Welcome to the Fall 2017 edition of the *Cartel & Joint Conduct Review*. This issue examines several recent developments in joint conduct jurisprudence and enforcement.

It has long been recognized by antitrust practitioners that partial cross-ownership among firms can potentially harm competition, and those practitioners have settled on a framework that defined the avenues through which cross-ownership could violate the antitrust laws. However, recent economic research has challenged the traditional approach. Eric R. Emch and David C. Kully explore the state of law and economics surrounding partial cross-ownership in *Partial Cross-Ownership and Antitrust: Putting the Current Debates in Context*. The article explores how the antitrust agencies and courts have applied the traditional framework, examines recent empirical work, and discusses challenges and legal uncertainties that the enforcement agencies would face in an action to block small, partial acquisitions by institutional investors.

The Third Circuit’s *Valspar Corp. v. E.I. DuPont de Nemours and Co.* made clear that a plaintiff in an oligopoly case must provide inferences that show that the alleged conspiracy is “more likely than not.” Lisa Danzig examines the dueling majority and dissenting opinions to help answer a fundamental question: what does a plaintiff...
alleging price-fixing in an oligopoly need to show to move the ball across the goal line and advance its case beyond summary judgment?

Next, the issue turns to a recent development in joint conduct jurisprudence following a decision by an Ohio Court to dismiss a per se Section 1 claim brought by a small hospital that alleged that a joint venture of hospitals had organized a group boycott and restricted its access to patients and physicians. Juliette Caminade and Samuel Weglein of Analysis Group take on the decision and unpack the legal and economic concepts.

Earlier this year, the Transportation and Energy Industries Committee hosted a committee program that explored the recently enjoined acquisition of Waste Control Specialists by Energy Solutions. In this issue, Maria Garibotti from Analysis Group provides Joint Conduct Committee members with an on-point summary of this fascinating panel, which held a lively discussion that touched on the interplay between economic evidence and ordinary course documents, the boundaries of the failing firm defense, and the procedural constraints that may be found outside the District Court of DC.

We are also pleased to resume our Joint Conduct Committee spotlight feature, in which we publicize the stellar contributions that our committee members are making to the Section and to the larger antitrust community. This edition features the interview of Senior Counsel to the Assistant Attorney General for the U.S. Department of Justice Antitrust Division, Bryson Bachman, by our own Kellie Lerner.

We wish you and your families a healthy and happy holiday season.
Partial Cross-Ownership and Antitrust: Putting the Current Debates in Context

by Eric R. Emch and David C. Kully

Eric Emch is a Partner at Bates White Economic Consulting. David Kully is an antitrust partner at Holland & Knight LLP.

I. Introduction

It has long been recognized by antitrust practitioners that partial cross-ownership among firms can potentially harm competition. In response to this possibility, economists and lawyers historically settled on a framework that defined the specific avenues through which partial cross-ownership can reduce competition and thereby violate the antitrust laws. The basic intuition parallels the treatment of unilateral and coordinated effects in the Horizontal Merger Guidelines. If an entity that has some control over a firm can claim a portion of the profits of a competitor, its financial incentive to compete aggressively with that competitor is diminished (unilateral effects). And if two or more firms are able to share competitively sensitive information through, for instance, presence on each other’s executive boards or management committees, their ability to organize and monitor collusion may increase (coordinated effects). Either avenue could form a basis for harm to competition that violates the antitrust laws.

Recent economic research, however, presents a challenge to this framework. This research observes that large institutional investors often own small stakes in a number of competing firms and purports to show that in certain industries – the studies have focused on airlines and banking in particular – this overlapping ownership structure has led to diminished competition and anticompetitive outcomes. Unlike under the traditional framework, the small stakes held by each institutional investor offer it no obvious ability unilaterally to dictate how vigorously firms compete with one another and no formal access to competitively sensitive information.

The results of these recent studies challenge how antitrust enforcers have traditionally treated cross-ownership. The effects of cross-ownership that these studies purport to show do not depend on the existence of a controlling stake, a board seat, or even a sizable share of ownership. While these studies focus on empirical findings and are more agnostic about the exact mechanisms that cause this harm to come about, they posit that informal levers of control and access to information stemming from small ownership stakes are sufficient to impose either unilateral or coordinated harm.

Before abandoning or radically rethinking the traditional approach to determining how cross-ownership may lead to anticompetitive outcomes in order to accommodate this new research, or contemplating revising the antitrust laws to better reach particular ownership patterns, it makes sense to better understand the current state of economic thinking and the current legal context relating to cross-ownership, and specifically how the recent research challenges that thinking.


3 See Azar et al., Anti-Competitive Effects of Common Ownership, supra note 3, at 31-37.
We lay out in the discussion that follows what we currently know and do not know about these issues. Section II discusses the traditional economic understanding of the effects of cross-ownership. Section III explains how the antitrust agencies and courts have applied this understanding in enforcement actions targeting anticompetitive cross-ownership, focusing on what past enforcement might tell us about the possibility of extending enforcement to reach the issues addressed in the new studies. Section IV summarizes recent empirical work on the impact of large institutional investor cross-ownership of shares of competitors in concentrated industries, discusses criticisms of that work, and describes the theoretical mechanisms the authors posit to explain the results they observe. Section V notes challenges and legal uncertainties that the enforcement agencies would face in an action to block small, partial acquisitions by institutional investors. Section VI concludes.

II. Traditional Economics of Partial Cross-Ownership

Consider two firms that compete in a relevant antitrust market that become connected through partial cross-ownership. That connection could be, for instance, through a private equity firm that buys stakes in them. Alternatively, it could come from one firm buying a limited stake in a competitor. Under the traditional antitrust approach, such a change in ownership could lead to anticompetitive outcomes through one of two basic channels.

As with horizontal mergers, theories of harm can be divided into unilateral effects and coordinated effects. Though partial ownership stakes can have impacts under each of these channels, the way in which the limited stake leads to anticompetitive outcomes can differ somewhat from traditional merger analysis.

Partial ownership can create unilateral incentives to raise prices by lowering the “cost” of a price increase, because the partial owner can expect to recapture some otherwise lost profits from its ownership stake in a competitor. In contrast to a complete acquisition, the unilateral effects of a partial acquisition may be muted, and can be markedly asymmetric, applying to only one of the two firms associated by cross-ownership. Below we will differentiate between “one-sided” and “two-sided” unilateral effects depending on whether the incentives of one or both firms are affected by the partial ownership.

The analysis of coordinated effects under partial cross-ownership is similar to that under a full acquisition, though details may differ. Assessing the possibility of coordinated effects from horizontal mergers traditionally involves evaluating a series of “checklist” factors to determine whether an industry is susceptible to anticompetitive coordinated conduct in general, and then assessing whether the transaction changes one of these checklist factors in a way that makes coordination more likely. The “checklist” factors generally involve assessing whether the industry exhibits transparency (in prices, quantities, etc.), homogeneity (in firms or products), or certainty (of demand or supply), and whether it is characterized by high concentration among sellers and low concentration among buyers. We will call the impact of partial cross-ownership on the checklist factors “coordinated effects Avenue A.”

The checklist approach, which has been criticized for its ad hoc nature and its vague predictions, can be supplemented by considering the impact of an acquisition of a financial stake in a competitor on the behavior of firms under a particular game theory model of collusion. Under this model, firms play a “collusive” strategy each period and share monopoly profits until a firm defects from the collusive strategy, at which point the game reverts to the competitive equilibrium. The collusive equilibrium can be sustained as long as the profits one firm could earn by

---


6 See, e.g., id. at 67.
deviating from collusion – a short-term increase in profits until deviation is detected, followed by a long-term decline in profits as firms revert to the competitive equilibrium – do not exceed its profits from maintaining collusion.7

A financial stake in a competitor can have two potentially conflicting effects on this game. On the one hand, it might make defection from collusion less likely because the benefits a defecting firm would expect to receive would be diminished by sales taken from the other firm in which it owns a stake. On the other hand, the potential unilateral effects of the cross ownership would make the post-defection equilibrium less competitive (and with higher prices) than before the transaction producing the partial cross-ownership. This means that the “punishment” that accompanies detection would be less severe, making defection more likely.8 Whether the partial ownership stake makes collusion more or less likely overall under this framework is indeterminate in general, though one can make more specific predictions by incorporating further data and assumptions. We will call this approach to assessing the competitive effects of cross-ownership “coordinated effects Avenue B.”

As summarized in Figure 1, the traditional economic framework for evaluating competitive harm from partial cross-ownership sees potential harm coming from all cross-ownership scenarios except one – the case of a single entity owning a silent financial interest in two competing firms. In that case, there is no mechanism that would allow the partial owner to change the behavior of the firms in which it owns a stake, even if it had an incentive to do so.

Though some studies of the economic effects of partial ownership have allowed for the possibility that small ownership stakes conveyed some influence over the decisions of firm managers,9 in practice, as discussed in Section III below, antitrust enforcers have generally assumed that owners of small stakes with no formal control mechanisms do not meaningfully influence the actions of the firm.

The authors of the new research on cross-ownership would agree that completely “silent” cross-ownership raises no competitive concerns, but would argue that large institutional investors are not necessarily silent, even if their ownership stakes are relatively small and confer no formal mechanisms of control. To the extent that their observations depend on institutional owners finding some ways to exert some measure of limited control – and are thus not “silent” – the new studies do not require new economic theories to explain why such cross-ownership may be anticompetitive. But they do require an explanation of why small ownership stakes with no formal mechanisms of control should not be considered silent. This issue will be discussed in more detail in Section IV.B. First we describe in more detail the way in which cross-ownership that involves at least some control may lead to anticompetitive outcomes under traditional antitrust analysis.

7 “Coordinated effects” also includes parallel accommodating conduct that may be individually rational for each firm and not motivated by retaliation or deterrence. See Horizontal Merger Guidelines, supra note 2, at 24-25. Such parallel accommodating conduct could also be affected by partial cross-ownership but that link has not been explored deeply in the literature.


II.A. Unilateral Effects of Cross-Ownership

The most thoroughly examined and easily understood economic effect of a cross-ownership stake is its direct impact on a firm’s unilateral pricing incentive. When a firm considers increasing its prices, it balances the increased profits it would earn from the customers it retains against the profits it would lose when other customers switch to another supplier. After obtaining a financial stake in a competitor, a firm recaptures a share of the formerly lost profits, since some lost customers would go to the firm in which it now has a stake. This reduces a firm’s “cost” of raising its price. Under most models of competition, this results in a firm raising prices if it owns a financial stake in a competitor.

When an investor with full control over one firm holds a silent financial interest in another, its cross-ownership is “one sided” in that it affects only its unilateral incentives to raise the prices of the firm it controls. But when one firm acquires a stake in a competitor that confers limited control in addition to a financial interest, the unilateral incentives of both the acquiring firm and the acquired firm change, making the unilateral effects “two-sided.” The magnitude of the impact on the incentives of the partially acquired firm depends on the degree of control that the partially acquiring firm obtains. Its exercise of that control might also be constrained by its fiduciary or other obligations to the firm (to the extent the price increases would not be in the unilateral interests of the partially acquired firm).10

II.B. Coordinated Effects of Cross-Ownership

II.B.1. Coordinated Effects Avenue A

What we call “Avenue A” coordinated effects flow from one entity having at least limited control of each of two competing firms in a market, and focuses on control elements rather than financial interest as the driver of anticompetitive effects. This approach to coordinated effects analysis is not based on one particular model of competitive interaction, but follows the standard coordinated effects merger analysis as currently practiced. We discuss in Section III instances in which courts and the antitrust enforcement agencies have applied the Avenue A approach to cross-ownership. Under this coordinated effects approach (and unlike the Avenue B approach we discuss in the next section), making an entity’s investment in a competitor completely passive is enough to resolve any competitive concern.

