Cross-Market Effects in Hospital Mergers: A Collision of Economic and Legal Theory

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I. Introduction

Over the past five years, a number of antitrust economists

and the Federal Trade Commission have expressed an increasing interest in the theory of "cross-market effects" in hospital mergers. This theory posits that mergers between hospitals in entirely separate geographic markets nonetheless may create market power that results in higher prices for health plans and, indirectly, for consumers. As health systems continue their pursuit of the somewhat amorphous goal of "scale," and as tighter federal antitrust enforcement makes expansion into geographically distinct markets an attractive means to pursue growth and scale, the validity of a cross-market effects theory should be a question of considerable interest to health systems and their counsel. This article explores how this question came to the fore, the basis for the cross-market effects theory, some of the current evidence that arguably supports the theory, and the practical difficulties that would arise in attempting to challenge a hospital merger on the basis of a theory that, at present, has no direct support in case law or the federal antitrust agencies' *Horizontal Merger Guidelines*.

II. The Evolution of Interest in Cross-Market Effects

Interest in cross-market effects can be fairly described as the end point of decades-long research into the consequences of consolidation in the health care industry, complaints by health plans about provider consolidation, and a willingness at the federal enforcement level to question prevailing notions of hospital competition.

A. Hospital Consolidation Trends Generally

Consolidation within the health care provider sector has been a subject of public policy debate for decades. For example, research on hospital system formation published in 2003 noted that, during the 1990s, system consolidation had largely been viewed as a phenomenon of national for-profit hospital chains.[1] Yet, significant consolidation occurred in the nonprofit hospital sector between 1995 and 2000, with the percentage of hospitals in systems with at least one local-market partner increasing from 33 percent to 43 percent

[1]Alison E. Cuellar & Paul J. Gertler, *Trends in Hospital Consolidation: The Formation of Local Systems*, 22 HEALTH AFF. 77, 79 (2003).

(representing almost half of all admissions) in that period. The authors concluded their review with a series of questions that now seem too familiar:

> Key policy questions remain largely unanswered: Does recent hospital consolidation explain part of the recent rise in hospital spending growth rates and the return to rapid medical care cost inflation? *What is the significance of systems that operate across many markets rather than concentrating locally?* Can hospitals lower costs, implement information systems more effectively, *or leverage their bargaining power with insurers when entering multiple geographic areas*? And finally, what role do vertically integrated systems play in changing administrative costs, clinical efficiencies, quality of care, patient safety, charity care, and prices?[2]

Although this 2003 paper concluded that the pace of hospital mergers and acquisitions had declined significantly from the mid-1990s to 2000, consolidation within the industry has in fact continued at a relatively steady pace in the ensuing two decades. "Scale" has emerged as a major buzzword of health care systems in the post-Affordable Care Act world.[3] Specifically, the assumption of population health risk by providers, the alignment of economic incentives between physicians and health systems, and the statistical measurement and modeling of health status are thought to argue for a larger scale of provider operations, including scale gained through merger and acquisition.[4]

Data cited by Dafny, et al. indicate that 528 general acute care hospital mergers occurred between 2000 and 2012.[5] Of those, approximately half involved hospitals located in the

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[2] *Id.* at 85 (emphasis added).

[3] *See, e.g.*, Kenneth Kaufman, *The New Reality of Healthcare Scale*, KAUFMAN HALL(Dec. 8, 2017), *available at* https://www.kaufmanhall.com/sites/default/files/The-New-Realities-of-Healthcare-Scale.pdf.

[4] Of course, the enforcement agencies have begged to differ. *See* Robert W. McCann, *Something Old, Something New: Accounting for Accountable Care in Antitrust Analysis*, *in* HEALTH LAW HANDBOOK 147-48 (Thomson Reuters 2015 ed.).

[5] Leemore Dafny, Kate Ho & Robin S. Lee, *The Price Effects of Cross-Market Mergers: Theory and Evidence from the Hospital Industry* (June 27, 2017) at 1 n.4, *available at* http://www.people.fas.harvard.edu/~robinlee/papers/PriceEffects.pdf. This paper was first published by the National Bureau of Economic Research as its Working Paper No. w22106 (2016) [hereinafter DH&L Study].

same general geographic area, known as a Core-Based Statistical Area ("CBSA").[6] About 37 percent of mergers occurred between hospitals located in the same state but in different CBSAs, and about 15 percent occurred between hospitals located in different states and different CBSAs. According to the American Hospital Association, in 2016, of 4,840 community hospitals, 3,231 (67 percent) were members of a hospital system.[7]

B. Effects of Consolidation

Beginning around 2000, public attention began to focus more specifically on the growth of large multi-hospital systems and the question of whether those systems had made themselves indispensable to health plans or otherwise amassed "too much" bargaining power. By and large this attention took the form of subjective media coverage more than objective economic analysis.[8] The subjects of these writings included many well-known health care systems and networks, such as the University of California (UC Health), Partners HealthCare, Sutter Health, Inova, Long Island Health Network, and Intermountain Healthcare. Some of this work foreshadowed the more recent questions about cross-market effects. For example:

> From an antitrust perspective, it is important to emphasize that many multihospital systems extend over broad geographic areas and have escaped antitrust scrutiny because their mergers do not result in excessive concentration in any of their geographic service areas. Numerous participants in contract negotiations between health plans and hospitals noted that provider leverage depends on how big the hospital or hospital

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[6] A CBSA is a U.S. geographic area defined by the Office of Management and Budget, which is essentially the same as a Metropolitan Statistical Area with respect to large cities and a micropolitan area with respect to smaller towns. United States Census Bureau, *Georgraphic Terms and Concepts,* https://www.census.gov/geo/reference/gtc/gtc_cbsa.html (last visited Jan. 18, 2018).

[7] American Hospital Association, *Fast Facts on US Hospitals*, http://www.aha.org/research/rc/stat-studies/fast-facts.shtml (last visited Jan. 18, 2018).

[8] A brief but informative survey of this coverage can be found in Gregory S. Vistnes & Yianis Sarafidis, *Cross-Market Mergers: A Holistic Approach*, 79 ANTITRUST L.J. 253, 255-57 (2013).

system is and how much of an insurer's patient volume it generates.[9]

The possible existence of cross-market effects was raised (albeit not by that name) in a 2002 Department of Justice Business Review Letter to a consortium of seven small and rural Michigan hospitals (the "Michigan Hospital Group" or "MHG") that proposed to engage in joint payor contract negotiations.[10] No two hospitals in the consortium were geographically proximate to each other, and thus they were not considered traditional competitors of one another. Based on the absence of direct competition, the DOJ concluded that the consortium was unlikely to effect a significant reduction in competition. However, the DOJ noted that several health plans had expressed the view that the MHG participants might be able to increase their bargaining leverage by contracting exclusively through MHG.[11] Thus, a health plan might be forced to contract with all seven hospitals (even if it did not need or want all seven hospitals) to ensure that it did not end up with "holes" in the network that would render it unable to market a plan to employer groups seeking broad geographic or state-wide coverage. But the DOJ concluded, "[w]hether the hospitals' bargaining leverage could in fact be expanded by negotiating exclusively through MHG is by no means clear and to make that determination would require additional investigation and analysis."[12] The Letter then noted that MHG's request for business review advice specifically disclaimed an intent to negotiate on an exclusive basis, and therefore the DOJ did not need to address the question.

