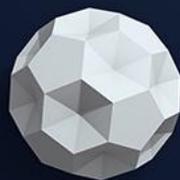


Common Ownership and Passive Investments: The Next Frontier for Antitrust Enforcement?

What does economic analysis really tell us?



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Capturing the zeitgeist: *concentration, oligopolies, and the pervasive presence of institutional stock owners*

Institutional ownership is growing: **70+% of US stock market**

Large institutions that can diversify across stocks:
largest 4 have about **5% of the stock market each**

- State Street, BlackRock, Vanguard, Fidelity

One of these funds is the **largest shareholder in most of the S&P500**

Other economies have large sovereign wealth funds

Clearly an effective tool for diversifying risk

BUT, the claim goes, **surely these large institutions also benefit from increasing the stock prices of the stocks they hold**



BLACKROCK



STATE STREET



Vanguard®

***“Suppose you owned shares of all firms in the same industry.
Would you push these firms to compete extra hard with each other?
Do you think real-world institutional investors do?”
Prof. Martin Schmalz***

Economic
debate

Policy
debate

Incentive and
ability?

Mechanism?

How credible is
the evidence?

Is it worth
policing?

Regulation or
competition
law?

**(a few) empirical studies on
“effects” of common ownership**

Topics for discussion

What the recent empirical evidence claims to show

The proponents' "narrative"

The economic pushback

- We understand cross ownership/minority shareholding effects (*O'Brien Salop, Bresnahan Salop*) but cannot just transpose the tool (MHHI) to external non-competing investors
- Incentives and ability? But what is the *mechanism*?
- The empirical analysis is not robust in multiple ways

The policy questions

- Can there be an antitrust issue? (*Recent EC merger decisions, Elhauge...*)
- Is this something we should regulate? (*Posner et al.,*)

Do we "believe the science" yet?

1. What the recent empirical evidence claims to show



Anticompetitive effects of common ownership?

Very small body of empirical studies claiming to find anticompetitive effects of common ownership to-date

Two-three *industry* studies claim to show a **“likely causal link” between increased common ownership concentration and consumer prices**

- **Airlines:** Azar, Schmalz & Tecu¹
- **Banks:** Azar, Raina & Schmalz²

A couple of *cross-industry* studies argued to confirm that **common ownership “correlates” with less competition between firms**

- Common ownership is correlated with flatter executive incentives: *Antón et al.*³
- Common ownership is correlated with lower investment: *Gutiérrez & Philippon*⁴

¹ Azar, Schmalz & Tecu, *Anti-Competitive Effects of Common Ownership*, The Journal of Finance (forthcoming).

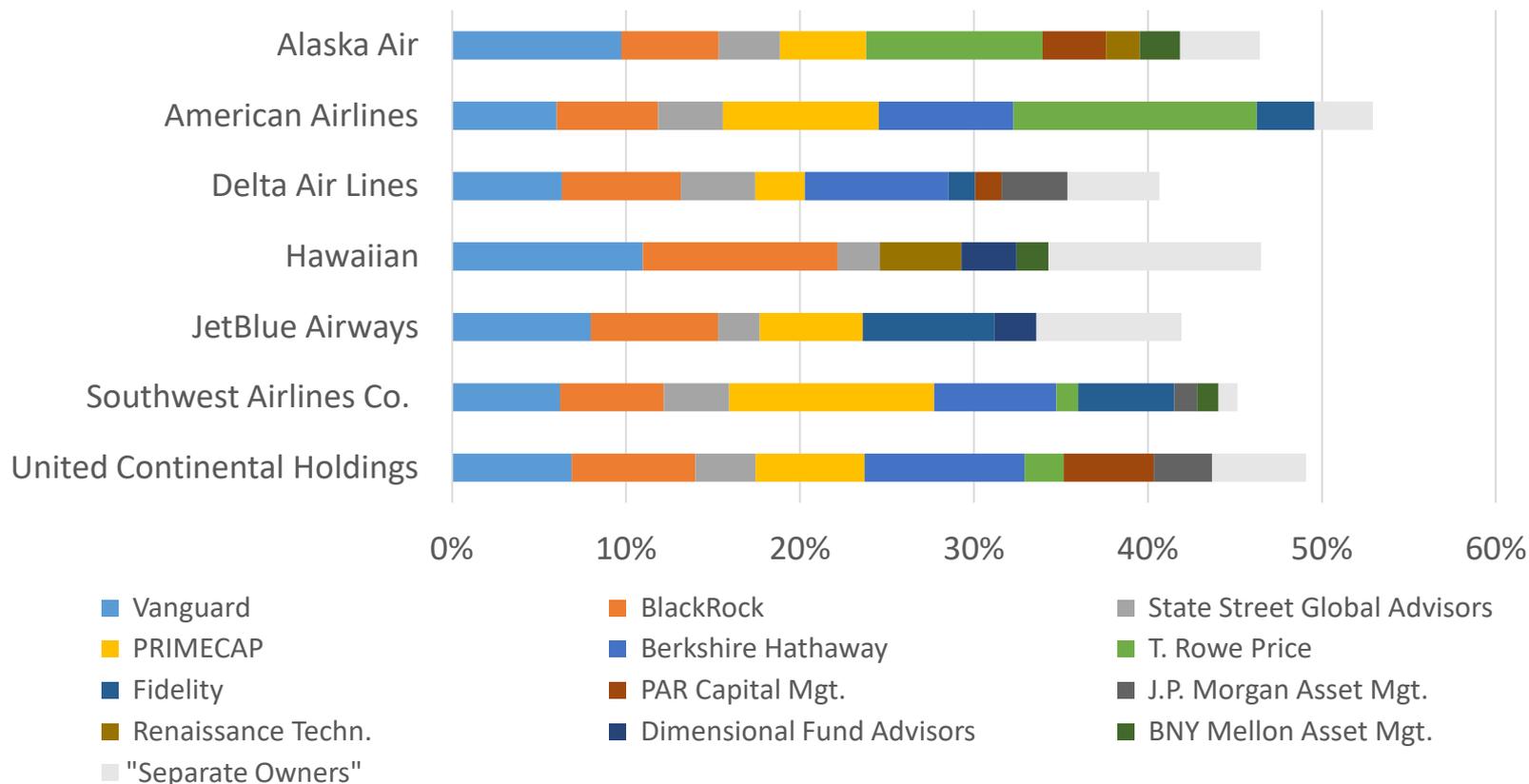
² Azar, Raina & Schmalz, *Ultimate Ownership and Bank Competition* (2016)

