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Defusing the Antitrust Threat to Institutional Investor Involvement in Corporate Governance

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Abstract

Thirty years of regulatory reform has focused on encouraging diversified institutional investors' involvement in corporate governance. Recently, some intriguing recent economic research by Azar, Schmalz and Tecu (working paper 2015) and Azar, Raina and Schmalz (working paper 2016) purports to show that concentration among shareholdings has led to higher prices in the airline and banking industries, two concentrated industries. Based on this research, Einer Elhauge (2016) has argued that current ownership patterns by diversified institutional investors violate Section 7 of the Clayton Act. Following on Elhauge, Posner, Weyl and Scott Morton (working paper 2016) propose a "solution" in which diversified investors would be limited to acquiring one firm in any oligopoly.

In this article, we critique the economic evidence, focusing on the airline industry. We then challenge Elhauge's legal analysis and critically examine Posner et al's proposals. Although we are unconvinced by the rather broad claims of the existing literature, we agree that an open discussion of the antitrust implications of common ownership by large institutional investors is appropriate. Thus, in the final section, we sketch out proposed "Antitrust Guidelines," including a safe harbor, in an effort to prevent anticompetitive effects, while continuing to encourage institutional investors' involvement in corporate governance.

Introduction

Americans are suspicious of concentration of financial power. Of late, anxiety has been rising over the increased concentration of shareholdings in large diversified institutional investors, with

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particular attention to index funds.[1] Against this backdrop, there is a provocative line of new economics research that claims to show theoretically and empirically that concentration of shareholdings in the hands of diversified investors has substantial anti-competitive effects in concentrated markets.[2] Taking these assertions as valid, Einer Elhauge argues that such shareholdings violate Section 7 of the Clayton Act.[3] Following on the Elhauge claim, Eric Posner, Glenn Weyl and Fiona Scott Morton propose dramatic changes in enforcement policy and offer institutional investors a choice of safe harbors, either of which would destroy their current business models.[4]

Does the economic evidence justify efforts under the antitrust laws to force institutional investors to divest themselves of shares in competing companies in oligopolies? Do current investment practices violate Section 7 as Elhauge claims? Even assuming that there is an antitrust risk of some magnitude, are the Posner et al proposals attractive? Should institutional investors adopt them? Will this "New Learning" chill institutional investor involvement in corporate governance? How should we think about cross holdings by diversified investors? How can we continue to encourage institutional investor involvement in corporate governance while avoiding anti-competitive effects?

In this Article, we address all of these compelling issues. In Part I we summarize and critique the underlying economic evidence, and conclude that there are numerous and serious issues with both the theoretical and empirical analyses. Part II analyzes the legal implications of the economic evidence, and concludes that, contra Prof. Elhauge, existing holdings by diversified funds do not violate Section 7 of the Clayton Act. Further, we argue that even if there were substantial antitrust risk, the primary effect of Posner et al's proposals would be to drive institutional investors back towards their traditional passivity in corporate governance in order to take advantage of the statutory "solely for investment" exemption. Part III moves from critique to proposal, and suggests guidelines for institutional investor investment in concentrated industries and involvement in corporate governance that steers clear of antitrust risk. Given the ever increasing role of institutional investors in corporate governance, developing appropriate antitrust guidelines is critical. Part IV concludes.

I. The Economic Evidence

Technical econometric papers by academic economists rarely catch the attention of others outside the narrow confines of academia. But, a relatively recent paper by Azar et al is an exception to the rule.[5] The authors note that from 2001 to 2013 institutional investors held 77% of the stock of all

[1] See for example, the following *Economist* magazine articles: "Who really owns the skies?" June 11, 2015; "Stealth socialism: Passive investment funds create headaches for antitrust authorities," September 17, 2016.

[2] Jose Azar, Martin C. Schmalz, and Isabel Tecu, "Anticompetitive Effects of Common Ownership," University of Michigan Stephen M. Ross School of Business, Working Paper No. 1235 (2015); José Azar, Sahil Raina & Martin C. Schmalz, Ultimate Ownership and Bank Competition (Jan. 8, 2016), http://ssrn.com/abstract=2710252 [https://perma.cc/UD9E-8H7M].

[3] Einer Elhauge, Horizontal Shareholding, 129 Harv. L. Rev. 1267 (2016).

[4] Eric A. Posner, Fiona Scott Morton, & E. Glen Weyl, "A Proposal to Limit the Anti-Competitive Power of Institutional Investors," (working paper, November 28, 2016), available at SSRN: https://ssrn.com/abstract=2872754 or http://dx.doi.org/10.2139/ssrn.2872754.

[5] Jose Azar, Martin C. Schmalz, and Isabel Tecu, "Anticompetitive Effects of Common Ownership," University of Michigan Stephen M. Ross School of Business, Working Paper No. 1235 (2015).

airlines and they point to similar holdings in other oligopolistic industries.[6] Focusing on airlines, they pay particular attention to the 2013 to 2015 period, when seven major institutional investors combined to hold substantial shares of the four major U.S. airlines. Furthermore, the authors' econometric analysis suggests that the shareholding of the institutional investors has increased airline fares as much as ten percent above what fares would have been absent the wide holdings of the institutional investors.

There is no doubt that the role of institutional ownership in the U.S. economy has grown substantially in past decades and continues to grow today, with such institutions owning on the order of 70 percent of the U.S. stock market.[7] Building on prior work on the subject, Azar et al provide a theoretical argument for why increased concentration of shareholdings will lead to anticompetitive effects. They also claim to have found empirical evidence that supports this analysis. In the discussion that follows, we consider the two arguments separately. While the claims of the various authors are quite broad, we will focus our discussion on the airline industry – the target of the Azar et al study.[8]

A. The Theoretical Argument

At its core, the theoretical case for the adverse impact of common ownership is a version of television's CSI: Is there motive? Is there opportunity? In this context, the question is whether common ownership creates both an *incentive* to raise fares and an *ability* to do so. We consider each of these perspectives in turn.

1. The Incentive Argument: What will managers maximize if they manage for their actual shareholders?

To understand the Azar et al incentive argument, start with a simple case. Imagine that Warren Buffett owns 51% of all four major airlines and uses his controlling position to appoint the directors at each airline. From both the corporate law and antitrust perspectives, it would be clear that Buffett controlled all four airlines. From an antitrust perspective, we should expect two sorts of anti-competitive effects: first, (as suggested by Azar et al) it will change each firm's individual/unilateral pricing incentives because Delta's managers will likely realize that attracting customers who would otherwise fly on United will not, by itself, benefit their boss, Buffett, because of his ownership interest in United; second, it will make collusive behavior far more likely because, with Buffett as the controlling shareholder of all the major airlines, coordination and enforcement of that coordination becomes easier. As we will discuss below, such an acquisition that put Buffet in this ownership position would

[6] These details are noted in Einer Elhauge, "Horizontal Shareholding," 129 *Harvard Law Review* 1267 (2016).
[7] Eric A. Posner, Fiona Scott Morton, & E. Glen Weyl, "A Proposal to Limit the Anti-Competitive Power of Institutional Investors," draft, November 28, 2016. For an overview, see Edward B. Rock, "Institutional Investors in Corporate Governance," in *The Oxford Handbook of Corporate Law and Governance* (Jeffrey Gordon and Wolf-Georg Ringe, eds.) (forthcoming: 2017).
[8] We do not have access to the underlying data. Consequently, a number of our technical comments should be seen as raising questions and concerns that we expect to clarify through discussions with the authors and/or through analysis of the data.

surely violate Section 7 of the Clayton Act and might well violate both Section 1 and Section 2 of the Sherman Act. Because effective control of a publicly traded corporation with dispersed ownership rarely requires 51%, cross holdings at levels below 50% would also raise serious concerns.

That cross-ownership has the potential to change firms' unilateral pricing incentives and/or to encourage collusive behavior has been well known in the industrial organization/antitrust literature for some time. With respect to unilateral behavior, the most prominent contribution is that of O'Brien and Salop.[9] With respect to collusive behavior, the best work is that of Gilo et al.[10] We focus on the former, since the Salop-O'Brien framework serves as the underpinning for the empirical analysis of Azar et al.

O'Brien and Salop focused on the effects of a firm acquiring stock in a competitor. In this situation, they argued, a firm will take into account the effect of cutting prices (or other strategic competitive behavior) on the value of its shares in the competitor. Cross ownership has the effect of shifting the firm's objective from that of maximizing its own corporate profits to maximizing the weighted average of the partially owned and controlled profits of all of its horizontal competitors. To capture this effect on the unilateral incentives of a competitor, O'Brien and Salop expand the standard concentration – market power analysis that relies on the Herfindahl-Hirschman Index to a modified HHI (MHHI) framework in which a competitor's partial ownership of competitors enters the calculation. Using this framework, they point out that, in evaluating the likely competitive effect of share acquisitions, the increase in the MHHI (the MHHIΔ) is relevant to the analysis.[11] O'Brien and Salop do not assume or argue that the traditional concern with the increase in concentration resulting from mergers (the HHIΔ) and their newly developed MHHIΔ are commensurate.

Relying on the O'Brien and Salop model, Azar et al make several moves. First, they extend the use of the MHHI from the case of a firm owning stock in a competitor (cross ownership) to a (non-competitor) investor owning stock in competing firms (common ownership). Second, they assume that an increase in the MHHI resulting from an increased concentration of shareholdings has the same relationship to anti-competitive risks associated with increases in the traditional HHI. That is, they assume that (and subsequently test whether) the Merger Guidelines' emphasis on the importance of HHIs in investigation into potential anticompetitive effects maps without any adjustment to the MHHI framework.

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[9] Daniel P. O'Brien and Steven C. Salop, "Competitive Effects of Partial Ownership: Financial Interest and Corporate Control," 67 *Antitrust L. J.* 559 (2000).

[10] David Gilo, Yossi Moshe, and Yossi Spiegel, "Partial Cross Ownership and Tacit Collusion," 37 *Rand J. Econ* 81 (2006).

[11] The HHI, which is a sum of the squares of the market shares of firms in a relevant market, is the now standard measure of industry concentration. In reviewing mergers, enforcement authorities use the increase in concentration resulting from a merger, the HHIΔ, as an important rule of thumb for identifying mergers that pose prima facie competitive concern. *See,* U.S. Department of Justice, Federal Trade Commission, Horizontal Merger Guidelines, August 19, 2010, Section 5.3 (Market Concentration) and Section 13 (Partial Acquisitions). *See also*, Federal Trade Commission and the U.S. Department of Justice, "Antitrust Guidelines for Collaborations Among Competitors," April 2000 (especially Section 3.34, Factor Relevant to the Ability and Incentive of the Participants and the Collaboration to Compete). Neither of the Guidelines discusses the MHHI.

The core of Azar et al's empirical analysis thus assumes that managers will take into account the holdings of shareholders in competing airlines. This is a heroic (and unconvincing) assumption for a variety of reasons. First, sticking with Azar et al's focus on the airline industry, note the substantial heterogeneity of the holdings of the largest shareholders. Thus, Table A.1 from Azar et al's online appendix shows the following:[12]

A Ownership of Major US Airlines

Table A.1: Top ten shareholders and ownership percentage of Delta Air Lines, United Airlines, Southwest Airlines, and JetBlue Airways.

This table provides the names and ownership percentage of the ten largest shareholders of the three largest airline companies and JetBlue, constructed from 13F filings as of March 31, 2013 and SEC proxies as of March 15, 2013.

(a) Delta Air Lines, Inc.

Wellington Management Co, LLP	6.3%
Vanguard Group, Inc.	5.2%
Capital Research & Mgmt Co	4.9%
BlackRock Investment Mgmt, LLC	4.7%
Lansdowne Ptnr Limited	4.1%
Wayzata Invt Partners, LLC	4.0%
Janus Capital Management, LLC	3.7%
Fidelity Management & Research	2.7%
Odey Asset Management, LLP	1.6%
Winslow Capital Mgmt, Inc.	1.6%

(b) United Airlines, Inc.