Growing interest in the implications of hospital system consolidation also prompted a handful of empirical studies, mostly focused on California, of the pricing effects of hospital system development—specifically whether hospitals in systems charge higher prices than similar hospitals that are not part of systems.

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[9]Robert A. Berenson et al., *The Growing Power of Some Providers to Win Steep Payment Increases From Insurers Suggests Policy Remedies May Be Needed*, 31 HEALTH AFF. 973, 976 (2012).

[10]Letter from Charles A. James, Assistant Att'y General, U.S. Dep't of Justice, to Clifton E. Johnson (Apr. 3, 2002), *available at* https://www.justice.gov/sites/default/files/atr/legacy/2007/08/13/10933.pdf.

[11]*Id*. at 2-3.

[12]*Id.* at 3.

- An early study by Cuellar and Gertler examined the effects of joining a system on a variety of hospital performance measures, using data from four states (Arizona, Florida, Massachusetts, and Wisconsin).[13] That study concluded average net inpatient prices per admission increased 7.7 percent for managed care patients and 4.1 percent for indemnity patients, relative to hospitals that did not join a system. The authors did not find the differences explained by improvements in quality (as measured by inpatient mortality rates, rates of overused procedures, and rates of adverse safety events).
- More dramatically, a 2007 study by Melnick and Keeler examined California hospital price trends during the period 1999 through 2003, a period of significant price growth for U.S. hospitals overall.[14] The study found that prices of hospitals belonging to a large system increased about 34 percent more than comparable non-system hospitals during that period. For hospitals in smaller systems, the positive differential was about 17 percent. The results were independent of the level of market concentration, and not confined to markets in which a system had multiple hospitals. The authors posited that the results may indicate that hospitals belonging to non-local multi-hospital systems had improved their bargaining position vis-à-vis health plans.
- Results of a 2009 study of hospital-insurer bargaining indirectly suggested that system hospitals earn margins that, on average, were consistent with prices about 23 percent higher than non-system hospitals.[15]
- Finally, a more recent study of California hospitals attempted to distinguish and separately estimate the effects of changes in a hospital's bargaining *position* as a

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[13]Alison E. Cuellar & Paul J. Gertler, *How the Expansion of Hospital Systems Has Affected Consumers*, 24 HEALTH AFF. 213, 217 (2005).

[14]Glenn Melnick & Emmett B. Keeler, *The effects of multi-hospital systems on hospital prices*, 26 J. HEALTH ECON. 400, 403, 409-11 (2007).

[15]Matthew S. Lewis & Kevin E. Pflum, *Hospital Systems and Bargaining Power: Evidence from Out-of-Market Acquisitions*, 48 RAND J. ECON. 579, 595 n.24 (2017) (citing Katherine Ho, *Insurer-provider networks in the medical care market*, 99 AM. ECON. REV. 393 (2009)) [hereinafter Lewis & Pflum Study].

result of joining a system (*i.e.*, from increased concentration in a local market) from the effects of changes in a hospital's bargaining *power* from joining a system—the hospital's ability to increase its share of the surplus in a contract bargaining situation.[16] The authors posit that increases in bargaining *power* can occur even if the affiliating hospitals are located in separate markets. The study concludes that, on average, the increased bargaining power associated with system membership contributes more to a system hospital's markup than does the increase in the system's bargaining position. The authors estimate that the additional markup in the per diem reimbursement for the average system hospital created by additional bargaining power is about 23 percent, in comparison to an additional 4 percent created by the stronger bargaining position derived from system membership for hospitals that have partners in the same patient market.

Although these studies suggest a correlation between a hospital's affiliation with a hospital system and higher prices charged by that hospital, they do not actually explain why that result may exist. In some cases, this is because the studies are purely cross-sectional, comparing prices between system and non-system hospitals at a point in time, and/or because they do not sufficiently distinguish competing hospitals versus hospitals in distinct markets. And most importantly, to the extent these studies suggest that cross-market mergers improve a system's bargaining power or position, they do not establish that the result is occasioned by an increase in market power that falls within the purview of the antitrust laws.

C. Health Plan Complaints

Several sources have suggested that current heightened interest in cross-market hospital merger effects is a consequence of continued health plan complaints about hospital system acquisitions that have not been challenged by the FTC, presumably on the basis that the acquiring and

[16]Matthew S. Lewis & Kevin E. Pflum, *Diagnosing Hospital System Bargaining Power in Managed Care Networks*, 7 AM. ECON. J. ECON. POL'Y 243 (2015).

acquired parties operate in separate geographic markets. As Vistnes and Sarafidis point out, a history of health plan complaints about hospital mergers in urban markets led the FTC and DOJ staffs to change their thinking about hospital market definition in metropolitan areas, starting in the late 1990s.[17] A similar "where-there's-smoke-there's fire" thought process appears to be part of the current discussion. Again, the fact that payors may experience a shift in bargaining power in favor of a hospital system does not in and of itself establish an antitrust violation.

III. Economic Research

Research attempting to more specifically define and measure price effects in cross-market mergers, to control for factors that may influence observed price effects, and to develop a viable theory of the source of such effects is limited and of relatively recent vintage. Below, we discuss three papers that are contributing to this debate. Subsequently, we discuss some critiques of the research.

A. Theoretical Work by Vistnes & Sarafidis

One of the first efforts to more specifically define an economic theory of cross-market effects is presented in the previously-referenced 2013 article Vistnes and Sarafidis.[18] Acknowledging that competitive effects in *inter*-market hospital mergers is dependent on the existence of what they call "linkages" between hospitals based on patient preferences (*i.e.*, patients' willingness to substitute one hospital for another), the authors posit that competitive effects in cross-market mergers, if they exist, must arise from linkages created by a different mechanism. Specifically, they posit that those linkages arise from one of two means.

First, the authors propose, employers may consider the totality of a health plan's network when deciding whether to

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[17]Vistnes & Sarafidis, *supra* note 8, at 254.

[18]*Id.* The authors are careful to note that the intent of this article was to stimulate further discussion of the topic, rather than to argue that cross-market hospital mergers are in most cases, if at all, anticompetitive. The article does not attempt to identify the conditions under which a cross-market merger may be more or less likely to be anticompetitive. Some of the later work discussed in this chapter takes up that question.

offer a particular health plan to their employees, as opposed to viewing the network as a collection of independent, market-specific components. Alternatively, they suggest that inter-hospital linkages could arise because a health plan's premiums do not (or cannot) vary across the regions in which an employer's employees live, in which case a health plan would seek a common price across markets, such that the plan's optimal price would depend on demand across each market.[19]

Vistnes and Sarafidis go on to explain that inter-hospital linkages, although necessary, are not a sufficient condition for anticompetitive effects. It is also necessary for the health plan to face a "concave" profit function, such that the risk to the plan's profits is greater if the plan cannot contract with both of the merging hospitals than it is if the plan cannot contract with just one of them. If the harm to a health plan from failing to contract with Hospital A is independent of whether it can contract with Hospital B, then a merger of Hospital A and Hospital B is unlikely to pose any competitive concerns.