³ Antón et al., *Common Ownership, Competition, and Top Management Incentives*, ECGI Working Paper (2018)

⁴ Gutiérrez & Philippon, *Investment-Less Growth: An Empirical Investigation*, NBER Working Paper (2016)

Poster child of “common ownership”: airline industry*

Between 2001 and 2013 institutional investors held 77% of all airlines stock in the US



Notes: Figure shows holdings by the top ten shareholders for each airline that hold at least three percent of shares. Owners that do not hold shares of any other of the airlines shown are grouped into “separate owners.” Source: S & P Capital IQ.

* Source: Tecu

Azar, Schmalz & Tecu “Airlines study”

Data

- All airline fares, and shares on US routes
- All ownership > .5%

Approach

- Compute O’Brien Salop’s “**modified HHI**” (**MHHI**)” to measure common ownership concentration
- Correlate changes in airline ticket prices to changes in common ownership concentration on the same route, controlling for other factors that may affect prices

Results

- **Fares 3-11% higher than without common ownership**

Similar authors find MHHID raises fees/lowers rates **in banking**

2. The proponents' narrative



Anticompetitive effects of common ownership?

Two sorts of anticompetitive effects seen as likely concerns

Unilateral pricing incentives will change because (say) Delta's managers will "realise" that competing hard to attract customers who would otherwise fly on United will not by itself benefit the common owner

Collusive behaviour becomes more likely because coordination and enforcement of that coordination becomes easier.

***Echoes seminal analyses of effects of cross-ownership/
minority shareholdings: O'Brien Salop (2000) for unilateral effects, Gilo et al. (2006) for collusive behaviour***

Direct “read across” from cross ownership/ minority shareholding analysis

Well established that unilateral effects can exist with partial ownership.

O’Brien and Salop (2000) modified the tools for standard unilateral effects analysis to partial acquisition

“Modified HHI” (MHHI) – common metric which expand the HHI concentration/market power analysis to include a rival’s share of competitors (including the *distribution of financial and control rights*).

Already commonly used in enforcement context

Key point: O’Brien and Salop apply their model to cross-ownership (one competitor partially owning another competitor) and measure the impact this has on the incentives of management when maximising their profits function.

Assumption: the tool “can be straight-forwardly applied to common ownership (an industry-outsider, e.g. investor, partially owning multiple competitors)”.

The simple version

**Premise 1:
Common owners are better off if the firms that they own compete less**

Ex: Vanguard is better off if United and Southwest do not compete

**Premise 2:
Firms take their owners' interests into account in their competitive strategy**

Ex: United takes Vanguard's (and its other owners') interests into account



Firms that share common owners compete less

Ex: United competes less with Southwest

Foundation for this is claimed to be O'Brien & Salop's work on partial ownership except the partial owner is a non-rival investor rather than an industry participant

How is this supposed to work?

All pretty vague...

In an oligopoly, rival firms gain when they **compete more softly**

A diversified fund will tend to **hold all the rivals in an oligopoly**, and “collectively” funds are the largest shareholders by far.

