# HORIZONTAL SHAREHOLDING: A SUMMARY OF THE ARGUMENT







## I. INTRODUCTION

I will begin this short essay on horizontal shareholding with some background facts about institutional ownership. It has grown over the last 50 years and continues to grow. Institutions now own over 70 percent of the U.S. stock market.<sup>2</sup> Index funds are above 10 percent of the stock market, leaving a balance of about 60 percent in managed funds of different types.<sup>3</sup> Institutional investors have grown because savers gain from investing in funds that can diversify across stocks and have economies of scale. The largest four fund families hold about 5 percent of the stock market each (State Street, BlackRock, Vanguard and Fidelity). One of these funds is the largest shareholder in most of the S&P500.<sup>4</sup> There are other large owners that hold diversified stocks including competitors, e.g. Warren Buffet and sovereign wealth funds.

## II. ABILITY

Corporate governance is an important function of institutional investors because they are large enough to have the incentive to gather information, engage in oversight, assemble votes to discipline management and monitor top management. Note that mutual funds technically do not "own" the stock but rather hold it for the ultimate investor. They have a fiduciary duty that gives them the right and responsibility to vote. Improved corporate governance is widely viewed as a useful consequence of the development of large funds. Some observers will claim that corporate governance is all box-ticking. If the corporation achieves metrics for independent directors, chairman/CEO roles, meets performance targets, incentive compensation, and so forth, then no large owner intervenes any further, and the whole exercise is somewhat mechanical. Another school of thought holds that corporate governance is real; owners engage with management over strategy, influence compensation and so forth. Below are some quotations taken from fund websites:

#### Blackrock 2013:

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 encompasses a range of activities from brief conversations to a series of one on one meetings with companies.

#### Blackrock 2011:

Most of our engagements are nuanced and sensitive... we are extremely unlikely to use the media, make a statement at a shareholder meeting, propose a shareholder resolution, or employ other public means in our engagement process.

#### Vanguard 2011:

Through engagement, we are able to put issues on the table for discussion that aren't on the proxy ballot.

2 McCahery, Sautner & Starks, Behind the Scenes: The Corporate Governance Preference of Institutional Investors, J. Fin. (forthcoming 2016), available at: http://onlinelibrary.wiley.com/doi/10.1111/jofi.12393/full; Rydqvist, Spizman & Strebulaev, Government Policy and Ownership of Equity Securities, 111 J. Fin. Econ. 70 (2014); Fichtner, Heemskerk & Garcia-Bernardo, Hidden Power of the Big Three? Passive Index Funds, Re-Concentration of Corporate Ownership, and New Financial Risk, CORPNET Working Paper (2016), available at: <a href="https://papers.csmr.com/sol3/papers.cfm?abstract\_id=2798653">https://papers.csmr.com/sol3/papers.cfm?abstract\_id=2798653</a>.

3 As of 2010, institutional investors held common stock worth \$11.5 trillion. Blume & Keim, Working Paper, Institutional Investors and Stock Market Liquidity: Trends and Relationships, The Wharton School, University of Pennsylvania (Aug. 21, 2012), available at: <a href="http://finance.wharton.upenn.edu/~keim/research/ChangingInstitutionPreferences\_21Aug2012.pdf">http://finance.wharton.upenn.edu/~keim/research/ChangingInstitutionPreferences\_21Aug2012.pdf</a>, at 20. In the same year, index funds held about \$1.4 trillion. See Cremers, Ferreira, Matos & Starks, Indexing and Active Fund Management: International Evidence 36 (unpub. m.s. 2015). This implies that index funds compose 12 percent of the market. But index funds have grown considerably in the last few years, so the figure today is somewhat higher.

