

WHY DID THE ANTITRUST AGENCIES EMBRACE UNILATERAL EFFECTS?

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INTRODUCTION

When Judge Richard Posner upheld the Federal Trade Commission challenge to a hospital merger in 1986,¹ he emphasized the threat of coordinated competitive effects. Posner explained that the “ultimate issue” in the antitrust review of mergers is “whether the challenged acquisition is likely to hurt consumers, as by making it easier for firms to collude, expressly or tacitly, and thereby force price above or farther above the competitive level.”² The Justice Department Merger Guidelines in force during most of the 1980s similarly highlighted a concern with coordinated competitive effects.³

Within a decade, the primary focus of merger reviews at the federal antitrust enforcement agencies had changed. According to Charles James, the first Assistant Attorney General for Antitrust in the current administration, “one interesting side-effect of the 1992 [Horizontal Merger] Guidelines has been the emergence of unilateral effects as the predominant theory of economic harm pursued in government merger investigations and challenges.”⁴ Still, coordination has not been entirely eclipsed as a concern

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¹ *Hosp. Corp. of Am. v. Fed. Trade Comm’n*, 807 F.2d 1381 (7th Cir. 1986) (Posner, J.).

² *Id.* at 1386.

³ U.S. Dep’t of Justice Merger Guidelines § III.C (1982), *reprinted in* 4 Trade Reg. Rep. (CCH) ¶ 13,102; U.S. Dep’t of Justice Merger Guidelines § 3 (1984), *reprinted in* 4 Trade Reg. Rep. (CCH) ¶ 13,103.

⁴ Charles A. James, *Rediscovering Coordinated Effects* (Aug. 13, 2002), *available at* <http://www.usdoj.gov/atr/public/speeches/200124.htm>. Other senior government officials have made similar observations. William J. Kolasky, *Coordinated Effects in Merger Review: From Dead Frenchmen to Beautiful Minds and Mavericks* (Apr. 24, 2002), *available at* <http://www.usdoj.gov/atr/public/speeches/11050.htm> (“Since the issuance of the 1992 Horizontal Merger Guidelines, both the FTC and the Division have placed increased reliance on unilateral effects theories to challenge horizontal mergers and have brought fewer coordinated effects cases.”); Jonathan B. Baker, *Unilateral Competitive Effects Theories in Merger Analysis*, 11 ANTITRUST 21 (Spring 1997) (Unilateral theories have become “by far the most common in the internal analyses of the antitrust enforcement agencies, particularly among agency economists.”).

among government enforcers or in agency litigation.⁵ Indeed, antitrust enforcement agency interest in coordinated competitive effects theories is now on the rise.⁶

I. POLITICS AND THE RISE OF UNILATERAL EFFECTS

Why did the unilateral competitive effects of merger capture the attention of enforcement agency economists during the late 1980s and 1990s? Stuart Gurrea and Bruce Owen view the agency attention to unilateral effects as importantly “political.”⁷ The agencies, they suggest, when led by “aggressive enforcers”—apparently a reference to the most recent Democratic administration⁸—and frustrated by a series of losses in merger litigation, latched on to unilateral theories “because they are more readily found in proposed transactions than are coordinated interaction effects.”⁹

The political explanation for the rise of unilateral effects analysis at the agencies is unconvincing, for two reasons. First, the political theory is inconsistent with the timing of agency interest in unilateral effects. Unilateral effects analysis was accepted by the antitrust agencies *before* the Democrats took charge of the Executive Branch in 1993; its introduction into the 1992 Horizontal Merger Guidelines reflected then-current agency enforcement practice.¹⁰ Moreover, recent commentary associated with the current Republican administration emphasizes continuity in federal agency enforcement norms during the last two decades, regardless of the political party in charge of the Executive Branch—implicitly locating Clinton era antitrust enforcement as within the modern mainstream, and not as unusually aggressive.¹¹ Second, it would be surprising if the antitrust agencies did

⁵ David A. Balto, *The History of Coordinated Interaction in Merger Enforcement*, 12 GEO. MASON L. REV. (forthcoming 2003).

⁶ Charles A. James, *Rediscovering Coordinated Effects* (Aug. 13, 2002), available at <http://www.usdoj.gov/atr/public/speeches/200124.htm>; William J. Kolasky, *Coordinated Effects in Merger Review: From Dead Frenchmen to Beautiful Minds and Mavericks* (April 24, 2002), available at <http://www.usdoj.gov/atr/public/speeches/11050.htm>; David T. Scheffman & Mary Coleman, *Quantitative Analyses of Potential Competitive Effects from a Merger*, 12 GEO. MASON L. REV. (forthcoming 2003).

⁷ Stuart D. Gurrea & Bruce M. Owen, *Coordinated Interaction and Clayton § 7 Enforcement*, 12 GEO. MASON L. REV. 89 (2003).

