PRESUMPTIONS, DAMN PRESUMPTIONS AND ECONOMIC THEORY: THE ROLE OF EMPIRICAL EVIDENCE IN HOSPITAL MERGER ANALYSIS

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INTRODUCTION

It is hardly coincidental that the quote in the title of this symposium ("lies, damned lies and statistics") should have been applied disparagingly by a federal district court to the ambiguous role of economic evidence in antitrust litigation.¹ Over the past twenty years, economics has provided the exclusive theoretical basis for antitrust enforcement guidelines,² preoccupied antitrust scholarship, and served as the predominant tool for judicial analysis of antitrust disputes. Despite the preeminent role of economic theory in antitrust law, empirical economic evidence has played a relatively small part in both the formation and refinement of economic theory and the judicial resolution of individual disputes.

The reasons for the subordinate role of empirical economic evidence in antitrust analysis are not all that clear. Some may be attributed to the power of certain forms of economic theory, whose persuasiveness rests on assumptions no longer, if ever, deemed worthy of careful examination. Others seem to follow from the limitations of the judicial process and its consequent inability to provide suitable conditions for empirical examination. Still others may stem from the difficulty of measuring the relevant portion of rapidly changing markets with the kind of accuracy and timeliness thought necessary to litigation. Whatever the precise constellation of causes, it is well recognized, even by leading adherents of the law and economics approach to antitrust analysis, that the relationship between economic theory and economic "fact" is tenuous at best.³

This is not necessarily suggesting that empirical data can or should play a larger role in antitrust analysis than it already does. Except at the largest levels of generality, levels too large either to help refine theory or to prove useful in litigation, the economic theories underlying antitrust law appear oddly oblivious

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1. See McGahee v. Northern Propane Gas Co., 858 F.2d 1487, 1496 n.19 (11th Cir. 1988).

2. See, for example, the various incarnations, since 1982, of Merger Guidelines and the recent proposal regarding the use of efficiencies evidence in merger analysis. (The FTC's recent recommendations for modifying antitrust policies included the proposal that efficiencies evidence relevant to the issue of a merger's probable competitive effects be admissible in court.).

3. See, e.g., Frank H. Easterbrook, Allocating Antitrust Decisionmaking Tasks, 76 GEO. L.J. 305, 308-09 (1987) (declaring that "[t]he empirical foundation on which much antitrust policy was built has been washed away"); see also Fishman v. Estate of Wirtz, 807 F.2d 520, 563 (7th Cir. 1986) (Easterbrook, J., dissenting) (discussing merger law in particular and stating that "[p]ropositions about the economics of mergers often are filled with ifs and maybes; competing schools of thought produce different prescriptions"). See generally Michael S. Jacobs, An Essay on the Normative Foundations of Antitrust Economics, 74 N.C. L. REV. 219, 250-54 (1995). to data. Many examples of this curious detachment exist. Thus, while observations and studies of single-firm behavior may demonstrate that for-profit firms generally seek to maximize profits (or at least some for-profit firms; economists continue to debate this point),⁴ the evidence about profit-maximizing behavior, or absence thereof, by not-for-profit firms is at best inconclusive.⁵

By the same token, merger law generally proceeds on the assumption—an assumption rooted squarely in economic theory—that antitrust should prevent markets from becoming unduly concentrated. Theory tells us that in such markets, one of two anticompetitive scenarios is likely to play itself out: in the merger-to-monopoly scenario, consumers will face a firm with the power to unilaterally raise price profitably above competitive levels; while in the mergerto-oligopoly scenario, the reduced number of firms remaining and in the postmerger market will find it easier to collude successfully (that is, without being detected) to fix prices at supra-competitive levels. However plausible these assumptions may be on an intuitive basis, their empirical foundation is hard to trace and bereft of recent corroboration.

Though antitrust law contains many theories and assumptions with weak or non-existent empirical support, the two described above have not been selected at random. This paper concerns itself generally with hospital mergers and, in particular, with the case of *FTC v. Butterworth Health Corp.*,⁶ a recent controversial hospital merger decision characterized by a respected scholar as "the most revolutionary hospital merger decision yet issued²⁷ This is a decision that owes its notoriety in large measure to the novel manner in which it approached various types of empirical evidence offered in defense of the Butterworth merger but not normally found (and if found, not normally accepted) in hospital merger cases. In discussing *Butterworth*, this paper focuses attention on the poorly understood relationship among antitrust merger theory, its application to particular hospital mergers, and empirical data about the business

4. See, e.g., RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW 17 (4th ed. 1992). But cf. Oliver Hart, An Economist's Perspective on the Theory of the Firm, 89 COLUM. L. REV. 1757, 1758-59 (1989) (stating the view that profit maximization may become secondary to the goals of corporate managers).

5. See, e.g., Herbert Hovenkamp, Positivism in Law & Economics, 78 CAL. L. REV. 815, 827-31 (1990) (asserting that although the profit-maximizing assumption lacks empirical validation and is difficult to test empirically, it is a normative convention adopted by economists without empirical proof). Others have theorized that the limits of human knowledge and a natural inclination to follow proven patterns of behavior incline (even for-profit) firms to act less than optimally, "satisficing" instead of maximizing. See ADOLPH A. BERLE & GARDINER C. MEANS, THE MODERN CORPORATION AND PRIVATE PROPERTY 113-16, 303-08 (1967); Robert G. Harris & Thomas M. Jorde, Antitrust Market Definition: An Integrated Approach, 72 CAL. L. REV. 1, 28-29 (1984); Herbert Simon, Rational Decision Making in Business Organizations, 69 AM. ECON. REV. 493, 503 (1979).

6. 946 F. Supp. 1285 (W.D. Mich. 1996), aff'd per curiam, 121 F.3d 708 (6th Cir. 1997).

7. Thomas L. Greaney, Night Landings on an Aircraft Carrier: Hospital Mergers and Antitrust Law, 23 AM. J.L. & MED. 191, 212 (1997).

behavior of hospitals generally.

