Antitrust’s Healthcare Conundrum: Cross-Market Mergers and the Rise of System Power

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As healthcare markets continue to consolidate and prices continue to rise, economists, legal scholars, antitrust enforcers, and policymakers have the opportunity and the obligation to examine how the dynamics of our healthcare markets have changed over time and how those changes affect consumers and competition. Although antitrust merger law is designed to arrest anticompetitive harms in their incipiency, it has failed to prevent anticompetitive consolidation in most sectors of the healthcare industry. Of particular concern is the inattention of antitrust enforcers to the growing market power of healthcare systems that span multiple local geographic markets. While more than half of all hospital mergers have occurred across geographic markets in the last decade, none have been challenged in federal court. Emerging economic data suggest that these mergers can result in price increases for hospitals throughout the newly merged systems, and a number of cases document the propensity of hospital systems to exercise post-merger market power. To accurately reflect the expanding body of knowledge surrounding price and market power in healthcare transactions, the traditional tools of antitrust enforcement must be seen with new eyes. This Article argues that cross-market healthcare transactions can lead to increased prices through a variety of mechanisms and provides a framework for analyzing which mergers may raise competition concerns. Our hope is that this framework will encourage economists, legal scholars, and antitrust enforcers to work collaboratively to identify and restrict the growth of “system power” resulting from anticompetitive cross-market healthcare mergers.

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For nearly fifty years, state and federal antitrust enforcers have refrained from challenging mergers, acquisitions, or affiliations between entities that do not directly compete in the same geographic or product markets—so-called “cross-market mergers”—on the assumption that these transactions cannot harm competition. Over the last decade, however, economists have found evidence that certain cross-market healthcare mergers are associated with significant post-merger price increases. In several notable cases, plausible claims have been made that dominant health systems, such as Sutter Health and HCA Healthcare, have exercised market power attributable to bargaining leverage resulting from their multiregional coverage. We call this phenomenon “system power.” These developments call into question the validity of the assumption that such mergers cannot harm competition or consumers. In this Article, we analyze federal statutes and their legislative history, case law, guidance documents from antitrust agencies in the United States and the European Union, legal and economic scholarship, and regional and national trends in employer and insurer markets to develop an initial antitrust framework to identify system power and challenge potentially anticompetitive healthcare mergers that cross traditional geographic markets.

The healthcare sector has experienced massive consolidation among providers and insurers over the last thirty years. A recent study found that approximately 95% of metropolitan areas had highly concentrated hospital markets, 78% had highly concentrated specialist physician markets, and 58% had highly concentrated insurer markets. Further, through mergers and

1. For simplicity and in keeping with other literature on this topic, we refer to all cross-market mergers, acquisitions, affiliations, and other transactions as cross-market mergers.
acquisitions that cross geographic areas, hospitals, physicians, and other providers have consolidated into health systems that span counties, states, regions, and even the nation. In fact, over half of hospital mergers and acquisitions in the United States between 2009 and 2019 crossed geographic market boundaries. By 2019, 59% of hospital systems in the United States were cross-market systems, meaning that they had facilities in more than one geographic market. Cross-market healthcare provider consolidation has enabled the rise of system power, which allows healthcare systems to leverage significant market power across geographic markets against purchasers of healthcare. These mergers have gone largely unimpeded and unmonitored by antitrust enforcers, despite economic evidence demonstrating post-merger price increases.

For decades, healthcare mergers of all kinds have been permitted to proceed unchecked, allowing health systems across the country to accumulate market power. Working with limited resources, the Federal Trade Commission (FTC) has focused its energy in the healthcare sector predominantly on challenging horizontal hospital mergers—mergers within the same geographic market—and typically for acute care services. But even then, it has only challenged a relatively small percentage of hospital mergers in the past twenty years. Antitrust enforcers have generally ignored healthcare mergers between entities in different geographic hospital markets, citing uncertainties over how to effectively challenge them under existing antitrust law and a hesitancy to act without more economic data or dynamic modeling. Geographic hospital market boundaries are notoriously difficult to define, but traditionally involve

6. See Furukawa et al., supra note 4, at 1322. Studies have also found evidence that health systems charge higher prices. See, e.g., Glenn A. Melnick & Katya Fonkych, Hospital Prices Increase in California, Especially Among Hospitals in the Largest Multi-Hospital Systems, 53 J. HEALTH CARE ORG., PROVISION, & FIN. 1, 1 (2016).
8. Id. at 1656.
10. MEDICARE PAYMENT ADVISORY CMM’N, REPORT TO THE CONGRESS: MEDICARE PAYMENT POLICY 465 (2020); KING ET AL., supra note 5, at 6–7.
13. Ramirez, supra note 11, at 12 (explaining that cross-market mergers are an issue that the FTC is “continuing to explore in an effort to determine whether the antitrust laws are implicated”); see Dep’t of Just. & FTC, Conglomerate Effects of Mergers - Note by the United States 1, 7 (Organisation for Econ. Co-Operation & Dev., Working Paper No. JTI03462557, 2020), https://www.ftc.gov/system/files/attachments/us-submissions-oecd-2010-present-other-international-competition-fora/oecd-conglomerate_mergers_us_submission.pdf.
the area in which health plans seek to include providers to serve the preferences of their subscribers.14 Mounting economic evidence that systems can acquire market power by expanding beyond individual local markets suggests that it is time to reconsider assumptions that cross-market mergers are always benign.

At the outset, it should be acknowledged that the widely used term “cross-market mergers” is, from our perspective, something of a misnomer. The concerns identified in this Article are based on the evidence that, in some cases, what are called “cross-market” mergers are really “within market” when the relevant product and geographic markets are correctly defined, such as a regional market for organ transplants. In other cases, the concern with a system extending its reach beyond the local markets in which it operates is that the merger enhances the opportunity and likelihood that it will exercise market power through tying arrangements or other anticompetitive tactics. In both cases, the proper focus of competitive analysis is on the risk of competitive harm attributable to the enhanced bargaining leverage arising from a merger outside of the system’s existing power base.

That said, throughout the Article, we refer to mergers of healthcare providers and systems with entities in different geographic areas as “cross-market mergers” for several reasons. First, use of the term aligns with the relevant economic and legal academic literature on this topic. Second, it avoids compromising the well-established geographic market definitions used in horizontal hospital merger cases. And lastly, it pushes back against the belief that these mergers are not a threat to competition due to their cross-market nature. We argue that instead of being truly “cross-market,” these mergers can also be conceptualized as “within-market” mergers with redefined notions of consumer demand and market boundaries.15 This redefinition could be accomplished through the recognition of markets for an array of healthcare services offered throughout multiple geographic areas and sold to multihospital insurers building provider networks for health plans sold in those areas.

The Article proceeds in six parts. Part I provides a taxonomy for mergers and defines the various types of cross-market healthcare provider mergers. Part II examines recent cases and actions by antitrust enforcers, demonstrating the harms from unchallenged cross-market healthcare provider mergers, as well as the first merger conditions imposed on cross-market grounds. Part III describes the evolution of healthcare merger enforcement for horizontal and non-

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15. We acknowledge that challenges arise both from labeling these mergers as “cross-market” as well as from expanding the geographic market to conceive of them as within-market but cross-geographic areas. Most importantly, we believe the market should be analyzed from the perspective of the insurer who is attempting to construct a network of providers that spans the areas served by the merged entity. We are grateful to John Kwoka, Leemore Dafny, Richard Scheffler, and Lawrence White for insightful discussions on how to label and frame these mergers.
horizontal mergers and identifies key insights into merger characteristics that can serve as precursors to anticompetitive behavior for cross-market mergers. Part IV analyzes the empirical evidence demonstrating associations between certain cross-market healthcare mergers and price increases, as well as theoretical arguments from economics literature that suggest several mechanisms for how cross-market healthcare mergers could lead to price increases. Part V explores two potential claims under section 7 of the Clayton Act that antitrust enforcers could use to challenge a cross-market healthcare merger. Part VI begins to develop the framework for identifying and challenging potentially anticompetitive cross-market healthcare mergers by identifying anticompetitive precursors, mechanisms for price increases following cross-market mergers, and limiting principles, as well as the remaining unknowns.

There is growing recognition that antitrust enforcement has been derelict in its obligation to curb excessive provider consolidation. Healthcare provider markets have consolidated enormously as a result of horizontal merger activity, vertical affiliations between hospitals and physician practices, and cross-market provider acquisitions. The rapid growth of large health systems presents a new threat to competition that merits the close attention of antitrust enforcement agencies. This Article offers a preliminary framework for enhanced scrutiny of such mergers.

I. DEFINING CROSS-MARKET Mergers

Antitrust enforcers and economists broadly categorize mergers into groups: horizontal and non-horizontal. Horizontal mergers refer to mergers between competitors operating in the same product and geographic markets, whereas non-horizontal mergers are mergers between entities that do not compete in the same market. The term non-horizontal merger encompasses both vertical and conglomerate mergers. Vertical mergers combine entities in different stages of the same supply chain, while conglomerate mergers occur between entities that do not compete in the same product or geographic markets.

17. See generally, e.g., Jeffrey Church, Conglomerate Mergers, in 2 ISSUES IN COMPETITION LAW AND POLICY 1506 (2008).
In the healthcare industry, providers of all kinds now look beyond their own market for ways to extend their reach and market power. Many modern healthcare mergers include both horizontal and non-horizontal elements. Contemporary discussions of cross-market mergers generally refer to geographic cross-market mergers, which involve combinations among providers that do not directly compete in the same local geographic market but sell the same, related, or complementary products or services to a common customer or set of customers. By contrast, product cross-market mergers include mergers between entities that offer different products and services, regardless of whether the entities are in the same or different geographic markets, such as the merger of cardiologists and pathologists in a single physician practice. These complex combinations of competitors and markets have created challenges for antitrust enforcers in determining whether such mergers are anticompetitive. As a result, they often default to examining only horizontal transactions.

A high percentage of healthcare provider markets are already highly concentrated throughout the United States, rendering additional horizontal merger enforcement important but insufficient.\(^{22}\) Health systems with extant market power can leverage their ownership or affiliation with one or more “must-have” hospitals (hospitals that payers cannot exclude from their networks) in ways that exacerbate the risks associated with cross-market mergers.\(^{23}\) As discussed below, adding new facilities to systems with existing market power can allow them to extend that market power to other geographic regions by contracting with payers in such a way that links one region to another. We argue that antitrust enforcers cannot afford to confine their attention to anticompetitive effects arising from the horizontal aspects of a transaction when market conditions indicate that acquisitions across geographic areas create opportunities to expand the reach of their leverage.

II. RECENT CASES AND ENFORCEMENT ACTIONS ADDRESSING SYSTEM POWER RESULTING FROM CROSS-MARKET MergERS

Recent legal developments demonstrate the importance of investigating the potential broader gains in market power and influence attained through the consolidation of healthcare providers into health systems. The state and federal

\(^{22}\) The Congressional Budget Office found that, in 2010, “63 percent of the 124 MSAs [across forty-two states] had highly or very highly concentrated hospital markets. By 2017, that share had risen to 70 percent.” Cong. Budget Off., The Prices That Commercial Health Insurers and Medicare Pay for Hospitals’ and Physicians’ Services 18 (2022), https://www.cbo.gov/publication/57422; see also King et al., supra note 5, at 6; Fulton, supra note 4, at 1530.

\(^{23}\) Robert A. Berenson, Paul B. Ginsburg, Jon B. Christianson & Tracy Yee, The Growing Power of Some Providers To Win Steep Payment Increases from Insurers Suggests Policy Remedies May Be Needed, 31 Health Affs. 973, 973 (2012). Insurers need must-have providers within their networks to be commercially viable because of network adequacy laws and providers’ geographic proximity, referrals, legal obligations, reputation, specialized services, or lack of an alternative in a geographic location. See generally id.
cases against Sutter Health\textsuperscript{24} and the California Attorney General’s review of the affiliation between Cedars-Sinai Memorial Health System and Huntington Memorial Hospital illustrate the potential consequences of unbridled consolidation and how health systems can use the resulting system power to leverage hospitals in different geographic markets to raise prices.

A. SUTTER HEALTH

Sutter Health is one of the largest health systems in California, with twenty-four hospitals and thirty-six surgery centers spanning multiple markets across Northern California.\textsuperscript{25} Importantly, Sutter became the dominant market power in Northern California, predominantly through mergers and acquisitions—many of which were considered cross-market—that went largely unchallenged and unregulated by antitrust enforcers.\textsuperscript{26}

Large employers and labor unions along with the California Attorney General filed suit in California state court against Sutter, alleging that the health system leveraged its market power through the use of certain anticompetitive contracting terms.\textsuperscript{27} The plaintiffs alleged that Sutter used its position as a dominant provider in Northern California to raise prices through anticompetitive contracting practices, including the use of “all-or-nothing” contract clauses. All-or-nothing clauses require a health plan that wants to contract with at least one provider in a health system to contract with all providers in that system, effectively tying all the providers in the system together in negotiations.\textsuperscript{28} The plaintiffs argued that because Sutter required insurers who wanted to contract with its must-have providers to also contract with all of its providers, health plans had little choice but to include all of Sutter’s providers at the supracompetitive prices\textsuperscript{29} demanded by the health system.\textsuperscript{30}


\textsuperscript{25} ROB WATERS, MILLBANK MEM’L FUND, CALIFORNIA’S SUTTER HEALTH SETTLEMENT: WHAT STATES CAN LEARN ABOUT PROTECTING RESIDENTS FROM THE EFFECTS OF HEALTH CARE PROVIDER CONSOLIDATION 6 (2020); Melnick & Fonkych, supra note 6, at 2.


\textsuperscript{27} UFCW Complaint, supra note 24.


\textsuperscript{29} “Supercompetitive prices” refers to prices that are higher than what they would be in a competitive market. Robert H. Lande, A Traditional and Textualist Analysis of the Goals of Antitrust: Efficiency, Preventing Theft from Consumers, and Consumer Choice, 81 FORDHAM L. REV. 2349, 2351 (2013).

The lawsuits also claimed that Sutter used punitive pricing structures and other contract terms to intensify the effects of the all-or-nothing clauses.\(^{31}\) The California Attorney General alleged that Sutter employed “de facto all-or-nothing terms” through punitive pricing practices, such as raising the rates for their contracted providers if a health plan wanted to exclude a newly-acquired Sutter provider, and implementing excessive out-of-network pricing.\(^{32}\) Such terms made it economically favorable for the health plan to include a newly acquired Sutter provider and accept the all-or-nothing terms rather than pay the higher prices.\(^{33}\) These pricing practices had a similar effect to the explicit all-or-nothing clauses by indirectly tying all of Sutter’s facilities together. Through the accumulation of must-have providers and its unfettered growth from unchallenged mergers over the years, Sutter was able to accrue substantial market power in Northern California, which the State alleged enabled Sutter to demand higher prices through these contracting practices.\(^{34}\)

The state case ultimately settled, but the extent of the settlement terms—which included (1) a $575 million settlement payment, (2) prohibitions on Sutter’s ability to condition the pricing of certain hospitals on network inclusion of others and use of other anticompetitive contract clauses, and (3) the imposition of out-of-network rate caps—suggests the magnitude of the harm caused by Sutter’s market power.\(^{35}\)

The beneficiaries of health plans that contracted with Sutter brought a concurrently litigated federal suit against Sutter, *Sidibe v. Sutter Health*, in which they alleged similar behavior as the state case.\(^{36}\) However, after a decade of litigation, Sutter prevailed at trial, where the jury concluded that the evidence was insufficient to establish that Sutter had actually engaged in harmful tying or other anticompetitive practices.\(^{37}\) The jury was apparently persuaded that Kaiser Permanente’s presence in the Northern California market reduced the risk of anticompetitive harm from Sutter’s tying practices by providing an alternative to Sutter providers. That conclusion is being challenged on appeal to the Ninth Circuit, because evidence at trial demonstrated that Kaiser Permanente is a “closed” system and its providers cannot contract with commercial insurers. Thus, Kaiser’s presence could not eliminate the price-elevating effects of

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31. Cal. Att’y Gen. Sutter Complaint, supra note 30, at 31. The other contract terms used by Sutter included anti-incentive clauses and price secrecy clauses, both of which the plaintiffs claimed also exacerbated the impact of the all-or-nothing clauses and helped solidify Sutter’s system power. See GUDIKSEN ET AL., supra note 28, at 39–41, 47.
33. Id.
34. WATERS, supra note 25, at 4–5; Stahl, supra note 26; Melnick & Fonkych, supra note 6, at 2.
Sutter’s practices on non-Kaiser insurers. But regardless of that outcome, the Sutter experience reveals the immense repercussions of large health systems acquiring enough system power to leverage it across traditional geographic markets and demand supracompetitive prices.

The suits against Sutter serve as a reminder of the importance of premerger review procedures to prevent health systems from accruing significant market power. As the Sidibe case illustrates, challenging this type of anticompetitive behavior post-merger involves lengthy and expensive litigation with uncertain outcomes. However, Sutter’s practices that California alleged facilitated the exercise of market power suggest that market extension mergers merit the close attention of state and federal antitrust enforcers.