⁸ *Id.* Although Gurrea and Owen tie unilateral effects analysis to the 1990s, they do not specifically identify the enforcers they have in mind or explain why they view some antitrust enforcers as more aggressive than others.

⁹ *Id.*

¹⁰ U.S. Dep’t of Justice & FTC, Horizontal Merger Guidelines § 2.2 (1992), reprinted in 4 Trade Reg. Rep. (CCH) ¶ 13, 104 [hereinafter Horizontal Merger Guidelines].

¹¹ William E. Kovacic, *The Modern Evolution of U.S. Competition Policy Enforcement Norms*, 71

not seek to employ new theories and methodologies developed and accepted by economists for identifying the harmful competitive effects of mergers—even if it meant that anticompetitive transactions were found in places where the government had not looked previously (as with unilateral theories).¹²

II. ECONOMICS AND THE RISE OF UNILATERAL EFFECTS

This comment provides an alternative explanation for agency interest in unilateral effects during the 1990s that highlights improvements in economists' toolkits rather than political demands for more aggressive enforcement. Two economic developments during the previous decade brought attention to unilateral theories. The first was a theoretical literature that investigated the conditions under which oligopolists would find merger profitable even if the industry members were not coordinating their interactions.¹³ This literature was influential in helping economists understand how and when a unilateral theory involving merger among sellers of homo-

ANTITRUST L.J. 377 (2003); Thomas B. Leary, *The Essential Stability of Merger Policy in the U.S.*, 70 ANTITRUST L.J. 105 (2002); Timothy J. Muris, *Antitrust Enforcement at the Federal Trade Commission: In a Word—Continuity* (Aug. 7, 2001), available at <http://www.ftc.gov/speeches/muris/murisaba.htm>. Antitrust enforcement underwent a sea change with the Chicago school revolution, beginning during the late 1970s, but this dramatic change in perspective affected enforcers of all political stripes; see generally, Jonathan B. Baker, *A Preface to Post-Chicago Antitrust*, in POST-CHICAGO DEVELOPMENTS IN ANTITRUST ANALYSIS 60 (Roger van den Bergh, Roberto Pardolesi and Antonio Cucinotta, eds., 2002). The most significant deviation from the recent enforcement consensus was not during the Clinton administration. It was instead the relatively non-interventionist attitude of the federal agencies during the second term of the Reagan administration. See Eleanor Fox & Robert Pitofsky, *Antitrust Policy*, in CHANGING AMERICA: BLUEPRINTS FOR THE NEW ADMINISTRATION 319 (Mark Green ed., 1992).

¹² Enforcers in different administrations may raise or lower the evidentiary bar for proving certain theories. For example, enforcement officials in the current Republican administration have questioned the probative value of certain types of empirical evidence sometimes employed to demonstrate unilateral effects. E.g. DANIEL HOSKEN, DANIEL O'BRIEN, DAVID SCHEFFMAN & MICHAEL VITA, DEMAND SYSTEM ESTIMATION AND ITS APPLICATION TO HORIZONTAL MERGER ANALYSIS (FTC, Working Paper No. 246, 2002). But the logic and soundness of the theories themselves is not a policy question. Presumably for that reason, the same officials have not questioned the economic logic of the unilateral theory itself, or removed it from the Merger Guidelines.

¹³ See, e.g., Stephen W. Salant et al., *Losses from Horizontal Merger: The Effects of an Exogenous Change in Industry Structure on Cournot-Nash Equilibrium*, 98 Q.J. ECON. 185 (1983); Raymond Deneckere & Carl Davidson, *Incentives to Form Coalitions with Bertrand Competition*, 16 RAND J. ECON. 473 (1985); Martin K. Perry & Robert H. Porter, *Oligopoly and the Incentive for Horizontal Merger*, 75 AM. ECON. REV. 219 (1985); Joseph Farrell & Carl Shapiro, *Horizontal Mergers: An Equilibrium Analysis*, 80 AM. ECON. REV. 107 (1990).

geneous products would apply beyond the creation of a dominant firm.¹⁴ The second, and probably more important, development was the growth of empirical literature creating and applying new methodologies for measuring market power.¹⁵ These new methodologies became particularly useful for analyzing the loss of localized competition among sellers of differentiated products, the most common unilateral theory of adverse competitive effects of mergers,¹⁶ with the growing availability of computerized point-of-sale scanner data for recording individual transactions at supermarkets and other retail outlets.¹⁷ By the time the 1992 Merger Guidelines were drafted, agency economists had accepted the unilateral model as a useful analytic framework and were developing and employing methodologies for estimating the extent to which buyers consider individual products to be close substitutes; the extent to which, in consequence, one firm's products constrain the pricing of rival products; and the extent to which a merger among rivals would lead to higher prices by removing those constraints.¹⁸ Similarly,

¹⁴ Horizontal Merger Guidelines § 2.22; Robert D. Willig, *Merger Analysis, Industrial Organization Theory, and Merger Guidelines*, 1991 BROOKINGS PAPERS ON ECON. ACTIVITY 281, 293-99 (1991).

