

CROSS-MARKET MERGERS: THEORIES OF HARM AND LIMITING PRINCIPLES



BY CORY CAPPS, LEYLA KARAKAS & TETYANA SHVYDKO¹



¹ The authors are economists at Bates White Economic Consulting in Washington DC. The opinions expressed represent only those of the authors and do not represent the views or opinions of Bates White, LLC or of other Bates White employees, affiliates, or clients.

CPI ANTITRUST CHRONICLE

MAY 2023

U.S. HEALTHCARE ANTITRUST IN THE TRANSACTIONAL SPACE: SCANNING THE HORIZON FOR CHANGE

By Holden Brooks



HEALTH CARE ANTITRUST WITHOUT THE HEALTH CARE GUIDELINES: WHAT WILL THE FUTURE HOLD?

By Dionne Lomax & Lisl Dunlop



UNRAVELING ARIADNE'S THREAD: ANTITRUST AND THE BIG DATA REVOLUTION IN HEALTHCARE

By Dr. Theodosia Stavroulaki



CROSS-MARKET MERGERS: THEORIES OF HARM AND LIMITING PRINCIPLES

By Cory Capps, Leyla Karakas & Tetyana Shvydko



HEALTHCARE ADMINISTRATIVE COSTS AND COMPETITION POLICY

By Barak D. Richman & Dr. Kevin A. Schulman



THE EVOLUTION OF ANTITRUST ANALYSIS FOR THE HEALTHCARE INDUSTRY: IS IT FOR THE BETTER OR WILL IT RESULT IN UNNECESSARY HURDLES

By Patrick D. Souter



CROSS-MARKET MERGERS: THEORIES OF HARM AND LIMITING PRINCIPLES

By Cory Capps, Leyla Karakas & Tetyana Shvydko

Several studies find evidence of systematic price increases following specific types of “cross-market” hospital mergers and acquisitions—meaning combinations of hospitals that are too far apart to be close substitutes or in the same relevant antitrust market. The literature on cross-market healthcare mergers continues to grow, and antitrust agencies have in recent years investigated transactions on the basis of cross-market concern. As yet, however, no agency has fully litigated a cross-market challenge. We first review the mechanisms could drive cross-market price. We discuss logical predicates for each theory, as well as factors that may increase or decrease antitrust concern. We focus in particular on the common customer mechanism, which posits that hospitals can be substitutes from the perspective of employers and the health insurers that market products to them, even if they are not substitutes for individual patients. This mechanism appears to have been the primary focus of the known investigations to date and most closely relates to a potential lessening of competition. Finally, we discuss the important distinction that, while complementarity between sellers is ruled out by definition for in-market mergers, parties to a cross-market merger can be complements or substitutes.

Visit www.competitionpolicyinternational.com for access to these articles and more!

CPI Antitrust Chronicle May 2023

www.competitionpolicyinternational.com

Scan to Stay Connected!

Scan or click here to sign up for CPI's **FREE** daily newsletter.



Several studies find evidence of systematic price increases following specific types of “cross-market” hospital mergers and acquisitions — combinations of hospitals that are too distant to be close substitutes or in the same relevant antitrust market as traditionally defined. The literature on cross-market healthcare mergers continues to grow, and in recent years antitrust agencies have investigated transactions on the basis of cross-market concern. As yet, however, no agency has fully litigated a cross-market challenge.

We review the mechanisms by which a cross-market merger could lead to price increases, the logical predicates for each mechanism, and factors that may increase or decrease antitrust concern. We focus in particular on the *common customer* mechanism, which posits that hospitals can be substitutes from the perspective of employers and the health insurers that market products to them, even if the hospitals are not substitutes for individual patients. This mechanism appears to have been the primary subject of the investigations to date and most closely relates to a potential lessening of competition. Finally, we discuss the important distinction that, while complementarity between sellers is ruled out by definition for in-market mergers, parties to a cross-market merger can be complements or substitutes.

I. INTRODUCTION

A “cross-market” merger is one that combines firms that do not directly sell the same products to the same end customers yet could, nonetheless, potentially lead to price increases. In healthcare, where geographic markets tend to be localized (e.g. a portion of a large metropolitan area or one or several counties), cross-market concerns could apply to mergers of sellers in different but related markets, such as hospitals in distinct regions of a metropolitan area. For example, even if end consumers — patients — in one market do not view hospitals in other markets as substitutes to their local hospitals, those hospitals still may be substitutes from the perspective of health insurers, which act as intermediaries offering networks of healthcare providers to individuals and firms.²

The federal antitrust agencies as well as some state agencies have, in recent years, begun to investigate hospital transactions that are or might be cross-market mergers. Figure 1 summarizes the investigations to date that are a matter of public record. So far, the Federal Trade Commission (“FTC”) and Department of Justice (“DOJ”) have not brought a challenge, while the California Attorney General has negotiated consent decrees but not litigated a challenge, leaving the theory untested in court. In part, this may reflect the nascent, though slowly growing, body of *empirical* research into whether and when mergers and acquisitions are likely to increase prices through cross-market effects.

