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HOSPITAL MERGERS AND ECONOMIC EFFICIENCY

Roger D. Blair,[*] Christine Piette Durrance[**] & D. Daniel Sokol[***]

Abstract: Consolidation via merger both from hospital-to-hospital mergers and from hospital acquisitions of physician groups is changing the competitive landscape of the provision of health care delivery in the United States. This Article undertakes a legal and economic examination of a recent Ninth Circuit case examining the hospital acquisition of a physician group. This Article explores the *Saint Alphonsus Medical Center-Nampa Inc. v. St. Luke's Health System, Ltd.* (*St. Luke's*) decision—proposing a type of analysis that the district court and Ninth Circuit should have undertaken and that we hope future courts undertake when analyzing mergers in the health care sector. First, the Article addresses the question of how best to frame the acquisition of a physician group by a hospital—is the merger horizontal, vertical, or potentially both? In undertaking this analysis the Article examines the broader issue of the treatment of Accountable Care Organizations (ACOs) in antitrust law. ACOs are short of full integration and as such, a potential contractual alternative for hospitals and physician groups to an acquisition. A hospital acquisition of a physician practice also has implications for how to view competitive effects in the context of ACOs. Indeed, in *St. Luke's* the Ninth Circuit suggests that integration short of full merger was a possible alternative. Second, the Article examines the justification for integration as a way to address countervailing power in health care, the reduction of transaction costs, and potential cost and quality efficiencies. Third, the Article applies the economics of these issues to merger case law generally and specifically to the *St. Luke's* decision. Ultimately, the Article finds the economic analysis of the Ninth Circuit lacking. Finally, the Article offers policy implications of the decision and concludes with some suggestions to improve health care antitrust analysis in practice for litigated cases to make such analysis better follow economic principles.

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INTRODUCTION

Case developments in recent years have renewed attention on the antitrust implications of health care mergers. This attention is particularly important given the current trend of government victories against merging parties in merger challenges.[1] The United States

1. Lisa Jose Fales & Paul Feinstein, *How to Turn a Losing Streak into Wins: The FTC and*

Supreme Court's 2013 decision in *FTC v. Phoebe Putney Health System, Inc.*[2] was the result of a successful challenge of the anti-competitive merger of two hospitals in Georgia that attempted to shield the merger via state action.[3] While the Supreme Court has not ruled in decades on the substantive aspects of antitrust mergers, two recent circuit court antitrust health care cases have received significant attention—*ProMedica Health System, Inc. v. FTC*[4] in the Sixth Circuit and *Saint Alphonsus Medical Center-Nampa Inc. v. St. Luke's Health System, Ltd.*[5] (*St. Luke's*) in the Ninth Circuit.

Efficiencies, known in the business world as synergies,[6] play an important role in justifying mergers. By efficiencies, we mean decreases in price, increases in quality and/or output, or increases in innovation.[7] Because the *ProMedica* district court found no efficiencies in the transaction, that case is, from a doctrinal standpoint, less interesting than the *St. Luke's* decision in the Ninth Circuit that found both pro-competitive (efficiencies) and anti-competitive (monopoly power) effects present in the merger.[8] The Ninth Circuit ultimately upheld the district court's decision to enjoin the merger.[9] In doing so, the Ninth Circuit had the opportunity to undertake a serious economic analysis of the merger and to clean up dated case law that has failed to incorporate rigorous economic analysis of efficiencies and other competitive effects. Unfortunately, irrespective of the outcome, the Ninth Circuit's analysis was lacking. A more rigorous analysis would have provided guidance to improve case law for future courts. It also would bring predictability to merger cases decided in the shadow of the law in terms of merger planning for hospital acquisitions of physician groups, hospitals acquisitions of other hospitals, and for negotiations between merging parties and antitrust enforcers more generally. The lack of economically

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Hospital Merger Enforcement, ANTITRUST, Fall 2014, at 31, 31.

2. FTC v. Phoebe Putney Health Sys., 133 S. Ct. 1003 (2013).

3. *Id.*

4. ProMedica Health Sys., Inc. v. FTC, 749 F.3d 559 (6th Cir. 2014).

5. Saint Alphonsus Med. Ctr.-Nampa Inc. v. St. Luke's Health Sys., Ltd. (*St. Luke's*), 778 F.3d 775 (9th Cir. 2015).

6. *See, e.g.*, Michael Goold & Andrew Campbell, *Desperately Seeking Synergy*, HARV. BUS. REV., Sept.–Oct. 1998, at 131, 143 ("When synergy is well managed, it can be a boon, creating additional value with existing resources.").

7. Howard Shelanski, *Efficiency Claims and Antitrust Enforcement*, *in* 1 THE OXFORD HANDBOOK OF INTERNATIONAL ANTITRUST ECONOMICS 451, 451 (Roger D. Blair & D. Daniel Sokol eds., 2015).

8. *St. Luke's*, 778 F.3d at 786–92.

9. *Id.* at 793.

informed case law in *St. Luke's* is a missed opportunity to clarify merger law in light of the Supreme Court's absence in merger case law development.[10]

In the *St. Luke's* case, St. Luke's Health System (St. Luke's) sought to acquire the Saltzer Medical Group (Saltzer).[11] Saltzer was the largest independent multi-specialty physician group in Idaho.[12] St. Luke's already had integrated eight primary care physicians within its Nampa hospital system.[13] The combination of Saltzer's sixteen primary care physicians and St. Luke's eight primary care physicians raised antitrust concerns because the combined entity would control eighty percent of the adult primary care physicians in the Nampa area.[14] Private plaintiffs brought suit to enjoin the merger under both federal and state antitrust laws.[15] Subsequently, the Federal Trade Commission (FTC) and the State of Idaho also sought to enjoin the merger.[16] The district court consolidated the actions and ruled in favor of the plaintiffs.[17] On appeal, the Ninth Circuit affirmed the district court's holding.[18]

The *St. Luke's* decision is based on a changing reality in health care. The Affordable Care Act (ACA)[19] has served as the impetus toward increased health care consolidation for hospitals.[20] Acquisitions by

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10. For a discussion of the development of antitrust merger case law, see generally Hillary Greene & D. Daniel Sokol, *Judicial Treatment of the Antitrust Treatise*, 100 IOWA L. REV. 2039 (2015).

11. *St. Luke's*, 778 F.3d at 781–82.

12. *Id.* at 781.

13. *Id.*

14. *Id.*

15. *Id.* at 782.

16. *Id.*

17. *Id.*

18. *Id.* at 793.

19. Patient Protection and Affordable Care Act, Pub. L. No. 111-148, 124 Stat. 119 (2010) (codified as amended in scattered sections of 26 and 42 U.S.C.); *see also* Leemore Dafny et al., *Paying a Premium on Your Premium? Consolidation in the U.S. Health Insurance Industry*, 102 AM. ECON. REV. 1161 (2012) (providing an economic analysis of the changing health care landscape of which the ACA is a part).

20. Robert A. Berenson et al., *Unchecked Provider Clout in California Foreshadows Challenges to Health Reform*, 29 HEALTH AFF. 699, 699 (2010) (warning that incentives to charge higher rates will create increased consolidation); David M. Cutler & Fiona Scott Morton, *Hospitals, Market Share, and Consolidation*, 310 JAMA 1964, 1964 (2013) ("A large reduction in use of inpatient care combined with the incentives in the Affordable Care Act is leading to significant consolidation in the hospital industry."); Leemore Dafny, *Hospital Industry Consolidation — Still More to Come?*, 370 NEW ENG. J. MED. 198, 198 (2014) ("The Affordable Care Act (ACA) has unleashed a merger frenzy, with hospitals scrambling to shore up their market positions, improve operational efficiency, and create organizations capable of managing population health.").

hospitals of physician groups are also on the rise.[21] In 2015, health care spending was $3.1 trillion.[22] The largest portion of health care expenditure remains hospital services, at more than five percent of GDP.[23] Health care costs, therefore, are a significant policy issue and ways to reduce costs (and increase quality of care) remain critical to the U.S. economic outlook going forward.

Additional consolidation is inevitable,[24] but antitrust enforcement offers no clear solutions. Getting the antitrust analysis wrong can have significant effects—in hospital mergers, post-merger price increases that may be as high as forty to fifty percent of pre-merger costs.[25] We believe that health care will remain a fixture in antitrust into the foreseeable future. This is particularly true for health care mergers. Understanding *St. Luke's* in light of these challenges in health care suggests that the stakes in health care merger cases are significant. Courts must be more effective and sophisticated in their guidance to better shape the changing health care landscape.[26]

This Article undertakes a legal and economic examination of the *St. Luke's* decision—the type of analysis that the district court and Ninth Circuit should have taken and that we hope future courts will take when analyzing mergers in the health care sector. First, the Article addresses the question of how best to frame an acquisition of a physician group by a hospital—is the merger horizontal, vertical, or potentially both? In undertaking this analysis, the Article examines the broader issue of the treatment of Accountable Care Organizations (ACOs) in antitrust law.

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21. *See, e.g.*, Caroline S. Carlin et al., *The Impact of Hospital Acquisition of Physician Practices on Referral Patterns*, 25 HEALTH ECON. 439 (2015) (published online by Wiley Online Library) (providing a case study of such acquisitions).

22. Tami Luhby, *Health Care Spending Expected to Grow Faster*, CNN MONEY (July 28, 2015, 7:36 PM), http://money.cnn.com/2015/07/28/news/economy/health-care-spending/ [https://perma.cc/3QNH-53RP].

23. Christopher Garmon, *The Accuracy of Hospital Merger Screening Methods* (FTC Bureau of Econ., Working Paper No. 326, 2015), https://www.ftc.gov/reports/accuracy-hospital-merger-screening-methods [https://perma.cc/3GU7-J9KW].

24. Paul B. Ginsburg & L. Gregory Pawlson, *Seeking Lower Prices Where Providers Are Consolidated: An Examination of Market and Policy Strategies*, 33 HEALTH AFF. 1067, 1067 (2014).

25. Martin Gaynor, *Competition Policy in Health Care Markets: Navigating the Enforcement and Policy Maze*, 33 HEALTH AFF. 1088, 1089 (2014).

26. In the area of hospital acquisitions of physician groups, for the most part, such acquisitions fall outside the reporting requirements of the Hart-Scott-Rodino Act. *See* 15 U.S.C. § 18a (2012). Consequently, the antitrust agencies typically find out about mergers after the fact, which makes divestiture remedies more difficult given the post-merger consummation. *See* Dionne Lomax, *A History of* Evanston *and Analysis of the Merger Remedy*, CPI ANTITRUST CHRONICLE, May 27, 2008 (discussing the *Evanston* remedy).

Vertical integration via ownership means that a hospital and its physicians are within the same ownership umbrella and fully integrated both financially and clinically. ACOs are short of full integration and as such, are a potential alternative to acquisition for hospitals and physician groups through some amount of contractual integration short of ownership. A hospital acquisition of a physician practice has implications beyond the merger context. Such a merger has repercussions more broadly on how to view issues of competitive effects in the context of ACOs. Indeed, the Ninth Circuit in *St. Luke's* suggested integration short of full merger as a possible alternative to an anticompetitive merger.[27] Second, the Article examines the justification for integration as a way to address countervailing power in health care, the reduction of transaction costs, and cost and quality efficiencies. Third, the Article applies the economics of these issues to merger case law generally and specifically to the *St. Luke's* decision. Ultimately, the Article finds the economic analysis of the Ninth Circuit lacking. Finally, the Article offers policy implications of the decision and concludes with some suggestions to improve health care antitrust analysis in practice for litigated cases to make such analysis better comport with economic principles.

I. HOSPITAL ACQUISITIONS OF PHYSICIAN GROUPS: HORIZONTAL, VERTICAL, OR BOTH?

Hospital acquisitions of physician groups implicate both horizontal (such as the merger of two direct competitors)[28] and vertical (such as the merger of complimentary products within the production or distribution chain)[29] issues in antitrust merger law. While there have been many litigated merger decisions based on horizontal theories of harm, there has not been a vertical merger case decided before a circuit court since 1987[30] and no Supreme Court vertical merger cases since 1972.[31] As a result, the contours of what might be at stake in such a case remain relatively unclear in vertical merger cases compared to horizontal

27. Saint Alphonsus Med. Ctr.-Nampa Inc. v. St. Luke's Health Sys., Ltd., 778 F.3d 775, 791 n.15 (9th Cir. 2015).

28. *See generally* Bryan Keating & Robert D. Willig, *Unilateral Effects*, *in* 1 THE OXFORD HANDBOOK OF INTERNATIONAL ANTITRUST ECONOMICS, *supra* note 7, at 466.

29. *See generally* Michael A. Salinger, *Vertical Mergers*, *in* 1 THE OXFORD HANDBOOK OF INTERNATIONAL ANTITRUST ECONOMICS, *supra* note 7, at 551.

30. Alta. Gas Chems. Ltd. v. E.I. Du Pont de Nemours & Co., 826 F.2d 1235 (3d Cir. 1987); *see also* Fruehauf Corp. v. FTC, 603 F.2d 345 (2d Cir. 1979).

31. Ford Motor Co. v. United States, 405 U.S. 562 (1972).

mergers. Unfortunately, the *St. Luke's* decision reached the horizontal theory of harm regarding a concentration of physician groups and did not address the vertical issues.[32] We focus on the vertical issues in both law and economics below to address the sorts of questions that the *St. Luke's* Ninth Circuit court should have addressed. We note that the implications of *St. Luke's* are not limited merely to mergers that have both horizontal and vertical elements to them. Instead, the wider implications of the decision impact ACOs more generally, a form of integration short of merger.

The antitrust concern with mergers is that the combined firm will be able to raise prices or reduce quality or innovation unilaterally or via coordinated effects post-merger.[33] This Part examines both types of concerns in the context of hospital acquisitions of physician groups. Such acquisitions involve behavior that has both vertical and horizontal elements. The behavior is vertical in that the acquisition provides complementary services of hospitals and physicians. The horizontal element is that the hospital may already have physicians in the same specialty, which would lead to a merger of otherwise competing practices. A similar analysis can be undertaken for behavior short of merger, under ACOs.[34] This analysis of ACO behavior is important, because courts, such as the Ninth Circuit in *St. Luke's*, suggest that efficiencies could be achieved short of a merger,[35] which might implicate ACOs.

A. Vertical Merger Law

Vertical mergers often present more difficult challenges than horizontal mergers in antitrust case law. That is because, as with vertical conduct, vertical mergers are presumed to be pro-competitive due to the efficiencies that they generate.[36] The exact standards of the legal test in

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32. Complaint for Preliminary and Permanent Injunction and Damages, Saint Alphonsus Med. Ctr.-Nampa, Inc. v. St. Luke's Health Sys., Ltd., Nos. 1:12-cv-00560-BLW, 1:13-CV-00116-BLW, 2014 WL 407446, at *14 (D. Idaho Jan. 24, 2014), *aff'd*, 778 F.3d 775 (9th Cir. 2015)), 2012 WL 5882652.

33. U.S. DEP'T OF JUSTICE & FED. TRADE COMM'N, HORIZONTAL MERGER GUIDELINES (2010) [hereinafter 2010 MERGER GUIDELINES], https://www.ftc.gov/sites/default/files/attachments/merger-review/100819hmg.pdf [https://perma.cc/HRK7-5J2L].

34. For an economic analysis of ACOs, see H.E. Frech III et al., *Market Power, Transaction Costs, and the Entry of Accountable Care Organizations in Health Care*, 47 REV. IND. ORG. 167, 167–68 (2015) (finding physician concentration by organization has marginal effect but that physician geographic concentration leads to less ACO entry).

35. *St. Luke's*, 2014 WL 407446, at *14.

36. Robert Pitofsky, *Past, Present, and Future of Antitrust Enforcement at the Federal Trade*

case law to evaluate the effects of vertical mergers is less well developed than horizontal mergers. Indeed, the last time that the Supreme Court addressed a vertical merger case was 1972.[37] Prior vertical merger decisions, most notably *Brown Shoe Co. v. United States*,[38] were written during an era in which fairness and other non-economic based concerns motivated antitrust outcomes.[39] During this era, the U.S. Department of Justice's (DOJ) 1968 Merger Guidelines also included a discussion on vertical mergers, with a viewpoint to protect competitors over competition.[40]

Though case law and the DOJ Guidelines of the 1960s and 1970s incorrectly showed hostility to vertical merger policy,[41] the antitrust concern that they purportedly were based on—that of foreclosure—is nevertheless a credible concern in examining vertical mergers.[42] A number of more recent cases in which deals have been abandoned or conditioned suggest that there may be situations in which the concern of foreclosure could present an anti-competitive problem, as we note below. This includes where the upstream and downstream markets would be highly concentrated post-merger, and where potential inputs or where distribution channels may not be supplied to downstream rivals, as we discuss below in Part II.

The government recognized the concern with the possibility of foreclosure in a vertical merger context in the 1984 Merger Guidelines,[43] although under narrow circumstances.[44] Because of a very dated set of

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Commission, 72 U. CHI. L. REV. 209, 218 (2005). *But see* JOHN KWOKA, MERGERS, MERGER CONTROL, AND REMEDIES: A RETROSPECTIVE ANALYSIS OF U.S. POLICY (2015) (suggesting that U.S. antitrust policy has been too lax in a number of vertical merger cases).

37. Ford Motor Co. v. United States, 405 U.S. 562 (1972).

38. Brown Shoe Co. v. United States, 370 U.S. 294, 344 (1962); *see also* FTC v. Procter & Gamble Co., 386 U.S. 568 (1967); United States v. E. I. du Pont de Nemours & Co., 353 U.S. 586 (1957).

39. Roger D. Blair & D. Daniel Sokol, *Welfare Standards in U.S. and E.U. Antitrust Enforcement*, 81 FORDHAM L. REV. 2497, 2527–29 (2013); D. Daniel Sokol, *Tensions Between Antitrust and Industrial Policy*, 22 GEO. MASON L. REV. 1247, 1251–52 (2015).