B. Cedars-Sinai Memorial Health System and Huntington Hospital

While the suits against Sutter challenged the system’s alleged anticompetitive behavior ex post, the California Attorney General has the statutory power to review transactions involving nonprofit health entities before they are consummated and block or conditionally approve those that are potentially anticompetitive. The lessons learned from the Sutter litigation likely informed California Attorney General Xavier Becerra’s 2020 review of the affiliation between Cedars-Sinai Health System and Huntington Memorial Hospital, healthcare providers from different geographic markets in Southern California. Using his statutory approval power, the Attorney General and Greg Vistnes, an economic expert hired by the Attorney General, carefully reviewed the transaction and considered the potential for the affiliation to raise prices through cross-market effects. Using mechanisms discussed in recent economic literature, Vistnes analyzed the various ways the affiliation could allow the providers to leverage market power across geographic markets. These


39. See generally KING ET AL., supra note 5. Sutter seems to also have paved the way for other similar suits. A recently filed lawsuit in North Carolina accuses HCA Healthcare (“HCA”) of anticompetitive behavior similar to Sutter’s contracting practices. HCA is the nation’s largest for-profit hospital system in both revenue and number of hospitals, with over 180 hospitals in twenty-one states. See Amy Y. Gu, N.C. Class Action Sues HCA/Mission Health for Anticompetitive Contracting Practices, THE SOURCE ON HEALTHCARE PRICE & COMPETITION (Aug. 11, 2021), https://sourceonhealthcare.org/class-action-lawsuit-in-north-carolina-aliases-monopoly-and-all-or-nothing-contracting-practices/.

40. Under California law, the Attorney General receives notice of and reviews transactions involving nonprofit hospitals. CAL. CORP. CODE §§ 5914, 5917, 5920, 5923 (West 2023). The Attorney General has broad discretion in reviewing these transactions and may consider whether the transaction is in the public interest, or any other factors the Attorney General deems relevant. Id. §§ 5917, 5923. The Attorney General is empowered to approve, conditionally approve, or disapprove these transactions. Id. § 5917; Letter Regarding Attorney General’s Decision Conditionally Approving the Proposed Change in Control and Governance of Huntington Hospital from Anita Garcia Velasco, Deputy Att’y Gen., State of Cal. Dep’t of Just., to Jean Tom, Partner, Davis Wright Tremaine LLP (Dec. 10, 2020), https://oag.ca.gov/sites/all/files/agweb/pdfs/charities/nonprofithospital/decision-huntington-121020.pdf [hereinafter Cal. Att’y Gen. Cedars-Sinai/Huntington Affiliation Decision].

mechanisms included the tying theory, the common customer theory, and the change in control theory, which will be discussed in further detail in Parts IV and VI.\textsuperscript{42} Despite finding limited patient overlap between Cedars-Sinai and Huntington, Vistnes concluded that the proposed affiliation would likely create a risk of cross-market effects and a risk that post-affiliation prices would increase at one or more of the affiliating hospitals, even though patients would not likely consider the hospitals as substitutes because of their geographic distance from one another.\textsuperscript{43}

Based in part on these findings, the Attorney General conditionally approved the merger with competitive-impact conditions, including a price cap on Huntington’s rates and a requirement to maintain separate teams when negotiating prices with payers.\textsuperscript{44} Several months after the Attorney General issued his decision, the affiliating hospitals sued the Attorney General, alleging that he had inappropriately imposed “unprecedented” conditions and had relied on weak economic evidence, which they claimed amounted to arbitrary and capricious decisionmaking.\textsuperscript{45} The hospitals and the Attorney General ultimately reached a settlement with new conditions, including ten-year prohibitions on tying and all-or-nothing contracts, punitive pricing practices, and any contracting practices preventing the promotion of narrow networks, as well as a less-stringent five-year price cap, among other conditions.

This investigation into a cross-market affiliation illustrates how mergers and other transactions can be reviewed pre-transaction in light of theories described in cross-market empirical studies.\textsuperscript{46} Although the conditions imposed are time-limited, they illustrate the concerns raised by cross-market mergers in healthcare markets. As the next Part suggests, to effectively curtail the harms associated with system power, antitrust enforcers need to develop tools to identify risks and enjoin anticompetitive mergers.

\textsuperscript{42} Id. at 11–17.
\textsuperscript{43} Id.
\textsuperscript{44} Id. at exhibits 3, 4.
\textsuperscript{46} The Office of the California Attorney General continues to consider the cross-market effects of transactions and recently imposed competitive impact conditions on two transactions to address potential cross-market price effects. See Letter Regarding Attorney General’s Decision Conditionally Approving the Proposed Sale of Assets of Adventist Vallejo Hospital from Lily Weaver, Deputy Att’y Gen., to Jennifer Yoo, Partner, Latham & Watkins LLP (Oct. 5, 2021), https://oag.ca.gov/system/files/media/ahv-ag-decision-conditionally-approving-transaction.pdf; Letter Regarding Attorney General’s Decision Conditionally Approving Change in Control and Governance from Heidi Lehrman, Deputy Att’y Gen., to Jill H. Gordon, Partner, Nixon Peabody LLP (June 6, 2022), https://oag.ca.gov/system/files/media/mhsc-conditions-packet-06032022.pdf.

Antitrust law was designed to evolve alongside economic understanding of market dynamics. In 2015, the Supreme Court commented that it “felt relatively free to revise [its] legal analysis as economic understanding evolves and . . . to reverse antitrust precedent that misperceived a practice’s competitive consequences.”\(^{47}\) In the last decade, new developments in economic theory and modeling have changed the way antitrust enforcers analyze healthcare acquisitions, leading to a series of successful challenges to horizontal hospital mergers.\(^{48}\) However, these successes in challenging horizontal mergers have not been matched for non-horizontal mergers. This Part analyzes merger enforcement practices in the United States and the European Union to identify lessons for cross-market merger enforcement and the foundational elements of cross-market mergers with anticompetitive potential.

A. Cautionary Tales from Healthcare Antitrust Enforcement

Over the last few decades, supervision of healthcare mergers has been something of a rollercoaster ride. This history offers a cautionary tale for analyses of cross-market mergers. If enforcers proceed too cautiously or adopt dubious economic standards, effective antitrust enforcement will be thwarted, mergers will proliferate, and markets will continue to become highly concentrated. If they adopt overly stringent standards, procompetitive mergers may be blocked, hindering potential benefits. Adopting sensible, economically justified standards, however, will improve litigation results, while high-reward, low-risk mergers can continue apace. This Part provides a brief overview of the shifting legal terrain for horizontal and non-horizontal healthcare mergers and sets forth some of the key principles courts are likely to apply to cross-market mergers.

1. The Evolution of Horizontal Hospital Merger Enforcement

As noted above, healthcare antitrust merger enforcement has focused almost entirely on horizontal hospital mergers.\(^{49}\) In the mid-1990s, the FTC and Department of Justice (DOJ) experienced a series of consecutive defeats in challenges to hospital mergers. In almost all of these cases, courts held that the government’s alleged geographic markets were too narrowly drawn and did not encompass the range of viable competitors under the Elzinga Hogarty test.

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49. See Meier ET Al., supra note 12, at 51–68.
(“EH”), an economic model used to define certain geographic markets at the time. With only two exceptions, the government’s challenges alleged localized geographic markets, which were met with defensive arguments based on the EH test that broader markets were more appropriate, owing to the willingness of some patients to travel significant distances for acute care hospital services. The EH test thus produced unrealistically extensive geographic markets and was subsequently rejected by courts and economists as premised on a “silent majority fallacy.”

The government’s losses in these cases ushered in a period of extensive consolidation, in part due to nearly a decade of quietude among enforcers in which no hospital mergers were challenged. Not only were hospitals emboldened to acquire their rivals, but also, in doing so, they were able to significantly raise reimbursement rates from commercial payers. A report synthesizing the economic literature on pricing found that horizontal hospital mergers in concentrated markets generally resulted in price increases ranging from 20% to 40%. The rapidly growing concentration gave rise to an important development that changed the path of merger litigation: a series of retrospective analyses of mergers conducted by academic and FTC staff economists. Several analyses, including studies of cases unsuccessfully challenged in federal court, revealed significant post-merger price increases in local markets.

An important byproduct of the retrospective studies was a resurgence of litigation undertaken by the FTC and its adoption of new methods to evaluate market definition and assess likely effects. Relying on economic evidence

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51. The EH method defines the relevant market as “an area (1) that accounts for at least seventy-five percent of the sales of the relevant firms and (2) for which in and out flows of the relevant good or service are both low.” Capps, supra note 48, at 450.


54. Id.; Thomas L. Greaney, Coping with Concentration, 36 HEALTH AFFS. 1564, 1565 (2017).


56. Id.

produced by its retrospective study, in 2004 the agency brought an enforcement action to unwind a consummated merger between Evanston Northwestern Hospital and Highland Park Hospital.  

The case was a bold move on several counts. The FTC alleged that a segment of the large Chicago area constituted a distinct geographic market for acute care hospital services, price increases justified corrective action years after the merger had been completed, and the high prices produced by bargaining between hospitals and payers were the proper focus for antitrust merger analysis. Importantly, the evidence adduced at the administrative hearing supported the agency’s findings that the EH test led to misleading conclusions in hospital merger cases. Finally, the case helped establish that hospital market competition existed at two stages and that bargaining during the first stage, when payers and hospitals negotiate over payment rates, determined prices and was appropriately the central focus of antitrust merger analyses.

The retrospective FTC challenge of the Evanston–Highland Park merger marked a significant change in the antitrust analysis of horizontal hospital mergers. After rejecting the EH test for geographic market definition, courts have relied on new analytic techniques, such as examining an insurer’s willingness-to-pay (“WTP”) to include a provider or group of providers in their network, diversion ratios that assess how likely patients are to go to a hospital if another is unavailable, and merger simulations to assess the potential harm to competition resulting from horizontal hospital mergers. Recent cases have also unanimously adopted a multi-stage model of hospital competition, observing that price effects of mergers depend on the response of insurers, not patients, who are generally insensitive to retail hospital prices. In addition, competitive analyses in the post-Evanston era have relied on a unilateral effects theory, which depends on a firm’s ability to exercise market power on its own rather than patients.

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60. Evanston Nw. Healthcare Corp., supra note 59, slip op. at 62.

61. Kathleen F. Easterbrook, Gautam Gowrisankaran, Dina Older Aguilar & Yufei Wu, Accounting for Complementarities in Hospital Mergers: Is a Substitute Needed for Current Approaches?, 82 ANTITRUST L.J. 497, 521–23 (2019). Each of these techniques is described in more depth infra Part V.B.

than on collusion between firms.\textsuperscript{63} By allowing antitrust analysis to evolve alongside economic understanding of hospital markets, these shifts ushered in an economically sound approach to horizontal hospital merger enforcement.

As a result, the FTC, often working alongside state attorneys general, has enjoyed a significant reversal of fortune. Among the most important developments were a series of successes in federal appellate courts, in which the FTC prevailed in four cases within four years.\textsuperscript{64} Since 2008, it has won five federal cases\textsuperscript{65} and pressured entities to abandon at least two proposed mergers after the agency began its inquiry,\textsuperscript{66} while losing only one case.\textsuperscript{67}

In sum, the history of horizontal merger enforcement illustrates the evolutionary nature of antitrust doctrine and the need to continuously update the theory and methods used to predict future harms from mergers.\textsuperscript{68} That said, history also teaches that healthcare entities may seize upon uncertainty and undertake mergers where the law remains underdeveloped. Because healthcare mergers, once consummated, have historically been viewed as virtually impossible to unwind, antitrust enforcers must not be reluctant to deploy well-supported economic learning in litigation, rulemaking, and guidance to challenge mergers with anticompetitive potential.

2. The Delayed Evolution of Non-Horizontal Merger Enforcement

In sharp contrast to their commitment of extensive resources to challenging horizontal hospital mergers, federal and state antitrust enforcers have almost completely neglected non-horizontal mergers in healthcare.\textsuperscript{69} This lapse is especially troublesome considering that vertical mergers between healthcare

\textsuperscript{63} Capps et al., \textit{supra} note 14, at 447–48.

\textsuperscript{64} ProMedica Health Sys., Inc. v. FTC, 749 F.3d 559, 573 (6th Cir. 2014); Penn State Hershey Med. Ctr., 838 F.3d at 344; St. Alphonsus Med. Ctr.–Nampa, Inc., 778 F.3d at 784; Advocate Health Care Network, 841 F.3d at 476.


providers have increased significantly in recent years, with physician employment by hospitals growing from 24% to 45% from 2010 to 2018, and cross-market mergers representing more than half of all hospital mergers in the last decade. Just as government agencies’ failure to challenge horizontal hospital mergers for several years gave rise to highly concentrated markets and high prices, so also has their neglect of non-horizontal mergers produced a similar result. Furthermore, the absence of precedent and standards regarding non-horizontal mergers continues to invite entities to test the boundaries of antitrust enforcement and potentially inflict long-term competitive harm.

Prompted by an outpouring of legal and economic scholarship, attention may finally be turning to vertical mergers. As Professor Stephen Salop has persuasively argued, the neglect of vertical mergers has been the product of enforcers’ tendency to cling to mistaken economic theories and outdated legal precedents. In light of the mounting evidence that vertical mergers can harm competition, the FTC held hearings on vertical integration in 2018 and joined with the DOJ to revise its long-outdated Vertical Merger Guidelines in 2020 (“2020 Guidelines”). Despite these revisions, the 2020 Guidelines were criticized for failing to sufficiently transform vertical merger enforcement, and the FTC withdrew them in 2021, shortly after the appointment of FTC Chairwoman Lina Khan. Both the DOJ and FTC are investigating how to strengthen the guidelines to align with current economic thinking.

Recognizing the unique dynamics of vertical integration in healthcare and the strong economic evidence demonstrating that hospital-physician consolidation

70. Greaney & Scheffler, supra note 69; Fulton et al., supra note 7, at 1652–55.
71. See generally Gaynor & Town, supra note 55.
73. Salop, supra note 72, at 1964–66.
75. U.S. DEP’T OF JUST. & FTC, supra note 20; Greaney & Scheffler, supra note 69.
often engenders higher prices without promised improvements in quality. The FTC recently initiated a study specifically investigating the impact of physician-group and healthcare facility mergers. In light of these developments, change may be finally coming in vertical merger enforcement.

In contrast, cross-market healthcare mergers have largely been left out of modern antitrust discussions. As of 2022, no cross-market hospital merger has been directly challenged in court, and enforcers have imposed conditions on only a handful to mitigate potential competitive impacts.

This lack of enforcement arises in part from a lack of direct guidance or precedent on how to evaluate the competitive effects of cross-market mergers. The recently withdrawn 2020 Guidelines did not discuss conglomerate or cross-market mergers at all, leaving the 1984 Non-Horizontal Merger Guidelines (“1984 Guidelines”) as the most recent guidance related to cross-market mergers. While the 1984 Guidelines state that the agencies should weigh these considerations of potential harm against evidence of potentially beneficial efficiencies in non-horizontal merger cases, vertical merger enforcement has been sporadic and ineffective in healthcare markets and cross-market combinations have not even been monitored. The unsurprising result has been a steady increase in system-expanding consolidation that economic evidence suggests has contributed to significant price increases in some markets.

B. LESSONS FROM THE CONGLOMERATE MERGER DEBATES

The central challenge for antitrust policy is how to devise an agenda for developing judicially administrable tools that will enable courts and enforcers to

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78. See generally Brady Post, Tom Buchmueller & Andrew M. Ryan, Vertical Integration of Hospitals and Physicians: Economic Theory and Empirical Evidence on Spending and Quality, 75 MED. CARE RSC. REV. 399 (2018) (conducting a literature review of economic studies concluding that “vertical integration poses a threat to the affordability of health services and merits special attention from policymakers and antitrust authorities”); see also Baker et al., supra note 72, at 762.


80. See, e.g., William J. Kolasky, Conglomerate Mergers and Range Effects: It’s a Long Way from Chicago to Brussels, 10 GEO. MASON L. REV. 533, 535 (2002); U.S. DEP’T OF JUST. & FTC, supra note 18, § 6.1 (emphasizing the concept of substitutability as the basis for prediction of competitive harm from a merger.).

81. See sources cited supra notes 40 and 46.

82. Compare U.S. DEP’T OF JUST. & FTC, supra note 20, with U.S. DEP’T OF JUST. & FTC, supra note 19, § 4 (focusing mainly on competitive concerns arising from harm to perceived and actual potential competition).


85. Fulton, supra note 4, at 1530.

86. Dafny et al., supra note 3, at 289; Lewis & Pfum, supra note 3, at 580.
identify problematic cross-market healthcare mergers ex ante. One place to start is the experience and legal opinions of the United States and European Union dealing with conglomerate mergers more generally. Although these cases have a somewhat well-justified dubious reputation, a careful dissection of the logic in conglomerate merger precedent from the European Union and the United States provides guidance on characteristics that can result in competitive harm and reveals the importance of identifying linkages between the markets of the merging entities.