There are some high-level consistencies within the literature as to the three primary mechanisms that could lead to price increases from a cross-market merger: *change-in-control*, *tying*, and *common customers*. But there is no consensus on the conditions necessary for a merger that combines hospitals in distinct but related markets to generate a substantive risk of competitive harm through cross-market effects; nor is there a consensus on limiting principles or safe harbors that indicate when cross-market competitive harm is unlikely. In short, there is no consensus on when the agencies *should* investigate a cross-market transaction, and uncertainty regarding when the agencies will investigate a cross-market transaction is high. Further, given that no cross-market case has been litigated yet, uncertainty over when the agencies would be likely to sue is also high.³

In this paper, we first overview the aforementioned three mechanisms. We then discuss in more detail the common customers mechanism, which appears to have been the primary focus of the known investigations to date and is the mechanism that most closely relates to a potential lessening of competition. We review logical predicates for the common customer mechanism to create harm, limiting principles, and an important distinction between traditional in-market mergers of horizontal substitutes and cross-market mergers — namely, that complementarity between the sellers is ruled out by definition for in-market mergers whereas parties to a cross-market merger can be complements or substitutes.

² Nevo (2014) discusses other industries with intermediaries or platforms, such as cable companies offering bundles of content and smartphones offering bundles of technology and applications, in which a similar logic could apply. Aviv Nevo, “Mergers That Increase Bargaining Leverage,” Speech, Stanford Institute for Economic Policy Research, January 22, 2014, <https://www.justice.gov/atr/file/517781/download>. Vistnes & Sarafidis (2013) observe that the predicates of the cross-market theory could also apply to general combinations of inputs, such as hospitals and physicians, into health insurers’ provider networks. Gregory S. Vistnes & Yianis Sarafidis, “Cross-Market Hospital Mergers: A Holistic Approach,” *Antitrust Law Journal* 79, no. 1 (2013): 289.

³ For a detailed discussion of these and other issues, see Gregory S. Vistnes, “Cross-Market Hospital Mergers: Assessing Likely Harm and Implications for Future Government Action,” working paper (2022) (“Vistnes (2022)”). See also Keith Brand & Ted Rosenbaum, “A Review of the Economic Literature on Cross-Market Health Care Mergers,” *Antitrust Law Journal* 82, no. 2 (2019): 533–549; Jamie S. King, Alexandra D. Montague, Daniel R. Arnold, & Thomas L. Greaney, “Antitrust’s Healthcare Conundrum: Cross-Market Mergers and the Rise of System Power,” *Hastings Law Journal* 74, no. 4 (2023): 1057–1120.

Figure 1. Summary of Known Cross-Market Agency Investigations and Outcomes

Transaction	Year	Market	Agency	Outcome
Cedars-Sinai / Huntington	2020	Los Angeles, CA. 30-minute drive between Huntington and largest Cedars-Sinai hospital.	CA AG	Consent decree
Beaumont / Spectrum	2021	Michigan, approximately 100 miles away from each other.	FTC	No challenge
Adventist / Acadia	2021	Northern California, approximately 76 miles away from each other.	CA AG	Consent decree
Atrium / Advocate Aurora	2022	Merging parties in different states, with no hospitals in adjacent states. ^[1]	FTC	No challenge
USC / Methodist	2022	Los Angeles, CA. Methodist located 20-to-30-minute drive from closest USC hospital.	CA AG	Consent decree
Sanford / Fairview	2023	South Dakota-based Sanford Health is seeking to combine with Minnesota's Fairview Health Services.	MN AG	Under review ^[2]

Notes:

[1] Atrium had hospitals in North Carolina, South Carolina, Georgia, and Alabama, while Advocate Aurora Health was based in Wisconsin and Illinois.