40. U.S. DEP'T OF JUSTICE, 1968 MERGER GUIDELINES 8–10 (1968), *reprinted in* 2 TRADE REG. REP. (CCH) ¶ 4510 (Aug. 9, 1982) [hereinafter 1968 MERGER GUIDELINES], http://www.justice.gov/sites/default/files/atr/legacy/2007/07/11/11247.pdf [https://perma.cc/RSB3-B472].

41. Greene & Sokol, *supra* note 10, at 2058–59.

42. *See generally* Salinger, *supra* note 29.

43. 1984 Merger Guidelines, 49 Fed. Reg. 26,823 (June 29, 1984), http://www.justice.gov/sites/default/files/atr/legacy/2007/07/11/11249.pdf [https://perma.cc/242D-TM5K].

44. *Id.* at 26,835, § 4.21.

cases, the courts have not offered much in the form of guidance of how to address efficiencies in vertical mergers.[45] However, statements by senior officials at both agencies suggest that such efficiencies play a role in vertical merger analysis.[46]

The U.S. antitrust agencies have challenged vertical mergers based on a vertical foreclosure theory in recent years, causing some transactions to be modified or abandoned. These include Ticketmaster/LiveNation,[47] Google/ITA,[48] and Comcast/Time Warner,[49] among others. Similarly, the DOJ's Policy Guide to Merger Remedies addressed the potential harm of vertical mergers, noting that "vertical mergers can create changed incentives and enhance the ability of the merged firm to impair the competitive process."[50]

A general discussion of vertical mergers sets the stage for an application of vertical merger analysis in the context for *St. Luke's*. The case presented a possible framing of the vertical case in which a hospital sought to acquire an unaffiliated physician group.[51] This is what the private plaintiffs in the case alleged in their complaint. The private plaintiffs noted that, "St. Luke's will gain a near monopoly share in the Nampa, Idaho market for adult primary care physician services market. It will continue its practice of foreclosing virtually all competition for the hospital admissions of the physician practices it acquires."[52] Put differently, the integration of the physicians group into St. Luke's would mean that there would be a lack of referrals to competing hospitals. Consequently, there would be a reduction in competition for both

45. *See* ABA, ANTITRUST LAW DEVELOPMENTS 387 n.380 (7th ed. 2013) (compiling a list of antitrust cases).

46. *Id.* at 391–92.

47. Competitive Impact Statement, United States v. Ticketmaster Entm't, Inc., No. 1:10-cv-00139, 2010 WL 5699134 (D.D.C. July 30, 2010), 2010 WL 975407, http://www.justice.gov/atr/case-document/file/513376/download [https://perma.cc/8JDX-TRRE].

48. Competitive Impact Statement, United States v. Google, Inc., No. 1:11-cv-00688 (D.D.C. Oct. 5, 2011), 2011 WL 2444825, http://www.justice.gov/atr/case-document/file/497671/download [https://perma.cc/3SLQ-3KZ8].

49. Press Release, U.S. Dep't of Justice, Comcast Corporation Abandons Proposed Acquisition of Time Warner Cable After Justice Department and the Federal Communications Commission Informed Parties of Concerns (Apr. 24, 2015), http://www.justice.gov/opa/pr/comcast-corporation-abandons-proposed-acquisition-time-warner-cable-after-justice-department [https://perma.cc/8378-825M].

50. U.S. DEP'T OF JUSTICE, ANTITRUST DIVISION POLICY GUIDE TO MERGER REMEDIES 5 (2011), http://www.justice.gov/sites/default/files/atr/legacy/2011/06/17/272350.pdf [https://perma.cc/XF85-JRLG].

51. Saint Alphonsus Med. Ctr.-Nampa Inc. v. St. Luke's Health Sys., Ltd. (*St. Luke's*), 778 F.3d 775, 781–82 (9th Cir. 2015).

52. Complaint for Preliminary and Permanent Injunction and Damages, *supra* note 32, at 2.

inpatient and outpatient services.

Why didn't the government bring the vertical case against St. Luke's?[53] In part, the FTC did not need to do so (unlike the private plaintiffs) because the FTC had standing to bring the case as a much more legally cautious horizontal case.[54] The FTC also benefitted from defining the market narrowly as a horizontal case.[55] Nevertheless, failing to decide the case under a vertical theory of harm (or at least plead both vertical and horizontal theories of harm in the same complaint), contributes to the lack of cases litigated on the merits of a vertical theory. The advantage to a vertical theory in *St. Luke's* is that we believe a consent decree would not have been possible due to the all-or-nothing nature of the hospital merger. Such a case would have offered much needed clarity in case law and vertical merger policy. The most recent Supreme Court vertical merger case is from 1972.[56] The only "recent" vertical merger decided case (from 1997) is *HTI Health Services, Inc. v. Quorum Health Group, Inc.*,[57] where the court did not find substantial foreclosure. *Quorum* was a private case in which a hospital unsuccessfully challenged the merger of a private hospital and two physician groups in Vicksburg, Mississippi. The plaintiff hospital brought both a horizontal theory of harm (physician services and managed care purchasing markets) and a vertical theory of harm (acute inpatient hospital services market). To be sure, there have been numerous vertical mergers challenged since 1997 but these have resulted in consents, settlements, or deals that were abandoned.[58]

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53. Salop and Culley suggest that the nature of the foreclosure (either input or customer foreclosure) was unclear. *See* Steven C. Salop & Daniel P. Culley, Potential Competitive Effects of Vertical Mergers: A How-To Guide for Practitioners 20 n.39 (Dec. 8, 2014), http://scholarship.law.georgetown.edu/cgi/viewcontent.cgi?article=2404&context=facpub [https://perma.cc/6YKF-2HCP] ("This concern [of customer foreclosure in St. Luke's] might be classified instead as input foreclosure in that the payers tend to be third-party insurance companies or managed care operators, and that the patients are inputs who are steered to one or another hospital by the doctors. Where the merging firms produce complementary products, it is often possible to categorize the foreclosure either as input or customer foreclosure.").

54. On antitrust standing and foreclosure more generally, see Roger D. Blair & Christine A. Piette, *Antitrust Injury and Standing in Foreclosure Cases*, 31 J. CORP. L. 401 (2006).

55. Complaint for Permanent Injunction, FTC v. St. Luke's Health Sys., Ltd., No. 13-cv-116-BLW (D. Idaho Mar. 26 2013), https://www.ftc.gov/sites/default/files/documents/cases/2013/03/130312stlukescmpt.pdf [https://perma.cc/3E5W-M6KY].

56. Ford Motor Co. v. United States, 405 U.S. 562 (1972).

57. HTI Health Servs., Inc. v. Quorum Health Grp., Inc., 960 F. Supp. 1104 (S.D. Miss. 1997).

58. *See* Salop & Culley, *supra* note 53, at app.

B. Implications of Vertical Merger Analysis on ACOs

1. Vertical Integration Short of Mergers

Vertical merger analysis has broader implications because antitrust analysis of vertical mergers corresponds to vertical analysis short of merger. Such analysis has been under-developed in the case law. The *St. Luke's* case and the issue of vertical integration implicates more than just vertical merger law. It also impacts vertical integration through financial and clinical integration via ACOs. The Ninth Circuit *St. Luke's* decision also suggests that courts do not understand the benefit of ACOs. ACOs contain both horizontal and vertical elements, yet the Ninth Circuit recently analyzed the merger only horizontally.[59] The court also rejected any potential efficiencies in the structure,[60] thereby casting into doubt the ability to effectively implement ACOs in the future. To provide context for ACO implications of the *St. Luke's* merger, this Section provides an overview of ACO competition issues.

Antitrust enforcement with regard to physician practices in the modern era begins with the 1996 FTC/DOJ Statements of Antitrust Enforcement in Health Care (the Statements).[61] The Statements were written at a time of HMO growth. As such, the Statements recognized the possibility that integration that was short of a full merger between hospital and physician groups as part of "clinical integration" would fall under "rule of reason" treatment rather than "per se"[62] treatment that the Supreme Court in *Arizona v. Maricopa County Medical Society*[63] otherwise demanded.[64] In *Maricopa County*, the Supreme Court found a per se violation of physician controlled foundations for medical care that had fixed the maximum reimbursement rates for their members.[65] This arrangement lacked any financial integration and, as such, the relationship was viewed as a price fixing agreement and therefore per se

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59. Saint Alphonsus Med. Ctr.-Nampa Inc. v. St. Luke's Health Sys., Ltd. (*St. Luke's*), 778 F.3d 775, 783–92 (9th Cir. 2015).

60. *Id.* at 791–92.

61. U.S. DEP'T OF JUSTICE & FED. TRADE COMM'N, STATEMENTS OF ANTITRUST ENFORCEMENT POLICY IN HEALTH CARE (1996) [hereinafter FTC/DOJ STATEMENTS], http://www.justice.gov/sites/default/files/atr/legacy/2007/08/14/0000.pdf [https://perma.cc/Z5TJ-ASTT].

62. For a background and treatment of the per se rule and rule of reason, see, for example, Andrew I. Gavil, *Moving Beyond Caricature and Characterization: The Modern Rule of Reason in Practice*, 85 S. CAL. L. REV. 733, 733–37 (2012).

63. 457 U.S. 322 (1982).

64. FTC/DOJ STATEMENTS, *supra* note 61, at 82–87.

65. *Maricopa County*, 457 U.S. at 355–57.

illegal.[66] The problem with *Maricopa County* is that the Court did not give sufficient attention to the possibility that clinical integration, rather than financial integration, might also create pro-competitive effects that would overcome the potential anti-competitive effects and therefore would deserve rule of reason treatment.[67]

The Statements diverged from *Maricopa County* based on the potential efficiencies that such integration might have.[68] However, the meaning of "clinical integration" remained elusive.[69] The agencies first attempted to define this concept in Statements 8 and 9:

> Physician network joint ventures that do not involve the sharing of substantial financial risk may also involve sufficient integration to demonstrate that the venture is likely to produce significant efficiencies. Such integration can be evidenced by the network implementing an active and ongoing program to evaluate and modify practice patterns by the network's physician participants and create a high degree of interdependence and cooperation among the physicians to control costs and ensure quality. This program may include: (1) establishing mechanisms to monitor and control utilization of health care services that are designed to control costs and assure quality of care; (2) selectively choosing network physicians who are likely to further these efficiency objectives; and (3) the significant investment of capital, both monetary and human, in the necessary infrastructure and capability to realize the claimed efficiencies.[70]

This formulation of clinical integration was quite broad, which may have been by design.[71] The Statements were not the last word in vertical

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66. *Id.* at 357 ("[T]he fee agreements . . . are among independent competing entrepreneurs. They fit squarely into the horizontal price-fixing mold.").

67. Mark R. Patterson, *Justice Stevens and Market Relationships in Antitrust*, 74 FORDHAM L. REV. 1809, 1821 (2006); Rocco J. De Grasse, Note, Maricopa County *and the Problem of Per Se Characterization in Horizontal Price Fixing Cases*, 18 VAL. U. L. REV. 1007, 1051–62 (1984).

68. FTC/DOJ STATEMENTS, *supra* note 61, at 80 ("Experience indicates that, in general, more significant efficiencies are likely to result from a physician network joint venture's substantial financial risk sharing or substantial clinical integration. However, the Agencies will consider a broad range of possible cost savings, including improved cost controls, case management and quality assurance, economies of scale, and reduced administrative or transaction costs.").

69. Robert F. Leibenluft, *Antitrust and Provider Collaborations: Where We've Been and What Should Be Done Now*, 40 J. HEALTH POL. POL'Y & L. 847, 853–54 (2015).

70. FTC/DOJ STATEMENTS, *supra* note 61, at 72–73.

71. Robert F. Leibenluft, *The ACO Antitrust Policy Statement: Antitrust Enforcement Meets Regulatory Rulemaking*, ANTITRUST SOURCE, Dec. 2011, at 1, 2 ("The FTC and DOJ explained that they did not wish to offer more details regarding what might constitute clinical integration out of concern that more prescriptive language might dampen innovation. Officials of these antitrust

integration, however. The FTC staff started to offer advisory opinions as to the application of the Statements.[72]

2. ACO Policy Statement

The antitrust agencies have offered more recent guidance on vertical relations short of merger. To encourage increased competition through the ACA, the DOJ Antitrust Division and the FTC issued a Statement of Antitrust Enforcement Policy Regarding Accountable Care Organizations Participating in the Medicare Shared Savings Program (ACO Policy Statement).[73]

ACOs create the potential for great benefit in the health care system. However, ACOs also create potential for anti-competitive harms including higher prices and/or lower quality.[74] Consequently, the antitrust agencies set out ACO Guidelines to assist ACOs in navigating a path that leads to increased consumer welfare. This analysis addresses many of the issues that emerge in integration via merger between a hospital and physician group.

a. ACO Policy Statement Background

DOJ and FTC offered the ACO Policy Statement to provide greater antitrust clarity regarding ACO formation. The ACO Policy Statement is premised on ACOs' ability to promote greater efficiencies through higher quality of service and lower cost between hospitals (upstream) and physician groups (downstream).[75] As a matter of design, the implementation of ACO Guidelines does not live up to its promise. Consequently, we believe that rather than vertically integrate via contract, firms will choose to do so via merger. Firms will do so because firms will choose the greater certainty of vertical integration via acquisition because the complexities of clinical integration through ACOs outweigh the value of it.

The goal of ACOs is to provide lower-cost health care with better

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agencies feared that providers might feel constrained to using arrangements that closely followed whatever model the guidelines would describe, at the expense of developing their own approaches better suited to meet their particular needs.").

72. *Id.* at 3–4.

73. Statement of Antitrust Enforcement Policy Regarding Accountable Care Organizations Participating in the Medicare Shared Savings Program, 76 Fed. Reg. 67,026 (Oct. 28, 2011).

74. Richard M. Scheffler, *Accountable Care Organizations: Integrated Care Meets Market Power*, 40 J. HEALTH POL. POL'Y & L. 639, 640–41 (2015).

75. *See* Statement of Antitrust Enforcement Policy, 76 Fed. Reg. at 67,026 (noting that ACOs provide opportunities for innovation in health care and corresponding benefits to consumers).

quality.[76] Implementation issues for ACOs have been difficult such that reaching this goal has not been easy.[77] Under the Affordable Care Act, incentives have been set up under the Medicare Shared Savings Program (MSSP) to reward improved pay to the ACOs for improved performance.[78] Under the ACA, ACOs have been tasked with development of efficiencies in Medicare.[79] Under the MSSP program, according to Professor Greaney, ACOs "constitute an intermediary model for reform that does not require providers to assume insurance and technical risk for care provided to beneficiaries but still provides financial incentives to reorient delivery arrangements."[80]

b. Antitrust Analysis of the ACO Policy Statement

The FTC and DOJ issued the ACO Policy Statement in October 2011.[81] The Statement created "safety zones" for ACOs that operate as safe harbors—situations in which the presumptive anti-competitive harm that would run afoul of antitrust law is unlikely.[82] ACO participants who provide a "common service" and have a combined market share of thirty percent of each common service in each participant's Primary Service Area fall within the safety zone.[83] Clinical integration standards are set not by the antitrust agencies but instead by the Centers for Medicare and Medicaid Services (CMS).[84]

Do the pro-competitive restraints outweigh the anti-competitive effects? The question with ACOs is whether or not there is efficiency-enhancing integration. If there is, the ACO will escape per se analysis under *Maricopa County*.[85] In essence, the antitrust agencies offer rule of reason treatment if ACOs: "(1) meet the CMS eligibility requirements; (2) participate in the MSSP; and (3) use with commercial plans the same governance, leadership structure, and clinical and administrative

76. Thomas L. Greaney, *Regulators as Market Makers: Accountable Care Organizations and Competition Policy*, 46 ARIZ. ST. L.J. 1, 1 (2014).

77. *Id.* (calling implementation "a wrenching process").

78. Patient Protection and Affordable Care Act, Pub. L. No. 111-148, § 3022, 124 Stat. 119, 395 (2010) (codified at 42 U.S.C. § 1395jjj (2012)).

79. *Id.*

80. Greaney, *supra* note 76, at 6.

81. Statement of Antitrust Enforcement Policy Regarding Accountable Care Organizations Participating in the Medicare Shared Savings Program, 76 Fed. Reg. 67,026 (Oct. 28, 2011).

82. *Id.* at 67,028.

83. *Id.*

84. *Id.* at 67,027–28.

85. Arizona v. Maricopa Cty. Med. Soc'y, 457 U.S. 332 (1982).

processes that they use under the MSSP."[86]

The final ACO Policy Statement does not provide sufficient clarity on the issue of how best to clinically integrate in a way that leads to lower cost and better quality while complying with antitrust law.[87] The most recent ACO statement merely notes, "[c]linical integration can be evidenced by the joint venture implementing an active and ongoing program to evaluate and modify practice patterns by the venture's providers and to create a high degree of interdependence and cooperation among the providers to control costs and ensure quality."[88] Unfortunately, the ACO Guidelines also go on to say that the determination of clinical integration will be on a case-by-case basis.[89] This adds to the uncertainty of clinical integration.[90] This uncertainty can push hospitals toward a decision to integrate via merger rather than through contractual integration, particularly in small acquisitions that might not be detected due to being below the HSR reporting threshold[91] or because the creeping acquisitions are in less concentrated markets.

Consequently, there has not been as much certainty regarding ACOs as hospitals interested in ACO development might want. Thus far there has only been one advisory opinion request issued by the FTC since the introduction of the ACO Policy Statement.[92] Yet, more ACOs are in

86. Leibenluft, *supra* note 71, at 5–6.

87. *Id.* at 7 (noting "[t]he ACO Antitrust Policy Statement takes a much more mechanistic, almost regulatory, approach").

88. Statement of Antitrust Enforcement Policy, 76 Fed. Reg. at 67,027.

89. *Id.*

90. Lawrence P. Casalino, *The Federal Trade Commission, Clinical Integration, and the Organization of Physician Networks*, 31 J. HEALTH POL. POL'Y & L. 569, 579 (2006); Thomas L. Greaney, *The Tangled Web: Integration, Exclusivity, and Market Power in Provider Contracting*, 14 HOUS. J. HEALTH L. & POL'Y 59, 69 (2014).