The methods by which limited control can produce harm to competition vary by industry and situation. But limited control obtained through acquisition of a partial stake in rival firm can increase the likelihood of collusion in the following three ways (among others), organized according to the three primary obstacles to collusion:11

Reaching Agreement

1. Limited control can serve to align firm interests, leading to a greater homogeneity of firms, and thus increased ability to reach an agreement on a collusive price and profit division.

2. An entity with limited control of two competing entities can serve as an avenue for the side payments that may be necessary to support a collusive equilibrium.12

---

10 See, e.g., O’Brien and Salop, Competitive Effects of Partial Ownership: Financial Interest & Corporate Control, supra note 5 (modeling the unilateral effects of partial ownership as a function of ownership shares and degrees of partial control).


12 See Timothy Bresnahan & Steven C. Salop, Quantifying the Competitive Effects of Production Joint Ventures, 4 Int’l J. of Indus. Org. 155, 161 (1986) (arguing that a jointly controlled joint venture could be an avenue for full collusion among the parents via side payments through the joint venture).
Monitoring Agreement

3. Increased access to competitively sensitive information via limited control may allow increased ability to monitor deviations from an implicit or explicit agreement.

4. If the limited control includes veto rights for major strategic decisions, it implies access to nonpublic information about those decisions. If a decision is related to defecting from an implicit agreement – for example, building new capacity or targeting a new set of customers – then it could be detected early, limiting the incentive of a firm to defect in this way in the first place.

5. Limited control can provide a “cloak of legitimacy” over conversations relating to anticompetitive coordination, perhaps masking the true purpose of meetings in which collusion is discussed, or making such meetings less vulnerable to legal attack.

Punishing Deviations

6. Some level of control can allow a firm to punish individuals within a firm, rather than the entire firm, for deviating from an agreement. This type of punishment can be more direct and less costly than punishing the entire firm through, say, a price war.

7. In general, access to competitively sensitive information and levers of limited control may reveal more direct and less costly ways of punishing a deviator than intense competition in the entire market, which is damaging for the punisher as well as the target.

This is not an exhaustive list of possible impacts of two-sided limited control stakes on the traditional coordinated effects checklist factors, but identifies some of the more common routes by which acquisition of a partial stake in a competing firm, conferring limited control, can increase the likelihood of collusion. It is important when examining these factors in a real-world context to identify pre-transaction constraints on collusion. The acquisition can enhance the likelihood of collusion only if an existing constraint is relaxed.

Coordinated Effects Avenue B

What we call “Avenue B” coordinated effects focuses on how owners’ profit streams affect payoffs from collusion. This depends only on one-sided limited control, and does not require the two-sided limited control necessary to produce harm to competition under the Avenue A approach.

The economic analysis of collusion under the Avenue B framework can be derived from the theory of repeated games. A standard model has firms playing a repeated prisoner’s dilemma game in which “defection” from a collusive equilibrium is a dominant strategy for each firm in the one-shot game. If the game is repeated, and defections from a collusive strategy in one period are punished with defections by other firms in all future periods, then collusion can be sustainable if the participants recognize and desire the future profits they could obtain through collusion more than the current profits they would obtain through defection.

Ownership of a partial financial stake in a competitor can alter incentives of participants and the outcome of the game in at least two ways. Because one firm’s gains from defection might come from sales taken from a firm in which cross-owners also have a stake, defection becomes less profitable after a partial acquisition and thus less likely. This collusion-enhancing effect, however, has to be balanced against a collusion-reducing effect. Because competition is likely to be less intense under partial cross-ownership, for the reasons discussed in the unilateral effects section above, the punishment equilibrium under cross-ownership is correspondingly softer, and less of a punishment, making defection from collusion less costly and thus more likely.13 The specific features of the market

---

13 See Malueg, Collusive Behavior & Partial Cross Ownership of Rivals, supra note 9. But see David Giló, Yossi Moshe & Yossi Spiegel, Partial Cross Ownership & Tacit Collusion, 37 Rand J. Economics 81 (Mar. 2006) (concluding that, under certain circumstances, the reduction of potential punishment from defection will not offset the increased incentives not to defect from partial cross-ownership).
will dictate whether the collusion-enhancing effects offset the collusion-reducing effects under this avenue of harm.

III. Enforcement Actions Challenging Cross-Ownership

III.A. Overview of Recent Challenges to Cross-Ownership

The Antitrust Division and FTC have relied on both unilateral and coordinated effects theories of harm as outlined above in their enforcement actions in cases involving partial ownership. They have asserted in a number of cases that the cross-ownership created both unilateral incentives to increase prices and a heightened likelihood of collusion.

Each case the agencies have pursued entailed the acquisition of a financial stake sizeable enough to (at least as alleged) influence materially the unilateral incentives of the acquiring party, the ability to control or exert significant influence over the partly acquired party, and/or rights to obtain nonpublic, competitively sensitive information about the partially acquired party.14

III.B. Potential Indications of Enforcers’ Views of Potential Effects of Passive Cross-Ownership Interests

None of the agencies’ enforcement actions was predicated on a firm’s purely passive or silent ownership of shares in two competitors. But, consistent with the economic framework laid out above, the Antitrust Division and FTC have not ignored potential effects of small and passive ownership stakes in competitors in the relief they have demanded in partial ownership cases when they have identified clear avenues of control in at least one of two competitors.

III.B.1. Insistence on Complete Divestitures

In some cases, consistent with the economic framework outlined above, the agencies have insisted on a full divestiture of the minority stake held in a competitor, even when the acquiring parties have attempted (with differing degrees of good faith) to relinquish their ability to control or influence the competitor. Their demands in these cases for full divestitures suggests that the agencies recognize that even relatively small, passive financial interests in one competitor can produce harmful effects that potentially necessitate an enforcement response.15

A good example of the agencies’ refusal to accept efforts by defendants to eliminate influence or control conferred by partial ownership as sufficient to cure competitive harm is the Antitrust Division’s suit in 1998 to block Thomas H. Lee Partners (“THL”) (and its co-investor, Bain Capital) from acquiring Clear Channel. At the time of the proposed acquisition, under which THL would obtain 35 percent of the voting interests in Clear Channel and rights to name four members of Clear Channel’s twelve-member board, THL held a 20 percent equity interest and a 14 percent voting interest in Univision Communications, Inc., along with rights to appoint three members of Univision’s seventeen-member board, access to competitively sensitive information, and influence over Univision’s management.

---

14 In addition to the specific enforcement actions discussed below, see, e.g., Analysis of Agreement Containing Consent Orders to Aid Public Comment at 2-3, Hikma Pharmaceuticals PLC, FTC File No. 151-0198 (Feb. 26, 2016) (acquiring company’s ownership of 23 percent interest in company that would likely enter and compete with acquired company eliminated future competition that would exist but for the merger); Complaints ¶¶ 3, 31-34, United States v. Deutsche Borse AG, No. 1:11-cv-02280 (D.D.C. Dec. 22, 2011) (NYSE’s ownership of 32 percent interest in innovative competitor would harm competition under coordinated effects and unilateral effects theories); Complaint ¶¶ 4, 20, United States v. CommScope, Inc., No. 1:07-cv-0220 (D.D.C. Dec. 6, 2007) (acquisition of 30 percent interest in competitor and substantial rights to control the competitor and receive its confidential information would harm competition under coordinated effects theory); Competitive Impact Statement at 5-6, United States v. Rockwell Int’l Corp., No. 80-1401 (W.D. Pa. Sept. 30, 1980) (acquisition of 30 percent of competitor gave Rockwell “great influence, if not actual working control” over the competitor and eliminated competition between them); see also Analysis of Proposed Consent Order to Aid Public Comment at 2-3, Time Warner Inc., FTC File No. 961-0004 (Sept. 21, 1996) (explaining FTC vertical concern that MVPD’s partial ownership in programmer would reduce incentives for it to acquire competing programming).

15 The agencies, however, likely have more power in the remedy context to achieve complete relief from any potential effects of a small cross-ownership stake than they would to challenge the acquisition of a small, passive interest in an independent enforcement action. The requirements that an antitrust remedy restore competition lost by an acquisition and replace the competitive intensity that preceded an acquisition, see, e.g., FTC v. Sysco Corp., 113 F. Supp. 3d 1, 72 (D.D.C. 2015), imply a greater intolerance of some limited degree of competitive harm than is suggested by Section 7’s proscription of acquisitions that “substantially” lessen competition. We discuss below other challenges that the enforcement agencies or other plaintiffs would face in pursuing an antitrust case based on the potential effects of a small and passive cross-ownership interest. See infra, Section V.
decisions. THL sought to address the Antitrust Division’s concerns with its ownership and influence over direct competitors – Univision and Clear Channel each operated radio stations targeting Spanish-language listeners in Houston, Las Vegas, and San Francisco – by converting its minority stake in Univision into passive interests and withdrawing from Univision’s board. Because THL would “still profit from any reduction in competition between . . . Clear Channel and Univision” based on its continued equity ownership, even if converted to a passive interest, the Division found “a decree mandating divestitures . . . necessary to restore competition.” The Division’s decision notably did not depend on a finding that allowing THL to continue to maintain a financial interest in Univision, conferring no obvious mechanism for control, would allow it to exercise control over Univision. The Antitrust Division or FTC would likely need to make that finding before initiating an enforcement action to block or undo institutional investors’ acquisitions of small cross-ownership interests in competitors.

The Antitrust Division has also demanded full divestitures even in instances in which cross-ownership stakes were small and where it imposed other requirements to ensure ownership passivity during the period in which the divestitures would be effectuated. For instance, the Antitrust Division in 1996 challenged US West’s acquisition of Continental Cablevision because Continental owned 11 percent of Teleport Communications Group (“TCG”), which competed with US West in the provision of dedicated telecommunications services to businesses in four markets. The Antitrust Division insisted on complete divestiture of Continental’s shares in TCG but, to minimize disruption to TCG, permitted the divestitures to be completed over a period of almost two years after entry of the consent decree. Until the divestitures were completed, US West was required to treat its interest in TCG as a passive investment by holding the TCG interest separate and apart from the activities and interests of US West and relinquishing its rights to appoint directors, participate in directors’ meetings, or to obtain access to confidential information. These efforts to protect competition before the complete divestiture was effectuated were insufficient on their own, in the eyes of the Antitrust Division, to eliminate competitive harm from this relatively small cross-ownership interest in US West’s competitor.

The Antitrust Division took a similar position in its challenge in 1998 to the acquisition by AT&T of Tele-Communications, Inc. (“TCI”), which at the time owned a 23.5 percent interest in Sprint. This acquisition presented only (one-sided) unilateral effects concerns because TCI’s partnership interests in Sprint were converted to shares in Sprint tracking stock with minimal voting rights. AT&T agreed to address the Division’s concerns and eliminate potential unilateral effects through complete divestiture of Sprint’s stock but, again to minimize adverse impact of the divestitures on Sprint, was given five years to complete the divestitures. In the meantime, the consent decree sought to eliminate the impact on AT&T’s incentives of its ownership of shares in Sprint by imposing interim “corporate governance arrangements and the segregation of economic interests among different components” of AT&T. But
these measures again did not obviate the need for a full divestiture.