[2] In April 2023, Sanford and Fairview postponed closing their merger a second time, citing the ongoing review by the Minnesota Attorney General. It is unclear whether the FTC or DOJ is investigating the proposed transaction. Alex Kacik, "Sanford, Fairview delay merger a second time," *Modern Healthcare* (April 3, 2023), <https://www.modernhealthcare.com/mergers-acquisitions/sanford-health-fairview-health-services-delay-merger-again>.

II. POTENTIAL MECHANISMS OF CROSS-MARKET PRICE INCREASES

The literature has identified several mechanisms by which a merger of hospitals that do not compete in the same relevant antitrust market could lead to price increases: (1) *change-in-control*, (2) *tying*, and (3) *common customers*.⁴ In this section, we briefly describe each of these mechanisms. We then describe the common customers mechanism in more detail, as that is both most closely related to a theory of lessened competition and appears to have been the main focus of agency investigations to date.

A. Change-in-Control

The change-in-control mechanism refers to the potential for higher prices to result from a system that is a more effective bargainer — e.g. it may be more experienced, better financed and more patient, or simply more skilled — acquiring a hospital or system that is a less effective bargainer.⁵ With a better bargaining team at the helm, prices may increase post-acquisition, whether the hospitals are close together or distant, and whether they have common customers or not. Any price increases likely would be observed at the acquired hospitals or systems, which may be less sophisticated or have fewer resources than the acquirer. Another distinction is that, while systems with greater market power could also be more effective negotiators, the change-in-control mechanism does not require market power in either party's market.

Lewis & Pflum (2017) study out-of-market acquisitions and find evidence of significant post-transaction price increases on average, despite the acquiring system and target hospital being quite far apart.⁶ Their results provide support for the existence of the change-in-control mechanism but do not rule out the other mechanisms. They also note, and we agree, that it is unclear whether a price increase caused by replacing a less effective bargaining team with a more effective bargaining team constitutes an antitrust violation — i.e. it is not clearly a factor whose

4 Schmitt (2018) evaluates cross-market mergers that increase multimarket contact between competing hospital systems and finds evidence of general price increases rather than increases in the specific market(s) where the combination occurred. This result is consistent with increased multimarket contact facilitating coordination between systems that compete across multiple markets. Matt Schmitt, "Multimarket Contact in the Hospital Industry," *American Economic Journal: Economic Policy* 10, no. 3 (2018): 361–387.

5 Lewis & Pflum (2015) describe this mechanism as follows: "[S]ystem membership may alter a hospital's bargaining power allowing the hospital to extract a higher share of the surplus generated by contracting with an [insurer], resulting in a higher reimbursement rate. This latter channel is of particular interest because it allows for an increase in prices after merger (through higher bargaining power) even when merging hospitals are located in different patient markets and thus experience no change in bargaining position." Matthew S. Lewis & Kevin E. Pflum, "Diagnosing Hospital System Bargaining Power in Managed Care Networks," *American Economic Journal: Economic Policy* 7, no. 1 (2015): 244.

6 They also find that nearby rivals of the acquired hospitals also increase prices on average, but to a lesser extent. Matthew S. Lewis & Kevin E. Pflum, "The Price Effects of Cross-Market Mergers: Theory and Evidence from the Hospital Industry," *RAND Journal of Economics* 48, no. 3 (2017): 579–610.

effect “may be substantially to lessen competition, or to tend to create a monopoly.”⁷ In addition, leadership at hospitals with less sophisticated bargaining teams may also be less effective in other respects. The potential for mergers and acquisitions to cause less effective management teams to be replaced by more effective leadership is generally pro-competitive. It is unclear whether antitrust policy could restrict the scope for the change-in-control mechanism to lead to price increases without also weakening the generally beneficial competitive pressure that the risk of takeovers and managerial terminations creates.

B. Tying in the Presence of Non-Market Constraints on Pricing

Tying refers to the practice of selling two distinct though commonly related goods or services only together, rather than *a la carte*. Tying may raise competitive concern when a seller that has market power in one market but faces competition in a second market requires customers who want to purchase the former product to also purchase its version of the competitively supplied product.⁸ In the hospital industry, it is ubiquitous for hospital-insurer contracts to include both inpatient and hospital-based outpatient services. To our knowledge, this has not been challenged as anticompetitive, presumably because inpatient and outpatient services within a hospital are produced using common physical and human capital such that separate contracting and sale would be unwieldy and inefficient. Hospital systems may also tie across their locations by requiring an insurer that wants to contract with any of the system’s hospitals to contract with all of its hospitals — a practice often referred to as all-or-nothing contracting.⁹ In general, tying can be viewed as a form of cross-market conduct, because there are necessarily two markets at issue: one for the tying product and another for the tied product. Because tying of this sort has a long history in antitrust that predates the recent literature on cross-market hospital mergers, we do not discuss this in detail.