1. Linkages Based on Employer Demand for Overall Network Coverage

Under the first linkage hypothesis, a cross-market merger may give the acquiring or resulting system the ability to threaten a health plan with a greater number of "holes" in its network, and thus a loss of profits due to the reduced attractiveness of the health plan's product.[20] As explained by the authors, the underlying assumption is that an employer with employees in several markets will choose to offer a limited number of health plans to its employees, and will select whichever plan produces the best combination of attractiveness (to employees) and price (to the employer). In other words, the model assumes that employers have multiple plan options from which to choose. (This only makes

[19]The authors acknowledge that cross-market mergers also may create price effects for reasons that are independent of "linkages" or market power. *Id.* at 274. These could include the fact that the acquiring hospital or system has better information and/or is a better negotiator than the acquired hospital, or that the acquiring hospital has different incentives, *e.g.*, maximizing short-run vs. long-run profitability.

[20]*Id.* at 275-81.

sense, of course, because if the employer has no realistic choice among plans, the favored plan would be a functional monopolist and would not fear provider leverage or a loss of profits, at least in the short term.)

The model also assumes, of necessity, that a multi-market employer will offer the same plan to all of its employees in all of its markets. That is, the employer will not select plans on a market-specific basis based on the attractiveness and/or value of their networks in each particular market. The model further assumes that hospital systems negotiate on an all-or-nothing basis with each health plan, *i.e.*, the health plan must contract for all hospitals in a system if it wants to contract for any of them.

As we discuss in a later section of this chapter, there are good reasons to question how well this model fits the real world, as well as to point out that some of the constraints that purportedly bind health plans can be constraints of their own creation.[21]

2. Linkages Based on Common Pricing

Vistnes and Sarafidis postulate that cross-market linkages also can be created by a health plan's pricing practices.[22] If a health plan typically charges a common price to an employer for its employees in different markets, the health plan will create a situation in which its pricing response to the emergence of a hole in one market will depend on how that change will affect demand in other markets (which receive the same price), which in turn may depend on whether holes exist in the other markets. That is a health plan's decision about whether to accept a price increase from a hospital system may be dictated by the ripple effects that would occur if it were compelled to lower its premiums to compensate for a hole in its network. If a health plan's inability to contract with a health system leaves a material hole in its network in a particular market, it may have to reduce the price it charges in that market to compensate for the lower quality

[21]For additional critique and commentary on the assumptions underlying the Vistnes & Sarafidis models, see David A. Argue & Scott D. Stein, *Cross-Market Health Care Provider Mergers: The Next Enforcement Frontier*, 30 ANTITRUST 25, 26-29 (2015).

[22]Vistnes & Sarafidis, *supra* note 8, at 281-87.

of the network in that market. If the health plan prices its plan uniformly across markets, that means that the premium prices will fall in all markets if there is a hole in that one market, and the health plan's profits will fall accordingly.

The authors estimate that a health plan in this situation will set a compromise price that is higher than optimal in the market with a hole, but less than optimal in the markets without a hole. They also note that the resulting price will be influenced by the behavior of competing health plans. But it is far from clear that there is an unavoidable loss of consumer welfare under this scenario. Hypothetically, overall consumer welfare may increase with declining prices. This, too, is a situation in which actual market facts, rather than broad assumptions, would dictate the outcome.

3. Additional Observations

The authors acknowledge that their model makes the simplifying assumption that health plans engage in all-or-nothing bargaining. That is, the outcome of any negotiation between a health plan and a provider or system is binary—either they agree to a contract or they do not agree. In fact, the existence of tiered networks, as well as the use of other financial incentives to steer referrals away from higher-priced facilities indicate that the all-or-nothing bargaining model is not always prevalent. The authors suggest, however, that this fact is not a significant limitation on the usefulness of their basic theories and suggest, further, that more sophisticated bargaining models could actually define additional "linkage" opportunities.[23]

Finally, Vistnes and Sarafidis observe that the two linkage mechanisms they define are likely to have greater applicability when the markets in question are geographically proximate to each other than when they are geographically remote.[24] This makes sense insofar as the linkages are posited to arise from either the fact that the same employer is present in both markets or the fact that a single health plan prices consistently across the markets. As discussed later in this chapter, recent research on the topic appears to support this proposition to some degree.

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[23] *Id.* at 290.

[24] *Id.* at 292.

B. Two Empirical Studies

Subsequent to the Vistnes and Sarafidis paper, two notable studies have been published attempting to empirically measure the price effects of cross-market mergers. The first of these was the work of economists Matthew Lewis and Kevin Pflum, first published online in 2015 and subsequently by the RAND Journal of Economics.[25] The second is the previously-cited work of economists Leemore Dafny, Kate Ho, and Robin Lee, which was first published in 2016 by the National Bureau of Economic Research.[26]

Below we compare and contrast the methodologies, results, and findings of these works. Although the two studies have many similarities, they reach significantly different conclusions in certain important respects. Together, the two studies illustrate that the research remains in an early stage. And, as we discuss in later sections, there are important questions regarding the study methodologies and the practical ability to build a legal strategy on the basis of the research.

1. The Lewis & Pflum Study

Study Methodology. Lewis and Pflum examine price trends for 81 out-of-market hospital mergers (*i.e.*, mergers between hospitals that did not change the structure of a local market) occurring during the period 2000-2010. Price trends at merging hospitals were compared to all other hospitals in the dataset that did not join a system at any time between 1998 and 2010, using a "differences in differences" methodology.[27] The model's specifications included controls for three sets of variables that could affect the comparisons: hospital-level costs and capacity utilization; reimbursement-related variables, including Medicare and Medicaid load; and county-level demographic characteristics.

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[25] Lewis & Pflum Study, *supra* note 15.

[26] DH&L Study, *supra* note 5.

[27] Simplified, a differences-in-differences methodology compares the average change over time in the outcome variable for the study group (here, hospitals in out-of-market mergers during the relevant period), compared to the average change in the same variable over time for the control group (hospitals that did not join a system). The usefulness of the methodology depends in large measure on the comparability of the control group.

The dataset for this study excluded hospitals with fewer than 25 beds. Hospitals located within 45 miles of each other were assumed to be local competitors. That is, an acquisition was not deemed to be "out-of-market" if the acquiring system owned another hospital located within 45 miles of the acquired hospital, and hospitals participating in local mergers likewise were excluded from the out-of-market merger analysis.

"Prices" were measured as the average net revenue per non-Medicare discharge. This number was derived by multiplying a hospital's gross charges by the ratio of its total net revenue to gross charges, subtracting Medicare revenues from the result, and dividing by the number of non-Medicare discharges. It thus included Medicaid patients and revenues within the calculation, the effects of which the authors attempted to control through other variables.