III.B.2. Enforcers’ Acceptance of Continued Ownership Following Efforts to Eliminate Influence or Access to Confidential Information

In other cases, the enforcement agencies have tolerated continued possession of small cross-ownership stakes and have accepted efforts to relinquish control or influence and access to nonpublic, competitively sensitive information as sufficient to eliminate competitive concerns. In these instances, the agencies pursued enforcement positions to some degree at odds with the traditional economic framework predicting possible unilateral or coordinated effects from passive ownership stakes in rivals. It is not clear how these cases differ from ones in which divestitures of partial stakes were regarded to be essential to ensure the elimination of potential prospective anticompetitive effects. They might reflect some doubt on the part of the agencies that small, passive ownership stakes in a competitor are likely to harm competition, despite the economic logic of such an argument. But they might also reflect a determination by the agencies, exercising their prosecutorial discretion, that potential harm from continued passive ownership stakes in those instances were unlikely to be large or long lasting, or were outweighed by other factors such as efficiencies.

One significant example is the FTC’s challenge in 2007 to the acquisition of Kinder Morgan, which was in the business of terminaling gasoline and other light petroleum products, by a group of investors that included the Carlyle Group and Riverstone Holdings.25 Carlyle and Riverstone, at the time of the acquisition, owned 50 percent of the general partner that ultimately controlled Magellan Midstream Partners, L.P., a company that competed with Kinder Morgan in 11 markets.26 The FTC alleged in its complaint that Carlyle and Riverstone’s acquisition of 23 percent of Kinder Morgan would harm competition under both unilateral effects and coordinated effects theories.27 But rather than seeking to address the harm to competition by requiring Carlyle and Riverstone to divest their interests in one of the two competitors, the FTC required only that the companies’ investments be made passive.28 The FTC’s order required Carlyle and Riverstone to remove representatives from Magellan’s boards and prohibited them from influencing or receiving public information about Magellan or from sharing with Kinder Morgan non-public information about Magellan.29

The Antitrust Division similarly allowed Gillette in 1990 to maintain its 23 percent stake in and position as creditor to the owner of a competing wet shaving company based on commitments not to communicate about various competitively sensitive subjects, not to exert any influence over the competitor’s business, not to participate in management or on the board of the competitor, and to vote

26 See id. ¶¶ 10, 28, 34.
27 Id. ¶ 35. The alleged unilateral effects would be two sided because Carlyle and Riverstone’s interests in both Kinder Morgan and Magellan would have been sizeable enough to allow them to influence the competitive activities of both companies.
28 See Analysis of Proposed Agreement Containing Consent Orders to Aid Public Comment at 4-5, TC Group, L.L.C., FTC File No. 061-0197 (Jan. 25, 2007).
29 See id. at 5; see also, e.g., Analysis of Proposed Consent Order to Aid Public Comment, Medtronic, Inc., FTC File No. 9810324 (Oct. 1, 1998) (making Medtronic a “passive investor” by preventing it from naming a board member, from receiving competitively sensitive information, and from obtaining further shares in the competitor, and by requiring Medtronic to vote its shares in proportion to all other shareholders and to return any information containing trade secrets or other commercial evidence); Analysis of Agreement Containing Consent Order to Aid Public Comment at 6-7, Boston Scientific Corp., FTC File No. 0610046 (Apr. 20, 2006) (establishing a firewall to prevent Boston Scientific from receiving information from the competitor, and requiring Boston Scientific to relinquish right to exercise control over the competitor and to vote its shares in the competitor in the same proportion as all other shareholders).
shares in the competitor in proportion to other shareholders.30 Finally, the Antitrust Division required Univision in 2003 to divest a portion of its interests in a competitor, but permitted it to maintain a 10 percent, nonvoting share.31 The Division was satisfied that potential anticompetitive effects of the partial ownership would be remedied sufficiently by converting common stock holdings into nonvoting equity interests, a relinquishment by Univision of rights to seats on the competitor’s board, veto rights over important decisions, and the ability to obtain nonpublic, competitively sensitive information.32

As the above discussion makes clear, the antitrust agencies have not always been consistent in their approach to partial cross-ownership, and have sometimes allowed firms to maintain financial interests in their direct competitors even though the economic theory of how such ownership can lead to anticompetitive outcomes is clear. Those advocating that the antitrust agencies take a more aggressive stance toward partial ownership might therefore start by simply calling for a consistent approach in condemning firms’ partial ownership stakes in their competitors, even if completely passive on one side of the pair. That change in enforcement approach, which would be meaningful, would still be one step removed from the more aggressive stance towards partial ownership that some recent authors have called for.

IV. Recent Empirical Developments in the Economics of Cross-Ownership

A series of recent economics papers have gained significant attention in the antitrust community by challenging the traditional antitrust framework for analyzing cross-ownership and, implicitly, some of the agencies’ past enforcement decisions. These papers argue that even relatively small ownership stakes that do not convey any formal mechanisms of control should not necessarily be considered “passive,” particularly when the owners are large institutional investors like Blackrock or Vanguard and cross-ownership is pervasive across an industry. In those cases, they argue, cross-ownership can lead to significantly higher industry prices through either unilateral or coordinated mechanisms even without large ownership shares or formal methods of control.

Considering that large and diversified institutional investors collectively own roughly two-thirds of publicly traded shares in U.S. firms overall, and have stakes in competing firms in a number major industries such as airlines, banks, and retail pharmacies, if a competitive problem with this ownership structure exists, it could be pervasive and growing in recent years.33 Two recent papers purport to find empirical evidence that extensive cross-ownership by large institutional investors, each with relatively small stakes in rival firms, can lead to higher prices. In one influential paper, José Azar, Martin C. Schmalz, and Isabel Tecu analyze route-level airline pricing, and find that changes in route-level prices are correlated with changes in a measure of common ownership among the firms that serve the route.34 In another, José Azar, Sahil Raina, and Martin C. Schmalz analyze county-level pricing of banking services, and find that prices are correlated with a measure of common ownership of banks serving the market.35 These findings suggest that the degree of cross-ownership in an industry, even if stakes are individually small and do not involve direct control mechanisms such as board seats, is a potentially important factor in determining industry pricing. Einer Elhauge argues that this pattern of cross-ownership, in addition to leading to higher prices, helps explain economic puzzles like the failure of recent

---

32 See id. at 9-13. The Antitrust Division observed that Univision’s partial cross-ownership would create unilateral incentives for it to compete less aggressively but stated that reducing its stake from 15 percent to 10 percent “reduces substantially the likelihood that [Univision’s] competitive incentives will be affected by its partial ownership . . . , thus preserving [Univision’s] incentive to compete . . . .” Id. at 12.
34 Azar, Schmalz & Tecu, Anti-Competitive Effects of Common Ownership, supra note 3.
35 Azar, Raina & Schmalz, Ultimate Ownership and Bank Competition, supra note 3.
high corporate profits to lead to high growth, and even the rise of economic inequality in the United States. 36

These authors advocate that the antitrust agencies pursue a more attentive antitrust posture toward cross ownership of small minority stakes by large institutional investors than they have in the past.37 In December 2016, Eric Posner, Fiona Scott Morton, and Glen Weyl took to the pages of the New York Times to argue, based in part on evidence presented in the papers reporting potential effects of cross-ownership in the airline and banking industries, that the antitrust agencies should adopt a public enforcement policy that limits institutional investors to holding either a very small overall stake in an industry or investing in only one firm in an industry. Such a policy would represent a dramatic shift in current enforcement practice and would likely reshape the mutual fund industry.38 In their view, however, there would be little cost and much gained in economic efficiency and improved corporate governance by such a policy.39

The development of the empirical evidence of the potential effects of partial cross-ownership remains in its early stages, however, and the exact mechanism by which nominally passive ownership becomes active is unclear, though several possibilities have been discussed in the literature. The papers reporting price increases in the airline and banking industries have received significant attention, but neither has yet been published in a peer-reviewed journal. The authors themselves note that their work “merely intends to start the debate” about the costs and benefits of common ownership.40 That debate is ongoing, and already includes written critiques.41

Designing an exact policy response at this early stage of the debate may therefore be premature. The economics are still being developed, as we discuss in more detail in the rest of this section.

IV.A The Empirical Evidence

Antitrust enforcers in the United States have relied historically on the Herfindahl-Hirschman Index (“HHI”) as a measure of market concentration that guides enforcement policy. Horizontal merger enforcement has been focused on relatively concentrated markets (i.e., those with a high HHI) that experience a significant change in concentration as a result of a merger.42 The idea that price generally increases when a market moves from perfect competition to monopoly is uncontroversial and not model-specific.43 But there is a specific model of competition – the Cournot model – that is generally associated with the idea that HHI provides a good measure of the degree of margin increase as a market moves from perfect competition to monopoly.44 In the Cournot model, firms choose quantities of homogenous goods to produce, and market prices result from the intersection of total industry quantity and the industry demand curve. The degree of industry-wide price

37 See, e.g., Azar, Schmalz & Tecu, Anti-Competitive Effects of Common Ownership, supra note 3, at 39; Elhauge, Horizontal Shareholding, supra note 50, at 1300.
39 Id. at 46.
markup under the Cournot model is a function of the industry elasticity of demand and the HHI.

The basic Cournot model, however, assumes that firms are independently owned and have no financial stake in competitors. Economists Daniel O’Brien and Steven Salop refined that basic model to establish a modified framework – a “modified HHI” or “MHHI” – that accounts for possible cross-ownership among firms. These economists explain that, when a firm is partially owned by an entity that also has a financial interest in its competitors, that firm’s behavior is influenced by two factors: the amount of control exercised by the partial owner(s), and the financial interest that the partial owner(s) has in the firm’s competitors. To incorporate these factors into the Cournot model, the MHHI developed by O’Brien and Salop factors in “control weights” – a measure of the weight managers of the firm put on each owner’s interest – and financial interests, defined by percentage ownership. The difference between the HHI and the MHHI – the “delta MHHI” – is a function of the degree of cross-ownership.

If all cross-ownership is passive – that is, all control weights are zero – then the MHHI equals the HHI. Increasing cross-ownership generally increases the control weights and/or the financial interest that partial owners have in their competitors and thus increases the MHHI. This mathematical relationship between industry margins and MHHI only technically holds in the Cournot model, though one might imagine more generally a positive relationship between cross-ownership and industry price – for instance, if cross-ownership is thought to increase the likelihood of a collusive outcome. Outside the Cournot model, however, it is not clear that the MHHI would be the best index of the effect of cross-ownership.

The authors of the airlines and banking papers use modified HHI frameworks for their analyses. Each explores the relationship of market prices to the degree of cross-ownership (as measured by the MHHI and MHHI delta) across a range of local markets over time. MHHIs are generally computed by assuming that control weights equal ownership shares. Both papers treat all funds owned by a single company as a unified entity. For instance, they assign to “Vanguard” all shares of a bank or airline owned by the Vanguard Growth and Income Fund, the Windsor Fund, the Capital Value fund, and other independently managed funds falling under the Vanguard umbrella.

Based on this framework, the authors estimate that ticket prices increase by at least 3-7% due to firms responding to the incentives of common ownership across firms. Because there is no single “price” for banking services, the authors of the banking industry paper explore the relationship of the modified HHI to banking fees, fee thresholds, and the interest rate spread. They find a positive and statistically significant effect of the modified

45 See O’Brien & Salop, Competitive Effects of Partial Ownership: Financial Interest & Corporate Control, supra note 5. This work built on earlier work performed by Timothy Bresnahan and Steven C. Salop. See Timothy Bresnahan & Steven C. Salop, Quantifying the Competitive Effects of Production Joint Ventures, 4 Int’l J. of Indus. Org. 155 (1986).