The application of section 7 of the Clayton Act to conglomerate mergers was a fraught exercise from the beginning. Many antitrust enforcers and scholars argued that a merger could not substantially lessen competition when the merging firms produce products or services that neither compete with, nor are raw materials for, products of the other firm. This is because “there is no competition between them to be extinguished, nor the possibility of fewer alternatives for any customer or supplier anywhere.” Embedded in that history, however, are key insights that identify certain conglomerate mergers that can limit the alternatives available to certain customers. The crucial distinction drawn by judges and antitrust agencies in the United States and the European Union is that potentially anticompetitive conglomerate mergers create critical linkages between the markets served by the merging entities. These linkages are established when the products or services provided by the merging entities are related or complementary and can be packaged together for sale to a common customer.

1. Insights from the United States

Despite the contentious history surrounding conglomerate mergers, longstanding precedent—founded on the unmistakable legislative intent of U.S. merger law—fully supports challenges to conglomerate mergers that create a substantial risk of harming competition. In 1950, Congress extended the reach of section 7 of the Clayton Act through the Cellar-Kefauver Amendments to enable antitrust enforcers to challenge vertical and conglomerate mergers in addition to horizontal mergers. As amended, the Clayton Act states that

[n]o person engaged in commerce or in any activity effecting commerce shall acquire, directly or indirectly, the whole or any part of the stock or other share...
capital... where in any line of commerce or in any activity affecting commerce in any section of the country, the effect of such acquisition may be substantially to lessen competition, or tend to create a monopoly.\textsuperscript{93}

On this basis, the FTC and DOJ challenged thirty-three conglomerate mergers from 1964 to 1977 based on theories that the mergers would harm competitors.\textsuperscript{94} Of these challenges, the antitrust enforcement agencies succeeded in eleven cases all before 1975.\textsuperscript{95} No transaction has been challenged on conglomerate merger grounds since 1977.

The epitome of the United States government’s embrace of conglomerate merger challenges was the FTC’s challenge of Procter & Gamble’s acquisition of Clorox Chemical Co.\textsuperscript{96} Procter, the nation’s dominant soap and household cleanser manufacturer, sought to acquire Clorox, the dominant household bleach supplier, as a way to enter the market and quickly establish a dominant position.\textsuperscript{97} The Supreme Court’s majority opinion by Justice Douglas, in keeping with antitrust ideology at the time, held that the acquisition violated section 7 of the Clayton Act due to the potential harm to smaller competitors from Procter’s advertising prowess and the loss of Procter as a potential market entrant in the liquid bleach market.\textsuperscript{98} Because of the Supreme Court’s reliance on harm to competitors, the opinion came to be regarded as a simplistic condemnation of “bigness” that ignored competitive issues. This somewhat knee-jerk critique ultimately led to the demise of conglomerate merger challenges altogether.\textsuperscript{99}

Nevertheless, two features of the Procter decision are highly instructive for future cross-market merger analysis: the notion of similar or complementary products, and Justice Harlan’s pricing-power argument in his concurrence. First, the FTC noted that the acquisition of Clorox was a “product-extension merger,” a subset of conglomerate mergers, because “the products of the acquired company are complementary to those of the acquiring company and may be

\textsuperscript{93} 15 U.S.C. § 18 (emphasis added).

\textsuperscript{94} Church, supra note 17, at 1515 (citing Joseph P. Bauer, Challenging Conglomerate Mergers Under Section 7 of the Clayton Act: Today’s Law and Tomorrow’s Legislation, 58 B.U. L. REV. 199, 231 n.148 (1978)).

\textsuperscript{95} Id. (noting that all these cases were brought under theories of reciprocity or entrenchment).

\textsuperscript{96} FTC v. Procter & Gamble Co., 386 U.S. 568 (1967).

\textsuperscript{97} An internal report at Procter stated that “[t]aking over the Clorox business... could be a way of achieving a dominant position in the liquid bleach market quickly, which would pay out reasonably well,” and that Procter’s “sales, distribution, and manufacturing set up” could increase Clorox’s share of the markets in areas where it was low.” Id. (quoting The Procter & Gamble Co., 63 F.T.C. 1465, 1541–42 (1963)). The report also found that the merger would create efficiencies and facilitate advertising economies, so that Clorox’s advertising budget could be reduced and used elsewhere. Id. at 573. Clorox spent over $5 million per year in advertising and other promotional activities in 1957, which the FTC found critical to its ability to maintain a high market share despite the fact that its brand retailed at a price equal to or higher than that of its competitors. See id.

\textsuperscript{98} Id. at 575.

produced with similar facilities, marketed through the same channels and in the same manner, and advertised by the same media." The focus on product-extension mergers narrowed the field of conglomerate mergers to those that have linkages between markets due to the presence of similar or complementary products that are sold through similar channels to the same or similar customers. Subsequently, courts have also acknowledged similar linkages in geographic-extension merger cases when an entity that sells a product or service in one geographic market aims to acquire an entity that sells the same product in another geographic market. In both product-extension and geographic-extension cases, courts, including the Supreme Court, have relied on the linkages between the markets created by the merger to successfully challenge mergers that would substantially lessen competition, even if the entities were not direct competitors. This precedent can be readily applied to healthcare goods and services, which are comparably similar and complementary even across geographic markets. Of course, to support a finding of a possible lessening of competition, factfinders will need to demonstrate that these linkages are sufficient to enable cross-market health systems to leverage market power in anticompetitive ways.

A second lesson from conglomerate merger precedent is found in Justice Harlan’s concurrence in Procter, in which he argued that if the market leverage gained via the proposed product-extension merger was sufficient to confer pricing power, the court could block the merger for violation of section 7 of the Clayton Act. Justice Harlan took great pains to discuss the importance of constraining the spread of conglomerate mergers and needing to formulate “standards for the application of § 7 to mergers which are neither horizontal nor vertical and which have previously not been considered in depth by this Court.” Justice Harlan rejected, however, the majority’s arguments concerning harm to competitors, and instead rested his concurrence on the

100. Procter & Gamble Co., 386 U.S. at 577.


104. Procter & Gamble Co., 386 U.S. at 597 (Harlan, J., concurring).

105. Id. at 583–86, 589.

106. Id. at 583–86.
ability of the merger to increase pricing power in the relevant market by increasing the barriers to entry.  

In sum, American case law provides two key insights into the foundational elements for a cross-market merger to be anticompetitive: they must create linkages between the markets, and those linkages must be sufficient to generate pricing power. Further, the dynamics of the premerger markets must provide evidence that the merger would enhance the merged entity’s market power so as to enable it to increase price or reduce quality.

2. Insights from the European Union

In comparison to its U.S. counterparts, the European Commission (“EC”)—the regulatory body responsible for antitrust enforcement in the European Union—has historically expressed greater concern over the competitive effects associated with conglomerate mergers. Although the EC substantially shifted its approach to conglomerate mergers between 2001 and 2008 to align more closely with American precedent, it did not disregard the anticompetitive potential of conglomerate mergers entirely in its 2008 Non-Horizontal Merger Guidelines. Instead, the EC acknowledged that conglomerate mergers “in the majority of circumstances will not lead to any competition problems,” while noting that “in certain specific cases there may be harm to competition.” To that end, the Guidelines explicitly focus on “mergers between companies that are active in closely related markets (e.g., mergers involving suppliers of complementary products or of products which belong to a range of products that is generally purchased by the same set of customers for the same end use)” and establish considerable evidentiary requirements to block a merger. Importantly, the non-horizontal mergers that remain of concern to the EC resemble the description of the related-product mergers described in Procter and its progeny. Despite elevated evidentiary

107. Id. at 597.
108. Case T-210-01, Gen. Elec. Co. v. Comm’n of the Eur. Cmty., 2005 E.C.R. II-5693 (overturning the EC decision). The Court of First Instance overturned the EC’s decisions in both Tetra Laval and GE-Honeywell, not on the grounds that contingent sales arising from a conglomerate merger lacked the potential to cause anticompetitive harm, but because the Commission failed to meet its burden of proof. Id. at II-5742–43.
109. EC Guidelines, supra note 90, ¶ 92.
110. Id.
111. Id. at ¶ 91. More specifically, the Court of First Impression stated in GE-Honeywell that: [T]he Commission must establish that there is a high probability that anticompetitive effects will occur and not merely that they might occur. It must quantify those effects and show that they will result from the merger rather than from pre-existing market conditions. That requirement is particularly important in cases, such as the present, in which the merger is conglomerate, since it is accepted that such mergers rarely have anti-competitive effects. Gen. Elec., 2005 E.C.R. at II-5621.
112. EC Guidelines, supra note 90, ¶¶ 90–92; Procter & Gamble Co., 386 U.S. at 577 (“[T]he products of the acquired company are complementary to those of the acquiring company and may be produced with similar facilities, marketed through the same channels and in the same manner, and advertised by the same media . . . .”).
requirements, the door to challenging a conglomerate merger remains open in the European Union.

The EC’s main concern with conglomerate mergers is foreclosure, which can arise only when merging firms are active in closely related markets. The EC noted that “[t]he combination of products in related markets may confer on the merged entity the ability and incentive to leverage [its] strong market position from one market to another by means of tying or bundling or other exclusionary practices.” The ability to engage in tying or bundling requires significant market power in at least one of the markets concerned and a sufficient reduction in the number of competitive alternatives to shift market power. Furthermore, there must be a common customer who wants to buy both products to create linkages between the markets. While tying and bundling can benefit consumers, they can also weaken competitive pressure by reducing competition from actual or potential rivals, thereby allowing the merged entity to raise prices over time.

To evaluate the potential for a conglomerate merger to foreclose rivals, the EC assesses (1) whether the merged entity would have the ability to foreclose its rivals, in particular by conditioning sales in a way that links the separate markets together through bundling or tying; (2) whether it would have the economic incentive to do so; and (3) whether such foreclosure would significantly harm competition. Foreclosure analysis of this kind is particularly relevant to the consideration of cross-market healthcare mergers because of the prevalence of tying and bundling healthcare services as part of contracting with insurers for network inclusion. This is discussed further in Part V.A.

This brief review of merger history in the United States and the European Union reveals several lessons for modern cross-market healthcare merger analysis. First, failing to monitor market consolidation trends as well as advancements in economic theory and empirical analysis has significantly harmed healthcare markets by allowing anticompetitive consolidation to go unchecked. Second, not all cross-market mergers raise competition concerns, but judges, antitrust enforcers, and scholars have repeatedly honed in on certain

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114. EC Guidelines, supra note 90, ¶ 93.
116. See id.; EC Guidelines, supra note 90, ¶ 100.
117. EC Guidelines, supra note 90, ¶ 93.
118. Bundling of products and services can be pure or mixed. Id. ¶ 96. In the case of pure bundling, products or services are only sold jointly and in fixed proportions. Id. Mixed bundling occurs when products are offered separately, but the sum of the individual prices is higher than the bundled price. Id.
119. Tying occurs when the seller requires a purchaser of one product (the tying good) to also purchase another product (the tied good). Id. ¶ 97.
120. Id. ¶ 94.
121. Dafny et al., supra note 3, at 317; see Cal. Att’y Gen. Sutter Complaint, supra note 30, at 32–33.
characteristics that may enable a cross-market merger to have anticompetitive potential. These characteristics include (1) the proposed merger’s potential to create linkages between the merging entities’ markets, and (2) those linkages’ potential to confer enough market power to increase price or reduce quality. To establish such a linkage across geographic markets, the merging entities must sell products or services that are the same, related, or complementary to a common customer or set of customers. By selling to a common customer, the products must be linked in ways that have the potential to foreclose competitors and increase the market power of the merged entity. If the merger confers a sufficient increase in market power, price and quality effects arising from a cross-market merger can occur. Whether and how often these effects occur and how to model them in a premerger environment are the subjects of ongoing research by leading health economists, which can further guide development of an analytic framework for the anticompetitive potential of cross-market healthcare mergers.

IV. THE EMPirical Evidence of Price Increases following Cross-Market Healthcare Mergers

Recent economic research illuminates how the merger characteristics identified in U.S. case law and EU guidelines can result in anticompetitive price increases following cross-market mergers. This Part reviews economic evidence and discusses economic theory underlying cross-market price effects, beginning with a discussion of hospital-insurer bargaining—the predominant theoretical framework used in economics literature to assess the impact of cross-market mergers—followed by a discussion of five mechanisms by which cross-market mergers can lead to higher prices.

A. EMPIRICAL Evidence

In recent years, three studies have found credible evidence that cross-market hospital mergers can lead to higher prices on average.122 These studies provide guidance on the characteristics of cross-market mergers most likely to result in price increases or other anticompetitive effects, including the distance between the target and acquiring hospitals, whether the merger crosses state lines, and the market power and size of the merging entities.

In 2017, economists Matthew Lewis and Kevin Pflum compared prices at hospitals involved in cross-market mergers from 2000 to 2010 to prices at hospitals that were not involved in a merger.123 The authors defined a cross-market merger as the acquisition of an independent hospital by a health system that does not have a hospital located within forty-five miles of the acquired hospital.124 They found that price increases at independent hospitals acquired

122. See generally Lewis & Pflum, supra note 3; Schmitt, supra note 3; Dafny et al., supra note 3.
123. Lewis & Pflum, supra note 3, at 580.
124. Id. at 583.
through cross-market mergers were 17% higher than increases at hospitals that remained independent.\textsuperscript{125} Furthermore, those increases reached 29% for hospitals acquired by large systems and 33% for small hospitals.\textsuperscript{126} Prices at competitors near the acquired hospitals also increased by 8%, suggesting that cross-market mergers may have broader market price effects.\textsuperscript{127}

More recently, economists Leemore Dafny, Kate Ho, and Robin Lee examined two samples of hospital mergers from 1996 to 2012.\textsuperscript{128} They compared price changes at hospitals that became part of a cross-market system to price changes within a control group of hospitals that were not involved in a cross-market merger.\textsuperscript{129} They found that hospitals involved in cross-market mergers had relative price increases of 7% to 10% if the acquired hospital was in the same state as the acquiring system, but did not find relative price increases when the acquired hospital was out-of-state.\textsuperscript{130} This price effect persisted when the acquired hospitals were excluded from the model, meaning the rest of the acquiring system’s hospitals also experienced price increases. The effects were stronger for more proximate acquisitions within a driving distance of thirty to ninety minutes.\textsuperscript{131} Interestingly, the price increase was 18% when the acquirer had an above-median market share and the acquired hospital had a below-median market share, but that increase climbed to 31% when the acquirer had a below-median market share and the acquired hospital had an above-median market share.\textsuperscript{132} These findings suggest that market power dynamics between the merging entities may be an important consideration.

In 2018, in a different but related study, economist Matt Schmitt found that an increase in multimarket contact among hospitals from 2000 to 2010 was associated with higher hospital prices.\textsuperscript{133} Multimarket contact arises when health systems compete simultaneously with one another in multiple markets.\textsuperscript{134} Schmitt’s work follows a long line of literature in economics and management that hypothesizes that multimarket contact softens competition between firms, which is often referred to as the “mutual forbearance” hypothesis.\textsuperscript{135} Under this hypothesis, firms competing against one another in many markets may not compete vigorously in any given market out of fear of triggering intense competition across all markets.\textsuperscript{136} Schmitt’s findings suggest that cross-market

\begin{footnotesize}
125. Id. at 579.
126. Id. at 580, 603.
127. Id. at 579.
128. See generally Dafny et al., supra note 3.
129. Id. at 288.
130. Id. at 289.
131. Id.
132. Id. at 313.
133. Schmitt, supra note 3, at 385.
134. Id. at 368.
135. Id. at 362.
136. Id. at 368.
\end{footnotesize}
mergers resulting in increased multimarket contact between health systems may lead to higher prices.

Summarizing these studies, economists Keith Brand and Ted Rosenbaum noted that "it seems likely that hospital prices have increased following mergers that would not be flagged by widely used analytical methods for predicting harm."137 Although all three studies find price effects arising from cross-market hospital mergers, each looks at different underlying mechanisms to explain the results, as discussed in the following Part. All three studies also acknowledge that additional research and modeling is needed to examine these various mechanisms to best predict ex ante which cross-market mergers risk anticompetitive harm.

B. ECONOMIC THEORY

The economic literature discussed above analyzes five main mechanisms whereby cross-market mergers can lead to price increases: common customers, tying, change in control, hospital quality improvements, and multimarket contact.138 The first four mechanisms allow a hospital system to unilaterally increase prices, while the final mechanism, multimarket contact, requires cooperation among hospital systems.139 The debate on which mechanism or mechanisms most likely generated the cross-market price effects documented in the literature is still ongoing. But it is likely that multiple cross-market mechanisms are at work in American healthcare markets. This Subpart discusses hospital-insurer bargaining and then reviews each of the five mechanisms in turn. It concludes with critiques of the theory.