91. See the Hart-Scott-Rodino Antitrust Improvements Act of 1976 § 201, 15 U.S.C. § 18a (2012), and the related Premerger Notification Rules, 16 C.F.R. §§ 801–803 (2015).

92. Letter from Markus H. Meier, Assistant Dir., Bureau of Competition, FTC, to Michael E. Joseph (Feb. 13, 2013), https://www.ftc.gov/sites/default/files/documents/advisory-opinions/norman-physician-hospital-organization/130213normanphoadvltr_0.pdf [https://perma.cc/4TRB-BYME]. Note, however, that there were advisory opinions prior to the Policy Statement. *See* Letter from Jeffrey W. Brennan, Assistant Dir., Bureau of Competition, FTC, to John J. Miles (Feb. 19, 2002), https://www.ftc.gov/policy/advisory-opinions/advisory-opinion-miles-02-19-02 [https://perma.cc/7ZEK-NALA]; Letter from David R. Pender, Acting Assistant Dir., Bureau of Competition, FTC, to Clifton E. Johnson & William H. Thompson (Mar. 28, 2006), https://www.ftc.gov/sites/default/files/documents/advisory-opinions/suburban-health-organization/suburbanhealthorganizationstaffadvisoryopinion03282006.pdf [https://perma.cc/K2KR-9YSN]; Letter from Markus H. Meier, Assistant Dir., Bureau of Competition, FTC, to Christi J. Braun & John J. Miles (Sept. 17, 2007), https://www.ftc.gov/sites/default/files/documents/advisory-opinions/greater-rochester-independent-practice-association-inc./gripa.pdf [https://perma.cc/7VQL-UHV3]; Letter from Markus H. Meier, Assistant Dir., Bureau of Competition, FTC, to Christi J.

operation,[93] which may suggest that those ACOs that are operating at the margins in terms of behavior that may be anti-competitive have not asked for advisory opinions. ACOs may also be complicated to implement in practice, which might push providers to merge rather than partially integrate through ACOs. Particularly due to opportunities to benefit from arbitrage of different reimbursement rates, ACOs may be too complex given the potential returns for providers.[94]

Much remains unknown as to the pro- versus anti-competitive value of ACOs. Professor Scheffler of Berkeley explains:

> At present, regulators like the Federal Trade Commission and the Department of Justice are adapting existing metrics to measure the impact of the market power of ACOs. Moreover, we do not know what quality improvements to expect from ACOs or how such improvements should be measured. Is the ACO producing value for patients, and is it worth the cost? How should the value equation be measured and evaluated? Compared to what? These questions can only be addressed with ongoing research.[95]

i. Research into ACOs Is Inconclusive

Although ACOs are an important new innovation, there has been little academic work on the topic. The limited empirical work on ACOs suggests mixed results.[96] One issue that makes the study of ACO effectiveness difficult to measure is that what to measure is not always clear. For example, there are some limits to the ACO rules, including how they measure quality.[97] The ability of ACOs to be effective has

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Braun (Apr. 13, 2009), https://www.ftc.gov/sites/default/files/documents/advisory-opinions/tristate-health-partners-inc./090413tristateaoletter.pdf [https://perma.cc/E2XN-Y9T7].

93. We note that there had been over 700 ACOs created by the end of 2014. Deborah L. Feinstein et al., *Accountable Trust Organizations and Antitrust Enforcement: Promoting Competition and Innovation*, 40 J. HEALTH POL. POL'Y & L. 875, 884 (2015). However, the merger wave in health care has been equally significant during this period in terms of hospital-to-hospital mergers and hospital acquisitions of physician groups.

94. Melanie Evans, *Few Medicare ACOs Earned Bonuses in 2014*, MOD. HEALTHCARE (Aug. 25, 2015), http://www.modernhealthcare.com/article/20150825/NEWS/150829922 [https://perma.cc/9U7A-3MJB] ("Three out of four Medicare accountable care organizations did not slow health spending enough to earn bonuses last year, a continuation of mixed results for an initiative that federal officials have targeted for rapid expansion.").

95. Scheffler, *supra* note 74, at 643.

96. Gail R. Wilensky, *Lessons from the Physician Group Practice Demonstration—A Sobering Reflection*, 365 NEW ENG. J. MED. 1659, 1659 (2011).

97. James M. DuPree et al., *Attention to Surgeons and Surgical Care Is Largely Missing from Early Medicare Accountable Care Organizations*, 33 HEALTH AFF. 972, 973 (2014) ("Notably,

been questioned based in the theoretical economics literature through formal modeling. As a recent working paper by Frandsen and Rebitzer concludes, "Our estimates suggest that even minimally sized ACOs with modest cost reduction targets will generally not be self-financing unless extremely large economies of scale or productivity improvements accompany ACOs."[98] To create large economies of scale to make ACOs workable, therefore, requires some amount of market power. Yet, it is precisely the sort of market power that scale provides that creates the dilemma for antitrust risk exposure.

ii. Policy Implications

The lack of clarity in the ACO Final Policy Statement and difficulty of implementation has important policy consequences with regard to ACOs and antitrust mergers. We believe, based on our conversations with numerous health care providers, that the lack of clarity has increased the desire for health provider consolidation through the acquisition of physician groups. Rather than risk antitrust exposure through the implementation of ACOs (in a way that would maximize their value), a number of hospitals have gone about vertically integrating via merger with physician practices.[99] Such hospitals have done so as a way to address productivity and scale through merger. These hospitals have done so with small acquisitions as a deliberate way to "fly under the radar" of federal and state antitrust agencies because such transactions fall under HSR reporting requirements.[100] When courts, such as the one in *St. Luke's*, suggest that efficiencies could have been effectuated under circumstances less than a merger, consolidation via

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none of CMS' thirty-three ACO quality measures directly addresses surgery or surgical care.").

98. Bringham Frandsen & James B. Rebitzer, *Structuring Incentives Within Organizations: The Case of Accountable Care Organizations* 30 (Nat'l Bureau of Econ. Research, Working Paper No. 20034, 2014), http://www.nber.org/papers/w20034 [https://perma.cc/9LVS-LBG6].

99. *U.S. Health Services Total Deal Value for Q1 2014 Rose 152%, Pointing to Renewed Deals Confidence Post-ACA Implementation, According to PwC US*, PR NEWSWIRE (May 20, 2014), http://www.prnewswire.com/news-releases/us-health-services-total-deal-value-for-q1-2014-rose-152-pointing-to-renewed-deals-confidence-post-aca-implementation-according-to-pwc-us-259926451.html [https://perma.cc/GL8Q-H8ZM] ("The current trend of physician practice acquisitions by physician practice management companies is expected to continue in the near term as specialty-based physician groups look for ways to respond to reimbursement changes and higher regulatory costs of maintaining their practices.").

100. *See supra* note 91 for the HSR rules. On the impact of hospital acquisitions of physicians, see Scott Baltic, *Monopolizing Medicine: Why Hospital Consolidation May Increase Healthcare Costs*, MED. ECON. (Feb. 24, 2014), http://medicaleconomics.modernmedicine.com/medical-economics/content/tags/hospital-employment/monopolizing-medicine-why-hospital-consolidation-?page=full [https://perma.cc/5WFQ-TXTM].

merger suggests that hospitals believe such consolidation faces fewer transaction costs than ACOs and that perhaps ACOs are less effective than their original promise may have suggested.

C. Recent Enforcement Trends

Overall, the lack of clarity as to the meaning of ACOs does not mean that the antitrust agencies have been silent as to behavior that is unambiguously anti-competitive. Certain behavior that is per se illegal remains clear because there is no integration, whether clinical or financial. This includes DOJ enforcement against an association of chiropractors in South Dakota that had an eighty percent market share in the state.[101] The chiropractors in the association did not have any financial or clinical integration but were able to raise their reimbursements from insurers through joint negotiation. As part of the settlement with DOJ, the association was prohibited from price setting and joint negotiation for its members.[102] The FTC also has been active in enforcement of per se violations. This includes a recent case against nephrologists in Puerto Rico that lacked any financial or clinical integration but participated in a group boycott against insurers that did not agree with the nephrologists' demands for an increase in reimbursement rates.[103]

D. Role of Transaction Cost Economics in Health Care Integration

ACOs and vertical mergers also implicate a larger question of how transaction cost economics works in the health care setting.[104] Transaction cost economics suggests that there is a "make or buy" decision for firms—firms can integrate via ownership or via contract.[105] Organizational complexity may dictate whether or not there are economies of scale or diseconomies of scale to create greater benefit to ownership rather than contract.[106] These issues emerge in health care

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101. Complaint at 1, United States v. Chiropractic Assocs. of S.D., No. 4:13-cv-04030, 2013 WL 5595936 (D.S.D. Sept. 3, 2013), 2013 WL 1727875.

102. *Id.* at *2.

103. P.R. Nephrologists, 155 F.T.C. 874 (2013), 2013 WL 8364917.

104. Renee A. Stiles et al., *The Logic of Transaction Cost Economics in Health Care Organization Theory*, 26 HEALTH CARE MGMT. REV. 85 (2001).

105. OLIVER E. WILLIAMSON, MARKETS AND HIERARCHIES: ANALYSIS AND ANTITRUST IMPLICATIONS (1975); R.H. Coase, *The Nature of the Firm*, 4 ECONOMICA 386 (1937) [hereinafter Coase, *Nature of the Firm*]; R.H. Coase, *The Nature of the Firm: Origin*, 4 J.L. ECON. & ORG. 3 (1988).

106. OLIVER E. WILLIAMSON, THE ECONOMIC INSTITUTIONS OF CAPITALISM: FIRMS, MARKETS,

consolidation and impact whether or not a hospital will choose to merge with a physician group or merely contract via an ACO.[107]

The *St. Luke's* case did not address potential transaction costs between the hospital and the physicians group. A more robust economic analysis of the proposed merger would have examined scale and scope efficiencies of the acquisition in terms of the transaction costs and would have analyzed whether or not an ACO would have been a possible alternative to a full merger. The analysis also would have suggested what the limits of ACOs may be.

1. Basics of Transaction Cost Economics

Organizational structure impacts the costs associated with physician groups.[108] Structure impacts size and scope of practice. Consequently, the impact of financial incentives changes in importance based on the size of the group practice.[109]

We first begin with some basic economic description within a transaction cost economics (TCE) framework. Hospitals produce acute care hospital services. To do so, they need physician services. It is easy to appreciate the need for the traditional hospital-based physicians—anesthesiologists, emergency room physicians, pathologists, and radiologists. But hospitals also need admitting and attending physicians. By the same token, physicians need a place to send patients who cannot be treated without the sophisticated medical equipment and specialized care that only hospitals can provide.[110]

The relationship between hospitals and physician groups can be organized through contracts or through formal integration.[111] In some cases, a group of physicians may construct their own hospital.[112] These

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RELATIONAL CONTRACTING 103–30 (1985) (explaining how organization complexity and size can lead to inefficiencies); Todd R. Zenger, *Explaining Organizational Diseconomies of Scale in R&D: Agency Problems and the Allocation of Engineering Talent, Ideas, and Effort by Firm Size*, 40 MGMT. SCI. 708, 708–09 (1994) (showing how smaller firms are better to address agency cost problems).

107. Frech et al., *supra* note 34.

108. Roger Feldman, *The Economics of Provider Payment Reform: Are Accountable Care Organizations the Answer?*, 40 J. HEALTH POL. POL'Y & L. 745, 746 (2015).

109. Martin Gaynor & Paul Gertler, *Moral Hazard and Risk Spreading in Partnerships*, 26 RAND J. ECON. 591 (1995).

110. *See generally* SHERMAN FOLLAND ET AL., THE ECONOMICS OF HEALTH AND HEALTH CARE (David Alexander et al. eds., 7th ed. 2013).

111. Lawton Robert Burns et al., *Horizontal and Vertical Integration of Physicians: A Tale of Two Tails*, 15 ADVANCES HEALTH CARE MGMT. 39, 40 (2013).

112. PAUL FELDSTEIN, HEALTH CARE ECONOMICS 304–05 (Dave Garza et al. eds., 7th ed. 2011).

are usually relatively small, specialized hospitals, e.g., a women's hospital specializing in obstetrics and gynecology. More common, however, is the acquisition of multi-specialty physician groups by general acute care hospitals. In either case, the integration of hospitals and physician groups may be motivated by efficiency considerations.[113]

Hospitals may desire to acquire physician groups in order to reduce transaction costs. Transaction costs are any expenditures of resources associated with the use of the market mechanism in transferring a good or service from one party to another. Coase (a Nobel Prize winner)[114] described three categories of costs that are associated with the use of the price system.[115]

a. Search Costs

Contracts create various costs. First, there are search costs that must be borne in order to discover the relevant prices, identities, compatibility, and willingness to join forces.[116] Hospitals must identify physician groups that best align with their needs, and physician groups must desire what the hospital offers. In other words, the hospital and physician groups must match. The hospital and physician groups want to find a way to maximize the surplus available in the market. The challenge is to figure out how to share the combined surplus, which may be quite contentious.

b. Negotiation

Second, use of the market mechanism often necessitates the negotiation (and, later, enforcement) of contracts that stipulate precisely what the hospital and physician group agree to do.[117] These contracts

113. Thomas T.H. Wan et al., *Integration and the Performance of Healthcare Networks: Do Integration Strategies Enhance Efficiency, Profitability, and Image?*, INT'L J. INTEGRATED CARE, June 1, 2001, at 1.

114. *Ronald H. Coase – Facts*, NOBELPRIZE.ORG, http://www.nobelprize.org/nobel_prizes/economic-sciences/laureates/1991/coase-facts.html [https://perma.cc/G4P3-ZDMT] (last visited Feb. 14, 2016).

115. *See* Coase, *Nature of the Firm*, *supra* note 105. In this classic paper, Coase explains that this replacement of a market exchange with an internal (within the firm) transfer is the defining characteristic of a firm. Without that replacement, firms, as we know them, would not exist. A later, more extensive treatment of this same topic is provided in WILLIAMSON, *supra* note 105. A thorough survey of this literature is provided by Oliver E. Williamson, *Transaction Cost Economics*, *in* 1 HANDBOOK OF INDUSTRIAL ORGANIZATION 135 (R. Smalensee & R.D. Willig, eds., 1989).

116. Coase, *Nature of the Firm*, *supra* note 105, at 390.

117. Frech et al., *supra* note 34 (discussing transaction costs in the health care setting).

usually specify not only the price and quantity of the health care service, but also such details as coverage, scheduling, office space, clerical and administrative costs, and the like. Such detailed specification of the items affecting the purchase and sale is required to ensure that both parties will live up to the terms of the agreement, because performance incentives may change drastically after the initial contract is signed.[118] Generally, the longer the term of such contracts, the greater the costs of negotiation and enforcement. The added costs result because specifying future contingencies becomes increasingly problematic as the time horizon is extended.[119] Moreover, the more complex the transactions become, the more difficult it is to specify all future contingencies and the parties' contractual obligations, should those contingencies arise.[120] And any contingencies that are not covered by the terms of the contract leave one or both firms vulnerable to opportunistic behavior by the other party.[121]

c. Reduced Flexibility

Finally, in addition to negotiation and enforcement costs, there are costs of reduced flexibility associated with market transactions that make use of long-term contracts.[122] If the market price of the input falls during the term of the contract, the hospital will bear an opportunity cost in being unable to take advantage of the lower price because of its obligation to purchase the input at the higher price specified in the

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118. On opportunism more generally, see Christina Ahmadjian & Joanne Oxley, *Using Hostages to Support Exchange: Dependence Balancing and Partial Equity Stakes in Japanese Automotive Supply Relationships*, 22 J.L. ECON. & ORG. 213, 215 (2006) (applying Williamson's hostage-exchange model).

119. *See generally* Howard A. Shelanski & Peter G. Klein, *Empirical Research in Transaction Cost Economics: A Review and Assessment*, 11 J.L. ECON. & ORG. 335, 336–38 (1995).

120. *Id.* On incomplete contracts, see OLIVER HART, FIRMS, CONTRACTS, AND FINANCIAL STRUCTURE 1–2, 72–82 (1995), and Steven Shavell, *On the Writing and the Interpretation of Contracts*, 22 J.L. ECON. & ORG. 289, 289 (2006).

121. Scott E. Masten, *About Oliver E. Williamson*, *in* FIRMS, MARKETS, AND HIERARCHIES: THE TRANSACTION COST ECONOMICS PERSPECTIVE 37, 41 (Glenn R. Carroll & David J. Teece eds., 1999) ("As transactions become more complex and the environment more uncertain, the limitations of contracting as a safeguard against opportunism grow, increasing the attraction of other institutional arrangements that better support adaptive, sequential decision making while circumscribing or redirecting opportunistic tendencies."); *see also* Paul L. Joskow, *Asset Specificity and Vertical Integration*, *in* 1 THE NEW PALGRAVE DICTIONARY OF ECONOMICS AND THE LAW 108 (Peter Newman ed., 1998); Paul L. Joskow, *Transaction Cost Economics, Antitrust Rules, and Remedies*, 18 J.L. ECON. & ORG. 95, 102–03 (2002).

122. Keith J. Crocker & Scott E. Masten, *Pretia Ex Machina? Prices and Process in Long-Term Contracts*, 34 J.L. & ECON. 69 (1991).

contract.[123] A similar opportunity cost will be borne by the physician group of the input if the market price increases unexpectedly during the term of the contract.[124] Changes in market conditions involving aspects other than price (for example, the introduction of new medical equipment, new medical devices, changes in Medicare rules, changes in Medicare programs, new information technology systems) can impose analogous costs on either party.[125] The basic point here is that, by entering into the contractual agreement, each party locks itself into a predetermined pattern of behavior in order to assure the other party that it has not misrepresented its future intentions. An unexpected alteration of market conditions often makes this behavior suboptimal and, therefore, costly ex post.