I. THE HOSPITAL MERGER MOVEMENT OF THE 1990S

It is no coincidence that a hospital merger case should provide the focus of this paper. Hospital mergers are perhaps the most dramatic and unsettling evidence of the organizational upheavals that have characterized healthcare finance and delivery over the past five years.⁸ Over the last three years alone, the healthcare field has witnessed an unprecedented number of mergers involving hospitals. According to statistics compiled by the American Hospital Association (the primary organization tracking hospital mergers) there were thirteen hospital mergers in 1990, twenty-three in 1991, fifteen in 1992 and eighteen in 1993.⁹ In 1994 there was a quantum leap in activity, as more than 650 hospitals were involved in mergers or acquisitions;¹⁰ and, in 1995, that number rose to 735.¹¹

The reasons behind this unprecedented merger movement are manifold. Their common denominator, however, is the desire to lower the costs of hospital operation and thus the prices of hospital services. Seen from today's costconscious perspective, hospitals suffer from three significant problems. The first is the existence of tremendous excess capacity caused in large part by the governmentally subsidized construction and expansion of the 1950s and 60s. Among other things, these subsidies resulted in more hospital beds, equipment and services that now seem necessary for the size and health of our population. Recent data, for example, place the national occupancy rate for hospital beds at around fifty percent.¹² The second problem is the high cost of hospital operation. Hospital operation costs consume the lion's share of the health insurance dollar, accounting for approximately forty percent of personal health care spending.¹³ The third problem is the growing number of low-cost alternatives to high-priced hospital care. Free-standing outpatient facilities offer many procedures-from complex eye surgery, to abortions, to emergency care—that used to be the sole province of hospitals. Doctors' offices provide more complicated services than ever before and mini-hospitals offer birthing centers and a wide range of other

8. See, e.g., Robin E. Remis, Health Care and the Federal Antitrust Laws: The Likelihood of a Harmonious Coexistence, 13 J. CONTEMP. HEALTH L. & POL'Y 113, 113-14 (1996).

9. Sandy Lutz, Let's Make a Deal, MOD. HEALTHCARE, Dec. 19, 1994, at 47.

10. *Id*.

11. Sandy Lutz, Mergers and Acquisition Report; 1995: A Record Year for Hospital Deals, MOD. HEALTHCARE, Dec. 18, 1995, at 43.

12. See Peter M. Sullivan, N.Y.'s Medicaid Cuts are Irresponsibly Deep, NEWSDAY, Feb. 8, 1996, at A47; Ugur Yavas & Donald J. Shemwell, Competing for Patients and Profit; Analytical Framework Can Help, Marketers Determine the Competitive Strengths and Weaknesses of Hospitals, J. HEALTH CARE MARKETING, June 1, 1996, at 30.

13. United States v. Mercy Health Servs., 902 F. Supp. 968, 981 (N.D. Iowa 1995), *vacated*, 107 F.3d 632 (8th Cir. 1997).

specialized services.¹⁴ These competing facilities are equipped with the same sophisticated technology available in hospitals, but because they are small and specialized, and usually choose not to assume responsibility for any community-wide, uncompensated care, their costs and prices are lower than those of their hospital counterparts.¹⁵

With the continued growth in the membership of managed care organizations and the heightened attention of large, self-insured employers to health insurance costs, these problems have made hospitals prime targets for hard bargaining. In a concerted effort to lower the price of health insurance premiums, managed care has reduced hospitalizations generally, reduced lengths of stay, and turned whenever possible to lower cost outpatient options. Hospitals wishing to receive managed care dollars have had to compete not only with this new group of lower cost rivals but also with each other. Managed care has demanded lower prices from hospitals, pitting neighboring hospitals against one another in low-priced bidding wars and, given managed cares' willingness to have patients travel farther for less expensive care, against other hospitals once considered too remote to be competitive. To survive in this climate hospitals have had to find ways to reduce their historically high costs.

Merger is a time-honored method of cost reduction. By consolidating two separate firms into one larger organization, merger permits a variety of cost savings. Increased size will afford the new firm purchasing and borrowing economies. Its labor force can be reduced. Two separate administrations, law firms, accountants, and public relations firms will no longer be necessary. Expensive equipment need not be purchased twice, and capital expenditures—not only for equipment but for structures as well—can thus be lowered significantly. Moreover, when hospitals consolidate, they no longer need to compete with each other on every imaginable front: each can concentrate on those services and procedures that it does best—most successfully and at the lowest cost—raising their patient volumes in these areas and thus lowering their costs and improving their outcomes. These and other potential benefits normally flow from mergers.

Merger is also, however, a time-honored method for accumulating market power as a prelude to raising prices. In an important sense, the federal antitrust laws were enacted in 1890 and first amended in 1914 in response to public concern about the series of mergers and acquisitions near the end of the nineteenth century that created Standard Oil, many of the large railroad systems, and other trusts that were thought to prey on consumers and rivals alike.¹⁶ Hospital mergers have aroused similar concerns in some quarters, touching off fears that the recent wave of consolidation will result in higher prices for consumers and higher profits for hospitals themselves. These concerns have

^{14.} See Joe Sims, A New Approach to the Analysis of Hospital Mergers, 64 ANTITRUST L.J. 633, 639 (1996).

^{15.} See Michael S. Jacobs, When Antitrust Fails, 71 WASH. L. REV. 899, 902 (1996).

^{16.} See, e.g., United States v. Reading Co., 226 U.S. 324 (1912), modified by 228 U.S. 158 (1913); United States v. Standard Oil Co., 173 F. 177 (E.D. Mo. 1909), aff'd, 221 U.S. 1 (1911). See also Richard Posner, 100 Years of Antitrust, WALL ST. J., June 29, 1990, at A12.

prompted the antitrust enforcement agencies of the federal government, the Federal Trade Commission (FTC) and the Antitrust Division of the Department of Justice (DOJ), to challenge several recent mergers (including Butterworth) applying to them the same untested presumptions that underlie merger enforcement generally.