One variant of tying that could arise, under certain conditions, in a cross-market hospital merger involves a firm with market power that faces overt or implicit non-market constraints on its pricing. Suppose a hospital system has substantial market power that would enable it to negotiate exceptionally high prices from health insurers but that some external constraint makes it impossible or unattractive for the system to charge such a high price. The constraint could be overt price regulation, though that is rare. Alternatively, the constraint could be a desire to avoid negative press, negative attention from state legislators, or conduct investigations by state attorneys general and other agencies.¹⁰

If the system were unable to fully raise its prices to the level it could negotiate absent external constraints, it could use acquisitions and a tie to effectuate a price increase. Specifically, it could acquire one or more other hospitals and use all-or-nothing contracting to require health insurers to contract with those hospitals as a condition of contracting with its existing, price-constrained hospitals. The system could then raise prices at the acquired locations.¹¹ If those new locations are in markets distinct from the system’s existing hospitals, the result would be a price increase from a cross-market merger.

Several factors distinguish this tying theory from other cross-market mechanisms. First, the acquirer, but not necessarily the target, must have market power — this is in contrast to the common customers mechanism, where, as we discuss below, both parties must possess some degree of market power. Second, the tying mechanism does not require the existence of common customers, only a common insurer (if an insurer does not sell insurance in the geography of the tied hospitals, a tie would be moot). Third, there must be some non-market constraint on the prices the acquirer can set at its existing hospitals. This last factor likely limits the set of cross-market transactions to which this tying mechanism might apply. Finally, tying would be an atypical basis for a prospective merger challenge, though it certainly has been a significant basis for retrospective conduct investigations and enforcement actions.¹²

7 FTC, “The Antitrust Laws,” <https://www.ftc.gov/advice-guidance/competition-guidance/guide-antitrust-laws/antitrust-laws>.

8 FTC, “Tying the Sale of Two Products,” <https://www.ftc.gov/advice-guidance/competition-guidance/guide-antitrust-laws/single-firm-conduct/tying-sale-two-products>.

9 The California Attorney General filed an antitrust lawsuit against Sutter Health, which ultimately settled. One condition of that settlement requires Sutter to “stop all-or-nothing contracting.” California Department of Justice, “Attorney General Becerra Secures Preliminary Approval of Settlement with Sutter Health Resolving Allegations of Anti-Competitive Practices,” March 9, 2021, <https://oag.ca.gov/news/press-releases/attorney-general-becerra-secures-preliminary-approval-settlement-sutter-health>.

10 The aforementioned Sutter case provides one example. In another, the Pennsylvania Attorney General filed a lawsuit, ultimately settled, against UPMC that asked a state court to “[p]rotect against UPMC’s unjust enrichment by prohibiting excessive and unreasonable billing practices inconsistent with its status as a non-profit charity providing healthcare to the public.” Pennsylvania Attorney General, “Attorney General Josh Shapiro Announces Legal Action against UPMC for Violating Pennsylvania’s Charities Laws,” February 7, 2019, <https://www.attorneygeneral.gov/taking-action/attorney-general-josh-shapiro-announces-legal-action-against-upmc-for-violating-pennsylvanias-charities-laws/>.

11 The theory of using a tie to avoid price caps dates back at least to the 1950s. See Ward S. Bowman Jr., “Tying Arrangements and the Leveraging Problem,” *Yale Law Journal* 67, no. 19 (1957): 21–23.

12 King et al. (2023) argue that “[a] merger that provides a health system with the incentive and opportunity to tie its facilities together to coerce payers into higher prices and foreclose lower-priced hospitals from those payers’ networks should be within the reach of the Clayton Act.” King et al. (2023), 1090.

C. Common Customers

The foremost mechanism behind potential cross-market price increases is the presence of *common customers*, meaning large employers seeking to provide sufficient coverage in terms of choice and quality to their employees who live and work across multiple markets. These customers link the merging parties' separate geographic markets and can make the parties to a cross-market merger substitutes from the perspective of the *insurer*, despite not being substitutes for any individual health plan enrollees or patients.