2. Health Care and Transaction Cost Economics

Transaction costs implicate vertical relations within the hospital and physician setting. By replacing the system of market exchanges with internal transfers, integration may substantially reduce these transaction costs.[126] Instead of having hospitals and physician groups negotiate the sale of a health care service, we have managers organize the production and transfer of the health care service between the upstream division and the downstream division of the integrated firm.[127] As Williamson (another Nobel Prize winner)[128] has persuasively argued, replacing market transactions with administrative decisions can often be expected to reduce transaction costs for two fundamental reasons: (a) reducing health care costs via integration and (b) better aligning incentives.[129]

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123. Alison Evans Cuellar & Paul J. Gertler, *Strategic Integration of Hospitals and Physicians*, 25 J. HEALTH ECON. 1, 5–6 (2006).

124. *Id.*

125. Jeffrey Clemens et al., *The Anatomy of Physician Payments: Contracting Subject to Complexity* (Nat'l Bureau of Econ. Research, Working Paper No. 21642, 2015).

126. Frech et al., *supra* note 34, at 170, 172.

127. *Id.* at 168–69.

128. *Oliver E. Williamson – Facts*, NOBELPRIZE.ORG, http://www.nobelprize.org/nobel_prizes/economic-sciences/laureates/2009/williamson-facts.html [https://perma.cc/9LDK-CNHM] (last visited Feb. 14, 2016).

129. *See* Oliver E. Williamson, *The Economics of Antitrust: Transaction Cost Considerations*, 122 U. PA. L. REV. 1439, 1442–47 (1974) [hereinafter Williamson, *Economics of Antitrust*]; Oliver E. Williamson, *The Vertical Integration of Production: Market Failure Consideration*, 61 AM. ECON REV. 112, 113–14 (1971).

a. Reducing Health Care Costs via Integration

Internalizing the transfer through integration alters the relationship between the affected parties (hospital and physician group) from one of being largely adversaries to one of being partners. Without integration, one party often stands to gain profits at the expense of the other party. Both parties have an incentive to increase their own profits without regard to the impact on the other party, which may reduce their combined profits. Williamson refers to this sort of behavior as opportunistic.[130]

By joining together the profits of the two parties, vertical integration brings about a convergence of goals and thereby eliminates (or greatly reduces) the incentive for this sort of counter-productive behavior.[131] Such convergence, in turn, reduces the costs of completing the given transaction because the parties involved will no longer find it necessary to expend resources designing and negotiating contracts to protect themselves from the anticipated opportunism of the other party.

b. Better Aligning Incentives

Vertical integration is expected to reduce transaction costs because the incentive and control options available to the hospital are much more extensive for intrafirm as opposed to interfirm transfers.[132] It is far easier for the manager of a hospital to discover and, as necessary, reward or penalize the behavior of employees than it is to exercise similar controls over the behavior of another firm. In the former case, access to the relevant data (for example, through internal audits) is improved, and rewards or penalties (for example, through promotions, raises, and firings) are more easily administered. In the latter case, discovery of opportunistic behavior is relatively costly, and haggling or litigation may be the only means available for encouraging more desirable performance. And failure to elicit such performance can lead to a termination of the contractual relationship, which, in turn, requires search for a new supplier and negotiation of a new contract, all of which entails additional costs.

Thus, by combining the profit streams of the hospital and physician

130. *See, e.g.*, Williamson, *Economics of Antitrust*, *supra* note 129, at 1444–45. Vertical integration, however, does not remove principal-agent problems, which can lead to a reduction in the total surplus available.

131. *See* Cuellar & Gertler, *supra* note 123 (explaining the theory behind such integration although not finding it empirically in their study).

132. Frech et al., *supra* note 34, at 168–70.

group, integration increases the amount of information available to the parties to the transaction and sharpens the incentives of all parties to behave in a manner that promotes the profitability of the overall operation.

A particular situation expected to give rise to substantial transaction costs is that involving "transaction-specific assets."[133] Such assets arise from investments that are undertaken to support some particular set of market transactions.[134] For example, a hospital may invest in an MRI, proton knife, DaVinci equipment, or other complex medical equipment. Physicians may, however, want a greater share in the profits generated through use of this equipment and associated services, or they may decline to use them.

The problem with transaction-specific investments is that, once these assets are put in place (i.e., the costs are sunk), the party that owns them becomes vulnerable to what has been termed the "hold-up problem."[135] Specifically, the physician group will recognize that the hospital's trading options become severely limited ex post and, consequently, may attempt to capture a portion of the returns for itself when the contract comes up for renewal. Or, in the extreme, the physician group may simply renege on the contract and insist upon negotiation. The potential for such opportunistic behavior may prevent the hospital from undertaking these sorts of investments, despite their potentially profitable and socially beneficial use.

An obvious solution to this situation is vertical integration. If both parties to the transactions for which the assets are specifically designed are owned by the same entity, incentives for hold-up are substantially reduced if not eliminated entirely. Thus, vertical integration may be motivated by the desire to avoid hold-up problems stemming from transaction-specific investments.[136]

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133. *See* Benjamin Klein et al., *Vertical Integration, Appropriable Rents, and the Competitive Contracting Process*, 21 J.L. & ECON. 297, 298 (1978).

134. *See* Williamson, *Economics of Antitrust*, *supra* note 129.

135. *See* WILLIAMSON, *supra* note 106, at 47 (describing the hold-up problem's opportunism as "self-interest seeking with guile").

136. A number of empirical papers have confirmed the importance of transaction-specific assets in firms' decisions to vertically integrate. *See, e.g.*, Kirk Monteverde & David J. Teece, *Supplier Switching Costs and Vertical Integration in the Automobile Industry*, 13 BELL J. ECON. 206 (1982); Pablo Spiller, *On Vertical Mergers*, 1 J.L. ECON. & ORG. 285 (1985); Avi Weiss, *The Role of Firm-Specific Capital in Vertical Mergers*, 35 J.L. & ECON. 71 (1992); Avi Weiss, *Vertical Mergers and Firm-Specific Physical Capital: Three Case Studies and Some Evidence on Timing*, 42 J. INDUS. ECON. 395 (1994).

c. Economies of Scale and Scope

TCE provides a theory for integration. This theory helps to explain the push for vertical integration between hospitals and physician groups. There are two elements that drive the incentive for integration—scale[137] and scope[138] economies.

Scale economies are possible when the fixed cost of production can be spread over more units, which means that the average cost of production of each unit declines. In health care, these economies of scale may be a function of sharing the cost of specialized equipment over a larger group of patients or the negotiation of better reimbursement rates by hospitals that have scale with insurance providers.[139] Diseconomies of scale (where a larger size leads to suboptimal results) occur when organizational complexity leads to coordination and management inefficiencies that lead to the average cost increasing rather than decreasing. In the health care setting, this may occur because of multi-specialty groups that are multisite or are less efficient with regard to time and resources.[140] Some studies suggest that scale economies in health care support increased consolidation.[141] However, scale economies may not always be possible in health care because of complexities in the delivery of health care in multifaceted organizational structures. Both theoretical and empirical work suggests that diseconomies of scale are possible in health care.[142]

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137. Aubrey Silberston, *Economies of Scale in Theory and Practice*, 82 ECON. J. 369, 369 (1972) ("Classic economies of scale relate to the effect on average costs of production of different rates of output, per unit of time, of a given commodity, when all possible adaptations have been carried out to make production at each scale as efficient as possible.").

138. David J. Teece, *Economies of Scope and the Scope of the Enterprise*, 1 J. ECON. BEHAV. & ORG. 223 (1980).

139. Colin Preyra & George Pink, *Scale and Scope Efficiencies Through Hospital Consolidations*, 25 J. HEALTH ECON. 1049 (2006).

140. Thomas P. Weil, *Multispecialty Physician Practices: Fixed and Variable Costs, and Economies of Scale*, 25 J. AMBULATORY CARE MGMT. 70, 75–76 (2002).

141. Stephen M. Shortell & Kathleen E. Hull, *The New Organization of the Health Care Delivery System*, *in* 2 STRATEGIC CHOICES FOR A CHANGING HEALTH CARE SYSTEM 101, 101 (Stuart E. Altman & Uwe E. Reinhardt eds., 1996) ("Early evidence suggests that organized delivery systems that are more integrated have the potential to provide more accessible coordinated care across the continuum . . . than less integrated delivery forms."); Lief I. Solberg et al., *Is Integration in Large Medical Groups Associated with Quality?*, 15 AM. J. MANAGED CARE e34, e40 (2009) ("This demonstration of a relationship between integration and quality provides support for encouragement of integration.").

142. Gregory C. Pope & Russel T. Burge, *Inefficiencies in Physician Practices*, *in* ADVANCES IN HEALTH ECONOMICS AND HEALTH SERVICES RESEARCH 129 (Richard M. Scheffler & Louis F. Rossiter eds., 1992); Burns et al., *supra* note 111, at 56–57; Lawton R. Burns et al., *The Financial Performance of Integrated Health Organizations*, J. HEALTHCARE MGMT., May/June 2005, at 191,

Scope economies allow for a decline in the average cost of production because of integration of shared resources.[143] Units of production increase while costs decrease. In the health care setting, this may include such things as electronic medical records or a single management structure. Scope inefficiencies may include situations when the multi-practice groups within a single practice do not work efficiently.[144]

d. Managerial Diseconomies

As more and more physician groups are brought within the hospital's control, efficient management of the total operation becomes increasingly difficult. We refer to this problem as "managerial diseconomies."[145] Eventually, the additional costs of trying to coordinate one more stage of production will exceed the transaction cost savings that result from internalizing this additional stage.

Because transaction costs are associated with all real-world markets, the economic incentive to integrate may well be pervasive to address real market concerns and to create efficiencies. Yet, as we pointed out earlier, all firms, including hospitals, do continue to use some intermediate services markets. No hospital owns all of the physician inputs that it uses in the production of its health care services.[146] The reason for this lack of complete integration is that vertical integration itself tends to increase the firm's costs. Expanding the hospital's operations through additional physician group acquisition increases the problems of coordinating all the hospital's activities. At that point, the hospital will refrain from further vertical integration and will make use

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191 ("Results from a study of 36 large integrated health organizations (IHOs) suggest that financial performance is adversely affected by the scale of investment in integration . . . ."); José J. Escarce & Mark V. Pauly, *Physician Opportunity Costs in Physician Practice Cost Functions*, 17 J. HEALTH ECON. 129 (1998) (theorizing on economies and diseconomies of scale); Jeff Goldsmith, *Integrating Care: A Talk with Kaiser Permanente's David Lawrence*, HEALTH AFF., Jan. 2002, at 39, 39 ("Hospitals ended up not dealing with some of the basic things that have to happen for an integrated system to work right"); Weil, *supra* note 140 (finding that multispecialty practices with fifty-one or more doctors are less efficient).

143. John C. Panzar & Robert D. Willig, *Economies of Scale in Multi-Output Production*, 91 Q.J. ECON. 481 (1977).

144. R. Rosenman & D. Friesner, *Scope and Scale Inefficiencies in Physician Practices*, 13 HEALTH ECON. 1091 (2004) (finding that multi-specialty groups are less efficient than single specialty groups); Sisira Sarma et al., *Physician's Production of Primary Care in Ontario, Canada*, 19 HEALTH ECON. 14, 27 (2010) (finding scale economies in Canada).

145. For another application, see Francisco Brahm & Jorge Tarziján, *The Impact of Complexity and Managerial Diseconomies on Hierarchical Governance*, 84 J. ECON. BEHAV. & ORG. 586 (2012).

146. *See* Cuellar & Gertler, *supra* note 123, at 6–10.

of the intermediate services market for the allocation of this input.

Thus, while transaction costs provide a major incentive to vertically integrate, managerial diseconomies place a limit on the extent to which such integration will occur.[147] Consequently, the extent of vertical integration (the number of production stages brought within the hospital's control) is determined where the incremental cost of internalization equals or exceeds the incremental cost of market exchange. By expanding the firm's breadth of operations to this point, the overall costs of producing and delivering the final product to the consumer are minimized. The optimal mix of internal and market exchange is selected, and the expanse of the hospital's activities is determined.

Where vertical integration—via either internal expansion or merger—occurs in response to the presence of transaction costs, total welfare is improved by such integration.[148] Cost reductions that do not themselves lead to any increase in market power will result in price reductions for final product consumers.[149] Both producers and consumers can be made better off—profits can increase even as final output price falls by avoiding the costs of using the market mechanism. Consequently, antitrust policy should do nothing to discourage vertical integration under these circumstances.[150]

Overall, the literature on transaction cost economics explains the motivations for integration via contract and merger. TCE has profound implications on antitrust merger policy[151] and in particular on analysis of health care mergers between hospitals and physician groups. The lack of rigorous analysis of this in *St. Luke's* is a missed opportunity to provide

147. *Id.*

148. Alan J. Meese, *The Market Power Model of Contract Formation: How Outmoded Economic Theory Still Distorts Antitrust Doctrine*, 88 NOTRE DAME L. REV. 1291, 1314–16 (2013).

149. On the limits of vertical integration in such circumstances, see Janusz A. Ordover et al., *Equilibrium Vertical Foreclosure*, 80 AM. ECON. REV. 127 (1990); Michael H. Riordan, *Anticompetitive Vertical Integration by a Dominant Firm*, 88 AM. ECON. REV. 1232 (1998).

150. Indeed, many of the problems regarding health care competition are a function of bad regulatory design rather than private restraints of trade. *See generally* David L. Meyer & Charles F. (Rick) Rule, *Health Care Collaboration Does Not Require Substantive Antitrust Reform*, 29 WAKE FOREST L. REV. 169, 179 (1994) ("In health care, moreover, apparent imperfections in the functioning of market competition largely can be attributed to distortions caused by government intervention and the historical bias against competition in the field."). Specific to health care mergers involving physician group acquisitions, a physician will receive higher reimbursement rates for outpatient care that is delivered by an "integrated" system. *See* Burns et al., *supra* note 111, at 68; Ginsburg & Pawlson, *supra* note 24, at 1072.

151. *See, e.g.*, Dennis W. Carlton & Bryan Keating, *Antitrust, Transaction Costs, and Merger Simulation with Nonlinear Pricing*, 58 J.L. & ECON. 268 (2015).

sophisticated analysis and clarity for future mergers and integration short of mergers.

II. FORECLOSURE

A. Foreclosure Claim

Physicians in an integrated hospital may refer patients to their own hospital[152] through foreclosure.[153] When a hospital acquires a large multi-specialty physician practice, the impact on rival hospitals in the local market can be substantial.[154] Since the physicians of the acquired practices now are employed by the hospital, they will presumably refer all of their patients to their new hospital. In other words, the acquisition forecloses the rival hospital from these patients. In order to compete, the rival hospitals would have to be sufficiently more attractive to induce the patients to switch physicians. This, of course, may be possible for some patients but certainly not for all of them. The court in *St. Luke's* did not properly understand the argument regarding foreclosure. A better understanding of this argument would have led to improved case law analysis not merely for this case but for its precedential value.

B. Economic Rationale

As one might expect, the acquisition generates mutual benefits for the hospital and the practice group. Physicians are largely responsible for selecting the hospital for their patients. Each referral confers a benefit on the hospital that can be measured by the increased contribution margin.

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152. Ann S. O'Malley et al., *Rising Hospital Employment of Physicians: Better Quality, Higher Costs?*, ISSUE BRIEF (Ctr. for Studying Health Sys. Change, Wash. D.C.), Aug. 2011, http://www.hschange.com/CONTENT/1230 [https://perma.cc/2QV4-FVDA] (providing theoretical concern); Laurence C. Baker et al., *The Effect of Hospital/Physician Integration on Hospital Choice* 17 (Nat'l Bureau Econ. Research, Working Paper No. 21497, 2015), http://www.nber.org/papers/w21497 [https://perma.cc/22M6-4AHA] ("We find that a hospital's ownership of an admitting physician dramatically increases the probability that the physician's patients will choose the owning hospital. We also find that ownership of an admitting physician has large effects on how the hospital's cost and quality affect patients' hospital choice. Patients whose admitting physician is not owned by a hospital are more likely to choose facilities that are low cost and high quality. . . . By contrast, patients are more likely to choose a high-cost, low-quality hospital when their admitting physician's practice is owned by that hospital.").

153. Ordover et al., *supra* note 149; Richard S. Higgins, *Competitive Vertical Foreclosure*, 20 MANAGERIAL & DECISION ECON. 229 (1999).

154. Deborah L. Feinstein, Dir., Bureau of Competition, FTC, Address at the Fifth National Accountable Care Organization Summit: Antitrust Enforcement in Health Care: Proscription, Not Prescription 8 (June 19, 2014), https://www.ftc.gov/system/files/documents/public_statements/409481/140619_aco_speech.pdf [https://perma.cc/A7YA-FZL4].

By acquiring a physician's practice group, the hospital is essentially buying those referrals. The physicians also benefit because the price that is negotiated includes the capitalized value of the incremental contribution margin.[155] There is no way for a hospital to pay for referrals due to anti-kickback rules.[156] If a practice group is acquired, however, the hospital can "pay" the physicians by including a premium in the acquisition price.[157]

The private plaintiffs in *St. Luke's* offered a vertical foreclosure theory that involved referrals from the Saltzer group physicians drying up (relative to pre-merger) for their own inpatient admissions post-merger.[158] This meant that the channel for distribution of inpatient admissions would be foreclosed. The district court noted that prior practice at St. Luke's suggested a history of foreclosure.[159] The court explained, based on the testimony of Professor Haas-Wilson, that "[a]fter St. Luke's purchased five specialty practices, 'their business at Saint Alphonsus Boise dropped dramatically[, and] the amount of business that they did at St. Luke's facilities increased dramatically.'"[160] The court suggested that such a practice was likely to be replicated.[161] On appeal, there was no discussion of this issue, even though the implications of such foreclosure permeated the facts and needed to be addressed.

The economic reality is that in a world of price caps for certain hospital services, firms will attempt to increase the bottom line by increasing the total provision of hospital services. Given anti-steering

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155. The contribution margin is the difference between the incremental revenue and the incremental cost. It is a measure of the incremental profit resulting from the added referrals.

156. *See, e.g.*, 42 U.S.C. § 1320a-7b(b) (2012); Joan H. Krause, *Kickbacks, Honest Services, and Health Care Fraud After* Skilling, 21 ANNALS HEALTH L. 137 (2012).