Results. The findings by Lewis and Pflum included the following:

- Average net reimbursement rates increased 17 percent more at hospitals acquired by out-of-market systems than at hospitals that did not affiliate with a system during the same period.[28]
- Based on several related analyses, the observed difference in average reimbursement per discharge was not explained by (*i.e.*, attributable to) post-acquisition increases in case mix, average length of stay, or inpatient utilization rates (measured directly) or increases in quality (measured inferentially) at the acquired hospitals. Likewise, the price differential was not attributable to systemic changes in costs in the merging hospitals' markets relative to other hospitals in the same market.[29]
- Price increases in out-of-market acquisitions were substantial even when the geographic distance between

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[28]Lewis & Pflum Study, *supra* note 15, at 589. Separately, Lewis and Pflum found that prices at hospitals affiliating with an *in-market* system increased by an average of 11 percent more than non-merging hospitals, less than the amount observed for out-of-market acquisitions. The authors posit that this disparity may be due to greater antitrust oversight of in-market acquisitions. *Id.*

[29]*Id.* at 590, 596-98.

the acquired hospital and existing system hospitals was very large.[30]

- Price increases in out-of-market acquisitions were somewhat larger when the acquiring system was large (four or more hospitals) or when the target was relatively small.[31]
- Out-of-state acquisitions generate price increases that are roughly 50 percent larger on average than system acquisitions involving a hospital that is in a different market but within the same state as an existing system partner.[32]

Conclusions. Lewis & Pflum find that hospitals that were acquired in out-of-market mergers between 2000 and 2010 had significant post-merger increases in reimbursement rates. However, they further conclude that their findings with respect to the persistence of price differentials for system hospitals over increasingly large geographic areas, as well as the existence of significant differentials for out-of-state acquisitions, do not support the common employer linkage described by Vistnes & Sarafidis.[33] That is, the identified price effects from acquisitions classified as out-of-market are not likely to be the result of regional employers purchasing common coverage for employees or of patient substitution over a broader geographic area, in light of the finding that price differentials persist beyond the reasonable geographic scope of multiple employer markets. Thus, the authors do not find support for the idea that the demand of multimarket employers is a likely driver of increased market power for hospital systems. The authors note that despite these findings they are hesitant to draw strong conclusions given the relative infancy of the research.

The authors go on to suggest that the price differentials may well reflect increased bargaining power resulting from greater expertise and better information within systems.[34] To this point, they reference their findings that acquisitions by

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[30] *Id.* at 601-02.

[31] *Id*. at 602.

[32] *Id.* at 601.

[33] *Id.* at 602.

[34] *Id.*

smaller systems generated substantially smaller price increases than acquisitions by larger systems, and that prices increased substantially more when the acquired hospital was relatively small.

The authors conclude that, regardless of the explanation for the observed price effects, existing competition (merger simulation) models may need to be re-evaluated.[35] The findings of out-of-market price effects suggest that existing models may underestimate the price effects of mergers that do not involve close competitors. Of equal significance, existing models may be biased in assessing "local" mergers by excluding relevant factors (*i.e.*, those driving the *out-of-market* price effects), leading to an incorrect attribution of price effects to a reduction in local competition.

2. The Dafny, Ho, & Lee ("DH&L") Study

Study Methodology. DH&L examined two samples of hospital mergers occurring between 1996 and 2010, one sample consisting of transactions that were investigated by the FTC, and another (larger) sample consisting of all hospital mergers occurring between 1998 and 2010. The larger sample excluded (a) mergers between two independent hospitals (*i.e.*, transactions that did not entail the acquisition of a hospital or system by a system); (b) what the authors refer to as "crown jewel" hospitals (defined as the largest hospital being acquired for transactions involving five or fewer hospitals, and all hospitals above the 80th percentile of beds among target systems with more than five hospitals), on the assumption that merger transactions are motivated by crown jewel acquisitions, and thus post-merger pricing for those hospitals may distort the analysis of effects on other system members; and (c) hospitals gaining a system member within 30 minutes' driving time (to avoid the possibility that those hospitals are in the same market, not separate markets).[36] DH&L thus defined in-market transactions more narrowly than did Lewis & Pflum.

The authors used a bargaining model (similar to the "merger simulation" model used by the FTC) to isolate the potential price effects of a merger from changes in price un-

[35] *Id.* at 603.

[36] DH&L Study, *supra* note 5, at 17.

related to changes in bargaining power. Changes in price were modeled for three groups of hospitals: (1) hospitals acquiring a new system member in the same state but not in the same narrow (30-minute) geographic market ("adjacent" hospitals); (2) hospitals acquiring a new system member in a different state ("non-adjacent" hospitals); and (3) in-market hospitals that are not parties to the transaction (*i.e.*, the "control" hospitals).[37]

"Prices" were calculated in the same manner as in the Lewis & Pflum study. That is, prices were defined as average reimbursement rates per admission for commercial and Medicaid patients. Further, the authors made the following assumptions relative to their bargaining model:

- The demand for any health plan's products is elastic—that is, each health plan faces the possibility of losing customers if its product becomes less attractive (*i.e.*, as may be the case if the plan dropped a system from its network). In other words, no health plan has sufficient market power to force a customer to accept a product with a less attractive provider network.[38]
- Employers prefer to offer the same health plan in each market where their employees are located (*i.e.*, employers have a complete preference for one-stop shopping).[39]
- Hospital systems bargain on an enterprise basis and not on an individual hospital basis. A health plan that wishes to contract for one hospital in a system must contract for all hospitals in that system.[40]

Results. The DH&L Study findings include the following:

- Across both sample groups, hospital mergers in *adjacent markets* show statistically significant estimates of price increases in the range of 7 to 10 percent. (As noted below, this result was statistically attributable only to mergers of hospitals located 30 to 90 minutes apart.) Mergers occurring in *non-adjacent markets* show inconsistent, but generally small and negative, estimated

[37] *Id.* at 6-8.

[38] *Id.* at 11

[39] *Id.*

[40] *Id.*

price effects, which in any event are not statistically significant.[41]

- Expanding the definition of "local" markets to 45 minutes driving time did not affect the magnitude of the estimated price effects, but the precision (statistical reliability) of the estimate declined to marginal levels.[42]
- Greater health plan overlap (*i.e.*, a higher number of health plans common to the merging hospitals) in *adjacent* hospital transactions is associated with larger price effects (but at a decreasing rate). That is, each additional overlapping insurer is associated with a greater estimated price effect, but the magnitude of the effect declines with each additional overlapping insurer. Insurer overlap across state borders for *non-adjacent* hospitals does not have the same effect—the estimated price effects were, in one formulation, negative and marginally significant, and in another, positive but statistically insignificant.[43]
- Only adjacent hospitals gaining a system member within 30 to 90 minutes of driving time experienced steady price increases throughout the study period. Four years after gaining a nearby system member, prices for the 30-to-90-minute cohort were 19 percent higher than those of control hospitals. In comparison, estimated price effects for adjacent hospitals located more than 90 minutes apart were small (3 percent) and statistically insignificant.[44]
- The price increases estimated by the model do not change materially when the "target" hospitals are excluded from the dataset and the analysis is confined to acquiring hospital prices.[45]
- The size of the acquiring and target hospitals (based on

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[41] *Id.* at 22-23.

[42] *Id.* at 28.

[43] *Id.* at 25.

[44] *Id.* at 26-27.

[45] *Id.* at 28.

bed size relative to the median) were relevant to the estimations of price effects.[46] Specifically:

- Estimated price effects were large and statistically significant when a larger-than-average acquirer acquired a smaller-than-average target, and also when a smaller-than-average acquirer acquired a larger-than-average target.
- Estimated price effects were smaller but statistically significant when both the acquirer and target were below-average in size.
- For transactions in which both the acquirer and target were large, the predicted price effects were *negative*, but not statistically significant. The authors suggest that the absence of positive price effects may be explained by the probability that, in such transactions, both hospitals were "must haves" for health plan networks prior to the merger, and thus gained no leverage from their combination.