Funds’ performance “**improves**” if the firms they are invested in are more **profitable**.

So **large institutional funds have both incentive and ability to encourage softening of competition** among portfolio firms:

Incentive

A common owner does not gain from competition (e.g. lower prices) between the firms it holds shares in, but wants to **maximise joint profits**.

Ability

Through **corporate governance communications**, large owners impact firm strategy and intensity of competition

Essentially works through corporate governance:
“passive” investors engage with management

Vanguard's CEO & Chairman F. William McNabb:

“Through engagement, we are able to put issues on the table for discussion that aren’t on the proxy ballot” “Some have mistakenly assumed that our **predominantly passive management style suggests a passive attitude with respect to corporate governance. Nothing could be further from the truth.**”

BlackRock Proxy Voting and Shareholder Engagement FAQ:

“We engaged with roughly 1500 companies around the world in 2012. When we engage successfully and companies adjust their approach, **most observers are never aware of that engagement.** [...] We typically **only vote against management when direct engagement has failed.** [...] [Engagement] is about communicating to companies our concerns about issues that have the potential to materially impact long-term economic performance. Our preferred approach is to **encourage companies to change their practices where we feel it is needed, rather than to divest their shares** [...] Our engagement activities make an important contribution toward fulfilling our fiduciary duty to fund investors to **protect and enhance their long-term economic interests** in the companies in which we invest on their behalf.”

**This is deemed to suggest that
corporate governance channels are effective**

So what is the specific mechanism being claimed?

“The investor could provide advice and then **vote against the CEO if he does not follow**, or seek to nominate board members who agree”

“Each CEO knows **the investor is talking to rival CEOs**”

“The institutional investor could **design or promote incentive packages for CEOs to reduce their incentive to compete against rivals**”

“The investor could **block bids by activist investors interested in aggressive competition**”

“From the perspective of an investor holding all firms, **share changes must net to zero**. Schmalz reports a conversation in which a fund manager admitted that he does not tell his portfolio firms to compete harder against his other portfolio firms since market share is zero sum.”

4. The economic pushback



Anticompetitive effects of common ownership?

Multiple contributions critiquing both theory and evidence

Rock & Rubinfeld (2017)

- **No read across:** *not right to stretch the MHHI framework to the case of a non-competitor investor, and to assume an increase in the MMHI carries the same anticompetitive risk here as an increase in the traditional HHI*
- **HOW does common ownership make a difference to incentives?** *Implausible that managers of firm A will make decisions taking into account that a common entity has a small share in rivals also*
 - *Holdings of the largest shareholders in airlines are in fact heterogeneous across firms, hence no unique incentive*
 - *Funds also hold shares in suppliers and customers: how does this complicate picture?*
 - *Index funds do not simply aim to maximise portfolio values but compete over cost (management fee), accuracy of tracking index, etc – “softening competition” does not help*

Rock & Rubinfeld (2017) – cont.

- **HOW can shareholders really influence managers (ability)?**
- **Interpretation of empirical results** on the relationship between concentration (BOTH industry-level, measured by HHI, and institutional-level, measured by MHHI) and airline fares
- **Interpretation of effects at the level of airport pairs**
- ...

Kennedy, O'Brien et al. 2017

- Again raise issue (also in Rock Rubinstein) that the way the MHHI is used is inappropriate, and the relationship between price and MMHI that is estimated **does not provide a reliable prediction of the relationship between price and common ownership**
- **Re-do the analysis on airlines and find no effects**

Schmalz responded...

5. Legal/ policy implications?



Anticompetitive effects of common ownership?

Articulating common ownership as an antitrust concern?

US: Elhauge, Hovenkamp favouring antitrust enforcement under Clayton Act

Supreme Court precedent:

United States v. E.I. du Pont de Nemours & Co., Supreme Court: “Even when the purchase is solely for investment, the plain language of § 7 contemplates an action at any time the stock is used to bring about, or in attempting to bring about, a substantial lessening of competition.” 353 U.S. 586 (1957).

DOJ/FTC have not challenged partial equity acquisitions to date of less than 20%

DG Comp: “the placeholder”

Multiple recent decisions (agrochemicals, chemicals, gases, others) have contained a “Schmalz-like” discussion of common ownership.

Does not go anywhere in particular, but feels like it is a “placeholder” to say “we are watching this space”...

Does it make sense to think of a safe harbour? Posner et al.

They recognise that assessing Impact of investment in portfolio companies is MESSY. Depends on structure of product market, who else is a large investor. Chaos.