157. This same phenomenon occurs in hospital acquisitions of other hospitals. *See* Regina E. Herzlinger et al., *Market-Based Solutions to Antitrust Threats — The Rejection of the Partners Settlement*, 372 NEW ENG. J. MED. 1287 (2015).

158. Complaint for Preliminary and Permanent Injunction and Damages, *supra* note 32.

159. Saint Alphonsus Med. Ctr.-Nampa, Inc. v. St. Luke's Health Sys., Ltd., Nos. 12-CV-00560-BLW, 13-CV-00116-BLW, 2014 WL 407446, at *13 (D. Idaho Jan. 24, 2014), *aff'd*, 778 F.3d 775 (9th Cir. 2015).

160. *Id.*

161. *Id.* A related theory would be a raising rival's cost theory regarding the vertical effects of the merger that would not cause exit from the market but merely raise costs for rivals. *See* Steven C. Salop & David T. Scheffman, *Raising Rivals' Costs*, 73 AM. ECON. REV. 267 (1983). Using the regulatory system as such a strategy, as through higher reimbursement rates, makes it more difficult for other physician groups to compete because of the lack of referrals sent to them. *See* Steven C. Salop et al., *A Bidding Analysis of Special Interest Regulation: Raising Rivals' Costs in a Rent Seeking Society*, *in* FTC LAW & ECON. CONFERENCE, THE POLITICAL ECONOMY OF REGULATION: PRIVATE INTERESTS IN THE REGULATORY PROCESS 102 (1984).

rules, the best way to increase the total provision of services is through "buying" referrals.[162] As long as the hospital has some unfilled beds, it can increase its total profits by filling them. One way to do this is by using referrals. The difference between the hospital's charges and the marginal cost of an additional patient will flow to the bottom line as additional profit. This business strategy has the consequence of foreclosing competition by favoring in-network providers over out-of-network providers.

III. THE ECONOMICS OF THE HORIZONTAL CASE

In a horizontal merger case, the antitrust concern rests with the following two issues: "A merger can enhance market power simply by eliminating competition between the merging parties . . . . A merger also can enhance market power by increasing the risk of coordinated, accommodating, or interdependent behavior among rivals."[163] In *St. Luke's*, the horizontal case focused on a number of the traditional competitive effects elements, as embodied in the 2010 Merger Guidelines.[164] We address those issues below, positing that a more sophisticated analysis by the courts would have led to better guidance in line with economic theory. The horizontal case would have been stronger had St. Luke's properly understood the quality-based arguments and how quality and cost work within the same merger.

A. Countervailing Power in Health Care

From the horizontal perspective (as well as from a vertical one), physician acquisitions implicate negotiating power between providers and insurers. It is precisely to obtain the benefits of increased negotiating leverage that motivates many hospitals (and physician groups) to merge to obtain countervailing power over insurance providers and improve hospital bargaining position vis-à-vis insurers.[165] This Section lays out

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162. One might also attempt a related strategy. Because of the politics of pricing certain specialty services too high, hospitals might engage in spreading out the cost in what is the competitive (commoditized) services thereby raising the prices of these services because of the anti-competitive cross subsidization.

163. 2010 MERGER GUIDELINES, *supra* note 33, § 1.

164. Saint Alphonsus Med. Ctr.-Nampa Inc. v. St. Luke's Health Sys., Ltd. (*St. Luke's*), 778 F.3d 775, 783–92 (9th Cir. 2015).

165. Peter P. Budetti et al., *Physician and Health System Integration*, 21 HEALTH AFF. 203 (2002); Michael A. Morrisey et al., *Managed Care and Physician/Hospital Integration*, 15 HEALTH AFF. 62 (1996); Douglas A. Staiger et al., *Trends in the Work Hours of Physicians in the United States*, 303 JAMA 747 (2010).

the arguments associated with such countervailing power.[166] Indeed, such an argument was a basis to justify the *St. Luke's* merger.[167] Adult primary care physician reimbursement rates with insurers received treatment in two short paragraphs on appeal.[168]

In some geographic markets, dominant health insurers appear to have some measure of monopsony power (enhanced market power of buyers) in dealing with fragmented health care providers.[169] The exercise of monopsony power by health insurers increases their profits at the expense of the health care providers.[170] If the unorganized health care providers (physicians or nurses) or hospitals can consolidate their operations, they can create countervailing power, i.e., power on the other side of the market. In doing so, the market structure becomes one with elements of bilateral monopoly.[171] Interestingly, the creation of countervailing monopoly power in the face of a lawful monopsony reduces the allocative inefficiency resulting from the exercise of monopsony power. This may seem counterintuitive, but it is correct nonetheless. These results can be illustrated with a simple economic model.

1. The Economics of Countervailing Power

The basic economic model of countervailing power is illustrated in

166. *See generally* David T. Scheffman & Pablo T. Spiller, *Buyers' Strategies, Entry Barriers and Competition*, 30 ECON. INQUIRY 418 (1992).

167. Saint Alphonsus Med. Ctr.-Nampa, Inc., v. St. Luke's Health Sys., Ltd., Nos. 12-CV-00560-BLW, 13-CV-00116-BLW, 2014 WL 407446, at *12 (D. Idaho Jan. 24, 2014), *aff'd*, 778 F.3d 775 (9th Cir. 2015) ("The leverage gained by the Acquisition would give St. Luke's the ability to make these higher rates 'stick' in future contract negotiations.").

168. *St. Luke's*, 778 F.3d at 786–87.

169. For a compact treatment of the economics of monopsony, see Roger D. Blair & Christina DePasquale, *Bilateral Monopoly: Economic Analysis and Antitrust Policy*, *in* 1 THE OXFORD HANDBOOK OF INTERNATIONAL ANTITRUST ECONOMICS, *supra* note 7, at 364; Roger D. Blair & Christine Piette Durrance, *Group Purchasing Organizations, Monopsony, and Antitrust Policy*, 35 MANAGERIAL & DECISION ECON. 433 (2014).

170. For an examination involving physicians, see Roger D. Blair & Kristine L. Coffin, *Physician Collective Bargaining: State Legislation, and the State Action Doctrine*, 26 CARDOZO L. REV. 1731 (2005); Roger D. Blair & Jill Boylston Herndon, *Physician Cooperative Bargaining Ventures: An Economic Analysis*, 71 ANTITRUST L.J. 989 (2004).

171. The economics of bilateral monopoly can be traced to A.L. Bowley, *Bilateral Monopoly*, 38 ECON. J. 651 (1928). *See also* Roger D. Blair et al., *A Pedagogical Treatment of Bilateral Monopoly*, 55 S. ECON. J. 831 (1989); Roger D. Blair & D. Daniel Sokol, *The Rule of Reason and the Goals of Antitrust: An Economic Approach*, 78 ANTITRUST L.J. 471, 492–96 (2012); Richard Friedman, *Antitrust Analysis and Bilateral Monopoly*, 1986 WIS. L. REV. 873; Fritz Machlup & Martha Taber, *Bilateral Monopoly, Successive Monopoly, and Vertical Integration*, 27 ECONOMICA 101 (1960). In the health context, see Blair & Coffin, *supra* note 170, and Blair & Herndon, *supra* note 170.

Figure 1. The demand for health services is captured by the negatively sloped line *D* while the supply is represented by *S*. If the market were competitive, Q_1 units of health services would be purchased at P_1 per unit. This competitive solution maximizes social or total welfare, which is the sum of consumer and producer surplus. If a dominant health insurer purchases the health services, profit maximization will lead to a restriction in the quantity purchased. For the monopsonist, profit maximization requires purchasing the quantity where the marginal expenditure on health care services (*ME*) equals demand.[172] This means that the quantity purchased will fall to Q_2 and price will fall to P_2. The exercise of monopsony power converts some producer surplus into consumer (or buyer) surplus. From a social welfare perspective, this is just a transfer from producers of health care services to the health insurers. When quantity falls from Q_1 to Q_2, we can see that the value of health care services between Q_1 and Q_2, as measured by the height of demand, exceed their cost as measured by the height of supply. Thus, there is an allocative inefficiency (area *deb*) associated with monopsony—even a lawful one.

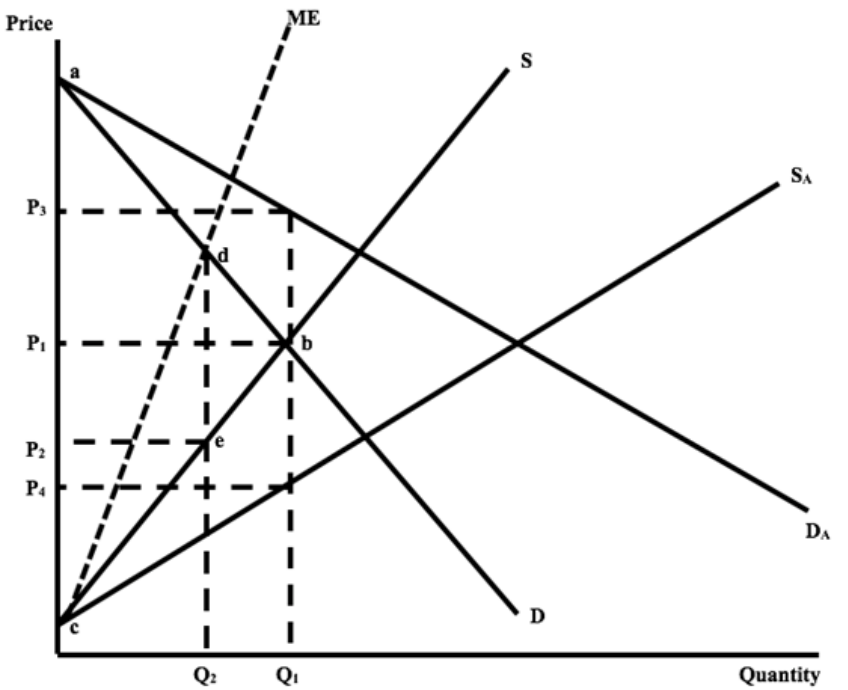


Figure 1

172. One can understand this via a technical proof. We provide a description instead in the text.

The loss of producer surplus provides a powerful incentive for health care providers to consolidate. In doing so, they become a monopolist. The market structure becomes one of bilateral monopoly: a monopolist supplier confronting a monopsonist buyer. A change in the market structure from monopsony to bilateral monopoly is procompetitive. The output will increase from the noncompetitive level (Q_2) to the competitive level (Q_1), i.e., bargaining will lead to the surplus-maximizing output. This eliminates the allocative inefficiency and the corresponding deadweight total welfare loss.

In a bilateral monopoly, the two parties have an incentive to agree on the surplus-maximizing quantity and then bargain over the price. In this context, the price is not a rationing device; after all, the quantity has already been agreed upon. Instead, the price is simply a mechanism for sharing the jointly maximized surplus. Consequently, the price is indeterminate. We can bound the price range by considering the all-or-none demand (D_A) and the all-or-none supply (S_A).

At quantity Q_1, the height of the all-or-none demand is the maximum price (P_3) the monopolist can command. At that price, all of consumer surplus has been extracted. Analogously, at Q_1, the height of the all-or-none supply is the lowest price since that price (P_4) allows the monopsonist to extract the entire producer surplus. These maximum and minimum prices set the bargaining range. The competitive price is in that range, but there is nothing that particularly recommends that price as a solution.[173]

Although the actual price is indeterminate, there are some likely price effects. If competing sellers merge in response to monopsony, the price is apt to rise above P_2—because the firms merged in pursuit of a better deal. These price movements, however, have no competitive significance since quantity does not respond to such price changes. The price movement does have distributive consequences, but these have no impact on total welfare.

The Ninth Circuit examined two related issues involving the possibility of bilateral monopoly in *St. Luke's*.[174] The first involved adult primary care physician provider reimbursements. Though noting that the district court had found that the "acquisition limited the ability of insurers to negotiate with the merged entity," the Ninth Circuit merely

173. In this specific example, the competitive price divides the surplus evenly, which is consistent with the Nash bargaining solution.

174. Saint Alphonsus Med. Ctr.-Nampa Inc. v. St. Luke's Health Sys., Ltd. (*St. Luke's*), 778 F.3d 775, 786–87 (9th Cir. 2015).

summarized that the lower court did not find that any price decreases would be passed onto consumers.[175]

B. Role of Efficiencies

Horizontal merger studies of hospitals show that efficiency gains are possible.[176] For example, Dranove and Lindrooth find efficiencies in cost decreases of fourteen percent for standalone hospitals integrated into hospital systems.[177] Other mergers may lack efficiencies and may serve to raise prices.[178]

Post-ACA there has been a trend toward vertical integration of physician groups into hospitals. According to Kocher and Sahni, more than half of all physicians are now employed by hospitals.[179] The combination of a hospital and one or more physician groups is sometimes referred to as an integrated delivery system (IDS). Such IDSs should theoretically lower costs because they can more easily coordinate care, improve communication among providers, reduce unnecessary duplication of tests and procedures, and generate other efficiencies.[180]

When a hospital first acquires a physician group, the acquisition is vertical in nature. The hospital is acquiring inputs it requires in the production of health care services. The ideas about reduced transactions costs and other efficiencies achieved through vertical integration described earlier apply to this case. Once the hospital is already established as an IDS, then subsequent acquisitions of physician groups continue to be vertical in nature. However, they also now have elements of horizontal integration as the IDS, which is already comprised of physician groups, continues to acquire additional physician groups.

The effects of vertical versus horizontal integration may be different.

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175. *Id.*

176. David Dranove & Richard Lindrooth, *Hospital Consolidation and Costs: Another Look at the Evidence*, 22 J. HEALTH ECON. 983 (2003). *But see* Teresa D. Harrison, *Do Mergers Really Reduce Costs? Evidence from Hospitals*, 49 ECON. INQUIRY 1054 (2011) (finding that costs declined but then rose to pre-merger levels).

177. Dranove & Lindrooth, *supra* note 176, at 983 ("Mergers in which hospitals consolidate financial reporting and licenses generate savings of approximately 14%: 2, 3, and 4 years after merger.").

178. Gautam Gowrisankaran et al., *Mergers When Prices Are Negotiated: Evidence from the Hospital Industry*, 105 AM. ECON. REV. 172, 174, 195 (2015) (finding a 30.5% price increase in the FTC challenge against the Inova merger).

179. Robert Kocher & Nikhil R. Sahni, *Hospitals' Race to Employ Physicians – The Logic Behind a Money-Losing Proposition*, NEW ENG. J. MED., May 12, 2011, at 1790, 1790.

180. Wenke Hwang et al., *Effects of Integrated Delivery System on Cost and Quality*, 19 AM. J. MANAGED CARE e175 (2013).

First, prices may be reduced through transactions cost savings generated through vertical integration. Second, prices may increase through the impact of tied purchasing through vertical integration. In other words, prices could be affected through the bundling of physician and hospital services. Finally, prices could be positively affected if the horizontal integration that occurs reduces the number of competitors and/or creates market power.

The potential for efficiencies exists in both the horizontal integration of physician groups as well as in the vertical integration of physician groups with hospitals. Rationales for integration among physicians into physician groups include:

> [C]reating modern practice infrastructure such as information technology (IT) and revenue cycle enhancement, enhancing operating efficiency, creating negotiating leverage, relieving physicians of administrative duties, income preservation, improving quality, increasing scale to manage risk contracts, improving the ability to coordinate care and referrals, positioning to serve as an ACO under health reform, fostering physician leadership, supporting population health, and improved ability to manage an uncertain and turbulent environment.[181]

Physician and physician groups may also face incentives to integrate with hospitals. These rationales include:

> [P]reparing for global risk contracting or capitation (e.g., by incorporating PCPs into hospital networks), increasing network size and geographic coverage to handle risk contracting, taking responsibility for the health status of the local population, offering a seamless continuum of care, responding to federal and state health reform legislation, and protecting and expanding the supply of physicians.[182]

These are not the only rationales. Additionally:

> During the 2000s, some additional rationales were added: mitigating competition between hospitals and their medical staffs, sharing the cost of clinical IT with physicians, helping physicians stabilize their incomes and supporting malpractice expenses, increasing the predictability of the physician's caseload with a desire to improve care, developing regional service lines, creating entry barriers to key clinical services,

181. Burns et al., *supra* note 111, at 56.

182. *Id.* at 67.

> helping hospitals deal with physician shortages and recruitment needs, developing a branding and differentiation strategy, enhancing clinical quality, leveraging payers, and preparing for ACOs . . . .[183]

These rationales for integration suggest that there are some pro-competitive reasons for potential merger efficiencies that courts should weigh as part of their analysis.

Some literature has tested these hypotheses directly. Baker, Bundorf, and Kessler investigated the effects of vertical integration in health care on hospital pricing power.[184] Using hospital claims data for non-elderly, privately-insured patients, the authors constructed county-level indices of hospital prices (as well as volumes of hospital admissions and spending) and tested the effects of vertical integration on these outcomes.[185] The results suggested that fully vertically integrated hospitals were associated with higher hospital prices, which the authors interpreted as confirming the hypothesis that vertical integration led to increased hospital market power.[186]

In a recent working paper, Baker, Bundorf, and Kessler analyze the relationship between hospital ownership of physician practices and hospital choice by the patient.[187] Using hospital admission data for Medicare recipients, the authors find an increased probability that the admitting physician refers a patient to the hospital that owns the physician group, thereby creating an implicit payment for referral.[188] Additionally, their study raises concerns about whether or not this increased probability results in patients choosing higher cost and lower quality hospitals when the physician group is owned by the hospital.[189]

In a series of papers, Carlin, Dowd, and Feldman also tested these hypotheses, but were able to specifically test the effects of horizontal integration as distinct from vertical integration.[190] They hypothesized

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183. *Id.* at 67–68.

184. Laurence C. Baker et al., *Vertical Integration: Hospital Ownership of Physician Practices Is Associated with Higher Prices and Spending*, 33 HEALTH AFF. 756 (2014).

185. *Id.* at 756.

186. *Id.* at 762.

187. Baker et al., *supra* note 152.

188. *Id.* at 17.