- The estimated price effects were not attributable to investments in assets or quality improvement at the target hospitals.[47] The authors base this finding on (a) the absence of material change in results when the target hospitals were excluded from the analysis (the premise being that any significant investment is more likely to be made at the target hospitals *and* to be reflected in the prices of the target hospitals, rather than the non-target system hospitals); and (b) the absence of a relationship between the observed price effects and hospitals' case mix indices or Medicaid patient shares, which the authors view as consistent with an absence of new investment following a merger.

Conclusions. DH&L find evidence of merger-related price effects in certain combinations of hospitals located within 30-90 minutes in separate markets within the same state. The magnitude of the price effects found by DH&L (7-10 percent) for those transactions is significantly less than that found by Lewis & Pflum, which may reflect the differences in sample selection and methodologies. DH&L find no statistically-meaningful effects from out-of-state acquisi-

[46] *Id.* at 27.

[47] *Id.* at 28.

tions, nor did it find any statistically-significant price effect when the merging hospitals were both large or if they were located in the same state more than 90 minutes apart.

In contrast to Lewis & Pflum, DH&L conclude that their results are consistent with the "common customer" theory of cross-market effects, based on their analyses suggesting that mergers of more proximate hospitals (*i.e.*, those within 30-90 minutes' driving time) produce the largest price effects. The authors posit that those are "precisely the sort of cross-market hospital mergers where common customers are likeliest to be present."[48] From this same result, DH&L posit that the estimated price increases should not be attributed to simple increases in bargaining resources and skill, on the theory that, if the premise were true, there should be no material difference in price changes between merging hospitals located within 90 minutes of each other and those more than 90 minutes apart.[49] DH&L also note that the inference of common customer effects is supported by their conclusion that changes to a target hospital's operations are not the driver of the estimated price effects.[50]

DH&L conclude that their evidence of a common customer effect implies that market power may arise from combinations over even broader geographic areas and across product markets. They argue that this form of market power represents a form of reduction in competition (for inclusion in health plan networks) and, to that extent, the price effects of cross-market mergers should be actionable under the antitrust laws.[51]

DH&L go on to argue that their findings "[do] not imply more expansive boundaries for mechanical calculations of market shares" but rather "favor[ ] an emphasis on the 'direct effects' likely to arise from a merger, a concept promulgated in the 2010 Horizontal Merger Guidelines."[52] In other words, DH&L believe that their findings favor an approach to merger enforcement defined not by reductions in

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[48] *Id.* at 29.

[49] *Id.*

[50] *Id.* at 28-29.

[51] *Id.* at 29-30.

[52] *Id.* at 29.

competition within defined markets but rather by predicted effects on price or output. The authors go on to suggest the need for additional research explicitly modeling the links between and among insurance choice, insurance competition, and hospital-insurer bargaining.

C. Critiques of the Empirical Research

There are good reasons to be cautious about drawing conclusions about the existence or source of price effects in cross-market mergers based on the studies discussed above. A number of fundamental questions have been published in a critique prepared for the American Hospital Association by economists David Argue and Lona Fowder.[53]

1. Methodological Issues and Assumptions

Fundamentally, both Lewis & Pflum and DH&L base their analyses of price effects on measures of total non-Medicare revenue, including Medicaid revenue, rather than the actual negotiated transaction prices between health plans and hospital systems. The use of a proxy measure likely introduces imprecision into the results, although the magnitude cannot be defined. As Argue & Fowder point out, it is possible that some health plans or employers may be affected differently than others, with some experiencing the estimated price increases and some not, and the reasons for any such differences, if they exist, are obscured by absence of data on actual prices.[54] Certainly, the fact that some health plans have significantly greater market shares than others would suggest that differential effects are likely.

Similarly, neither study had any information about the actual existence of common customers in *any* merger that was studied. This is significant given the prominence of the common customer theory in explanations of cross-market effects. The common customer hypothesis was "proven" in the DH&L Study solely by the fact that the estimated price effects were larger when the merging hospitals were more geographically proximate. But if in fact there were no com-

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[53]David A. Argue & Lona Fowder, *An Examination of New Theories on Price Effects of Cross-Market Hospital Mergers*, *available at* www.aha.org/content/16/crossmarketmergers.pdf.

[54]*Id.* at 6.

mon customers (or no common customers of consequence) in a not insignificant number of the cases studied, the conclusion that cross-market mergers lead to increased market power from common customer effects would be weakened if not wholly invalidated.

The DH&L bargaining model assumes that an employer that needs to insure employees in two markets will *always* choose one plan that can cover both markets, rather than a different plan for each market, even if the single plan election costs more or is of lower overall value to the employees. It seems an inherently questionable assumption that an employer would always act against its economic interest, and the authors provide no empirical support for this assumption.[55] In addition, this seems like an even more questionable assumption when the markets at issue are in different states.[56]

Both studies rely on a simplifying rule to define "local" markets—45 miles in the Lewis and Pflum Study and 30 minutes' travel time in the case of DH&L. Obviously, local market definitions are just that—local, and as the *Merger Guidelines* state, markets should be defined based on the likelihood that, given consumer preferences in a particular case, health plans would be able to switch providers in response to a price increase. A "local" market in Montana is not necessarily the same as a "local" market on Long Island.

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[55]Employers may limit their health plan options for a variety of reasons, *e.g.*, for administrative simplicity, to limit adverse selection, or to promote price competition among plans, but hypothetically there should be a point at which an employer would forego a particular objective in favor of greater premium cost savings and/or increased employee satisfaction.

[56]To be clear, health plans—particularly those with dominant market positions—affirmatively create disincentives for employer groups to obtain coverage from multiple sources. These disincentives typically take the form of minimum enrollment assurances, under which an employer must assure that a stated percentage (*e.g.*, 75 percent) of its eligible employees will select the particular plan in order for the employer to receive favorable premium rates. Disincentives also may take the form of a straightforward pricing penalty if the employer offers a second option at all. *See* Robert W. McCann, *Field of Dreams: Dominant Health Plans and the Search for a "Level Playing Field," in* HEALTH LAW HANDBOOK 49 (Thomson Reuters 2007 ed.). So, there is a bit of irony to the argument that employer preferences for "one-stop shopping" constitute a reason that cross-market mergers create adverse effects for health plans.

Thus, the use of a common market definition parameter across multiple, diverse mergers creates a potential that in-market (local) effects in some cases may be erroneously characterized as out-of-market (cross-market) effects.

