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Horizontal Shareholding and Antitrust Policy

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ABSTRACT

"Horizontal shareholding" occurs when one or more equity funds own shares of competitors operating in a concentrated product market. For example, the four largest mutual fund companies might be large shareholders of all the major United States air carriers. A growing body of empirical literature concludes that under these conditions market output in the product market is lower and prices higher than they would otherwise be.

Here we consider how the antitrust laws might be applied to this practice, identifying the issues that courts are likely to encounter and attempting to anticipate litigation problems. We assume that neither the mutual fund managers nor the firms in the product or service market are fixing prices in a way that would subject them to antitrust liability. Section 1 of the Sherman Act and §7 of the Clayton Act take quite different approaches to this problem, but each could be brought to bear. While the current literature on horizontal shareholding does not offer a single robust explanation of how the price increase mechanism works, we show that the "effects" test expressed in the Clayton Act does not require proof of the precise mechanism. Further, §7's "solely for investment" exception typically will not apply. We also briefly discuss special problems of private plaintiff challenges. Finally, we elaborate the two ways that efficiencies are relevant to analysis of such mergers. First, we show why the efficiency defense as currently formulated will seldom or never save such a merger. Secondly we discuss the problem of remedial efficiencies, or mechanisms for ensuring that judicial relief will not impose its own consumer harm.

Horizontal Shareholding and Antitrust Policy

Fiona Scott Morton[1] & Herbert Hovenkamp[2]

1. Introduction

"Horizontal shareholding" occurs when a number of equity funds own shares of competitors operating in a concentrated product market. For example, the four largest mutual fund companies might be the four largest shareholders of all the major United States airlines.[3] A growing body of empirical literature concludes that under these conditions market output is lower and prices higher than it would otherwise be.[4]

Here we consider how the antitrust laws might be applied to remedy such situations, identifying the issues that the courts are likely to encounter.[5] We assume that the firms in a concentrated product or service market are not fixing prices in a way that would subject them to liability under §1 of the Sherman Act. Nor are the managers of the funds that acquire interests in their shares agreeing with each other about how to purchase or vote the shares or otherwise influence the behavior of these firms. If either of these two horizontal agreements exists it is independently actionable under §1 of the Sherman Act. Rather, this paper considers the extent to which antitrust can be brought to bear against horizontal shareholding in the absence of either of these agreements.

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[3]Azar, José and Schmalz, Martin C. and Tecu, Isabel, (2017) *Anti-Competitive Effects of Common Ownership* J. FINANCE, forthcoming

[4]*Ibid*.; Azar, José and Raina, Sahil and Schmalz, Martin C., *Ultimate Ownership and Bank Competition* (July 23, 2016). Available at SSRN: https://ssrn.com/abstract=2710252 or http://dx.doi.org/10.2139/ssrn.2710252

[5]A consensus exists that the antitrust laws can reach this conduct. E.g., Einer Elhauge, *Horizontal Shareholding*, 129 HARV. L. REV. 1267, 1302-1304 (2017); Daniel P. O'Brien & Steven C. Salop, *Competitive Effects of Partial Ownership: Financial Interest and Corporate Control*, 67 ANTITRUST L.J. 559 (2000). Cf. Daniel A. Crane, *Antitrust and Wealth Inequality*, 101 CORNELL L. REV. 1171, 1222-1223 (2016) (noting the problem); David Gilo, *The Anticompetitive Effect of Passive Investment*, 99 MICH. L. REV. 1 (2000) (arguing that antitrust solution is necessary but that the "solely for investment" limitation would preclude most antitrust challenges; however see our discussion, infra, text at notes __).

2. Economic problem and trends towards increasing mutual fund ownership and scale of mutual funds

In the United States, the diversified mutual fund industry arose in the 1970's.[6] This model of saving and investing greatly benefits consumers by allowing them to invest small amounts in a huge range of assets at low cost. The development of the index fund also freed consumers from paying high fees for professional stock-picking and instead allows them to invest in the whole market at low cost.[7] Economies of scale in running a fund results in large funds being able to offer lower fees and more diversification, both of which are attributes that consumers want. Funds like Vanguard and Fidelity were early and successful movers in the space and today have large market shares, along with BlackRock and State Street.

By "institutional investors," we refer to asset managers, companies that manage mutual funds, sovereign wealth funds, and any other entity that manages stock market investing on behalf of final owners. Institutional investors today own at least 70% of the US stock market.[8] While the large mutual fund companies listed above hold in the range of 4-6% of the US stock market each, there are thousands of smaller asset management organizations

[6] Mutual funds held only 7% of the stock market in 1950. Joseph A. McCahery, Zacharias Sautner, & Laura T. 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; Kristian Rydqvist, Joshua Spizman & Ilya Strebulaev, *Government Policy and Ownership of Equity Securities*, 111 J. FIN. ECON. 70 (2014); Jan Fichtner, Eelke Heemskerk & Javier 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 https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2798653.

[7] "A mutual fund is a portfolio of stocks that may have an industry focus (e.g., energy) or a strategy (e.g., growth). An index fund (which is a type of mutual fund) holds a portfolio of stocks designed to exactly mimic the index of interest (e.g., S&P 500)." Erik Posner, Fiona Scott Morton, & E. Glen Weyl, *A Proposal to Limit the Anticompetitive Power of Institutional Investors*, ANTITRUST L.J . (Dec. 2017, forthcoming).

[8] As of 2010, institutional investors held common stock worth $11.5 trillion. Marshall E. Blume & Donald B. Keim, *Institutional Investors and Stock Market Liquidity: Trends and Relationships* 5 (2012) (unpublished manuscript on file with authors).

that together hold the remaining approximately 50%.

Competition economists initially failed to recognize the impact of institutional investors on competition, perhaps because the funds held relatively small shares in competitors.[9] The last two decades has seen a dramatic change:

> 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." [10]

Just 17 years ago BlackRock, Vanguard, and State Street put together were the largest shareholder in only 25% of the S&P 500.[11] Similarly, fewer than 10% of US public firms had institutional investors in common with product market competitors in 1980, while that fraction rose to 60% by 2010.[12] Thus the widespread occurrence of common ownership of firms that compete in the product market, or horizontal shareholding, in this form is relatively new and has not yet attracted policy or enforcement action from the agencies.