189. *Id.*

190. Caroline S. Carlin et al., *Changes in Quality of Health Care Delivery After Vertical Integration*, 50 HEALTH SERVS. RES. 1043 (2015) [hereinafter Carlin et al., *Changes*]; Carlin et al., *supra* note 21; Caroline S. Carlin et al., The Impact of Provider Consolidation on Price: Horizontal Integration and Tied Purchasing (Sept. 2013) (unpublished manuscript), http://conference.nber.org/confer//2013/HOPf13/Carlin_Feldman_Dowd.pdf [https://perma.cc/QD6R-G4YK] [hereinafter

that further horizontal integration between newly acquired physician groups and already-acquired physician groups may lead to higher prices because of increased market power, as it reduces the amount of competition in the market for physician services.[191] They further hypothesized that vertical integration between the hospital and physician groups may lead to higher or lower prices depending on the respective effects of tied contracting or bundling of physician and hospital services (positive) and transaction costs (negative).[192] Using a unique setting where three multi-specialty physician clinics were acquired by two hospital IDSs, the authors tested the effects of IDS acquisition of physician groups (which, in their setting, necessarily includes aspects of both vertical and horizontal integration) on physician and hospital prices.[193] They found evidence supportive of the market power hypothesis, where physician prices increased, and some evidence supportive of the tied contracting hypothesis, where hospital prices increased.[194]

Carlin, Dowd, and Feldman used the same data and acquisition setting to test two other relevant questions. They examined the effect of provider consolidation first on health care quality[195] and second on physician referral patterns.[196] Using cancer screening rates and ER use as indicators of health care quality, the authors found small positive effects on health care quality, suggesting limited increases in quality of care measures.[197] Additionally, when studying the effect of integration on physician referral patterns, the authors found some reduction in the use of historically-selected facilities and some increase in the use of the acquiring IDS facilities.[198]

Vertical integration in the hospital setting has yielded mixed empirical results. While some studies find efficiencies in limited settings,[199] others find an increase in prices,[200] and yet others find little

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Carlin et al., Impact of Provider Consolidation on Price].

191. Carlin et al., Impact of Provider Consolidation on Price, *supra* note 190, at 3.

192. *Id.* at 2–3.

193. *Id.* at 1.

194. *Id.* at 14.

195. Carlin et al., *Changes*, *supra* note 190.

196. Carlin et al., *supra* note 21.

197. Carlin et al., *Changes*, *supra* note 190, at 1048, 1065.

198. Carlin et al., *supra* note 21, at 1.

199. Federico Ciliberto & David Dranove, *The Effect of Physician-Hospital Affiliations on Hospital Prices in California*, 25 J. HEALTH ECON. 29, 37 (2006).

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

effect on total welfare.[201] There has been scant actual empirical evidence indicating that merger efficiencies can overcome the anticompetitive effects created by mergers.[202] Most prior work has been unable to investigate this specific question because of a lack of data on how mergers ultimately affect variable and marginal costs. A recent paper by Ashenfelter, Hoskin, and Weinberg, however, had sufficient data to test both the anticompetitive effects of a merger, as well as the potential merger efficiencies that result.[203] The authors examined a merger between two firms in the brewing industry, Coors and Miller, and found that "[o]n net, we find that despite reducing the number of macrobrewers from three to two, efficiencies created by the merger offset the incentive to increase prices in the average regional market in the long run."[204] At least in their specific case study, the authors showed it is possible for efficiencies to offset price increases resulting from a merger.[205]

Overall, both the district and appeals court in *St. Luke's* ignored the empirical analysis of physician group acquisitions. Further, a robust discussion of efficiencies was lacking in the Ninth Circuit. Indeed, the court explained, "We remain skeptical about the efficiencies defense in general and about its scope in particular."[206] Such mistrust of efficiencies that relies on outdated United States Supreme Court cases from the 1960s[207] and ignores the acceptance of efficiencies in other circuits where efficiencies have been addressed[208] is disappointing, regardless of whether or not the efficiencies in *St. Luke's* could have saved the merger. In order to explain efficiencies in the merger context, below we lay out the economics of merger efficiencies as well as a case analysis of the treatment of efficiencies by prior courts in the hospital merger

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201. Robert S. Huckman, *Hospital Integration and Vertical Consolidation: An Analysis of Acquisitions in New York State*, 25 J. HEALTH ECON. 58, 58 (2006).

202. Orley C. Ashenfelter et al., *Efficiencies Brewed: Pricing and Consolidation in the US Beer Industry*, 46 RAND J. ECON. 328, 328–29 (2015).

203. *Id.*

204. *Id.* at 330.

205. *Id.* at 352; *see also* Dario Focarelli & Fabio Panetta, *Are Mergers Beneficial to Consumers? Evidence from the Market for Bank Deposits*, 93 AM. ECON. REV. 1152 (2003) (finding that efficiencies outweigh market power effects in the banking merger context).

206. Saint Alphonsus Med. Ctr.-Nampa Inc. v. St. Luke's Health Sys., Ltd. (*St. Luke's*), 778 F.3d 775, 790 (9th Cir. 2015).

207. *See* FTC v. Procter & Gamble Co., 386 U.S. 568 (1967); Brown Shoe Co. v. United States, 370 U.S. 294 (1962).

208. *See, e.g.*, ProMedica Health Sys., Inc. v. FTC, 749 F.3d 559, 571 (6th Cir. 2014); FTC v. H.J. Heinz Co., 246 F.3d 708, 720–22 (D.C. Cir. 2001); FTC v. Tenet Health Care Corp., 186 F.3d 1045, 1054–55 (8th Cir. 1999); FTC v. Univ. Health, Inc., 938 F.2d 1206, 1222–24 (11th Cir. 1991).

setting.

C. Economics of Efficiency-Enhancing Mergers

In this Section we lay out the economics of efficiency-enhancing mergers. We do so to set up the discussion of efficiencies in the *St. Luke's* decision in the next section. To properly set up the case-specific efficiency discussion, we begin with first principles. Mergers among health care providers may yield efficiencies due to cost reductions or due to quality enhancement. In either case, total welfare may increase or decrease depending upon how much the merger alters market structure. This Section analyzes cost-based efficiencies, efficiency-enhancing joint ventures among sellers and buyers, and quality-based efficiencies.

1. Cost-Based Efficiencies

There are some instances in which a merger improves efficiency, for example by reducing the costs of production and/or distribution.[209] If the merger does not enhance market power, the cost savings will be passed on to some extent to consumers in the form of lower prices.[210] In this case, because both consumer welfare and total welfare are increased by the merger, the antitrust policy should be one of benign neglect.[211] In some instances, however, the improved efficiency is accompanied by enhanced market power, as Williamson noted in his famous exposition on the efficiency trade-off.[212] This may still result in greater output and lower prices and, therefore, would increase both consumer welfare and total welfare. The complication arises when there is a cost reduction due to the efficiency accompanied by an increase in market power that leads to a price increase above the previous level. This situation creates a need to weigh the benefits of improved efficiency against the costs of allocative inefficiency. The antitrust problem addressed by Williamson provides a good illustration of the required balancing.[213] The same analysis applies to all joint ventures and agreements that are necessary to realize the efficiency.

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209. 2010 MERGER GUIDELINES, *supra* note 33, § 10.

210. In the extreme case, where the market is perfectly competitive, the firm will not pass on any firm-specific efficiency.

211. Under certain circumstances, there may be a difference in outcomes as to efficiencies as between total welfare and consumer welfare tests. *See* Blair & Sokol, *supra* note 171, at 482–87.

212. Oliver E. Williamson, *Economies as an Antitrust Defense: The Welfare Tradeoffs*, 58 AM. ECON. REV. 18 (1968).

213. *See id.*

2. Efficiency-Enhancing Joint Ventures and Mergers Among Sellers

The case analyzed by Williamson illustrates the complications that may accompany efficiency-enhancing agreements, joint ventures, and horizontal mergers.[214] In Figure 2, the pre-agreement price and quantity, P_1 and Q_1, respectively, are determined by the equality of demand (D) and the competitive supply, which is shown as $MC_1 = AC_1$. The analysis assumes that industry marginal cost (MC_1) and average cost (AC_1) are constant. The merger increases efficiency as reflected in the decrease in costs from $MC_1 = AC_1$ to $MC_2 = AC_2$. If market power does not increase as a result of the merger, the cost savings will be passed on to consumers.[215] The price will fall to P_2 and the quantity consumed will rise from Q_1 to Q_2. In this case, the merger raises no antitrust policy concerns since the welfare effects are unambiguously positive: both consumer welfare and total welfare increase.

Complications arise when market power increases due to an efficiency-enhancing merger. In Figure 2, suppose that the merger leads to the same cost savings, but that the exercise of the resulting market power leads to an increase in price from P_1 to P_3 with a corresponding decrease in quantity from Q_1 to Q_3. From the consumer's perspective, the merger appears to be clearly undesirable. The price paid rises, and the consumer does not appear to enjoy any of the benefits from the cost reduction. The allocative inefficiency flowing from the exercise of market power causes consumer surplus to fall from area acP_1 to area abP_3. If the lawfulness of the merger is determined solely on the basis of consumer welfare in this market, it would be unlawful.

214. William M. Landes addresses a similar problem when a horizontal price fixing cartel reduces transaction costs while increasing price. William M. Landes, *Optimal Sanctions for Antitrust Violations*, 50 U. CHI. L. REV. 652 (1983).

215. Due to the perfectly elastic competitive supply curve, all of the cost saving is passed on to consumers when the market remains competitive. If the supply were positively-sloped, not all of the cost saving would be passed on, but output would still rise and price would still fall.

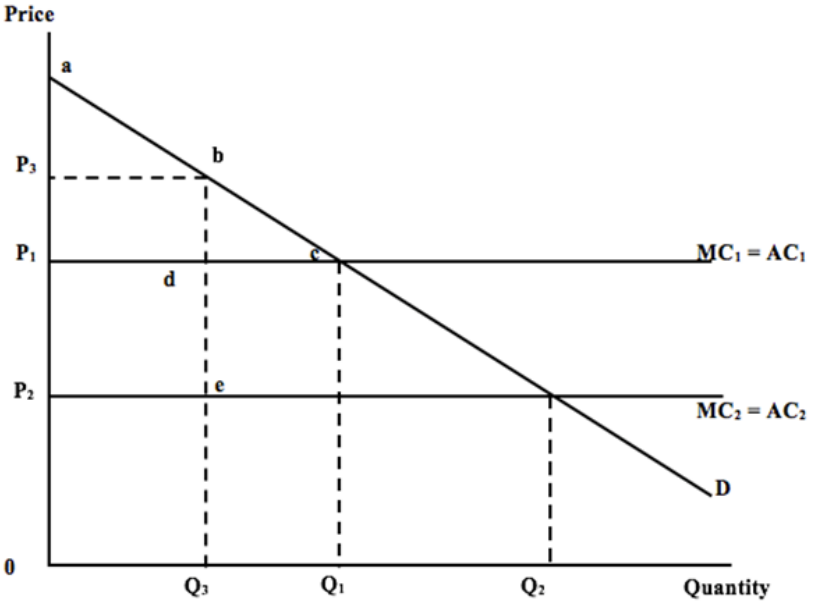


Figure 2

If one looks at this merger from a total welfare perspective, there are two important observations worth making. First, whether total welfare rises or falls depends on the relative magnitudes of the allocative inefficiency and the cost savings. In Figure 2, the allocative inefficiency is given by the triangular area *bcd*. The profit to the sellers is equal to the rectangle P_3beP_2. Part of this, area P_3bdP_1, is a transfer from consumers to producers and part of it represents the cost savings. Specifically, the cost savings is given by the rectangle P_1deP_2. As Figure 2 is drawn, the cost savings appears to be larger than the allocative inefficiency. In that event, the merger should not be barred on total welfare grounds because the benefits of the cost saving outweigh the allocative inefficiency. The merger is Kaldor-Hicks efficient because the winners (the producers) could compensate the losers (the consumers) and still be better off.[216] But this need not always be the case. When the allocative inefficiency outweighs the cost saving, the merger reduces both consumer welfare and total welfare. The merger is inefficient on the Kaldor-Hicks criterion because the winners cannot profitably compensate the losers. Such a merger should be forbidden. Since we cannot presume that the net effect

216. For a discussion of Kaldor-Hicks efficiency, see THOMAS J. MICELI, THE ECONOMIC APPROACH TO LAW 1–7 (2d ed. 2009). For a more extensive treatment, see RICHARD E. JUST ET AL., THE WELFARE ECONOMICS OF PUBLIC POLICY 32–38 (2004).

of an efficiency-enhancing agreement among rival sellers will inevitably be positive or negative, we need reliable estimates of the cost savings as well as of the allocative inefficiency. This is particularly daunting for proposed mergers because both estimates are needed before the merger is actually consummated.

Merger simulations have proved useful in many instances,[217] though they do not appear to be well-equipped to deal with the problem at hand.[218] The typical merger simulation does predict price effects before a merger has actually occurred. These simulations, however, use estimated demand elasticities and assumptions about the conduct of the firms to back out calculations of a firm's marginal cost. This makes it difficult to incorporate the cost savings and measure the potential allocative inefficiency. It is difficult for the analyst to estimate the cost savings a merged firm is apt to realize without very detailed cost data and very specialized institutional knowledge. Without specific cost estimates, merger simulation does not address the effect of efficiency. Moreover, estimating the potential allocative inefficiency is complicated by the fact that a firm's post-merger conduct may differ substantially from its pre-merger conduct. Consequently, it is doubtful that merger simulations are the answer.

Further, even if one's focus is solely on *consumer* welfare, the cost savings benefit consumers generally. These cost savings do, of course, improve the profits of the sellers in this market. But it would be a mistake to dismiss these cost savings as of no consequence to consumers.[219] The sellers' costs fall because fewer of society's scarce resources are needed to produce the output being sold.[220] These resources are then available to produce goods and services in other markets. The consumer benefits flowing from these cost savings may be diffused throughout the economy, but they exist nonetheless.

Below we offer some numerical examples of the potential efficiency gains of a merger:

Assume the demand curve written as

$$P = 500 - 0.5Q$$

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217. *See* Roy J. Epstein & Daniel L. Rubinfeld, *Merger Simulation: A Simplified Approach with New Applications*, 69 ANTITRUST L.J. 883 (2001) (explaining the use of merger simulation); *see also* 2010 MERGER GUIDELINES, *supra* note 33, § 6.1.

218. Dennis W. Carlton, *The Relevance for Antitrust Policy of Theoretical and Empirical Advances in Industrial Organization*, 12 GEO. MASON L. REV. 47, 61 (2003).

219. We are not counting the cost savings twice. One may dismiss them as beneficial to the sellers, but they should be considered for their benefits to consumers.

220. We are not referring to the resources not being used because output has been reduced from Q_1 to Q_3. We are instead referring to the resources now needed to produce Q_3.

The constant marginal cost (*MC*) and average cost (*AC*) written as

$$\begin{aligned} MC = AC &= 100 \\ 500 - 0.5Q &= 100 \\ Q^* &= 800 \end{aligned}$$

The pre-merger price *P** is equal to the marginal cost, i.e.,

$$P^* = 100$$

The resulting consumer surplus is

$$\begin{aligned} CS &= {}^{1}/_{2}(500 - 100)(800) \\ &= 160{,}000 \end{aligned}$$

Following a merger, suppose that price rises to, say, 120. The quantity would then be 760. The deadweight total welfare loss would then be

$$\begin{aligned} \Delta &= {}^{1}/_{2}(120 - 100)(800 - 760) \\ &= {}^{1}/_{2}\big((20)(40)\big) \\ &= 400 \end{aligned}$$

The minimum cost saving that would offset this welfare loss is easy to find:

$$(100 - x)(760) = 400$$

Thus, the decrease in MC and AC (ΔC) is

$$\begin{aligned} \Delta C &= \frac{400}{760} \\ &= 0.53 \end{aligned}$$

Contrary to the assertions of critics, efficiency gains that are rather modest can completely offset a substantial increase in price. In this example, a cost decrease of only $0.53 completely offsets the welfare loss associated with a price increase of $20.

Consumer Welfare:

The story is quite different if we focus on consumer surplus. The pre-merger consumer surplus is 160,000. Following the merger and the consequent price increase, consumer surplus falls to

$$\begin{aligned} CS_2 &= {}^{1}/_{2}(500 - 120)(760) \\ &= 144{,}400 \end{aligned}$$

Thus, consumer welfare falls by 15,600.

Profits:

Initially, the marginal cost was 10. Following the merger and the cost saving, the economic profit is

$$\Delta\pi = (120 - MC_2)(760)$$

The part attributable to the price rise is

$$(120 - 100)(760) = 15{,}200$$

The rest is due to the cost saving.

If the cost saving must be large enough to offset the loss in consumer surplus, then the minimum cost saving is equal to the number that we calculated plus the price increase. This is because the conversion of consumer surplus to producer surplus is equal to the increase in price times the new quantity. Is this "extraordinary" for purposes of merger law? If so, then under the sliding scale, extraordinary efficiencies are not that "extraordinary" in size.

3. Welfare Effects of Quality

Quality issues are particularly difficult for courts to understand and work through in antitrust merger cases.[221] Health care hospital mergers present particularly complex issues involving quality; the Ninth Circuit in *St. Luke's* was no different in its weak analysis of quality competition and gave significantly less attention to quality concerns than it did to cost-based efficiencies.[222] Below we explain the economics of quality before working through merger efficiencies more generally in case law along both cost and quality dimensions. Firms compete on quality in health care as fiercely as they may on price. Since the justification for a hospital merger may rest upon quality arguments, it is important to understand the welfare effects of quality mergers.

Some mergers may improve the quality of the hospital's output.[223] Irrespective of the welfare effects of the improved quality, neither the antitrust agencies[224] nor the courts[225] will recognize these benefits unless

221. *See* Roger D. Blair & D. Daniel Sokol, *Quality-Enhancing Merger Efficiencies*, 100 IOWA L. REV. 1969, 1971 (2015).