47 In the airlines paper, the authors measure MHHI in each local market by assuming that for stakes of greater than 0.5%, the “control weight” equals the ownership share – so that a manager of a firm, for example, puts a 1% weight on the interests of an owner with a 1% share. Stakes of less than 0.5% are assumed to be completely passive. They also explore the effect of assuming instead that only the 1, 3, 5, or 10 largest shareholders exercise control over the firm, or that the control weight is based on an index of voting power. For these alternative assumptions about control weights, they generally find statistically significant but smaller effects. The authors of the banking paper use a slightly different version of the MHHI which they dub the “GHHI,” to account for the phenomenon of banks’ asset management divisions owning direct stakes in competitors (a phenomenon which does not occur in the airlines industry). The GHHI is derived similarly to the MHHI as the equilibrium of a Cournot model, but incorporates the fact that a bank’s profits are themselves a function of its cross-ownership shares. In the banking paper, the authors assume control weights equal ownership shares and do not explore alternative specifications.

48 Azar, Schmalz & Tecu, Anti-Competitive Effects of Common Ownership, supra note 3, at 3. In an alternative specification, they find 10-12% higher prices. Id. at 4.
HHI on each of these “prices” (in contrast to HHI, which has little or no predictive power for price).49

IV.A.1. Critiques of Results

While these papers purport to find a strong correlation between common ownership, as measured by MHHI (or a similar measure) and price, a recent paper by Daniel O’Brien and Keith Waehrer urges caution before making too much of these empirical results.50

O’Brien and Waehrer point out that while it is true mathematically that, if costs, shares, and margins do not change, increasing the degree of cross ownership increases the MHHI and thereby margins, all cannot be held equal because market shares, costs, and degrees of cross-ownership are jointly determined. O’Brien and Waehler demonstrate that MHHI can either increase or decrease in response to a change in cross ownership, making the ultimate relationship of MHHI to price theoretically indeterminate.51 O’Brien and Waehler present an example of a large firm that owns shares in a number of capacity constrained small competitors. If the large firm increased its ownership stakes in the small firms and then raised its prices (expecting to recapture some lost profits through its increased ownership in the smaller firms), its market share (and market concentration) would decline, but prices would increase.52 Under this simple example, there is a negative relationship between MHHI and price.53

The fundamental issue is that if we expect firm managers’ behavior to be a function of the degree of cross-ownership of the owners of the firm — the ultimate argument of the common ownership literature — regressing industry or firm price on an industry concentration measure like MHHI is a roundabout way to test the proposition, and one that carries with it inherent identification problems. For this reason, other economists have proposed instead directly testing the weights that firms seem to put on each other’s profits.54

Examining individual firm behavior as a function of its ownership structure ties into the notion of a “maverick firm” that has long been used by the antitrust agencies in their analysis of merger effects. The agencies’ Horizontal Merger Guidelines define a “maverick firm” as one that plays a disruptive role in the market as a result of being in a different structural position than other firms.55 The antitrust agencies recognize that certain “maverick” firms can “resist[ ] otherwise prevailing industry norms to cooperate on price setting or other terms of competition” and play a disruptive role in an industry.56 The authors of the airlines paper make a similar argument with respect to firm ownership, arguing that “concentrated owners such as select hedge fund activists have been shown to successfully push their target firms to compete more aggressively against industry rivals.”57 This might argue for carefully considering ownership structure in assessing the degree of “maverickness” of a firm. Or, empirically, seeing if firms that have been called out by the antitrust agencies as mavericks in the past have had significantly different ownership structures than other firms in the market.

Tying the notion of “maverick” to ownership structure begs the question of exactly how non-controlling ownership

49 Azar, Raina & Schmalz, Ultimate Ownership and Bank Competition, supra note 3, at 17 -20.
50 O’Brien & Waehler, The Competition Effects of Common Ownership: We Know Less than We Think (Feb. 24, 2017).
51 Id. at 15.
52 Id. See also John R. Woodbury, Can Institutional Investors Soften Downstream Product Market Competition?, 3 CPI Antitrust Chronicle 26, 29 (Spring 2017) (“O’Brien and Waehler note that there is no obviously monotonic relationship between the MHHI and price. . . . Suppose an exogenous shock results in the reduction in costs for one particularly large firm. As a result, the firm lowers price, expands its output, and increases its market share. The . . . MHHI will . . . increase but price will fall.”).
53 Note that a similar problem infects HHI as well, and thus any attempt to regress price on HHI runs into potential indeterminacy issues. See, e.g., Joseph Farrell & Carl Shapiro, Asset Ownership and Market Structure in Oligopoly, 21 Rand J. Economics 275 (Summer 1990). This has not, however, prevented this approach from being used by many researchers in a variety of industries in the past. The use of MHHIs further complicates the issue because of the theoretical indeterminacy of the control weights.
55 See Horizontal Merger Guidelines, supra note 2, at 3-4.
56 Id.
57 Azar, Schmalz & Tecu, Anti-Competitive Effects of Common Ownership, supra note 3, at 5.
stakes affect firm behavior. The theoretical mechanism underlying this effect has not been the focus of the recent literature, but a number of different mechanisms have been proposed as explanations.

**IV.B. The Theoretical Mechanism of Influence**

The recent literature challenges antitrust agencies’ historical focus on formal mechanisms of control – e.g., board seats, veto power – but is still somewhat vague on the informal mechanisms of control that drive their concerns. As the authors note, large diversified mutual funds often tout the influence they have on firm managers. For instance, on its website, Vanguard describes how it exercises all of the levers of influence it possesses to protect its investors’ interests:

> Consequently, we are making our voice heard loudly and clearly in corporate boardrooms. Our advocacy encompasses a range of issues, including corporate governance, executive compensation and succession planning, board composition and effectiveness, oversight of strategy and relevant risks, and communication with shareholders. We also exert our influence as fiduciaries in a very important way when each Vanguard fund casts its proxy votes at companies’ shareholder meetings.

Even if Vanguard’s approach is pursued broadly by all significant institutional investors, it remains unclear why their advocacy and desire for influence necessarily translates into actual influence over managers, when the shares they hold in the firms in which they invest are relatively small.

The authors of the airlines paper propose as a leading explanation what they call the “do nothing” mechanism. They suggest that, without prodding from firm owners, managers are content to lead a “quiet life” with a safe income stream, and are not generally inclined to take on the risk and effort of competing aggressively. In this view, “go along to get along” is the natural state of industry competition, and it is the role of active owners, or owner-managers, to disrupt that state. Significant owners who are content with a state of diminished industry competition simply need to refrain from pushing managers to undertake competitive initiatives aimed at their competitors – in other words, to do nothing.

An alternative, more active vector of influence is what those authors call “voice, incentives, and voting.” This mechanism relies on private meetings with management and active exercise of proxy voting rights that mutual funds tout as important levers of influence. Through these avenues, they may, for instance, be able to influence the compensation scheme of managers, which can provide an ongoing incentive to compete less aggressively. Indeed, one examination of the relationship between common ownership and management compensation found that, in industries with higher levels of common ownership, managers are paid less for their own performance and more for rivals’ performance. But empirical research into this area too is still preliminary, and other recent studies produced the opposite result, finding that more common ownership yields stronger firm governance and a higher degree of pay for own-firm performance.

More broadly, while the mechanisms described above seem plausible, it’s not clear how influence exercised by the mechanisms described above would filter down to precise pricing strategies defined by cross-ownership at the route-or county-level that are examined in the airline and banking papers.

---


V. Legal Hurdles to Challenging Cross-Ownership Under New Theories

As discussed above, the antitrust enforcement agencies have on numerous occasions challenged the acquisition of a partial interest in another company under Section 7 of the Clayton Act— and Section 7 provides the most likely basis on which a challenge to partial cross-ownership by institutional investors might be pursued in the future. But the antitrust agencies’ lengthy history of challenges to anticompetitive partial acquisitions— under circumstances in which the acquisition conferred control or influence, access to competitively sensitive information, or a stake sufficient to affect the parties’ unilateral incentives— says little about their ability to block institutional investors from acquiring small stakes in competing companies, which the owners purportedly intend to hold as passive investments. Even if the empirical support for finding harm from these investments withstands continued scrutiny, the antitrust agencies and other plaintiffs would still encounter certain challenges to pursuing a claim to block this practice.

One significant hurdle enforcers would face is the explicit exception from the coverage of Section 7 of the Clayton Act for passive investment activity:

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.

There has been little litigation over the meaning of this provision and none recently. In past cases, the question of whether a partial acquisition was made “solely for investment” and was not subject to Section 7 often turned on whether the acquiring company had the intention or ability to use the investment to exercise influence or control over the target. Questions about whether the levers of influence exercised by an institutional investor holding small stakes in competing companies were sufficient to make the “solely for investment” exemption inapplicable would undoubtedly be key issues in any challenge to the investments.

Others have suggested that, if the likely effect of an acquisition is a substantial lessening of competition, the passive investment exemption should be inapplicable, regardless of whether the investor had an “investment” motivation for the acquisition. This reading of the “solely for investment” provision, which has been criticized “as a matter of straightforward statutory interpretation,” would eliminate the need on the part of an enforcement agency to evaluate whether the partial acquisition would confer control or influence, and leave the effects of the acquisition as the principal issue in the litigation. But questions remain

---

64 Absent some indication that institutional investors orchestrated a conspiracy among the competing firms in which they own stakes, Section 1 of the Sherman Act would be unlikely to provide an alternative avenue of attack.


66 See United States v. E.I. Du Pont de Nemours & Co., 353 U.S. 586, 601-06 (1957) (Du Pont’s investment in General Motors was part of Du Pont’s efforts to obtain “a new and substantial market” and “to entrench itself as the primary supplier” for General Motors, and was not made “solely for investment”); Crane Co. v. Haresco Corp., 509 F. Supp. 115, 123 (D. Del. 1981) (“The issue controlling the applicability of the investment exemption, then, is the likelihood that the acquisition would allow the offeror to influence significantly or control management of the target firm.”).

67 See Phillip E. Areeda & Herbert Hovenkamp, Antitrust Law: An Analysis of Antitrust Principles & Their Application ¶ 1204b (4th Ed.) (“A court’s finding that the acquisition would probably tend substantially to lessen competition would necessarily mean that the acquirer so intended, objectively speaking. Consequently, its acquisition could not be solely for investment.”); Elhauge, Horizontal Shareholding, supra note 50, at 1307-08 (“[E]ven when an investor can show that it is purely passive in the antitrust sense, the passive investor “exception” does not apply if the acquired stock is actually used, by voting or otherwise, to lessen competition substantially or to attempt to do so.”); see also, e.g., Gulf & Western Indus., Inc. v. Great Atl., 476 F.2d 687, 693 (2d Cir. 1973) (“[T]he court’s attention should be focused less on whether the purchase constitutes an ‘investment’ than on whether the effect (indeed at this juncture the reasonably likely effect) is substantially to lessen competition.”).

as to the appropriate interpretation of the passive investment provision, and those questions would also need to be answered in any enforcement action.