Capital Research & Mgmt Co	14.0%
T. Rowe Price Associates, Inc.	13.9%
BlackRock Investment Mgmt, LLC	8.3%
Wellington Management Co, LLP	6.8%
Janus Capital Management, LLC	6.5%
Fidelity Management & Research	5.7%
Vanguard Group, Inc.	4.8%
GMT Capital Corp.	3.1%
Appaloosa Management, L.P.	2.6%
Evercore Trust Company, N.A.	2.3%

(c) Southwest Airlines Co.

Primecap Management Company	11.2%
Vanguard Group, Inc.	6.2%
T. Rowe Price Associates, Inc.	5.3%
BlackRock Investment Mgmt, LLC	4.5%
Capital Research & Mgmt Co	4.3%
State Street Global Advisers	3.7%
Fidelity Management & Research	3.0%
Bankmont Financial Corp.	2.8%
Manning & Napier Advisors, Inc.	2.8%
Donald Smith & Co., Inc.	2.2%

(d) JetBlue Airways Corporation

Deutsche Lufthansa	16.6%
Donald Smith & Co., Inc.	10.4%
Wellington Management Co, LLP	8.9%
Dimensional Fund Advisors, Inc.	8.0%
Primecap Management Company	7.6%
Fidelity Management & Research	6.9%
BlackRock Investment Mgmt, LLC	6.6%
Vanguard Group, Inc.	4.9%
Scopia Capital, LLC	3.9%
Eagle Asset Management, Inc.	3.2%

[12] See José Azar, Martin C. Schmalz & Isabel Tecu, Online Appendix to: Anti-Competitive Effects of Common Ownership 2 tbl.A.1 (Univ. of Mich. Stephen M. Ross Sch. of Bus., Working Paper No. 1235, 2015). Ownership of American Airlines is excluded because of American's November 2011 bankruptcy. Azar et al at 24.

Azar et al and Posner et al view these data as powerful evidence of the extent of common ownership by institutional investors. But is it? If we reformat these holdings as a spreadsheet, we see the following:

	Delta	United	Southwest	JetBlue
Bankmont	0	0	2.8	0
BlackRock	4.7	8.3	4.5	6.6
Capital	4.9	14	4.3	0
Deutsche Lufthansa	0	0	0	16.6
Dimensional	0	0	0	8
Donald Smith	0	0	2.2	10.4
Eagle Asset	0	0	0	3.2
Evercore	0	2.3	0	0
Fidelity	2.7	5.7	3	6.9
GMT	0	3.1	0	0
Janus	3.7	6.5	0	0
Lansdowne	4.1	0	0	0
Manning & Napier	0	0	2.8	0
Odey	1.6	0	0	0
Primecap	0	0	11.2	7.6
Scopia	0	0	0	3.9
State Street	0	0	3.7	0
T Rowe Price	0	13.9	5.3	0
Vanguard	5.2	4.8	6.2	4.9
Wayzata	4	0	0	0
Wellington	6.3	6.8	0	8.9
Winslow	1.6	0	0	0

Two institutional investors -- Vanguard and BlackRock – are invested in all four of the major U.S. airlines, as you would expect with firms that manage large index funds. But other investors have very different profiles. Primecap owns 11.2% of Southwest and 7.6% of JetBlue, but has no ownership position in either Delta or United. T. Rowe Price has 13.9% of United and 5.3% of Southwest, but does not own any of Delta or JetBlue. Wellington has 6.3% of Delta, 6.8% of United, 0% of Southwest and 8.9% of JetBlue, while Capital has 4.9% of Delta, 14% of United, 4.3% of Southwest and no investment in JetBlue. For each weighting of industry investments, an investor would be expected to have a different view of the right sort of competition within the industry. While Vanguard and BlackRock might prefer "soft competition,"[13] Primecap might well argue for Southwest and JetBlue to undercut Delta and United if that is in the unilateral interest of Southwest and JetBlue, respectively. T. Rowe Price, by contrast, would object if United Airlines management took into account the effect of its strategy on Delta and JetBlue because it is only invested in United and Southwest.

[13] Even this is unclear, as the airlines have very different cost structures.

The problem becomes an order of magnitude more complicated when one realizes that BlackRock and Vanguard also manage funds that own shares of the airlines' suppliers (e.g., Exxon, Boeing) and customers (e.g. GE, GM, and IBM). For an index fund that owns market weighted positions in all companies in the index – in essence the whole economy – factoring in the effect of an airline's strategy on the fund's portfolio would be an extremely complex endeavor.

Of course, most of the holdings of institutional investors are not in index funds.[14] But, even in the simpler, but unrealistic case in which all the shareholders have index funds and thus have identical holdings, the implications for managerial strategy are unclear. Implicit in both Azar et al and Posner et al is the assumption that managers will seek to maximize the value of their index investors' portfolios. But that is to misunderstand the nature of competition among index funds. Because index funds strive to match a specific index, the potential maximum gross returns will be identical, namely, the performance of the index. Competition among index funds, therefore, is over the cost (the management fee), the accuracy of tracking the index, and customer service. Inducing "soft competition" will not help the index funds on any of these dimensions.

Accounting for non-index fund holdings greatly complicates the strategy calculus. But, it remains the case that confronted with the fundamentally heterogeneous, conflicting, and constantly changing preferences of shareholders (driven by heterogeneous and changing portfolios) with regard to whether and the extent to which the returns of other firms in the industry (and outside it) should count, the only strategy that will win support among the investors is to maximize the value of the single airline, without paying attention to what happens to competitors.[15]

More generally, the value of the MHHIΔ as a tool of antitrust analysis in concentrated industries like airlines depends on the extent to which institutional investor ownership will change the incentives of each of the airlines. To illustrate, suppose hypothetically that the four major airlines have equal shares on a particular route. Suppose also that there are two major institutional investors and each has a 10 percent ownership share in all the airlines. The presence of these investors will create a positive MHHIΔ if, but only if we assume that each airline will choose its output on the assumption that it will internalize 10 percent of the profits generated by each of the other airlines. To a first approximation, in that case the MHHIΔ will equal 125 in the O'Brien-Salop framework.[16] Each airline investor will, assuming some internalization of the ownership of the institutional investors, have an incentive to raise

[14] As of year end 2015, index funds collectively represented around $4 trillion in equity investments. (Jan Fichtner, Eelke M. Heemskerk and Javier Garcia-Bernardo, "Hidden power of the Big Three? Passive index funds, re-concentration of corporate ownership, and new financial risk," University of Amersterdam, Working Paper Feb. 7, 2017. This is about 16% of the total $25 trillion market cap for U.S. companies. http://data.worldbank.org/indicator/CM.MKT.LCAP.CD?view=map Index fundsy have grown, with the increasing popularity of the indexing business model, but still represent a relatively small percentage of the total market.

[15] This is an application of the Fisher Separation Theorem,for which the conventional citation is Irving Fisher, *The Theory of Interest* (Macmillan 1930). For discussions of the application of the Separation Theorem to corporate law and finance through the channel of the objective of the firm, see Richard MacMinn, *The Fisher Model and Financial Markets*, 2005, chapter 4; Daniel Spulber, "Discovering the Role of the Firm: The Separation Criterion and Corporate Law," 6 *Berkeley Bus. L. J.* 298 (2009).

[16] 125 = .1 x 2 x 25 x 25. See Table 1 at p. 595, where β is .2 (10 percent interest x 2 companies) and the shares are 25% each.

fares if operating in a "Cournot" framework in which firms choose profit-maximizing outputs. If, on the other hand, we assume that the institutional investors' stock holdings give them one-way control, the MHHIΔ would increase to 750.[17] By contrast, if the airline managers do not account for the effect of their strategy on institutional investors' other holdings, the MHHIΔ would be zero. The MHHI framework is thus extremely sensitive to the extent to which managers will take into account the effects on their shareholders other investments. Given the heterogeneity discussed above, we have serious doubts that airline managers would do this, unless an investor has a controlling position.

Now suppose that one institutional investor has a 20 percent ownership share in the airlines, while another has no presence whatsoever. The model will predict the same price effects, since the likely impact would be a function of the total ownership of airlines by the institutional investors in the aggregate. At least in this admittedly special case, the model predicts impacts that do not depend on the distribution of institutional investor shares. This is a troubling feature of using the underlying model in the common ownership case. In the original O'Brien and Salop analysis, managers, in considering strategy for Firm A, take into account the effect of that strategy on Firm A's ownership interest in competing Firm B. It just assumes control of Firm A. By contrast, Azar et al, in applying the O'Brien and Salop model to the common (and non-controlling) ownership case, draw no distinction between one investor holding 30% (arguably a controlling position) and three investors each holding 10%. As we will discuss in greater detail below, control or a level of influence close to control are critical elements of the current legal framework and current enforcement policies.

To pursue the control point further, we reiterate that the model on which Azar et al rely assumes implicitly that individual firms maximize the weighted average of the profits enjoyed by the shareholders of the firms, accounting for the shareholders' ownership of horizontal competitors. Does this more accurately represent the objectives of airlines than does the usual profit maximization assumption? Do individual airline managers actually account for the fact that institutional investors in their airline hold shares in competitor airlines? Given the heterogeneity of investors' holdings, how would they do this? More broadly, we need to ask to what extent do managers pursue objectives other than profit maximization? And, if they do pursue profits, is their perspective short run or long run? The debate about the relationship between ownership and control is an extensive and controversial one. Suffice it to say that there remains substantial concern as to the appropriate characterization of the objectives of the firm as well as the relationship between ownership and control.

These concerns raise fundamental questions about the core theoretical move of the Azar et al analysis: the extension of the O'Brien-Salop MHHI framework from cross-ownership to common ownership. The essential question here is how and to what extent common ownership makes a difference. In an oligopolistic industry such as the U.S. airline industry, there is no doubt that firms are keenly aware of their competitors' business strategies and actions. In such a world, one possible outcome is that firms acting in their unilateral self-interest will find it advantageous to be less aggressive with respect to cutting price or increasing output than they might be if the market were less concentrated. But, it is hard to see how key pricing and output decisions would be affected in the

[17] From Table 1, line 4 ("One-way Control), the MHHIΔ is equal to (1+.2) x 5 x 25 = 750.

presence of common ownership. Suppose hypothetically, that firms in the industry had, to some extent, chosen to set fares at a given level, through some form of tacit behavior. Why then, would we expect common ownership to encourage the firm and its competitors to move to a riskier higher airline fare outcome, and why would we expect this outcome to be a sustainable Nash equilibrium? We are doubtful that shareholder pressure could accomplish this. In essence, it does not seem reasonable to us to sum the HHI and the MHHIΔ. While we cannot rule out such a possibility, especially if there were communications that supported a collusive outcome, we remain highly dubious of a non-explicit framework that suggests otherwise.[18]

2. The "Ability" Argument

The second part of the Azar et al theoretical case is based on the ability of shareholders to influence managers to soften competition so as to maximize investors' portfolio value. Assuming a homogeneous shareholder interest, how might shareholders exert this influence, especially when doing so will hurt the individual airline?

One possibility would be through shareholder voting on directors, on shareholder proposals, or perhaps on mergers. But, we see no evidence that shareholders vote on competitive strategy and no evidence that directors run on a "platform" that is directed towards a competitive strategy. In proxy statements, the information provided is limited to qualifications, expertise and other directorships, and director stock ownership and compensation.[19] In sum, there is no obvious way in which shareholders can vote for "soft competition."

A second possibility is that shareholder voting on management compensation pushes managers to soften competition. This, too, is unlikely given the limited role of shareholder voting in setting managerial compensation. Until 2011, companies were only required to seek shareholder approval for the high-level terms of their equity-based compensation plans and periodic approval of the terms of their annual incentive (i.e. bonus) plan. Since 2011, however, shareholders periodically (usually annually) have a non-binding "say on pay" vote covering all aspects of compensation for top executives.