222. Saint Alphonsus Med. Ctr.-Nampa Inc. v. St. Luke's Health Sys., Ltd. (*St. Luke's*), 778 F.3d 775, 791–92 (9th Cir. 2015).

223. Quality is a general term that acquires meaning in specific context. It may refer to durability, fit and finish, style, color fastness, taste, texture, freedom from defects, and the like.

224. 2010 MERGER GUIDELINES, *supra* note 33, § 10.

they are merger-specific. If the quality change can be realized without the consolidation, then the efficiencies will not offset any reduction in competition. Consequently, in what follows, the quality changes are assumed to be merger-specific, i.e., the quality improvement is a product of the merger and cannot be realized without the merger.

Consumers prefer higher quality over lower quality goods and services. Thus, when quality improves, consumers are willing to pay more for the same quantity of the good. Initially, assume that improved quality leads to a parallel shift in demand for the good. The effect on consumer welfare is ambiguous. In fact, consumer surplus may rise, fall, or stay the same depending on what happens to price.

In Figure 3, D_1 represents demand before the merger and the corresponding quality improvement. The supply is not restricted by the marginal cost (*MC*). The pre-merger price and quantity are P_1 and Q_1, respectively. Following the merger, quality of the output improves and demand shifts to D_2. If the price rises to P_2, quantity will not change. In other words, none of the quality change is "passed on" so to speak. In this case, consumer surplus will be unchanged. Prior to the merger, consumer surplus was equal to the triangular area abP_1. Following the merger, consumer surplus is equal to the area of cdP_2. Those two triangular areas are precisely the same size. To be sure, the enhanced market power leads to some allocative inefficiency because consumer surplus would rise to ceP_1 if the merger produced the quality improvement without enhancing market power. But this is not the relevant comparison because we assume that the quality improvement and the enhanced market power are inextricably intertwined. Based on this model, on economic grounds, therefore, there is no reason to approve or disapprove the merger.

225. *See, e.g.*, FTC v. Sysco Corp., 113 F. Supp. 3d 1, 57–58 (D.D.C. 2015); United States v. H & R Block, Inc., 833 F. Supp. 2d 36, 89–90 (D.D.C. 2011).

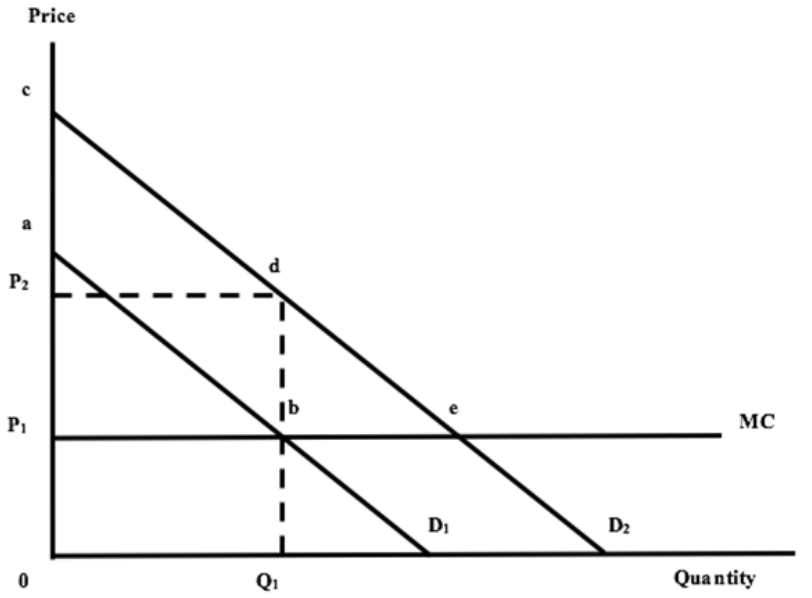


Figure 3

In Figure 4, D_1, D_2, and *MC* from Figure 3 have been reproduced. In this case, however, assume that the increased market power leads to a price increase to P_2, which leads to an increase in the quantity purchased. As long as quantity increases beyond Q_1, consumer surplus will rise. The premerger consumer surplus is again equal to the area abP_1. The post-merger consumer surplus is equal to area cdP_2, which is unambiguously larger than abP_1. If the merger is accompanied by an increase in market power, there will be some allocative inefficiency, but this is not relevant for antitrust policy purposes. What is important is that consumer surplus rises with the merger. On economic grounds, therefore, this merger should be applauded.

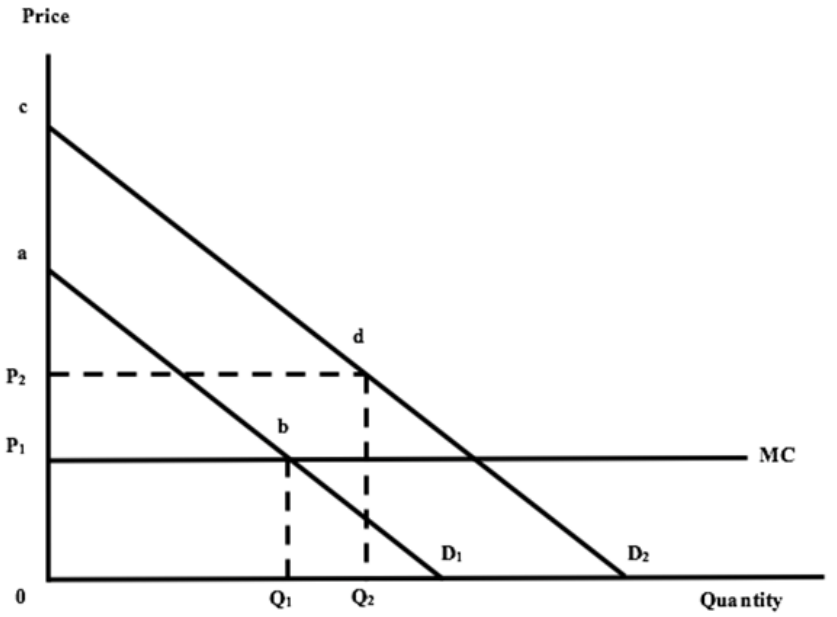


Figure 4

In Figure 5, the merger enhances both quality and market power. Price rises to P_2 and quantity falls to Q_2. In this case, consumer surplus necessarily falls. The pre-merger consumer surplus is, of course, area abP_1. The post-merger consumer surplus is area cdP_2, which is unambiguously smaller than area abP_1. Without more, this merger should not be approved on welfare grounds.

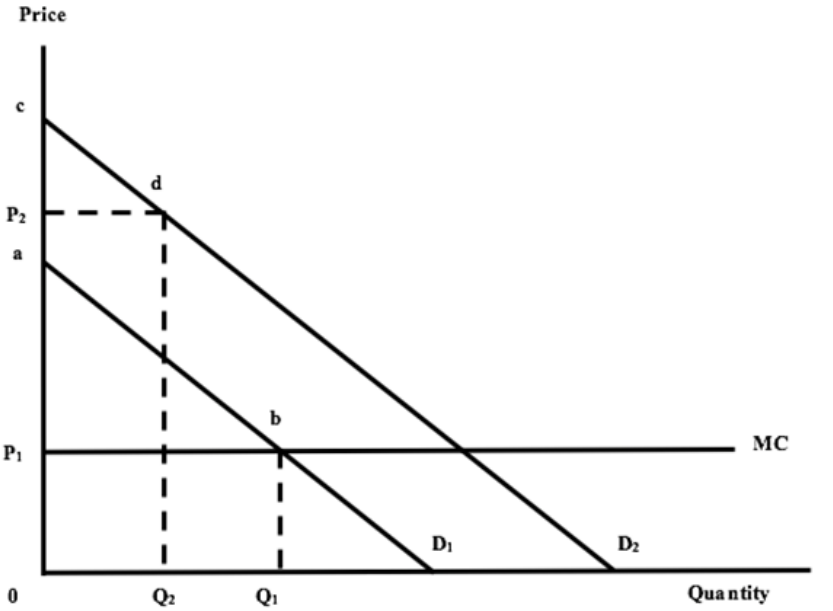


Figure 5

In these three cases, the quality improvement associated with the merger led to the same shift in demand, but the welfare changes were driven by the extent of the increase in market power. No legitimate inferences can be drawn from the fact that the post-merger price rose. In the case of a parallel shift in demand, it is the quantity change that drives the welfare result. Thus, it is tempting to use a quantity test. If the post-merger quantity will be higher, then the merger will improve consumer welfare. If the post-merger quantity will be lower, then the welfare effect will be negative. But such temptations should be avoided as such a quantity analysis will not necessarily tell us about what happens to consumer welfare.

Consider Figure 6. In this case, the improved quality causes D_1 to rotate to D_3, which has been drawn to where it intersects D_2 at the point defined by P_2 and Q_2. Now, the relevant comparison is between the pre-merger consumer surplus of abP_1 and the post-merger consumer surplus of cdP_2, which may well be larger than abP_1. Thus, there is no easy test unless one knows that the demand shift is parallel.

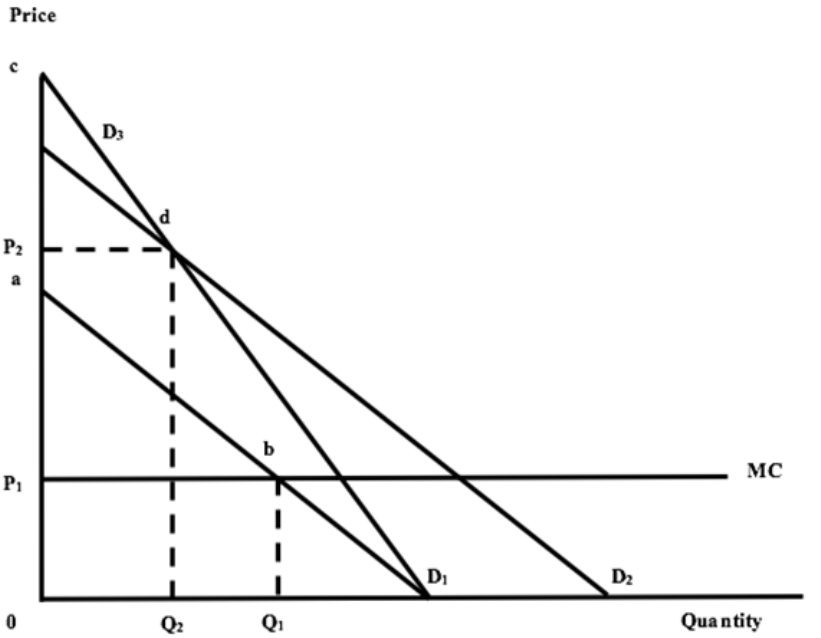


Figure 6

These examples illustrate how changes in quality may lead to different competitive outcomes. Such illustrations therefore suggest that courts must undertake a careful and nuanced approach to understand the implications of merger efficiencies. As we discuss below, most horizontal merger cases that discuss efficiencies do not fully integrate the economic analysis into their decision-making (at least not in the text of the decision) and instead provide a cursory analysis.

IV. THE LAW OF THE HORIZONTAL CASE

The economics of the horizontal case must be operationalized into law. After all, it is the administrability of economic thought into law that is the modern hallmark of antitrust case analysis.[226] This Part works through the judicial history of antitrust health care mergers and their analysis of efficiencies. The analysis of efficiencies in merger analysis shows an increasing willingness to identify where there may be

226. William E. Kovacic, *The Intellectual DNA of Modern U.S. Competition Law for Dominant Firm Conduct: The Chicago/Harvard Double Helix*, 2007 COLUM. BUS. L. REV. 1, 13–14; William H. Page, *Areeda, Chicago, and Antitrust Injury: Economic Efficiency and Legal Process*, 41 ANTITRUST BULL. 909, 909–11 (1996).

efficiencies. However, analysis remains uneven as between cost and quality based efficiencies and with an understanding that both cost and quality may be at issue in the same merger. What remains an unsettled question of merger case law is the situation where prices go up but so does quality.

A. Judicial History of Antitrust Mergers in Health Care—Overview

A string of several court losses over eight years in the 1990s by antitrust agencies in hospital mergers impacted both case law development and policy.[227] The cases used broader geographic markets than those alleged by the government and at times came up with different analyses relating to competitive effects than those alleged by the government antitrust enforcers. Consequently, the courts decided against the government antitrust enforcers in seven straight decisions.[228] The series of losses by the government had some difficult to measure effects. The sense within the practitioner community is that the losses emboldened potential merging parties to undertake acquisitions in some highly concentrated markets.[229]

An FTC retrospective study undertaken under the leadership of Chairman Tim Muris focused on consummated mergers that might make good candidates for government merger enforcement (as the price effects post-merger would be known).[230] The Commission found a case it deemed worth bringing in *In re Evanston Northwestern Healthcare Corp.*,[231] a post-consummated merger of Highland Park Hospital with

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227. FTC v. Tenet Healthcare Corp., 186 F.3d 1045 (8th Cir. 1999); FTC v. Freeman Hosp., 69 F.3d 260 (8th Cir. 1995); FTC v. Hosp. Bd. of Dirs. of Lee Cty., 38 F.3d 1184 (11th Cir. 1994); United States v. Long Island Jewish Med. Ctr., 983 F. Supp. 121 (E.D.N.Y. 1997); FTC v. Butterworth Health Corp., 946 F. Supp. 1285 (W.D. Mich. 1996), *aff'd mem.*, 121 F.3d 708 (6th Cir. 1997); United States v. Mercy Health Servs., 902 F. Supp. 968 (N.D. Iowa 1995), *vacated as moot*, 107 F.3d 632 (8th Cir. 1997); *see also* California v. Sutter Health Sys., 84 F. Supp. 2d 1057 (N.D. Cal. 2000), *aff'd*, 217 F.3d 846 (9th Cir. 2000), *amended by*, 130 F. Supp. 2d 1109 (N.D. Cal. 2001).

228. Terrell McSweeny, Comm'r, FTC, Keynote Remarks at the Clayton Act 100th Anniversary Symposium: The Clayton and FTC Acts: 100 Years of Looking Ahead 6 (Dec. 4, 2014), https://www.ftc.gov/system/files/documents/public_statements/603341/mcsweeny_-_aba_clayton_act_100th_keynote_12-04-14.pdf [https://perma.cc/BK4P-NGJB] ("Prior to Evanston, the FTC and DOJ had lost seven straight hospital merger challenges.").

229. Thomas L. Greaney, Commentary, *Competition Policy After Health Care Reform: Mending Holes in Antitrust Law's Protective Net*, 40 J. HEALTH POL. POL'Y & L. 897, 898 (2015).

230. Timothy J. Muris, Chairman, FTC, Remarks Before the 7th Annual Competition in Health Care Forum: Everything Old is New Again: Health Care and Competition in the 21st Century (Nov. 7, 2002), http://www.ftc.gov/speeches/muris/murishealthcarespeech0211.pdf [https://perma.cc/JE6B-6NG6].

231. Evanston Nw. Healthcare Corp., 144 F.T.C. 1 (2007).

Evanston Hospital and Glenbrook Hospital.[232] Together the merged entity became Evanston Northwestern Healthcare Corporation. FTC brought an administrative complaint,[233] and an ALJ found the merger to be anti-competitive,[234] which the Commission affirmed.[235] *Evanston* brought about a shift in the courts. Since that time, the government has won more cases, blocking hospital mergers[236] and chilling potential mergers. We provide this background of health care antitrust mergers to offer context for a discussion of the development of efficiencies in antitrust merger case law.

Antitrust doctrine shifted starting in the 1970s to take efficiencies seriously in both merger and conduct cases.[237] The belief in efficiencies outweighing anti-competitive effects underscores the paradigm shift in antitrust that began in the 1970s. This belief both by the antitrust agencies and courts has continued to the present. Under current antitrust doctrine for both mergers and conduct, efficiencies are an integral part of antitrust. In the merger context, though efficiencies perhaps have not provided the sole justification for particular merger cases (though efficiencies should have carried the day for the parties in the case of *FTC v. H.J. Heinz Co.*,[238] discussed below), efficiencies have been a staple of analysis of mergers in the various iterations of the Merger Guidelines, as we explore below, as well as in understanding the rule of reason more generally.[239] The Ninth Circuit's hostile reading of merger efficiencies in *St. Luke's* also goes against the antitrust jurisprudence of the past thirty years.[240] To be sure, efficiencies rarely come up in

232. *Id.* at 2–3.

233. *Id.* at 1.

234. *Id.* at 23 (finding that "Complaint Counsel proved that the challenged merger has substantially lessened competition in the product market of general acute inpatient services [sold to managed care organizations] and in the geographic market of the seven hospitals described above").

235. *Id.* at 1.

236. FTC v. Phoebe Putney Health Sys., Inc., 133 S. Ct. 1003 (2013); Saint Alphonsus Med. Ctr.-Nampa Inc. v. St. Luke's Health Sys., Ltd. (*St. Luke's*), 778 F.3d 775 (9th Cir. 2015); ProMedica Health Sys., Inc. v. FTC, 749 F.3d 559 (6th Cir. 2014); FTC v. OSF Healthcare Sys., 852 F. Supp. 2d 1069 (N.D. Ill. 2012); Reading Health Sys., No. 9353 (F.T.C. Dec. 7, 2012), http://www.ftc.gov/sites/default/files/documents/cases/2012/12/121207 readingsircmpt.pdf [https://perma.cc/3423-WMRJ] (Order Dismissing Complaint); Inova Health Sys. Found., 145 F.T.C. 366 (2008), http://www.ftc.gov/sites/default/files/documents/cases/2008/06/080617orderdismisscmpt.pdf [https://perma.cc/9LZ8-4KK8] (Order Dismissing Complaint).

237. Blair & Sokol, *supra* note 39, at 2515.

238. FTC v. H.J. Heinz Co., 246 F.3d 708 (D.C. Cir. 2001).

239. *See generally* Kovacic, *supra* note 226.

