hart 1979; DeAngelo 1983)
- Rotemberg (1984) assumes firm objective = weighted average of shareholder portfolio profits
 - For sufficiently low costs of diversification, there is **unanimous support for industry-value maximization** rather than firm-value maximization even with heterogeneous shareholders
- O'Brien & Salop (2000) assume a similar objective, later micro-founded with voting models (Azar 2012; Brito et al. 2016, 2018). Yields MHHI as measure of market concentration.
 - First applied to ownership by outside investors by Maxwell, O'Brien & Parsons (1999); also used by Azar et al. (2018a) in regressions of product price on MHHI + controls.
 - Persistent challenge: measuring control weights. Robustness needed in applications.



Theories say: common ownership reduces incentives to compete. Not: common owners do nefarious things, incite collusion, etc.

- Rubinstein & Yaari (1983), p.1:

Suppose also that cooperation or collusion are impossible,

- Rotemberg (1984):

Note that this collusion need not be "enforced" with penalties against cheaters. In fact managers never need to meet each other. Managers c

- Mechanism for **collusive outcomes** is: **reduced incentives to compete** "simply as a result of [managers] looking out for their shareholders." (Rotemberg 1984)
 - Mutual funds' response "We don't ask firms to collude" has little to do with the economic argument made



Important distinction btw unilateral effects & collusion

1. Collusion is only needed to maintain anticompetitive outcomes when there are incentives to compete. Common ownership reduces these incentives.
 2. Marginal effect of common ownership on *collusion* is ambiguous (Gilo, Moshe & Spiegel, 2006; de Haas & Paha, 2018)
- For both reasons, **searching for a connection between common ownership & collusive mechanism can lead to false negatives**
 - That said, investors do engage with managers on strategic competition, including output & pricing



Common owners use standard governance tools

- Standard governance mechanisms are, among others
 - Voting
 - Incentives
 - “Voice” (engagement)
- They are
 - available to common owners as well as to dedicated investors
 - employed centrally and therefore irrespective of investment strategy (active/“passive”)
 - **sometimes used in a deliberate attempt to reduce competition**
 - **hidden from regulators & researchers** in case of engagement meetings



Common ownership reduces managers' incentive to cut cost, increase output, maximize firm value

- Antón, Ederer, Giné & Schmalz (2018): CEO wealth-performance sensitivity is lower in more commonly-owned industries. Implies reduced incentive & effort to cut costs, increase profit.
 - **Implies lower output & higher margins in industry equilibrium**

Log(Wealth-Performance Sensitivity EGL)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Common Ownership (MHHID)	-0.205*** (-2.875)	-0.537*** (-6.731)	-0.275*** (-4.555)	-0.266*** (-3.601)	-0.158** (-2.798)	-0.375*** (-4.134)	-0.230*** (-3.030)

- **Common owners may be “weak principals” (by standard governance measures) and simultaneously enable reduced competition (e.g. by encumbering votes)**



Whether an incentive contract features Relative Performance Evaluation (RPE) is *per se* uninformative about its competitive incentives

- Effect on competitive incentives **depends on how performance is measured:** value (pro-competitive) or margins (anticompetitive)
 - $\text{Margin}_i = p - c' = A - a_1 q_i - a_2 q_j - c'$
 - Maximize $\text{margin}_i \implies$ minimize q_i
- Rock & Rubinfeld (ALJ 2017) note that at American Airlines...

In April 2015, Mr. Parker requested and the Compensation Committee agreed to provide 100% of his direct compensation in the form of equity incentives, underscoring our commitment to paying for performance and further aligning his interests with that of our stockholders. Mr. Parker will no longer receive any base salary and will no longer participate in the Company's 2015 Short-term Incentive Program. In addition, the majority of Mr. Parker's 2015 target equity compensation is performance-based and will be earned, if at all, not earlier than the third anniversary of the grant date based on our relative three-year pre-tax income margin as compared to that of a pre-defined group of airlines. We believe relative pre-tax income margin



BUSINESS

Wall Street Tells Frackers to Stop Counting Barrels, Start Making Profits

The shale-oil revolution produces lots of oil but not enough upside for investors

By Bradley Olson and Lynn Cook

Updated Dec. 13, 2017 6:09 p.m. ET

Twelve major shareholders in U.S. shale-oil-and-gas producers met this September in a Midtown Manhattan high-rise with a view of Times Square to discuss a common goal, getting those frackers to make money for a change.

The September Manhattan meeting homed in on one factor in particular: the role executive pay plays in driving a growth-at-all-costs mentality.



Voting (1): common owners vote on board representation by competitors' largest shareholder

Search

Bloomberg

Sign

Markets

Buffett's Investing Deputy Combs Named to JPMorgan's Board

By [Noah Buhayar](#)

September 20, 2016, 12:50 PM GMT+2 Updated on September 20, 2016, 3:55 PM GMT+2

- ▶ Combs has been adding duties, got credit for Precision deal
- ▶ JPMorgan CEO Dimon credits Combs for wisdom, judgment

LIVE ON BLOOMBERG
Watch Live TV >
Listen to Live Radio >

Berkshire Hathaway Inc.'s Todd Combs has been named to the board of JPMorgan Chase & Co., helping him build expertise beyond investment management and expanding the ties of [Warren Buffett's](#) conglomerate to the banking industry.

Combs's appointment was effective Monday, New York-based JPMorgan said in a [statement](#) Tuesday. Buffett's Berkshire is one of the [top investors](#) in JPMorgan competitors such as American Express Co. and Bank of America Corp., and U.S. regulators are [weighing](#) whether his 10 percent stake in Wells Fargo & Co. violates rules meant to limit the power of insiders.

- Combs not expected to propose or support a price war against Bank of America, Wells Fargo, U.S. Bancorp, Goldman Sachs, American Express, ...



Voting (2)

- An investor with the largest voting block in a firm is pivotal in close elections, and therefore powerful — want it or not. Also in activist campaigns.
 - E.g. BLK, Vanguard, SSgA voted against & caused Trian to lose a pro-competitive campaign at DuPont in 2015 (Schmalz, 2015)
 - Trian wanted increased R&D spending, relative performance evaluation to **increase market share**, less product market cooperation with competitors, ...
- Coffee (2015): “The most plausible hypothesis is that the large asset managers are concerned about the impact of hedge fund activism on their broader portfolio.”

“The ‘index funds’ control America. They’ll be the swing vote in every proxy contest in every election.”



Balance of powers shapes type of campaigns activists rationally attempt to get support for. Predicts Keiretsu malaise due to ‘index funds’.



Empirical evidence on mutual funds' pivotal role in proxy voting is exploding

- Matvos & Ostrovsky (2008): **funds vote** not in the interest of either target or acquirer, but **in the interest of their portfolio & portfolio of other funds in the family**
- Hsieh, Li & Tang (2018): passive investors more likely to vote for renewal of poison pills, insulating firms from activists
- Fichtner, Heemskerk & Garcia-Bernardo (2017): Big-3s' voting is quasi-centralized, making them the most powerful shareholder of ~90% of S&P 500 firms
- Brav, Jiang & Li (2018): how mutual fund voting shapes proxy voting
- See also Bubb & Catan (2018); Bolton, Ravina & Rosenthal (2018); Heath, Macciocchi, Michaely & Ringgenberg (2018); ...
- Mutual funds may strengthen or weaken *activism* — but would act against their interest and that of investors if they support portfolio-value destroying *campaigns*.



Voice: Softbank's Vision Fund (PE)

In the near term, the focus is on encouraging the ride-hailing firms to compete less feverishly and push up fares. Mr Misra has called on Uber to concentrate on its core markets of North and South America, Europe and Australia in order to narrow its losses before an IPO expected in 2019. In March SoftBank pulled off a coup when Uber agreed to sell its business in South-East Asia to Grab in return for a 27.5% stake. Uber will stop operating in Singapore, the Philippines, Malaysia and Vietnam, leaving the field clear, in theory, for Grab to raise prices.

Grabbing back

Uber makes a tactical retreat from South-East Asia

The company's deal with Grab shows the influence of its biggest shareholder, the SoftBank Vision Fund

- Competition authorities in several South-East Asian nations challenged the deals
- But do hedge funds / mutual funds engage on topics relating to competition also in U.S. public corporations?



U.S. lawsuit against activist ValueAct puts mutual funds on alert

Michael Flaherty, Ross Kerber

6 MIN READ



NEW YORK/BOSTON (Reuters) - The U.S. government's lawsuit against ValueAct Capital targets one activist investor but could call into question routine practices across the \$16 trillion mutual fund industry, according to attorneys and industry representatives.

Some communications the government cites as evidence are similar to discussions that are increasingly common between traditional, buy-and-hold funds and companies in their portfolios.



The case comes as active and passive investors work more together to pressure management at underperforming companies. Activists court passive shareholders before launching such a campaign, and passive investors recruit activists to agitate, several activist managers told Reuters.



FEDERAL TRADE COMMISSION
PROTECTING AMERICA'S CONSUMERS

clarified:

“Investment-only” means just that

- (Making recordings of all private engagement meetings available should help prove innocence. Yet, no apparent threat of prosecution.)
- Were topics touching on product market competition discussed in engagement meetings since?



BUSINESS

Wall Street Tells Frackers to Stop Counting Barrels, Start Making Profits

The shale-oil revolution produces lots of oil but not enough upside for investors

By Bradley Olson and Lynn Cook

Updated Dec. 13, 2017 6:09 p.m. ET

Twelve major shareholders in U.S. shale-oil-and-gas producers met this September in a Midtown Manhattan high-rise with a view of Times Square to discuss a common goal, getting those frackers to make money for a change.