For a competition problem to arise from large shareholders holding product market competitors, those owners must have the incentive and the ability to soften the intensity of competition. A lessening of competition is harmful to consumers. Large shareholders of course engage in corporate governance. Many activists have been encouraging better and increasing

[9] This drought was broken by José Azar in *Portfolio Diversification, Market Power, and the Theory of the Firm* (2016), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2811221

[10] Jan Fichtner, Eelke Heemskerk & Javier Garcia-Bernardo, "Hidden Power of the Big Three? Passive Index Funds, Re-Concentration of Corporate Ownership, and New Financial Risk" 17, available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2798653.

[11] Fichtner et al, supra; José Azar, *Portfolio Diversification, Market Power, and the Theory of the Firm* (2016), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2811221.

[12] Jie He & Jiekun Huang, *Product Market Competition in a World of Cross-Ownership: Evidence from Institutional Blockholdings*, REV. FIN. STUD. (forthcoming), papers.ssrn.com/sol3/papers.cfm?abstract_id=2380426.

corporate governance over the last few decades and we see evidence of large mutual funds engaging in this way.[13] Fund representatives meet with management, give opinions, vote on compensation, and so forth. Fund managers typically accumulate all the votes they control from all their funds and fund families and vote them as one block in order to increase their influence.[14] Certainly the funds themselves make statements indicating that they believe they have the ability to influence decisions of the firms they hold. For example:

> "We engaged with roughly 1,500 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's Proxy Voting and Shareholder Engagement FAQ (updated February 2014))[15]

> "By its nature, voting.. [is]… a rather blunt instrument. In contrast, our engagement with the directors and managers of the companies in which we invest provides us with the opportunity to target feedback and messaging more precisely than voting alone. So while voting is visible, it tells only part of the story. We believe that our active engagement demonstrates that passive investors don't need to be passive owners. In fact, our involvement in hundreds of direct discussions every year has taught us that we can accomplish as much—if not more—through dialogue than through voting alone." (Vanguard's webcast (2014))[16]

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[13] *See, e.g.*, Bernard S. Black, *Agents Watching Agents: The Promise of Institutional Investor Voice*, 39 UCLA L. REV. 811 (1992); Mark J. Roe, *A Political Theory of American Corporate Finance*, 91 COLUM. L. REV. 10 (1991). For some early criticisms, see Edward Rock, *The Logic and (Uncertain) Significance of Institutional Shareholder Activism*, 79 GEO. L.J. 445 (1991); John C. Coffee, Jr., *The SEC and the Institutional Investor: A Half-Time Report*, 15 CARDOZO L. REV. 837 (1994)

[14] http://webcasts.acc.com/handouts/Article_304_EE32_PassiveInvestorsNotPassiveOwners2014__1_.pdf

[15] In José Azar, Martin C. Schmalz, & Isabel Tecu, *Anti-Competitive Effects of Common Ownership*, J. Fin., forthcoming.

[16] http://webcasts.acc.com/handouts/Article_304_EE32_PassiveInvestorsNotPassiveOwners2014__1_.pdf

In standard economic models of competition, softer product market competition leads to higher profits for the product market firm. A firm earning higher profits experiences an increase in its stock price, and any mutual fund holding that stock experiences higher returns as a consequence. Funds benefit from higher firm profits in two ways. Funds' higher returns both increase investment flows into the fund, and may increase incentive-based compensation to fund managers themselves.[17]

The theory literature to date does not identify what mechanism funds may use to soften competition. One model popular in the literature is to assume the management of the competing firms maximize the profits of their owners (the funds), which they can do because they know how much of their rivals each of their owners owns.[18] Alternative, and simpler possibilities include: fund managers can encourage a common strategy among product market rivals, monitor product market rivals, raise the patience level, or value for the future, of rival management teams, or, most easily, fail to mimic the actions of an owner that holds only one firm. All of these attributes appear as determinants of prices in economic models of multi-period competition.[19]

Though the mechanism is not established, there is a growing empirical body of evidence that horizontal shareholding has led to higher prices in product markets. At this writing, analysis of the effects of horizontal shareholding is nascent compared to the analysis of coordinated and unilateral effects from mergers.[20] Nevertheless, the academic literature

[17] Chevalier and Ellison & Judith Chevalier, Glenn Ellison, *Career Concerns of Mutual Fund Managers*, 114 Q.J. ECON. 389 (May 1999), available at https://doi.org/10.1162/003355399556034; Elton, E. J., M.J. Gruber, and C.R. Blake, C. R., *Incentive Fees and Mutual Funds*, 58 J. Fin. 779 (2003).

[18] As originally modeled in Timothy Bresnahan & Steven C. Salop, *Quantifying The Competitive Effects of Production Joint Ventures*, 4 INT'L J. INDUS. ORG. 155 (1986). *See also* Daniel P. O'Brien & Steven C. Salop, *Competitive Effects of Partial Ownership: Financial Interest and Corporate Control*, 67 ANTITRUST L.J. 559 (2000), and José Azar and Martin C. Schmalz, & Isabel Tecu, *Anti-Competitive Effects of Common Ownership*, J. Fin. forthcoming.

[19] See, for example, James W. Friedman, *A Noncooperative Equilibrium for Supergames*, 28 REV. ECON. STUD. 1; Edward Green and Robert Porter, *Non-cooperative Collusion Under Imperfect Price Information*, 52 ECONOMETRICA 87; B. Douglas Bernheim and Michael D. Whinston, *Multimarket Contact and Collusive Behavior*, 21 RAND J. ECON. 1 (1990); Joseph Farrell & Eric Maskin, *Renegotiation in Repeated Games*, 1 GAMES AND ECONOMIC BEHAVIOR, 327 (1989).