2. The Dynamics of Bargaining

Any effort to reduce employer-health plan-health system bargaining to a formulaic model risks oversimplifying the individual dynamics of those transactions. Among the factors that define those dynamics would be:

- Health insurance markets are not equally competitive. The models assume employers have choices among competing health plans, but the choices available to a particular multi-site employer may be limited. Many health insurance markets are concentrated and an employer's presumed need to cover multiple markets by definition would limit the number of viable single-insurer options.[57]
- Employer preferences for a health plan may exist for reasons unrelated to network adequacy or price in any local market. For example, employers may have brand name preferences, or may perceive that a particular plan offers superior out-of-area coverage.
- Health plan profitability does not necessarily correlate to selling the most comprehensive network. It is theoretically possible that a health plan could make a greater profit selling less comprehensive coverage at a lower premium than more comprehensive coverage at a higher premium. Each plan's bargaining strategy presumably will be dictated by its unique economic (and non-economic) goals.
- Negotiations between a health system and a health plan are not necessarily driven by hospital-specific pricing. In many instances, negotiations center on the overall cost of the contract, with the allocation of "price increases" (and "decreases") between institutions, and/or between inpatient and outpatient services a matter of

[57] *See, e.g.*, American Medical Association, *Competition in Health Insurance: A Comprehensive Study of U.S. Markets* (2017) (reporting that in 43 percent of Metropolitan Statistical Areas, a single insurer has a 50 percent or greater share of the commercial market).

separate negotiation. In addition, health systems may offer value-added services that play into the overall negotiation but not necessarily into the rates of any particular institution.

3. The Competition Questions

As Argue and Fowder note, there is an inconsistency in the overall theory insofar as it ignores the implications of health plans' ability to substitute hospitals in local geographic markets prior to a cross-market merger.[58] The cross-market effects theory holds that the existence of substitutes for the merging hospitals within each of their *respective* markets is irrelevant to the cross-market effect, *i.e.*, because the merger "bundles" the merging hospitals. However, if a health plan could replace the individual hospitals in its network in each market *pre-merger* (that is, if there were pre-merger alternatives to *each* of the merging hospitals), it stands to reason that it could replace them post-merger as well. In that situation, the merged hospitals would not acquire any additional market power.[59]

More generally, there is a legitimate question as to whether an out-of-market merger can create additional market power through a reduction in competition (*i.e.*, in a manner that is within the purview of the antitrust laws). DH&L assert that the premise is true insofar as the existence of common customers means that a merger will reduce competition for inclusion in health plan networks. But, by definition, the merging parties will not be competitors for network inclusion *before* the merger—because, by definition, they operate in different markets. Thus, the question is whether the law condemns a merger that (hypothetically) creates market power other than through a direct reduction in competition between the merging parties.[60]

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[58]Argue & Fowder, *supra* note 53, at 4.

[59]Argue & Fowder additionally explain that health plans could further avoid the "bundling" effect by acting as single-market purchasers, *i.e.*, selling separate products with local networks for each local market. In that scenario, a system would not be able to leverage any potential cross-market dependencies. *See id*.

[60]Consider a merger between A and B. Assume A has an in-market competitor, C. The cross-market effects theory posits that the merger of A

4. Other Sources of Bargaining Power

The related point is that there are a number of ways that a cross-market merger could enhance a system's bargaining power without impairing competition. Argue and Fowder, for example, contend that multi-hospital systems bring value to employers and health plans because they reduce transaction costs and possibly increase quality over what could be offered by the system hospitals individually.[61] Such increases in value from a cross-market merger would enhance a system's bargaining power but would not reduce competition on the merits. They assert that DH&L have not adequately accounted for this possibility to explain their predicted price effects.

Similarly, as a multi-hospital system develops and grows, it could simply change its pricing philosophy. For example, a system that expands successfully may conclude (whether correctly or not) that it has developed a brand name or reputation based on size and/or quality that provides a basis for it to demand "premium" prices. Similarly, the development and growth of a hospital system may lead the system to hire individuals whose operating and financial philosophies are more oriented to the "bottom line" than was the case when the system hospitals were separate operations. In cases of price increases resulting from changes in incentives driven by growth (acquisitions) and not by a reduction in direct competition, there is a strong argument that, notwithstanding any public policy concerns, those price increases are not within the purview of the antitrust laws.[62]

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and B will reduce competition between A and C (*i.e.*, because A—by virtue of its merger with B—becomes more attractive (or more essential) than C). But if B is not a competitor of C, has the merger created a cognizable reduction in competition? What if B, rather than being another hospital, is an outpatient clinic?

[61] Argue & Fowder, *supra* note 53, at 5.

[62] *See also* Concurring Statement of Commissioner J. Thomas Rosch, FTC v. Ovation Pharmaceuticals, Inc., No. 081 0156 (F.T.C. Dec. 16, 2008) (positing that a substantial post-acquisition price increase imposed by Ovation for the drug Indocin IV occurred for reasons unrelated to elimination of competition). "There is reason to believe that the sale of Indocin to Ovation had the effect of eliminating the reputational constraints on Merck that had existed prior to the sale. There is evidence that Ovation lacked Merck's large product portfolio and thus arguably was not

IV. Implications for Merger Enforcement

The cross-market effects theory is undeniably interesting and raises questions concerning the operations of large health care systems. But those questions do not easily translate into antitrust enforcement policy. Among other things, the theory does not square simply with the federal *Merger Guidelines* or existing judicial interpretations of the Clayton Act.

A. *Tensions with the* Merger Guidelines

FTC analysis of hospital competition discards the traditional notion that hospitals compete directly for patients. Instead, the FTC analyzes the competitive effects of hospital mergers under a "two-stage" model of competition[63]—a model in which payors, rather than patients, are viewed as the "most relevant" customers of the hospitals' services.[64]

In the first stage, hospitals compete to be included in payors' networks.[65] This occurs through direct negotiation between the hospital and the payor, primarily based on the prices a hospital will offer relative to its competitors. It is important in this first stage for hospitals to be included in the payor's network because members of the payor's health plan often have access to in-network providers at lower costs than if that provider were not in-network. Likewise, payors seek to include providers in-network to create health plans in a particular geographic area that are more attractive to its members or prospective members.

If the hospital and payor agree to the terms in which the hospital will participate in the payor's network, the hospital then competes for patients (enrollees) who have purchased

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concerned, as Merck had been, that the sale of Indocin at a monopoly price would damage its reputation and sales of more profitable products. . . . [T]he transaction had the effect of substituting Ovation, a firm that had an incentive to protect its ability to engage in monopoly pricing, for Merck, which lacked the same incentive." *Id*. at 1.

[63]Gregory S. Vistnes, G., *Hospitals, Mergers, and Two-Stage Competition*, 67 ANTITRUST L.J. 671, 674-75 (2000).

[64]FTC v. Advocate Health Care Network, 841 F.3d 460, 475 (7th Cir. 2016).

[65]Vistnes, *supra* note 63, at 674-75.

the payor's health plan.[66] In this second stage, to the extent that once a provider is in-network there is little price difference for a patient to use one in-network provider versus another, the hospital seeks to attract patients to use its facilities largely along non-price dimensions such as quality, reputation, patient satisfaction, location, and convenience.[67]

In this model, the prices for a hospital's services are determined by the relative bargaining strength of the hospital and health plan during contract negotiations.[68] If the hospital demands reimbursement rates for services that the payor believes are too high, the health plan can refrain from contracting with the hospital and leave it out of its network.[69] Similarly, if the payor offers too low a rate for the hospital's services, that hospital can walk away and not contract with the payor.

In examining the competitive impact of a merger of two hospitals, any incremental bargaining strength the merging parties may gain depends on the availability of alternative hospitals a payor could contract with should it not reach agreement with the merged firm to be in-network.[70] Thus, underpinning the two-stage model is the assumption that in order for a merger to have an anticompetitive effect, the merging hospitals must (at least to some degree) be in-network *substitutes* for each other—*i.e.*, a health plan's enrollees would use Hospital A if Hospital B were no longer in their health plan's network post-merger, and vice-versa. If the alternatives available to a health plan to form a network are reduced (*e.g.*, because Hospital A and Hospital B merge), the model's assumption is that the prices that payors are required to pay to form a marketable network may rise, and/or output (services) may be reduced—depending on the number and quality of available substitutes for the merged hospitals.