Even if the “solely for investment” provision is inapplicable, plaintiffs relying significantly on empirical work suggesting that partial cross-ownership leads to higher industry prices as the basis for a challenge to particular investments would face the additional challenge of establishing a causal link between the challenged acquisition and the asserted anticompetitive effect.69 As discussed above, the authors of the papers discussing this empirical work suggest potential mechanisms through which investors influence the management of the firms in which they invest and potentially lead those firms to compete less aggressively. If investigation by the antitrust agencies revealed that those mechanisms confer sufficient influence or access to sensitive information to produce the unilateral or coordinated effects on which they relied in past enforcement actions, then the existing economic and legal framework on which partial acquisition cases have been based in the past might still provide grounds for a challenge. That evidentiary record does not appear to exist today, however, and any enforcement action based on the existing empirical record would face significant opposition from the institutional investors.70

VI. Conclusion

Antitrust lawyers and economists do not come to potential problems with partial cross-ownership raised by the new scholarship without economic and legal tools that have stood the test of time. Economists have well-developed theories for how ownership of a stake in a competitor can alter the unilateral incentives for the owner to compete as aggressively as it would if it could not recapture a portion of lost profits through increased sales by the competitor in which it holds an interest, and how that ownership might soften competition among industry participants by increasing the likelihood of implicit or explicit collusion. The antitrust enforcement agencies have over the past few decades repeatedly used this economic work as a basis for enforcement actions seeking to prevent partial acquisitions.

The new economic work concerning partial cross-ownership by large institutional investors seeks to push the enforcement envelope by offering some empirical evidence of the existence of anticompetitive price increases under conditions that might not be captured by the existing legal and economic framework. Unilateral effects and coordinated effects theories used in past cases by the antitrust agencies do not address instances where ownership stakes are small and lack formal mechanisms of influence or control.

Before concluding that new rules should apply or that antitrust enforcers must be given new tools to address this new investment phenomenon, we should first have a better understanding of the nature of the purported problem. The new results, while a cause for concern if taken at face value, have received significant criticism already, and our empirical understanding will continue to improve as the analysis and vetting of these studies continues. As that process in the economics world proceeds, further clarification of the “solely for investment” exception to liability under Section 7 of the Clayton Act might also reveal when efforts by supposedly passive institutional investors to influence management might cross the line and forfeit entitlement to the exemption. To the extent efforts by investors to directly influence management or impose particular compensation schemes provides the mechanism that has produced the reported harmful results, investigations by the antitrust agencies may uncover persuasive evidence that illuminates these “passive control” mechanisms. This would help inform future enforcement actions and provide guidance to economic researchers hoping to better understand the issue.


70 See, e.g., Benjamin R. Dryden, “Horizontal Shareholding:” Is Oligopoly Pricing a Symptom or the Disease?, The Threshold: ABA Newsl. Mergers & Acquisitions Committee (Mar. 30, 2017) (suggesting that it might be higher industry prices that causes higher cross-ownership and not the other way around).
In Case you Missed It: Moving the Ball Across the Goal Line—The Third Circuit’s Summary Judgment Standard for Price-Fixing in Oligopolies

by Lisa Danzig

Ms. Danzig is an associate at Cleary Gottlieb. Her practice focuses on antitrust matters and litigation.

This fall, the United States Court of Appeals for the Third Circuit issued a key opinion on the standard that a plaintiff alleging price-fixing in an oligopolistic market must meet to survive summary judgment. In *Valspar Corp. v. E.I. DuPont de Nemours and Co.*,1 the court affirmed a United States District Court for the District of Delaware decision granting summary judgment for DuPont, an alleged price-fixing conspirator in the titanium dioxide industry.2 The court interpreted Third Circuit precedent as requiring that “a plaintiff in an oligopoly case must provide inferences that show that the alleged conspiracy is ‘more likely than not,’” and concluded that Valspar had not shown that circumstantial evidence in the case met that standard.3 A forceful dissent from Chief District Judge Stenbel criticized the majority’s ruling as usurping the jury’s role in determining whether the evidence showed “a lawful coincidence or an unlawful agreement.”4 The dueling opinions arrive at different answers to the question: what does a plaintiff alleging price-fixing in an oligopoly need to show in order to move the ball across the goal line and advance its case beyond summary judgment?

Background

Plaintiff Valspar alleges that DuPont, along with several other titanium dioxide suppliers (an industry that both sides agreed was an oligopoly) formed and carried out an agreement to fix prices from 2002 to late 2013.5 At the heart of Valspar’s allegations are thirty-one parallel price increase announcements by titanium dioxide suppliers that began shortly after DuPont joined an industry trade association.6 Valspar also put forth economic evidence that the titanium dioxide market was concentrated, had relatively stable market shares, and featured supracompetitive prices, as well as evidence that DuPont and its alleged co-conspirators had: (1) participated in a data sharing program in which they exchanged aggregated and anonymized information on production, inventory, and sales volumes, and that it may have been possible to derive individual manufacturers’ productions from the data, (2) participated in trade association meetings that presented opportunity to conspire, (3) utilized industry consultants to receive information on competitors’ future price increases, (4) showed awareness of parallel price increases in internal company e-mails, and (5) at times, sold titanium dioxide to their competitors at below market prices.7 DuPont moved for summary judgment, contending that the price increases and other evidence showed no more than “conscious parallelism”—the theory that oligopolists will follow their competitors’ prices in hopes of maximizing each firm’s profits. Valspar took the position that the evidence in the case could form the basis for an inference of conspiratorial

---

1 *Valspar Corp. v. E.I. DuPont De Nemours, No. 16-1345 (3d Cir. Sept. 14, 2017).*
2 *Valspar Corp. v. E.I. DuPont De Nemours, 152 F. Supp. 3d 234 (D. Del. 2016).*
3 *Valspar*, slip op. at 9 n.1, 13 (citing *In re Chocolate Confectionary Antitrust Litig.*, 801 F.3d 383, 412 (3d Cir. 2015)); *In re Flat Glass Antitrust Litig.*, 385 F.3d 330, 594 (3d Cir. 2004). In addition to *Chocolate and Flat Glass*, a third key in-circuit precedent is *In re Baby Food Antitrust Litig.*, 166 F.3d 112, 122 (3d Cir. 1999).
5 *Id.*, slip op. at 4 (3d Cir. Sept. 14, 2017) (majority opinion).
6 *Id.*
7 See *id.* at 4, 19, 22-28.
agreement and therefore that there was a genuine issue of material fact, making summary judgment not appropriate.

Notably, a summary judgment motion involving “substantially the same record” had previously been heard by the District Court for the District of Maryland in a class action brought by titanium dioxide purchasers. The District of Maryland had denied summary judgment. The Third Circuit declined to follow the result of the Maryland class action, finding that the law of the circuit commanded application of a different standard than the District of Maryland and the Fourth Circuit Court of Appeals.

**Majority Opinion**

The majority’s opinion begins with a review of the “special problem” of oligopolies in price-fixing cases under Section 1 of the Sherman Act. That is, because oligopolies by nature have a small number of competitors, they are interdependent—that is, “any rational decision . . . must take into account the anticipated reaction of the other firms.” Price increases from parallel conduct that is not the result of any actual conspiratorial agreement, or “conscious parallelism,” are not atypical in oligopolies, and do not violate § 1 even though pricing might be supra-competitive.

The court then expounds the evidentiary standard at summary judgment in price-fixing cases involving oligopolies. It finds that the U.S. Supreme Court in *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.* held that “conduct as consistent with permissible competition as with illegal conspiracy does not, standing alone, support an inference of conspiracy.” It then explains that Third Circuit jurisprudence has interpreted *Matsushita* to require that “a plaintiff in an oligopoly case . . . provide inferences that show that the alleged conspiracy is ‘more likely than not.’” Where there is no direct evidence of a conspiracy—only circumstantial evidence—this requires that evidence “go beyond mere interdependence” and “be so unusual that in the absence of an advance agreement, no reasonable firm would have engaged” in the parallel behavior. In evaluating whether that standard is met, the Third Circuit considers evidence of parallel conduct as well as “plus factors” from which an actual agreement to fix prices could be inferred.

The opinion suggests that the very nature of oligopolies tends to discount many kinds of circumstantial evidence often found in a § 1 case and emphasizes that non-economic, traditional conspiracy evidence (i.e., “proof that the defendants got together and exchanged assurances of common action or otherwise adopted a common plan even though no meetings, conversations, or exchanged documents are shown”) is critical in a price-fixing case involving an oligopoly. It notes that a tacit agreement presents a special problem of proof since tacit agreements are difficult to distinguish from conscious parallelism. It also explains that two common plus factors, motive to enter into a conspiracy and actions contrary to a firm’s self-interest, are “intrinsic to oligopolies” and thus should be “deemphasized” in § 1 cases involving them. The court finally explains that when reviewing all of the evidence, “ambiguous evidence alone cannot raise a reasonable inference of conspiracy sufficient to survive summary judgment.”

The court then turns to the specific evidence in the case, first reviewing each type of evidence individually. It finds that thirty-one parallel price increase announcements were merely an “uptick in frequency of a pre-established industry practice” and not the “radical” or “abrupt” change in
industry practices needed to create inference of a conspiracy.\textsuperscript{23} It then evaluates plus factors. While the evidence shows that the industry was conducive to price-fixing (motive to enter into a conspiracy) and there was non-competitive behavior such as supracompetitive pricing (actions against self-interest), the court says that this evidence merely proves oligopolistic interdependence.\textsuperscript{24} Turning to evidence of a traditional conspiracy, the court finds that none formed the basis of a reasonable inference of an agreement. In particular, the court considers evidence that the competitors (1) participated in a data sharing program (the court concludes that the information exchanged was “innocuous” compared to other cases where price information was exchanged), (2) participated in trade association meetings that presented opportunity to conspire (the court says there was no evidence of discussion of prices during the meetings and no evidence of an agreement), (3) used industry consultants to obtain confirmations of competitor price increases (the court finds that this evidence undermines existence of a conspiracy because conspirators would have no need for using consultants in this way if there was a conspiracy), (4) showed awareness of parallel price increases the industry in internal e-mails (noting that there are no e-mails evidencing an explicit agreement to fix prices, the court determines that they are consistent with conscious parallelism), and (5) made a small number of inter-firm sales at below market prices (the court finds that, while inter-competitor sales can be used to maintain market share, the sales are also explained by other reasons that are not conspiratorial).\textsuperscript{25} The court then explains that all of the evidence, individually and as a whole, and viewing the evidence in a light most favorable to Valspar, is just as consistent with legal oligopolistic behavior as a conspiracy, and fails to show that “a conspiracy is more likely than not.”\textsuperscript{26}

In concluding, the majority explains that defeating summary judgment in a § 1 case involving an oligopoly with only circumstantial evidence is not completely foreclosed in the Third Circuit. However, the circumstantial evidence must involve “non-economic evidence of an actual agreement.”\textsuperscript{27}

\textbf{Dissent}

In dissent, Chief District Judge Stenbel laments that the majority opinion “creates an unworkable burden, not supported by [Third Circuit] precedent,” and opines that the case presents enough factual issues “that the question whether [the parallel pricing behavior] was a lawful coincidence or an unlawful agreement should be decided by a jury.”\textsuperscript{28} The opinion criticizes the majority as misinterpreting Third Circuit precedent and \textit{Matsushita} in failing to consider the economic plausibility of the alleged conspiracy; it reads \textit{Matsushita} to require a sliding scale approach under which more liberal inferences from the evidence should be drawn in favor of Valspar because its theory “makes perfect economic sense.”\textsuperscript{29}