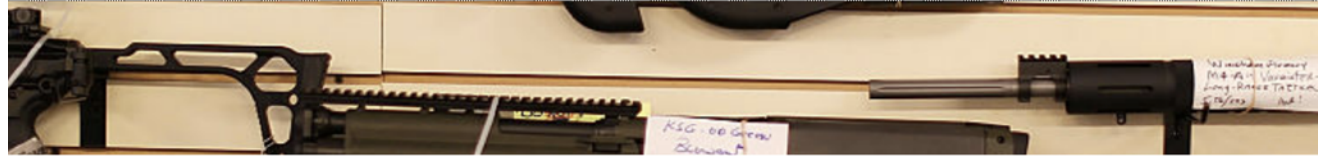
The September Manhattan meeting homed in on one factor in particular: the role executive pay plays in driving a growth-at-all-costs mentality.



Institutional investors even think they can change the *products* themselves

Q Search

Bloomberg



Business

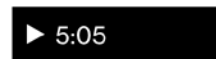
Investors With \$4.8 Trillion Push Gun Industry for Reform

By [Janet Lorin](#), [John Gittelsohn](#), and [Polly Mosendz](#)

November 14, 2018, 1:00 PM GMT+1 *Updated on November 14, 2018, 7:30 PM GMT+1*

- ▶ Coalition of 13 say they seek changes rather than divestment
- ▶ 'You need a chorus of investors singing loud and clear'

LISTEN TO ARTICLE



SHARE THIS ARTICLE

- Share
- Tweet
- Post
- Email

Investors and money managers with more than \$4.8 trillion in assets are banding together for the first time to pressure gun manufacturers and sellers to make firearms “safer, more secure and easier to trace.”

The 13 members -- which include State Street Global Advisors, TIAA's investment manager Nuveen and pension funds in California, Florida and Connecticut, where mass shootings have occurred -- is asking for changes in business practices rather than threatening divestment, the group said Wednesday in a [statement](#).

LIVE ON BLOOMBERG

Watch Live TV >

Listen to Live Radio >

Most Read

TECHNOLOGY

**Beijing to Judge Every
on Behavior by End of**

POLITICS

**EU Leaders Say Brexit
Possible Deal: Brexit L**

updated 21 minutes ago

MARKETS



L. Fink: “*We can tell a company to fire 5000 employees tomorrow.*” — But not affect product market outcomes?



<https://promarket.org/unusual-debate-at-davos-lobbying-maximizing-shareholders-value-and-the-duty-of-ceos/>



“Fund giant BlackRock lobbies for mergers of European banks” (but explicitly not: Commerzbank)

F.A.Z. EXKLUSIV

Fondsriese Blackrock wirbt für Fusionen europäischer Großbanken

AKTUALISIERT AM 04.10.2016 - 18:10



Philipp Hildebrand vom Finanzgiganten Blackrock, der auch größter Aktionär der Deutschen Bank ist, rechnet mit der europäischen Bankenbranche ab.

- Mechanism to affect mergers apparently exists.
 - (Also, to oust the CEO.)
- But no plausible mechanism exists that can affect competitive outcomes?
 - Aren't mergers potentially related to competitive outcomes?



More...

- Common owner of United, Delta, American, Alaska, Virgin, and SWA (Levine, 2016):

“I’d like to see [SWA] boost their fares but also cut capacity”

- Mysterious why anyone would think common owners don’t have the ability to engage on topics that affect product market outcomes.
 - Based on statements & behavior outside antitrust hearings, they certainly think they have that ability.



Conclusion on theory & mechanisms

Given

- theory
- magnitude of anticompetitive incentives
- fiduciary duty of funds to maximize value of portfolio of assets
- abundance of mechanisms yielding ability to affect product markets

we would need overwhelming empirical evidence that anticompetitive incentives from common ownership never cause anticompetitive outcomes.

“Evidence” panel: at least 24 papers, many of them published in top journals, document effects on prices, quantities, product market cooperation, innovation.

So: what should we do?



Regulators understood the problem arising from institutional ownership long before formal theories emerged

- 1934 Senate Securities Report: *“Congress must `prevent the diversion of these trusts from their normal channels of diversified investment to the abnormal avenues of control of industry”* (Roe 1990)
- SEC’s ICI bill: *“the national public interest...is adversely affected...when investment companies [have] great size [and] excessive influence on the national economy”* (Roe 1990)

However, Bogle (2018) points out:

Street with very few others up in that rarified air. The Investment Company Act essentially says that no mutual fund can own more than 10% of the shares of any company. But when and if our index fund gets to 10%, all we have to do is start a second one and that would be in technical compliance. There should be limits. Should we

Also J. Bogle, WSJ Nov 29, 2018: *“Public policy cannot ignore this growing dominance [of the Big-3]. ... I do not believe that such concentration would serve the national public interest.”*

But: what about the benefits of diversification?



1. Common ownership as presently documented has little to do with households' ability to diversify. Much to do before touching index funds.

- Berkshire, ValueAct, Softbank concentrate(d) holdings in particular industries
- Most ETFs primarily used for factor exposure, not for widely diversified investment by median household
- Largest ETF \$250bn AuM — 1% of U.S. market cap (and much less of a globally diversified portfolio). So how do funds hold 5-10% of firms' stock?
 - BlackRock, Vanguard, ... are not **funds**. They are fund **families**.
 - Control (voting, engagement) mostly centralized across funds within family.
- **Households can diversify across funds**
 - That might raise the cost of diversification, but not the principal ability
 - How high is that cost, compared to the benefit of having a competitive economy?



2. Common ownership reduces incentives to compete — and welfare — due to the reduced cost of diversification they enable

- Rotemberg (1984)

This paper presents a model in which firms, acting in the interest of their shareholders, tend to act collusively when their shareholders have diversified portfolios. Therefore, government interventions which reduce diversification, such as taxing trades in stocks and redistributing the proceeds, are potentially beneficial since they promote competition.

- Mutual funds' "efficiency defense" doesn't appear to take into account that **reduced cost of diversification** may be the fundamental cause of the antitrust problem, and **the reason regulatory limits would be welfare-enhancing.**

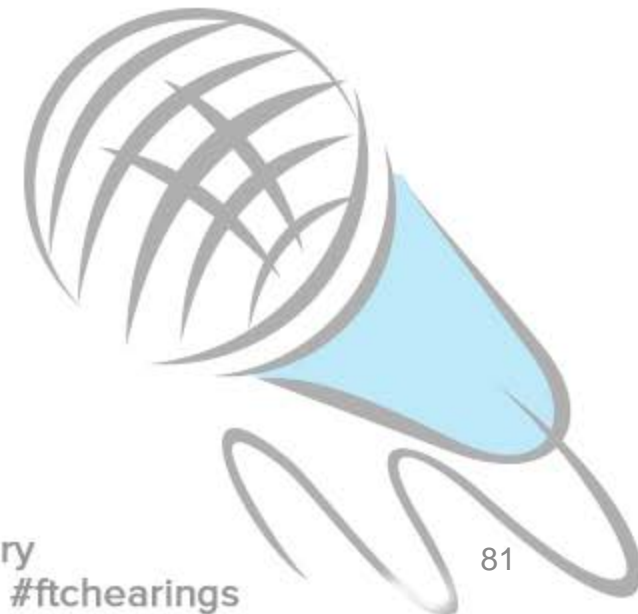


Mutual funds' emphasis on benefits of cheap diversification supports Rotemberg (1984)'s conclusion

These, by lowering the costs of diversification naturally induce more collusion if managers follow the wishes of the ultimate recipients of dividends. However, in the light of this paper, it may well be that the funds which concentrate on specific industries and those whose portfolio is very broad do the most harm.



Break
1:55-2:05 pm

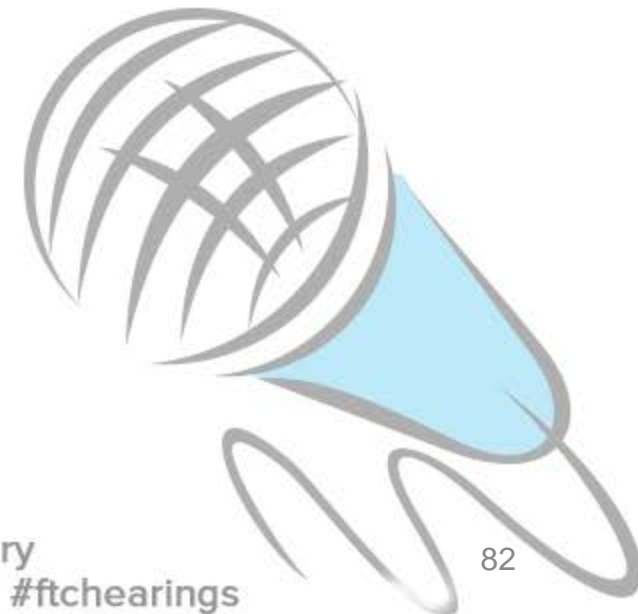


Theories of Competitive Harm from Common Ownership

Session moderated by:

Daniel Rubinfeld
New York University
School of Law

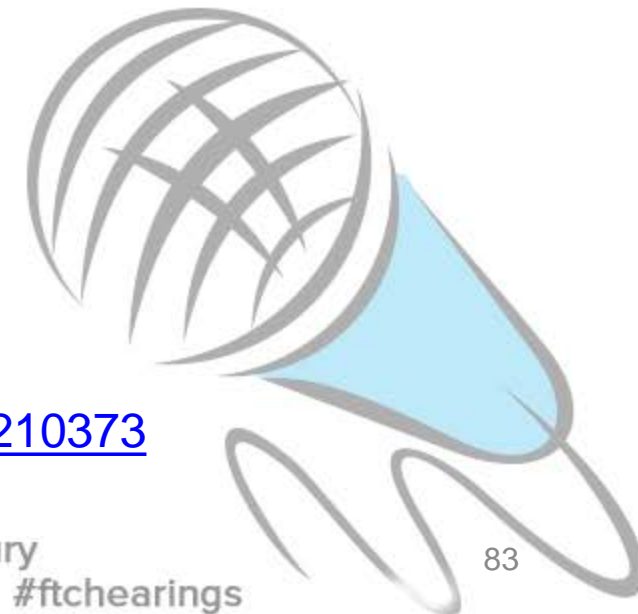
William F. Adkinson, Jr.
Federal Trade Commission
Office of Policy Planning



Theories of Competitive Harm from Common Ownership

Scott Hemphill
New York University
School of Law

Hemphill & Kahan paper available at <https://ssrn.com/abstract=3210373>



Approach

- Consider empirical studies linking common concentrated owners (CCOs) to higher prices
 - Particularly (but not only) those using MHHI to measure common ownership
- Identify strategies that might link CCOs to higher prices
- For each strategy, answer two questions:
 - Is it **tested** by the empirical literature?
 - Is it **plausible**—that is, effective, feasible, and in an advisor's interest?
- Result: some are tested, some are plausible; few are both
- Implications for welfare assessment, reform, and further investigation



Typology of Mechanisms

- **Conflict:** Will a noncommon owner (NCO) at the firm oppose the CCO's strategy? Or is it happy to go along?
- **Precision:** Does the mechanism target particular firm actions? Or does it alter firm incentives across-the-board?
- **Activity:** Does the effect require affirmative activity by the CCO? Or can the CCO remain passive?