1. Hospital-Insurer Bargaining

The foundational question regarding cross-market mergers is whether the transaction will improve the bargaining position, bargaining power, or both, of the merged provider entity in negotiations with insurers. Bargaining position depends on the relative importance of reaching an agreement for the negotiating parties, whereas bargaining power refers to the possibility that one party might have better negotiating skills or information than the other. Answering this question can help determine whether cross-market healthcare mergers have anticompetitive potential and under what circumstances. The predominant theoretical framework used in the literature assumes that hospitals engage in bilateral Nash bargains with insurers over reimbursement rates and network


139. Schmitt, supra note 3, at 368.
inclusion. Stated simply, a Nash bargaining game is a process by which two players (a hospital and an insurer) decide how to share a surplus (profits) that they jointly generate. The portion of benefits received by each player often depends on their bargaining position and bargaining power, which together comprise market power.

If an insurer needs a particular hospital system to participate in its network more than the hospital system needs the insurer, the hospital system benefits from a stronger bargaining position, empowering it to demand a greater share of the surplus generated by an agreement between the health system and the insurer. In the context of cross-market mergers, the relative bargaining position of a hospital system will increase if the merger combines two or more potentially substitutable hospitals. Previously, researchers had assumed that hospitals in different markets could not be substitutes for each other, but recent work has shown that when adopting the view of insurers, rather than that of patients, that assumption may be misleading. Gregory Vistnes and Yianis Sarafidis, antitrust economists at Charles River Associates, offer the example of an insurer that can effectively offer its plan to multimarket employers if it lacks a key hospital or provider (i.e., the plan has a hole) in one of two suburban markets, but not both. Even without patient substitution between them, the two suburban markets can be substitutes for each other, inasmuch as the plan needs to fill at least one hole to be marketable. Hence, the geographic market for that plan would include both suburban markets.

As to bargaining power, many scholars suspect that an independent hospital that joins a larger system is likely to gain bargaining skills or information. The larger system likely has more experience in price negotiations and more extensive information on the reimbursement rates than other hospitals receive from insurers. In the context of cross-market mergers, a large hospital system is likely to have valuable information (or bargaining skills) that may be useful to a newly acquired stand-alone hospital, regardless of whether that hospital is located in the same market as the acquiring system. Unlike changes in bargaining position, improvements in bargaining power and skill that arise from a merger are not likely to result in price increases deemed anticompetitive by antitrust enforcers.

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141. See John F. Nash, Jr., The Bargaining Problem, 18 ECONOMETRICA 155, 157 (1950).
143. Vistnes & Sarafidis, supra note 2, at 291.
144. Id.; Dafny et al., supra note 3, at 312.
145. Lewis & Pflum, supra note 3, at 602.
As a result of their implications for antitrust enforcement, untangling whether cross-market price effects result from mechanisms that arise from changes in bargaining position or bargaining power is essential to developing a framework for cross-market merger analysis.

2. The Mechanisms

Economists have identified five main mechanisms by which cross-market healthcare mergers can lead to price increases. While not all of these mechanisms will lead to price increases that can give rise to antitrust challenges, it is important to understand the drivers of cross-market price effects and differentiate anticompetitive outcomes, such as abuse of market power and collusion, from procompetitive outcomes, such as improvements in quality and bargaining skill.

a. Common Customers

As noted in Part III, the most prevalent mechanism for cross-market price increases arises from the market linkages created by the existence of a common customer who is willing to pay a premium to purchase a package of related or complementary products from the merging entities. Dafny, Ho, and Lee used a version of the hospital-insurer bargaining model developed by Ho and Lee to demonstrate how cross-market price effects can arise from a common customer.\(^{147}\) The basic model considers two hospitals bargaining with an insurer, each engaged in a bilateral Nash bargain with the insurer over reimbursement and inclusion in the insurer’s network.\(^{148}\) The authors assume that the disagreement point (that is, the profits the bargaining parties would receive if an agreement cannot be reached) in the Nash bargaining problem between the hospitals and the insurer changes if the hospitals merge because the newly merged system can remove both hospitals from the insurer’s network instead of just one.\(^{149}\) According to their model, cross-market price effects can only occur when markets are linked.\(^{150}\) Stated differently, cross-market price effects are only possible if the value to an insurer of Hospital A in Market 1 being in-network depends on whether Hospital B in Market 2 is in-network. Dafny, Ho, and Lee offer “common customers”—households and employers—as the first part of the linkage necessary between hospital markets to enable a price effect and directly incorporate a common insurer to serve those households and employers.\(^{151}\)

\(^{147}\) Dafny et al., supra note 3, at 288.

\(^{148}\) Id. at 291.

\(^{149}\) Id. at 290–91.

\(^{150}\) See id.

\(^{151}\) Id. at 291. The authors also speculate about the possibility of price effects resulting from a common insurer with no common customer, but found that scenario to be likely in two limited scenarios that involve government regulation. See id. at 297.
When looking at geographic cross-market mergers, economists assume that the hospitals offer the same “product.” As noted in Part V, this product is often acute inpatient services, which encompass primary and secondary care. When analyzing households as a common customer, Dafny, Ho, and Lee consider the impact of a merger across product markets, rather than geographic markets. For instance, a household could value hospitals that specialize in cardiac services as well as hospitals that specialize in pediatric services. These preferences could arise from the composition of family members (such as adults and children), or an individual who values multiple services. Either way, the preferences for access to different medical services within a single or multi-person household can create the necessary linkage between product markets. A household that values cardiac services and pediatric services may value a health plan that provides access to both services particularly highly. That is, having access to both services provides greater value than the sum of the individual values of the two services. Colloquially, the whole is greater than the sum of its parts. This idea is formally referred to as the “concavity effect.” If it is true, the cardiac and pediatric service markets are said to be “linked,” and cross-product market price effects, such as price increases, become possible.

Employers can also act as common customers and create market linkages that enable cross-geographic market price effects. For example, a statewide employer looking to provide health insurance to its entire workforce needs a health plan that provides a statewide provider network. Like the household demand for multiple providers in the same geographic area, employer demand for statewide coverage could give leverage to a hospital system that has providers in multiple markets throughout the state. Furthermore, under the network holes theory, the absence of this multimarket hospital system in an employer’s network could create multiple “holes” in the network. The more holes a hospital system can create, the more likely it is that health plans without the system will not be viable options from the perspective of statewide employers. As a result, a health system that can create multiple holes in a provider network may be able to negotiate higher prices from a common customer.

152. For general acute care services provided by hospitals, care is divided into four categories: primary, secondary, tertiary, and quaternary care, with the categories reflecting increasingly complex services. ProMedica Health Sys., Inc. v. FTC, 749 F.3d 559, 561–62 (6th Cir. 2014). Primary care services include basic medical services like hernia surgeries and radiology services. Id. at 561. Secondary care services include slightly more complicated treatments such as hip replacements and bariatric surgeries. Id. Tertiary care services include more complex surgeries, like brain surgery, and treatment for severe burns. Id. Quaternary care services are the most complex, often involving transplantation of major organs. Id. at 561–62.

153. Dafny et al., supra note 3, at 315. Although our focus is on cross-geographic market mergers, we include the household example because it provides context on how cross-market mergers can create market power and lead to supercompetitive prices. ProMedica Health Sys., 749 F.3d at 561–62.

154. See Dafny et al., supra note 3, at 316.

155. Id. at 317.

156. Vistnes & Sarafidis, supra note 2, at 255.

157. Id.
b. Tying

Tying generally considers how a firm with market power in one market (the tying market) can tie or somehow link its sales in that market with its sales in a second market (the tied market) in a way that leverages its market power in the tying market. Economist Michael Whinston shows that by tying, a monopolist can reduce the sales of its competitor in the tied market and lower its profits below a level that would justify continuing operations.158 Other variants of the tying theory show how bundling across markets can increase the bargaining strength of firms or their abilities to extract profits from consumers and lead to higher prices without disadvantaging rivals.159 The lawsuit against Sutter illustrates an extensive form of tying wherein Sutter tied all of its facilities together and increased prices, even in more competitive markets, through the use of all-or-nothing clauses.160

c. Change in Control

Cross-market price effects can also arise from the change in control caused by the merger. Changes in control can increase an acquired hospital’s bargaining power by improving its negotiation skills, increasing its access to relevant information, and altering its relationship to the community in ways that can result in price increases.161 Lewis and Pflum raise these possible explanations for the price effects they found. The authors suggest that stand-alone hospitals can gain bargaining skills and information—bargaining power—from an out-of-market acquiring system that has more experience in contract negotiations and a better sense of the rates negotiated by other hospitals, thereby enabling them to garner a higher price.162 This logic leads the authors to argue that differences in bargaining power likely contribute more to a target hospital’s markup than differences in bargaining position.163 To minimize the impact of transferable bargaining weight or negotiating skill that drive cross-market price effects, Dafny, Ho, and Lee analyzed price increases following cross-market mergers but excluded stand-alone target hospitals from their sample.164 Instead, they measured the price changes for hospitals in the rest of the system, so-called bystander hospitals, which allowed them to conclude that the price increases they documented did not result from a change in control or bargaining power.165

160. See supra Part II.A.
162. Lewis & Pflum, supra note 3, at 602.
163. Id.
164. Dafny et al., supra note 3, at 314.
165. Id. at 298.
Price increases in bystander hospitals resulting from cross-market acquisitions are more likely to be anticompetitive than price effects in target hospitals.

Change-in-control price effects can also occur when a for-profit hospital system acquires a nonprofit hospital and increases prices because it is more focused on profit maximizing than the nonprofit hospital had been, or it feels less obligation to the local community to avoid price maximization. To capitalize on the opportunity for change in control price effects, health systems may target independent hospitals with unrealized market power for cross-market acquisitions. Overall, while change in control may contribute to target-hospital price effects, it is the price effects in bystander hospitals within the merged system that can indicate potential abuse of market power and harm to competition.

d. Hospital Quality Improvements

Theoretically, cross-market mergers could also lead to price increases arising from quality improvements. If the acquiring system is of higher quality and can transfer this quality to its newly acquired hospital, the merger can create a procompetitive cross-market price effect. However, Dafny, Ho, and Lee also convincingly ruled this mechanism out as the main source of the cross-market price effects they observed by excluding the target hospital from their analysis. While it seems plausible that a stand-alone hospital could increase in quality when acquired by a large, successful hospital system, it seems fairly unlikely that the quality of care offered throughout a large, successful hospital system would increase because of the acquisition.

e. Multimarket Contact

As hospital systems grow in size, they increasingly come into contact with each other in more and more markets throughout the country. That is, they no longer compete with each other for inclusion in insurers’ networks in just one market, but several. Researchers have shown how multimarket contact—competing against the same entity in several markets—can lead to collusive behavior. Intuitively, if Hospital Systems A and B know they are going to compete against each other several times for inclusion in insurers’ networks, they may not compete as much on price as they would have in a one-off situation for fear of retaliation in other markets.

Multimarket contact is sometimes discussed separately from the other cross-market price effect mechanisms because it requires the cooperation of

166. VISTNES, supra note 41, at 17.
167. See generally Dafny et al., supra note 3.
hospital systems, whereas the other mechanisms allow for hospital systems to unilaterally increase prices through cross-market mergers. The potential to bring antitrust challenges based on both unilateral effects and coordinated effects arising from these five mechanisms is discussed in Part V.

3. Critiques on the Theory

Economists David Argue and Scott Stein provide the strongest critique of the cross-market theories outlined above. Argue and Stein take exception to some of the assumptions underlying the models. They note that the models utilized by Vistnes and Sarafidis in 2013 and Dafny, Ho, and Lee in 2019 do not require “any individual hospital to have market power in its local hospital market for the cross-market hospital system to possess cross-market power,” which creates concerns that the models might be overinclusive. While neither model required market power, the concern about this lack of a requirement seems overblown. By not requiring market power in any one entity, the authors could examine whether price effects could occur even in the absence of market power. Furthermore, 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.

Argue and Stein also note the fact that single-market employers are immune to cross-market leverage because of the lack of employee substitution between local markets. They suggest that nothing stops cross-market employers from acting like single-market purchasers (that is, purchasing multiple single-market health plan networks), which would prevent cross-market systems from increasing their bargaining leverage by linking the markets. While there may be situations where cross-market employers prefer to negotiate on a market-by-market basis, this is not always, nor even commonly, the case. Evidence suggests that some multimarket employers deeply value the simplicity and efficiency that comes with contracting with just one national health plan. Further, few employers have the capacity and resources

170. See generally David A. Argue & Scott D. Stein, Cross-Market Health Care Provider Mergers: The Next Enforcement Frontier, 30 ANTITRUST 25 (2015). For other critiques by other authors, see Perry & Adler, supra note 146 (arguing that the economic theories do not always lead to competitive harms and discussing practical concerns to potential legal theories); Brand & Rosenbaum, supra note 137, at 548–49 (outlining remaining questions in light of recent cross-market empirical studies).
171. Argue & Stein, supra note 170, at 27.
172. VISTNES, supra note 41, at 21; Varanini, supra note 103, at 523.
173. VISTNES, supra note 41, at 21.
174. Argue & Stein, supra note 170, at 27.
175. Id.
176. Plaintiff’s Proposed Findings of Fact: Phase I at 24, United States v. Anthem, Inc., 855 F.3d 345 (3d Cir. 2017) (No. 17-5024) [hereinafter Anthem Plaintiff’s Proposed Findings of Fact] (citing trial testimony by large employers and an insurance company CEO stating that dealing with one national insurer improves costs and administrative simplicity).
to negotiate directly with providers in multiple single markets and instead rely most often on multimarket networks developed by large insurers.\footnote{177}{Interview with Elizabeth Mitchell and Emma Hoo, President/CEO & Dir. of Value-Based Purchasing, Purchaser Bus. Grp. on Health (Jan. 26, 2022); Matthew D. Eisenberg, Mark K. Meiselbch, Ge Bai, Aditi P. Sen & Gerard Anderson, Large Self-Insured Employers Lack Power To Effectively Negotiate Hospital Prices, 27 AM. J. MANAGED CARE 290, 293 (2021) (finding that self-insured employers lack the market power to negotiate hospital prices).}

Overall, these critiques provide valuable insights into areas for future research and existing limitations on cross-market analysis, which we address in Part VI. On the whole, though, the economic literature “provide[s] credible evidence that prices have increased after such mergers.”\footnote{178}{Brand & Rosenbaum, supra note 137, at 533.} While the data suggest multiple mechanisms that could be responsible for these post-merger price increases, the common customer and tying mechanisms are the most likely culprits. The next Part explores how antitrust enforcers can utilize existing antitrust law to analyze these two mechanisms.

V. LEGAL AVENUES FOR CHALLENGING A CROSS-MARKET HEALTHCARE MERGER

As economists continue to analyze the potential mechanisms driving price increases following cross-market mergers, legal scholars must examine whether existing antitrust law provides the tools necessary to challenge these transactions. U.S. antitrust law, specifically the Clayton Act, clearly enables enforcers to challenge cross-market healthcare mergers, but current merger simulation tools need refining to accurately capture the impact of a cross-market merger on insurer-provider negotiations. While there may be other potential avenues for regulating cross-market mergers through other federal antitrust laws\footnote{179}{It may be possible for the FTC to utilize its power under section 5 of the Federal Trade Commission Act to adopt clear standards and presumptions to address potential harms arising from cross-market mergers. For an extensive discussion of the power of the FTC under section 5, see generally Sandeep Vaheesan, Resurrecting “A Comprehensive Charter of Economic Liberty”: The Latent Power of the Federal Trade Commission, 19 U. Pa. J. BUS. L. 645 (2017).} and various state merger-review processes,\footnote{180}{Many states have statutes empowering the State Attorney General to review and approve healthcare mergers involving charitable or nonprofit hospitals such as the laws that governed the California Attorney General’s review of the Cedars-Sinai. See supra Part II.B. For an overview, see Market Consolidation, The SOURCE ON HEALTHCARE PRICE & COMPETITION, https://sourceonhealthcare.org/provider-contracts/ (last visited Apr. 1, 2023); King et al., supra note 5, at 4.} having a mechanism to directly challenge a cross-market merger under the Clayton Act is essential to effective antitrust enforcement.\footnote{181}{While some states have adopted ex post legislative remedies to system power, such as bans on all-or-nothing contracting and anti-steering or anti-tiering clauses, those ad hoc remedies are unlikely to prevent all means by which market power may be exercised. For information on states that have passed such bans, see Market Consolidation, supra note 180; Provider Contracts, The SOURCE ON HEALTHCARE PRICE & COMPETITION, https://sourceonhealthcare.org/provider-contracts/ (last visited Apr. 1, 2023).}

The language and history of the Clayton Act leave no doubt that Congress intended antitrust enforcement to block both horizontal and non-horizontal...
mergers with the potential to substantially decrease competition. The report from the House of Representatives on the final bill amending the Clayton Act in 1950 proclaims that one of the purposes of amending section 7 was “to make it clear that the bill applies to all types of mergers and acquisitions, vertical and conglomerate as well as horizontal, which have the specific effects of substantially lessening competition.”