These premises are embodied in the FTC/DOJ *Horizontal*

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[66] *Id.* at 681-84.

[67] *Id.*

[68] *Id.* at 676-77.

[69] *Id.*

[70] *Id.* at 677.

Merger Guidelines.[71] The *Guidelines* emphasize the concept of substitutability as the basis for prediction of competitive harm from a merger or other business combination. "A merger is unlikely to generate substantial unilateral price increases if non-merging parties offer very close substitutes for the products offered by the merging firms."[72] Indeed, the *Guidelines* direct that the "evaluation of *competitive alternatives* available to customers is *always necessary*."[73]

The agencies define relevant markets in order to evaluate the competitive effects of a proposed merger.[74] Under the *Guidelines*, firms in different geographic (or product) markets are presumed, by definition, not to be substitutes for each other.[75] In the *Guidelines* framework, only those mergers that "enhance market power" "should not be permitted."[76] Accordingly, the *Guidelines* examine "how the Agencies analyze mergers between *rival* suppliers that may enhance their market power as sellers."[77] One of the two principal ways a merger can enhance the merged firm's market power is by "eliminating competition between the merg-

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[71]FTC & U.S. Dep't of Justice, *Horizontal Merger Guidelines* (2010) (hereinafter *Guidelines*).

[72]*Id.* § 6.1.

[73]*Id.* § 4 (emphasis added).

[74]*Id.* § 4 (The "ultimate goal of market definition is to help determine whether the merger may substantially lessen competition."); *Id.* § 4.1.1 ("[T]he purpose of defining the market and measuring market shares is to illuminate the evaluation of competitive effects.").

[75]*Id.* § 4 ("As a result, properly defined antitrust markets often exclude some substitutes to which some customers might turn in the face of a price increase even if such substitutes provide alternatives for those customers."). *See also* PHILLIP E. AREEDA & HERVERT HOVENKAMP, ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION § 530a (3d and 4th ed. 2010-2017) ("A properly defined market excludes other potential suppliers (1) whose product is too different (product dimension) or too far away (geographic dimension) and (2) who are not likely to shift promptly to offer defendant's customers a suitably proximate (in both product and geographic terms) alternative.").

[76]*Guidelines* § 1 ("The unifying theme of these Guidelines is that mergers should not be permitted to create, enhance, or entrench market power or to facilitate its exercise. For simplicity of exposition, these Guidelines generally refer to all of these effects as enhancing market power.").

[77]*Id.* § 1 (emphasis added).

ing parties."[78] If the two merging firms do not compete against each other in the same market, however, they are not substitutes for one another and there thus can be no market power created or enhanced by their merger.

The theory of cross-market effects is at odds with the analytical framework of the *Guidelines*.

- *Lack of Substitutability between the Merging Parties*. As discussed above, if by definition a cross-market merger is a merger of two hospitals operating in distinct geographies, the merging hospitals are not substitutes competing against one another for inclusion in payors' networks. Because the merger does not eliminate any *pre-merger* competition that existed between the two hospitals, there is no creation or enhancement of market power as that concept is framed by the *Guidelines*.
- *Existence of Alternatives to each Merging Party*. Under the cross-market theory, neither hospital needs to have market power in its geographic market pre-merger for there to be potential cross-market effects post-merger.[79] In other words, in this scenario, the fact that each hospital faces competition from other hospitals/systems (which are substitutes for it) is immaterial. But under the *Guidelines*, the presence of pre-merger substitutes for both hospitals would indicate that health plans have alternatives in *both* markets to which to turn should the merged firm attempt to raise price. As discussed above, any creation of cross-market linkages in this situation is not due to a reduction in competition.
- *Overly Narrow Geographic Markets*. Under the *Guidelines*, the relevant geographic market is the area to which customers would turn for alternatives if faced with a small but significant price increase. For example, if the hospitals in geography X were to raise their prices and in response patients there switched to hospitals in geography Y, both areas under the *Guidelines* would

[78] *Id.* § 1; *see also id*. § 6. The other principal theory of competitive harm under the *Guidelines* is coordinated effects. *See id.* §§ 1, 7.

[79] As discussed above, Vistnes & Sarafidis posit that cross-market effects are based on "linkages" that are expressly *not* the same as those that create market power in local market mergers. *See supra* notes 18-24 and accompanying text.

comprise the relevant geographic market—whether or not the two areas were less than 30 minutes apart, *e.g.*, as assumed in the DH&L Study. This is a significant tension between the *Guidelines* and the research purporting to establish an actionable theory of cross-market effects.

To the extent that particular facts establish that patients can and do travel at least 30 minutes to seek care, the 30-minute assumption for an "adjacent market" would run contrary to commercial realities of patient travel and thus define too narrow of a "market" outside of which to assess cross-market effects. Indeed, where this assumption is not borne out by the facts, the cross-market simulation to predict adjacent market effects may actually be capturing *within* market (local) effects.[80]

B. *Inconsistencies with Courts' Interpretations of the Clayton Act*

In addition to tension with the *Guidelines*, a cross-market effects theory of competitive harm would confront inconsistencies with established judicial precedent under Section 7 of the Clayton Act. These inconsistencies would pose an additional hurdle to the FTC in challenging hospital mergers in federal court based on alleged cross-market effects.

- *Courts' Acceptance of the Guidelines' Framework*. Although the Guidelines are not legally binding on courts in examining merger challenges instituted under Section 7 of the Clayton Act,[81] courts often discuss and rely on the *Guidelines* as an analytical tool to aid their merger analysis.[82] Because the FTC and DOJ frequently rely on their own *Guidelines* when litigating mergers,

[80]This possibility is suggested by the fact that when the DH&L Study expanded its within-market assumption to a 45-minute drive time, the statistical reliability of the estimate of the predicted cross-market price effects declined to marginal levels. DH&L Study, *supra* note 5, at 28.

[81]*See, e.g.*, Olin Corp. v. FTC, 986 F.2d 1295, 1300 (9th Cir. 1993) ("Certainly the Guidelines are not binding on the courts . . . ."); Prater v. U.S. Parole Comm'n, 802 F.2d 948, 954 (7th Cir. 1986).

[82]*See, e.g.*, California v. Sutter Health Sys., 130 F. Supp. 2d 1109, 1120 (N.D. Cal. 2001) ("Although the Merger Guidelines are not binding,

courts have also criticized the agencies for not following their own guidance or taking positions contrary to them.[83] For the reasons discussed above, courts may not look favorably on the FTC staking out positions in a merger challenge built on cross-market effects that are inconsistent with the *Guidelines* themselves or with prior positions that the FTC has taken in reliance on the *Guidelines*.