¹⁵ The first empirical study of which I am aware that demonstrated that it was practical to estimate the magnitude of the loss of localized competition from merger among sellers of differentiated products and simulate the effects of merger was published in 1985 (and circulated earlier in working paper form). See Jonathan B. Baker & Timothy F. Bresnahan, *The Gains from Merger or Collusion in Product-Differentiated Industries*, 33 J. INDUS. ECON. 427 (1985). Other approaches followed. E.g. Steven Berry & Ariel Pakes, *Some Applications and Limitations of Recent Advances in Empirical Industrial Organization: Merger Analysis*, 83 AM. ECON. REV. 247 (1993); Jerry Hausman et al., *Competitive Analysis with Differentiated Products*, 34 ANNALES D'ECONOMIE ET DE STATISTIQUE 159 (1994); Gregory Werden & Luke Froeb, *The Effects of Mergers in Differentiated Products Industries: Logit Demand and Merger Policy*, 10 J. L. ECON. & ORG. 407 (1994); Aviv Nevo, *Mergers with Differentiated Products: The Case of the Ready-to-Eat Cereal Industry*, 31 RAND J. ECON. 395 (2000). For a recent survey of empirical methods used in antitrust, see Jonathan B. Baker & Daniel L. Rubinfeld, *Empirical Methods in Antitrust Litigation: Review and Critique*, 1 AM. L. & ECON. REV. 386 (1999).

¹⁶ Horizontal Merger Guidelines § 2.21. The theory itself was implicit in familiar economic models of monopolistic competition that predated the modern era of antitrust enforcement. It had been ignored in antitrust practice, presumably because of measurement difficulties, but the development of new empirical techniques for analyzing market power removed this excuse for not taking differentiation seriously. Cf. Timothy J. Muris, *Antitrust Enforcement at the Federal Trade Commission: In a Word—Continuity*, *supra* note 11 (“[A]lthough we have always had what could be called ‘unilateral effects’ theories, they have evolved, and they have been more widely applied since the 1992 revision of the [Merger] Guidelines.”).

¹⁷ Unilateral competitive effects analysis has been particularly important for analyzing mergers among sellers of branded consumer products, where scanner data is often available for analysis and localized competition may be significant.

¹⁸ Econometric evidence can be valuable but it also can be challenging to develop and present persuasively in court. A host of statistical and modeling issues often must be addressed, and the results are not always easy to interpret. The litigation challenges associated with proof of loss of localized competition have led to a revival of interest in submarkets, Jonathan B. Baker, *Stepping Out in an Old*

former Assistant Attorney General James attributes the recent importance of unilateral effects analysis in government investigations in part to “the belief by many economists that unilateral price changes resulting from mergers can be predicted and demonstrated empirically.”¹⁹

Agency economists in particular found unilateral theories attractive, and not solely because they could take advantage of new empirical tools and newly-available sources of data to measure the competitive effects. Economic training places a premium on developing a fully specified and logically consistent theory that derives outcomes from the rational behavior of individual actors. During the 1980s, the research literature became “committed to the conceptual framework of game theory,” leading to the association of coordination with “a particular class of equilibria in super-games” while other forms of oligopolistic conduct had distinct representations.²⁰ From within this framework, the consequences of merger have been most readily understood when oligopolies interacted without coordination. Assistant Attorney General James has similarly noted that coordinated effects analysis “can be perceived to be less determinate than the types of effects predicted under unilateral theory.”²¹ Accordingly, a methodological commitment to a fully specified and logically consistent theory provides a possible, though largely unarticulated, distinction between unilateral and coordinated theories that may have influenced economists to favor the unilateral approaches.

Put differently, if the facts support a unilateral theory, it is clear as a matter of economic logic why the particular merger would likely lead to higher prices. Before the merger, the price a merging firm charged for a particular product was held in check by the collective presence of competition from the products of rivals, including those of its merger partner, that were second choices for a significant fraction of buyers. That constraint is removed by merger, giving the firm an incentive to raise prices.²² The

Brown Shoe: *In Qualified Praise of Submarkets*, 68 ANTITRUST L.J. 203 (2000).

¹⁹ Charles A. James, *Rediscovering Coordinated Effects* (Aug. 13, 2002), available at <http://www.usdoj.gov/atr/public/speeches/200124.htm>. In contrast, James continues, “There is no corresponding set of predictive tools for coordinated effects.” *Id.*

²⁰ Robert D. Willig, *Merger Analysis, Industrial Organization Theory, and Merger Guidelines*, *supra* note 14 at 291.