The dissent conducts its own review of the evidence to consider whether an agreement can be inferred and, like the majority, evaluates parallel pricing behavior and the presence of plus factors. With respect to the thirty-one parallel price increases, the dissent points to an increase in number of parallel price increases in the industry after the start of the alleged conspiratorial period (in stark contrast to the majority’s characterization that the increase was merely an “uptick,” the dissent calls the increase “unprecedented” compared to other Third Circuit cases involving oligopolies).\textsuperscript{30} It argues that the sheer number of parallel price increases, combined with temporal proximity (hours or days) between competitors’ respective price increase announcements “creates a strong inference of a conspiracy.”\textsuperscript{31} As to plus factors, the dissent walks through evidence of repetitive parallel price increases and evidence relating to the use of consultants, e-mails, inter-firm sales, and price signaling, and provides reasons one might interpret each as supporting an inference of an agreement.\textsuperscript{32} It interprets the majority opinion as “seem[ing] to require

\begin{footnotesize}
\begin{itemize}
  \item Id. at 17-18 (quoting \textit{Chocolate}, 801 F.3d at 410).
  \item \textit{Valspar}, slip op. at 19.
  \item Id. at 21-29.
  \item Id. at 29-30.
  \item Id. at 32-33, n.15.
  \item Id. at 1 (Stenbel, C.J., dissenting).
  \item Id. at 2-3, 7-8.
  \item Id. at 26.
  \item Id. at 4-5.
  \item Id. at 10-19.
\end{itemize}
\end{footnotesize}
Valspar to present evidence of direct meetings and conversations.”33 It criticizes the majority opinion as relying on dicta in a prior opinion to set up a new “more likely than not” standard for a plaintiff to provide summary judgment in a price-fixing case involving an oligopoly.34 It further rebukes the majority for setting out an approach that “shut[s] the door on a district court’s ability to accept reasonable inferences in any case involving oligopolists” and “usurp[s] the jury’s role in deciding cases loaded with circumstantial evidence of an actual agreement to fix prices.”35

Conclusion

Valspar has petitioned for a rehearing en banc.36 Absent reversal, the Third Circuit summary judgment standard for a plaintiff seeking to prove price-fixing in an oligopoly with circumstantial evidence is higher than in some other circuits—including the Fourth Circuit, where “the existence of a conspiracy [need only] be a reasonable inference that the jury could draw from that evidence.”37 The majority and dissenting opinions illustrate the tensions between enforcement of Section 1 of the Sherman Act and chilling competitive behavior, and between the role of juries and the high costs of mistaken inferences in antitrust cases. At the end of the day, the decision appears to require that plaintiffs show non-economic evidence of an agreement, and crucially, that the evidence (individually or on the whole) be something more than consistent with conscious parallelism. The Third Circuit’s standard could be a deterrent to plaintiffs bringing price-fixing cases that involve oligopolies—or an attraction to defendants seeking removals there.

33 Id. at 20.
34 Id. at 31 n.22.
35 Id. at 30.
On August 9, 2017, an Ohio District Court dismissed a case brought by a small Ohio hospital alleging a per se violation of Section 1 of the Sherman Act. The hospital alleged that a joint venture of hospitals had organized a group boycott and restricted its access to patients and physicians. This article offers a description of the case background, a review of the legal and economic concepts most relevant to the case, and a summary of the Court’s decision. This decision sheds light on the antitrust treatment of joint ventures, group boycotts, and volume discounts, particularly in the managed care industry.

Case Background and Previous Decisions

Parties
The plaintiff, the Medical Center at Elizabeth Place LLC (“MCEP”), is a small, acute-care hospital in the Dayton, Ohio area. The defendant, Premier Health Partners (“Premier Health”), is a joint venture of four healthcare provider corporations (collectively, the Defendants). Premier Health manages many of the four corporations’ business functions, including the negotiation of managed care contracts with insurers. The income streams of those business functions are consolidated.

Allegations
MCEP sued Premier Health, alleging a per se violation of Section 1 of the Sherman Act. It claimed that Premier Health, with insurers, orchestrated a group boycott that prevented or delayed MCEP’s access to managed care contracts (and thus to patients) and access to physicians.

Relevant provisions are listed below.

– Premier Health’s contracts with insurers included the following restraint: were an insurer to add an additional hospital to its networks, Premier Health could terminate or renegotiate its contract with that insurer (hereafter “Panel Limitations”).

– Premier Health’s physicians’ contracts included lease and employment non-compete provisions related to MCEP. For instance, they prevented Premier Health’s physicians from affiliating with MCEP, admitting patients to MCEP, or referring them to other physicians at MCEP.

Previous Decisions
In 2014, District Court Judge Black granted the Defendants’ motion for summary judgment, on the grounds that the Defendants were acting as one entity, thus making them unable to conspire. He found that Premier Health controlled the operations of the four healthcare corporations. He thus concluded that MCEP had failed to show the plurality of actors necessary for a violation under Section 1 of the Sherman Act.

Dr. Caminade is an associate in the Boston office of Analysis Group. Dr. Weglein is a principal in the Boston office of Analysis Group. Dr. Caminade and Dr. Weglein specialize in applying economic theory, data analysis, and econometrics to the analysis of various antitrust issues and complex business disputes, in particular in the health care industry.


2 Whether affiliated with or employed by Premier Health.


However, in 2016, the U.S. Court of Appeals for the Sixth District reversed Judge Black’s judgment and remanded the case, basing its decision on *American Needle, Inc. v. National Football League*. The Court found that the Defendants were actual competitors and thus could not be considered one entity.

Because MCEP only alleged a *per se* violation, the Defendants then moved for summary judgment, on the grounds that the *per se* rule did not apply. First, they argued, that in *Northwest Wholesale Stationers, Inc. v. Pacific Stationery & Printing Co.*, the Supreme Court established that not all group boycotts are *per se* illegal; second, they argued that the conduct at stake is a core function of the joint venture, thus making it subject to the rule of reason under *Texaco, Inc. v. Dagher*. Judge Black rejected the motion and asserted that the conduct should be evaluated by the *per se* rule.

Judge Black subsequently recused himself from the case, whereupon Premier Health filed a motion for reconsideration as to the applicable legal standard. The case was reassigned to Judge Rice, who found the *per se* rule did not apply, reversing Judge Black’s ruling, and dismissed the case in August 2017.

**Legal and Economic Concepts**

*The Per Se Standard*

The Supreme Court and the Sixth Circuit have both established that the *per se* rule should be used stringently and sparingly. It must be restricted to cases where it is almost certain that the behavior will be found unreasonable under the rule of reason.

*The Antitrust Treatment of Joint Ventures*

Because joint ventures can enhance the combined firms’ efficiency, Courts have established that, in the context of joint ventures, otherwise *per se* illegal conduct is more likely to be judged under the rule of reason.

Whether trade restraints by joint ventures are judged under the *per se* rule or the rule of reason has been laid out by *Texaco, Inc. v. Dagher*. To be subject to the *per se* rule, a restraint must have the following characteristics: 1) the restraint should not be related to a “core activity” of the joint venture; 2) the restraint should be potentially subject to *per se* condemnation; and 3) the restraint is not plausibly necessary to achieve the procompetitive objective of the joint venture (i.e., it is a naked restraint on trade).

The rule of reason applies in all other cases. The Court found that pricing decisions were part of the core activity of a joint-venture, and thus must be judged under the rule of reason.

*Rate-for-Volume Pricing in the Managed Care Industry*

Rate-for-volume pricing, also called volume discounts, corresponds to the practice of offering discounts or lower prices to customers with higher volume. This pricing practice is standard in the managed care industry: healthcare providers typically offer lower rates to insurers expected to bring them a higher volume of patients. This pricing practice has never been held to be *per se* illegal.

An insurer will be expected to bring a higher volume of patients to a provider if it has a larger number of members, but it can also “steer” its members to some providers, thus increasing the number of patients received by the chosen providers. Such steering can be accomplished, for instance, by the use of narrow networks. By using narrow networks (also called selective contracting), an insurer limits the number of in-network providers its members can access. The insurer can thus channel, or steer, more members to the in-network providers compared to a situation where more providers would be in-network. In exchange, it gets lower prices from healthcare providers. The volume discounts are thus tied to the size and nature of the network. If an insurer adds an additional hospital to its

---

5 At Lem Litig., 817 F.3d 935.
8 574 U.S. 1, 7 (2006).
10 See Copperweld Corp. v. Independence Tube Corp., 467 U.S. 752, 768 (1984); In re New Energy Corp. 739 F. 3d 1077, 1079 (7th Cir. 2014); Major League Baseball Props., Inc. v. Salvino, Inc., 542 F.3d 290, 338 (2nd Cir. 2008); Polk Bros., Inc. v. Forest City Enters., Inc., 776 F.2d 185, 188 (7th Cir. 1985); In re ATM Fee Antitrust Litig., 554 F. Supp. 2d 1003, 1011-12 (N.D. Cal. 2008).
11 574 U.S. 1.
12 Consider the following simplified example. If an insurer has one hundred members who visit the hospital once a year, and if it has ten identical hospitals in its network, each hospital expects to treat ten patients per year. However, if the insurer uses a narrow network and contracts with only five hospitals, those hospitals expect to treat twenty patients per year. By using a narrow network, the insurer
network, the network then becomes less narrow, thus diverting patients from the original in-network hospitals. Under rate-for-volume pricing, the original hospitals would then be expected to increase the rates charged to the insurer. For this economic reason, rate-for-volume pricing contracts are sometimes contingent on the contours of the insurer’s network, and thus include clauses that allow for renegotiation if the insurer’s network changed in breadth, such as the Panel Limitations.

Non-Compete Clauses in the Managed Care Industry
Non-compete clauses are also commonplace in the healthcare industry. For example, hospitals may prevent affiliated or employed physicians from investing in, or referring patients to, other hospitals. A justification for these non-compete contractual provisions is that they prevent physicians from freeriding on investments made by hospitals (e.g., physicians’ training or provision of convenient office space) by joining or affiliating with another hospital, therefore making those investments more likely to happen.

The Antitrust Treatment of Group Boycotts
While group boycotts were historically considered per se illegal, the Supreme Court, in *Northwest Wholesale Stationers*, clarified the conditions under which a group boycott would be considered per se illegal. Three characteristics are sufficient to find a group boycott per se illegal: 1) the boycott uses joint effort to disadvantage competitors by cutting off their access to consumers or suppliers; 2) its instigators have market power; and 3) there is no plausible procompetitive justification for the boycott. While those three characteristics are not necessary to establish per se treatment, the plausibility of a procompetitive effect of a group boycott needs to be considered.

The Panel Limitations are not Per Se Illegal

The Panel Limitations are Vertical Restraints
Discussing the Panel Limitations included in Premier Health’s contracts with insurers, which allow Premier Health to terminate or renegotiate their contracts if the insurer’s hospital network were to change, Judge Rice described these restrictions as vertical restraints. The restrictions stem from the joint venture of hospitals and apply downstream, to the insurers. While the restrictions may have an impact on horizontal competitors, as argued by MCEP, Judge Rice noted that the Supreme Court has established that an agreement is horizontal if the relationship between the agreeing parties is horizontal, rather than if the effects of the agreement are horizontal. As vertical restraints are typically analyzed under rule of reason, Judge Rice concluded the Panel Limitations should not be judged under the per se standard.

The Panel Limitations Belong to the Joint Venture’s Core Activity
For the sake of argument, Judge Rice addressed the argument as if the Panel Limitations had been found to be, in general, per se illegal. As the case involved a joint venture, under *Dagher*, one would need to establish whether the Panel Limitations are part of the joint venture’s “core activity.” Judge Rice noted that since the Panel Limitations are intrinsically linked to the volume discounts given by Premier Health, they are part of the joint venture’s pricing decisions, a joint venture’s core activity. The restraint should thus be analyzed under rule of reason.