[18] The use of the MHHIΔ in the context of a study of the airline industry raises additional concerns. First, there is substantial product differentiation in the industry. Indeed, prior studies of the industry have used (Bertrand) models in which airlines choose prices, not outputs. In our view, the Bertrand model is more appropriate for airline industry study than the Cournot model. This despite the argument to the contrary for duopoly markets given by James A. Brander and Anming Zhang, "Market Conduct in the Airline Industry: An Empirical Investigation," 21 *Rand Journal of Economics*, 567 (1990).

We also note that results of the empirical analysis would change if the authors were to utilize the price-oriented "Price Pressure Index" ("PPI") of O'Brien and Salop, rather than MHHIΔ. Without an empirical study, we cannot ascertain the broad significance of this issue. We note, however, that use of the more appropriate PPI would take into account the mix of individual ownerships and would also take into account a Bertrand framework in which profit margins and diversion ratios (accounting for different firm-level demand elasticities) would play an important role. Absent such an analysis, we would not consider the Azar et al results to be fully robust.

[19] See, e.g., Delta Proxy Statement (April 29, 2016) at pp. 15-21, 22, 60-63.

Overall, "say on pay" proposals are approved 92% of the time and there is little reason to think it provides a channel for any sort of fine tuning of executive compensation.[20]

A third possible mechanism is through lobbying. It is certainly possible that institutional investor conversations with airline managers could have an effect on managers' behavior. And we have not made an effort to study publicly available information with respect to earnings calls. However, we are doubtful that there will have been much if any impact, given the heterogeneous nature of the shareholders and the fact that there is no obvious channel of influence.

Under Delaware corporate law, shareholders do not do very much. In sum, they vote, sell and sue.[21] Activist shareholders can be effective when they can present a credible threat of prevailing in a proxy contest over directors. Compensation plays an important role in aligning managerial and shareholder interests, as does the presence of independent directors. But none of these tools provides for the degree of micromanagement necessary to implement the kind of alignment with the portfolio interests of actual shareholders, especially in a world in which actual shareholders hold very different portfolios. Absent a controlling position, which allows a shareholder to appoint the board and fire the managers, there is no channel by which individual shareholders or class of shareholders (e.g., index funds) can force managers to manage to maximize their portfolio at the expense of the portfolios of other shareholders.

B. **The Empirical Argument**

If Azar et al were making only a theoretical argument for extending the MHHI framework to the common ownership context, the analysis would be limited to raising serious questions about the theoretical argument. But, what has grabbed headlines is Azar et al's empirical claims, specifically the claim that concentration of shareholdings in the hands of diversified institutional investors has increased the price of airline tickets by as much as 10%. If this claim is valid, it raises serious questions about the competitive effects of increased concentration of shareholdings as well as validating the use of the MHHI framework in antitrust analysis. We are unconvinced. In this section, we review the empirical case.

1. **Doubts about the "Instrumental Variable" Analysis**

The Azar et al paper involves a detailed empirical analysis of the relationship between airline concentration and airline fares. Utilizing publicly available data on individual airline ticket prices for individual airport to airport routes over the period 2001Q1 to 2013Q1, the authors analyze the correlation between airline fares and both airline concentration and institutional ownership

[20] Georgeson,"Annual Corporate Governance Review" 2016, at p. 10. But, see Miguel Anton, Florian Ederer, Mireai Gine, and Martin Schmalz, "Common Ownership, Competition, and Top Management," ssrn, draft July 1 (2016), concluding that managers are rewarded for their rivals' performance as well as their own.

[21] Robert B. Thompson, "Preemption and Federalism in Corporate Governance: Protecting Shareholder Rights to Vote, Sell and Sue," 62 *Law and Contemporary Problems* 215 (1999).

concentration.[22] To be specific, the basic (route-level) regression model takes the following form (route and carrier subscripts as well as time fixed effects and market-time-carrier fixed effects are omitted):

$$\log (p_t) = \beta \, MHHI\Delta_t + \gamma \, HHI_t + \theta \, X_t + \varepsilon_t$$

where HHI is the Herfindahl-Hirschman Index, MHHIΔ is the increase in the HHI reflecting institutional ownership (as suggested by O'Brien and Salop), and X is a vector of exogenous control variables and fixed effects.

Since concentration is expected to have a positive effect on airline fares, the inclusion of the HHI variable is appropriate in this "reduced-form" equation. What is at issue, however, is the addition of the modified HHI variable MHHIΔ. The inclusion of MHHIΔ in the airline fare regression generates interesting correlations, while raising provocative questions. The authors suggest that the MHHIΔ measures the likely incremental impact of cross-ownership in a Cournot model of oligopolistic competition.

The calculation of the MHHIΔ is relatively straightforward, but its meaning and interpretation is not. The MHHIΔ will equal 0 if there is no cross-ownership to 10,000 minus the HHI if cross-ownership shares create a single effective monopolist. Note in particular that the MHHIΔ can be (and is in some cases) as high as or higher than the HHI itself and indeed can be higher than 10,000 – the maximum HHI in a single-firm monopoly.

The authors claim that taking into account common ownership changes the airlines' anticompetitive incentives by orders of magnitude. Although Azar at al do not treat the possible endogeneity of the HHI variable (an important limitation of their analysis), they do note the likely endogeneity of the MHHIΔ variable. Given this concern, they point out that the 2009 acquisition of Barclays Global Investors by BlackRock – one of the largest institutional investors – has the potential to serve as an "instrument" that will, through instrumental variables estimation ("IV") allow the authors to deal with endogeneity (or "reverse causality") concerns. The suggestion here is that the merger of BlackRock and BGI – which changed ownership concentration in the major airlines from independent BlackRock with, hypothetically 3%, and independent BGI with, hypothetically 3% to a single BlackRock with 6% -- was a change of sufficient magnitude to affect ticket prices through encouraging managers to better take into account their investors' investments in competing airlines.[23] For the reasons given above, we find this implausible theoretically.

We also find the power of the variable that accounts for the merger of BlackRock and BGI, which differentially changed the MHHI in airline markets, to be empirically implausible. An "instrumental

[22] The DB1B database has been utilized by the Antitrust Division of the Department of Justice and private parties to evaluate airline mergers. For one example of the use of the database, see Bryan Keating, Mark Israel, Daniel L. Rubinfeld, and Robert Willig, "Airline Network Effects and Consumer Welfare," *Review of Network Economics*, Nov. (2013), 1-36.

[23] These are hypothetical numbers that track, more or less, the relative size of BlackRock and BGI's holdings. Note that BlackRock, prior to the merger, was largely an active manager, while BGI was largely an indexer. This means that the aggregate numbers mix passive and active investment strategies and, with regard to the active portfolios, may not be long term holdings and may not reflect short positions.

variable" analysis takes a change in a variable that is correlated with, but not causally related to the variable of interest (in this case airline fares) and uses it to simulate a natural experiment. The airline industry is an interesting laboratory here because there are numerous markets (Azar et al use "airport pairs" as relevant markets), and the change in MHHI resulting from the BlackRock/BGI merger will be different in the different airline markets because markets are served by different combinations of airlines. The basic idea is to view the merger as a "treatment" that is applied to different markets to different extents, and then observe the resulting effects (do ticket prices go up more in the markets in which the MHHIΔ is larger?).

An ideal instrument satisfies several conditions. First, it is correlated with the potentially endogenous concentration variable or variables. Second, it has no effect on the dependent variable (airline fares) except through its correlation with the concentration variables. Third, there is no (reverse-causal) effect of airline fares on the instrument. It seems clear that all three conditions are satisfied by the BlackRock-BGI event,[24] qualifying the acquisition in question as a suitable instrument. What is less clear is the relationship between the strength of the instrument and the reliability of the regression results, with strength typically measured by the correlation between the instrumental variable and the concentration variables. There is an inherent tension here. To the extent that the instrument is strong, i.e., highly correlated with concentration variables, then one is likely to question whether the endogeneity is really being removed. However, to the extent that the instrument is relatively weak, the resulting IV estimation will have poor statistical properties and could indeed perform less well than ordinary least squares.[25] The authors point out that their "treatment variable" instrument – the implied change in MHHIΔ – is "a strong predictor of the actual change in MHHI delta," which suggests that their instrument is not weak.[26]

We have a variety of concerns about the empirical case made by Azar et al. Many go to the robustness of the results. Whether our robustness concerns have empirical import will depend on further analysis of the data. Our first concern relates to market definition. In our view, relevant markets are typically determined by city pairs, not airport pairs. As a consequence, the authors have the wrong micro unit of analysis. Using airport pairs as relevant markets will in many cases lead to markets with substantially higher HHIs and MHHIs than would be the norm if markets were defined by city pairs. To illustrate, United is the dominant carrier on the SFO-EWR (San Francisco to Newark) route. But, United faces substantial competition from Jet Blue, Southwest, American, Delta, and Virgin Atlantic on other airport pairs that are in the same relevant market (SFO-JFK, OAK-LGA, etc.).[27]

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[24] As Azar et al point out (at p. 21), it is unlikely that increasing ownership concentration in airlines was a motivation for the BlackRock/BGI merger.

[25] James H. Stock, J. H. Wright, and M. Yogo (2002), "A Survey of Weak Instruments and Weak Identification in Generalized Method of Moments," 20 *Journal of Business and Economic Statistics*, 518 (2002).

[26] Azar et al, p. 22.

[27] In litigation surrounding the United Airlines acquisition of Continental Airlines, the Court agreed with one of us (Rubinfeld) that the relevant market included OAK and SFO on the San Francisco end and JFK, LGA, and EWR on the New York end.

Our next concern relates to the causality question. As the authors are aware, the 2009 timing of the BlackRock – BGI acquisition was one year later than Delta's acquisition of Northwest airlines, an acquisition which has been successful not only for Delta, but for the broader public.[28] Moreover, the year 2009 was a year in which the adverse effects of the great recession were diminishing. Indeed, airline fuel costs were falling and airline profit margins and overall profits were generally increasing.[29] Then, in 2010, only one year later, United acquired Continental – marking an additional improvement in major airline networks (although United has endured a more difficult transition towards generating its predicted network benefits than did Delta).

There is no doubt that nominal airline fares increased on many routes after 2009, but it is much less clear to what extent quality-adjusted fares increased. All of this raises the question of what is being measured by the BlackRock-BGI based instrument. Suppose one were to posit a change in fuel costs or (despite its possible endogeneity) the acquisition of Delta by Northwest as an alternative instrument. Would these hypothetical instruments generate similar predictive results?

We suspect that the MHHIΔ may be serving as a proxy for other route-level characteristics, such as low-cost carrier ("LCC") share. We would expect the MHHIΔ to be lower on routes with LCC presence and pressure for the major airlines to cut prices; if so, the model should be estimated with a complete set of LCC interactions. Moreover, the model is estimated using as weights the average number of passengers for market carriers. This suggests that the results are driven primarily by the larger routes, especially those that are associated with relevant markets that are concentrated. We are curious as to whether the results would hold up if the model were estimated only for the larger routes.[30] A plausible alternative explanation for the empirical findings of Martin Schmalz and his co-authors is that the major airlines have higher margins on those routes, due to greater market power, increased efficiencies, or a combination of both.

A further concern is that the MHHIΔ (which, recall, is the contribution of the ownership concentration) could be correlated with increasing demand. As noted above, 2009 marked the low point of the recession. If, as the economy recovered, demand increased more quickly in the "major markets" (e.g., NYC-LA) than in smaller markets (e.g., Cincinnati– St. Louis)[31], and if the changes in the MHHIΔ due to the BlackRock-BGI merger (after accounting for endogeneity) were concentrated in airlines serving the major markets[32], then Azar et al's IV analysis could over-estimate likely price effects.

Finally, we note that through the entire period of analysis, Southwest was the LCC that exerted the greatest downward presume on airline fares. However, that pressure diminished somewhat over

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[28] *See,* Mark Israel, Bryan Keating, Daniel L. Rubinfeld, and Robert D. Willig, "The Delta-Northwest Merger: Consumer Benefits from Airline Network Effects, Chapter 18, in *The Antitrust Revolution* (John E. Kwoka, Jr. and Lawrence J. White, eds.), Oxford University Press (2015).