II. THE RUDIMENTS OF MERGER LAW AND THEIR UNEASY FIT WITH HOSPITAL MARKETS

A. Merger Analysis

Section 7 of the Clayton Act¹⁷ provides the primary statutory basis for merger enforcement. As enacted in 1914 and amended in 1950, it proscribes mergers whose effect "in any line of commerce or . . . in any section of the country . . . may be substantially to lessen competition, or to tend to create a monopoly."¹⁸ The language of the statute—particularly the phrases "may be"and "tend to"—make its application predictive in nature, directed at the likely future instead of the presumably better known past. Indeed, unlike other antitrust laws whose legislative history allows no confident conclusions about their intent, the merger laws were designed to arrest anticompetitive concentration "in its incipiency," before its effects might be fully, or even partially, known.¹⁹

The fear of concentration reflected in the Clayton Act arguably has some empirical underpinning, but it is of a casual, political type rather than of a scientific nature. In 1950, when the Act was amended to increase its scope and efficacy, Congress was all too aware of the close relationship between big business and big government that had characterized and helped to produce fascist Germany and Japan. Strengthening federal merger law in order to stifle large increases in aggregate concentration was seen as a means of preserving and fostering ideals of democracy and fair play.²⁰ With the passage of time, of course, this particular set of post-war concerns has mostly, if not entirely, abated. Nevertheless, the Clayton Act remains unchanged, in part because its underlying political message about the dangers of corporate size and power continue to strike responsive chords with many, and in part because its implicit economic theory about the relationship between concentrated markets and high prices, though essentially untested, seems plausible. Though evidence in support of this theory is inconclusive-increased concentration has brought higher prices for air travel but lower ones for cola and computer chips-the Clayton Act operates on the assumption that economic evils such as higher prices, reduced output, and

18. *Id*.

^{17. 15} U.S.C. § 18 (1994).

^{19.} See Brown Shoe Co. v. United States, 370 U.S. 294, 315-23 (1962); see also Alan A. Fisher & Robert H. Lande, Efficiency Considerations in Merger Enforcement, 71 CAL. L. REV. 1580, 1588-93 (1983) (discussing the legislative history of Section 7).

^{20.} See, e.g., Robert Pitofsky, The Political Content of Antitrust, 127 U. PA. L. REV. 1051 (1979).

inferior quality lurk in concentrated markets. Courts have historically applied the Act on the basis of this assumption.

In 1963, in *United States v. Philadelphia National Bank*,²¹ the United States Supreme Court announced the basic methodology for the judicial analysis of horizontal mergers and acquisitions, those between direct competitors in the same product or service and geographic markets.²² Under this approach, which is still favored today, courts must first define the relevant product and geographic markets in which the merging firms compete.²³ Since the purpose of the law is to prevent undue concentration in any market ("line of commerce"), one must first know the market before the merger's effect on concentration can be gauged. Having defined the relevant market, courts are to presume the illegality of any merger producing a "significant increase in the concentration of firms" within the market and resulting in a firm with an "undue percentage share" of the market.²⁴ As originally conceived, the rule of presumptive illegality applicable to mergers resulting in undue concentration was a very powerful one, rebuttable only by evidence clearly demonstrating "that the merger is not likely to have such anticompetitive effects."²⁵

Over time, the power of this presumption has weakened, as courts and regulators have sought to accommodate antitrust theory to the complex reality of a large and diverse economy. Thus, in 1974, the Supreme Court announced in another merger case that a showing of undue concentration could be rebutted by evidence that the government's data regarding market share failed adequately to reflect the defendants' true competitive position.²⁶ More recently, courts have increasingly come to discount market share as the exclusive determinant of market power when the defendant can prove that structural factors peculiar to the market effectively diminish the power that large market shares theoretically confer.²⁷ At the same time, the Federal Horizontal Merger

- 21. 374 U.S. 321 (1963).
- 22. Id. at 356.

23. Id. at 356, 363; see also Philip Areeda, Market Definition and Horizontal Restraints, 52 ANTITRUST L.J. 553 (1983); Robert G. Harris & Thomas M. Jorde, Market Definition in the Merger Guidelines: Implications for Antitrust Enforcement, 71 CAL. L. REV. 464 (1983); William M. Landes & Richard A. Posner, Market Power in Antitrust Cases, 94 HARV. L. REV. 937 (1981).

24. *Philadelphia Nat'l Bank*, 374 U.S. at 363-64 & n.40 (competition is substantially lessened when the combined share of the merging firms would exceed 30% of the relevant market and the post-merger concentration level of the five largest firms in that market was approximately 78%).

25. Id. at 363.

26. United States v. General Dynamics Corp., 415 U.S. 486, 501 (1974).

27. See, e.g., United States v. Baker Hughes, Inc., 908 F.2d 981, 985 (D.C. Cir. 1990) ("[T]hat a variety of factors . . . can rebut a prima facie [merger] case has become hornbook law." Among those factors are ease of entry into the post-merger market, the prospect of efficiencies from the merger, excess capacity, degree of product homogeneity, marketing and sales methods, industry structure, weakness of data underlying the prima facie case, high elasticity of industry demand, and high cross-elasticity of supply and demand.) (citing PHILLIP E. AREEDA & HERBERT HOVENKAMP,

Guidelines,²⁸ which describe the methods by which enforcement agencies analyze mergers and select cases for prosecution, have been loosened to allow for agency consideration—even with mergers in "highly concentrated markets"—of non-statistical factors that might overcome the presumption flowing from undue concentration.²⁹ Indeed, so many factors have recently been added to the market share presumption that some courts view it as practically devoid of explanatory power,³⁰ while commentators complain that merger analysis has lost its theoretical underpinning and now regards all data as arguably relevant.³¹

Much more could be said about the growing complexity and increasing confusion that have come to characterize merger analysis generally; but a fuller treatment of that topic is beyond the scope of this paper. It is sufficient to make two final observations First, merger law continues to grow ever more complicated, as new ideas persuade enforcement agencies to expand their analyses into relatively uncharted territory. In the past few years, for example, the FTC has decided that otherwise unobjectionable mergers might nevertheless stifle competition in "innovation markets," markets for the research and development of new products and processes.³² Though the scope of these markets appears difficult to define and the notion of innovation markets seems inherently indistinct, the FTC has employed this new concept in analyzing the

ANTITRUST LAW ¶¶ 919, 920.1, 921, 925, 934-35, 939, at 813-23 (Supp. 1989); HERBERT HOVENKAMP, ECONOMICS AND FEDERAL ANTITRUST LAW § 11.6, at 307-11 (1985); LAWRENCE A. SULLIVAN, HANDBOOK OF THE LAW OF ANTITRUST § 204, at 622-25 (1977)). See generally Michael S. Jacobs, *The New Sophistication in Antitrust*, 79 MINN. L. REV. 1, 8-12 (1994).

28. U.S. DEP'T. OF JUSTICE & FEDERAL TRADE COMM'N, MERGER GUIDELINES—1992, reprinted in 4 Trade Reg. Rep. (CCH) ¶ 13,104, at 20,569 (Apr. 17, 1997).