Main Results

- **Conflict:** the MHHI-based empirical program depends upon a conflict of interest between the CCO and other investors
 - In other words: if an owner of (just) American Airlines is happy to go along with the proposed action at AA, the strategy is not tested by the MHHI approach
- **Passive, across-the-board strategies** (such that the firm “lives the quiet life”): most not tested, most not plausible
- **Active, targeted strategies** (“reduce capacity on LGA-ORD”): implausible for institutional investors



The MHHI Approach Requires a Conflict of Interest

- MHHI is the most important tool used to measure common ownership
- MHHI is increasing in common ownership, **and decreasing in noncommon ownership**
- Using MHHI requires a conflict of interest between CCO and NCO, as to the action to be taken by the firm
- Many proposed mechanisms lack any conflict
 - Example: a CCO tells American and United that it would be in each airline's interest to increase price
 - An NCO of (say) American is happy to go along. There is no conflict.
- Does the CCO have a special **ability** (compared to other investors) to promote such a strategy? Maybe, but the MHHI-based literature is not informative about this point.



The MHHI Approach Requires a Conflict of Interest

NCOs	CCO?	HHI*	MHHI delta	MHHI
American: 1 10% owner United: 1 10% owner	No	5000	0	5000
American: 1 10% owner United: 1 10% owner	Yes; 10%	5000	2500	7500
American: 2 10% owners United: 2 10% owners	Yes; 10%	5000	1667	6667

* Illustration assumes that American and United are a duopoly in some market, which they share equally



The MHHI Approach Requires a Conflict of Interest

$$\max_{x_j} \tilde{\Pi}_j = \sum_{i=1}^M \gamma_{ij} \sum_{k=1}^N \beta_{ik} \pi_k = \pi_j + \sum_{k \neq j} \frac{\sum_i \gamma_{ij} \beta_{ik}}{\sum_i \gamma_{ij} \beta_{ij}} \pi_k.$$

Maximize airline profits

Distortion of airline's decision making,
compared to maximizing profits

Source: Azar et al. (2018)



Passive, Across-the-Board Strategies

- Example: CCO fails to advocate pay for performance, leading the firm to “live the quiet life”
- As for **passive** mechanisms, MHHI is not a good measure
 - A merger of CCOs increases MHHI but does not increase passivity
 - Replacing small dispersed investors with a CCO increases MHHI, but does not increase passivity
- As for **across-the-board** strategies, most are implausible
 - Wholesale dilution of incentives should lead to other inefficiencies
 - May take a long time to work (and common ownership may change)
 - There are some exceptions (relative performance and activist contests)



Active, Targeted Strategies

- Such strategies are implausible for institutional investors
- Increasing portfolio value has only a small effect on fees, and could even have negative effects
- Compared to this small benefit, the reputational and legal risks can be large
- Active, targeted strategies are hard to implement: Fidelity is a “they,” not an “it”
- Where the action is against the firm’s interest, the firm is likely to resist



Selective Omission

- Actively pursue only a subset of targeted strategies—those that both increase firm value and increase the CCO's
- Plausible for institutions that try to influence management
- Easier to implement internally: less resistance within organization and from firm; less negative PR



Implications

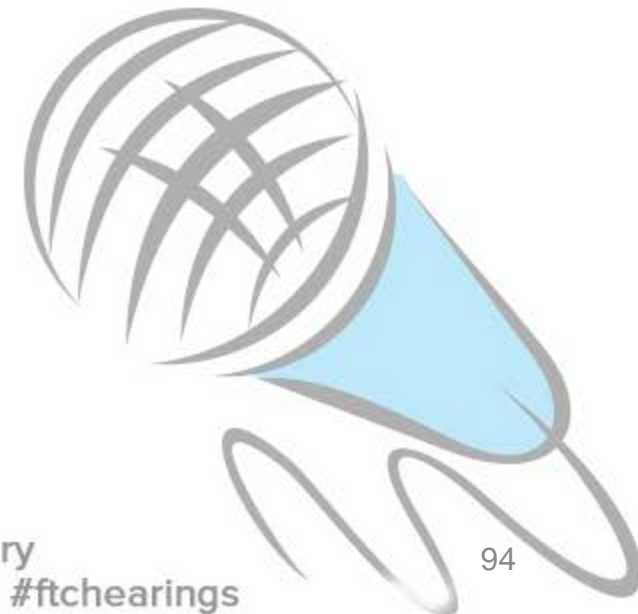
- Selective omission is both tested and plausible; most other mechanisms are not
- Analysis of CCOs must take account of systemic differences in the incentive and ability to pursue anticompetitive strategies
- A high priority is to collect direct evidence of any steps taken by CCOs to produce anticompetitive results, and responsive steps taken by firms to implement them
- The case for widespread reform has not been made



Theories of Competitive Harm from Common Ownership

Menesh S. Patel

University of California, Davis
School of Law

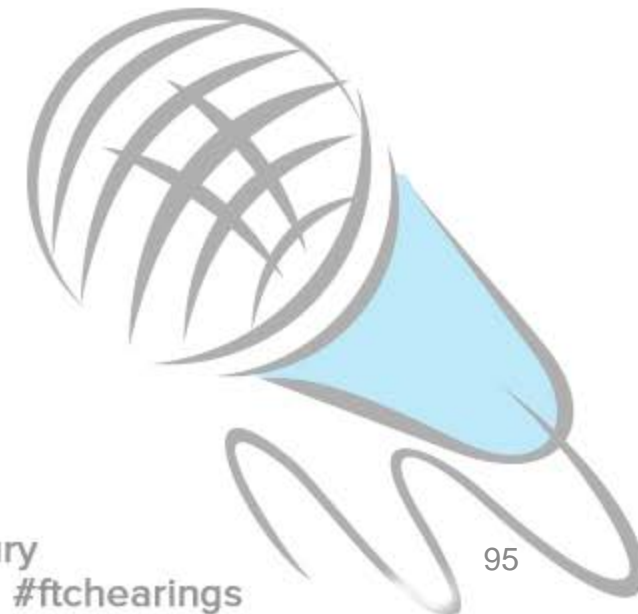


Theories of Competitive Harm from Common Ownership:

How Horizontal Shareholding Harms Our Economy—And Why Antitrust Law Can Fix It

Einer R. Elhauge
Harvard University
Law School

*These slides cover a small fraction of the 103 page comprehensive analysis. For the full story, see <https://ssrn.com/abstract=3293822>



Empirical Evidence Shows Horizontal Shareholding

- Increases gap between corporate investment and profits – **undisputed**
- Makes changes in executive *wealth* less sensitive to performance – **undisputed** (moots prior dispute about effect on executive *annual pay* that affected only 22% of executive wealth changes)
- Delays and prevents pharmaceutical entry – **2 studies undisputed**
- Adversely impacts bank fees and rate – **not really disputed** (supposedly contrary study stresses results preliminary given data problems; plus it excluded effect of market shares and concentration)
- Raises airline prices – **replicated by critics** even with own construction of data and definition of horizontal shareholding. Critics negate price effect only by altering regression in incorrect ways: e.g., using an instrumental variable *negatively* correlated with horizontal shareholding.



Causal mechanisms

- Although proof of them unnecessary, same multiple mechanisms as law & economics has always used to explain how agency slack is limited:
- Board Elections (even if uncontested, withheld votes → ↑director loss of jobs)
- Executive compensation (even if vote nonbinding, dissents → ↓ CEO pay)
- Market for corporate control (managers want HS backing in next contest)
- Stock market (managers don't want stock dumped by displeased HS)
- Labor market (withheld votes → fewer directorships at *other* corporations)
- Direct communication (write them all, then 1000s of private engagements)
- Reduced shareholder pressure on managers to compete
- Macro mechanisms: shown in cross-industry studies & 90% of airline effect
- Micro mechanisms: shown in airline, banking, pharma & earnings calls



Contra-Mechanisms?