Likewise, the Supreme Court has recognized that “[a]ll mergers are within the reach of [section] 7, and all must be tested by the same standard, whether they are classified as horizontal, vertical, conglomerate or other.”

Furthermore, as the Supreme Court has repeatedly noted, Congress enacted the Clayton Act in 1914 explicitly to preempt anticompetitive practices in their incipiency, a command that necessarily involves dealing with “probabilities, not certainties.”

The Supreme Court has often recognized the centrality of the incipiency standard to enforcement of the Clayton Act.

In sum, section 7 permits antitrust enforcers to challenge any potentially anticompetitive merger and only requires evidence of a probable future adverse effect on competition.

The remainder of this Part provides an in-depth analysis of two ways antitrust enforcers can challenge anticompetitive cross-market mergers in healthcare: (1) potential tying under section 7, and (2) traditional horizontal merger analysis under section 7.

A. CROSS-MARKET MERGERS THAT ENHANCE THE POTENTIAL FOR TYING

First and foremost, antitrust enforcers can challenge a cross-market merger under section 7 when the consolidation gives rise to the potential for anticompetitive tying. 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.

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185. United States v. Phila. Nat’l Bank, 374 U.S. 321, 362 (1963) (“[T]he amended § 7 was intended to arrest anticompetitive tendencies in their ‘incipiency.’”); United States v. E.I. du Pont de Nemours & Co., 353 U.S. 586, 589 (1957) (“Section 7 was designed to arrest in its incipiency not only the substantial lessening of competition from [an] acquisition . . . but also to arrest in their incipiency restraints or monopolies in a relevant market . . . .”)
Anticompetitive tying typically arises when a seller of a product or service leverages the market power it has in one market to coerce a buyer to purchase another product or service by tying the two together. Traditionally, tying claims may be brought by the purchaser who was forced to pay supracompetitive prices for the tied product, or by competitors who were foreclosed by the tying arrangement and can no longer compete for the purchaser’s business in the market for the tied product. For tying arrangements to restrain competition, the seller must have significant market power in one of the concerned markets. Otherwise, the seller cannot force customers to purchase the tied product because they can simply purchase the tying product from another seller.

In cross-market hospital mergers, tying can arise under various circumstances. For example, the potential for tying can arise when a newly merged cross-market entity negotiates with insurance companies on an all-or-nothing basis, allowing the health system to tie all of its facilities together so that the insurer must include all of the hospital system’s providers in its network or none at all. It can also occur with just a few facilities where a newly merged entity ties the facilities with market power to another facility in a more competitive market. When the system has market power, that negotiation will likely include price increases for the newly acquired facility and can foreclose hospitals competing for inclusion in the insurer’s network. These conditions are not uncommon. Large, multi-hospital systems often include must-have hospitals or provider organizations. In this way, must-have providers can generate significant market power for their health systems and expand that power to an acquired hospital or other hospitals in their system that lacked market power premerger, by employing all-or-nothing contracting. This transfer of market power can constitute a tying arrangement in which the system leverages the market power of its “must-haves”—or even just the size and scope of its services—to increase its prices at all of its facilities.

While challenging existing anticompetitive tying arrangements has a long history under the Sherman Act, proscribing mergers based on their potential to lead to anticompetitive tying under section 7 remains controversial. At least one court has opined that the Clayton Act “does not expressly prohibit the practice,” while antitrust experts Phillip Areeda and Herbert Hovenkamp...
believe that attempting to determine which mergers would give rise to anticompetitive tying is too speculative of an endeavor. Furthermore, Areeda and Hovenkamp contend that the existing threat of a challenge to a tying arrangement under the Sherman Act is enough to deter entities from engaging in tying without proscribing mergers that give rise to the mere potential to tie.

This hesitancy to challenge proposed mergers based on tying concerns is misplaced. Challenging a cross-market hospital merger for its potential to permit anticompetitive tying finds support in the history of antitrust merger law, current predictive analyses under current merger law, and the lessons derived from recent economic analysis of cross-market mergers.

1. Potential Tying Under Section 7 of the Clayton Act

Only one court has specifically addressed the question of whether evidence of potential anticompetitive tying can provide grounds to block a hospital cross-market merger. In 2015, the Ninth Circuit addressed the potential for tying in St. Alphonsus Medical Center v. St. Luke’s Health System. The district court had found that due to the horizontal acquisition of a physician group, St. Luke’s Health System would accumulate additional bargaining leverage in the market for primary care services. The district court thus concluded that St. Luke’s would use its market power to tie primary care services with ancillary services, thereby allowing it to demand higher fees for ancillary services. The Ninth Circuit affirmed enjoining the merger based on the potential for anticompetitive price effects in the primary care market but rejected potential tying as grounds for blocking the merger, noting that section 7 of the Clayton Act “does not expressly prohibit the practice.” The only authority the court cited for its refusal to consider the effects of future tying arrangements was commentary found in the Areeda and Hovenkamp treatise. As mentioned above, the legislative intent of section 7 clearly was to prohibit all types of mergers that may substantially lessen competition. It was also the intent of Congress for section 7, “as in other parts of the Clayton Act[,] . . . to cope with monopolistic tendencies in their incipiency and well before they have attained such effects as

198. Areeda & Hovenkamp, supra note 196.
199. Id.
201. 778 F.3d at 787.
205. See Areeda & Hovenkamp, supra note 196.
would justify a Sherman Act proceeding."

Further, the Supreme Court has recognized this intent repeatedly over the years and has only required evidence of a probable, not certain, negative impact on competition in the future. Challenging a cross-market merger under section 7 for its potential to permit the merging entities to create anticompetitive ties and increase prices would align with the congressional intent to stop anticompetitive conduct before it manifests and hurts consumers.

2. The Speculative Nature of Potential Tying Claims

While some scholars have argued that proscribing a merger because it could lead to anticompetitive tying agreements is unduly speculative, it is no more so than many predictions required under modern merger analysis. Analyses such as the hypothetical monopolist test, coordinated effects analysis, and the assessments of the likelihood and effects of entry—all essential elements in evaluating potential consumer harms—entail similar predictive inquiries. First, the universally accepted hypothetical monopolist test that courts and the FTC use to determine the proper geographic market in a horizontal merger case asks if a hypothetical monopolist could impose a small but significant non-transitory increase in price without losing consumers. While courts rely on several types of evidence in the test, at its core, it is a prediction of how entities will respond in the complicated realm of healthcare markets given a hypothetical price increase. Similarly, coordinated effects analyses of horizontal mergers aim to predict the post-merger potential for multiple competitors to exercise market power jointly. Lastly, the investigation into the likelihood of entry of other competitors—a familiar undertaking in merger cases—is also a hypothetical inquiry about the future behavior of market participants. It requires an examination of incentives and rewards that might accrue from expansion into

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209. Areeda & Hovenkamp, supra note 196; Perry & Adler, supra note 146, at 505.
211. The Horizontal Merger Guidelines describe coordinated effects as the “enabling or encouraging [of] post-merger coordinated interaction among firms . . . involv[ing] conduct by multiple firms that is profitable for each of them only as a result of accommodating reactions of the others.” U.S. Dep’t of Just. & FTC, supra note 18, § 7; see also Hosp. Corp. of Am. v. FTC, 807 F.2d 1381, 1387 (7th Cir. 1986); FTC v. OSF Healthcare Sys., 852 F. Supp. 2d 1069, 1087 (N.D. Ill. 2012); John Miles, Health Care and Antitrust Law § 12:15 (2022).
212. If firms attempted to exercise market power by raising prices or lowering quality, they would attract new entry, forcing prices down to the competitive level. Determining the ease of entry involves an examination of whether entry by competitors is “timely,” “likely,” and “sufficient” to counteract the anticompetitive effects of the merger. United States v. Rockford Mem’l Corp., 717 F. Supp. 1251, 1281 (N.D. Ill. 1989), aff’d, 898 F.2d 1278 (7th Cir. 1990); U.S. Dep’t of Just. & FTC, supra note 18, § 9.
new markets. Although certain concrete factors aid in these analyses, the question is ultimately a prediction of behavior that is not materially different from the factual predicates for an anticompetitive tying arrangement.

Analyzing whether a healthcare cross-market merger would allow anticompetitive tying that could lead to the foreclosure of rivals or supracompetitive prices for payers is not any more speculative than the analyses laid out above. In fact, the EC’s Non-Horizontal Merger Guidelines acknowledge tying as a potential anticompetitive harm arising from non-horizontal (or cross-market) mergers and lay out the necessary preconditions for when a merger raises concerns due to the merged entity’s ability to tie products or services. The Guidelines explain that a merged entity must have significant market power in one of the markets involved and that there must be a common pool of customers—both measurable factors in mergers among health systems and hospitals. The Guidelines outline that in examining whether a merger will potentially lead to anticompetitive effects, the EC looks at whether the firm could foreclose rivals, whether it has the economic incentive to do so, and whether the potential tying and subsequent foreclosure would have a significant detrimental effect on competition, thus causing harm to consumers. All of these are feasible inquiries under U.S. antitrust law.

3. The Need for Premerger Tying Analysis

In their treatise, cited in the Ninth Circuit’s refusal to consider potential tying arrangements in St. Luke’s, Areeda and Hovenkamp assert that the prohibitions against tying under various antitrust statutes are “sufficient to condemn all instances of merger-induced tying, thus making separate condemnation of mergers on this ground superfluous and overdeterrent.” Although they concede that tying arrangements can be hard to detect and acknowledge that “subtle” forms of tying may be unreachable under existing precedent, the authors also remain skeptical that these “subtle” forms of tying exist. They conclude that the probability of these forms of tying occurring is too low and “the judicial machinery too crude to identify any tying that (a) is likely to occur as a result of a merger, (b) will be anticompetitive if it does occur, and yet (c) for some reason will be unreachable under the already expansive law of tying arrangements.” This assessment that tying behavior can be sufficiently addressed post-merger is questionable on several grounds.

214. E.g., FTC v. Univ. Health, Inc., 938 F.2d 1206, 1219 (11th Cir. 1991) (“Georgia’s certificate of need law . . . is a substantial barrier to entry by new competitors and to expansion by existing ones . . . .”)
215. EC Guidelines, supra note 90, at ¶ 93.
216. Id. ¶¶ 95–98.
217. Id. ¶ 94.
218. Areeda & Hovenkamp, supra note 196.
219. Id.
First, far from providing airtight control over tying arrangements, antitrust law has become increasingly permissive of post-merger tying arrangements. Many older decisions reflect courts’ initially hostile reaction to tying arrangements. These decisions held tying arrangements illegal under a per se rule that did not require a market definition or proof of market power. However, courts have moved away from that view, with more recent decisions assessing tying claims by applying a “quasi per se” rule akin to a rule of reason analysis, whereby the anticompetitive effects are weighed against likely efficiencies. Many courts now permit defendants to defend otherwise unlawful tying arrangements based on a legitimate business or procompetitive justification, especially if the tying arrangement is the least restrictive alternative to achieve those benefits. Going even further, some economists have recently argued that all ties that do not substantially foreclose competition should be per se legal, pushing the permissibility of tying arrangements even further. However, courts historically have applied a stricter standard to test the legality of tying arrangements than they have to other forms of constraints. Although the per se test applicable to tying arrangements has become more permissive, it is nonetheless an important doctrinal shortcut evidencing the judiciary’s conclusion that tying arrangements involving firms with market power are usually harmful. As the Supreme Court recognized in upholding the quasi per se rule for tying in Jefferson Parish Hospital District No. 2 v. Hyde, “it is far too late in the history of our antitrust jurisprudence to question the proposition that

220. Under the per se rule, if the plaintiff can prove that an agreement ties two products, the conduct is inferred as anticompetitive, and the arrangement is deemed illegal. Herbert J. Hovenkamp, The Rule of Reason, 70 Fla. L. Rev. 81, 83 (2018).

221. Unlike a pure per se analysis in which an arrangement would be automatically invalid if the plaintiff could prove that an agreement tied two products, in modern tying cases the plaintiff must also prove market power and demonstrate the effect of the tying in the tied product market. See U.S. Healthcare, Inc. v. Healthsource, Inc., 986 F.2d 589, 593 n.2 (1st Cir. 1993) (describing tying as a “quasi” per se offense); Sheridan v. Marathon Petrol. Co., 530 F.3d 590, 593–94 (7th Cir. 2008) (affirming that tying arrangements are subject to a modified per se standard that requires proof that the seller has market power for the tying product).

222. See, e.g., Heartland Payment Sys., Inc. v. MICROS Sys., Inc., No. 07-cv-5629, 2008 WL 4510260, at *10 (D.N.J. Sept. 29, 2008) (“Assuming that the elements [of a per se tying case] are met, the defendant may still justify the restriction by proving its overall competitive reasonableness.”); Metrix Warehouse, Inc. v. Daimler-Benz Aktiengesellschaft, 828 F.2d 1033, 1044 (4th Cir. 1987).

223. See, e.g., Christian Ahlborn, David S. Evans & A. Jorge Padilla, The Antitrust Economics of Tying: A Farewell to Per Se Illegality, 49 Antitrust Bull. 287, 290 (2004). However, Einer Elhauge has persuasively argued that the “quasi per se” analysis of tying precedent is fully justified and should be applied in some circumstances even where there is no significant foreclosure. Einer Elhauge, Rehabilitating Jefferson Parish: Why Ties Without a Substantial Foreclosure Share Should Not Be Considered Per Se Legal, 80 Antitrust L.J. 463, 463 (2016); see also Daniel Crane, Tying and Consumer Harm, 8 Competition Pol’y Int’l 27, 32–33 (2012); Erik Hovenkamp & Herbert J. Hovenkamp, Tying Arrangements and Antitrust Harm, 52 Ariz. L. Rev. 925, 966–67 (2010); Thomas A. Lambert, Appropriate Liability Rules for Tying and Bundled Discounting, 72 Ohio St. L.J. 909, 913–14, 980 (2011); Steven Semeraro, Should Antitrust Condemn Tying Arrangements That Increase Price Without Restraining Competition?, 123 Harv. L. Rev. 30, 30–31 (2010).

certain tying arrangements pose an unacceptable risk of stifling competition and therefore are unreasonable ‘per se.’”

Second, assumptions that the threat of a Sherman Act challenge is already overly deterrent and therefore anticompetitive tying is unlikely to occur have been convincingly challenged. The lawsuit against Sutter Health demonstrated how a dominant health system can use all or nothing contracting—essentially, an extreme form of tying—to foreclose competitors. Additionally, economic literature demonstrating the plausibility of profitable tying-based foreclosure strategies and their effect on markets have refuted claims that such conduct is illusory or rarely enables the perpetrator to achieve or maintain monopoly power.

Third, the unwillingness to address the potential for tying arising from mergers also shortchanges the concerns about potential harms from tying arrangements found in the legislative history of the antitrust laws and judicial precedent. The Supreme Court has recognized the strong signal from Congress that tying agreements should be closely monitored. As it observed in endorsing the quasi per se rule for tying agreements in Jefferson Parish, “[i]n enacting § 3 of the Clayton Act...Congress expressed great concern about the anticompetitive character of tying arrangements.” As the Court indicated, Congress designed section 3 of the Clayton Act to ensure that certain tying arrangements would be unlawful regardless of the outcome of the pending Sherman Act challenge. Reports from both the House of Representatives and Senate leading up to the passage of the Clayton Act illustrate Congress’s goal to ensure that the Act specifically “prohibits the exclusive or ‘tying’ contract.” This concern arose after several courts declined to use the newly passed Sherman Act to address tying cases.

Although tying did not play as prominent a role in the legislative history of the Sherman Act and courts were initially hesitant to condemn tying under the

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227. Herbert J. Hovenkamp & Fiona Scott Morton, Framing the Chicago School of Antitrust Analysis, 168 U. PA. L. REV. 1843, 1868–69 (2020) (“The Chicago [school’s] position...[that] [a] firm claiming foreclosure was simply a whining loser who was unable to compete in the market place...has been undermined by an enormous economics literature demonstrating the existence of profitable foreclosure strategies both in theory and in the marketplace.”); see also Thomas G. Krattenmaker & Steven C. Salop, Anticompetitive Exclusion: Raising Rivals Costs To Achieve Power over Price, 96 YALE L.J. 209, 219 (1986); Louis Kaplow, Extension of Monopoly Power Through Leverage, 85 COLUM. L. REV. 515, 515 (1985).
228. 466 U.S. at 10.
229. See Kramer, supra note 224, at 1023; Brock P. McAllister, Where the Effect May Be To Substantially Lessen Competition or Tend To Create a Monopoly, 3 A.B.A. SECTION:ANTITRUST L. 124, 131–32 (1953).
230. H.R. REP. NO. 63-627, at 10–11 (1914); see also S. REP. NO. 63-698, at 6–9 (1914).
231. Kramer, supra note 224, at 1019. The 1912 National Platform of the Democratic Party stated: “We regret that the Sherman Anti-Trust Law has received a judicial construction depriving it of much of its efficiency, and we favor the enactment of legislation which will restore to the statute the strength of which it has been deprived by such interpretations.” Felix H. Levy, The Clayton Law— an Imperfect Supplement to the Sherman Law, 3 VA. L. REV. 411, 414–15 (1916).
law, starting in the 1940s, the Sherman Act became the legal vehicle by which to bring tying claims. As noted above, early cases brought under the Sherman Act illustrate the Supreme Court’s distaste for tying arrangements. Although perhaps somewhat hyperbolic viewed against modern economic thinking, Justice Frankfurter’s claim that “[t]ying agreements serve hardly any purpose beyond the suppression of competition” provides a clear reminder that tying has long been taken very seriously by Congress and the courts. Indeed, even the critics of per se treatment of tying agreements acknowledge that the forced sales of goods or services by entities with market power should be condemned under a rule of reason analysis.