4 "As a consequence of their dominance in the asset management industry, a large and growing number of publicly listed companies in the United States face the Big Three—seen together—as their the largest shareholder...when combined, BlackRock, Vanguard, and State Street constitute the single largest shareholder in at least 40 percent of all listed companies in the United States....When restricted to the pivotal S&P 500 stock index, the Big Three combined constitute the largest owner in 438 of the 500 most important American corporations, or roughly in 88 percent of all member firms." P. 17 of Fichtner, Heemskerk & Garcia-Bernardo, "Hidden Power of the Big Three? Passive Index Funds, Re-Concentration of Corporate Ownership, and New Financial Risk," available at: <a href="https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=2798653">https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=2798653</a>.

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This evidence suggests that the funds feel their corporate governance efforts are substantive and effective.

### III. INCENTIVE

Institutions benefit when the prices of the stocks they hold increase. Increasing portfolio returns often flow directly into managerial compensation and also benefit managers indirectly by increasing demand for their fund product.<sup>5</sup> Larger financial flows into funds typically increase their managers' compensation. However, funds have limited options to increase performance. They can make corporate governance improvements that they feel will improve management effort and therefore performance. Secondly, they can help managers make good strategic decisions directly.

There are many oligopolies in the U.S. economy, e.g. aluminum, breakfast cereal, carbonated beverages, airline travel, wireless carriers, seeds and more. In an oligopoly with sufficiently low industry elasticity of demand, all rival firms gain when they compete more softly and achieve higher prices. Oligopoly competitors often cannot achieve monopoly prices, and perhaps cannot even achieve prices very much above competitive levels due to imperfect information, lack of patience, asymmetry, and a host of other attributes that can create competition despite an oligopoly market structure.

A diversified fund will tend to hold rivals in an oligopoly if they are similarly large and listed on the same stock exchange. Of course, some may be private, or be listed on another (perhaps international) stock exchange. When a single owner owns two competitors, the common owner often does not gain from competition (e.g. lower prices). A single firm has an incentive to maximize only its own profits, the common owner has incentive to maximize joint profits.

# IV. INCENTIVE AND ABILITY

The problem the literature has identified is that a large institutional fund has both the incentive to soften competition among portfolio firms, and through corporate governance communications, information flow, and creation of incentives, it also has the ability to soften the intensity of competition among portfolio firms.

#### A. Empirical Evidence

The empirical evidence that such behavior is indeed occurring is growing. The modern literature was initiated by Azar et al (2017) who study airline prices. The first use the cross section of all routes and fares to relate the level of fares to common ownership of those airlines. They also exploit a fund merger to see if airline fares move as predicted when common ownership changes exogenously and sharply. They find support for the hypothesis outlined above. Additional empirical work is finding that horizontal shareholding causes higher prices or less relative competition in banking and in executive compensation, respectively. The body of empirical academic work in this area is growing quickly and I expect the number of published papers in this area to rise in coming years.

#### B. Mechanism

Additional empirical literature may help pin down the mechanism through which the institutional investor softens competition. There are many such possible mechanisms. For example, the investor could provide advice and then vote against the CEO if he does not follow it. Alternatively, if each CEO hears strategic advice from the investor and knows the investor talks to rival CEOs, they realize they have common information. Such common information could render them less likely to make mistakes that disrupt cooperative pricing. Fund ownership may make executives more patient. The institutional investor could design or promote incentive packages for CEOs to reduce their incentive to compete against rivals. Diversified fund managers may decline to encourage portfolio firms to aggressively take market share away from rivals since market share is zero sum. A fund could choose not to cooperate with bids by activist investors interested in making one firm into an aggressive competitor. The current work points to executive compensation as one channel, but clearly there are many possible channels, and, moreover, the mechanism

5 Chevalier & Ellison, Career Concerns of Mutual Fund Managers, 114 Q.J. Econ. 389 (May 1999), available at: https://doi.org/10.1162/003355399556034.