[29] *See*, Robert S. Pindyck and Daniel L. Rubinfeld, *Microeconomics*: 9th Edition, Example 9.3 (Airline Regulation), forthcoming (2017).

[30] See John Woodbury, "Commentary," *Antitrust Source*, December 2014, for these and other thoughtful comments.

[31] in ways that were systematically correlated with the error after controlling for local income per capita.

[32] More precisely,

time as Southwest's costs increased and Southwest began to invest more heavily in developing its mini-hubs. Moreover, Southwest's acquisition of AirTran removed another LCC from the marketplace. Isn't it likely that these industry changes have more to do with any increase in air fares on major airline routes than the increase in ownership shares created by the BlackRock – BGI acquisition?[33]

2. Doubts about the Channel of Influence

In suggesting possible channels of influence, Azar and his colleagues as well as Posner and his colleagues rely on a paper by Anton, Ederer, Gina and Schmalz for the proposition that compensation structures that align the interests of managers with the interests of diversified investors provide a plausible channel of influence. In particular, Anton et al argue that the differential use of a Relative Performance Evaluation ("RPE") approach to compensation offers the means by which firms account for the interdependence of competitor behavior, especially in oligopolistic industries.[34] Specifically, the authors suggest that RPE is less likely to be utilized or if used will be less robust in industries with high cross ownership and offer a model in which RPE is optimally utilized when each firm is owned by a different investor or each firm's strategic decision does not influence its competitors. According to the authors, when "the most powerful shareholders of a firm also own large stakes in the firm's competitors, shareholders do not want to incentivize managers to compete aggressively . . . Instead, they choose to reward top managers more for industry profits, irrespective of where the profits come from . . . "[35]

To understand their claim, we need to take a step back. In aligning the interests of managers and shareholders, tying compensation to stock price is problematic because it rewards or punishes managers for broad, market wide price movements that have nothing to do with how effective a manager the CEO was. From a principal-agent perspective, what undiversified shareholders really care about is the extent to which our CEO outperforms other CEOs.[36] A compensation structure that implements this approach is known as "Relative Performance Evaluation" or RPE.

Anton et al note a potential downside to RPE: it incentivizes managers to compete with other firms in an industry even if, given market structure, "soft" competition is preferred. Anton et al ask whether RPE is used less at firms in markets with a high MHHI than at firms in markets with a lower MHHI? In a cross-industry study, Anton et al find a correlation between MHHI and the use of RPE.

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[33] We have a number of other quibbles that may be may not have empirical import. First, code-share revenues are allocated primarily to the operating airline, not the marketing airline. Second, the MHHI calculation is based on margins, not fares. The authors have only accounting for cost changes over time, a potentially powerful fare determinant is the inclusion of a variable that interacts the distance of the flight with year fixed effects.

[34] Miguel Anton, Florian Ederer, Mireia Gina, and Martin Schmalz, "Common Ownership, Competition, and Top Management Incentives," Cowles Foundation Discussion Paper No. 2046 (July 2016). In the their banking paper (J. Azar, S. Raina, and M. Schmalz, "Ultimate Ownership and Bank Competition," University of Michigan working paper, 2016), the authors write, "Lastly, Anton et al. (2016) show that managers' incentives are at least partially aligned with their shareholders anticompetitive interests: top executives get paid less for the own firm's performance and more for rival performance when the industry is more commonly owned."

[35] Anton et al at p. 4.

[36] For a thoughtful theoretical discussion of the import of relative performance, *see* Bengt Holmstrom, "Moral Hazard in Teams," 13 *Bell Journal of Economics*, Autumn 324 (1982), section 4.

Methodologically, this is a very difficult question to address. First, RPE is not readily observable because we do not know the extent to which compensation committees, in granting discretionary raises, reward relative or absolute performance. Second, RPE has become very popular so that many firms use some form of RPE. Third, there can be substantial differences between expected compensation and realized compensation and it is unclear which will have the greatest effect on incentives. Finally, compensation data, especially over time, has not been reported in a standardized format, and the data provided by commercial services is full of errors.

For Azar et al, the airline industry is the test case for the anticompetitive effects of common ownership. As a result, they should predict low levels of RPE at major airlines. Yet a quick look suggests otherwise. Taking the 2015 proxy statements as a useful snapshot, we find that, at American:

> In April 2015, Mr. Parker requested and the Compensation Committee agreed to provide 100% of his direct compensation in the form of equity incentives, underscoring our commitment to paying for performance and further aligning his interests with that of our stockholders. Mr. Parker will no longer receive any base salary and will no longer participate in the Company's 2015 Short-term Incentive Program. In addition, the majority of Mr. Parker's 2015 target equity compensation is performance-based and will be earned, if at all, not earlier than the third anniversary of the grant date *based on our relative three-year pre-tax income margin as compared to that of a pre-defined group of airlines. We believe relative pre-tax income margin is the most effective measure of our relative financial performance in the airline industry* . . . Mr. Parker's 2015 total target direct compensation continues to remain at a level significantly below his peers at Delta and United (using 2013 proxy compensation data reported in 2014 for Delta and United).[37]

Delta followed a similar approach (albeit somewhat less extreme): "The structure of Delta's executive compensation program therefore aligns with the goal of creating long-term value for Delta's stockholders. This structure ties the ultimate value of long-term awards to the achievement of key measures of the success of the business, including return on invested capital, average annual operating margin *relative to airline peers and customer service performance*, as well as stock price performance and continued employment with Delta."[38]

Although inconsistent with the predictions of the Azar et al approach, the fact that RPE is universally used in the airline industry is unsurprising from a corporate governance perspective. Shareholders have long pushed for RPE. In response to institutional investor responses to a 2011 survey, ISS now incorporates relative performance evaluation into its assessment of pay-for-performance alignment, and strongly recommends the use of RPE. Importantly, ISS does *not*

[37] American April 22, 2015 proxy at 38 (emphasis added). American's April 29, 2016 proxy continues this approach ("The performance-vesting RSUs vest no earlier than April 2018 and are earned subject to the Company's achievement of pre-tax income margin, excluding special charges, over a three-year period from January 1, 2015 to December 31, 2017 relative to the weighted average of a peer group comprised of Delta, United, Southwest, JetBlue, Alaska, Spirit and Virgin America." At 60)

[38] Delta 2015 proxy at 75 (emphasis added). See also, United 2015 proxy at 42, Southwest 2015 proxy.

recommend or allow for differences in compensation approach for firms in concentrated markets.[39] Because a substantial percentage of medium sized and smaller institutional investors follow ISS recommendations, so do the compensation committees.[40] The important role of ISS guidelines in the design of executive compensation thus raises additional issues for the use of RPE (or lack of RPE) as the channel of influence. In a world in which a substantial percentage of shareholders follow ISS recommendations, the fact that those guidelines do not distinguish among firms based on MHHI makes it unlikely that there will be significant variation in the use or intensity of RPE based on MHHI.

II. The Legal Framework

In the preceding sections, we raised a variety of questions regarding the theoretical and empirical claims that the increase in share ownership by diversified institutional investors has had anti-competitive effects in concentrated industries. In this section, we examine the legal framework and ask whether such ownership patterns are illegal under the antitrust laws.

A. The Statutory Framework

Section 7 of the Clayton Act, in relevant part, provides that:

> No person shall acquire, directly or indirectly, the whole or any part of the stock or other share capital and no person subject to the jurisdiction of the Federal Trade Commission shall acquire the whole or any part of the assets of one or more persons engaged in commerce or in any activity affecting commerce, where in any line of commerce or in any activity affecting commerce in any section of the country, the effect of such acquisition, of such stocks or assets, or of the use of such stock by the voting or granting of proxies or otherwise, may be substantially to lessen competition, or to tend to create a monopoly.

At the same time, the "solely for investment exemption" provides that:

> 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.

The antitrust analysis of common or cross ownership is carried out within this framework.

B. The Relevant Case Law

Although the language of the Section 7, and the leading Supreme Court case interpreting it[41] both emphasize the extent to which it is designed to arrest anticompetitive conduct in its "incipiency" –

[39] ISS 2014 FAQ at 6.
[40] Georgeson, supra, at 10 (95% approval of say on pay resolution when ISS recommends in favor; 68% approval when ISS recommends against.)
[41] *U.S. v. Philadelphia National Bank*, 374 U.S. 321 (1963).

"where . . . the effect of such acquisition of . . . stock or the use of such stock . . . may be substantially to lessen competition or to tend to create a monopoly" – the statutory language only gains meaning in its application. In this section, we review the sparse case law and the enforcement history.[42]

The only U.S. Supreme Court case to address cross ownership of stock is the *U.S. v. E.I. du Pont de Nemours & Co.* from 1957. The story of Du Pont's involvement with General Motors is a famous and important chapter in the history of corporate governance.[43] In 1917, Pierre du Pont led Du Pont to invest $25 million of its profits from World War I into GM stock. When, during the post war recession, GM and, more to the point, its founder and CEO William C. Durant, ran into financial trouble, the Du Pont Company and J.P. Morgan and Company assumed Durant's debts and the stock he controlled. Pierre du Pont famously moved to New York to become president and, working with Alfred P. Sloan, Jr., reorganized GM and essentially invented the modern, multi-division managerial corporation. Although du Pont stepped down from the GM presidency in 1923 and from the chairmanship in 1928 and from the board in 1940, Du Pont continued to hold shares in GM.

Fast forward to the late 1940s. By this point, GM and Du Pont were both among the largest corporations in the world. In 1946, the DOJ began to investigate breaking up GM.[44] In 1948, as part of this investigation, the U.S. brought suit to force a separation of Du Pont and GM and the divestiture by Du Pont of its 23% stock interest in GM. According to the head of the Antitrust Division of the Department of Justice, the main problem was the "concentration of economic power in industries controlled by a few large companies."[45]

The government used Clayton Act Section 7 against Du Pont, arguing that by means of the cross holdings, Du Pont had obtained an illegal advantage in the supply of fabrics and finishes to GM, with "the resultant likelihood, at the time of suit, of the creation of a monopoly of a line of commerce." The case thus, on its face, involved a vertical restraint.

It is in this context that the Supreme Court described Section 7 as "designed to arrest in its incipiency not only the substantial lessening of competition from the acquisition by one corporation of the whole or any part of the stock of a competing corporation, but also to arrest in their incipiency restraints or monopolies in a relevant market which, as a reasonable probability, [****8] appear at the time of suit likely to result from the acquisition by one corporation of all or any part of the stock of any other corporation."

As a vertical restraint case, this cross-ownership does not seem strong to modern eyes. As GM argued at the time, the total GM use of fabrics and finishes was a negligible percentage of any relevant market (3.5% of finishes used for automobiles; 1.6% of fabrics used for automobiles). Even on the court's account, the anti-competitive effect was far from obvious, with the concern being that Du Pont supplied around 67% of GM's requirements for finishes and around 50% of the requirements for fabrics.

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[42] For comprehensive discussions, see 1-3 Antitrust Law Developments 3A and 3B.

[43] For a comprehensive account, see Alfred D. Chandler, Jr., Pierre S. Du Pont and the Making of the Modern Corporation (1971) at Part IV (pp. 433-604).

[44] Mark Roe, "The Modern Corp and Private Pensions," 41 *UCLA L Rev* 75 (1993) at 131.

[45] Roe, supra, at 131 n. 16.

The court makes much of the fact that Du Pont used its stock ownership and relationship to encourage GM to buy its fabrics and finishes. Whatever pressure Du Pont exerted, by the time of the government's lawsuit, it was unlikely that the purpose of the stock ownership was to push finishes and fabrics: in 1947, Du Pont's stock was worth around $2 billion while it only sold about $22 million per year in product.[46]

Given how questionable the theory of anti-competitive harm was, even at the time,[47] the case is best understood as a "bigness is badness" case from a period of antitrust enforcement in which that was a compelling argument. Most would agree that, were an equivalent case brought today (imagine, for example, that Microsoft owned 23% of GM and used that stock ownership to get GM to buy Microsoft Office), it would come out the other way. The case's current vitality is as a citation for the proposition that Section 7's goal is to supplement the Sherman Act and "arrest the creation of trusts or monopolies in their incipiency."[48] That said, it seems that it has not been cited by the Supreme Court, even for that proposition, since the 1970s.