29. Id. § 1.51(c) (Certain mergers in "highly concentrated markets" presumptively create or enhance market power, unless the presumption is overcome "by a showing that the [other, structural market] factors make it unlikely" that those consequences will result.); see also id. § 1.51(b) (Certain mergers in "moderately concentrated markets post merger potentially raise significant competitive concerns depending on [other market] factors.").

30. See, for example, *United States v. Baker Hughes, Inc.*, 908 F.2d 981, 992 (D.C. Cir. 1990), where Judge Thomas declared as follows:

Imposing a heavy burden of production on a [merger] defendant would be particularly anomalous where, as here, it is easy to establish a prima facie case. The government, after all, can carry its initial burden of production simply by presenting market concentration statistics. To allow the government virtually to rest its case at that point, leaving the defendant to prove the core of the dispute, would grossly inflate the role of statistics in actions brought under section 7.

31. See, e.g., Jacobs, *supra* note 27, at 8 (arguing that "quixotic searches" for increasingly complex factors somehow thought germane to merger analysis are "inevitably inconclusive and all ultimately destructive of methodological simplicity and administrative efficiency").

32. For a discussion on the emerging use of innovation markets in merger analysis, see Jonathan B. Baker, Fringe Firms and Incentives to Innovate, 63 ANTITRUST L.J. 621 (1995); Richard J. Gilbert & Steven C. Sunshine, Incorporating Dynamic Efficiency Concerns in Merger Analysis: The Use of Innovation Markets, 63 ANTITRUST L.J. 569 (1995).

recent merger of two large pharmaceutical companies, requiring the post-merger firm to share certain research with its competitors.³³ During the same period, the FTC has developed what appears to be a new theory of market power³⁴—unilateral competitive effects—to explain how certain mergers between sellers of differentiated products can create significant pockets of market power, even if they fall short of producing undue concentration in the relevant market as a whole.³⁵ While these new methodologies may be hard to comprehend, they do serve to make one thing quite clear: antitrust analysis is not getting any simpler.

Second, it is clear that these new approaches and technical twists in merger analysis are inspired by theory, not fact. They arise for the most part from a distinct economic philosophy, the post-Chicago School of antitrust economics, that has emerged over the past decade as an important counterweight to the hitherto unquestioned primacy of the Chicago School's theories. I have described and analyzed this development elsewhere³⁶ and need not rehearse it again here, save to say that theory, not fact, lies at the heart of both schools and that both admit, as indeed they must, that their theories are largely lacking in empirical support.³⁷ The new approaches to merger analysis, like their antecedents, presume that the business world operates as theory suggests it should.

B. Merger Analysis Applied to Hospital Mergers

If merger law in general is somewhat (or mainly) unsettled, hospital merger law finds itself in an even greater state of confusion. There are good reasons for this predicament. First, though mergers had been providing grist for antitrust adjudication prior to the enactment of the first federal statutes in 1890, it was not until 1975 that the Supreme Court definitively announced that the work of professionals—lawyers in that case—was "trade or commerce" within the meaning of the Sherman Act and therefore subject to antitrust scrutiny.³⁸ It took

34. Though it might be simply a new method of defining the relevant product market.

35. See generally Jonathan B. Baker, Mergers Among Sellers of Differentiated Products, ANTITRUST, Spring 1997, at 23; Gregory J. Werden, Simulating Unilateral Competitive Effects from Differentiated Products Mergers, ANTITRUST, Spring 1997, at 27. This methodology is particularly sensitive to estimates of factors, such as elasticities of demand and supply, that are widely acknowledged to be extremely difficult, if not impossible, to estimate accurately.

36. See Jacobs, supra note 3 and accompanying text.

37. Id. at 251-54.

38. Goldfarb v. Virginia State Bar, 421 U.S. 773, 788 (1975).

^{33.} This was the merger by which Ciba-Geigy and Sandoz became Novartis. In re Ciba-Geigy Ltd. et al., File No. 961-0055 (F.T.C. Dec. 5, 1996) (accepting a proposed consent decree for public comment to settle allegations that the proposed merger between Ciba-Geigy and Sandoz violated Section 7 of the Clayton Act in the gene therapy research, corn herbicide, and flea control product markets); see also Stephen Moore, Drug Giant Novartis Voices Optimism, Despite Strains of its \$27 Billion Merger, WALL ST. J., June 18, 1997, at A17.

more than a decade before a hospital merger case made its way into the federal reports.³⁹ By that time, however, although the core presumption of merger law—that anticompetitive consequences flow from undue concentration—had proven itself remarkably robust if not perfectly explanatory, it was nevertheless derived from the merger experience of "traditional" industry and commerce conducted by for-profit firms in markets that were largely if not entirely unregulated. Courts could plausibly regard these "traditional" markets as workably competitive; and thus could plausibly presume that big mergers would disturb a competitive status quo.

The hospital markets of the mid-1980s seemed very different from the "traditional" markets that had informed the development of merger law. They were not competitive in the usual sense of the word, but were heavily regulated in almost all aspects of their operation and were populated largely by not-for-profit firms—indeed, different kinds of not-for-profit firms—whose goals and objectives were arguably not the same as those of for-profit companies.⁴⁰ The financial subsidies from which hospitals benefitted generated substantial over-capacity in beds and equipment. When mergers began to occur in these markets, one might have argued that the presumptions animating traditional merger law did not hold. Because the hospital markets were distorted by virtue of having never operated competitively, the traditional presumption about the anti-competitive effects of increased concentration might not prove true. One might have also argued, equally reasonably, that the prevalence of not-for-profit firms might not be the unabashed profit-maximizers that populate the for-profit sector.