As an example, consider an employer with a primary location in the center of a large metropolitan area that consists of a central city and multiple surrounding suburbs from which workers commute. For example, Manhattan workers commute from Brooklyn, The Bronx, Long Island, Hoboken, Westchester, etc. Likewise, San Francisco workers commute from the surrounding counties of Oakland, Marin, San Mateo, and Contra Costa. In general, few patients would consider hospitals in a distant suburb or county to be close substitutes for their local hospitals, meaning that a merger of hospitals in distant suburbs would likely not be a horizontal, in-market merger. The premise underlying the common customers mechanism is that, because larger employers need a health plan that offers *most* of its workers a reasonably attractive network of hospitals from which to choose, hospitals in disparate suburbs can be substitutes *from the perspective of health insurers* that market their products to such larger employers.

Continuing the example, suppose that an employer would not be disaffected by having a less attractive hospital network in one suburb where its employees live, but having two such gaps would be substantially more difficult, and having three gaps would be untenable.¹³ If this pattern holds, then a merger of hospitals in two or more distinct suburbs could increase the combined entity's bargaining leverage. Each hospital on its own could create at most one network gap, which does not make an insurer's network difficult to market. But together, they may be able to create two gaps, and that would make the insurer's product difficult to market. That stronger threat would increase the combined entity's bargaining leverage over the insurer and allow it to increase price — even though few if any patients view the combining hospitals as substitutes.

III. COMPONENTS OF A COMMON CUSTOMERS CROSS-MARKET THEORY OF HARM

Vistnes & Sarafidis (2013) first identified the common customer mechanism as a potential driver of cross-market effects in an analysis that, while grounded in the structure of the industry, is theoretical.¹⁴ In subsequent work, Dafny, Ho, & Lee ("DHL," 2019) provide additional theoretical analysis, along with empirical work to test the theory.¹⁵ In their empirical work, they construct a sample of mergers involving hospitals located within the same state but more than 30 minutes apart. DHL's central result is that mergers among hospitals located within 30–90 minutes of each other and in the same state lead, on average, to price increases of 7 percent to 10 percent. They also evaluate mergers among hospitals that are more than 90 minutes apart but find no evidence of persistent price increases; they attribute this to the extent of common customers waning as distance increases.

DHL's results establish that cross-market hospital mergers can lead to price increases, but that raises practical questions for enforcers and merging parties alike. What types of cross-market hospital transactions are more or less likely to lead to price increases? Are there tangible criteria that establish when a transaction is unlikely to raise concern, akin to the HHI thresholds applicable to horizontal in-market mergers?¹⁶

For the common customer mechanism, as developed by Vistnes & Sarafidis and DHL, to raise a risk of increased bargaining leverage and higher prices from a cross-market merger, several conditions must be met. The following overview of necessary conditions is based on our review of their work, as well as subsequent commentary and agency investigations. The conditions we identify align closely with the discussion in Vistnes (2022).¹⁷

13 The reduction in the value of a health insurer's network from having a second gap must be more than twice as large as the reduction from having a first gap (assuming the gaps are equally sized). This condition applies when the value function relating the quality of a health insurer's hospital network to the number of geographies with an attractive set of hospitals in-network is "concave."

14 Vistnes & Sarafidis, *supra* note 2.

15 Leemore Dafny, Kate Ho, & Robin Lee, "The Price Effects of Cross-Market Mergers: Theory and Evidence from the Hospital Industry," *RAND Journal of Economics* 50, no. 2 (2019): 286–325.

16 Under current agency policy, mergers in unconcentrated markets and mergers involving small changes in concentration are "unlikely to have adverse competitive effects and ordinarily require no further analysis." *Horizontal Merger Guidelines* (2010), § 5.

17 "Three necessary conditions drive the [] theory: the presence of common linked employers [i.e. common customers]; market power at the hospitals across which there are common linked customers; and concavity." Vistnes (2022), 20 and cites therein.

Two caveats apply to the factors we discuss below. First, the common customer mechanism does not embed any specified relationship between market shares of the merging parties within linked markets or the extent of common customers and the probability or magnitude of cross-market price increases. Consequently, we can identify factors that likely increase or decrease concern, but only qualitatively. This, of course, does not bar enforcement. For example, coordinated effects merger challenges commonly rely on qualitative assessments of the impact of a merger on the ability of firms to sustain higher prices through coordinated interaction, as opposed to quantitative indicia such as upward pricing pressure and merger simulations.¹⁸ Second, in contrast to the large body of case law on horizontal mergers, there have been no litigated cross-market merger challenges. This means we cannot identify the factors that a court hearing an eventual cross-market challenge would prioritize.