Interestingly, there have been very few "partial acquisition" cases since Du Pont. The Supreme Court has not returned to the subject. At the court of appeals level, the leading case is *U.S. v. Dairy Farmers of America*.[49] There, the large dairy cooperative, Dairy Farmers of America ("DFA"), held a 50% interest in National Dairies and then acquired a 50% interest in Southern Belle, a dairy that was the sole competitor of National Dairy in a variety of markets. In their original agreements, DFA had voting rights in both companies, joint operating rights, the ability to veto salaries and major investments, and a long history of profitable joint ventures with both partners. Prior to filing a summary judgment motion, the DFA/Southern Belle operating agreement was modified to eliminate management rights and to make the stock nonvoting. The district court granted summary judgment on the grounds that the government had not demonstrated that DFA had control over Southern Belle under the revised operating agreement, and that without control, there was no Section 7 violation. The Sixth Circuit reversed on several grounds including: because the District Court failed to consider the original agreement under which DFA had control; and because, even under the revised agreement, the government had made out a sufficient case that the *effect* of the acquisition would be to reduce competition.

There are a few scattered district court cases that provide slightly more guidance. In *U.S. v. Tracinda*,[50] Kirk Kerkorian, directly and through Tracinda, owned approximately 48% of MGM's stock and was its controlling shareholder. He also owned 5% of Columbia Pictures stock. In 1978, Tracinda launched and completed a tender offer for around 19% of Columbia Pictures, giving Kerkorian around 25% of Columbia. This led the government to seek divestiture of the Columbia stock. The court rejected the government's claim on the grounds that Tracinda's acquisition fell within Section 7's "solely for investment" exemption. Central to the court's decision was the "Stockholders' Agreement" which

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[46] Edward Rock, "Controlling the Dark Side of Relational Investing," 15 *Cardozo L. Rev*. 987 (1994) at [about fn. 56).
[47] Jesse W. Markham, "Merger Policy under the New Section 7: A Six-Year Appraisal," 43 *Virginia Law Review,* 489 (1957).
[48] *Brunswick* 429 US 477 (1977); *U.S. v American Bldg. Maintenance*, 422 US 271, 278 (1975).
[49] 426 F.3d 850 (6th Cir. 2005). One of the authors, Edward Rock, worked on this case as an expert and provided an opinion on the corporate governance aspects.
[50] *United States v. Tracinda Inv. Corp*., 477 F. Supp. 1093 (C.D. Cal. 1979).

limited the extent to which Kerkorian could use his stock "specifically providing that in a shareholders vote for directors, Kerkorian shall vote his stock in favor of the nominees for election of directors as proposed by the management of Columbia, and shall cast this vote proportionately to the other shares present at the meeting and voting in favor of such nominees. Additionally, the contract placed a limit on Tracinda and Kerkorian's Columbia stock ownership at 25.5%."

For the court, the key question was one of control: "Where by stock acquisition one corporation controls another, a combination of the two companies is necessarily created. Where control is nonexistent, there is no combination. Accordingly, in the context of a Section 7 action, this control-investment distinction is not only a valid dichotomy, but is a most useful judicial tool in tackling the investment exemption issue." Because there was no evidence that the stock acquisition was made for the "purpose or even with the slightest intent of controlling Columbia," the court found that the "solely for investment" exemption applied. Interestingly, the court held that the exemption was to be determined by the intent at the time of acquisition, and the fact that the restrictions on the use of the stock only lasted three years was of little importance: "The fact that this contract will last three years, as opposed to ten, twenty or fifty years, bears very little weight upon the ultimate determination of intent at the time of acquisition, although the Court does take it into consideration."

Similarly, in *Anaconda v. Crane*,[51] the issue was an exchange offer by Crane for 22.6% of Anaconda which Anaconda argued would violate Section 7. To avoid that issue, Crane offered to limit its holdings to 22.6%, to commit not to seek representation on the board of directors, and to comply with the provisions of Section 7, including a prohibition against voting its shares to bring about or attempt to bring about a substantial lessening of competition.

Following the Du Pont interpretation of Section 7, the court held that, "Once it is established to the satisfaction of the Court that the acquisition is 'solely for investment,' the statute requires a showing that the defendant is 'using the [stock] by voting or otherwise to bring about, or in attempting to bring about, the substantial lessening of competition . . . .'" In light of the proposed consent order, the court held that Anaconda was unable to carry its burden.

Finally, in *Gulf Western v. Great Atlantic and Pacific Tea Co.*, 476 F.2d 687 (2d Cir 1973), the Second Circuit affirmed a preliminary injunction against G & W's tender offer for 15% of A & P (G & W already owned 4%). Finding a substantial likelihood that G & W would seek control of A & P, and has the potential to attain that goal, the court held that the "solely for investment" exemption did not apply.[52]

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[51] 411 F. Supp. 1210 (SDNY 1975).

[52] It is interesting to note that these latter cases involved competitor challenges to hostile acquisitions. These challenges have largely disappeared for two reasons. First, the U.S. Supreme Court's decision in *Cargill Inc. v. Montfort of Colorado Inc,* 107 S. Ct. 484 (1986) focused attention on the need for "antitrust injury" as an element of standing. Targets using section 7 to resist a hostile tender off typically cannot satisfy that requirement. Second, the effectiveness of the poison pill as a defensive measure post *Moran v. Household International, Inc*. 490 A.2d 1059 (Del. Ch. 1985) meant that genuinely hostile deals eventually disappeared with the result that target boards' approval of the merger (even if under pressure) removed the antitrust issue.

As this summary shows, in applying Section 7 to partial acquisitions, the case law focuses on *two* elements of control. First, these are understood as "cross ownership" cases not "common ownership" cases. In each, there is clear, uncontroversial control over "firm A", with the key question being whether the acquisition of stock provides sufficient control or influence over "Firm B." Du Pont was viewed as maximizing Du Pont's interests and the question was whether it also controlled or influenced GM in an anti-competitive way; DFA controlled National Dairy and the question was the extent of its influence and control over Southern Belle; Kerkorian controlled MGM and the question was the degree of his influence or control over Columbia; Crane was assumed to be looking after Crane's interests and the question was the degree of its influence or control over Anaconda; Gulf Western had effective control over Bohack, the second largest operator of supermarkets in the New York area, and the question was whether its tender offer would give it control or influence over A & P, the largest operator of supermarkets in New York.[53] O'Brien and Salop developed their model for these sorts of cross ownership cases, as distinguished form the "common ownership" category that Azar et al focus on.

Second, in considering whether the challenged stock acquisition will threaten anti-competitive harm, the focus has been on very substantial stock acquisitions (>20%) and the extent to which the stock held or being acquired allowed the acquirer to control the target. In at least one case – *Dairy Farmers* – in which the acquisition involved a 50% interest, and a long history of cooperation with the other shareholder, a court found that "influence" was sufficient as long as there was proof of anticompetitive effect.

C. The DOJ/FTC Enforcement Policy

Longstanding enforcement policy has been consistent with this interpretation of the cases. Under the 2010 FTC/DOJ Horizontal Merger Guidelines, there are three aspects of partial acquisitions that the enforcement agencies consider: influence over competitive conduct of the target firm; reduced incentives to compete; and access to nonpublic, competitively sensitive information.

In applying these guidelines, the DOJ and the FTC generally have not challenged partial equity acquisitions of less than 20% (with no evidence of control):

- *Denver & R.G.W. R.R.* 387 U.S. 485, 504 (1967) (20% interest);
- duPont, 353 U.S. at 588 (23% interest);
- *F. & M. Schaefer Corp. v. C. Schmidt & Sons, Inc*., 597 F.2d 814 (2d Cir. 1979) (notes convertible into 29% of outstanding stock);
- AT&T acquisition of MediaOne Group (2002): MediaOne held 25% ownership of Road Runner and Time Warner Entertainment which competed with AT&T controlled Excite@Home (divestiture of interest in Road Runner and restrictions on AT&T's interactions with Time Warner)

[53] 476 F.2d 687, 690-91.

- TC Group (Carlyle) and Riverstone Holdings (2007) sought to acquire 22.6% interest in Kinder Morgan while also holding a 50% interest in Magellan Midstream Partners which competed with Kinder Morgan (FTC consent decree: remove agents from the Magellan boards; prohibited anything but a passive interest; no sharing of nonpublic information)

- *Crane Co. v. Harsco Corp*., 509 F. Supp. (D. Del. 1981) at 123 (5% interest and a proposed tender offer for an additional 15%);

- *United Nuclear Corp. v. Combustion Engineering, Inc.,* 302 F. Supp. (E.D. PA 1969) at 540 (21% interest);

- *Metro-Goldwyn-Mayer, Inc. v. Transamerica Corp*., 303 F. Supp. 1344, 1354 (S.D.N.Y. 1969) (slightly less than 17% interest);

- *Am. Crystal Sugar Co. v. Cuban American Sugar Co.*, 152 F. Supp. (D.C.S.D.N.Y.1957), aff'd, 259 F.2d 524 (C.A.2d Cir., 1958) at 392 (23% interest).

- *U.S. v. CommScope, Inc. and Andrew Corporation*, 72 Fed. Reg. 72,376 (2007) (proposed final judgment and competitive impact statement, requiring divestiture of 30% ownership interest);

- *Clear Channel Communications, Inc. and AMFM Inc.,* Merger Settlement, 66 Fed. Reg. 12,544 (2001)(proposed final judgment and competitive impact statement, requiring merging radio broadcast companies to divest acquired party's 29% equity interest in advertising company that competed with acquiring party's subsidiary);

- AT&T, 1999 U.S. Dist. LEXIS 16731 (final judgment) (TCI's 23.5% ownership interest in Sprint to be sold to an unrelated party prior to merger with AT&T);

- *United States v. Rockwell Int'l Corp*., 1980 U.S. Dist. LEXIS 16425 (W.D. Pa. 1980) (consent decree ordering divestiture of 29% interest);

- *Zeneca Grp., 127 F.T.C. 874 (1999)* (decision and order) (in consent decree resolving objections to the Astra/Zeneca merger, Zeneca required to divest 3% interest in company that competed with merger partner Astra);

D. Professor Elhauge's Harvard Law Review essay

As noted above, Professor Einer Elhauge argued recently that the Azar et al research is sufficient to establish a violation of Section 7 under current law. In light of our disagreement, and the fact that Posner et al rely so heavily on his analysis, it is worthwhile to examine his arguments in detail.[54]

Elhauge starts by arguing that under the operative paragraph of Section 7, stock ownership by an investor in multiple firms that "lessens the incentives of the firms to compete with each other in a

[54] Jon Baker published an earlier response to Prof. Elhauge's argument that takes a different approach than we do. Jonathan B. Baker, "Overlapping Financial Investor Ownership, Market Power, and Antitrust Enforcement: My Qualified Agreement with Professor Elhauge," 129 *Harvard L. Rev. Forum* 212 (2016).

sufficiently concentrated market" are illegal. For this proposition, he cites only the *Dairy Farmers* case. As we have seen above, that case – involving a 50% shareholder that had or shared control of National Dairy acquiring a 50% interest in the sole competing dairy – involved extreme facts, and is not remotely similar to institutional investors' existing common ownership in the airline industry in which individual institutional investors do not control any of airlines.

Professor Elhauge then goes on to argue that, under the merger guidelines, the enforcement agencies should investigate "any horizontal stock acquisitions that have created, or would create, a ΔMHHI of over 200 in a market with an MHHI over 2500, in order to determine whether those horizontal stock acquisitions raised prices or are likely to do so." Here, Elhauge assumes that HHI measures and MHHI measures are appropriately commensurate, and applies the existing guidelines without any adjustment, despite the fact that the Horizontal Merger Guidelines rely on HHI, not MHHI and do not equate the two. Moreover, for the reasons outlined above, equating MHHI with HHI in the common ownership context is problematic.