The Panel Limitations are not Subject to Per Se Condemnation
Further assuming, for the sake of argument, that the Panel Limitations had not been found to be part of the joint venture’s core activity, one should next ascertain whether those limitations are potentially subject to per se condemnation. There, Judge Rice disagreed with the Sixth Circuit’s opinion, which had opined that “explicitly excluding the insurers’ ability to contract with other partiers” was “anticompetitive on its face” and “serves no proper business function,” thus subject to the per se rule. He found that the opinion was dicta and not based on facts, and that short-term exclusive contracts between healthcare providers and insurers have repeatedly survived antitrust challenges.

---

14 Based on Com-Tel, Inc. v. DuKane Corp., 669 F.2d 404, 409 (6th Cir. 1982).
The Panel Limitations are Plausibly Procompetitive

Were the Panel Limitations potentially subject to the per se rule, one next inquires as to whether they plausibly served a procompetitive objective. Judge Rice opined that the Panel Limitations served a plausible efficiency goal. The Panel Limitations were a quid pro quo for the volume discounts granted by Premier Health to insurers, and thus, allowed for rate-for-volume pricing, which can result in lower premiums and more consumer choice.18

The Non-Compete Clauses are not Per Se Illegal

Judge Rice also finds that the non-compete clauses included in Premier Health’s physician contracts were not subject to the per se rule. First, he opined that, generally, the clauses are vertical restraints. However, even if they were, for the sake of argument, viewed as horizontal, Judge Rice ruled that Dagher would apply and the restraint 1) belongs to the joint venture’s “core activity”; 2) was not typically subject to per se, and 3) was plausibly procompetitive. Indeed, when Premier Health invested in its physicians, it did not want them to confer the benefits of those investments on MCEP.

The Group Boycott is not Per Se Illegal

Judge Rice also found that the group boycott alleged by MCEP had plausible procompetitive benefits, thus making it subject to the rule of reason under Northwest Wholesale Stationers. He cited two analogous cases.19 In Stop & Shop Supermarket, the First Circuit court established that the exclusive contracts that prevented an insurer from adding pharmacies to its network were not per se illegal, as the exclusive dealing arrangement was part of a rate-for-volume contract. In Levine, the Eleventh Circuit found that panel limitations that excluded some providers from a multiprovider network were not per se illegal.

Additional Reasons for a Per Se Treatment

Judge Rice noted that Premier Health’s stated intent to drive MCEP out of the market is not enough to bring a per se challenge.20 Judge Rice also opined that because 1) rate-for-volume pricing and non-compete provisions are common in the healthcare industry and were used by Premier Health in contracts predating MCEP, and 2) courts are not experienced enough to judge complicated healthcare pricing, it would be inappropriate to judge the restraints under the per se rule.

Conclusion

Judge Rice’s opinion on Med. Center at Elizabeth Place provides guidance on the use of per se rule vs. rule of reason in the context of joint ventures, in particular regarding vertical restraints and group boycotts in the managed care industry.

---

16 Indeed, the Panel Limitations do not actually prevent insurers from adding hospitals to their networks. Rather they allow for contract termination or renegotiation.
17 See, e.g., Methodist Health Servs. Corp. v. OSF Healthcare Sys., 859 F.3d 408, 410 (7th Cir. 2017).
18 See Abraham v. Intermountain Health Care Inc., 461 F.3d 1249, 1261 (10th Cir. 2006).
19 Stop & Shop Supermarket Co. v. Blue Cross & Blue Shield, 373 F.3d 57 (1st Cir. 2004); Levine v. Cent. Fla. Med. Affiliates, Inc., 72 F.3d 1538 (11th Cir. 1996).
United States v. Energy Solutions – Perspectives on Litigating Antitrust Merger Challenges

by Maria Garibotti

Dr. Garibotti is a manager in the Chicago office of Analysis Group. Dr. Garibotti specializes in the application of economics and statistics to questions arising in antitrust and other litigation. Dr. Garibotti was part of the team that supported the DOJ’s economic expert, Professor John Mayo, in the Energy Solutions-Waste Control Specialists merger.

On September 26, 2017, the Transportation and Energy Industries Committee of the ABA Section of Antitrust Law hosted a panel discussion on the recently enjoined acquisition of Waste Control Specialists (WCS) by Energy Solutions, the latest in a series of successful merger challenges by the Antitrust Division of the Department of Justice (DOJ). The case, decided in June 2017, raised several issues of interest to antitrust practitioners, and the panel held a lively discussion that touched on several issues, including the interplay between economic evidence and ordinary course documents, the boundaries of the failing firm defense, and the procedural constraints that may be found outside the District Court of DC.

Energy Solutions and WCS both own disposal facilities for low level radioactive waste (LLRW). Because of the regulatory framework governing the disposal of radioactive waste, the Energy Solutions facility in Clive, Utah and the WCS facility in Andrews, Texas are the only licensed LLRW disposal options available for LLRW generated in 36 states, plus the District of Columbia, and Puerto Rico. The case centered on commercial LLRW—that generated by power plants, hospitals, and research centers.

LLRW can be classified for disposal as Class A, B, or C waste based on its radioactive content. Class A waste is the least hazardous and has less stringent requirements for its disposal than Class B or C waste. The Clive facility owned by Energy Solutions is licensed to accept Class A waste only, while the WCS facility at Andrews is licensed to receive all three classes of LLRW. LLRW that is Class A when it is generated is typically called “lower activity” waste by market participants, while LLRW that is Class B or C when generated is called “higher activity” waste. Higher activity waste can sometimes be “dispositioned,” meaning it can be processed and reclassified as Class A waste for disposal.

The panel was moderated by John R. Seward, Counsel at the DC office of Andrews Kurth Kenyon. The panel included the lead trial attorneys for each side in the merger, as well as an economic expert who was not involved in the transaction:

Julie Elmer (DOJ): Trial attorney in the networks and technology enforcement section of the Antitrust Division. Ms. Elmer joined the Division in April 2015 and has played a key role in merger investigations in various industries.

Tara Reinhart (Energy Solutions): Antitrust Partner with Skadden, Arps, Slate, Meagher & Flom. Ms. Reinhart focuses on civil litigation and government investigations. She is the former chief trial counsel for the FTC Bureau of Competition, and led the FTC team that successfully challenged Staples’ proposed acquisition of Office Depot.

Dr. Chetan Sanghvi: Managing Director with NERA Economic Consultants. Dr. Sanghvi is an expert in industrial organization and antitrust economics. He was previously with the FTC, where he was Economics Advisor to the office of Commissioner Brill, a testifying economics expert, and lead economist on FTC litigations.

Product Market Definition

The panel started by discussing product market definition. Mr. Seward noted that the different Classes of radioactive waste and the differences in the two disposal facilities created interesting issues around relevant product market and the extent of competition. He pointed out that the Division had argued four relevant product markets, yet the Court decided that the industry did not need to be divided so granularly, and instead found that there were two product markets: lower- and higher-activity commercial LLRW.2

Ms. Elmer noted that as long as it is supported by the evidence, a market “need not have the precise contours” of the market as defined in the complaint.3 The Government had provided evidence from ordinary course documents, corroborated by executive testimony at trial, that the companies drew the same dividing line between lower and higher activity waste as the government did, and that pricing and disposal options also differed along the same dividing line.4 The Court agreed with the Government’s split of the industry into lower- and higher-activity LLRW, but stopped short of further subdividing waste depending on how it had been generated—whether in the course of normal operations or during the nuclear plant decommissioning process.5

The Defendants argued that the companies were not very close competitors because of the differences in the waste received by each facility.6 Ms. Reinhart noted that while the Court ultimately sided with the Government, customer documents used at trial pointed to the existence of three segments, rather than two. The three segments included: a sub-segment of lower activity waste at “the lowest end of Class A,” which could be sent to any ordinary landfill with minimal paperwork; a “middle category” with the remainder of the Class A waste that was mostly sent to Energy Solutions; and higher activity waste that could only be sent to WCS. This division of the industry would have resulted in no overlap between the parties.

Ultimately, the Court may have been persuaded by ordinary course documents. Ms. Elmer noted that the parties’ story conflicted with some of their past positions. For example, Energy Solutions had filed an antitrust counterclaim against WCS in 2015,7 arguing that its ability to process and “downblend” high activity waste to be disposed in Clive was the only competitor to disposal of Class B and C waste at WCS. While not all higher activity waste can be processed in this manner, ordinary course documents showed that Energy Solutions had been innovating and expanding the boundary of the waste they could process. As a legal matter, the Government did not have to prove perfect overlapping competition across all product lines. Documents supported that the parties did compete for important segments of the market.8

As an aside, both Ms. Reinhart and Ms. Elmer pointed out that they felt constrained by the rules set by the Court. Ms. Reinhart indicated that the 25-hour limit on trial testimony and the Court’s preference for live rather than video testimony limited the Defendants’ ability to present evidence from customers regarding the granularity of the market. Ms. Elmer noted that there was no bulk admission of exhibits—the Court required that all documents be sponsored by either live witnesses or deposition testimony played at trial. That limited the number of ordinary course documents that the Government could present.

Entry and Self-Help

Turning to economic evidence relevant to competitive effects, Ms. Reinhart highlighted two arguments. The first was that entry into processing was relatively easy for anyone so interested, including utilities themselves: a witness testified that “all you need is $100,000 and a tank.” The second was the possibility of long-term storage of higher activity waste as a constraint on the merged firm. On this point, she pointed to three things: testimony from customers, documentary evidence showing that WCS pricing was constrained by the potential for storage, and a “natural experiment” when the industry had to adjust to the shutdown of the only existing Class B and C facility in 2007, prior to WCS entry.
Ms. Elmer noted that, in its decision, the Court rejected processing as an alternative because processed waste has to be disposed, and the merging parties would still be the only disposal options. The Court had also found no evidence of generators entering the market.9 With regards to storage, Ms. Elmer pointed to Defendants’ witnesses admitting that storage and disposal are not the same—while storage is an interim step, disposal is a final step. Ms. Elmer also alluded to testimony from customers that they would not respond to a SSNIP by resorting to storage, as it was costly and risky, and they preferred disposal to storage.

With the discussion turning towards economics, Dr. Sanghvi joined in. Self-help should be evaluated the same way as any other alternative available to customers: it cannot be just a theoretical possibility, and it should be sufficient to replicate the existing pricing dynamic. Dr. Sanghvi found storage to be a very interesting economic question, and felt that the Court and the Government had not given it its due attention by failing to take into account the time value of money. Although the Government rebutted the relevance of self-help by noting that generators would either “pay now” or “pay later,” Dr. Sanghvi pointed out that the choice to charge a competitive price today or an anticompetitive price tomorrow cannot be set aside as a matter of economics. It needs to be rebutted empirically, based on the time value of money, magnitude of the potential price premium, and the parties’ discount factors.

Looking for lessons learned on trial advocacy, Ms. Reinhart noted that the Judge had ignored the economic evidence for storage, on which the Defendants relied heavily, in favor of fact evidence. Ms. Elmer’s takeaway was that the companies’ decision to allege a product market that excluded self-storage in their private antitrust action resonated with the Court, and suggested that private parties should think about potential ramifications when bringing an antitrust action and alleging a product market.

The Failing Firm Defense

The opinion outlined two prongs to a successful failing firm defense: (1) a grave probability of business failure by the target, and (2) no other prospective purchaser for the target. The Court declined to opine on the first prong, and decided that the Defendants had not met their burden on the second. The panel discussed both components.

First Prong: Grave Probability of Business Failure

Ms. Elmer noted that WCS was not behaving like a firm that was “poised to fail,” noting that it was meeting all of its financial obligations, competing for and winning long-term projects, and representing to its project owners, regulators and people in the community that it had the financial resources to stand behind its current and potential projects.