A. Sufficient Volume of Common Customers

Common customers are customers that value the services of both of the parties to a cross-market merger. For example, while *enrollees* who live in an eastern suburb of a city would generally place little value on whether hospitals in a western suburb are in their insurance network, *employers* that have workers residing in both the eastern and western suburbs would place value on the hospitals in both suburbs. Only some employers in a given region would have workforces that are dispersed in this way.¹⁹ In other words, for any given cross-market merger, some customers will be common and some will not, and the relative magnitudes of the two will depend on the specifics of the merger at hand. There are no theoretical or empirical thresholds for the extent of common customers that raise concerns. Directionally, a smaller set of common customers raises less concern and vice-versa.

Results in DHL support the conclusion that concern wanes as the extent of common customers declines.²⁰ In particular, DHL find evidence of price effects among cross-market mergers involving hospitals within 30–90 minutes, which they hypothesize are “precisely the sort of cross-market hospital mergers where common customers are likeliest to be present.”²¹ But they do not find evidence of sustained price increases beyond 90 minutes.

Although far from a bright line, this does identify several topics that hospitals considering a cross-market merger, or an agency evaluating such a merger (or deciding whether to do so), could explore. Public data on commuting patterns between markets may provide an indicator of the extent to which a full investigation would likely identify more than a handful of common customers. Whether or not the implicated markets are in the same metropolitan statistical area (“MSA”) is also informative, as the US Census Bureau defines MSAs to include a core urban area “plus adjacent counties having a high degree of social and economic integration with the core as measured through commuting ties.”²² In addition, business records may identify the employers providing insurance coverage to patients of the respective merging hospitals, which could provide a direct measure of the presence and significance, or absence, of common customers.

B. Market Power and Market Shares in Two or More Component Markets

There is consensus in the literature that *at least one* merging party must possess market power in the linked market. For example, King et al. write, “Researchers and antitrust enforcers have been quick to note that there are definitely plus factors that make cross-market price effects more likely. One of these plus factors is almost always that one of the parties to the transaction has market power in at least one market.”²³

However, we believe that when premised on common customers the theory requires that some degree of market power be present in *at least two* component markets.²⁴ This is because the common customers mechanism operates through increased bargaining leverage. A hospital

18 *Horizontal Merger Guidelines* (2010), § 7.

19 The majority of firms in the country are small, but large firms account for the majority of employment. Nationwide, firms with fewer than 100 employees account for about 35 percent of employment while firms with more than 1,000 employees account for about 42 percent of employment. BLS, “Table F. Distribution of Private Sector Employment by Firm Size Class: 1993/Q1 through 2022/Q1, Not Seasonally Adjusted,” https://www.bls.gov/web/cewbd/table_f.txt. Larger firms are much more likely to offer insurance coverage to their workers and so account for a disproportionate share of the commercially insured population. Kaiser/HRET, “2022 Employer Health Benefits Survey,” October 27, 2022, <https://www.kff.org/health-costs/report/2022-employer-health-benefits-survey/>.

20 DHL, 315; see also DHL, 296 (“The price effects of a cross-market merger should be larger the more prevalent are common customers for the merging hospitals.”).

21 Some confusion is evident in the literature regarding DHL’s results for out-of-state mergers. DHL do not *test* whether out-of-state combinations that are within the 30- to 90-minute range lead to price increases, because their data include few such transactions. DHL, 311. They do test whether out-of-state combinations *overall* lead to price increases and find that they do not. Taken together, their results imply that out-of-state combinations involving distances greater than 90 minutes are unlikely to raise concern, but their results do not speak to out-of-state combinations at distances between 30 and 90 minutes. That said, the extent of common customers at any given distance would likely be no greater and may well be less for hospitals in different states, which would imply lesser concern.

22 US Census Bureau, “Glossary,” <https://www.census.gov/programs-surveys/metro-micro/about/glossary.html> (see definition of “Core Based Statistical Areas”).

23 King et al. (2023), 1088.

24 DHL (2019) do not include an explicit statement of the necessity of a significant market share or market power in two or more of the linked markets. However, that proposition is somewhat implicit in several statements in their paper. See DHL, 291, 296.

without market power (i.e. a hospital that faces ample substitutes) would not augment the bargaining leverage of the merged entity — even if one party does have existing market power. In this view, we agree with Vistnes (2022).²⁵

However, there is no consensus and little evidence on how to operationalize a “market power in at least two markets” condition. Vistnes suggests examining the prices set by the hospitals in the linked markets as well as relying on interviews with health plans. Fulton et al. (2022) use a 30 percent cut-off, based on discharge shares within a commuting zone, to define a “large” market share that might raise cross-market concern.²⁶ Merger challenges when post-merger shares are 30 percent or less are rare, and FTC challenges to horizontal hospital mergers typically entail alleged post-merger shares of 50 percent or higher. In this respect, a 30 percent share could be a reasonable informal safe harbor, so long as the share is computed in an appropriate relevant geographic market. This, however, is not necessarily straightforward, especially at the deal consideration or agency screening stage. For example, a hospital could have a 15 percent share within its “commuting zone,” a 25 percent share in its primary service area, and a 50 percent share in a relevant geographic market, as the FTC would ultimately define it in court.