He then considers whether institutional investors' acquisitions would fall within the "solely for investment" exemption. He largely concedes that the investments would fall within the first clause, but argues that the fail the second requirement, namely: "and not using the same by voting or otherwise to bring about, or in attempting to bring about, the substantial lessening of competition." An acquisition of stock that is solely for investment but that fails this second condition would not be exempt from Section 7.

In arguing that the routine acquisition and voting of shares in concentrated industries falls outside of this provision, Elhauge relies heavily on pages 597-606 of *U.S. v. DuPont* (GM).[55] There, in stark contrast to the kinds of corporate governance activities that institutional investors engage in with portfolio firms, the Supreme Court reviews in detail the efforts that Du Pont executives made to use the stock holdings and leadership position (Pierre du Pont was the CEO of General Motors during the early years) to induce GM to purchase more Du Pont products. After reviewing this history, the court concluded that:

> "The fact that sticks out in this voluminous record is that the bulk of du Pont's production has always supplied the largest part of the requirements of the one customer in the automobile industry connected to du Pont by a stock interest. The inference is overwhelming that du Pont's commanding position was promoted by its stock interest and was not gained solely on competitive merit."[56]

In the context of the Du Pont opinion, the "use" of the stock went well beyond "normal" corporate governance engagement (such as voting the shares and engaging with management on strategic direction) to active involvement in the day to day management. As such, it is a weak precedent for the claim that institutional investors' ordinary corporate governance activities would deprive them of the "solely for investment" exemption.

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[55] *United States v. E.I. du Pont de Nemours & Co.*, 353 U.S. 586 (1957).

[56] DuPont(GM) at 605.

Professor Elhauge goes on to assert that "The solely-for-investment element has been found to be met *only* when the investor committed either to not vote its stock or (in what amounts to the same thing) to vote the shares in the same proportion as other shareholders vote, often with the additional requirements that the investor not nominate directors, have any representative on the board, or exert any other form of influence over management," (emphasis added) with citations to *Tracinda* and *Anaconda*. This is a bit of an overstatement. In *Tracinda*, the court found that Kerkorian, who controlled MGM, fell within the exemption without making any findings as to whether his commitment to vote his Columbia shares for management nominees and to use mirror voting was necessary. In *Anaconda*, Crane committed not to put representatives on the board but made no commitments on how it would vote its shares. Furthermore, because the DOJ and FTC rarely challenge acquisitions of less than 20%, we do not have many examples of their views on what sort of restrictions are necessary at this level of ownership to come within the "solely for investment" exemption.

In this connection, Elhauge goes on to argue that the routine corporate governance activities engaged in by institutional investors – engaging in direct discussion with corporate management and occasionally trying to influence corporate management by voting or threatening to vote against them – take the institutions out of the exemption. There is no legal basis for this claim. For the large diversified funds, there is no evidence that they engage with the managers of firms in concentrated industries on competitively sensitive topics. Moreover, with regard to engaging with them on issues of general corporate governance – what is the firm's succession plan? Do you have a strategic plan? –none of the partial ownership cases provides a legal basis for the claim that this degree of engagement is inconsistent with the "solely for investment" exemption.

Finally, Elhauge argues that "even purely passive investors are liable for actual anticompetitive effects." According to Elhauge, if the Azar et al research is correct, then "no matter how passive investors may be, they are still liable if their stock acquisitions or usage actually lessen competition." This cannot be correct as a matter of straightforward statutory interpretation. The language of the second condition of the exemption explicitly requires that the shares be *actively* employed: "and not *using* the same by voting or otherwise *to bring about*, *or in attempting to bring about*, the substantial lessening of competition."[57] To assert that purely passive holdings – buying the shares and "putting them in the drawer" -- fall outside of this exemption, as Elhauge does, is to ignore the plain statutory meaning. Elhauge points to no authority in support of this reading.

In a footnote, Professor Elhauge then suggests that, even if Section 7 does not apply, purely passive common ownership with likely anti-competitive effects would violate Sherman Act Section 1 as "a combination or agreement whose anticompetitive effects would constitute an unreasonable restraint of trade." He does not cite any authority for this, and identifying the concerted conduct that triggers Section 1 liability would be non-trivial. There is no evidence that institutional investors agree on any common investment plan (doing so would likely trigger a disclosure obligation under 13D). In fact, institutional investors pursue different approaches. Taking airlines as an example, as described above, index funds invest in all publicly traded airlines that appear in the relevant index, and are equally

[57] Emphasis added.

weighted. By contrast, active managers may proceed differently. As Table A above shows, the shareholder bases of the major airlines differ vary substantially with only Vanguard and BlackRock – who manage the two largest index funds – having roughly equivalent (market weighted) positions.

E. "Solutions" to a Non-Problem?

Eric Posner, Glen Weyl and Fiona Scott Morton move the discussion to the next stage. They take as given that Azar et al's results are convincing and that Elhauge's antitrust analysis is largely persuasive. They then ask how the law can provide safe harbors for institutional investors. Although we disagree with Posner and his co-authors on whether there is, in fact, an antitrust problem that needs to be solved, in this section, we consider how attractive Posner et al's safe harbors would be, and how they compare to what we take to be the existing statutory safe harbor, namely, "putting the shares in a drawer."

Posner et al state their preferred rule as follows:

> 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 or directly communicate with the *top managers or directors* of firms.

Stated this way, the rule in fact is comprised of two sub-rules that we will discuss separately.

1. Alternative #1: Invest in only one firm in a concentrated market

The first way to comply with the Posner et al proposed rule is for an institutional investor to buy only one of the major firms in a concentrated market. Thus, e.g., BlackRock could only buy one airline. Vanguard, likewise, could only buy one airline (with no limits on whether BlackRock and Vanguard invest in the same or different airlines). An investor that so limited itself would be free to engage fully in corporate governance activities without any concern for antitrust liability.

There are some obvious problems of implementation that they partially address. These include: How does one characterize multiproduct firms? How will the institutions know which are the markets in which they are only allowed to buy one firm? Which are the firms that they must choose from and who will decide? How will foreign firms be treated? Will investors have to divest once a market is deemed an oligopoly? How long will they have to do so? And so forth.

They also address a second set of issues, namely, whether such a rule will interfere with adequate diversification? Here, again, they have answers rooted in finance theory. They correctly point out that under standard finance theory, one can get the benefits of diversification among, e.g., large cap firms, through purchasing far fewer than all the firms in the S & P 500 index.

Our concern with this proposal is only partly related to the numerous and sundry problems of implementation, although they would be substantial. Our primary concern is that the Posner et al "solution" would destroy the index fund business model, an extraordinarily successful product for

investors that has provided a valuable and low cost means to save for retirement.[58] We have little doubt that their proposal will substantially increase the cost of "managing" index funds – a cost that will undoubtedly be borne by the investors in these funds. Moreover, to the extent that investors are interested in an index product, investing in only one firm in a concentrated market would not provide it. With one fund investing in, for example, JP Morgan Chase, United Airlines and Apple, while another fund owns Citi, Delta, and Microsoft (and numerous other combinations), actual results would vary widely and no longer track an index.[59] Diversification and tracking are two distinct concepts that serve different goals.

2. Alternative #2: Limit investments to 1% and buy whatever you want

An alternative means of complying with the Posner et al rule is to limit holdings to 1%. Institutional investors that met this constraint could invest in all of the firms in the industry. We note, however, that the rule as stated is ambiguous on whether index funds that limited their size to 1% would be free to engage in any sorts of governance activities they might choose.

On either interpretation, the effect of this "safe harbor" would be to impose a 1% cap on traditional index funds. From an index fund's perspective, this is not an appealing constraint. To make it effective, the larger institutional investors (BlackRock, Vanguard, and State Street) would each have to split themselves up into multiple independent units. From the investor's perspective, the most dramatic change would be that costs would go up. It is hard to imagine that each of these mini-Vanguards could continue to charge five basis points for ownership of shares in its S & P 500 Index fund.

3. Alternative #3: Index without limit and put the shares in a drawer

On our view, even if Azar et al are right in their claims of anticompetitive effects, diversified investors could comply with Section 7 by buying shares and then taking no involvement whatsoever in corporate governance ("putting the shares in a drawer"), use mirror voting in which shares are automatically voted in the same proportion as other shares, or pass through the votes to the beneficial owners.

This derives from our interpretation of the "solely for investment" exemption to Section 7, sketched out above. Index funds and other widely diversified investors that have never sought control and do not nominate directors must be the paradigmatic investor who buys shares "solely for investment." Governance passivity by institutional investors ("putting the shares in a drawer") will also satisfy the second part of the exemption: "and not using the same by voting or otherwise to bring about, or in attempting to bring about, the substantial lessening of competition." Because the statutory language requires taking some action – "using . . . by voting . . . to bring about or in attempting to bring about . . . " – pure passivity by institutional investors must fall within it. Otherwise nothing would.

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[58] Full disclosure: both of the authors have substantial retirement monies invested in Vanguard's Index 500 fund.

[59] Note that index funds are used for purposes other than diversification. For example, index funds or options tied to index funds can be used to hedge a portfolio. http://www.schwab.com/public/schwab/active_trader/trading_insights/options_etfs_global/how_to_hedge_your_portfolio.html

If this is correct as a legal matter, it is our sense that large institutional investors will prefer this option (certainly for index funds and likely for all of their investments), which allows them to continue the basic business model undisturbed, over the other alternatives. In doing so, Vanguard would still be able to comply with SEC requirements to disclose its voting guidelines and how it votes. The guidelines would be simple: we engage in mirror voting in order to avoid the risk of substantial antitrust liability. And, then, its reports of its proxy votes would be easily generated and entirely uninteresting.

Vanguard could likewise comply with the far more fragmentary suggestions from the Department of Labor and the SEC that they have a "fiduciary duty" to their investors to vote in an informed manner. Surely, if doing so were to expose the funds and their investors to substantial risk of antitrust liability, including, according to Elhauge, treble damages, avoiding that risk by not voting (or mirror voting) would comply with whatever fiduciary duties Vanguard has.

4. Alternative #4: Index through derivatives

A final alternative would be for institutional investors to construct their optimal portfolio for concentrated markets by using derivatives. Derivatives, unlike shares, do not carry votes so, under Posner et al's approach, would be exempt.

Whether this would be as attractive to large institutional investors as Alternative #3 would depend on cost. For large funds investing in large companies, adequate capacity may be lacking. Also, to the extent that the counterparties accumulated large stock positions in order to hedge, a crucial question would arise -- how they would vote those shares?

5. Implications for Corporate Governance

Assume that we are right in how diversified investors are likely to respond to the alternatives offered by Posner et al by adopting Alternatives #3 or 4. What would the consequences of this be for corporate governance?

The first effect would be to push many broadly diversified institutional investors, including all index funds, towards passivity. Recall that competition among index funds is not over the performance of the index, but over cost, tracking errors, and customer service. This means that their financial incentive to spend money on corporate governance (especially firm specific governance) is weaker than for "highly engaged" investors that make large undiversified investments in particular firms.[60] Thirty years of efforts have convinced the widely diversified, long term institutions to engage in limited corporate governance activities, but, with relatively weak financial incentives, it will not take much antitrust risk to induce these firms to return to the status quo ante, fire their corporate governance groups, and thereby reduce their costs.

A return to passivity by the widely diversified funds will empower "long only" shareholders. This group would include the actively managed mutual funds such as T. Rowe Price and the activist hedge

[60] Edward B. Rock, "The Logic and (Uncertain) Significance of Institutional Shareholder Activism," 79 *Geo. L. J*. 445-506 (1991).

funds. By not voting or adopting mirrored voting, the diversified institutions would significantly magnify the impact of both sorts of investors.

Moreover, and even more concerning, rather than having to convince the large diversified institutional investors to support them in contests with management, they would gain their support automatically through mirror voting. If this happened, the emerging equilibrium – in which the diversified institutional investors are the de facto "deciders" in corporate law controversies between activists and managers – would be nipped in the bud.[61] For those concerned that activist shareholders already produce a short term bias, eliminating the paradigmatic long term holders from concentrated markets would exacerbate what some already view as a serious problem.