However, these arguments were not made when hospital merger law was aborning. There were no solid empirical studies supporting these arguments; indeed, despite the judiciary's occasional plea for better evidence,⁴¹ datagathering efforts were slow to form. Instead, in the absence of hard evidence to the contrary, courts presumed for the most part that hospital markets were essentially similar to all others and thus applied to hospital mergers the same analytical approach used to judge mergers in other markets.⁴² This early, reflexive approach to hospital mergers was not without its critics, in fact, powerful lobbying groups succeeded in modifying it on the federal level and, in many instances, eliminating it on the state level.⁴³ In the federal courts, however,

41. See, e.g., United States v. Rockford Mem'l Corp., 898 F.2d 1278 (7th Cir.), cert. denied, 498 U.S. 920 (1990).

42. See, e.g., id.; FTC v. University Health, Inc., 938 F.2d 1206 (11th Cir. 1991).

43. U.S. Dep't of Justice & Federal Trade Comm'n, 1996 Statement of Enforcement Policy on Mergers Among Hospitals, *reprinted in* 4 Trade Reg. Rep. (CCH) ¶ 13,153 at 20,801 (Sept. 5, 1996) (outlining an "antitrust safety zone" in which a merger "between two general acute-care

^{39.} Hospital Corp. of Am. v. FTC, 807 F.2d 1381 (7th Cir. 1986).

^{40.} See, e.g., United States v. Mercy Health Servs., 902 F. Supp. 968, 973 (N.D. Iowa 1995) ("Traditionally, hospitals competed on the basis of amenities and perceptions of quality. Only in the last ten to fifteen years have hospitals begun to compete on the basis of price."), vacated as moot, 107 F.3d 632 (8th Cir. 1997).

with some notable exceptions, this approach has continued to hold sway though with subtle differences of opinion: for some, a hospital's not-for-profit status is irrelevant, for others it is dispositive;⁴⁴ also, for some, the relevant geographic markets are expanding, while for others they remain local.⁴⁵ In the grand scheme of things, though, these are small differences, because most courts continue to embrace the traditional notion—unsupported by empirical evidence—that hospital markets are no different fundamentally from other forms of business activity.

III. THE BUTTERWORTH CASE

A. The District Court Opinion

In *FTC v. Butterworth Health Corp.*,⁴⁶ the FTC sought to enjoin the merger of the two largest general acute care hospitals in Grand Rapids, Michigan, Butterworth Health Corporation and Blodgett Memorial Medical Center. Both were not-for-profit corporations, prosperous and well-managed.⁴⁷ Their merger was prompted by Blodgett's interest in constructing a \$187 million replacement facility that would free it from the confines of an apparently undesirable location.⁴⁸ Shortly after Blodgett's relocation proposal failed to receive the approval of a county commission, Blodgett and Butterworth agreed to merge "to avoid substantial capital expenditures and achieve significant operating

44. Compare Rockford Mem'l Corp., 898 F.2d at 1285 ("We are aware of no evidence—and the defendants present none, only argument—that nonprofit suppliers of goods or services are more likely to compete vigorously than other profit-making suppliers."), and University Health, Inc., 938 F.2d at 1224 ("[T]he nonprofit status of the acquiring firm will not, by itself, help a defendant overcome the presumption of illegality that arises from the government's prima facie case."), with United States v. Carilion Health Sys., 707 F. Supp. 840, 849 (W.D. Va.) (concluding that the defendant's "nonprofit status weighs in favor of their mergers being reasonable"), aff'd on other grounds, 892 F.2d 1042 (4th Cir. 1989).

45. Compare Mercy Health Servs., 902 F. Supp. at 978 ("It is not sufficient to take a snapshot of the current situation and define the relevant geographic market to be synonymous with the current service areas of the defendant hospitals."), and FTC v. Freeman Hosp., 911 F. Supp. 1213, 1221 (W.D. Mo.) (accepting the principle of geographic proximity, which identifies alternative sources consumers can seek out without further travel, to determine the relevant geographic market), aff'd, 69 F.3d 260 (8th Cir. 1995), with Rockford Mem'l Corp., 898 F.2d at 1284-85 (determining that relevant geographic market was the hospitals' service area not the tencounty area proposed by the defendants).

46. 946 F. Supp. 1285 (W.D. Mich. 1996).

47. Id. at 1288.

48. Id. at 1288-89.

hospitals where one of the hospitals (1) has an average of fewer than 100 licensed beds over the three most recent years, and (2) has an average daily inpatient census of fewer than 40 patients over the three most recent years" will not be challenged "about extraordinary circumstances").

efficiencies.³⁴⁹ The FTC challenged the merger, contending that it would unduly concentrate the relevant product and geographic markets.⁵⁰

Agreeing with the FTC's proposed product and geographic market definitions, the district court identified two separate product markets, each with its own geographic market.⁵¹ One product market consisted of general acute care inpatient hospital services—the garden variety product market in recent hospital merger cases;⁵² the other market consisted of primary care inpatient hospital services, a more narrowly drawn market hitherto unrecognized in merger litigation.⁵³ For the first, broader product market, the court defined the relevant geographic market as Greater Kent County, Michigan, an area encompassing Grand Rapids and parts of seven adjoining counties within a thirty-mile radius.⁵⁴ Within that market, the court found that four Grand Rapids hospitals and five small rural hospitals competed for general acute care inpatients.⁵⁵ Regarding the smaller market for primary care services, the court identified the geographic market as the "immediate Grand Rapids area;" the only competitors in that market were the four Grand Rapids hospitals.⁵⁶

Having identified the markets, the court then examined the extent to which the proposed merger would concentrate them. In that regard, the court found that the post-merger hospital corporation could account for as much as sixty-five percent of the general acute care inpatient market and seventy percent of the primary care inpatient market.⁵⁷ Additional evidence strongly suggested that other factors would exacerbate the concentrative effects of the merger and place the relevant markets under the control of a truly dominant firm: the two other Grand Rapids hospitals were found to offer a more limited range of services and to have a reputation for providing a lower quality of care;⁵⁸ entry barriers were significant;⁵⁹ and the merger partners had announced their intention to reduce certain managed care discounts post-merger and institute "standard managed care rates."⁶⁰ Persuaded by this evidence that "the merged entity would have substantial market power in two relevant markets," the court found that the FTC

51. *Id.* at 1290.

52. See FTC v. Freeman Hosp., 911 F. Supp. 1213, 1217 (W.D. Mo.), aff'd 69 F.3d 260 (8th Cir. 1995); United States v. Mercy Health Servs., 902 F. Supp. 968, 971 (N.D. Iowa 1995); FTC v. University Health, Inc., 938 F.2d 1206, 1210 (11th Cir. 1991).

53. These services include normal childbirth, gynecology, pediatrics, general medicine and surgery. *See Butterworth*, 946 F. Supp. at 1291.