- *Non-horizontal* shareholder interests (already accounted for & they *benefit* because HS reduces competition at their firm and rivals simultaneously)
- *Vertical* common shareholding (won't constrain horizontal effects because 95% of airline price increases externalized & can worsen horizontal effects given successive market power or foreclosure effects)
- *Index fund* family incentives to increase portfolio value are strong
 - Efforts costs of lessening competition *zero or negative* & certainly small compared to gains
 - Strong incentives to compete with active funds for investment *flow* & index fund families have many active funds of their own
 - What matters is *relative* effort: index fund incentives > other shareholders
 - Empirical evidence shows index fund families are *hugely* influential



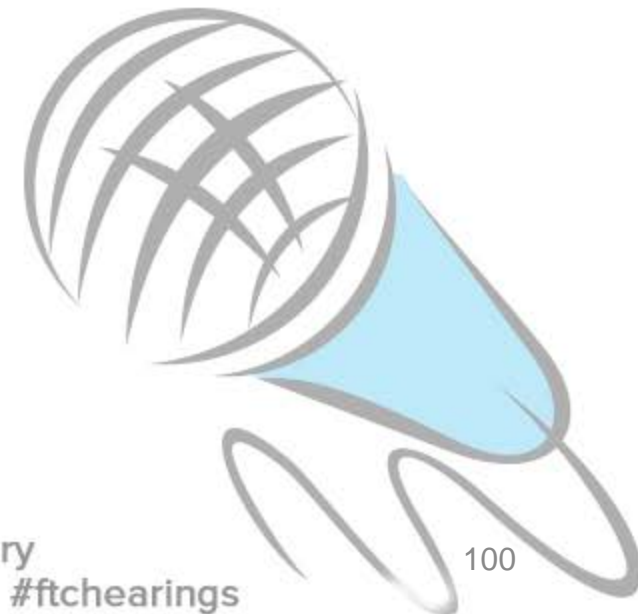
What Antitrust Law Can Do

- Clayton Act bans *any* stock acquisition that may substantially lessen competition & continuing to hold stock is an “acquisition”
- Structure of statute has one provision about acquisitions by one commercial entity in another (cross-shareholding), but another about acquisitions by *any* entity (commercial or not) in commercial entities (horizontal shareholding)
- Solely-for-investment provision exempts only if (1) no influence *and* (2) do not create anticompetitive effects.
- Claims that need control or influence clearly rebutted by statutory text, cases, and agency guidelines on cross-shareholding
- Trusts attacked by Sherman Act *were horizontal shareholders*
- Even if don't directly tackle horizontal shareholding, it lowers concentration levels that traditional merger analysis can tolerate & indicates many mergers now deemed non-horizontal should be deemed horizontal.



Theories of Competitive Harm from Common Ownership

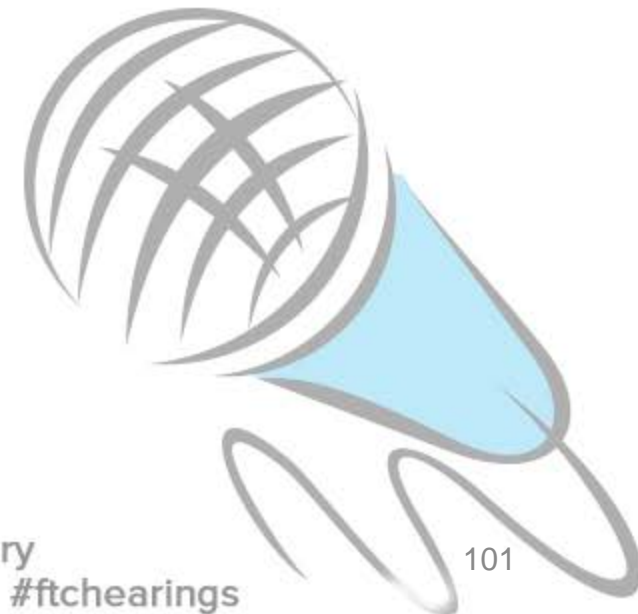
Fiona M. Scott Morton
Yale University
School of Management



Theories of Competitive Harm from Common Ownership

William H. Rooney

Willkie Farr & Gallagher LLP

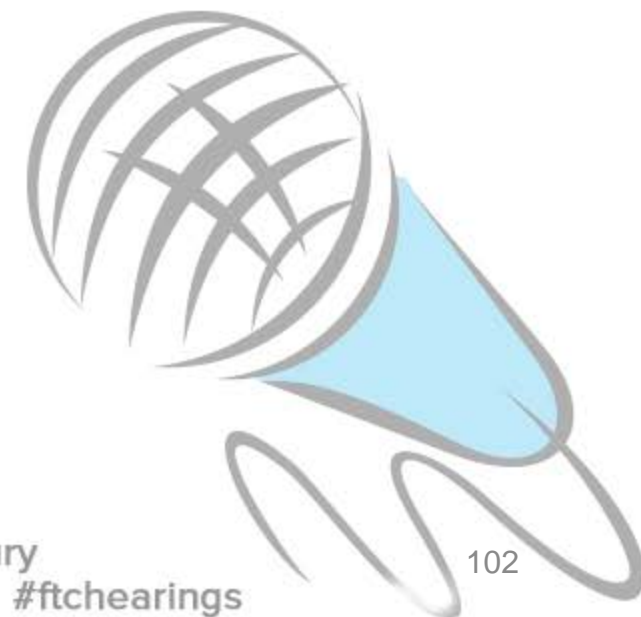


Theories of Competitive Harm from Common Ownership

Panel Discussion:

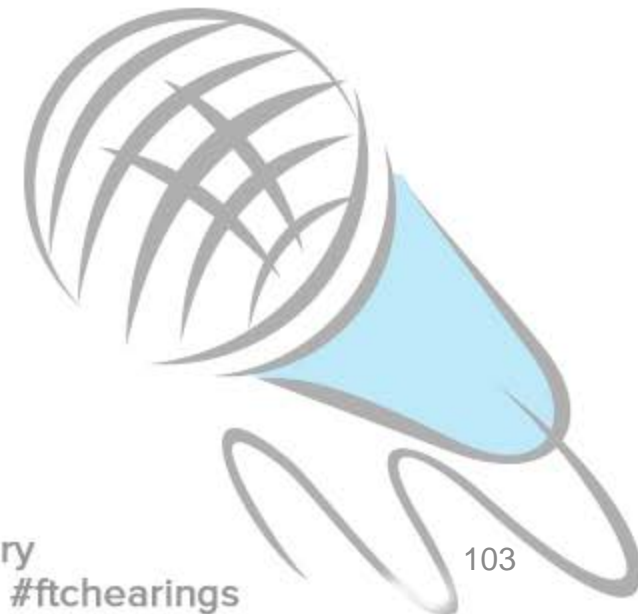
Scott Hemphill, Menesh S. Patel,
Einer R. Elhauge,
Fiona M. Scott Morton,
William H. Rooney

Moderators: Daniel Rubinfeld &
William F. Adkinson, Jr.



Break

3:50-4:05 pm



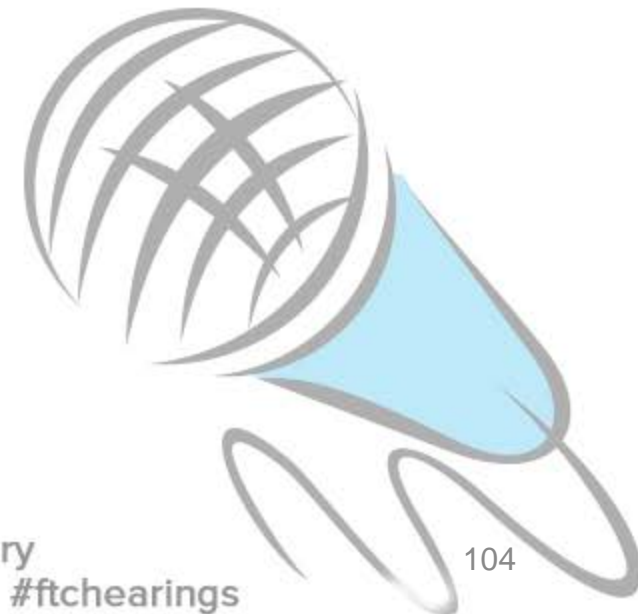
Econometric Evidence of Competitive Harm from Common Ownership

Session moderated by:

Nathan Wilson

Federal Trade Commission

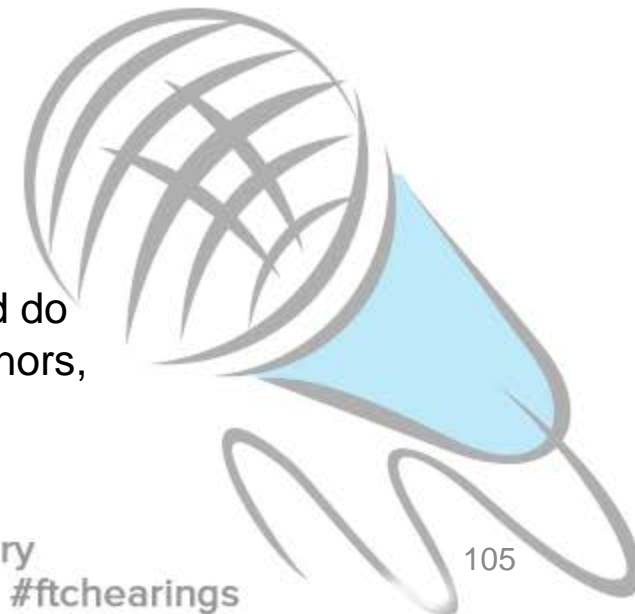
Bureau of Economics



Econometric Evidence of Competitive Harm from Common Ownership

Serafin J. Grundl
Federal Reserve Board

Disclaimer: The analysis and conclusions set forth are those of the author and do not indicate concurrence by other members of the staff, by the Board of Governors, or by the Federal Reserve Banks.