Can we design guidelines, rooted in current economic analysis and law, which will allow institutional investor involvement in corporate governance to develop without exposing consumers to anticompetitive effects? It is to this task that we now turn.

III. Looking Forward: Antitrust Guidelines for Common Ownership

Although we are unconvinced by Azar et al's theoretical and empirical analyses and disagree with Elhauge's legal analysis, they have identified an interesting and important issue. With the ever increasing levels of institutional investor ownership, with the increasing concentration among institutional investors, and with increasing institutional investor involvement in corporate governance, it is a good time to begin to think through the implications for antitrust. In this section, we sketch out antitrust guidelines for institutional investors.

We start from the recognition that common ownership can raise significant competitive concerns. As our earlier discussion points out, were Warren Buffett to propose acquiring 51% of the major airlines, there would be a substantial risk of anticompetitive effects, and we are certain that such an acquisition would and should be prohibited under Section 7 of the Clayton Act.

A. Standard Cross Ownership

The partial cross ownership cases discussed earlier provide the basis for the current regulatory treatment which we fully support: when a firm buys shares in a competing firm, that can affect both unilateral and coordinated conduct, and enforcement authorities are appropriately sensitive to these effects. When a firm acquires a controlling interest in a competitor, that is typically treated as equivalent to a merger even if the ownership if less than 100%.

In these partial ownership situations, transactional planners sometimes try to design governance structures that purport to eliminate the ability of the acquiring firm to exercise control. Thus, Northwest Airlines' acquisition of around 14% of the outstanding shares that carried in excess of 50% of the voting power in Continental Airlines was subject to a governance agreement that, according

[61] Marcel Kahan & Edward Rock, "Anti-Activist Poison Pills," working paper (2017).

to Continental and Northwest, prevented Northwest from controlling or influencing Continental thus rendering the acquisition innocuous. The Department of Justice took a contrary view , arguing that there would remain a long-term competitive concern.[62] In cases such as this, the key questions are whether the cross ownership has a significant effect on unilateral behavior and whether, despite the governance agreement, there is sufficient influence or control of the competitor to threaten coordinated effects.

As the earlier discussion of enforcement actions and consent decrees shows, this is not a new issue. The enforcement authorities focus on the magnitude of the ownership interest in evaluating the unilateral effects, and the degree of influence or control in evaluating the coordinated effects.

B. Common Controlling Shareholders

It is a small step from standard cross ownership cases to cases in which competitors have a common controlling shareholder. The easiest case is when a controlling shareholder of Firm A proposes acquiring a controlling interest in competitor Firm B. Such an acquisition should be treated the same as a proposed merger because the anticompetitive potential is identical.

In the DFA case, discussed above, the first version of the transaction had this character. DFA owned a 50% interest in National Dairies and, through various control rights, had at least shared control over National Dairies. When DFA subsequently proposed acquiring Southern Belle, a competing dairy, the Antitrust Division analyzed this as if it were a merger of National Dairies and Southern Belle. After the government challenged the acquisition, DFA changed the operating agreement in Southern Belle to make the shares non-voting and to limit DFA's other control rights.

As in the standard cross ownership cases involving governance agreements, the question often becomes whether the governance structures adopted do, in fact, insulate Firm B from control or influence of acquiring Firm A.

C. Common Ownership without Control

The same principles should apply in the common ownership context.

1. How large a stake is needed for control?

When an investor is a controlling shareholder of Firm A, that will affect the competitive analysis (and move the case into the analysis under section A or B above). How large a percentage of stock is necessary for control?

Here, the law treats control differently in different contexts. Under Delaware corporate law, control is presumed when a shareholder has more than 50%.[63] Between 40-50%, there are cases

[62] See, e.g., "Competition in the Airline Industry," Testimony of A.A.G. Joel I Klein before the Senate Committee on Commerce, Science and Transportation, March 12, 1999.

[63] Marcel Kahan and Edward Rock, How to Prevent Hard Cases from Making Bad Law: Bear Stearns, Delaware, and the Strategic Use of Comity, 58 Emory L. J. 713, 743 (2009).

coming out both ways, depending on a variety of factors including the holdings of other investors, and whether the shareholder has representation on the board.[64] In the corporate context, the primary implication of control is with regard to the regulation of conflicts of interest that may injure non-controlling shareholders.

In federal Securities Regulation, "controlling person" liability under 1933 Act Section 15 and 1934 Act Section 20(a) is a species of culpable participation liability imposed on firms and individuals and thus serves both compensatory and deterrence goals. Majority ownership coupled with the ability to appoint directors is typically sufficient. Minority ownership, by contrast, often is not: "courts have dismissed control person claims against companies that owned a 22-percent [fn. 4] and a 30-percent[fn. 5] interest in the primary violator, and claims against defendants who owned 38 to 50 percent of the stock of the primary violator and also placed designees on the primary violator's board [fn. 6]."[65]

The kind of control relevant for antitrust may be different from the relevant degree of control in corporate law or securities regulation. Given the focus on facilitating coordinated conduct, board representation – even just one director – will loom large. It is certainly possible for a firm with a share ownership substantially less than 50 percent, and arguably as low as 20 or 25 percent, to place individuals on a board and through board representation, even if perhaps contrary to fiduciary duties to shareholders, allow for substantial influence as the result of successful bargaining among board members. Such was the argument put forward when the Department of Justice threatened to sue to block Primestar, Inc. (a consortium of five cable television companies) from acquiring a satellite television provider.[66] The deal was eventually abandoned. Generally, as our earlier discussion shows, antitrust authorities have not challenged acquisitions of less than 20% by a competitor especially when there is no board representation.

2. A Proposed "Safe Harbor" for <15%, No Board Representation, and "Normal" Corporate Governance Activities

a. The "Safe Harbor"

Based on these principles, we propose a "safe harbor" for investors who hold 15% or less, who do not have board representation, and who engage in no more than "normal" corporate governance activities. We believe that this approach strikes the right balance between antitrust and corporate governance concerns. Investors who fit into this safe harbor pose no antitrust risk. A safe harbor is necessary because the risk of antitrust litigation threatens to chill the fragile involvement in corporate governance that has been carefully nurtured over the last two decades.

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[64] *Id*.

[65] https://www.law360.com/articles/272035/control-person-liability-tips-for-investment-firms Citing [4] *In re Deutsche Telekom*, No. 00 CIV 9475 SHS, 2002 (S.D.N.Y. Feb. 20, 2002); [5] *In re Flag Telecom Holdings Ltd. Sec. Litig.*, 352 F. Supp. 2d 429 (S.D.N.Y. 2005); and [6] *Zishka v. American Pad & Paper Co.,* No. CIV. A. 3:98-CV-0660-M, 2001 (N.D. Tex. Sept. 28, 2001), aff'd, 72 Fed. Appx. 130 (5th Cir. 2003).

[66] See, Daniel L. Rubinfeld, "The Primestar Acquisition of the News Corp./MCI Direct Broadcast Satellite Assets, 16 *Review of Industrial Organization* 193 (2000).

b. **What are "Normal Corporate Activities"?**

Over the last twenty years, a huge amount of attention has been devoted to getting institutional investors involved in corporate governance. To a large degree, these efforts have been successful. Now, the largest institutional investors have substantial proxy voting groups that take their responsibilities as shareholders very seriously. Out of these efforts, a rough consensus of "best practices" has emerged.

There are several elements to the current approach. First, it complies with applicable regulations. Thus, in response to SEC rulemaking,[67] institutional investors have adopted and publicized "proxy voting policies" and report how they vote. These voting policies tend to be quite comprehensive and to signal to corporate management the investor's views on various fundamental issues of corporate governance. Thus, e.g, with regard to governance, Vanguard has announced that "The funds will generally support proposals to declassify existing boards (whether proposed by management or shareholders), and will block efforts by companies to adopt classified board structures in which only part of the board is elected each year."[68]

Second, large institutional investors spend a substantial amount of time meeting with managers of portfolio companies. As Vanguard has explained

> Although proxy voting at shareholder meetings is important, it's only one component of our corporate governance program. We believe that engaging in direct discussions with the leaders and directors of the companies in which the Vanguard funds invest is a particularly effective way for us to advocate for our views. During our conversations with corporate leaders and board members, we strive to provide constructive input that will better position companies to deliver sustainable value over the long term for all investors.
>
> During the past 12 months, we conducted over 800 engagements with the management or directors at companies of different types and sizes, encompassing nearly $1 trillion in Vanguard fund assets. Our engagement volume represents an increase of 19% over the previous 12-month period and 67% over the past three years. Though we engage with companies for a variety of reasons, we are most likely to engage because we are preparing to vote at the shareholder meeting, an event has occurred at the company that could affect stock value, or our research has uncovered a specific governance concern that is not on the ballot.
>
> ***
>
> Our engagement efforts include conference calls or in-person meetings with executives and/or directors, formal letters requesting change, and participation in broader initiatives advocating

[67] Rock, Institutional Investors in Corporate Governance, Oxford Handbook at Section 7.2, 7.3. See, e.g., 17 CFR 275.206(4)-6 - Proxy voting.

[68] https://about.vanguard.com/vanguard-proxy-voting/voting-guidelines/

for change. Direct conversations with company managers and directors were the primary form of engagement. [69]

Vanguard, and many other institutional investors, structure their engagement around basic, fundamental principles including "board composition and governance, board responsibilities, shareholder rights, transparency, succession planning, executive compensation, and responsibilities of asset managers such as Vanguard."

Many of these principles have been summarized in a widely circulated summary of principles applicable to corporate governance, asset management and corporate behavior, "Commonsense Corporate Governance Principles" signed by the CEOs of 13 majors corporations and investors.[70] These principles include a role for asset managers, including urging active engagement with companies, raising critical issues, and evaluating the "board's focus on a thoughtful, long-term strategic plan and on performance against that plan."

Mary Jo White, while chair of the SEC, likewise pushed for engagement between long term investors and firms.[71]

In an important article describing current modes of engagement, Matt Mallow and Jasmin Sethi of Blackrock describe a variety of styles, ranging from "light" engagement to more intensive modes. As they point out, engagement has become more structured and standardized through means such as the "SDX Protocol."[72] In identifying engagement topics, SDX uses, as examples: board composition and leadership; board oversight of capital allocation; executive succession; takeover defenses; management performance.

c. The Fit with Current Law

These notions of "normal corporate governance activities" fit comfortably within the "passive investment" concepts in federal securities regulation. Under Rule 13D, promulgated pursuant to Section 13(d) of the Securities Exchange Act of 1934, investors that acquire more than five percent are obligated to disclose their holdings on Schedule 13D within ten days. Certain categories of shareholders that hold more than 5% can file the substantially less burdensome 13G "short form" beneficial ownership disclosure rather than the full 13d disclosure.[73] First, "qualified institutional investors" including

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[69] https://about.vanguard.com/vanguard-proxy-voting/update-on-voting/

[70] http://www.governanceprinciples.org/

[71] Mary Jo White, Chair, U.S. Sec. & Exch. Comm'n, Building Meaningful Communication and Engagement with Shareholders (June 25, 2015), http://www.sec.gov/news/speech/building-meaningful-communicationand-engagement-with-shareholde.html.

[72] http://www.sdxprotocol.com/what-is-the-sdx-protocol/

[73] It is less burdensome in several dimensions. First, rather than being filed within ten days of acquiring the shares, qualified investors need only file within 10 days of the end of the month of the triggering event requiring the filing, and must amend the Schedule 13G each year within 45 days of the end of the calendar year to report changes. If, however, a 13G filer acquires in excess of 10% of the stock, an amended 13G must be filed within 10 days of the acquisition. Second, it requires substantially less information. Third, Rule 13d-2 requires that 13D filers (but not 13G filers) promptly amend the filing when plans change or when the filer acquires or divests 1% or more. .

registered broker dealers, registered investment companies and registered investment advisors, who acquired the securities in the ordinary course of business and not with the purpose nor with the effect of changing or influencing the control of the issuer may and often do take advantage of this option. Second, 13G filing is also available to "passive investors" defined as an investor that "(i) has not acquired the securities with any purpose, or with the effect of, changing or influencing the control of the issuer, or in connection with or as a participant in any transaction having that purpose or effect, other than a qualified institutional investor; and (ii) is not directly or indirectly the beneficial owner of 20% or more of the class."[74]

Mutual funds typically file 13Gs as QIIs, while hedge funds that have a genuine intent not to seek to change or influence control take advantage of the passive investor exemption. By contrast, hedge funds with a history of activism, and that have even an inkling that a passive engagement may eventually turn active, are well advised to file a 13D from the outset because of the difficulties of establishing when the "intent" shifted.