[20] John E. Kwoka, Jr., *Does Merger Control Work? A Retrospective on*

finding that competition is adversely affected is growing.[21] In highly concentrated product markets, shareholding by a small number of institutional investors is causally linked with reduced output and higher prices.[22] Studies to date have covered the banking and airline industries, with others underway.[23] Additionally, there are several studies of the impact of horizontal shareholding on the extent to which executive compensation rewards absolute performance versus 'beating' the performance of a rival.[24] The latter encourages product market competition and the former discourages it. The seminal paper in this literature find that increased horizontal shareholding increases the extent to which top management is compensated on an absolute basis.[25] Most of the studies measure the extent of common

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U.S. Enforcement Actions and Merger Outcomes 78 ANTITRUST L. J. (2013), available at SSRN: https://ssrn.com/abstract=1954849 or http://dx.doi.org/10.2139/ssrn.1954849 has a bibliography that lists many merger retrospective studies. Another review of a number of studies can be found in Graeme Hunter, Gregory K. Leonard, & G. Steven Olley, *Merger Retrospective Studies: A Review*, 23 ANTITRUST 34 (2008), available at SSRN: https://ssrn.com/abstract=1567535

[21] This literature review below covers only academic and government research. Due to the inherent policy interest of the topic, there are now many industry-sponsored reports which we do not list here.

[22] Azar, Schmalz, & Tecu, *Anti-Competitive Effects*, *supra* note __.

[23] Azar, Sahil & Schmalz, *Ultimate Ownership*, *supra* note __; and Jacob Gramlich & Serafin Grundl, *Estimating the Competitive Effects of Common Ownership* (April 21, 2017). FEDS Working Paper No. 2017-029. Available at SSRN: https://ssrn.com/abstract=2940137 or http://dx.doi.org/10.17016/FEDS.2017.029r1

[24]Miguel Anton, Florian Ederer, Mireia Gine, & Marcin C. Schmalz, *Common Ownership, Competition, and Top Management Incentives* (June 1, 2017) (Ross School of Business Paper No. 1328; European Corporate Governance Institute (ECGI) - Finance Working Paper No. 511/2017), available at SSRN: https://ssrn.com/abstract=2802332 or http://dx.doi.org/10.2139/ssrn.2802332;

[25]Ibid. There are two other unfinished papers in this literature that are no longer accessible on the web. The first finds the same result as Anton et al, the second does not. *See also* Lantian (Max) Liang "Common Ownership and Executive Compensation" 2017 draft (no longer accessible on the web); a 2016 draft is available at https://acfr.aut.ac.nz/__data/assets/pdf_file/0008/58085/43082-L-Liang-Common_ownership_V2.pdf. Heung Jin Kwon "Executive Compensation under Common Ownership" 2016 draft (no longer accessible on the web

ownership with MHHI, a modified version of the familiar Herfindahl Hershman Index,[26] to measure the extent of horizontal shareholding.[27] However, more work needs to be done before this metric can be accepted as the preferred basis for empirical work or litigation. In particular, we do not yet understand whether or what size of harms arise from large common owners, what constitutes "large," the impact of total amounts of horizontal shareholding, or the effects of the ordering of owner size (e.g. the largest owner compared to a particular percentage amount of ownership).

Though the channel through compensation is one possibility, the mechanism(s) by which horizontal shareholding reduces competition is not yet known with certainty. There may be more than one mechanism and mechanisms may vary by industry, over time, and by different patterns of ownership. While arguably a nuanced understanding of the mechanism could allow for optimal policies in response, if the government can show anticompetitive effects from the holdings, it does not have a burden to illuminate the exact mechanism.

The legality of the holdings does not depend on exactly how ownership by these funds raise prices. For example, in merger analysis it is also the case that, although the HHI correlates both theoretically and empirically with higher prices, the precise mechanism by which competition is injured in any particular case may not be known. However, the "effects" test in §7 of the Clayton Act[28] makes it unnecessary to determine the precise mechanism. For example, at the time a merger's legality is assessed antitrust enforcers may not know whether the firms are likely to engage in traditional explicit collusion or some other form of cooperative or noncooperative price coordination. The precise form of coordinated interaction does not matter as long as the structural analysis predicts that it is likely to occur.[29]

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[26] The Herfindahl-Hirschman Index, or HHI, equals the sum of the squares of all firms in the market. On the derivation of the HHI, comparison to alternatives, and predictability of relationship between HHI readings and market structure, *see* HERBERT HOVENKAMP, FEDERAL ANTITRUST POLICY: THE LAW OF COMPETITION AND ITS PRACTICE §12.4 (5th ed. 2015).

[27] Bresnahan & Salop, *supra* note __; O'Brien & Salop, *supra* note ___.

[28] *See* discussion *infra*, text at notes __.

[29] On the abiding value of structural analysis and the correlation between market structure and anticompetitive outcomes, *see* Herbert Hovenkamp & Carl Shapiro, *Horizontal Merges, Market Structure, and Burdens of Proof*, __ YALE L.J. __ (2018) (forthcoming).

3. Legal Theory and Potential Obstacles

Section 1 of the Sherman Act prohibits "combinations" in restraint of trade, as well as contracts and conspiracies.[30] The triggering conditions are an agreement between two or more firms and a "restraint" of trade, which is a restraint on competition that is reasonably likely to reduce output and increase price-cost margins.[31] The statute itself says nothing about whether it condemns purpose or effects, and the case law reaches both.[32] It also clearly applies to ongoing arrangements such as joint ventures that, while initially lawful, are subsequently modified so as to include agreements that restrain trade.[33] Ever since its very first merger decision the Supreme Court has also applied §1 to completed acquisitions that leave no separate entities capable of conspiring once the acquisition has occurred. That is, §1 can be brought to bear against a "combination" even if the result is a single firm, which is legally unable to fix prices with itself. The mere formation of the combination is sufficient to trigger §1.[34]

Section 7 of the Clayton Act takes a different approach.[35] First, it is triggered when one firm "acquires" either the stock or assets of another firm, saying nothing about ongoing relationships that do not involve an

[30] 15 U.S.C. §1.