- 54. Id. at 1290.
- 55. Id. at 1291.
- 56. *Id.* at 1293.
- 57. Id. at 1294.
- 58. Id. at 1298.
- 59. Id. at 1297-98.
- 60. *Id.* at 1299.

^{49.} *Id.* at 1289.

^{50.} *Id.* at 1288-90.

had established a prima facie case.61

Despite this evidence, however, the court refused to enjoin the merger.⁶² Rather, it concluded on the basis of various pieces of more or less "empirical" evidence that defendants had rebutted the government's prima facie case by demonstrating that the admitted increase in market concentration would not harm consumers.⁶³ It used "facts," in other words, to overcome the presumption that dominant firms in highly concentrated markets will raise price to supracompetitive levels.⁶⁴

The most important of these facts was the not-for-profit status of the merging hospitals. Despite the well-publicized unwillingness of most other courts to distinguish between for-profit and not-for-profit hospitals for purposes of merger analysis,⁶⁵ the *Butterworth* court found the two fundamentally different. Primarily on the basis of one recent study, which was fortified by some testimony and the judge's own "casual" empiricism, the court determined that not-for-profit hospitals in highly concentrated markets follow a significantly different pricing pattern from that of their for-profit counterparts. In particular, it found that while dominant for-profit hospitals set prices substantially above competitive levels, not-for-profit hospitals tend to *lower* prices when they attain market dominance.⁶⁶ This one study, the court implied, could overcome the force of merger law's basic presumption about the anticompetitive impact of high concentration.⁶⁷

There were other pieces of "data" that also proved persuasive to the court. The court observed, for example, that the boards of the merging hospitals consisted of local business leaders who, it said, "have a direct stake in maintaining high quality, low cost hospital services."⁶⁸ It considered the testimony of the board chairmen, each of whom testified "convincingly" that the merger was motivated "by a common desire to lower health care costs and

65. See FTC v. University Health, Inc., 938 F.2d 1206, 1225 (11th Cir. 1991); United States v. Rockford Mem'l Corp., 898 F.2d 1278, 1286 (7th Cir.), cert. denied, 498 U.S. 920 (1990); United States v. Mercy Health Servs., 902 F. Supp. 968, 989 (N.D. Iowa 1995); see also In re Hospital Corp. of Am., 106 F.T.C. 361, 502 (1985), aff'd, 807 F.2d 1381, 1393 (7th Cir. 1988). Some courts, however, have suggested that mergers between not-for-profit hospitals merit distinctive and more lenient treatment. See FTC v. Freeman Hosp., 911 F. Supp. 1213, 1226-28 (W.D. Mo.), aff'd, 69 F.3d 260 (8th Cir. 1995); United States v. Carilion Health Sys., 707 F. Supp. 840, 847-49 (W.D. Va.), aff'd on other grounds, 892 F.2d 1042 (4th Cir. 1989).

66. See Butterworth, 946 F. Supp. at 1296-97. The court based its conclusion on empirical studies by economists showing that high market concentration with dominant not-for-profit hospitals does not correlate positively with higher prices and may result in lower prices. See William J. Lynk, Nonprofit Hospital Mergers and the Exercise of Market Power, 38 J.L. & ECON. 437, 459 (1995).

67. Butterworth, 946 F. Supp. at 1297.

68. Id. at 1296.

^{61.} *Id.* at 1302.

^{62.} Id. at 1303.

^{63.} Id. at 1302.

^{64.} Id.

improve the quality of care."⁶⁹ It toured the hospitals and came away "confirmed" in its belief that the boards had been "responsible stewards of the resources available to them."⁷⁰ The court was impressed by the defendants' offer to bind themselves contractually—through a "Community Commitment"—not to raise prices "or otherwise injure the community."⁷¹ And it noted that within the relevant markets important buyers of health care—those presumably at risk of any monopoly pricing that the merger might permit—supported the merger.⁷² These and other reasons⁷³ convinced the district court that though it might well produce undue concentration in the relevant markets, the proposed merger would probably not generate anticompetitive effects. In a per curiam opinion, the Court of Appeals for the Sixth Circuit affirmed, concluding that the district court had not abused its discretion.⁷⁴

B. Empiricism Examined: the Lynk Study, the Role of the Non-Profit Board, and Community Commitment

The most "empirical" portion of the proof in *Butterworth* was a study published in 1995 by William Lynk in the well-respected *Journal of Law and Economics*.⁷⁵ Despite the FTC's objection to the study's methodology, the court relied heavily on its conclusions.⁷⁶ The study examined the post-merger pricing behavior of California hospitals that became dominant in their markets through merger. Looking at these hospitals by category,⁷⁷ the court found that compared to for-profit hospitals, certain private not-for-profit hospitals in the study sample "have a significantly lower association between higher market shares and higher prices, and on balance increased nonprofit market share is associated with lower,

72. Id. at 1299.

73. The court also found that the merger "would result in significant efficiencies, in the form of capital expenditure avoidance and operating efficiencies, totaling in excess of \$100 million." *Id.* at 1301. It made this finding after comparing a comprehensive study prepared by defendants with the FTC's expert's critical analysis, and after making its own tour of the defendants' facilities and concluding that in the absence of the merger, Blodgett would certainly proceed with its relocation plans, and Butterworth would respond by renovating and upgrading its own facilities, setting off a "medical arms race" that would harm consumers. *Id.*

74. FTC v. Butterworth Health Corp., 121 F.3d 708 (6th Cir. 1997).

- 75. Lynk, *supra* note 66, at 442.
- 76. Butterworth, 946 F. Supp. at 1296.

77. The categories were for-profit hospitals, private not-for-profit hospitals, and government-run hospitals. Lynk, *supra* note 66, at 442.

^{69.} Id. at 1297.

^{70.} Id. at 1299.