Finally, the availability of alternative remedies, such as conduct remedies that impose conditions on a merger and other potential deterrents for anticompetitive behavior post-merger, should not justify an indulgent policy toward mergers that enable or enhance the likelihood of anticompetitive tying arrangements. Both courts and scholars have found it inappropriate to permit a merger to go forward based on the existence of these deterrents. For example, in FTC v. Penn State Hershey Medical Center, the Third Circuit held that the district court inappropriately considered private price agreements as a guaranteed deterrent against all anticompetitive behavior. Relying only on price caps leaves room for other harms such as various forms of anticompetitive contracting. Furthermore, even if antitrust enforcers challenge and prohibit anticompetitive tying behavior as a condition of the merger, the merged entity retains its enhanced market power and ability to leverage it in other ways. Scholars and courts have acknowledged that conduct remedies, such as price caps and prohibitions on certain forms of anticompetitive behavior, are often not comprehensive enough, are time-limited, and are potentially rendered moot by

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232. See Int’l Salt v. United States, 332 U.S. 392, 396 (1947) (condemning tying in the absence of any showing of market power, when tying product was patented); Times-Picayune Publ’g Co. v. United States, 345 U.S. 594, 608–609 (1953) (holding that a tying arrangement violates section 1 of the Sherman Act when a seller enjoys a monopolistic position in the market for the tying product and a substantial volume of commerce in the tied product is restrained); N. Pac. Ry. v. United States, 356 U.S. 1, 14 (1958) (Harlan, J., dissenting) (arguing that Northern Pacific’s tying arrangements violated section 1 of the Sherman Act, even though the arrangements did not involve a patented product and the district court made no findings that Northern Pacific “had a ‘dominant position’ or . . . ‘sufficient economic power’ . . . in the relevant land market,’ creating a per se rule for tying”).


234. See, e.g., Ahlborn et al., supra note 223, at 289 (“[M]odern economic thinking supports a rule of reason approach toward tying. . . . The economic literature finds that tying may have anticompetitive effects (putting possible efficiencies to one side) when certain necessary conditions hold; market power is just one of those necessary conditions.”). But see, e.g., Hovenkamp & Hovenkamp, supra note 223, at 966 (“The case for antitrust harm from tying is ambiguous at best and requires detailed scrutiny into market power, rationales for tying, and anticompetitive effects—all the subject of antitrust’s traditional rule of reason.”); Jefferson Parish Hosp. Dist. No. 2 v. Hyde, 466 U.S. 2, 35 (1984) (O’Connor, J., concurring) (“The time has therefore come to abandon the ‘per se’ label and refocus the inquiry on the adverse economic effects, and the potential economic benefits, that the tie may have.”).

235. 838 F.3d 327, 343 (3d Cir. 2016).
changes in the healthcare industry. As a result, they should not be a substitute for barring a merger from its incipiency. In this same vein, the EC has argued that courts should not assess whether a merger’s anticompetitive effects can be reduced or eliminated through post-acquisition enforcement of conduct remedies; instead, they should directly enjoin a potentially anticompetitive merger from the outset.

In sum, there is ample support for challenging a cross-market merger under section 7 for its ability to give rise to anticompetitive tying. The legislative intent of section 7 was to arrest mergers where evidence shows that they are likely to substantially lessen competition, regardless of the type of merger. The presence of common customers across the country and many health systems with substantial market power creates the ideal conditions for hospitals and health systems to engage in mergers that enable them to tie facilities or services together to extract supracompetitive prices and foreclose competing hospitals for inclusion in health networks. While these arrangements can be challenged after the fact, and have been, the availability of post-hoc behavioral challenges has proven insufficient to prevent further competitive harm arising from cross-market healthcare mergers.

4. Potential Tying Analysis

In conducting prospective evaluations of proposed mergers, antitrust enforcers must navigate the delicate line between letting “antitrust enforcement remain an inherently predictive, forward-looking exercise” and avoiding “veering into mere speculation.” Because such analyses are necessarily predictive, courts applying antitrust’s common law methodology have long-deployed presumptions and evidentiary rules of thumb to assess relevant evidence. Moreover, courts will not be writing on a blank slate. Past opinions have carefully analyzed the conditions necessary to create anticompetitive tying

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agreements and can guide courts in determining the likelihood of such anticompetitive tying arrangements arising from cross-market mergers.

While we do not presume to propose an exhaustive list of factors, historical and market-specific conditions, as well as factors commonly examined in antitrust tying cases, should be considered in analysis of cross-market healthcare mergers. Some relevant considerations include: (1) past instances of all-or-nothing contracting or other tying behavior by the health system, (2) incentives the system has to tie facilities or services together, (3) whether a common customer would be vulnerable to coercion or incentives to contract for multiple facilities or services, and (4) the ability of rival hospitals to deter anticompetitive contracting or pricing. These inquiries, along with economic modeling, could provide courts with enough foresight to sufficiently predict a merged provider’s likelihood of anticompetitive tying. Given the extensive amount of consolidation involving mergers across markets and the known abuses of tying in healthcare, being able to use section 7 to identify and challenge cross-market mergers that create the ability and incentive to anticompetitively tie is imperative to protect our healthcare markets.

B. CROSS-MARKET MERGERS: HORIZONTAL THEORIES AND TOOLS

In addition to tying analysis, courts may also examine whether the potential impact of cross-market mergers can be analyzed using more traditional tools of horizontal analysis based on negotiations between the merging entities and insurers. Analyses of horizontal mergers proceed along two distinct paths depending on whether the merger is likely to cause coordinated or unilateral effects.  

1. Coordinated Effects Analysis

Under the analysis for possible “coordinated effects,” the inquiry focuses on whether the merger will enable or encourage post-merger coordinated interactions among firms in a relevant market. Harmful effects are most likely in concentrated markets, which also have other conditions conducive to interdependent conduct such as high barriers to entry.

A coordinated effects analysis might theoretically apply to cross-market mergers that increase the likelihood that a hospital system will act cooperatively in markets it enters because it competes in multiple local markets with another system. Such effects have been observed by economist Matt Schmitt, who demonstrated that mergers that increase multimarket contact between two hospital systems enabled the merged entity to raise prices by 6% in the markets in which no merger took place. Presumably, hospitals could be responding to market interdependency created by their shared presence in multiple markets.

244. Id. § 7.
245. Schmitt, supra note 3, at 377 tbl. 2.
when coordinating their pricing. However, antitrust precedent has placed a high burden on claims of tacit collusion,246 with courts frequently noting that parallel conduct may be the result of competitors rationally taking account of each other’s likely response rather than the product of an agreement.247 However, where evidence of signaling or other “plus factors” probative of a “meeting of the minds” between hospitals is present, an agreement in restraint of trade may be found.248

2. Unilateral Effects Analysis

On the other hand, unilateral effects analysis focuses on those mergers in which the elimination of competition between the merging parties alone substantially lessens competition.249 In these cases, the merging firms typically offer close substitutes for common customers; their combination gives consumers the Hobson’s choice of paying more or selecting a less-desired substitute.250 Courts have struck down mergers involving close competitors in hospital markets,251 physician markets,252 and in other industries253 where the demand conditions would have enabled the merged entity to unilaterally raise prices without threat of competitive harm. In recent healthcare antitrust cases, courts have typically applied unilateral effects analysis and paid particular attention to whether the merger will enable the health system to leverage its market power against the insurer to negotiate supracompetitive prices.254

Using unilateral effects analysis, antitrust enforcers may challenge cross-market mergers when market conditions demonstrate the existence of relevant markets for healthcare services that are broader than the local geographic markets found in most hospital merger cases. This potential exists in circumstances in which a distinct market, known as a cluster market, exists for a certain package of services, such as highly specialized services or multimarket health system services, offered to a common customer.255 Cluster market analyses have been successfully used in horizontal healthcare merger challenges, and they provide an important legal mechanism for reframing the

market dynamics at work in cross-market healthcare mergers. We argue below that in some cases market demand may support defining a cluster market for certain buyers that extends beyond the local boundaries traditionally assumed to delimit horizontal competition among hospitals.

a. Cluster Markets for Healthcare Services

Hospital merger challenges have consistently focused on cluster markets for primary and secondary services needed for acute care, and have generally excluded markets for tertiary and quaternary care that patients may seek regionally or nationally.256 Yet this historical focus on primary and secondary services within local geographic markets does not preclude courts from recognizing other markets that reflect market realities.257 Legal precedent and economic analysis consistently support the creation of cluster markets where purchasers can purchase items separately, such as acute care services from several different hospitals in a geographically dispersed system, but prefer to purchase items in a group.258 Professor Ian Ayres has argued that the creation of cluster markets is justified when multiproduct firms create economies of scope259 or sell products or services that are transactional complements.260 Services are transactional complements if buying them from a single firm “significantly reduces consumers’ transaction costs” or has other benefits that would warrant the consumer paying a premium for the package.261 The Sixth Circuit adopted the cluster market concept in ProMedica Health System, Inc. v. FTC, which involved a merger of two hospital systems.262 It referred to this concept as a “package-deal” for hospital services, holding that “if ‘most customers would be willing to pay monopoly prices for the convenience’ of
receiving certain products as a package, then the relevant market for those products is the market for the package as a whole.”

Likewise, a cluster market could also exist for a subset of services or services to a distinct set of customers, such as tertiary care services or pediatric patients. “That is true even if the individual products [and services] in the package are not direct substitutes for one another.” As a result, factfinders may find economically justified and relevant cluster markets for healthcare services that span different geographic areas.

b. Potential Cluster Markets for Healthcare Services in Distinct Geographic Areas

This Subpart analyzes two possible cluster markets encompassing healthcare providers in different geographic areas: (1) clusters consisting of providers of highly specialized care, and (2) clusters of multiregion health system services that include providers and facilities in different geographic areas. Where bargaining based on such cluster markets exists, horizontal merger principles may be readily applied.

First, antitrust enforcers could expand the markets considered in hospital cases from the typical acute care services to include highly specialized services, like tertiary and quaternary care, where relevant.

As economists Keith Brand and Ted Rosenbaum have explained, while the majority of patients seeking care at a local hospital would not go to another hospital in a different geographic area if another hospital were available in the same geographic market, a subset of patients seeking highly complex or specialized services, like tertiary care or quaternary care, may be willing to travel further for treatment. This possibility is especially relevant for services provided in large academic medical centers that might not be offered by smaller community hospitals. Furthermore, network adequacy laws may require insurers to have facilities that offer such specialized services within a certain geographic distance from patients, which could make having certain facilities in-network essential. As a result, a merger between health systems could lead to price increases if some insurers or employers would be willing to pay higher premiums to have access to the merged entity’s complex tertiary and quaternary care services.

263. Id. at 567 (quoting AREEDA & HOVENKAMP, supra note 196, ¶ 565c).
264. Id.
265. FURROW ET AL., supra note 256.
266. Brand & Rosenbaum, supra note 137, at 544–45.
269. See Brand & Rosenbaum, supra note 137, at 545 (pointing out that this shift in the relevant geographic market for tertiary and quaternary services may explain some of the pricing effect described by Dafny, Ho, and
of employers or payers that demand highly specialized services from a single
source, there are two possible relevant antitrust markets: a market limited to
highly specialized care, and an all-inclusive market that includes the full
spectrum of healthcare services, including primary, secondary, tertiary, and
quaternary care.

Antitrust enforcers could challenge a merger between academic medical
centers in different markets for acute care services but the same market for
highly specialized services, like tertiary and quaternary care, under section 7 of
the Clayton Act, with a straightforward application of the Horizontal Merger
Guidelines. In doing so, the agencies will typically use “the smallest relevant
market satisfying the hypothetical monopolist test,” which could focus on
highly complex and specialized services. Courts have found that demand for
hospital services varies among the many different levels of healthcare services.
In *ProMedica*, the Sixth Circuit acknowledged that the geographic distance that
patients will travel differs among primary, secondary, tertiary, and quaternary
care, noting specifically that the “geographic market for tertiary services
is . . . larger than the geographic market for primary and secondary services.”
The Sixth Circuit further noted that the competitive conditions—such as barriers
to entry, relevant competitors, and market share—would vary among different
levels of service, including tertiary or quaternary care. Likewise, in *FTC v.
Advocate Health Care Network*, the Seventh Circuit found that patients were
willing to travel farther to receive “complex” services from academic medical
centers. Where insurers typically negotiate with hospitals to provide one or
more tertiary or quaternary services separately from primary and secondary care,
defining distinct product and geographic cluster markets is appropriate. Indeed,
courts have readily excluded such services from the product-market definition
for local hospital mergers. Thus, a broader, multiregional market for tertiary
and quaternary services should be consistent with well-established market
definition principles.

In other instances, it may be appropriate to define a cluster market for
health systems that can provide a *full line* of healthcare services ranging from
primary to quaternary care. While courts have historically rejected attempts to

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Care Network*, 841 F.3d at 473–74.
272. *ProMedica Health Sys., Inc.*, 749 F.3d at 566 (using this analysis to support the FTC’s decision to
exclude tertiary services from the merger analysis in the *ProMedica–St. Luke’s* merger).
273. *Id.*
Health Care Network*, 841 F.3d at 473–74.
include a full line of healthcare services in a single market, no case has yet addressed situations in which payers demand and are willing to pay a premium for that broad cluster of services. These circumstances may occur when insurers have sufficient demand for highly complex or specialized services such that they must include hospitals that can provide those services in their networks, even if they are geographically farther away than patients would travel for primary and secondary care. In these instances, courts could define a cluster market that only included health systems that can provide a full line of services and analyze a merger on whether it could harm competition by consolidating eligible providers within that market. As noted above, the Horizontal Merger Guidelines recommend using the smallest market for market definition, which in this case would be limited to the distance patients would be willing to travel for any service within the full line. Once either cluster market is established, courts could apply traditional horizontal merger principles to determine the potential impact of the merger on competition.

c. Cluster Markets for Multimarket Health Systems with Common Customers

Antitrust enforcers should also evaluate potential cluster markets consisting of the range of services offered by multimarket health systems for targeted customers. Two such target groups would be insurers aiming to construct multimarket provider networks and employers with geographically dispersed employees. In line with the network holes and common customer theories described in Part IV, the economic validity of these cluster markets depend on whether insurers or employers will pay a premium for a package of multimarket healthcare services.

(1) The Changing Nature of Health Insurer and Employer Markets

In defining relevant markets for employer-sponsored health insurance, and in turn healthcare services, factfinders must be sensitive to changes in employer demand. Many businesses have become more regional or national in scope, with employees who reside in different states or regions of the country. For example, as of 2020, the ten largest private employers had 6.1 million employees working in forty-three states, on average. Seven of these employers—Walmart, FedEx, Home Depot, United Parcel Service, Target, Starbucks, and UnitedHealth

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278. See Ayres, supra note 255, at 115. In one recent case, however, a district court refused to exclude major teaching hospitals from the relevant market despite econometric evidence that a narrower market satisfied the hypothetical monopolist test. FTC v. Thomas Jefferson Univ., 505 F. Supp. 3d 522, 545 (E.D. Pa. 2020).
279. See supra Part IV.
Group—employ people in all fifty states. This phenomenon is likely to increase substantially following the delocalization of work resulting from the COVID-19 pandemic. National employers have shifted from having over a hundred contracts with different insurance companies located across the country to a world where most have no more than three. Now, many regional and national employers aim to standardize the insurance products across employees and minimize the time and resources needed to negotiate numerous insurance contracts within local markets. As a result, “the quality and breadth of the carrier’s medical provider network” has become an important factor for regional and national employers in selecting an insurance carrier to provide health benefits coverage to their employees.

Employer demand for multimarket health insurance networks that cover all or a substantial portion of an employer’s employees has changed the market for employer-sponsored health insurance. In an important case on point, United States v. Anthem, Inc., the U.S. District Court for the District of Columbia found “evidence that the larger a company gets, and the more geographically dispersed its employees become, the fewer solutions are available to meet its network and administrative needs.” The court went on to conclude that the demand for national coverage limited the number of alternatives because “regional firms and new specialized ‘niche’ companies that lack a national network are not viable options for the vast majority of national accounts.” The court also found that only four insurance carriers offered the broad provider networks and account-management capabilities needed to adequately serve a national account. Importantly, the court identified a relevant multiregional insurance market for merger analysis under the Clayton Act: “the market for the sale of health insurance to ‘national accounts’—customers with more than 5,000 employees, usually spread over at least two states—within the fourteen states where Anthem operates as the Blue Cross Blue Shield licensee.”