Three Different Approaches

- I will focus on methodology not conflicting findings or conclusions
- Three different methodological approaches have been used:
 1. Relate prices to MHHI (or GHHI):
 - Azar, Schmalz and Tecu (2017), Azar, Raina and Schmalz (2016), Dennis, et al. (2017)
 2. Structural approach:
 - Kennedy, O'Brien et al. (2017), Backus, Conlon et al. (2018)
 3. Testing comparative statics:
 - Gramlich and Grundl (2017) and Gramlich and Grundl (2018)
- I will focus on the third approach



Two Competing Theories

- Theory 1: Each firm maximizes its own profits: π_i
- Theory 2: Firm maximizes weighted average of own and rival profits:
 $\pi_i + \sum_{j \neq i} w_{ij} \pi_j$
- We want to test Theory 1 vs Theory 2: Need to find testable predictions



Testing Comparative Statics

- Theory 1 predicts that changing the profit weights w_{ij} has no effect
- Theory 2 predicts that changing the profit weights w_{ij} changes
 - Prices
 - Quantities
 - Profits
 - ...
- We can test monotone comparative statics predictions of Theory 2
- Variation in profit weights w_{ij} as ownership changes (e.g. O'Brien and Salop (2000))



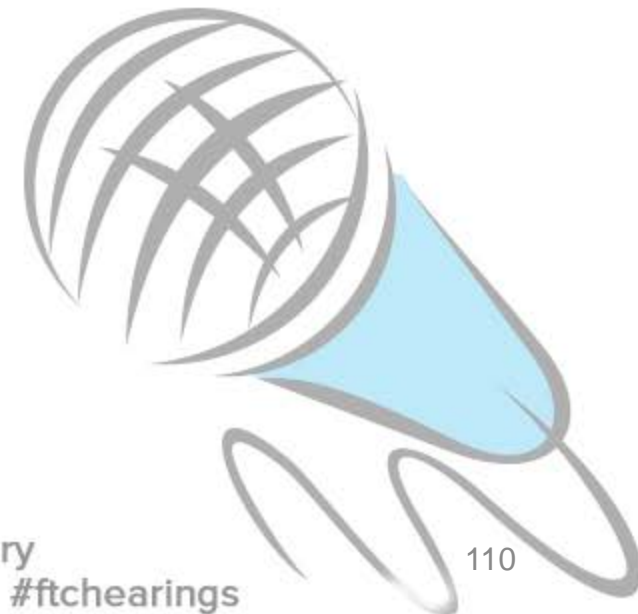
Strengths and Weaknesses

- Strengths:
 - Weak restrictions sufficient for monotone comparative statics
 - Do not have to fully specify a particular model
 - Easy to implement; could be applied in many industries
- Weaknesses:
 - Cannot flexibly control for all profit weights, only for “summarizing” functions
 - Only tests direction of effects. For example demand system would tell us whether i and j are close substitutes, which is important for effect size



Econometric Evidence of Competitive Harm from Common Ownership

Daniel P. O'Brien
Compass Lexecon



Empirical Analysis of Common Ownership

- The empirical question
- The empirical approach
 - The reduced form approach and its difficulties
 - The structural approach
- Problems with the papers claiming to find effects
- More recent evidence
- The state of play and next steps



Empirical Analysis of Common Ownership

- The empirical question
- The empirical approach
 - The reduced form approach and its difficulties
 - The structural approach
- Problems with the papers claiming to find effects
- More recent evidence
- The state of play and next steps



Empirical Analysis of Common Ownership

- The empirical question
- The empirical approach
 - The reduced form approach and its difficulties
 - The structural approach
- Problems with the papers claiming to find effects
- More recent evidence
- The state of play and next steps

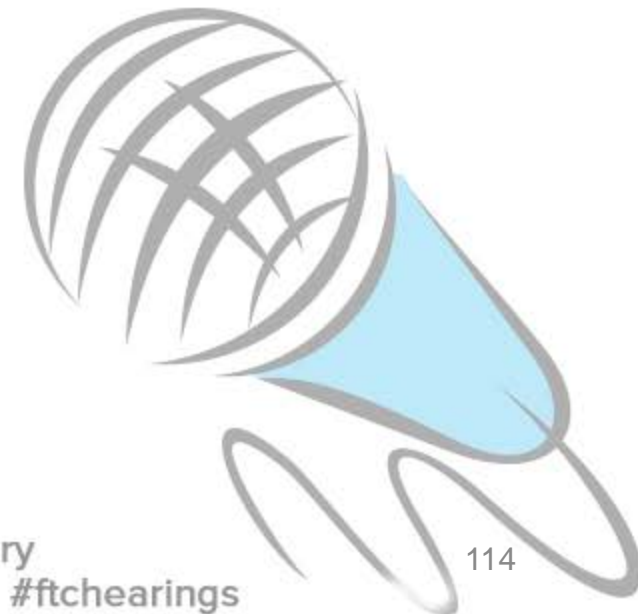


Econometric Evidence of Competitive Harm from Common Ownership:

Empirical Studies of Common Ownership- Effects on Product Markets & Innovation

Martin Schmalz

University of Michigan
Ross School of Business



Baseline: decades of evidence that institutional ownership affects capex, payouts, merger activity, ...

- **Common ownership** affects corporate financial choices (Semov 2017)
 - BlackRock's CEO L. Fink directly expresses views on payouts & capex in letters to CEOs, threatens votes against management
- Every dollar paid out can't be spent again on capex
 - Reduced capex means lower capacity
 - Lower capacity means lower output
- If there's an effect on capex, payouts, ..., how can there *not* be an effect on product markets?



Economy-wide increase in common ownership is well-documented

- The literature has documented the existence of common ownership links since Kotz (1979); Hansen & Lott (1996); Gilo (2000); Lindsey (2008); Matvos & Ostrovsky (2008)
- Harford, Jenter & Li (2011) *“conclude that, by 2005, most institutional investors in S&P 500 firms do not want corporate managers to narrowly maximize the value of their own firm. Instead, investors would see their portfolio values maximized if managers internalized a large percentage of any externalities imposed on other index firms.”*
- See also Azar (2012); He & Huang (2017); Banal-Estanol, Vives, Seldeslachts (2017); Gilje, Gormley & Levit (2018); Backus et al. (2018); see Azar et al (2x) for market-level



Empirical evidence of anticompetitive effects

- Common ownership density predicts industry margins (Azar, 2012)
- Gutierrez & Philippon (2016, 2017): quasi-indexer ownership of firms causally related to buybacks and reduced investment relative to margins
- Azar, Schmalz & Tecu (2018a; AST) study airline market-level effects: common ownership causes higher prices and reduced output
 - Independently replicated by Kennedy, O'Brien, Song & Waehrer (2017)
 - Data & code available on JF website



Deep-dive on AST's results

- Panel regressions indicate 3-8% higher prices due to average level of common ownership
 - Not significant in smallest 16% of markets (90% of passengers in 50% of markets)
 - Not significant in markets with HHI <2,500
- BlackRock's acquisition of BGI differentially affected different routes' ownership structure
 - These differences predict changes in ticket prices across routes; estimates up to 12%
- Robust to
 - Alternative measures of common ownership, proportional control assumption, mergers, bankruptcies, ... fixing market shares at 1/n
- Driven by largest & long-term shareholders (most powerful in theory)
 - Effects identified from x-sectional variation, not just long-run changes in the industry
- Evidence does *not* directly inform whether results due to unilateral or coordinated effects



Dennis, Gerardi & Schenone (2017) claim AST's results driven by weighting regressions & largest 5% of markets

- These claims are factually incorrect (AST 2018b, available on SSRN)
 - AST results are robust to not weighting by # passengers
 - Dennis et al.'s non-finding of anticompetitive effects in smaller markets likely due to failure to aggregate 13Fs to institution level

Dep. Var.	(1) Full-sample lfare	(2) Top 5% lfare	(3) Bottom 95% lfare	(4) p50-95 lfare	(5) Full-sample lfare	(6) Top 5% lfare	(7) Bottom 95% lfare	(8) p50-95 lfare
MHHI delta	0.0496** (0.0212)	0.183*** (0.0452)	0.0563*** (0.0206)	0.114*** (0.0228)				
MHHI delta using Non-Aggregated Filings					0.0188 (0.0253)	0.188*** (0.0489)	0.0205 (0.0248)	0.0743*** (0.0274)



What about the Structure-Conduct-Performance (SCP) critique (e.g. Schmalensee, 1989)?

- Market shares are endogenous to product prices, asset prices, ownership
 - No accepted model exists to inform nature of endogeneity
 - Therefore, market shares held constant in several of AST's tests, with robust results also for $s = 1/n$
- The alternative is other models with other assumptions
- Also, SCP critique is primarily concerned with cross-industry regressions, not with within-industry regressions of price on concentration with cost controls



What Schmalensee (1989) actually said

5.1 Price Levels

Studies that compare price levels among geographically separated markets in the same industry are immune to the serious accounting problems that affect profitability studies, and one can expect that omitted market-specific variables are less important (and thus less likely to cause large biases) when attention is focused on a single industry. On the other hand, biased results may be obtained if adequate controls for exogenous determinants of cost are not included. The relation between concentration and price has been studied in numerous markets.³⁴ This work generally provides strong support for:³⁵

Stylized Fact 5.1: In cross-section comparisons involving markets in the same industry, seller concentration is positively related to the level of price.

- That price-HHI relation is negatively-biased because of the omitted variable *common ownership* (Azar, Raina & Schmalz 2016)

“Structural analysis is not a substitute for credible inference” (Nevo & Whinston, JEP 2010)

- “one comes away with the impression that there is only a single way to conduct credible empirical analysis. This seems to us a very narrow and dogmatic approach to empirical work; credible analysis can come in many guises, both structural and nonstructural”
- “empirical analysis must not only deal with credible inference, but also with ‘extrapolation’ ... This is where structural analysis comes in.”



Academic structural studies

- Parker & Röller (1997): common ownership of telecom licenses helps explain higher prices
- Lundin (2016): joint profit maximization fits the data better than individual profit maximization (nuclear power supply dynamics)
 - Terminating joint ownership of power plants would reduce prices by 5%
- Backus, Conlon & Sinkinson (2018b): Bertrand model likely fits cereal prices better than a common ownership model assuming 100% of the incentive effects translated to strategy
 - Few people believe in perfect passthrough and *no* frictions (fund, family, firm, subsidiary supermarket)
 - Paper doesn't reject $>0\%$ effects of common ownership



ICI (!) - sponsored airline study by Kennedy, O'Brien, Song & Waehrer (2017)

1. Finds no + point estimates, but does not reject + effects
 2. Also estimates negative effect of route distance on cost. Logic?
 3. Estimates based on a selected 10% subsample of the data. Why?
- Non-positive effect doesn't replicate using standard methods
 - Academic incentives to check & improve on industry-sponsored studies are low. Natural role of competition authority.