^{71.} *Id.* at 1298. The boards promised to (1) freeze list prices or charges, (2) freeze prices to managed care plans at pre-merger levels, (3) limit profit margins, (4) provide for the underserved and medically needy, and (5) establish a governing board for the merged entity that included community representation reflective of the diversity of West Michigan. *Id.* at 1304-06.

not higher, prices."78

The court also considered a second study, described as a "replication" of the first, that was prepared by Lynk expressly for the underlying litigation and focused strictly on the pricing behavior of Michigan hospitals. This study concluded that in Michigan, as in California, mergers between not-for-profit hospitals that resulted in highly concentrated markets were associated with lower post-merger prices.⁷⁹ After evaluating this data, the FTC's expert economist "obtained similar results concerning the relationship between market concentration and pricing levels,"⁸⁰ and though the two experts disputed the likely cause of the findings,⁸¹ they agreed that "high market concentration among nonprofit hospitals does not correlate positively with higher prices."⁸²

The court placed great weight on these studies. By showing that high market concentration does not lead not-for-profits to raise prices, these "unexpected empirical findings" cast doubt, in the court's view, on the traditional presumption of merger law that a significant increase in market concentration will lead to higher prices.⁸³ This doubt about the traditional presumption, coupled with evidence of anticipated cost savings from the merger and the defendants' promise to freeze prices for three years following the merger, led the court to presume in turn that these particular defendants would not raise their prices post-merger.⁸⁴ The court thus allocated to the government the burden of overcoming that presumption through evidence of post-merger anticompetitive effects.⁸⁵ Such evidence is very difficult to muster, since it is necessarily speculative, and the government could not do it in this case. It was reduced to questioning the precise

78. Butterworth, 946 F. Supp. at 1295 (quoting Lynk, supra note 66, at 459). This result was reported for what the author labeled "consumer co-op" hospitals, those where the hospital's consumers control its general policies—through representation on the board and "perhaps through other means." Lynk, supra note 66, at 441. The study found that other not-for-profit hospitals—the "government (usually county) hospital"—perhaps because their income could be made available to fund other undertakings of the owner—priced in a manner roughly comparable to for-profit hospitals. Id. at 459. Lynk postulated that this phenomenon may be explained by the potential of mergers to create "economic efficiencies" and by the possibility that "a nonprofit hospital organization whose only function is the provision of hospital services to a well-defined population, and whose governing board effectively represents the same population, looks—and probably acts—more like a consumer cooperative than a creator of monopoly resource misallocation." Id. at 458.

79. Butterworth, 946 F. Supp. at 1295.

80. Id.

81. Id. Lynk argued that the lower prices resulted from merger-specific efficiencies, "through the consolidation of clinical services and other means." Id. (quoting Lynk, supra note 66, at 458). Leffler, the government's expert, contended it might have to do less with efficiencies and more with the "ruralness"—and thus lower costs—of concentrated hospital markets. Id.

84. Id. at 1297-98.

^{82.} Id.

^{83.} Id.

^{85.} Id. at 1298.

amount of the anticipated cost-savings and the strength of the hospitals' promise to freeze prices; but since the government's vision of the future was no more plausible than the defendants,' the merger was allowed to proceed.⁸⁶

In an important sense then, the empirical studies proved outcomedeterminative. By persuading the court to drop the presumption that higher prices follow high concentration, they effectively caused the burden of proof to shift from the defendants to the government, and caused the nature of the proof about anti-competitive effects to change from theoretical to "factual." Since this burden was—not surprisingly—impossible to carry, the government lost.

In *Butterworth*, the government challenged the methodology used in both Lynk studies.⁸⁷ As others in this symposium have persuasively argued, empirical studies can often go wrong or confuse more than they illuminate, for a wide variety of reasons.⁸⁸ In my view, however, the *Butterworth* court was right to employ and rely upon the Lynk studies. In the first place, although antitrust in general—merger law no less—depends upon presumptions for ease of administration, predictability and the like, courts have repeatedly emphasized that these presumptions serve useful ends only when they reflect facts. The Supreme Court issues periodic reminders about the limits of legal presumptions in antitrust law generally,⁸⁹ and at least one Court of Appeals has rued the absence of empirical data regarding the workings of the hospital markets and issued a call for more research into this area.⁹⁰

The Lynk studies purport to show important facts that bear on the competitive nature of not-for-profit hospitals. This is important information about market structure and deserves consideration; indeed, given our relatively undeveloped understanding about the nature of competition between not-for-profit hospitals, it would be foolish to disregard these studies. If legal presumptions are meant to be rooted in fact, the existence of new, salient facts has a direct bearing on the continuing validity of old presumptions. As new facts help to displace old presumptions, the law may seem rudderless for a while, too particularistic, lacking in guidance or intelligibility. But this is a reasonable price to pay for new, sensible presumptions. As more new facts emerge, new presumptions will form around them; presumptions in general are useful, but no particular presumption has a right to eternal life.

This is not to say that every empirical study is a good one or that all are

89. See, e.g., Eastman Kodak Co. v. Image Technical Servs., Inc., 504 U.S. 451, 466 (1992) ("Legal presumptions that rest on formalistic distinctions rather than actual market realities are generally disfavored in antitrust law.... In determining the existence of market power... this Court has examined closely the economic reality of the market at issue.").

90. See United States v. Rockford Mem'l Corp., 898 F.2d 1278, 1286 (7th Cir.), cert. denied, 498 U.S. 920 (1990) ("It is regrettable that antitrust cases are decided on the basis of theoretical guesses as to what particular market-structure characteristics portend for competition.").

^{86.} Id. at 1302-03.

^{87.} *Id.* at 1296.

^{88.} See, e.g., William M. Sage, Judicial Opinions Involving Health Insurance Coverage: Trompe L'Oeil or Window on the World?, 31 IND. L. REV. 49, 61-68 (1998).

equally deserving of judicial consideration. Empirical studies can be flawed, inconclusive, untimely, and otherwise problematic. But they can also prove very valuable. As a class they are arguably relevant to the work of antitrust courts, each subject to attack by opposing counsel and experts on traditional grounds of evidentiary sufficiency. Indeed, perhaps in the fullness of time and with the assistance of the academic community, courts can develop comprehensible rules of easy application for assessing the validity of empirical methodologies. But until then, cross-examination and the opposing testimony of expert witnesses can help expose flawed studies. Lynk's work survived these challenges. The *Butterworth* court's use of that work advances the cause of antitrust law by moving it in the direction of greater accuracy.