[31] See 7 PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶1502 (4th ed. 2017).

[32] For example, naked price fixing is a per se violation even if the cartel was unsuccessful in raising price.

[33] E.g., NCAA v. Board of Regents of Univ. of Oklahoma, 468 U.S. 85 (1984) (condemning 1981 decision to restrict national broadcasting of football games initiated many years after initial venture was formed in 1905).

[34] Northern Securities Co. v. United States, 193 U.S. 197 (1904). The Court condemned under §1 a series of transactions under which Northern Securities Co., a New Jersey holding company, acquired a controlling interest in the stock of railroads that had been competitors prior to the acquisition. Justice Holmes dissented, distinguishing earlier decisions such as United States v. Trans-Missouri Freight Assoc., 166 U.S. 290 (1897); and United States v. Joint Traffic Assoc., 171 U.S. 505 (1898), because these involved joint ventures in which the participants remained as separate entities and subsequently fixed prices. Holmes complained that the only thing that could reasonably be challenged in the present case was the stock acquisitions themselves, since subsequent to the transactions the firms were effectively a single entity. Id. at 385-388. See the contemporary analysis in ALBERT KALES, CONTRACTS AND COMBINATIONS IN RESTRAINT OF TRADE §139 at p. 127 (1918). Tracking Holmes's argument, Kales also criticized the decision, observing that while the common law condemned price fixing it had never condemned the mere acquisition of stock.

[35] 15 U.S.C. §18.

acquisition.[36] That is, the triggering condition must be the acquisition, whether of stock or of a productive asset. Second, §7 also states an "effects" test – "where the effect may be substantially to lessen competition," saying nothing about intentions,[37] and – significantly – nothing about the precise mechanism by which competition may be lessened. Third, the statute itself clearly applies to both compete and partial acquisitions ("the whole or any part" of stock or assets). The practices involved in horizontal shareholding generally concern partial stock acquisitions. Fourth, while §1 of the Sherman Act reaches ongoing activity only when the requisite "agreement" can be shown, §7 does not have this limitation, provided that the challenged conduct is an acquisition. Using §7 against horizontal shareholding is justified by the same kind of economic theory and evidence that is conventionally used in merger analysis. While §7 of the Clayton Act contains an exemption for acquisitions "solely for investment," the exemption does not apply if actual anticompetitive effects are shown, and particularly not if the holder is voting the shares in question.[38]

Suppose a large investor purchases 20% of Alpha Co. and then later purchases 30% of Beta Co., which is Alpha's competitor in a concentrated market. Section 1 of the Sherman Act might reach oligopoly or collusion-like behavior between Alpha and Beta only in the presence of a qualifying agreement, and these are difficult to prove unless there is explicit evidence of an agreement. Section 1 might be brought to bear if the two acquisitions yielded a "combination" in restraint of trade, although to the best of our knowledge the Sherman Act has never been applied to an aggregation of noncontrolling security interests in this fashion.

By contrast, §7 of the Clayton Act would be triggered by the Beta stock purchase, which is an acquisition, and the only thing that need be shown is that the effect may be substantially to lessen competition. The statute does not require the challenger to show that Alpha and Beta are going to be fixing prices or engaged in other collusion-like behavior that is unlawful only if it meets the Sherman Act's agreement requirement. The important thing,

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[36]Section 7 can apply to the formation of a joint venture, *provided* that the vehicle for creating the venture is a stock or asset acquisition. See United States v. Penn-Olin Chem. Co., 378 U.S. 158 (1964), which applied §7 to formation of a joint venture where the venture was separately incorporated and each of the forming companies acquired a 50% interest of the venture's capital stock. The district court had rejected both a Clayton Act §7 challenge and a Sherman Act §1 challenge. 217 F. Supp. 110 (D. Del. 1963).

[37]See 1 RICHARD S. MARKOVITS, ECONOMICS AND THE INTERPRETATION AND APPLICATION OF U.S. AND E.U. ANTITRUST LAW 88 (2014)

[38]*See* discussion *infra*, text at notes __.

however, is that it must be the Alpha or Beta *acquisition* that is reasonably shown to be the cause of this noncompetitive behavior.

Partial acquisitions are different from complete acquisitions in one very important respect. A complete acquisition results in a single entity, making its subsequent decisions unilateral and thus not reachable under §1. For that reason, one cannot speak of an ongoing agreement among two completely merged firms.[39] By contrast, a partial acquisition typically leaves the acquiring firm and the remaining assets or equities of the acquired firms as distinct entities. That means that their post-acquisition relationship can still be governed by either §7 of the Clayton Act or §1 of the Sherman Act, depending on the nature of the conduct. If the conduct is a further acquisition, then §7 could be brought to bear. If the conduct is an agreement that restrains trade, then §1 of the Sherman Act applies.[40]

Transactions leading to horizontal shareholding are "horizontal" mergers, even though each individual stock transaction is between noncompeting companies. For example, if Vanguard buys 15% of United Airlines that transaction would appear to be neither horizontal nor vertical. The two firms are not competitors, so there is no horizontal acquisition. Further, they do not stand in a buyer-seller relationship in the product market, so there is no vertical acquisition. However, if Vanguard should then buy 15% of Delta Airlines the result would be that a single firm now holds partial ownership of both United and Delta, two competing airlines. As a result, the relevant merger analysis would be of a horizontal merger in the airline industry involving a partial stock acquisition.

In addition to §1 of the Sherman Act and §7 of the Clayton Act, §5 of the Federal Trade Commission Act empowers the FTC to condemn "unfair

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[39] E.g., Copperweld Corp. v. Independence Tube Corp.,467 U.S. 752 (1984) (parent corporation and wholly owned subsidiary lack conspiratorial capacity).