Singular focus of discussion on MHHI misses the forest for the trees

- Many more papers document effects of common ownership on firm behavior, market structure, innovation, ... using alternative measures of common ownership



Selection of other studies

- Lindsay (2008): common ownership fosters **alliances** among VC-backed firms, blurs **firm boundaries**
- Azar, Raina & Schmalz (2016): higher fees, lower deposit interest rates, higher fee thresholds in banking markets with greater ultimate ownership (GHHI). **Effects driven by quasi-indexers.**
- Panayides & Thomas (2017): common ownership causes reduced competition for market share **via reduced capex and advertisement expenses**
- Semov (2017): common ownership causes firms to move **closer together in product space**
- Gerakos & Xie (2018): common ownership btw brand and generic drug manufacturer reduces market **entry**; predicts settlement probability incl. **pay-for-delay**
- Newham, Selde-slachts & Banal-Estanol (2018): independently confirm reduced **entry** of generic due to common ownership
- Brooks, Chen & Zeng (2018): common ownership drives **merger** activity
- Antón, Azar, Giné & Lin (2018): common ownership helps resolve the **merger** paradox



Effects of common ownership (CO) on corporate innovation

- Kostovetsky & Manconi (2016): more knowledge diffusion (cross-citations) btw CO firms
- Geng, Hau & Lai (2017): CO reduces holdup between firms with complementary R&D
- He & Huang (2017): CO fosters product market coordination, innovation productivity
- Borochin, Yang & Zhang (2017): focused long-term ownership fosters exploratory innovation; ownership by short-term diversified investors impedes innovation
- Qiu (2017): across-industry common ownership fosters innovation; within-industry common ownership impedes innovation
- Antón, Ederer, Giné & Schmalz (2018): common ownership correlates with more (less) innovation when technological (product market) spillovers are greater

Welfare effects unclear.

Innovation effects overpower anticompetitive effects only under restrictive conditions (Lopez & Vives 2018). No empirical evidence.



Effects of vertical common ownership links

- Ojeda (2016): firms sharing common owners with banks obtain cheaper & riskier loans
 - Not commonly-owned firms pay higher interest rates
 - See also Cici, Gibson & Rosenfeld (2015)
- Freeman (2017): common ownership causes longer-lasting customer-supplier relationships
- [Geng, Hau & Lai (2017): common ownership reduces holdup between firms with complementary R&D]. Mirrors prior *cross-ownership* results.

Existence of vertical effects doesn't negate existence of horizontal effects, or sign the net effect.



Contrast btw # empirical papers finding (no) effects of common ownership on product markets vs # speakers in the FTC hearings

	Finds common ownership affects product markets, innovation	Finds no competitive effects of common ownership (if “preliminary”)	No own empirics / factually incorrect / industry-affiliated or sponsored
Academic empirical papers (authors)...	~23 (~40)	3	DNA
... of which present today as panelists or moderators	1	2	23

- 12 min / 24 papers = 30 sec / paper is not enough to do justice to evidence
- In case of interest in a fact-based debate reflecting the literature, hear some of the other 40 authors as well
- *Consumer* protection and *investor* protection may conflict here. Shareholder value isn't social welfare.



Closing remark

- The quality of this debate would benefit from better data access to researchers, and independent analyses of product markets

ers rarely have a voice. In America things have slipped so badly that a material conflict of interest is not considered a disqualifying condition, or even a relevant consideration, for someone to pronounce on antitrust policy and be taken seriously.

The Economist, 17 Nov 2018

- Meanwhile, the ICI (2018) urges the FTC to not analyze this issue:

In light of the considerations discussed above, we urge the Commission to focus its resources on other areas.

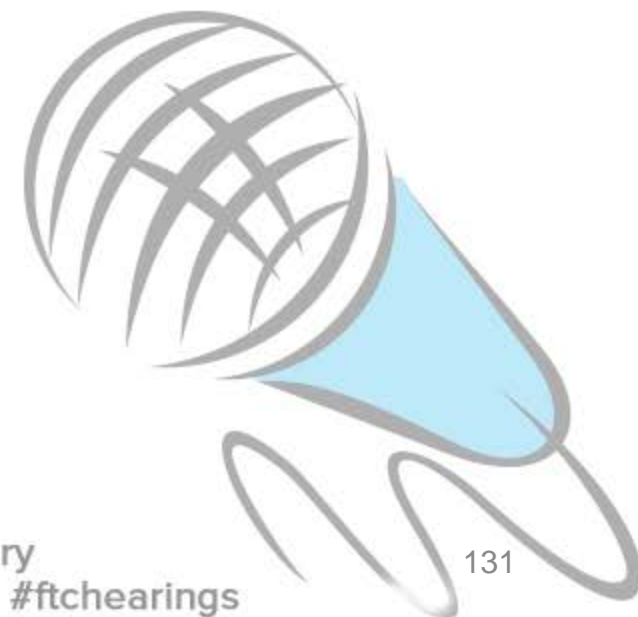
- Why the desire to hide the ball? If the industry believed common ownership wasn't an antitrust problem, wouldn't they want the FTC to study it in all imaginable detail?



Econometric Evidence of Competitive Harm from Common Ownership

Christopher Conlon
New York University
Stern School of Business

Ideas and Charts from three projects with
Matt Backus (Columbia GSB)
Mike Sinkinson (Yale SOM)



Theory of Common Ownership

- Old idea from Rotemberg (1984) developed for joint ventures
- What if firms maximize the **portfolio value** of their investors instead of their own profits?
- Recent literature (Schmalz et al) applies this idea to traditionally passive or **indexed investors**.
- I have nothing to say about **mechanisms**, take theory as given and think about implications.
- I am mostly in the **theory testing** business.
- I am going to focus mostly on **positive** results. Leave **normative** topics to discussion.



A note on data

- Ownership data from 13F's is not great particularly post 2010
 - Only 400-450 firms the S&P 500 according to WRDS/ TR data.
 - Many large companies have < 20 owners
- We've gone and scraped all of these filings from SEC database post 2000.
 - Scraped data is pretty good post 2013 when SEC required XML filings.
 - XML filings a huge benefit to researchers
- Will make this publicly available to other researchers



What is the object of interest?

- We argue for the **profit weight**
 - Most of the literature uses the MHHID
- $$\kappa_{f,g} = \frac{\gamma_f \cdot \beta_g}{\gamma_f \cdot \beta_g}$$

$$MHHID = \sum_f \sum_{g \neq f} \kappa_{fg} S_f S_g$$

- MHHID Interacts profit weight with potentially **endogenous objects**. And the old problem of **market definition**.



Properties of Profit Weights #1

- Imagine all investors own $x\%$ of Firm 1 and $y\%$ of firm 2.
- Small retail investors (ignored) own the rest r_1, r_2 .
 - Can place a weight of more than 100% on competitor profits
 - Higher retail share means higher profit weights

$$\kappa = \begin{bmatrix} 1 & x/y \\ y/x & 1 \end{bmatrix} = \begin{bmatrix} 1 & \frac{1-r_2}{1-r_1} \\ \frac{1-r_1}{1-r_2} & 1 \end{bmatrix}$$



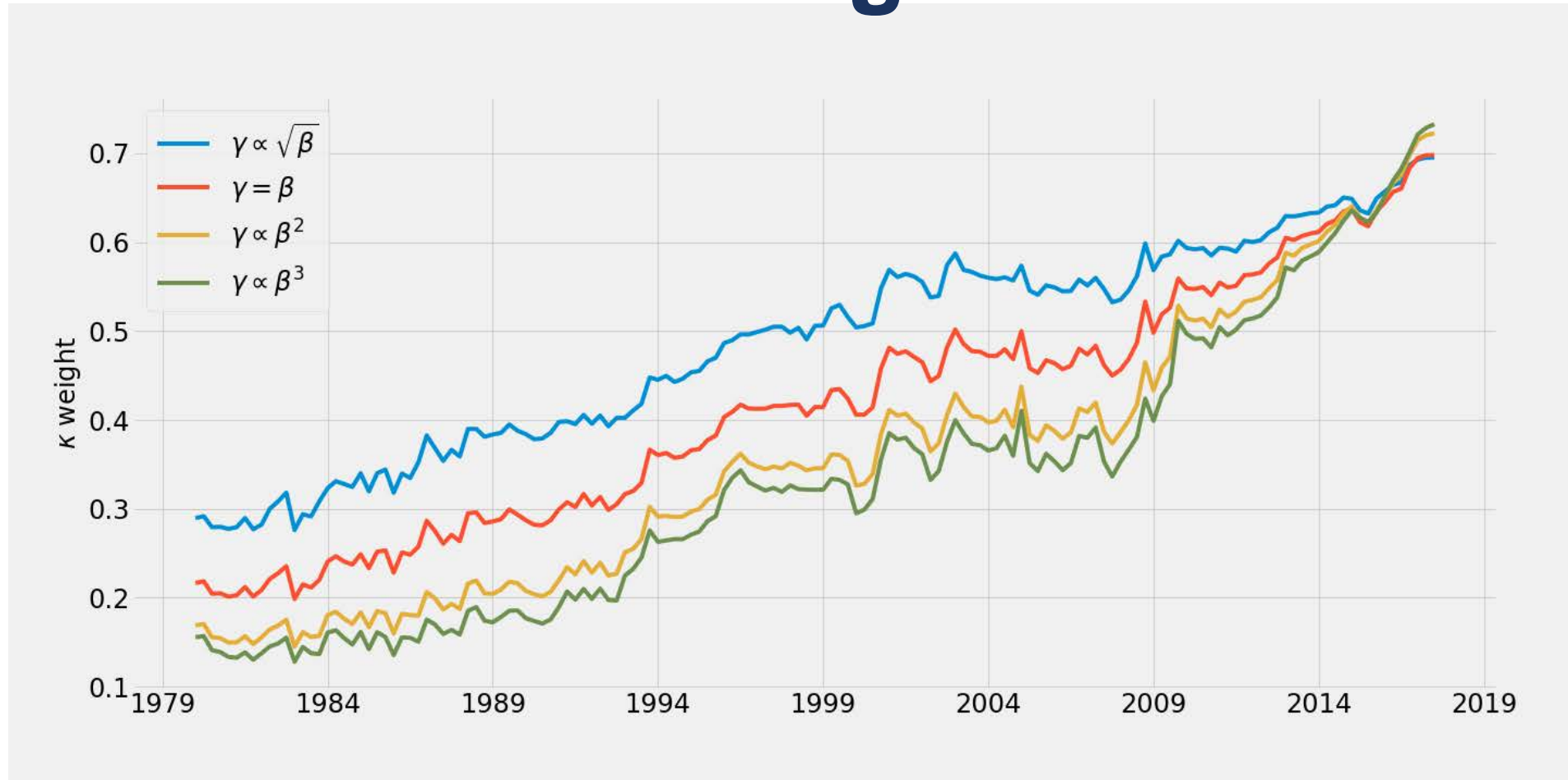
Properties of Profit Weights #2

- Profit Weights depend on two things:
 - Similarity of Investor Holdings in both firms
 - **Relative** Investor Concentration