- *FTC Cases Asserting Broader Geographic Markets*. As discussed above, current studies of cross-market effects rely on arbitrary definitions of local markets. In the DH&L Study, for example, hospitals more than 30 minutes' driving time of each other were deemed to be in different markets. The FTC, however, has alleged competitive harm from *in-market* hospital transactions in geographic areas in which patients travel as far and farther than 30 minutes for inpatient care.[84]
- *A Merger Must Lessen Competition in a Properly Defined Market*. Section 7 of the Clayton Act makes it unlawful to "acquire . . . the assets of another person . . . where in any line of commerce . . . in any section of the country, the effect of such acquisition may be substantially to lessen competition. . . ."[85] Section 7 is designed to prevent mergers that create or enhance market power of the merged firm through the lessening of

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courts often have adopted standards set forth in [them] in analyzing antitrust issues."); FTC v. Cardinal Health, 12 F. Supp. 2d 34, 53 (D.D.C. 1998) ("While the Guidelines are not binding, they constitute the agencies' informed judgment on the area of their expertise.").

[83] *See, e.g.*, United States v. Syufy Enterprises, 903 F.2d 659, 664–66 & n.11 (9th Cir. 1990) (criticizing the agency for ignoring its two-year test for sufficient entry under the Guidelines); United States v. Baker Hughes Inc., 908 F.2d 981, 983, 985, 992 n.13 (D.C. Cir. 1990) (noting that DOJ's position was "devoid of support" in the Guidelines and that DOJ also "ignored its own admonition" in them).

[84] *See, e.g.*, Complaint, FTC v. Advocate Health Care Network et al., 2016 WL 3387163, (N.D. Ill. June 20, 2016) (No. 1:15-cv-11473); Complaint, FTC v. Penn State Hershey Med. Ctr. et al., 185 F. Supp. 3d 552 (M.D. Pa. 2016) (No. 1:15-cv-2362); Complaint, FTC v. ProMedica Health Sys., Inc., 2011 WL 1219281 (N.D. Ohio Mar. 9, 2011) (No. 311-cv-00047-DAK).

[85] 15 U.S.C. § 18.

competition.[86] And this is consistent with how the *Guidelines* define mergers that may be anticompetitive, *i.e.*, those mergers that create or enhance market power by eliminating pre-merger competition that existed between the merging parties.[87]

Courts assess the likely competitive impact of a merger by examining the relevant market in which merging parties compete. That is, the government must establish that the merger is likely to "substantially . . . lessen competition or tend to create a monopoly in . . . a market for a particular product in a particular geographic area."[88] Although the *Guidelines* state that there may be instances in which the agencies do not need to define a relevant market and can rely on direct competitive effects,[89] the U.S. Supreme Court has held that determining the relevant product and geographic markets "is 'a necessary predicate' to deciding whether a merger contravenes the Clayton Act."[90]

The Supreme Court has explained that the relevant geographic market is the "area of effective competition"—"a market area in which the seller operates and to which the purchaser can practicably turn for supplies."[91] The purpose of defining a relevant geographic market is to identify the area in which firms

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[86]*See* FTC v. Proctor & Gamble Co., 386 U.S. 568, 577 (1967) ("Section 7 of the Clayton Act was intended to arrest the anticompetitive effects of market power in their incipiency."); *see also* William Landes & Richard Posner, *Market Power in Antitrust Cases*, 94 HARV. L. REV. 937, 937 (1981) ("[T]he main purpose of the section 7 [of the Clayton Act] is to limit mergers that increase market power.").

[87]*Guidelines* § 1.

[88]United States v. Baker Hughes Inc., 908 F.2d 981, 982-83 n.1 (D.C. Cir. 1990).

[89]The most recent version of the *Guidelines* from 2010 posits that the agencies' analysis of a proposed merger "need not start with market definition." *Guidelines* § 4. Although no court has ever dispensed with the need to define a relevant market, the agencies state that the "evaluation of *competitive alternatives* available to customers is *always necessary* at some point in the analysis." *Id.* § 4.

[90]United States v. Marine Bancorporation, Inc., 418 U.S. 602, 618 (1974) (quoting United States v. E. I. Du Pont De Nemours & Co., 353 U.S. 586, 593 (1957)).

[91]United States v. Phila. Nat'l Bank, 374 U.S. 321, 359 (1963).

selling similar products compete with one another.[92] Even if two firms sell similar products, if the firms compete in distinct geographic markets, they are not competitors of one another—just as two firms operating in the same geographic market are not competitors if they each sell different products.

Following these judicial decisions, merging hospitals that operate in separate geographic areas (*i.e.*, in "cross markets"), by definition, cannot be substitutes for one another. Accordingly, any geographic market inclusive of one of the hospitals will necessarily exclude the other hospital. Because the merging hospitals are not substitutes for one another pre-merger, no competition between them for customers (payors) is lost due to their merging and therefore the merged firm has not acquired market power from the merger falling under the purview of the Clayton Act.

Unless the policy debate is an argument for a return to a "big is bad" theory of merger enforcement, it is hard to see how Section 7 of the Clayton Act could proscribe a merger that does not result in a reduction of competition between the merging parties. If the parties to a lawful hospital merger engage in full-line forcing post-merger—which is the premise for cross-market pricing effects—that conduct will be reached, if at all, retrospectively under Section 2 of the Sherman Act.[93] But Section 7 of the Clayton Act should not be used prospectively to condemn a merger that does not create market power through a reduction in direct competition between the merging hospitals solely on the premise that the merged firm *might* raise prices following the merger.

V. Conclusion

Given continuing public discussion of health care cost issues, as well as continuing consolidation among providers, it is unsurprising that the propriety of out-of-market mergers

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[92]The relevant geographic market is "where . . . the effect of the merger on competition will be direct and immediate." *Id.* It must include the "sellers or producers who have the . . . 'ability to deprive each other of significant levels of business.' " Rebel Oil Co. v. Atlantic Richfield Co., 51 F.3d 1421, 1434 (9th Cir. 1995) (quoting Thurman Industries, Inc. v. Pay'N Pak Stores, Inc., 875 F.2d 1369, 1374 (9th Cir. 1989)).

[93]15 U.S.C. § 2.

is now being questioned. Many, if not most, hospital combinations hold the potential to shift the bargaining framework in favor of the providers, to the consternation of health plans. But that premise itself says nothing about the source and nature of any incremental bargaining power, or the magnitude of the change in the bargaining dynamic in a particular case. As even the most ardent proponents of the theory concede, more research and analysis will be required in order for a cross-market effects case to be "ready for prime time" within the antitrust enforcement framework currently embraced by the federal courts.

In that regard, one might reasonably expect the FTC to undertake more detailed investigations into proposed out-of-market mergers, particularly those in relatively proximate markets, in order to understand the motivations for, and objectives of, the combinations—as well as to gather data on transactional pricing strategies and negotiations by systems. And in a similar vein, it would be reasonable to expect the FTC to undertake retrospective reviews of consummated cross-market mergers, with the objective of informing prospective enforcement analyses, in the same manner that the agency reviewed consummated in-market hospital mergers in the early 2000s.[94]

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[94]That effort culminated in the FTC's well-publicized retrospective challenge to the acquisition of Highland Park Hospital by Evanston Northwestern Healthcare, an action credited with changing the agency's hospital merger enforcement strategy. *See* Joseph Farrell et al., *Economics at the FTC: Retrospective Merger Analysis with a Focus on Hospitals*, 35 REV. INDUS. ORG. 369, 378-80 (2009).