[40] See, e.g., the Division's press release attending closing of an investigation of a partial acquisition involving Hearst and MediaNews (MNG):

> Because Hearst's minority investment in MNG will not bring the companies under common ownership or control, interactions among them — including any changes in Hearst's investment and related arrangements that affect competition among the companies' Bay Area newspapers — will continue to be subject to scrutiny under Section 1 of the Sherman Act as well as the other antitrust laws.
>
> https://www.justice.gov/archive/atr/public/press_releases/2007/227168.htm.

methods of competition."[41] The FTC has independent authority to enforce both §5 of the FTC Act and §7 of the Clayton Act. The Supreme Court has held that §5 of the FTC Act reaches further than the Sherman Act,[42] and its language does not contain an agreement requirement. Nevertheless, the courts have generally declined to find a violation based on conscious parallelism or other collusion-like behavior in the absence of a more-or-less explicit agreement.[43] Section 5 can be used to fill in "gaps" in the coverages of other antitrust provisions, however. For example, an unaccepted solicitation to fix prices can violate §5 of the FTC Act even though it does not produce an agreement and thus does not violate §1 of the Sherman Act.[44]

Antitrust enforcement policy against horizontal shareholding by mutual funds presents some novel legal issues. Unlike the traditional merger case, the defendant may not be the company operating in the product market where competition is threatened, but rather the mutual fund which has purchased some of its shares. The broad language of §7 of the Clayton Act clearly permits such actions, but drafting complaints will be novel in important ways. For example, should all large institutional investors be sued at once, or only a particular investor who has made a recent significant purchase? The former seems most appropriate, particularly when the cumulation of purchases of all diversified investors are contributing to the feared source of competitive harm Further, the fact that mutual fund acquisitions typically occur incrementally rather than all at once may raise some issues under the ordinary time limitations that the legal system places on lawsuits – namely, the four year statute of limitations on antitrust damages actions or the doctrine of "laches" which covers suits for equitable relief.[45]

Efficiencies: Substantive and Remedial

Merger analysis must always consider efficiencies, and at two different stages. First it must consider whether the acquisition itself produces efficiencies sufficient to offset any anticompetitive effects. Second it must consider the welfare effects of any proposed remedy.

[41] 15 U.S.C. §45.

[42] FTC v. Brown Shoe, Inc., 384 U.S. 316 (1966).

[43] E.g., FTC v. E. I. DuPont de Nemours and Co., 729 F.2d 128 (2d Cir. 1984) (titanium dioxide) (declining to find that parallel but not expressly collusive behavior violated §5).

[44] See, e.g., *In re* Valassis Communications, Inc., 71 Fed. Reg. 13976, 13978-79 (Mar. 20, 2006) (consent agreement). *See generally* 6 PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶1419 (4th ed. 2017).

[45] *See* 2 PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶320 (4th ed. 2015).

Substantive merger rules are heavily nuanced because of widespread belief that mergers can lead to reduced costs, improved products or services, or better management. While nearly all naked cartels are challenged upon discovery, only a small percentage of mergers are challenged. That is so because we do not expect efficiency gains from cartels. If their only likely effects are negative, a harsh rule against them is in order.

While the form of horizontal shareholding is a merger by stock acquisition, in substance the structure that is created resembles a cartel rather than a merger. The transaction does not create efficiencies in the downstream product market where the reduction in competition (e.g. air travel) is located. For example, being owned by a different mutual fund does not itself lower costs or improve the quality provided to the customers of the downstream firm. For these reasons, the merger rules governing horizontal shareholding should presumptively be harsh.

Considering remedies, *purchasers* of mutual funds may be harmed by aggressive application of merger rules to horizontal shareholding because merger enforcement will reduce the monopoly profits that result from the collusion-like effects. A private gain resulting from collusion is hardly a qualifying merger efficiency but only an anticompetitive wealth transfer. To the extent aggressive merger enforcement shifts resources away from shareholder monopoly profits and toward consumers who benefit from product market competition, it is consistent with merger law's consumer welfare principle.

A second harm antitrust enforcement might impose on purchasers of mutual funds is the lower level of diversification that will result from the fund being unable to hold product market competitors. When a fund acquires the stock of a competitor of firms it already holds, then the transaction may create efficiencies by making the fund higher quality. More diversification within a fund lowers the variance of returns and creates a product more attractive to consumers. This efficiency can be measured without much difficulty because index composition, portfolio composition, and stock return data are easily obtained. There is some evidence that the extent of this efficiency is small compared to the variance across existing mutual funds.[46] The reason we would *not* expect large gains in diversification from holding e.g. the fourth airline is because the returns of firms in the same industry are highly correlated, and are more highly correlated that returns of firms in different

[46]William Goetzmann, Fiona Scott Morton, and Natalie Zhu, "The performance of index funds that don't hold competitors" (2017) (draft on file with authors)

industries.[47] However, it is important to appreciate that adding or subtracting the stock of a product market competitor does not change the expected return of the fund. That is, in theory, expected returns above those based on risk are equal across all stocks.[48] There is no efficiency gain from the acquisition in the level of the portfolio's return, only in any reduction in variance.

A standard application of the rule of reason under a general welfare test would suggest that an enforcer should compare the gains from additional diversification to the harms from higher prices to determine the net effect. One difficult in making these two terms net out is that the gains accrue to owners of mutual funds while the higher prices are paid by consumers in the product market (e.g. airline consumers). In *Philadelphia Bank* the Supreme Court held that efficiencies that obtained in a different market could not be used to defend against anticompetitive effects in the market the provoked the challenge.[49] The effect of that ruling in this case is that the anticompetitive consequences of the acquisition in the challenged product market (airline travel) could not be offset by any efficiency gains in the mutual fund market.

The 2010 Horizontal Merger Guidelines adhere to the *Philadelphia Bank* position on this issue, although they do state that the Agency might exercise its prosecutorial discretion not to challenge a merger that produces significant efficiencies in a market other than the one experiencing the threatened anticompetitive effects.[50] Two other facts are significant for present purposes. First, under the Guidelines any claimed efficiencies would have to be sufficient to offset any price increase in the affected market. Efficiencies in the management of mutual funds will not have any impact, however, on product prices in the air travel market. Further, in the case of mutual fund efficiencies, the claimed efficiencies would actually be accruing to different people, the mutual fund investors and managers, rather than the firms in the product market experiencing the anticompetitive acquisition.