$$\kappa_{fg} = \cos(\beta_f, \beta_g) \sqrt{\frac{IHHI_g}{IHHI_f}}$$

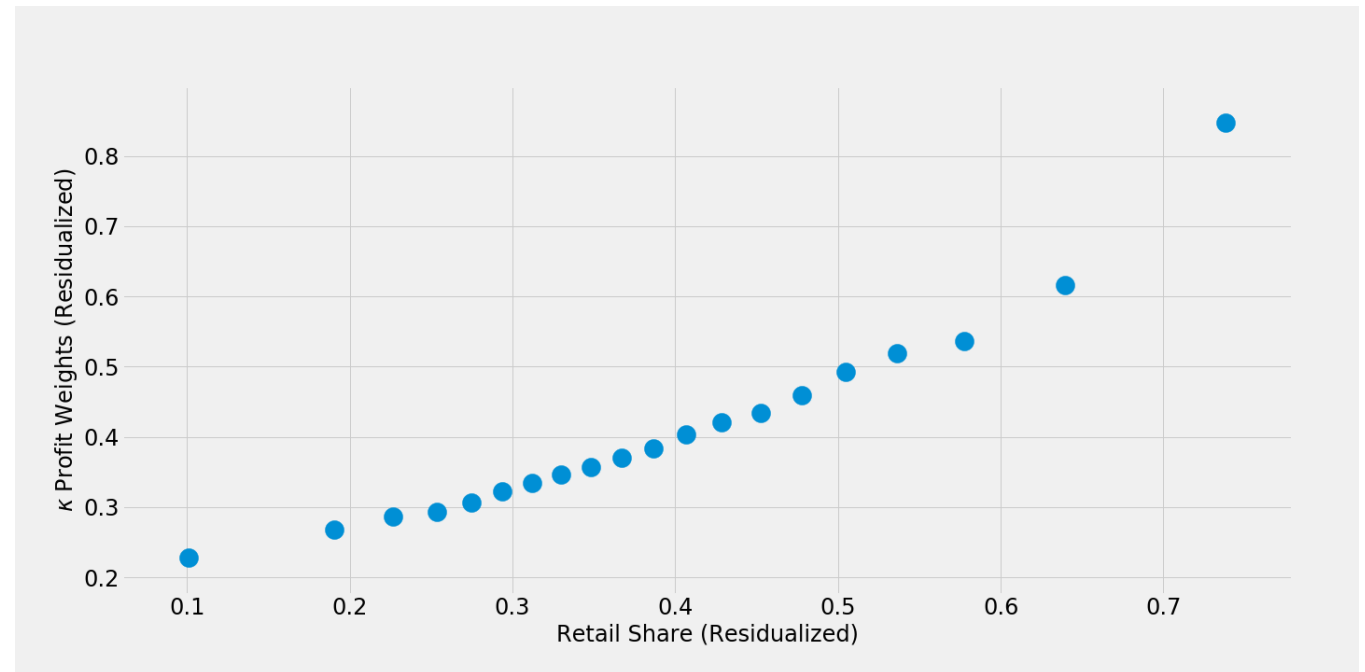


Control and long run trends



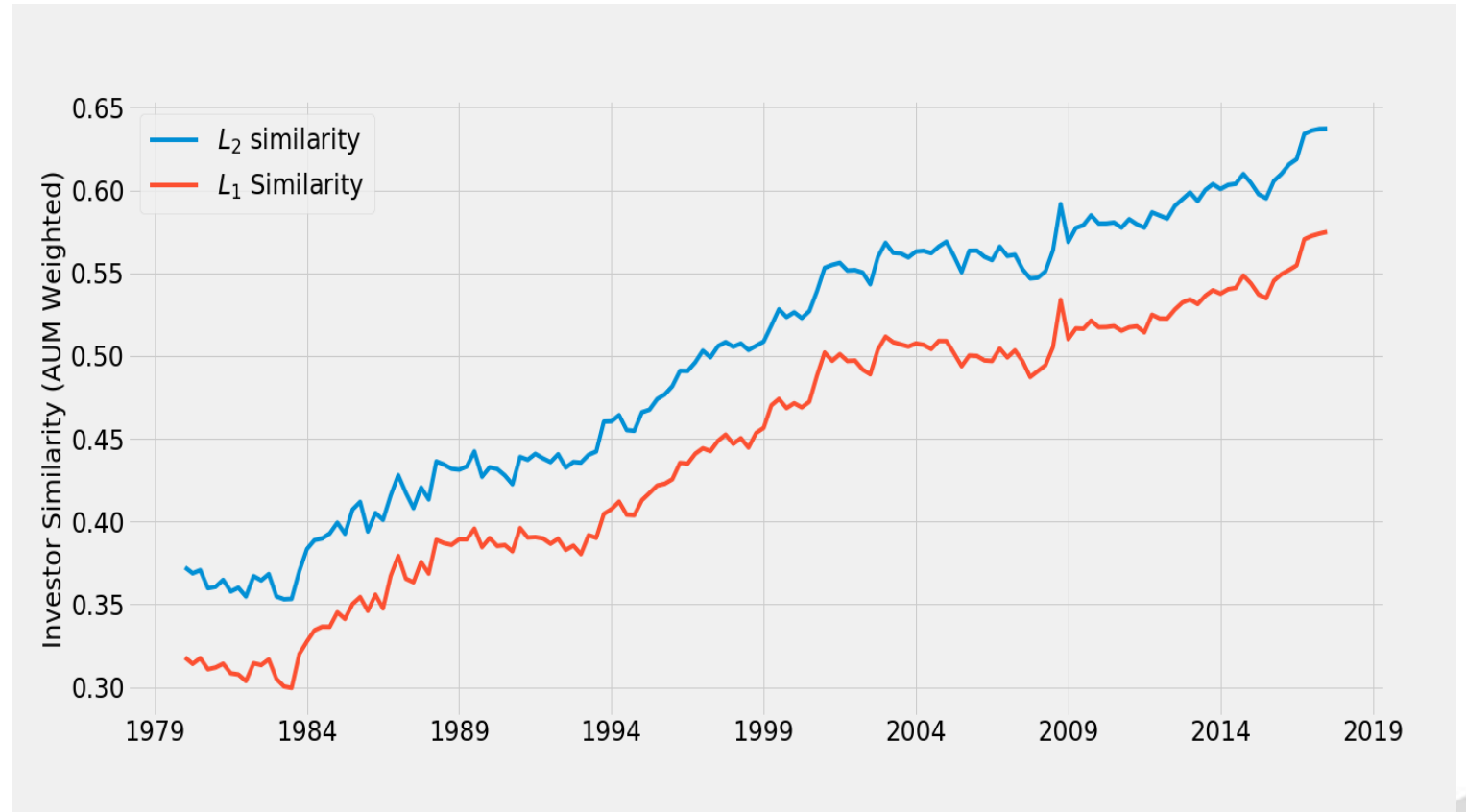
What drives profit weights?

- Retail Share
- Market Cap
- Undiversified investor discipline



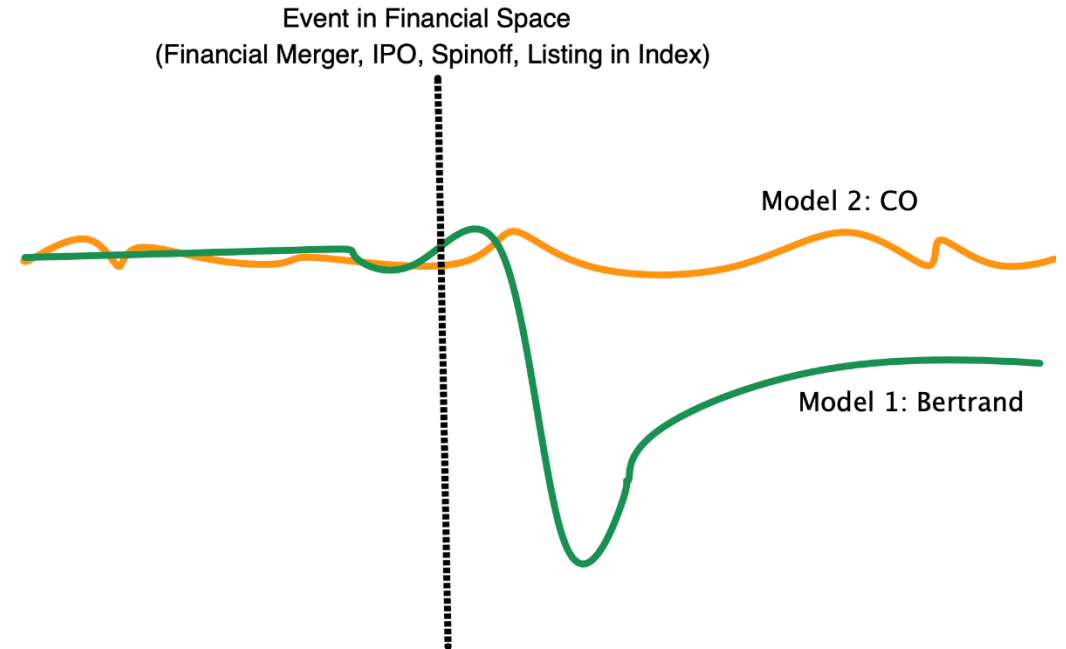
What is the main driver?