6 Azar, Schmalz & Tecu, Anti-Competitive Effects of Common Ownership, J. Fin, forthcoming.

7 Anton, Ederer, Gine & Schmalz, *Common Ownership, Competition, and Top Management Incentives* (June 1, 2017) (Ross School of Business Paper No. 1328; European Corporate Governance Institute; Azar, Raina & Schmalz, *Ultimate Ownership and Bank Competition* (July 23, 2016), available at: https://ssrn.com/abstract=2710252 or http://dx.doi.org/10.2139/ssrn.2710252.



may vary across firms or owners. Determining the mechanism is an intellectually interesting project and it is also critical for designing a policy to mitigate any harms from horizontal shareholding. If the softening of competition can be shown to occur through a fairly precise channel, a policy could be chosen that eliminates that effect but perhaps not ownership itself.

## V. ANTITRUST ENFORCEMENT OF HORIZONTAL SHAREHOLDING

The Clayton Act was passed in 1914 and controls asset acquisitions that tend to lessen competition. The original problematic organizational form for which the U.S. antitrust laws are named was the "trust." (The U.S. has "antitrust" law while the rest of the world has competition law.) The trust was a kind of holding company that allowed Gilded Age industrialists to buy up an industry (e.g. Rockefeller and Standard Oil) and combine them into one effective competitor. Therefore, enforcement against a large common owner of firms that would otherwise compete is familiar ground for U.S. courts, and is a topic on which there is already jurisprudence. In particular, readers may want to peruse the Supreme Court case *United States v. E.I. du Pont de Nemours & Co.*: "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). In Hovenkamp and Scott Morton (forthcoming, Yale Law Journal) we discuss the legal case for liability for horizontal shareholding under both the Clayton Act and the Sherman Act. In the U.S., merger law applies when ownership is partial but to date these applications have been in settings of two or three firms buying or selling large minority stakes or engaging in JVs. The mutual fund setting is a modern variant of these earlier common ownership forms.

One important difference between horizontal shareholding and more standard merger analysis is the role of efficiencies. In this setting there are no efficiencies to the firm (e.g. Delta achieving lower costs) from being owned by one versus another owner (e.g. Wellington instead of Vanguard). Airlines do not operate more efficiently because their owner owns another airline. The benefits from such common ownership, namely diversification, accrue to the owners of the stock themselves who may be an almost entirely different set of people than airline consumers. Diversification also benefits the fund industry because its product becomes more attractive. But under *Philadelphia National Bank*, efficiencies in another industry cannot be used as a defense to anticompetitive conduct under the Clayton Act. Indeed, asking a judge to balance the concerns of investors with consumers being harmed by anticompetitive behavior in the airline market would require a court to rule in a much broader way than it would in a normal antitrust case. Ideally some elected part of the government determines policy for the mutual fund industry in order to make the best tradeoff between investors and consumers.

Some commentators have argued that the passive investment exception eliminates liability under the antitrust laws. But these rules are primarily about notification, not about anticompetitive behavior.<sup>8</sup> Passive investors do not have to *notify* an acquisition below a certain ownership threshold. Secondly, passive investing is not the same as passive ownership. We have seen above that funds are clearly not passive owners, nor would we want them to be, given the beneficial corporate governance that they provide.

#### A. Policy Concerns

If the legal liability for horizontal shareholding exists according to the precedent we describe, then courts will soon be ruling that particular funds may not hold particular product market competitors. For example, a court might find convincing evidence that four big funds' ownership of, for example, airlines, or of carbonated beverages, had raised prices. Such a court might then order a divestiture by the funds of the competing firms as a remedy. The nature of that divestiture would be tricky because the impact of ownership of a product market competitor depends on how many other competitors the fund owns, and on how many similarly-diversified owners there are. Thus compliance with the divestiture order might depend on the investment actions of other funds. Similarly, funds may perceive that when they hold stock in an oligopoly going forward, their exposure to liability depends on the holdings of other funds active in that same industry. Indeed, liability might be created when another fund buys and sells in that industry. This problem raises the question: how can a fund invest and be sure it is not lessening competition? And for society, how can we continue to support low-cost mutual fund saving? It seems clear that the government will have to develop a policy that protects competitive markets but also seeks to keep the fund industry as diversified and low cost as possible given the competitive constraint. Posner, Scott Morton and Weyl (2017) discuss one such option which I outline below.