Secondly, the tradeoff described above between higher prices for goods and lower variance of stock portfolios varies greatly across consumers depending on purchasing patterns and stock holding. For example, about half

[47] Stefano Cavaglia, Christopher Brightman, & Michael Aked, *The Increasing Importance of Industry Factors*, 56 FINANCIAL ANALYSTS J. (2000) [2000/09/01, doi: 10.2469/faj.v56.n5.2389]

[48] Eugene Fama, "Efficient Capital Markets: A Review of Theory and Empirical Work, Journal of Finance, May 1970.

[49]United States v. Philadelphia National Bank, 374 U.S. 321, 370 (1963) (rejecting argument that although merger reduced competition in market for smaller loans there were offsetting efficiencies in a different market for larger loans); see 4A PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶972 (4th ed. 2015).

[50] 2010 Horizontal Merger Guidelines, *supra* note __, §10 n. 36.

the US population owns no stock at all. These consumers can only be harmed by mutual fund acquisitions that reduce competition and lead to higher prices or lower quality in the product market. Any evidence that the acquisition will tend to lower innovation, raise prices, or cause other harm to this group cannot be offset by any diversification efficiency, no matter its size. Relatively wealthy shareholders will be the group bearing any losses from the reduced level of diversification in mutual funds, though these individuals will offset those losses against the gains they receive from lower prices.[51]

One additional efficiency a mutual fund could raise is that it engages in better governance than the previous owner, and this governance causes the firm to operate more efficiently. A "merger-specific" efficiency,[52] which the Guidelines mandate, would require the fund to show it has better ability to govern than the previous owner, or it would have to show it is bigger than other owners and therefore exercises more positive influence even if it has the same ability. In either case, however, there is a less anticompetitive alternative to the challenged conduct: the mutual fund can hold a different firm that does not compete with a firm it already holds. If the fund holds firms that do not compete in the same product market it will achieve corporate governance efficiencies without any anticompetitive effects.

For the reasons given above, it is likely that private lawsuits and class actions will begin to accumulate in this area. Settlements that create rules about which funds may hold which assets may begin to proliferate. This has the potential to cause huge inefficiencies in the mutual fund industry. Different funds will reach different settlements with different courts which are likely to create a playing field that is not level across funds. Moreover, one court's settlement may be inconsistent with another's and hamper a fund's operations. An additional risk is that a settlement is based on a benchmark that can change over time. For example a fund may be found liable for lessening competition because it is the largest shareholder in two competitors. If the fund is then enjoined from being the largest shareholder, it must determine its asset acquisitions by monitoring what all other owners buy and reacting accordingly. Legal holdings may become illegal if the previously largest shareholder sells some of its stake. The process of choosing assets to hold in a mutual fund will become much more complicated and

[51]The top 10% of the wealth distribution owns a significant fraction of mutual funds but are unlikely to depend on the diversification we discuss here due to their holdings of foreign stocks, private equity, hedge funds, and other real assets. (source: authors' calculations using data from the 2013 Federal Reserve Survey of Consumer Finances)

[52] An efficiency is "merger specific" if as a practical matter it can be created only by the challenged merger.

costly. Citizens who save using mutual funds will negatively impacted by uncoordinated private competition law enforcement.

A motivation for our enforcement recommendation is prevention of these harms. Here, the antitrust task is to produce a remedy that eliminates or significantly reduces the anticompetitive effects of horizontal shareholding, while also preserving any efficiencies that ordinarily accrue to mutual fund portfolio selection and management. Such a balance could result in a set of enforcement actions and policies that achieve broad social objectives: competitive markets, low-cost savings vehicles such as mutual funds, and well-functioning capital markets.[53] Whatever safe harbor or enforcement policy is chosen will certainly be challenged in court and must be carefully designed to fit with current law.

Acquisitions "solely for investment"

Section 7 contains an exemption for acquisitions that are "solely for investment."[54] The provision was intended to apply to passive investors who do not "by voting or otherwise" bring about or attempt to bring about a noncompetitive result. Ordinarily a statutory exemption applies to conduct that would otherwise violate the statute, but that is not the way courts have interpreted the "solely for investment" provision.[55] Rather, most hold that it applies only to circumstances where the acquisition in question did not "substantially lessen competition" at all, which means that it would be lawful whether or not it was solely for investment.[56] Two Courts of Appeals agree that the section was meant as little more than an assurance to purely passive investors rather than as a limitation on the Clayton Act's coverage.[57] One

[53] One possible solution is an enforcement safe harbor policy, as in Posner, Scott-Morton, & Weyl, supra note __.

[54] "This section shall not apply to persons purchasing such stock solely for investment and not using the same by voting or otherwise to bring about, or in attempting to bring about, the substantial lessening of competition." 15 U.S.C. §18.

[55]See 5 ANTITRUST LAW ¶1204a, b (4th ed. 2016). *But see* Jon B. Dubrow, *Challenging the Economic Incentives Analysis of Competitive Effects in Acquisitions of Passive Minority Equity Interests*, 69 ANTITRUST L.J. 113 (2001) (criticizing this view for making the "solely for investment" exception "mere surplusage").

[56]E.g., Golden Grain Macaroni Co., 78 F.T.C. 63 (1971) ("When an acquisition will necessarily affect the competitive behavior of the two involved firms, it cannot be said that the sole purpose of the acquisition was for investment"); see also 5 PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶1240b (4th ed. 2016) (same; examining other decisions).