281. Id.
282. Id.
283. Id.
284. Id.
285. Id.
286. Id.
287. Id.
288. Id.
289. Id.
served by local suppliers. By the same token, networks consisting of providers that offer services demanded by multimarket insurance plans that serve national employer accounts can constitute a relevant antitrust market.

Insurers developing multimarket insurance networks have demonstrated a preference for contracting with health systems that offer medical services throughout the network area, which could be substate, state, regional, or national in scope. As employers and insurance companies have sought to provide multimarket insurance plans, health systems have responded by expanding, largely through mergers and acquisitions, to capture more of this market for comprehensive healthcare services across geographic areas. While the services provided in these broader markets could be subdivided into numerous smaller individual service and geographic markets, the Supreme Court has supported the creation of cluster markets, noting that there is “no barrier to combining into a single market a number of different products or services where that combination reflects commercial realities.”

The creation of a cluster market for a particular package of geographically dispersed healthcare services will depend on whether insurer demand for the package is sufficient to justify paying a premium for it. Demand for healthcare services occurs in at least two distinct stages. The relevant market conditions may differ significantly based on the stage of competition. In the first stage, the prices for a provider’s services are determined by the relative bargaining strengths of the provider and insurer during contract negotiations. These negotiations must occur before most individual patients select their plans or know what healthcare services they will need in a given year. Economists have found evidence that the value, as measured by insurer WTP, of “a system

290. FTC v. Sysco Corp., 113 F. Supp. 3d 1, 46 (D.D.C. 2011) (“Defendants engage in individual negotiations with their national customers and possess substantial information about them... Price discrimination can occur in such a marketplace, even if the targeted customers do not share specific identifiable traits.”). See generally Ayres, supra note 255.

291. Schmitt, supra note 3, at 369; Anthem, 236 F. Supp. 3d at 179 (acknowledging that, while the market in the immediate case would be limited to the fourteen states in which Anthem operated as the Blue Cross Blue Shield licensee, a larger geographic market consisting of the “entire United States” existed for the sale of national accounts).


294. Kate Ho, Insurer-Provider Networks in the Medical Care Market, 99 AM. ECON. REV. 393, 396–97 (2009); see also Vistnes, supra note 41, at 673–75.

295. Vistnes, supra note 41, at 673–75.

of hospitals is larger than the sum of the WTP of each individual hospital.\(^{297}\) Capps, Dranove, and Satterthwaite note that the difference between the WTP of the system as a whole and the sum of the WTP for each individual hospital within the system is the incremental value of the merger.\(^{298}\) We call this “system power,” the value of the merged system. The increase in system power from a merger will be greater if the merging entities are close substitutes within a particular market than if their markets are largely distinct.\(^{299}\) A health system’s market power in negotiations with insurers, and therefore its ability to negotiate higher payment rates, will depend more on the importance of its overall package of providers and facilities to the network and less on the concentration of its providers and facilities in one particular market.\(^{300}\) Likewise, multiregional providers may gain bargaining leverage as they add additional facilities demanded by payers and employers.

(2) Why Multimarket Insurers Contract with Multimarket Systems

For the subset of insurers that aim to offer health plans to multimarket employers, the importance of contracting with a multimarket health system can range from nice-to-have to existential. The relevant question becomes whether insurance carriers will pay a premium to have the package of services delivered by a single provider. If so, “the relevant market is the market for the package of services as a whole.”\(^{301}\) Why might insurers pay a premium to contract with large health systems?

Several reasons arise, and others may exist. First, the health system may have sufficient market power to demand higher prices for all of its providers. For a cross-market merger to generate sufficient leverage to increase prices through a common customer effect, as described by Dafny, Ho, and Lee, the merger must “create a sufficiently large and attractive hospital system that its loss from the network could plausibly induce employers or households to drop the plan.”\(^{302}\) Second, by negotiating with one health system rather than numerous individual hospitals and provider organizations, insurers can reduce marginal transaction costs and spread fixed transaction costs across a broader set of services.\(^{303}\) The ability to contract for a substantial portion of a health insurer’s multimarket network with a single signature creates numerous

\(^{297}\) Id. at 617.
\(^{299}\) Dranove & Sfekas, supra note 296, at 617.
\(^{300}\) Id.
\(^{301}\) ProMedica Health Sys., Inc. v. FTC, 749 F.3d 559, 567 (6th Cir. 2014) (citing Areeda & Hovenkamp, supra note 191, ¶ 565c). The Sixth Circuit held that the package-deal theory did not apply in ProMedica because the record did not show that the MCOs were willing to pay a premium to have all of those services delivered in a single package. Id. at 567–68.
\(^{302}\) Dafny et al., supra note 3, at 296; see supra Part IV.
\(^{303}\) Ayres, supra note 255, at 115.
negotiation efficiencies and provides greater certainty that the insurer will be able to fill out those portions of its desired network. Third, the fixed transaction costs involved in bringing providers into an insurance network and the benefits inherent in sustained provider-insurer relationships can incentivize insurers to keep contracting with the same large health systems, even as they acquire additional entities and raise prices. Patient preferences for provider continuity and their willingness to change insurers if the network no longer includes certain providers can create strong incentives for insurers to maintain large health systems in their network. Finally, insurers may also prefer to contract with a large health system to avoid inconsistencies or incompatibilities among providers or employee benefit plans. If large health systems standardize the use of electronic medical record systems, patient interface technologies (such as websites and portals), and health system policies across all system providers, this uniformity can appeal to both insurers and employers looking to standardize the experience of health insurance across enrollees or employees. Overall, insurers have numerous reasons to pay a premium for a package of health system services that spans multiple geographic markets.

This insurer preference is sufficient to define a cluster market for multimarket health system services in the geographic area where the insurer is attempting to construct a network. This multimarket network area could encompass a substate area (for example, Southern California), a state, a multistate region (such as the northeastern United States), or the nation.

In sum, insurers have several reasons to prefer contracting with large cross-market health systems to provide a range of healthcare services in different geographic markets, and to pay a premium for doing so. Courts can define cluster markets to cover the package of providers, services, and facilities offered by a health system to an insurer looking to provide highly specialized services, like tertiary or quaternary care, or looking to build a multimarket network of providers when the package of the providers and facilities offered by a health system is worth more than the sum of its individual parts. Once a cluster market that spans multiple geographic areas is established, antitrust enforcers could use the foundations of horizontal merger analysis to guide their assessment.

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304. To the extent these efficiencies exist, they will offset any supracompetitive price increases obtained from the market power effects described above. Dafny et al., supra note 3, at 297. But see id. at 312 ("[C]ost efficiencies arising from lower negotiation costs with insurers and post-merger operational efficiencies do not appear to outweigh price increasing effects, at least among in-state transactions.").

305. Ayres, supra note 255, at 115.


308. See Anthem Plaintiff’s Proposed Findings of Fact, supra note 176, at 24–27.

309. See supra notes 265–67 and accompanying text.

310. ProMedica Health Sys., Inc. v. FTC, 749 F.3d 559, 567 (6th Cir. 2014) (quoting AREEDA & HOVENKAMP, supra note 196, ¶ 565c); see also Dafny et al., supra note 3, at 316.
of the merger’s competitive effects, although traditional antitrust tools and measurements of market power, like WTP, may require some modifications to accurately analyze the competitive impact within these markets. Development of these models and modifications is critically important to enable antitrust enforcers and courts to fully analyze the value of a merged entity to the insurer.

(3) Horizontal Healthcare Merger Analysis: Measuring Market Power and Insurer Willingness-to-Pay

Once a cluster market for a particular package of services has been defined, under traditional merger analysis, a court or antitrust tribunal will evaluate the product and geographic markets and consider whether the merger would cause a substantial increase in market concentration sufficient to warrant blocking the merger. Such traditional approaches to market definition and concentration, however, have struggled to reliably estimate effects in healthcare markets. In the case of cross-market mergers, courts should follow the trend in unilateral effects cases and move away from an emphasis on market definition. Instead, they should focus on the potential impact of the merger on market leverage and pricing power, which is the crux of section 7 analysis. The Horizontal Guidelines acknowledge that “[s]ome of the analytical tools used by the Agencies to assess competitive effects do not rely on market definition.” These include diversion ratio analysis, WTP, and merger simulations, which attempt to measure a hospital’s bargaining leverage in contract negotiations with health insurers.

The 2010 Horizontal Merger Guidelines do not require the agencies to start with market definition. Instead, they simply require an evaluation of competitive alternatives that serve as substitutes for consumers. This demand substitution analysis, often satisfied through use of diversion ratio analysis, considers

311. These potential modifications are discussed below. See infra Part VI.
312. U.S. DEP’T OF JUST. & FTC, supra note 18, § 4. Once the market is defined using the hypothetical monopolist test, an economist then determines the hospital concentration, often using the Herfindahl-Hirschman Index (“HHI”), and the change in concentration resulting from the merger. See Dranove & Sfekas, supra note 296, at 615.
313. Capps et al., supra note 14, at 442–47 (describing the challenges associated with using the Elzinga-Hogarty methodology); Dranove & Sfekas, supra note 296, at 615.
318. Diversion ratio analysis aims to determine whether two merging entities are close competitors of one another. See, e.g., BUREAU OF COMPETITION, BUREAU OF ECON. & OFF. OF POL’Y PLAN., FEDERAL TRADE COMMISSION STAFF SUBMISSION TO TEXAS HEALTH AND HUMAN SERVICES COMMISSION REGARDING THE CERTIFICATE OF PUBLIC ADVANTAGE APPLICATIONS OF HENDRICK HEALTH SYSTEM AND SHANNON HEALTH SYSTEM 12–13 (2020), https://www.ftc.gov/system/files/documents/advocacy_documents/ftc-staff-comment-texas-health-human-services-commission-regarding-certificate-public-advantage/20100902010119texashsc copacomment.pdf [hereinafter FTC COPA SUBMISSION] (describing a diversion ratio analysis for the Hendrick Health System and Shannon Health System proposed merger). It calculates where patients would opt to receive care if one of the merging systems were removed from an insurer’s network and was no longer an option for that
whether a health plan’s enrollees would be able and willing to substitute one provider for another in response to a price increase or a reduction in quality or service.\textsuperscript{319} Yet this analysis excludes the possibility that while two providers in different geographic markets may not be substitutable for particular patients, they may be substitutable for an insurer attempting to build an insurance network that spans multiple geographic markets. If the alternatives available to the insurer to form a network are reduced because the two providers merge, the prices that the insurer will have to pay to form a desirable network may rise depending on the number and quality of available substitutes for the merged providers in the network.\textsuperscript{320} For instance, while Cedars-Sinai and Huntington are not in the same geographic market for acute care services, and the demand substitution and diversion ratio analyses demonstrated that few patients would consider them substitutes for each other,\textsuperscript{321} the merger between them could leave insurers few available alternatives to build a viable network for sixty-one employers that span Southern California, if they could not successfully negotiate with the merged entity.\textsuperscript{322} The traditional demand substitution analysis under the Horizontal Merger Guidelines, however, would find that the merger neither created nor enhanced market power because Cedars-Sinai and Huntington are not direct substitutes for one another with respect to individual patients in the same market.\textsuperscript{323} Only when viewed through the perspective of the insurer trying to build a broader network in Southern California can the full competitive impact of the cross-market merger be seen.

WTP analysis revolutionized hospital merger analysis by enabling antitrust enforcers to estimate the value to insurers of having particular providers in their insurance network without having to define a specific hospital market.\textsuperscript{324} Instead of defining a geographic market and analyzing a hospital’s market share for primary and secondary care more broadly, WTP estimates the value of a particular hospital or health system to an insurer based on the market share of the entity in numerous “micromarkets,” defined by small geographies, patient demographics, and medical conditions.\textsuperscript{325} As a result, WTP analysis can

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  \item \textsuperscript{319} U.S. Dep’t of Just. & FTC, supra note 18, § 4.
  \item \textsuperscript{320} See, e.g., FTC COPA Submission, supra note 318, at 13.
  \item \textsuperscript{321} VISTNES, supra note 41, at 11.
  \item \textsuperscript{322} Id. at 28 (noting that employer-specific data provided by insurers demonstrated that several of the largest employers had employees using both Cedars-Sinai Health System and Huntington Memorial Hospital in significant numbers, and that in some cases those two hospitals were the most heavily used by employees).
  \item \textsuperscript{323} Id. at 9–10 (finding that Cedars-Sinai and Huntington Memorial Hospital were not direct substitutes for patients in the same market); U.S. Dep’t of Just. & FTC, supra note 18, § 5; AREEDA & Hovenkamp, supra note 196, ¶ 530a (“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.”).
  \item \textsuperscript{324} Dranove & Sfekas, supra note 296, at 614; VISTNES, supra note 41, at 24–25.
  \item \textsuperscript{325} David Dranove & Christopher Ody, Evolving Measures of Market Power, 2 AM. J. HEALTH ECON. 145, 149 (2016).
\end{itemize}
determine the incremental value of each provider based on the “unique combination of patient characteristics that generate unique demand” in a particular micromarket, and in turn use that to calculate the value of including the provider in the network. Providers with greater WTP have greater market power and can demand higher prices. In negotiations between a healthcare provider and an insurer in a given market, “WTP can be thought of as a measure of the difference between the insurer’s gross payoff if an agreement is reached versus if it is not.” Over the last fifteen years, economists have developed and refined WTP as a market power measure, and it has become the preferred method for measuring market power in recent hospital merger cases.

Merger simulations offer a third modeling technique to estimate the effect of a merger without defining the product or geographic markets. Merger simulations, refined combinations of WTP and diversion ratios, predict post-merger prices by using patients’ WTP for hospitals to model the prices that insurers would be willing to pay to include those providers in their network.

As currently applied, however, these techniques measure the value and substitutability of merging hospitals to patients or payers from the perspective of patients. This patient-centric framing limits the utility of these approaches for cross-market mergers, as patients will not see two cross-market entities as substitutes or complements. Diversion ratios will not find that patients would substitute one cross-market provider with another. Likewise, a typical WTP analysis measures “the incremental attractiveness of a hospital to individuals in the area, and thus the importance of the hospital to a health plan seeking to market their product to those individuals.”

The reliance of these techniques on individual patient choice at the local market level, however, will hinder the accuracy of post-merger price predictions because they “fail to incorporate considerations, such as complementarities, that are present when insurers and hospitals actually negotiate prices but are not present when patients seek care.” Such complementarities and other market

326. Dranove & Sfekas, supra note 296, at 614, 617.
327. Dranove & Ody, supra note 325, at 149.
331. Easterbrook et al., supra note 61, at 522. Merger simulations model the ability of hospitals with higher WTP to command higher prices in the relevant merger area, and use that to predict the prices that the merged entity will charge post-merger. Id.
332. Id. at 522–23; Capps, supra note 48, at 447.
333. VISTNES, supra note 41, at 24–25; see also Easterbrook et al., supra note 61, at 522–23.
334. Easterbrook et al., supra note 61, at 525 (“Despite the improvements of newer merger analysis techniques, which are less dependent on market definition and can capture product differentiation at the point
power effects can exist for insurers following a cross-market merger, but they would not be identified by current merger simulation techniques. As a result, if patient preferences when seeking care do not align with insurer preferences when negotiating with hospitals, as they will not in cross-market mergers, these techniques will not produce reliable measures of hospital prices at the first stage of competition for inclusion in insurer networks.

Viewing a cross-market merger through the lens of the insurer requires a shift in merger-review analysis, but not a transformative one. Most helpful would be merger simulation models that can estimate an insurer’s WTP for services provided by a cross-market merged entity, accounting for changes to the merged entity’s system power such as its value to the insurer’s network based on market power effects that occur across geographic markets. Such a model would allow enforcers to challenge cross-market healthcare mergers in instances where linkages exist between the markets served by merging entities through multimarket insurers and employers creating multimarket insurance networks.

Overall, antitrust enforcers can challenge potentially anticompetitive cross-market mergers using a unilateral effects analysis under section 7 of the Clayton Act when the merging entities sell products or services that can be tied together or linked through the sale of related products or services to a common customer. To demonstrate that the merger will likely substantially lessen competition, case law requires evidence of a likely effect based on changes in bargaining power resulting from the merger, such as evidence of an increase in system power in the case of a cross-market healthcare merger. Recognition of cluster markets that better reflect commercial realities of insurer purchasing practices can facilitate this market analysis. Furthermore, antitrust enforcers should consider developing revised versions of current tools used for horizontal merger analysis to capture the change in market power arising from cross-market mergers. One promising approach is the development of an insurer-based WTP merger simulation that incorporates complementarities and market power effects from the insurer perspective to estimate the value of any particular merged entity to insurers trying to build a network that covers the geographic areas serviced by the merged entity. Developing and evaluating this model will take substantial time and resources, but continued development of sophisticated tools is an important strategic goal for antitrust enforcement. In the meantime, courts can also rely on testimony from employers and insurers, provider-insurer contracts

patients seek care—they rely on patient choices to project competition between hospitals at the point when they are negotiating prices with insurers—could significantly limit their ability to predict post-merger prices.”).