Ms. Reinhart stated that the Government’s criticism was unfair and compared it to “telling a drowning man [to] stop trying to swim.” WCS had never made a profit. It also produced a detailed financial analysis showing that even under the best conceivable scenario, the company would be operating at a loss in five years. In sum, WCS showed the potential for failure was met.

Dr. Sanghvi found that the government’s position was singularly focused on the short run. In industries with specific assets and very large fixed costs, firms can find themselves below the minimum viable scale. This is a disequilibrium: firms are not making money, even though in the short run they may be covering their marginal costs and operating. Dr. Sanghvi stated his belief that antitrust enforcement should not be about preserving low prices in disequilibrium, but about preventing high prices in equilibrium. According to Dr. Sanghvi, very aggressive antitrust enforcement seeking to prolong disequilibrium can lead to adverse effects and reduce the incentives to invest or enter.

Ms. Elmer pointed out that the failing firm defense is an affirmative defense that must meet a high bar, because it gives a “free pass” for an otherwise anticompetitive merger. By design, it is a tough defense to meet. Ms. Reinhart acknowledged the high bar, but indicated that the Government’s position appeared to be that a company needs to go out and keep trying to sell, and accept any offer higher than liquidation value. She pointed to testimony by the Government’s financial expert, who agreed that the DOJ would not bless a deal with a competitor if a company valued at a net negative value had an offer for a dollar. Ms. Reinhart pointed out that the financial analysis she had previously mentioned was unrebut-

---

9 Id. at 46-48.
and the government had argued that it had been produced as a litigation tactic.

Ms. Elmer provided additional arguments made by the Government against the claim that WCS was facing imminent business failure. She noted that WCS had filed an application with the NRC in Spring 2016 to store high level radioactive waste—much more dangerous than LRRW—for 100 years. In the application, WCS’s president affirmed under oath that WCS had the financial wherewithal to meet its obligations. The CEO of WCS’s parent company, Valhi, had been deposed in April 2017 and testified that Valhi had not made determinations about what it would do if the merger did not go through—there had been no discussions with creditors or regulators. This evidence weighed against the relevant legal standard that exit be imminent.

Second Prong: No Other Prospective Purchasers

Ms. Elmer summarized the process that Valhi was trying to cast as a Horizontal Merger Guidelines (HMG) shop process. In 2014, Valhi hired an investment banker to find an investor willing to pay fair value for a minority share in WCS, rather than looking to sell WCS outright. Valhi fired the investment banker in August 2014 and did not retain another one, instead conducting negotiations on its own. The ordinary course documents showed that Valhi executives felt that offers were not high enough, and that it would be fully acceptable to continue to operate WCS as a subsidiary. This process was not enough to meet the requirements in the HMG.

Ms. Reinhart added that Valhi had also attempted to sell in 2015, leading to the Energy Solutions offer. At that time, WCS believed that there were no additional companies that were interested. Ms. Reinhart characterized the Government’s position as presenting a “chicken and egg” problem that could never result in an acquisition by a rival, as any such acquisition would result in additional steps taken exclusively for litigation.

Ms. Elmer pointed out that the Court suggested a potential work-around: after entering the merger agreement with Energy Solutions in October 2015, the Valhi board should have retained the right to consider other offers.

Dr. Sanghvi agreed with Ms. Reinhart that the Government’s position would result in most acquisitions by competitors being a non-starter. He noted that mergers and acquisition deals do not just happen—they involve agency problems and other frictions. Such deals are “sensitive enough” when a party retains the right to obtain a topping bid, but the Government’s proposal that parties retain the right to consider not just a topping bid, but any bid, could stop deals before they begin. Dr. Sanghvi expressed concern that Hart-Scott-Rodino was not meant to be interpreted this way.

Trial Practice Outside the District of DC

The panel then discussed certain procedural constraints in this case that are unusual for merger litigation. Ms. Elmer indicated that both sides presented ex parte proposed findings of fact and conclusions of law before the trial. As a result neither side saw what the other side had argued, although she noted that the Judge issued an order to present and explain certain topics specifically, giving each side a clue about what the other side had presented. Instead of post-trial briefings, the Judge gave the parties two hours to present closing arguments and requested a comprehensive slide deck with the evidence that each side wanted her to consider. Ms. Reinhart noted that the ex parte nature of the legal filings was odd, and did not allow for the usual advocacy and back-and-forth between the parties. She also found that the two hours for closing arguments went by fast, and were not an adequate substitute for a briefing.

Mr. Seward observed that the opinion did not discuss economic testimony in detail. Ms. Reinhart agreed, noting that the Defendants relied heavily on the testimony of their economic expert, who was not mentioned by name anywhere in the decision. She thought the Judge had avoided giving economic evidence its proper weight, opting instead for relying on ordinary course documents.

Ms. Elmer noted that the Court did not see expert reports in this case, and that with the story told by the documents and customer testimony, the Government did not need to lean heavily on its economic expert. She offered the conclusion that economic evidence may not be sufficient to contradict “hot” documents produced in the ordinary course of business.

Dr. Sanghvi closed by stating his surprise at the lack of substantive economics in the opinion, and more generally at the procedural rules that limited the dialog between the parties. Economic testimony is a central way to organize and structure each side’s narrative in merger litigation, and he would have wanted the Court to engage more with economic analysis.
Bryson Bachman is Senior Counsel to the Assistant Attorney General for the U.S. Department of Justice ("DOJ") Antitrust Division. He focuses his practice on civil antitrust matters and assists with oversight of the antitrust division. Prior to his current position, he was a Deputy Associate Attorney General and trial attorney for the DOJ. He has also served as Senior and Chief Counsel to Senator Mike Lee, member of the U.S. Senate Judiciary Committee, and Chairman of the Antitrust, Competition Policy and Consumer Rights Subcommittee, and worked for three years in the private sector as an associate at Sidley Austin LLP. Mr. Bachman began his legal career as a judicial clerk for The Honorable Thomas B. Griffith for the U.S. Court of Appeals for the D.C. Circuit.

You have a varied career as an antitrust practitioner. Can you tell us what incited your interest in antitrust law?

I minored in economics during college and it colored my world—I started thinking in terms of transaction costs and efficiencies. Then I worked as a summer law clerk at the Federal Trade Commission, which spurred my interest in antitrust. A few years later, I had an opportunity to work for Senator Mike Lee on the antitrust subcommittee of the Senate Judiciary Committee, which I jumped on. These experiences prepared me for my work at the DOJ.

I have worked for the DOJ for more than three years. During my first couple years, I worked on two large merger reviews that ended up being litigated—each with its own set of complex challenges.

Could you tell us more about your time as a trial attorney? What two cases did you work on?

The first case concerned the merger between GE Appliances and Electrolux, and the second case concerned Cigna’s merger with Anthem. I was involved in essentially the full course of both merger investigations, as I worked on the investigation teams and then on the trial teams that resolved the cases. (Electrolux and GE abandoned their merger during the late stages of the trial; Anthem’s acquisition of Cigna was blocked by the District Court for the District of Columbia and upheld by the D.C. Circuit.)

Were there any lessons learned from these significant trial opportunities?

I learned that an antitrust trial is a different animal. When I was in private practice, I worked on a trial involving a criminal matter where it was easier to understand from the beginning what would and would not be convincing to the judge. In an antitrust trial, I found it more difficult from the outset to envision what would matter in the actual litigation. The value of experience—of seeing firsthand what will and will not be persuasive to a judge—cannot in my view be overstated. I might analogize it to building a table for a room. In my experience, until you have a sense of what an antitrust trial really looks like, you are in some sense building a table (preparing your case) without knowing the dimensions and other features of the room in which it will rest. Once you’ve litigated, you’ve seen the room.

I also learned how discovery is an important piece of the puzzle. The discovery requests are time intensive. Sometimes the endeavor pays off a lot and sometimes it doesn’t. But ultimately, given how important documents...
can sometimes be in proving a case, the documents gathered during discovery in merger litigation can be very important.

The deposition stage can also be critical. In some instances, the importance of documents and information only becomes apparent when you are preparing for depositions. It is at that stage that you see how the information may or may not be as important or persuasive as you perhaps initially thought.

You worked on antitrust matters for the Senate Judiciary as well as for the DOJ. Are there any notable differences between working for the legislative branch versus the executive branch?

While they are two different branches of government, the antitrust work was actually similar in a lot of ways. What is important and persuasive in reviewing a transaction is often the same.

In terms of differences, I would say the DOJ has more resources at its disposal. The DOJ also offers a more granular view on the issues because you have access to many documents from the parties.

What about the third branch of government. Any bold predictions for the next cases that will be before the Supreme Court?

I do not have any predictions to share. I am, however, quite interested to see whether the Supreme Court becomes more active on antitrust matters now with Justice Gorsuch on the bench.

Are there any particular emerging antitrust issues that are piquing your interest lately?

In my work, I see new factual scenarios arising and new industry trends appearing. It will be interesting to see how the antitrust tool box and laws are applied to the new ways that businesses are functioning.

When you are not in the office. What are you likely to be doing outside of the antitrust world?

I am a bit of an avid sportsman. I would say I split my time equally between tennis, golf, basketball, and my road bike. I actually often use my bike to travel to work. It’s a fun mode of transportation from the Virginia suburbs and a good way to start or end the day.

Sounds like a fun ride. As we begin to wrap up, is there any advice you would offer young lawyers interested in antitrust?

Yes. Enjoy what you are doing but be willing to take risks, and make sure you do what needs to be done to grow your skills and become a better lawyer. Seek out mentors to help you with the growth process. Seize every opportunity that you think will make you a better advocate.

That’s great advice. Perhaps, we could close out with the best advice that you have received?

It is easy to get caught up thinking about your career path. Do good work wherever you are, and the next opportunity will come along. It will rise to meet you.

The Joint Conduct Committee thanks Mr. Bachman for taking the time out of his busy schedule to do this interview.
Get Involved!

Are you interested in playing a bigger role in the Joint Conduct Committee, but not sure how to get involved? Here is a list of the current volunteer opportunities available in the coming months. We are committed to featuring a diverse range of voices and perspectives, and we welcome contributions from new and experienced practitioners alike.

- **ABA SAL Joint Ventures Handbook**: We are looking for contributors to the next update of the Handbook. If interested, please contact Sarretta McDonough (smcdonough@gibsondunn.com) and Kellie Lerner (klerner@robinskaplan.com).

- **Joint Conduct Editorial Board**: We are looking for volunteers to join our Committee’s Editorial Board. Responsibilities include developing themes and drafting and editing content for the *Cartel and Joint Conduct Review* and the Committee’s Connect page. We ask our Editorial Board Members to commit to serving on the Editorial Board for a minimum of one quarter; the estimated time commitment, on average, will be 5-10 hours per month. If interested, please contact Kellie Lerner (klerner@robinskaplan.com).

- **Cartel & Joint Conduct Review Spring 2018 Issue**: We are currently accepting submissions for the Spring 2018 issue of the *Cartel & Joint Conduct Review*. Submissions should be 2,000 words or less; we welcome both summary/informational pieces and opinion pieces. Interested authors should contact Kellie Lerner (klerner@robinskaplan.com).

- **Joint Conduct Committee Programs**: We are looking for volunteers to organize brown bag programs and/or CLE teleseminars for 2018. Never organized a program before? No problem! One of our Committee leaders will guide you through the process. If interested, please contact John Delacourt (jdelacourt@pptaglobal.org) and Joanne Lewers (joanne.lewers@dbr.com).