This brings us to the next piece of collective data. This includes the *Butterworth* court's observation that the boards of the merging hospitals consisted of local business leaders who, it said, "have a direct stake in maintaining high quality, low cost hospital services."⁹¹ It considered the testimony of the board chairmen, each of whom testified "convincingly" that the merger was motivated "by a common desire to lower health care costs and improve the quality of care."⁹² It was impressed by defendants' offer to bind themselves through a "Community Commitment" not to raise prices "or otherwise injure the community."⁹³ It noted that important buyers of health care—those who would presumably be at risk for any monopoly pricing that the merger might permit—supported the merger.⁹⁴ The court rejected the government's claim that the managed care discounting foreclosed by the merger would harm consumers generally, on the basis of evidence—not clearly specified—that consumers in managed care were outnumbered by those covered by more traditional forms of health insurance.⁹⁵

There are many ways to evaluate the court's use of this data. The court could be regarded as having made a factual finding that dominant not-for-profit hospitals whose board members are drawn from the community are structurally disinclined to raise prices to the people that they serve. The same William Lynk who authored the pricing studies discussed above has hypothesized—in nonempirical fashion—that the "consumer cooperative" not-for-profit hospital lacks an economic incentive to raise prices to its members.⁹⁶ But the court did not express such a finding, and, although theory suggests that corporate structure

93. *Id.* at 1298. The boards promised to (1) freeze list prices or charges, (2) freeze prices to managed care plans at pre-merger levels, (3) limit profit margins, (4) provide for the underserved and medically needy and (5) establish a governing board for the merged entity with community representation that reflected the diversity of West Michigan. *Id.* at 1298, 1304-06.

- 94. Id. at 1299.
- 95. Id. at 1298-99.

96. See William J. Lynk, Property Rights and the Presumptions of Merger Analysis, ANTITRUST BULL. 363, 377 (1994); see also Henry B. Hansmann, The Role of Nonprofit Enterprise, 89 YALE L.J. 835, 889 (1980).

^{91.} Butterworth, 946 F. Supp. at 1296.

^{92.} Id. at 1297.

might discourage certain kinds of not-for-profits from using market power to harm consumers, the court lacked the empirical warrant necessary for such a broad conclusion.

On the other hand, the *Butterworth* court could be seen as having found that these defendants-because of their governing structure and their Community Commitment to hold the line on price—would not raise price post-merger. I believe that the court did make such a finding, and I view it as problematic. The empirical question here is whether the Community Commitment (1) buttresses the Lynk study on post-merger pricing and (2) is judicially administrable in the event of breach. Regarding the first point, the Commitment seems to add little of substance to the broader empirical question: it is not a promise to lower prices---despite the acknowledged efficiencies that the merger will yield---but rather a promise not to raise them. Regarding the second point, by bringing the promise into its merger analysis, the court seems to be inviting future litigation of a regulatory nature about whether the promise has been breached by an unwarranted price increase. This kind of oversight might be workable if undertaken by the State Attorney General as part of a compromise to ensure the preservation of social and community service, but the federal courts might be hard pressed to undertake this task.

Finally, the court's attention to buyer attitudes towards the prospect of a post-merger price increase could be viewed as a useful attempt to employ a workable rule of thumb to the complex factual questions in merger analysis. In *Butterworth*, large local buyers of hospital services supported the merger.⁹⁷ Despite their exposure to post-merger monopoly overcharges (or lowering of quality, or service cutbacks), those who would be buying from the merged hospital not only failed to oppose the merger but actually supported it. This is important data. Rational buyers, fearing future harm in the form of higher prices, would strenuously argue against a merger creating a profit-maximizing monopolist. Since we have no reason to doubt the rationality of large buyers in Grand Rapids, their support of the merger must mean that they think that they will be better off after the merger. How can this be? In all likelihood, they share the hospitals to pass on efficiency-related cost-savings in the form of lower prices.

Buyer reaction thus provides a good test—a useful rule of thumb—of the merger's likely effects. Buyers are the victims of anticompetitive mergers, forced to pay supra-competitive prices. Merger law exists, largely if not exclusively, to protect them. If they disdain "protection" and welcome a merger, antitrust has no reason to override their collective will, provided that the buyers in question are (1) rational, which we must assume in the absence of good evidence to the contrary, and (2) sufficiently representative of all buyers in the market, or (3) sufficiently numerous so that we can infer representativeness. In *Butterworth*, the court simply recited that the buyers were "important," without indicating precisely what it meant by the term. Presumably the buyers were large

and representative—the government did not argue otherwise—but it would have been preferable for analytical purposes to know somewhat more about them. Nevertheless, the court made good use, in my opinion, of a valuable empirical test inexpensive to develop and easy to apply: for the best assessment of a merger's likely effects, ask a fair sampling of buyers. Antitrust needs more tests like this.

CONCLUSION

It is difficult to determine when the state of empirical research has advanced sufficiently to serve as a basis for changing the law. No one would claim, I should imagine, that courts should be oblivious to new scientific findings⁹⁸ or that, once adopted, legal presumptions whose factual predicates no longer hold true should continue in force. Nor, however, would anyone advocate that courts adopt every new study offered for their consideration, changing the law to suit the most recent set of findings. They must strike a balance respecting both the teachings of science and the need for stable doctrine, a balance arguably more necessary in antitrust—given the size of the stakes and the need for predictability—than in most areas of law.

The *Butterworth* opinion has its problems, some of them substantial.⁹⁹ But it makes a good attempt at striking the necessary balance. It will no doubt receive its share of criticism, but the critics will be talking details: were Lynk's studies "good enough;" should there be rules for the admissibility of such studies; were the buyers whose reactions were gauged adequately representative of buyers as a whole? These are good questions, but they hardly detract from the legitimacy of reconsidering old presumptions in the light of new evidence and attempting to develop workable rules of antitrust analysis.

98. See Daubert v. Merrill Dow Pharms., 509 U.S. 579 (1993) (providing a more formal means of incorporating even marginal scientific evidence into the trial process); see also Petruzzi's IGA Supermkts., Inc. v. Darling-Delaware Co., 998 F.2d 1224, 1241 (3d Cir. 1993) (antitrust case raising *Daubert* issues with regard to expert economic testimony).

99. One of the biggest problems is that by relying on the current preferences of large buyers, most of whom do not purchase health insurance from managed care organizations, the court effectively freezes current preferences in place, handicapping the future growth of managed care in Grand Rapids by eliminating the possibility that managed care organizations could obtain low hospital prices by pitting one competing hospital against the other. Perhaps, however, buyers foresee this possibility but do not welcome it because they perceive that heightened price competition between hospitals does not necessarily benefit the community at large.