Suppose the agencies were to adopt an X percent safe harbor for concern under the common customers mechanism. A transaction would be within the safe harbor if, in every pair of markets (one from each system) with significant common customers, one party *or* the other had a share below X percent.

C. Health Insurance Products Are Not Tailored to the Linked Markets

A cross-market hospital merger can increase the combined system’s bargaining leverage if having network “gaps” in additional markets makes it increasingly difficult for health insurers to market their plans. For example, suppose that having a gap (i.e. not having an important hospital in-network) in Market A would reduce an insurer’s sales by 10 percent and that a gap in Market B would likewise reduce sales by 10 percent. A cross-market merger of hospitals in Markets A and B would increase the system’s bargaining leverage if the simultaneous absence of the system’s hospitals in both markets would reduce the insurer’s sales by more than 20 percent. This is a restatement of the “concavity” condition.

For a cross-market merger, the individual enrollees in Market A place little or no value on the appeal of the hospital network in Market B. Likewise, Market B enrollees care little about the hospital network in Market A. Substitutability, and potential increased bargaining leverage, arises insofar as *employers* with workers in both markets would be substantially less likely to buy an insurance product with a gap in both markets. This, however, presumes that the employer offers the same insurance product in both markets. If, instead, the employer offers insurance products that are tailored to each market — call them Plan A (for Market A) and Plan B (for Market B) — then the linkage between the two markets is sundered.²⁷

If a cross-market merger combines important hospitals in the two markets but health plans are tailored to each market, the combined system would not gain bargaining leverage. This is because the reduction in the value of Plan A from a simultaneous termination in both markets by the combined system is identical to the reduction in the value of Plan A from losing just the hospitals in Market A. The same applies in Market B.

This identifies additional questions for parties to a cross-market merger, or agencies reviewing such a merger, to evaluate. Do most employers with workers in the component markets offer a common plan in both markets? Are the sets of insurers similar in the component markets? If employers do not offer tailored plans, would it be costly for them to do so?

D. From the Perspective of Insurers, the Combining Systems Are Substitutes Rather than Complements

By definition, horizontal mergers combine firms that offer substitutes. In contrast, complementarities between merging parties are an inherent possibility in cross-market mergers. For example, a better provider network for an insurer in one market will boost demand for that insurer’s products, which will benefit all providers contracted with the insurer. As a hospital system accounts for a greater share of an insurer’s network — such as by having hospitals located in more of the insurer’s markets — the system will internalize those positive externalities to a greater degree.

25 “Showing appreciable harm under the CLE [i.e. common customers] theory requires showing that both of the merging parties have substantial market power since, absent such market power, a merger would not make it more difficult for a health plan to drop the hospital from its provider network.” Vistnes (2022), 21.

26 Brent D. Fulton, Daniel R. Arnold, Jaime S. King, Alexandra D. Montague, Thomas L. Greaney, & Richard M. Scheffler, “The Rise of Cross-Market Hospital Systems and Their Market Power in the US,” *Health Affairs* 41, no. 11 (2022): 1652–1660.

27 DHL explain this as follows: “The simple model [of cross-market bargaining leverage effects on price] assumed that employers faced a cost of offering additional plans. If instead, employers could costlessly offer different plans in different markets, then markets would again be separable and no cross-market merger price effects would arise.” They further observe that insurers commonly offer specific health plan products over broad markets. DHL, 317.