- Indexing
- Investor concentration has ambiguous effects



How can we test?

- Estimate demand (like for a merger case)
- Estimate marginal costs assuming conduct
 - Regular differentiated products
 - Common ownership weights
- Changes in investment space will generate shocks to marginal costs in some models but not others
 - Exploit **cross firm asymmetry** and variation in profit weights.
 - Which sequence of marginal costs looks most reasonable?
 - Need lots of controls for MC and shocks to MC.
 - Formal test in our paper.
- Bertrand looks good for RTE Cereal.



My Main Points

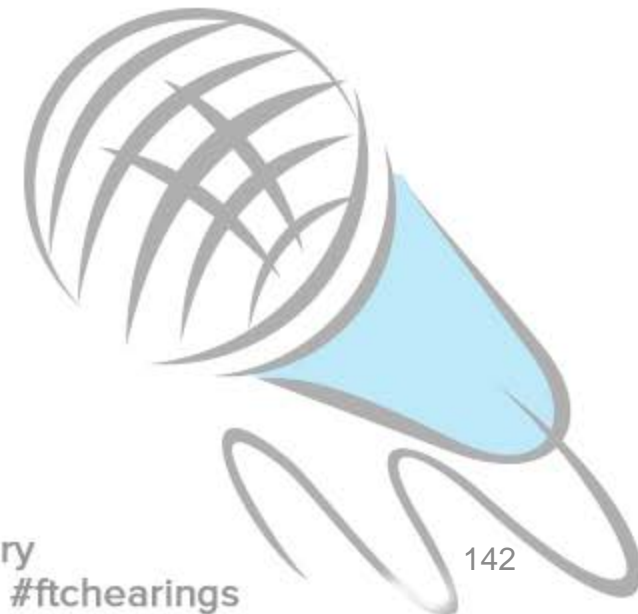
1. Focus should be on profit weights not MHHID
2. How important are control assumptions?
 - Very important but also not very important
3. Massive long run trend in common owner **incentives**.
 - Correlated with indexing, retail share, market cap
 - Less about **investor concentration** than most think.
4. Coordinated Effects are hard.
5. Potential Remedies are even harder



Econometric Evidence of Competitive Harm from Common Ownership

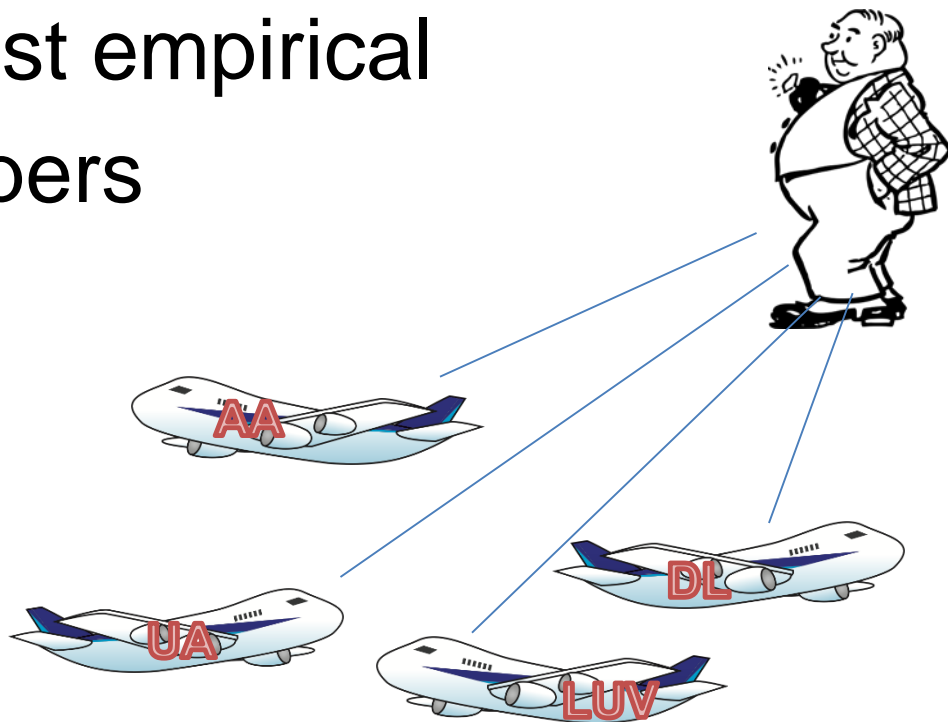
Nancy L. Rose

Massachusetts Institute of Technology
Department of Economics

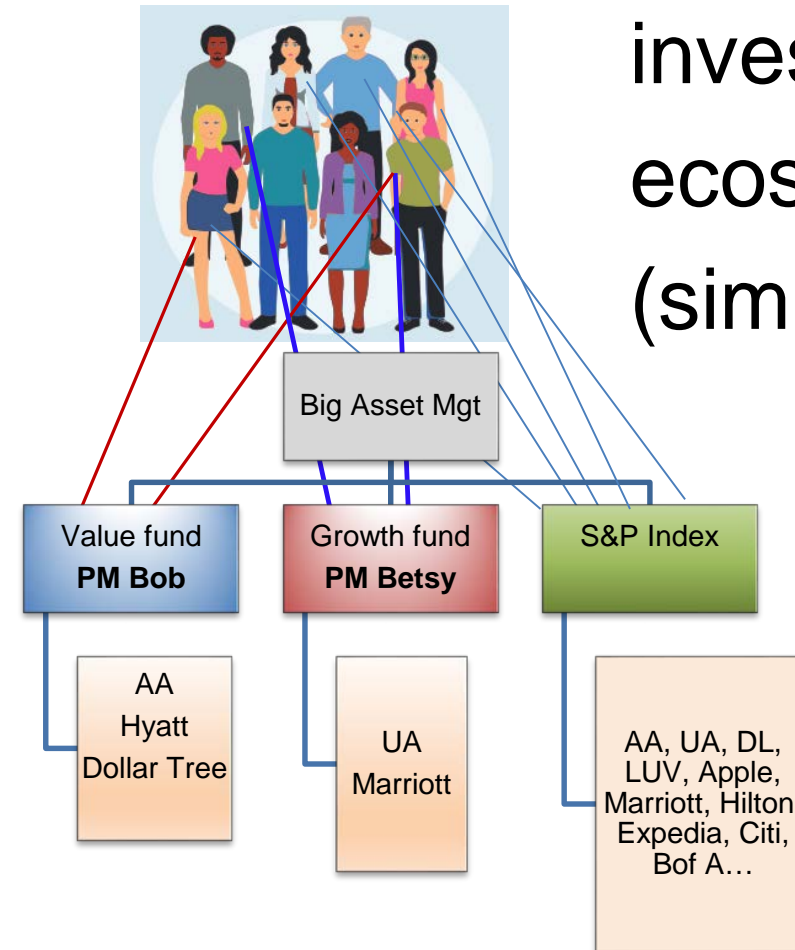


Typical Common Ownership measures don't reflect anyone's incentives

most empirical papers



investment ecosystem (simplified)



MHHID measures have muddy interpretations

- Price = $f(\text{HHI}, \text{MHHID})$ is not a behavioral equation
 - What does comparative static of ΔMHHID on ΔP reflect?
- CO tests bind when firms *decline* profitable deviation from (tacit?) collusion, sacrificing own π for rivals' π
- Empirical measures of CO & ΔMHHI likely capture “these are largest, national/global companies in sector”
 - Alignment in strategies, interests in softer competition?
 - Compare $\text{HHI}=5000$ airline routes with AA-DL to AA-Allegiant



This is an important area
of ongoing economic research

Where a rush to policy judgment is premature

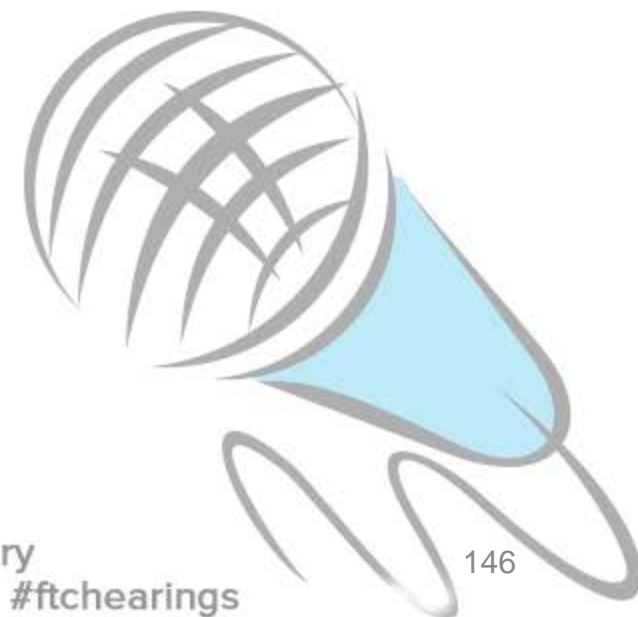


Econometric Evidence of Competitive Harm from Common Ownership

Panel Discussion:

Serafin J. Grundl, Daniel P. O'Brien,
Martin Schmalz, Christopher Conlon,
Nancy L. Rose

Moderator: Nathan Wilson



Thank You

Hearing #9: Dec. 11-12

Data Security

Federal Trade Commission

Constitution Center