<sup>8</sup> See Scott Morton & Hovenkamp, Yale Law Journal, forthcoming for more details on, and sources for, these points.

<sup>9</sup> Posner, Scott Morton & Weyl, "A Proposal to Limit the Anti-Competitive Power of Institutional Investors," forthcoming in Antitrust Law Journal, <a href="https://papers.srn.com/sol3/papers.cfm?abstract\_id=2872754">https://papers.srn.com/sol3/papers.cfm?abstract\_id=2872754</a>.

#### B. Proposed Safe Harbor



No institutional investor or individual *holding* shares of more than a *single effective firm* in an *oligopoly* may *ultimately own* more than 1% of the market share unless the entity holding shares is a free-standing index fund that commits to being *purely passive*.

A fund that followed this policy would not be prosecuted by the agencies under the antitrust laws; and we feel that private suits against compliant funds would have difficulty establishing liability in an environment where the government had declared liability to be minimal. Such a policy would allow a fund to avoid litigation and operate in a consistent and efficient manner. It would also allow the lowest cost index funds to maintain their business model. We define an effective firm size to be HHI/10,000. The rule thus boils down to a fund holding one firm in an oligopoly or collection of small fringe firms with a limited combined market share. The definition of an oligopoly firm would need to be created each year by an agency that would then publish a list along with market shares that could be used to calculate the HHI above. Clearly these oligopolies would not be antitrust markets; the list would only serve the purpose of mapping markets where the antitrust agencies are concerned about effective competition into ticker symbols which are the unit needed by fund managers to comply with the law. In our context "own" means any stock controlled and voted by the entire institution (across all funds it manages). A purely passive index fund engages in no communication, voting is mirrored and its assets or management is not combined with an active fund. Purely passive index funds would have to be free-standing entities with independent management companies. Any policy of this form would have to contain grace periods to transition holdings and other details covering practical considerations.

# IV. SOCIAL WELFARE IMPACT

The social welfare impact of this type of policy could be high. In the U.S. we face a tradeoff: the investor wants a low cost, diversified vehicle in which to save, but the consumer wants low prices for goods she buys. The social planner should assess the empirical magnitude and incidence of horizontal shareholding on prices and diversification. Reducing a fund's ability to diversify raises the variance of investor returns. In principle there is no change in the mean risk-adjusted return from holding one airline instead of four, however, the higher variance reduces investors' utility. The amount by which investors' utility falls is likely to be small because the decline in variance from holding, e.g. the fourth airline, is low. On the other hand, an effective policy will lower the prices of oligopoly goods, creating a first-order increase in consumer utility. Secondly, the distributional impact of these changes is not even. Wealth holding in the U.S. is very concentrated; according to the latest Survey of Consumer Finances (2016), the top 10 percent of households own about 75 percent of total wealth. In addition, the top 1 percent hold many assets other than stock: real estate, private equity, hedge funds, foreign stocks, etc. Their S&P fund is likely not where they are getting diversification. If so, there is little harm from less diversification for both the top few percent of wealth holders as well as the bottom 50 percent of wealth holders. About half of U.S. household have no stock assets at all (including pension assets) and therefore can only experience zero harm from any horizontal shareholding policy. These consumers will benefit from any decline in horizontal shareholding that leads to lower prices. The upper middle part of the wealth distribution faces a tradeoff between the variance of their portfolio and paying lower prices for goods sold by oligopolies. In our paper we make a rough calculation of the tradeoff and conclude that on net it is overwhelmingly beneficial.

## VII. CONCLUSION

The competition problem potentially created by horizontal shareholding by large institutional investors is one of the most important ideas in antitrust enforcement in recent years. The development of the literature is occurring quickly and will be needed to guide policy. Governments and policy makers will gain from focusing on these issues now and determining how to study and address them.