Complementarities of this sort could mitigate or even offset price increases that might arise from the common customer mechanism. DHL explain this as follow:

[I]f the sum of the losses from excluding either hospital individually exceeds the loss from excluding both simultaneously . . . then a merger may potentially lead to a reduction in negotiated reimbursement rates under Nash bargaining. This can occur, for example, if the two merging hospitals are sufficiently strong complements so that an insurer can only obtain significant revenues . . . if it contracts with both hospitals as opposed to only one.²⁸

The Massachusetts Health Policy Commission (“HPC”) relied on a version of this complementarity logic in approving (subject to conditions) the merger of Beth Israel and Lahey Health, two systems that primarily operated hospitals in adjacent parts of the Greater Boston area.²⁹ The motivating premise was that, absent the merger, each system has an attenuated incentive to make investments or offer lower prices in order to become more competitive with the market leader, Partners Healthcare (now Mass General Brigham). For example, if a narrow network product that excludes Partners Healthcare requires both Beth Israel and Lahey to be marketable, then complementarity as described above would apply. One aspect of the HPC decision that would not apply generally in the case of cross-market hospital mergers is the presence of a market leader that was not part of the transaction.

IV. CONCLUSION

Cross-market hospital mergers can affect prices in multiple markets and through multiple mechanisms, not all of which clearly fall under the antitrust laws. Moreover, there is the potential for complementarity as well as substitutability between the merging parties. These factors make competitive effects analysis and enforcement in cross-market cases complex and uncertain. This ambiguity is likely to continue until and unless additional empirical research emerges and antitrust agencies establish precedents through fully litigated merger challenges.

The DOJ and FTC are currently revising the *Horizontal Merger Guidelines*, and a draft for public commentary may soon be available.³⁰ The new guidelines are expected to cover mergers of all types rather than just horizontal mergers and may include principles by which the agencies will evaluate cross-market mergers.³¹

In the meantime, two recent merger reviews suggest that transactions involving hospitals more than two hours apart may not be challenged, which is consistent with the 30- to 90-minute result from DHL. Specifically, the FTC issued second requests, reportedly on cross-market grounds, for the Beaumont-Spectrum and Advocate-Atrium mergers. In the former, all party hospitals were located within Michigan but were over two hours apart. In the latter, the parties’ hospitals were in different states. Some additional guidance may come from three consent decrees in California, but it is unclear whether that will generalize to other states or to federal investigations.³²

28 DHL, 292.

29 “The core question is as follows: *If BILH becomes more attractive to payers and consumers [through complementarities for the combined system], would BILH become a true alternative to Partners in payer networks and thereby constrain Partners’ ‘must-have’ status, or would the result instead be a second ‘must-have’ system? If enough consumers (patients or employers) would have a strong preference for a plan that includes both systems, BILH could become a second ‘must-have’ system in the Commonwealth. . . . If, on the other hand, a combined BILH system were viewed as a true alternative to Partners, payers would have an increased ability to build a viable network without Partners, which would constrain Partners’ bargaining leverage and reduce the price increases it would otherwise be able to negotiate.*” (Emphasis added.) Massachusetts Health Policy Commission Review of The Proposed Merger of Lahey Health System, etc., HPC-CMIR-2017-2, September 27, 2018, <https://www.mass.gov/doc/final-cmir-report-beth-israel-lahey-health/download>, 64–65. Two of the authors of this paper advised the Massachusetts HPC in its review of the BIDCO-Lahey merger.

30 DOJ & FTC, “Federal Trade Commission and Justice Department Seek to Strengthen Enforcement Against Illegal Mergers,” press release, January 18, 2022, <https://www.ftc.gov/news-events/news/press-releases/2022/01/federal-trade-commission-justice-department-seek-strengthen-enforcement-against-illegal-mergers>.

31 In comments submitted in response to the announcement of the revision, Nancy Rose & Leemore Dafny offered the following recommendations regarding cross-market mergers:

- “When reviewing mergers among parties that serve different markets (e.g., cross-market mergers), the Agencies’ review will emphasize the competitive effects of such a transaction over the formal delineation of relevant markets. . . . market definition may be uninformative or even misleading with regard to the potential for the merger to yield anticompetitive effects.”
- “When performing a merger review, whether horizontal or nonhorizontal (including cross-market), the effects of prior mergers or acquisitions by the parties will explicitly be considered as sources of real-world evidence . . . such direct evidence may bolster the case for or against challenging a given transaction.”

Leemore Dafny & Nancy Rose, “Response to DOJ-FTC Merger Guidelines Request for Information,” April 21, 2022, <https://tinyurl.com/5f4ahdwm>. Professor Dafny is a co-author of DHL and Professor Rose is a former DOJ chief economist.

32 Vistnes (2022), section IV.C.

CPI Subscriptions

CPI reaches more than 35,000 readers in over 150 countries every day. Our online library houses over 23,000 papers, articles and interviews.

Visit competitionpolicyinternational.com today to see our available plans and join CPI's global community of antitrust experts.