²¹ Charles A. James, *Rediscovering Coordinated Effects* (Aug. 13, 2002), available at <http://www.usdoj.gov/atr/public/speeches/200124.html>. *But cf.* Timothy Bresnahan, *Comments on “Reforming European Merger Review: Targeting Problem Areas in Policy Outcomes”* by Kai-Uwe Kuhn (Nov. 26, 2002), available at <http://www.stanford.edu/~tbres/research.htm> (rigorous evidence of coordinated competitive effects can be qualitative and anecdotal).

²² For a hypothetical numerical illustration, see Jonathan B. Baker, *Unilateral Competitive Effects Theories in Merger Analysis*, 11 ANTITRUST 21, 23 (1997). This theory does not make all mergers

mechanism by which prices are led to rise is made clear by the theory. By contrast, the mechanism by which a merger would make coordination more likely or more effective is less apparent. The most common explanation that with fewer sellers in a market, coordination is more likely is a widely accepted empirical observation about probabilities. But this empirical regularity cannot explain why any particular merger is harmful, or distinguish those acquisitions in concentrated markets that would make coordination more likely from those that would not.²³ In short, the reason prices rise from merger under the unilateral story is clear to economists in a way that the received learning on the way a merger may facilitate coordination, however general its acceptance, is not.

III. LESSONS FOR THE REVIVAL OF COORDINATED EFFECTS

The recent agency interest in coordination challenges industrial organization economists in two ways. The first problem is to clarify the theoretical foundations for coordinated competitive effects, that is, to explain persuasively why and how a particular change in asset ownership, a merger, alters the ability or effectiveness of coordination.²⁴ One possible answer, mentioned in passing in the Merger Guidelines, involves the possibility that the merger involves the loss of a “maverick” firm (which had previously constrained industry coordination), or otherwise affects the maverick’s incentives to limit the degree to which coordinated outcomes approach what

appear to harm competition; defenses may include ease of entry, repositioning by rivals, and efficiencies.

²³ Jonathan B. Baker, *Mavericks, Mergers, and Exclusion: Proving Coordinated Competitive Effects Under the Antitrust Laws*, 77 N.Y.U. L. REV. 135, 139-40 (2002); Charles A. James, *Rediscovering Coordinated Effects* (Aug. 13, 2002), available at <http://www.usdoj.gov/atr/public/speeches/200124.htm> (Coordinated competitive effects analysis in the Merger Guidelines “does not do as much as some might like to determine why maintaining the independence of one of the specific parties to the proposed transaction is an important enough constraint upon coordinated interaction to justify a challenge.”); see William J. Kolasky, *Coordinated Effects in Merger Review: From Dead Frenchmen to Beautiful Minds and Mavericks* (Apr. 24, 2002) available at <http://www.usdoj.gov/atr/public/speeches/11050.htm> (“[N]either the theoretical nor the empirical literature tells us much at all about whether the disappearance of a single firm through merger will increase the likelihood of coordination, other than, perhaps, in the extreme case where a merger reduces the number of firms in a market from three to two.”).

²⁴ See Charles A. James, *Rediscovering Coordinated Effects* (Aug. 13, 2002) available at <http://www.usdoj.gov/atr/public/speeches/200124.htm> (discussing research effort to explain “why does this particular merger matter” in order to help the Justice Department “focus more directly on how individual firms affect the competitive dynamic in a market and how their elimination through merger may impact upon the likelihood of coordination”).

would arise from joint-profit maximization among the rivals in a market.²⁵ Gurrea and Owen intriguingly pursue what can be learned from behavior economics and experimental economics, to fill the same void.²⁶ The second problem is to identify types of empirical evidence that might bear on proof of coordinated competitive effects of mergers among rivals. The forthcoming article by David Scheffman and Mary Coleman, the senior antitrust economists at the F.T.C., represents an interesting attempt to do so.²⁷

This effort by economists, in the agencies and the academy, is critical to the current revival of coordinated competitive effects analysis of mergers. Unilateral effects became important with improvements to economists toolkits. Similarly, the long-term success of the renewed interest in coordinated competitive effects can be expected to turn primarily on developments in the tools and theories used by economists, not on shifting political winds.

²⁵ Jonathan B. Baker, *Mavericks, Mergers, and Exclusion: Proving Coordinated Competitive Effects Under the Antitrust Laws*, *supra* note 23.

²⁶ Stuart D. Gurrea & Bruce M. Owen, *Coordinated Interaction and Clayton § 7 Enforcement*, *supra* note 7.

²⁷ David T. Scheffman & Mary Coleman, *Quantitative Analyses of Potential Competitive Effects from a Merger*, *supra* note 6.