[57] See Golden Grain Macaroni Co., 78 F.T.C. 63, 172 (1971), modified on other grounds, 472 F.2d 882 (9th Cir. 1972), cert. denied, 412 U.S. 918 (1973); Gulf & Western Indus. V. Great Atlantic & Pacific Tea Col, 476 F.2d 687, 693 (2d Cir.

district court decision suggests that the "solely for investment" language removes the "incipiency" test from qualified acquisitions. That is, ordinarily the statute condemns mergers whose effect "may be" substantially to lessen competition. However, if an acquisition is determined to be solely for investment, then the test for that particular acquisition is whether the acquisition actually brings about a substantial lessening of competition.[58]

The courts have also been clear that an investment acquisition can violate the basic provision of §7 even though it is not of a complete or even a controlling interest.[59] As a result, a firm cannot make out the "solely for investment" claim simply by showing that the interest is non-controlling.[60] Control is not the issue, but rather power to influence firm behavior or performance. Whether the acquiring firm is entitled to vote the shares is important, although not decisive.[61] Several antitrust consent decrees have

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1973).

[58] Anaconda Co. v. Crane Co., 411 F. Supp. 1210, 1219 (S.D.N.Y. 1975).

[59] E.g., United States v. E.I. du Pont de Nemours & Co., 353 U.S. 586, 602-607 (1961) (condemning 23% interest); American Crystal Sugar Co. v. Cuban-American Sugar Co., 259 F.2d 524, 526,, 531 (2d Cir. 1958) (condemning 23% acquisition); Denver & Rio Grande Western R.R. v. United States, 387 U.S. 485, 501 (1967) ("A company need not acquire control of another company in order to violate the Clayton Act"); United States v. Dairy Farmers of America, Inc., 426 F.3d 850 (6th Cir. 2005) (reversing summary judgment; here, a 50% non-voting interest could violate the statute because "there may be a mechanism that causes anticompetitive behavior other than control," noting that common ownership might reduce the firms' incentives to compete); Gulf & Western Indus. v. Great Atlantic & Pacific Tea Co., 476 F.2d 687, 694 (2d Cir. 1973) (20 percent stock ownership sufficient to influence acquired firm's policy). Cf. Dan River, Inc. v. Unitex, Ltd., 624 F.2d 1216, 1225 (4th Cir. 1980) (20% block "frequently regarded as control"). See Daniel P. O'Brien and Steven C. Salop, *Competitive Effects of Partial Ownership: Financial Interest and Corporate Control*, 67 ANTITRUST L.J. 559 (2000).

[60] See Crane Co. v. Harsco Corp., 509 F.Supp. 115, 122 (D.Del. 1981) (acquisition of non-controlling interest did not necessarily fall within "solely for investment" exception: "Though the offeror's avowed purpose may be investment, where the interest sought to be acquired is sufficiently large that influence or control is a realistic possibility, the Court is constrained to consider the potential anticompetitive effects of the acquisition.").

[61] *E.g.*, United States v. Dairy Farmers of America, Inc., 426 F.3d 850, 860 n.3 (6th Cir. 2005) (lack of control not decisive of "solely for investment" limitation); United States v. Tracinda Investment Corp., 477 F.Supp. 1093,

permitted acquisitions conditional on voting limitations.[62] Whether such limitations would be effective in combatting the anticompetitive effects of horizontal shareholding is doubtful.

Finally, an acquisition that is regarded as solely for investment and lawful at the time it is made may become unlawful later on. In *DuPont* the Supreme Court held that the "solely for investment" provision resulted in non-immunity for an acquisition that was thought to be harmless when made but that later was used by the parties to produce anticompetitive results.[63] This holding adds an important element to ordinary §7 coverage. While the statute itself applies only to acquisitions, the "solely for investment" provision considers both the original acquisition and the subsequent use of the acquired shares.

To conclude, nothing in the statute or case law stands in the way of merger decrees that seek to control anticompetitive outcomes by limiting a shareholder's ability to vote its shares. Of course, this does not mean that such remedies are appropriate on welfare grounds, but only that they appear to be legally permissible.

Post-Acquisition Evidence

Since the passage of Hart-Scott-Rodino ("HSR") and establishment

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1098-1099 (C.D.Cal. 1979) (acquisition permitted because acquiring firm was contractually limited in its voting of the acquired stock). *Cf.* United States v. Gillette Co., 55 Fed. Reg. 28312-01 (July 10, 1990) (permitting acquisition solely for investment when investor promised not to seek position on board of directors nor vote in a way that might lessen competition).

[62] *E.g.*, Time Warner, Inc., Proposed Consent Agreement with Analysis to Aid Public Comment, 61 Fed. Reg. 50,301, 50,308 (1996) (requiring divestiture of 7.5% equity position or acceptance of capped non-voting shares); United States v. Gillette Co., Proposed Final Judgment, Stipulation, and Competitive Impact Statement, 55 Fed. Reg. 12,567, 12,569 (1990) (imposing restrictions on how votes could be cast). *Cf. Competitive Impact Statement*, United States v. Rockwell Int'l Corp., 45 Fed. Reg. 69,314, 69,316 (1980) (defendant agreed not to vote its shares during period of stage divestiture). See Daniel P. O'Brien & Steven C. Salop, *Competitive Effects of Partial Ownership: Financial Interest and Corporate Control*, 67 ANTITRUST L.J. 559 (2000); Daniel P. O'Brien & Steven C. Salop, *The Competitive Effects of Passive Minority Equity Interests: Reply*, 69 ANTITRUST L.J. 611 (2001). For a critique, see Jon B. Dubrow, *Challenging the Economic Incentives Analysis of Competitive Effects in Acquisitions of Passive Minority Equity Interests*, 69 ANTITRUST L.J. 113 (2001).

[63] *United States v. DuPont (GM)*, 353 U.S. 586, 588-589, 592, 597 (1957) (the merger was challenged some 40 years after the acquisition; further it was vertical and on a dubious "captive purchaser" theory).

of pre-merger notification in 1976, most mergers are challenged prior to their occurrence. As a result, there is no "post-acquisition" evidence to consider. Nevertheless, the statute condemns anticompetitive, completed acquisitions, and both the government and private plaintiffs are empowered to pursue mergers that have already been consummated. The Government Agencies continue to do so even though HSR gives them an opportunity to use pre-acquisition challenges.[64]

While relevant to both partial and complete acquisitions, post-acquisition developments are particularly important in cases involving the former.[65] Complete acquisitions create a single firm, and the antitrust laws apply only to the "acquisition." Any evidence of anticompetitive performance or conduct occurring after the merger must be shown to result from the acquisition itself. Causation is problematic when a firm whose full merger appears harmless when made but is thought to become anticompetitive later.