Also recognise that private or government litigation “could cause significant disruption to equity markets because of its inherent unpredictability”

“We need something more reliable to ensure a fund can invest and not lessen competition”

Proposed “safe harbor policy” from government enforcement:

Investors in firms in well defined oligopolistic industries would benefit from a safe harbor if (a) either they **limit their holdings to small stake “no more than 1% of the total size of an industry” or hold the share of only “a single effective firm” per industry**; or (b) they can **hold more if the entity holding shares is a free-standing index fund that commits to being *purely passive*.****

“A fund that follows this policy will not be prosecuted by the agencies under the Clayton Act: would allow a fund to avoid litigation”

** “Oligopoly” would be defined by FTC annually, “purely passive” = no communication, assets not combined/pooled with an active fund

Posner et al. recognise the trade offs

Tradeoff:

- The saver wants a low cost, diversified vehicle in which to save
- The consumer wants low prices for goods

If we care about social welfare we need to assess the empirical magnitudes, **which is bigger?**

=> Proposed policy “lowers diversification” – but argue effect is “second order”

=> Policy “lowers prices of oligopoly goods”, and this yields first-order increase in consumer utility

Simulations to show gains in terms of GDP growth exceed costs under various assumptions

Plus “redistribution matters”: significant inequality in US wealth distribution

“Top 20% hold most wealth; most harmed by increased variance, while most consumers hold no wealth; care only about prices”

“Yes, want funds to be able to plan a coherent investment and marketing strategy that has no liability, but also want product market competition”

Again strong pushback

Rock & Rubinfeld (2017)

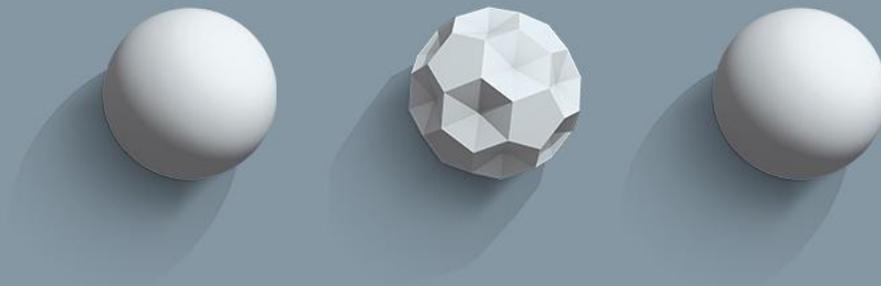
“Solution to a non problem”, “Would destroy the index fund model”

Much laxer safe harbour proposal (15% or less, no board representation, no more than “normal” corporate governance)

Patel (2017)

Common ownership should continue to be evaluated on a case-by-case basis, not relying on modified concentration measures which poorly gauge competitive effects

5. Conclusions



Anticompetitive effects of common ownership?

A first order issue? More research needed....

Is the effect
explicit or tacit?

- **Explicit.** Investors provide communications (“focus on margin”) that soften competition
- **Implicit.** Managers internalise investors’ preferences and act accordingly

If **explicit:** is the
empirical
evidence
plausible?

- Schmalz et al. find route-by-route effects
- **Do we believe this:** one thing to say “focus on margin” another to say “focus on margin on NYC to Boston, but not Boston to Denver”

If **implicit:** do we
believe the
theory?

- Investors could try to incentivise management (e.g. via compensation schemes), but ultimately **need Mercedes’ CEO to believe he will be rewarded if he softens competition with BMW and reduces his own profits because this will leave his investors better off overall**

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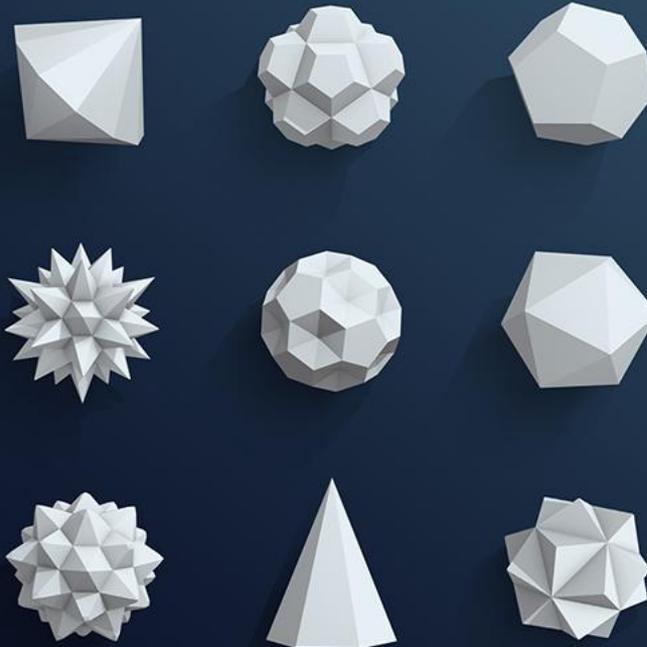
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