335. Id. at 513–14 (arguing that failing to incorporate within market complementarities of children’s hospitals and orthopedic hospitals in mergers with general acute care hospitals may lead to the overestimation of prices, but that cross-market cases failing to account for complementarities and other market power effects may lead to price increases).

336. Id. at 523.
and business documents, and market price fluctuations to document the demand for and price effects of multimarket provider networks.\textsuperscript{337}

In sum, under existing federal antitrust law, antitrust enforcers have several viable pathways to challenge cross-market healthcare mergers that have the potential to harm competition. Identifying the strongest legal claim will depend on the specific nature of the merging entities, the dynamics in the relevant markets, and the availability of economic modeling tools to simulate post-merger effects. While enforcers and policy experts should continue to undertake additional research and strive to develop new economic tools, they should also embrace innovative antitrust enforcement actions grounded in traditional antitrust principles. Where credible evidence supports a finding that a cross-market merger may substantially lessen competition, enforcers should not be deterred from relying on that evidence to challenge the merger.

\section*{VI. An Initial Framework for Identifying System Power and Challenging Potentially Anticompetitive Cross-Market Mergers}

While economic theory and legal precedent support the notion that cross-market mergers can harm competition and be challenged under section 7 of the Clayton Act, a workable doctrinal framework has yet to be developed.\textsuperscript{338} Over the last sixty years, however, judges, legal and economic scholars, and antitrust enforcers have provided key insights that lay the foundation for developing such a framework.\textsuperscript{339} This Part synthesizes these insights from antitrust case law, guidance documents from American and European antitrust agencies, and economic and legal scholarship to identify the salient elements of cross-market merger analysis. Such elements include the market linkages that create the necessary preconditions for anticompetitive behavior, market dynamics that create opportunities for cross-market mergers to lead to price increases, limiting principles, and areas for future research.

\subsection*{A. Linkages: Preconditions for Anticompetitive Behavior}

To be anticompetitive, a cross-market merger must create linkages between the products and services sold by the merging entities.\textsuperscript{340} Linkages exist when the products or services sold by merging entities are related or

\begin{footnotesize}
\begin{enumerate}
\item \textsuperscript{337} Greg Vistnes successfully used such materials to model the potential impact of the Cedars-Sinai–Huntington merger. See generally VISTNES, supra note 41.
\item \textsuperscript{338} Varanini, supra note 103, at 516–17; Samuel A. Kleiner, Thomas G. Koch & Christopher P. Lau, You’d Be Hard To Replace: Provider Competition in Narrow Insurance Networks (2021) (unpublished manuscript) (on file with authors).
\item \textsuperscript{339} See generally Vistnes & Sarafidis, supra note 2; Lewis & Pflum, supra note 3; Dafny et al., supra note 3; Varanini, supra note 103; Ayres, supra note 255.
\item \textsuperscript{340} See, e.g., Vistnes & Sarafidis, supra note 2, at 260; EC Guidelines, supra note 90.
\end{enumerate}
\end{footnotesize}
complementary, and are sold to a common customer or set of customers. Such linkages are ubiquitous in the U.S. healthcare system because insurers act as intermediaries to package and finance healthcare delivery. Insurers create linkages between the products and services sold by health systems, even across local provider geographic markets, when they package those services into provider networks for employers. Health systems can also create linkages between disparate geographic markets when they tie the sale of services in one market to services in another market. As noted in Part V, anticompetitive tying can occur in healthcare contracts between providers and insurers through all-or-nothing contracting or other joint negotiations that tie healthcare services from different geographic markets together in a package for sale to insurers.

Importantly, linkages occur in the first stage of competition in healthcare—when insurers negotiate with health systems for network inclusion—making it the critical focal point for antitrust analysis. As Vistnes and Sarafidis observe, “even if there are no linkages between the merging hospitals from the perspective of individual patients (i.e., individual patients who are unwilling to substitute between those merging hospitals), merger effects can arise if there is some type of linkage between hospitals from the health plans’ perspective.” In other words, so long as the healthcare products and services are sufficiently related and common customers exist, these linkages can arise, creating the necessary preconditions for anticompetitive behavior. The next question is whether the dynamics of the markets involved in the merger make it likely that anticompetitive price increases or other substantial competitive harms may occur.

B. Market Dynamics That Create Opportunities for Anticompetitive Harms

As noted in Part IV, economists have identified several mechanisms that would enable a cross-market healthcare merger to increase prices, but not all are necessarily anticompetitive. Informed by those mechanisms, empirical evidence, and legal theory, we identify below three market dynamics that increase the likelihood of an anticompetitive price increase: mergers involving (1) providers of highly specialized services, (2) must-have providers or sufficient providers to create the potential for tying, and (3) providers in different geographic areas needed to fill networks for multimarket insurers or employers.

342. Ayres, supra note 255, at 116; EC Guidelines, supra note 90 (“In practice, the focus of the present guidelines is on mergers between companies that are active in closely related markets (e.g., mergers involving suppliers of complementary products or of products which belong to a range of products that is generally purchased by the same set of customers for the same end use).” (footnote omitted)).
343. Dafny et al., supra note 3, at 309 (stating that to establish a common customer in a cross-market healthcare merger, the merging entities must negotiate with at least one common insurer).
344. Vistnes & Sarafidis, supra note 2, at 260.
1. Highly Specialized Services

Perhaps the most straightforward scenario of competitive harm arises from healthcare mergers that cross traditional local geographic market boundaries in a distinct product market limited to highly specialized services, like tertiary and quaternary care. As discussed in Part V, patients are often willing to travel farther for these services than for traditional primary and secondary services. As such, the dynamics here are not cross-market in nature, even though the merging hospitals may be in different markets for primary and secondary care. Antitrust enforcers could consider the market power impacts on mergers of healthcare entities that do not compete in the same markets for acute care services (i.e., primary and secondary care) but do compete in the same market for highly specialized care over a broader geographic region. Analyzing whether the merging entities are substitutes within either the markets for certain highly specialized, individual services, or markets for a full line of health services, including highly specialized services, may offer a more accurate prediction of the market power impacts of the merger. In this instance, antitrust enforcers could rely on traditional horizontal analysis measurements to analyze the potential impact of the merger.

2. Leveraging Market Power Across Markets: Tying

Economists and legal scholars have also found that merged health systems can leverage the market power held by one or more of the providers within the system to increase prices for other providers in different markets. Health systems often establish market power by including one or more must-have providers, such as the only hospital in an area that has an obstetrics department, or by having a particular practice encompass a significant percentage of hospital or physician practices. As a result, insurers cannot build a viable network without including those providers. A health system with one or more must-have providers can leverage that market power to raise prices in other markets through direct or indirect tying, similar to the behavior of Sutter. As laid out in Part V.A, in evaluating a cross-market merger involving a system with one or more must-have providers, antitrust enforcers could analyze the pricing behavior of the health system following prior mergers and acquisitions to determine whether a pattern of leveraging system power across geographic markets or using anticompetitive contract terms, like all-or-nothing clauses, has occurred.

345. See supra Part V.A.
346. Varanini, supra note 103, at 523; Vistnes & Sarafidis, supra note 2, at 268–69.
348. See supra Part V.
3. Leveraging System Power Across Markets: Common Customer

While antitrust tying analysis generally applies to situations in which a firm leverages its market power in one market to restrain competition in other markets, anticompetitive effects can also occur in cross-market mergers where both entities have market power, and perhaps in instances where the size and scope of a health system across several markets generate value even in the absence of market power in any one particular market. As Vistnes and Sarafidis note, a health system can gain leverage through a cross-market merger by threatening to remove multiple desirable hospitals or providers from the insurer’s multistate network and to reduce plan profits in multiple states if the merged system’s price demands are not met. Under their “network holes” theory discussed above, the more holes a health system can put into a network, the greater its system power and leverage over the health plan. By the same token, Dafny, Ho, and Lee have illustrated that the presence of a common customer seeking to purchase healthcare services for employees in multiple states can increase the bargaining power of a health system that has providers in those markets. Thus, the common customer theory teaches that a cross-state hospital merger can produce system power “if the insurer is more harmed by losing both hospitals jointly than by the combined effect of losing each hospital separately.” System power can only arise, however, if there are sufficient linkages for the common customer between the two markets.

In the case of a multistate insurer, having one or more employers that demand a network of healthcare services in multiple geographic areas creates the necessary linkages across the markets that can generate market leverage for the multistate health system. As a result, a cross-market merger of two health systems with market power within a substate area, like Southern California, or within different areas of a state, like Southern and Northern California, could affect a multistate insurer’s ability to build a provider network covering those areas. Whether this mechanism can apply outside state boundaries to include sizeable health systems that cover a multistate region or a broader swath of the country requires more empirical analysis and understanding of insurer contracting practices, but the general logic underlying the mechanism—the market power gained over the multistate insurer seeking to build a broad provider network in multiple markets—remains the same.

Each of these scenarios offers a potential avenue by which a cross-market healthcare merger can lead to anticompetitive price increases. As such, they offer starting points for antitrust enforcers, legal scholars, and economists to

349. Vistnes & Sarafidis, supra note 2, at 275.
350. Id.
352. Id. at 290.
353. Id. (referring to linkages as interdependencies).
354. Id. at 291.
355. U.S. DEP’T OF JUST. & FTC, supra note 18, § 4.2.1; see also Varanini, supra note 103, at 518.
investigate the anticompetitive potential of cross-market mergers. Retrospective studies could also provide significant guidance on the extent to which these mechanisms contribute to price increases arising from prior cross-market mergers.

C. LIMITING PRINCIPLES

The introduction of limiting principles can also help identify and investigate potentially anticompetitive cross-market healthcare mergers. In his article, *Addressing the Red Queen Problem*, Supervising Deputy Attorney General of California, Emilio Varanini, proposed three limiting principles for cross-market merger analysis to meet antitrust enforcement goals of “simplicity, minimalism, efficacy, enforceability, and predictability.”

First, the mergers should occur within the same state. This limitation arises from findings by Dafny, Ho, and Lee, and can easily be imposed until sufficient evidence arises to warrant competition concerns arising from interstate cross-market mergers. Of course, future research may prove that the artificial boundaries of state lines do not limit the risk of cross-market harms. However, enforcers would be wise to exercise caution in their selection of initial litigation targets in deciding whether to challenge mergers that cross state lines.

Second, the presence of multimarket employers in the relevant markets must be sufficient to drive insurer interest in creating a multimarket network. Employer demand need not arise from one employer with employees in each of the relevant markets. Instead, multimarket employers could create a web of multimarket demand that is strong enough, in terms of volume of commerce, to create a profit incentive for insurers. Additional research into multimarket employer preferences regarding the standardization of employee health benefits across markets is necessary to understand the strength of employer demand. In addition, as Brand and Rosenbaum point out, more research into the dynamics of how employers respond to network changes and how those changes impact insurer profits is needed to refine this limitation.

Third, one or more of the providers in the cross-market merger must have market power in one or more of the relevant markets. In most cases, market power will be established by one of the merging entities having market power in its own local market. This logic follows from the intuition that a cross-market

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357. *Id*.
358. *Id*.
359. *Id*.; Dafny et al., *supra* note 3, at 286; Brand & Rosenbaum, *supra* note 136, at 544. Incidentally, we see no theoretical reason that cross-market effects could not occur in health system mergers and acquisitions that cross state lines, but in the absence of evidence demonstrating such an effect, state boundaries serve as a limitation on enforcement.
merger between two hospitals with insignificant market power in their respective markets is unlikely to generate much leverage over a multimarket insurer, as neither is critically important to the development of a multimarket provider network.363 Having at least one provider with market power within a merged entity, however, can enable a health system to leverage its market power to increase prices. As such, establishing that the merged entity would have market power in at least one market serves as an important limitation on antitrust inquiry. That said, the specific market power threshold necessary to surpass the limitation remains a point for further research and consideration.364

While the preconditions, market dynamics, and limitations discussed above offer guidance as to whether and when antitrust enforcers should challenge cross-market mergers, it is also important to recognize that enforcers may face conflicting imperatives. The Clayton Act charges them with preventing anticompetitive effects from all types of mergers before they occur. At the same time, they must safeguard time and resources by bringing well-founded cases that are likely to succeed and avoid damaging legal precedents. We therefore suggest bringing challenges only in cases that muster solid evidence of likely effect, and the development of a vigorous research program on the impact of cross-market mergers to inform future challenges.

D. DIRECTIONS FOR FUTURE RESEARCH AND LITIGATION

In this Article, we have sought to build upon foundational antitrust principles and empirical evidence to identify anticompetitive preconditions, market dynamics that facilitate anticompetitive harms, and limitations on cross-market analysis to develop an initial framework for analyzing cross-market healthcare mergers. Additional economic and market research in several targeted areas can enhance and further develop this framework, as well as our understanding of the impact of cross-market mergers on healthcare markets.

First, greater understanding of the role that employer demands for certain types of networks and benefits standardization plays in cross-market mergers is needed. Potential inquiries include (1) how state, regional, and national employers value the ability to offer standardized benefits to employees in different geographic areas; (2) how employer preference and demand for broad networks impact insurer profits; and (3) whether factors other than employer demand drive provider network and health system growth. Interviews with representatives from large multimarket employers and large employer associations, as well as the third-party administrators that represent them, can provide key information. Retrospective studies of cross-market mergers can also

363. Id. at 518.
364. The threshold could be set at a 30% or 50% market concentration, it could involve inclusion of a “must have provider,” or it could include a health system so prevalent in multiple markets that the system itself becomes a “must have.” Each of these possibilities should require exploration.
shed light on these factors, especially when supplemented with newly accessible hospital and insurer pricing data.365

Second, we must gain further understanding of the market power effects both of individual facilities across geographic markets as well as those of a newly merged system vis-à-vis a multimarket insurer. Antitrust enforcers need reliable methods of modeling the impact of a potential cross-market merger on the market power relationship between the merged provider and the insurer.366 Such an economic model must be dynamic—it must be able to account for a wide set of variables, such as network adequacy laws and norms in local markets—so that it can analyze the market value of the combination of different healthcare providers across different geographic areas to insurers. The value of any particular addition to a health system is analogous to the value of adding a particular player to a basketball team. The overall value of an individual to any particular team depends not just on the skill and health of the acquired player, but also on how the new player will complement the strengths and weaknesses of existing players, and how his or her personality and style of play will integrate with the team. Likewise, in healthcare markets, the value of any merger or acquisition will depend on the entities already within the merging health systems, the legal and regulatory forces acting on the providers and insurers, the areas insurers are trying to provide network coverage in, and the alternatives available to the merged entity, among other factors.

Third, as noted above, cross-market merger effects can be procompetitive, anticompetitive, or a combination of both. Since merger-review analysis requires antitrust tribunals to analyze both potential efficiencies and competitive risks, enforcers need to acquire a firm understanding of the dynamics of payer-provider bargaining where there is a demand for multiregional coverage.

Developing an enforcement agenda in a new and evolving area of competitive concern presents several dilemmas. Government agencies need to act prudently, choosing targets for investigation and litigation carefully so as to create useful legal precedents while also targeting the most representative and troublesome mergers. At the same time, litigation requires sound economic analysis and expertise to tackle the complex factual issues discussed above. As a first step to establishing a firm basis for future action, antitrust enforcers and academics should interview and survey employers and insurers regarding network building, provider-insurer contracting, and employer preferences. Equally important would be to conduct retrospective studies of the kind that helped change courts’ approach to horizontal hospital mergers to inform individual case analyses and develop enforcement strategies.

366. See Varanini, supra note 103, at 517.
CONCLUSION

The time has come to challenge the mistaken assumption that the merger of healthcare entities in different geographic areas cannot harm competition. Over the last few decades, healthcare markets have consolidated to unprecedented levels through horizontal, vertical, and cross-market transactions, resulting in significant healthcare price increases for the American public. Much of this unfortunate history is attributable to shortcomings in antitrust law enforcement, particularly a reliance by courts and government agencies on flawed economic methods or simplistic assumptions about provider-payer bargaining. This Article seeks to warn against history repeating itself as antitrust law deals with system power.

Cross-market healthcare mergers represent more than half of all hospital mergers in the last decade, and the trend is likely to continue. While recent economic evidence shows that cross-market healthcare mergers can lead to anticompetitive effects, finding ways to effectively prevent anticompetitive cross-market mergers and the accompanying rise of system power remains a critical challenge for enforcers. Through careful analysis of case law, antitrust guidelines from the United States and the European Union, economics and legal theory, and empirical research, we have developed an initial framework for identifying and challenging cross-market mergers with anticompetitive potential as violations of section 7 of the Clayton Act. Our hope is that this framework advances the collective understanding of how cross-market mergers affect healthcare markets, so that antitrust law can continue to evolve alongside the ever-changing dynamics of healthcare markets.