Partial acquisitions of either stock or assets are a different matter.[66] Assuming the merger was horizontal, a competitive relationship continues to exist between the two firms.[67] As noted previously, that relationship continues to be governed by §1 of the Sherman Act if it involves an agreement. In addition, any further acquisition of stock could be analyzed under §7. In general, the effect on competition is assessed as of the time of trial, not at the time of acquisition.[68]

What about a partial acquisition solely for the purposes of investment and either not challenged or approved initially, but that poses a threat to competition later on? The provision governing purchases for purposes of investment does not separately speak to that issue, but the general merger law is clear: at least in the case of government plaintiffs, a consummated acquisition can be challenged at the time it becomes anticompetitive, even if that occurs long after the acquisition itself.[69] In *Du Pont* the Supreme Court

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[64]E.g., Chicago Bridge & Iron Co., N.V. FTC, 534 F.3d 410 (5th Cir. 2008); Evanston Northwestern Healthcare Corp. Antitrust Litig., 2016 WL 4720014 (N.D. Il. Sep. 9, 2016); United States v. Bazaarvoice, Inc., 2014 WL 203966 (N.D.Ca. Jan. 8, 2014).

[65]*See* 5 Antitrust Law ¶1203e (4th ed. 2016).

[66]*See id*., ¶1205c3.

[67]*See id.*, ¶1205a ("Noncontroling acquisitions of stock or temporary acquisitions of assets may be appraised for legality at any time.").

[68]*United States v. General Dynamics Corp.*, 415 U.S. 486, 505 (1974); *Chicago Bridge & Iron Co. N.V. v. F.T.C.*, 534 F.3d 410 (5th Cir. 2008).

[69]5 ANTITRUST LAW ¶1204e (advocating this for purposes of investment provision as well).

held that these post-merger actions were governed by §7 of the Clayton Act. The Court largely ignored §1 of the Sherman Act even though the government had brought its action under both provisions and actually emphasized the Sherman Act in the previous litigation. The anticompetitive conduct of which the government complained was a series of input provision agreements for automobile fabrics and finishes in which General Motors allegedly favored Du Pont over rival suppliers. None of these agreements was an "acquisition" in the merger sense. Justice Burton (joined by Justice Frankfurter) dissented. He faulted the majority for abandoning the Sherman Act issues and relying exclusively on §7.[70] He then developed in a lengthy argument his objections, concluding that the Court erred in:

> (1), applying §7 to a vertical acquisition; (2) holding that the time chosen by the Government in bringing the action is controlling rather than the time of the stock acquisition itself; and (3) concluding, in disregard of the findings of fact of the trial court, that the facts of this case fall within its theory of illegality.[71]

But the fact is that the four-member majority[72] had done exactly what Justice Burton said.[73] Of these, the most relevant for our purposes is number 2, or the holding that the appraisal of a partial stock acquisition must occur as of the time of suit rather than the time of acquisition. This seems quite consistent with the language of the "solely for investment" provision, which speaks of someone who has made such an investment "not using the same by voting or otherwise to bring about, or in attempting to bring about, the substantial lessening of competition." That is, this language clearly refers to conduct that occurs subsequent to the acquisition, and the relevant conduct ("voting or otherwise") is clearly not limited to acquisitions. Of course, the

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[70]In fact, the acquisitions were purely vertical and occurred during the period 1917-1919. Section 7 was not amended so as to reach vertical acquisitions until 1950, so these stock purchases were not even reachable under the Act unless (1) §7 as amended in 1950 was to be applied retroactively; or (2) §7 somehow applied to the subsequent preferential dealing insofar as it occurred after 1950.

[71] Id. at 611.

[72]Justice Burton and Frankfurter dissented. Justice Clark, Harlan and Whittaker did not participate. See id. at 608.

[73] The Supreme Court subsequently acknowledged this in United States v. ITT Continental Baking Co., 420 U.S. 223, 242 (1975) (noting that *DuPont* decision "held that there is a violation 'any time when the acquisition threatens to ripen into a prohibited effect…. Thus, there can be a violation at some later time even if there was clearly no violation – no realistic threat of restraint of commerce or creation of a monopoly—at the time of the initial acts of acquisition.").

Supreme Court majority did more than use the post-acquisition conduct to conclude that the "solely for investment" limitation did not apply; it also used the same evidence to condemn the merger, in an action brought some 40 years after the merger had occurred.

To summarize, the competitive effects of partial stock acquisitions, including horizontal shareholding, can generally be appraised as of the time of the lawsuit. This entails that the challenge is not merely to the "acquisition" but also to post-acquisition performance or behavior.

Conclusion

Section 7 of the Clayton Act is a promising vehicle for combatting the anticompetitive effects of horizontal shareholding. The acquisition should be enjoined when it causes competitive harm in the product market in which institutional investors acquire the stock of two or more competitors. Section 7 enables the agency to reach back in time and accumulate small purchases, which is critical in enforcement against institutional investors. As decades of merger enforcement has established, it is not necessary for a challenger to articulate exactly how harmful coordinated interaction might occur, but only to show a likelihood that it will occur. This remains a critical difference between §1 of the Sherman Act and the more prophylactic reach of §7 of the Clayton Act and places a premium on the use of empirical evidence. Nevertheless, significant issues remain unresolved, pertaining to both legal substance and the design of effective remedies. Section 1 may still be a useful agency tool when the challenged conduct involves agreement-driven conduct other than an acquisition. On the question of remedy, at this writing partial divestitures seem to be most promising, although care must be taken that they be properly coordinated across all segments of a market.