At least for QIIs, filing a 13G is consistent with engaging in substantial shareholder activism that falls short of a control contest.[75] Such activism could, e.g., include urging management to sell assets or pay a large dividend or change executive compensation, and pushing for the elimination of poison pills and staggered boards.

Although the federal securities regulation concepts of "solely for investment" ownership have kept up with changes in institutional investor involvement in corporate governance, the antitrust standards have not. The Hart Scott Rodino Act requires advanced notice, and approval, before acquiring shares above a relatively low (annually adjusted) threshold.[76] Like Clayton Act Section 7, there is a "solely for investment" exemption for HSR notification that exempts "acquisitions, solely for the purpose of investment, of voting securities, if, as a result of such acquisition, the securities acquired or held do not exceed 10 per centum of the outstanding voting securities of the issuer."[77]

Under HSR, investors meet this standard only if "the person holding or acquiring such voting securities has no intention of participating in the formulation, determination , or direction of the basic business decisions of the issuer."[78] As institutional investors have become more active in corporate

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[74] Rule 13d-1(c).

[75] Amendments to Beneficial Ownership Reporting Requirements, File No. S7-16-96, SECURITIES AND EXCHANGE COMMISSION, INTERNATIONAL SERIES Release Nos. 1111, 34-39538; 17 CFR Part 240; RIN 3235-AG81Adopting Release at p. 10, 1998 SEC LEXIS 63, *33.

[76] As of January 2017, that threshold is $78.2 million. https://www.ftc.gov/news-events/blogs/competition-matters/2016/01/hsr-threshold-adjustments-reportability-2016. In addition to the "size of transaction" test, there is also a "size of person" test that is applicable in smaller acquisitions (transactions between $50 million and $200 million). FTC Hart-Scott-Rodino Premerger Notification Program, Introductory Guide II (revised September 2008) available at https://www.ftc.gov/sites/default/files/attachments/premerger-introductory-guides/guide2.pdf .

[77] 15 U.S.C. Section 18A (a)(c)(9); 16 CFR Sections 802.9 and 802.64.

[78] 16 C.F.R. § 801.1(i)(1). See, also, Section 802.9, example 3 ("After the acquisition in example 1, acquiring person "A" decides to participate in the management of issuer X. Any subsequent acquisitions of X stock by "A" would not be exempt under section 7A(c)(9)."). Under current interpretations, having a board representative is inconsistent

governance, the FTC and some of its representatives have suggested that such action is consistent with the "solely for investment" exemption. Thus, in a widely followed 2002 speech Marian Bruno, assistant director of the Premerger Notification Office, Bureau of Competition, FTC, suggested that "[M]any such institutional investors, who served as the model for 'passive' investor behavior when the Rules were first adopted, have become routinely more active in seeking to influence the business decisions of the issuers of voting securities. Some of these large investors have sought to rely on the 'investment only' exemption despite seeking to influence the management decisions of an issuer. This behavior has included both direct and indirect attempts by investors to persuade management to put the issuer up for sale. Such activity is inconsistent with the purely passive intent necessary to rely on the exemption."[79]

The tension between corporate/securities and antitrust conceptions of "passive investment" has recently come to a head in the enforcement action against ValueAct in connection with the proposed merger between Baker-Hughes and Halliburton. ValueAct, an activist hedge fund that often seeks board representation,[80] acquired shares in both companies and actively encouraged both boards to complete the merger. It did not file under HSR on the grounds that its purchases were "solely for investment." The U.S. Department of Justice filed a civil suit alleging a violation of HSR reporting requirements, and argued that ValueAct did not qualify for the "solely for investment" exemption because it "used its position to influence decisionmaking at both companies."[81] In the settlement in which ValueAct agreed to a civil penalty of $11 million, ValueAct agreed not to engage in a variety of contacts with the boards of either company without seeking HSR clearance:

> (A) Propose to an Officer or Director of the Issuer that the Issuer merge with, acquire, or sell itself to another Person;
>
> (B) Propose to an Officer or Director of any other Person in which the Defendant owns Voting Securities or an equity interest the potential terms on which that Person might merge with, acquire, or sell itself to the Issuer;

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with the exemption. Billal Sayyed, A "Sound Basis" Exists for Revising the HSR Act's Investment-Only Exemption, *The Antitrust Source* (April 2013) at TAN 24.

[79] See, also, John M. Sipple, Jr., Chief, Fed. Trade Comm'n Premerger Notification Office, Remarks Before the N.Y. State Bar Association, Antitrust Section 18 (Jan. 16, 1990) ("A passive investor can meet with management to gather information about its investment and it can vote the stock it holds," but "if a significant shareholder makes suggestions to the issuer's management that it undertake certain actions, whether or not they require shareholder approval, such conduct may be construed as evidencing an intent inconsistent with an investment only intent.").

[80] See, e.g., http://www.forbes.com/sites/antoinegara/2015/01/05/hedge-fund-seeks-board-seats-transparency-at-governance-specialist-msci/#1781a9232bd0; https://www.theguardian.com/business/2016/feb/17/rolls-royce-ready-to-give-activist-investor-valueact-a-board-seat.

[81] Julia La Roche, The $19 billion hedge fund targeted by the government is fighting back, Business Insider, April 4, 2016, quoting Assistant Attorney General Bill Baer. [Alternative cite: DOJ Release, ValueAct Invested Over $2.5 Billion in Halliburton and Baker Hughes, Failed to Notify Antitrust Authorities, Wrongly Claiming No Intent to Influence Companies' Business Decisions ("ValueAct's substantial stock purchases made it one of the largest shareholders of two competitors in the midst of our antitrust review of the companies' proposed merger, and ValueAct used its position to influence decision-making at both companies.")]

(C) Propose to an Officer or Director of the Issuer new or modified terms for any publicly announced merger or acquisition to which the Issuer is a party;

(D) Propose to an Officer or Director of the Issuer an alternative to a publicly announced merger or acquisition to which the Issuer is a party, either before consummation of the publicly announced merger or acquisition or upon its abandonment;

(E) Propose to an Officer or Director of the Issuer changes to the Issuer's corporate structure that require shareholder approval; or,

(F) Propose to an Officer or Director of the Issuer changes to the Issuer's strategies regarding the pricing of the Issuer's product(s) or service(s), its production capacity, or its production output.

This settlement has raised concern not so much because of the particular case – the Baker-Hughes/Halliburton transaction raised serious antitrust concerns and was ultimately abandoned after opposition from US and EU antitrust regulators [82]– but to the extent that it represents the government's current view of conduct inconsistent with the "solely for investment" exemption to HSR. Many of these actions are just the sort of things that responsible institutional investors routinely discuss with the managers of portfolio firms, including suggestions to eliminate a staggered board (item E), comments on the wisdom or lack of wisdom of a proposed merger or the merger price (items B, C and D), and suggestions made to the board that increasing capacity might be ill advised (item F). The SEC was sufficiently concerned by the ValueAct settlement that it modified its Compliance and Disclosure Interpretations to clarify that not qualifying for the HSR "solely for the purpose of investment" exception due to a shareholder's efforts to influence management on a particular topic does not, by itself, disqualify the shareholder from reporting on 13G.[83]

To the extent that the ValueAct settlement represents the current thinking on the limits to the "solely for investment" exemption, it is overbroad. Indeed, given the current modes of engagement between large institutional investors and corporate management described below, if the conduct identified in ValueAct is in fact inconsistent with the exemption, then all of the large institutional investors are currently in continuous daily violation of HSR as they buy additional shares in their index funds. It is hard to imagine that the FTC would like, or could process, the number of HSR filings that would result from such an approach, taken seriously. Because of this, we prefer to think of the ValueAct settlement as a product of its special facts.

3. Conduct outside the "Safe Harbor"

Nothing we say above should be construed to suggest that we think that conduct outside of the safe harbor is necessarily anticompetitive. Rather, such conduct must be analyzed under Clayton Act Section 7 principles.

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[82] http://www.reuters.com/article/us-bakerhughes-m-a-halliburton-idUSKCN0XS1KW

[83] https://www.sec.gov/divisions/corpfin/guidance/reg13d-interp.htm (July 14, 2016), Question 103.11.

In our view, even if BlackRock or Vanguard would end up crossing the 15% ceiling on the safe harbor, it seems unlikely that the stock acquisitions would violate Section 7 even in concentrated markets. But that, of course, is a question for another day.

D. Competitively Dangerous Conduct

As important as the creation of safe harbors is, it is equally important for institutional investors to make sure that they do not act, wittingly or unwittingly, in an anticompetitive way. Certain types of conduct pose anti-competitive dangers even if an investor has less than 15%.

Here, the closest analogy is the antitrust treatment of trade associations.[84] The clearest concern is with the exchange of price or other sensitive business data among competitors. It is entirely possible that a shareholder could act as a "cartel ringmaster".[85] Suppose, e.g., a representative of a shareholder that owned 7% of each of the major airlines "lobbied" airlines to reduce capacity or raise prices, explicitly or implicitly assuring each airline that it was pressuring its competitors. This would pose a serious anticompetitive danger, and would expose his or her employer to substantial risk of liability.

The Cartel Ringmaster scenario can play out in other ways. For example, imagine an investor who pushes firms in a concentrated industry to adopt compensation contracts that give each CEO a stake in the financial performance of a competitor. Once one is sensitive to the antitrust concerns, the legal risk is obvious.

More generally, for investors that hold positions in competing firms, there should be substantial antitrust training of the corporate governance professionals – both members of the proxy voting groups as well as portfolio managers -- who interact with portfolio firms so that they will know how to avoid discussing competitively sensitive topics. Topics that may be innocuous when an investor holds only one company may become problematic and legally risky when investors own shares of competitors and engage with both.

This danger carries over to the managers of portfolio firms, including both executive officers and investor relations professionals, in their relations with investors. In concentrated markets, firms will need to be aware that some of their investors will hold investments in competing firms, and avoid discussing competitively sensitive topics like prices. Communicating this sort of information may be evidence of price fixing in violation of Section 1. That said, this should not require much change, if any, in behavior for firms in concentrated markets. Such firms already face antitrust risk from coordinated price increase and, when adequately counseled, already avoid any public discussion of such issues.

Conclusion

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[84] https://www.ftc.gov/tips-advice/competition-guidance/guide-antitrust-laws/dealings-competitors/spotlight-trade

[85] Thomas G. Krattenmaker and Steven C. Salop, Anticompetitive Exclusion: Raising Rivals' Costs to Achieve Power over Price, 96 Yale L. J. 209, 238-40 (1986), citing the famous example of F. R. Gadd. *American Column & Lumber Co. v. United States*, 257 U.S. 377, 401 (1921).

Can common ownership on concentrated markets have anti-competitive effects? Absolutely. Is there compelling evidence that common ownership by diversified institutional investors currently have anti-competitive effects? Do the existing holdings by diversified institutional investors in concentrated markets violate Section 7 of the Clayton Act? Should such investors be forced to hold only one firm in any concentrated industry? No. In this article, we have considered the antitrust attack on widely diversified institutional investor ownership and found it lacking.

But the authors of this provocative line of argument have done a valuable service in raising the antitrust issue. Moving forward, it is appropriate for scholars, practitioners, institutional investors, and regulators to think about antitrust guidelines for diversified shareholders. We have sketched out and defended a first cut, but more work needs to be done.