240. Greene & Sokol, *supra* note 10 (providing an overview); *see also* William J. Kolasky & Andrew R. Dick, *The Merger Guidelines and the Integration of Efficiencies into Antitrust Review of Horizontal Mergers*, 71 ANTITRUST L.J. 207, 235 (2003) ("This review of the case law shows that

practice in terms of litigated cases, as we will explore below in greater detail.[241]

B. Case Law Treatment of Merger Efficiencies

Case law holds that efficiencies may be used to rebut a claim for preliminary injunction.[242] Yet, both the district court and Ninth Circuit in *St. Luke's* suffered from some fundamental problems of understanding the legal role of efficiencies in merger analysis. Unfortunately, the Ninth Circuit was hostile to efficiencies.[243]

Efficiencies came into play as part of a procedural burden shift. First, the plaintiff needs to establish a prima facie case. Then, the burden shifts to the defendant to put forth evidence rebutting the alleged anti-competitive effects of the merger. This burden-shifting approach was embodied in *United States v. Baker Hughes Inc*.[244] The Ninth Circuit began its efficiencies analysis with the statement that efficiencies are technically illegal under United States Supreme Court case law.[245] The decision then expressed doubt that the efficiencies analysis overall[246] is problematic. By framing merger efficiencies this way, the Ninth Circuit consciously devalued efficiencies in a way that is detrimental to how antitrust works in practice.

In earlier jurisprudence, the Supreme Court was hostile to efficiency claims and even used efficiencies as a justification to challenge a merger because small, inefficient competitors could be harmed by the

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the Merger Guidelines have been influential in shaping the courts' approach to efficiencies, just as they have been in other areas. The courts have followed the agencies' lead in accepting that efficiencies may be used, in appropriate circumstances, to rebut a prima facie case of illegality based on presumptions drawn from market shares and concentration ratios. The courts have also adopted the same basic analytical framework as the Guidelines, sometimes citing the Guidelines, but also often relying on the Areeda-Turner treatise, on which the current Guidelines approach is largely modeled."). We note, however, that the current living author of the treatise, Herb Hovenkamp recently explained, "Although more empirical work needs to be done, what we have so far suggests that current merger policy if anything underestimates competitive harm, exaggerates passed-on efficiencies, or some combination of both." Herbert J. Hovenkamp, Appraising Merger Efficiencies 29 (Sept. 27, 2015) (unpublished manuscript), http://ssrn.com/abstract=2664266 [https://perma.cc/VA7W-M696].

241. FTC v. CCC Holdings, 605 F. Supp. 2d 26, 72 (D.D.C. 2009) (noting that "courts have rarely, if ever, denied a preliminary injunction solely based on the likely efficiencies").

242. *Heinz*, 246 F.3d at 720.

243. Saint Alphonsus Med. Ctr.-Nampa Inc. v. St. Luke's Health Sys., Ltd. (*St. Luke's*), 778 F.3d 775, 791 (9th Cir. 2015).

244. United States v. Baker Hughes Inc., 908 F.2d 981 (D.C. Cir. 1990).

245. *Id*. at 989–90.

246. *St. Luke's*, 778 F.3d at 791.

efficiencies.[247] Technically still good case law, "[p]ossible economies cannot be used as a defense to illegality" under *FTC v. Procter & Gamble Co.*,[248] a case where the Supreme Court ruled in favor of the government, because the merger would reduce advertising costs.[249] This reading of efficiencies merger law was upheld in the Ninth Circuit in 1979 in *RSR Corp. v. FTC*.[250] Unfortunately, the Supreme Court has not cleaned up these old cases, although all other circuits that have weighed in on merger efficiencies recognize their importance.[251]

This framing of efficiencies as invalid as a defense to guide case law is important given the emphasis that the Ninth Circuit decision gave to its harsh language on efficiencies in the *St. Luke's* case.[252] This is not to suggest that efficiencies had no value until the 1980s. The 1968 DOJ Merger Guidelines allowed for a rather limited efficiencies defense.[253] Similarly, the Supreme Court began to recognize efficiencies in the conduct area starting in the late 1970s.[254]

Nevertheless, only in the 1980s did merger case law shift to begin to acknowledge that efficiencies might serve as a possible "defense."[255] The 1982[256] and 1984[257] Merger Guidelines also re-established efficiencies as a "defense."[258] Although the DOJ 1982 Guidelines

247. Brown Shoe Co. v. United States, 370 U.S. 294 (1962); *see also* United States v. Phila. Nat'l Bank, 374 U.S. 321 (1963).

248. 386 U.S. 568, 580 (1967).

249. *Id.* at 580 (arguing that "[p]ossible economies cannot be used as a defense to illegality. Congress was aware that some mergers which lessen competition may also result in economies but it struck the balance in favor of protecting competition").

250. 602 F.2d 1317 (9th Cir. 1979).

251. Greene & Sokol, *supra* note 10, at 2057–67 (providing an overview of the case evolution).

252. Saint Alphonsus Med. Ctr.-Nampa Inc. v. St. Luke's Health Sys., Ltd. (*St. Luke's*), 778 F.3d 775, 791 (9th Cir. 2015).

253. 1968 MERGER GUIDELINES, *supra* note 40, at 8 ("*Unless there are exceptional circumstances*, the Department will not accept as a justification for an acquisition normally subject to challenge under its horizontal merger standards the claim that the merger will produce economies (i.e., improvements in efficiency) because, among other reasons, (i) the Department's adherence to the standards will usually result in no challenge being made to mergers of the kind most likely to involve companies operating significantly below the size necessary to achieve significant economies of scale; (ii) where substantial economies are potentially available to a firm, they can normally be realized through internal expansion; and (iii) there usually are severe difficulties in accurately establishing the existence and magnitude of economies claimed for a merger." (emphasis added)).

254. Cont'l T.V., Inc. v. GTE Sylvania Inc., 433 U.S. 36 (1977).

255. Greene & Sokol, *supra* note 10.

256. U.S. DEP'T OF JUSTICE, 1982 MERGER GUIDELINES § V (1982), http://www.justice.gov/sites/default/files/atr/legacy/2007/07/11/11248.pdf [https://perma.cc/8YTW-FGJV] [hereinafter 1982 MERGER GUIDELINES].

257. 1984 Merger Guidelines, 49 Fed. Reg. 26,823 (June 29, 1984).

258. *Id.* at 26,834, § 3.5.

offered a limited defense in "extraordinary cases,"[259] the 1984 DOJ Merger Guidelines marked a further shift. Efficiencies were no longer a stand-alone defense as such but were part of the competitive effects analysis that the agency would undertake for a potential merger. A list of criteria for which efficiencies would be evaluated under the 1984 Merger Guidelines offered something of a roadmap to potential merging parties.[260] The 1984 Merger Guidelines explained that the "efficiency-enhancing potential . . . [of mergers] can increase the competitiveness of firms and result in lower prices to consumers."[261] In doing so, the 1984 Guidelines noted that it never ignored efficiency claims.[262] Subsequent to the 1984 Merger Guidelines, case law that examined merger efficiencies played a minor role through the rest of the 1980s.[263]

Efficiencies resurfaced in 1991 in the health care antitrust context for a merger in Georgia. The Eleventh Circuit in *FTC v. University Health, Inc.*[264] noted that "an efficiency defense to the government's prima facie case in section 7 challenges is appropriate in certain circumstances."[265] The Eleventh Circuit added, "[w]e conclude that in certain circumstances, a defendant may rebut the government's prima facie case with evidence showing that the intended merger would create significant efficiencies in the relevant market."[266] This case is important because courts have repeatedly cited *University Health* in health care mergers.[267]

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259. *See* Kolasky & Dick, *supra* note 240, at 218, 220 (offering a description and critique of the changes in efficiencies in the merger guidelines).

260. 1984 Merger Guidelines, 49 Fed. Reg. at 26,834, § 3.5 ("Cognizable efficiencies include, but are not limited to, achieving economies of scale, better integration of production facilities, plant specialization, lower transportation costs, and similar efficiencies relating to specific manufacturing, servicing, or distribution operations of the merging firms. The Department may also consider claimed efficiencies resulting from reductions in general selling, administrative, and overhead expenses, or that otherwise do not relate to specific manufacturing, servicing, or distribution operations of the merging firms, although, as a practical matter, these types of efficiencies may be difficult to demonstrate.").

261. *Id.*

262. *Id.* at 26,835.

263. Greene & Sokol, *supra* note 10, at 2058–61.

264. 938 F.2d 1206 (11th Cir. 1991).

265. *Id.* at 1222.

266. *Id.*

267. *See, e.g.*, FTC v. Phoebe Putney Health Sys., Inc., __ U.S. __, 133 S. Ct. 1003 (2013); Saint Alphonsus Med. Ctr.-Nampa Inc. v. St. Luke's Health Sys., Ltd. (*St. Luke's*), 778 F.3d 775 (9th Cir. 2015); ProMedica Health Sys., Inc. v. FTC, 749 F.3d 559 (6th Cir. 2014); FTC v. Tenet Healthcare Corp., 186 F.3d 1045 (8th Cir. 1999); FTC v. OSF Healthcare Sys., 852 F. Supp. 2d 1069 (N.D. Ill. 2012); HTI Health Servs., Inc. v. Quorum Health Grp., 960 F. Supp. 1104 (S.D. Miss. 1997); FTC v. Butterworth Health Corp., 946 F. Supp. 1285 (W.D. Mich. 1996), *aff'd mem.*, 121 F.3d 708 (6th Cir. 1997).

University Health articulated that efficiencies could be based on price, quality, and new products.[268] Further, it articulated the criteria for cognizable efficiencies from the deal as merger-specific efficiencies that are verifiable and "do not arise from anti-competitive reductions in output or service."[269] The efficiencies also needed to be merger-specific in the sense that something less than a full merger could not accomplish the same outcome.[270] Case law has recognized the efficiencies as laid out in the merger guidelines and adopted the 1992/1997 and 2000 Merger Guideline's approach to the efficiencies inquiry.[271]

Though the 2010 Merger Guidelines revised the approach to merger analysis, the efficiencies section of the 2010 Guidelines (renumbered Section 10) remained mostly untouched.[272] Yet, efficiencies are also mentioned in earlier sections of the Guidelines. In section 2.2.1 the agencies state that they will "look for reliable evidence" of merger efficiencies.[273] This includes that "[t]he Agencies give careful consideration to the views of individuals whose responsibilities, expertise, and experience relating to the issues in question provide particular indicia of reliability. The financial terms of the transaction may also be informative regarding competitive effects."[274] Beyond this list of evidence, the details of what sort of information constitutes efficiencies is not clearly spelled out. Similarly, section 6.1, which discusses merger simulation models, allows the agencies to incorporate merger efficiencies into their models.[275]

The remainder of the efficiencies analysis is articulated in section 10.[276] According to the formulation of the Guidelines, the efficiencies must be specific to the merger, cognizable to the merger (merger

268. See, for example, sources cited *supra* note 267.

269. U.S. DEP'T OF JUSTICE & FED. TRADE COMM'N, HORIZONTAL MERGER GUIDELINES § 4 (1992) [hereinafter 1992 MERGER GUIDELINES], https://www.ftc.gov/sites/default/files/attachments/merger-review/hmg.pdf [https://perma.cc/26G5-HRMM].

270. *Id.* at 31 n.35 ("The Agency will not deem efficiencies to be merger-specific if they could be preserved by practical alternatives that mitigate competitive concerns, such as divestiture or licensing. If a merger affects not whether but only when an efficiency would be achieved, only the timing advantage is a merger-specific efficiency.").

271. *See* Greene & Sokol, *supra* note 10, at 2063–67; D. Daniel Sokol & James A. Fishkin, *Antitrust Merger Efficiencies in the Shadow of the Law*, 64 VAND. L. REV. EN BANC 45, 51–53 (2011).

272. *See* Sokol & Fishkin, *supra* note 271, at 54.

273. 2010 MERGER GUIDELINES, *supra* note 33, § 2.2.1.

274. *Id.*

275. *Id.* § 6.1.

276. *Id.* § 10.

specific), and verifiable.[277] Since the issuance of the 2010 Guidelines, various courts have cited to this in dicta.[278] In health care, the types of efficiency claims tend to include:

> improved quality of care, including improved patient outcomes, avoidance of capital expenditures, consolidation of management and operations support jobs, consolidation of specific services to one location (e.g., all cardiac care at hospital A and all cancer treatment at hospital B), and reduction of operational costs (e.g., savings in purchasing or accounting costs).[279]

In the previous Part, we discussed the economics of efficiencies and provided a numerical example of how little change is necessary for significant efficiencies to emerge from a merger. Yet, the 2010 Merger Guidelines, adopting the language of the 1997 addition to the 1992 Merger Guidelines, suggest a sliding scale that seems to require "extraordinary" efficiencies for the efficiencies to overcome the anti-competitive effects.[280] As the 2010 Merger Guidelines explain:

> In conducting this analysis, the Agencies will not simply compare the magnitude of the cognizable efficiencies with the magnitude of the likely harm to competition absent the efficiencies. The greater the potential adverse competitive effect of a merger, the greater must be the cognizable efficiencies, and the more they must be passed through to customers, for the Agencies to conclude that the merger will not have an anticompetitive effect in the relevant market. When the potential adverse competitive effect of a merger is likely to be particularly substantial, extraordinarily great cognizable efficiencies would be necessary to prevent the merger from being anticompetitive.[281]

The Guidelines go even further in expressing skepticism of what extraordinary efficiencies might ever exist. The Guidelines state, "In the Agencies' experience efficiencies are most likely to make a difference in merger analysis when the likely adverse competitive effects, absent the efficiencies, are not great. Efficiencies almost never justify a merger to monopoly or near-monopoly."[282] Perhaps because of the agencies' own skepticism, in spite of a sliding scale for efficiencies, courts have not

277. *Id.*

278. *See, e.g.*, United States v. H & R Block, Inc., 833 F. Supp. 2d 36, 89 (D.D.C. 2011).

279. Feinstein et al., *supra* note 93, at 882.

280. 2010 MERGER GUIDELINES, *supra* note 33, § 10.

281. *Id.*

282. *Id.*

clearly articulated what constitutes "extraordinary efficiencies."[283] The lack of guidance of what this might mean prevents effective planning. If "extraordinary efficiencies" are possible (as they probably should have been found to have been in *Heinz*), then there should be an articulation of what such a standard may be in the case law.

Of all of the litigated merger cases since the introduction of the efficiencies section of the 1992 Merger Guidelines, only one case, *Heinz*, has provided significant analysis to the efficiencies.[284] The case involved a three-to-two merger of baby food companies between the number two and three players in the market (Heinz and Beechnut), in which the market leader was Gerber.[285] In what was a national market, supermarkets always carried the market leading Gerber.[286] However, supermarkets rarely carried all three baby food companies.

Both Heinz and Beechnut had advantages, one in the quality of the baby food and the other in more efficient production facilities.[287] The parties suggested that the efficiencies from the merger would be in the range of $9.4–12 million due to moving all production to the Heinz manufacturing facility in Pittsburgh (and shutting down an antiquated plant in upstate New York).[288] The variable cost savings of the manufacturing consolidation and plant closure would have created a forty-three percent variable cost reduction.[289] The parties also claimed efficiencies in distribution of fifteen percent due to the proposed merger.[290] In contrast, the FTC made a number of claims. These claims included: (1) that the efficiencies did not outweigh the anti-competitive effects, (2) that these efficiencies were not cognizable to the merger, and (3) that such efficiencies could have been achieved through other means.[291] The district court ruled in favor of the merging parties based upon the efficiency claims and denied the FTC request for a preliminary injunction to block the merger. On appeal, the D.C. Circuit reversed the district court's holding.[292] In doing so, the D.C. Circuit found that the

283. *See* Sokol & Fishkin, *supra* note 271, at 60 ("What has not been discussed at length in the literature, agency speeches and policy statements, the Commentary, the Merger Guidelines, or case law is a detailed analysis of the application of the sliding scale approach . . . .").

284. *See* FTC v. H.J. Heinz Co., 246 F.3d 708, 720–24 (D.C. Cir. 2001).

285. *Id.* at 711–13; FTC v. H.J. Heinz Co., 116 F. Supp. 2d 190, 192–94 (D.D.C. 2000).

286. *Heinz*, 116 F. Supp. 2d at 193.

287. *See Heinz*, 246 F.3d at 721.

288. *Heinz*, 116 F. Supp. 2d at 199.

289. *Heinz*, 246 F.3d at 721.

290. *Heinz*, 116 F. Supp. 2d at 199.

291. *Heinz*, 246 F.3d at 720–21.

292. *Id.*

merging parties could not prove that the efficiencies outweighed the anti-competitive effects of the proposed transaction under the 1992/97 Merger Guidelines.[293]

A number of hospital merger cases prior to the 2010 Horizontal Merger Guidelines have discussed efficiencies but in a more limited way.[294] Many of these cases and their nuances were not cited by *St. Luke's* district and circuit court decisions in terms of determining both the cost and quality based efficiencies. Overall, the analysis of efficiencies in both wins and losses for the government in health care cases have demonstrated a cursory analysis of efficiencies that is much shorter than other parts of the competitive effects analysis.

Perhaps courts' analyses of efficiencies are not surprising if the cases that go to litigation and that get decided are atypical cases—so one sided that there is a selection bias and where the parties cannot overcome the merger burden shift of *Baker Hughes*. This shift first requires the plaintiff make a prima facie case of illegality followed by a burden shift to the merging parties to show efficiencies.[295] However, the fact that the merging parties do not abandon the transaction suggests that they believe they can overcome the structural presumption. If this is the case, the parties often believe that they have compelling merger efficiencies. Even if the parties overestimate their chances of success, at least in some cases, the efficiencies must be real enough that the parties are willing to spend the financial resources to go to court based on their assessment of the case. If so, the overly light (and often simplistic) treatment of efficiencies by the courts suggests that unlike an issue like market definition, courts feel uncomfortable in analyzing the efficiencies of a particular hospital merger. The lack of comfort with a serious efficiencies analysis condemns potentially pro-competitive mergers. Without a clearer sense of what efficiencies count in the courts and what efficiencies might be "extraordinary," unnecessary deal uncertainty leads to suboptimal antitrust policy.

Though the 2010 Merger Guidelines were not meant to be applied in a step-by-step fashion,[296] this is exactly how courts have undertaken their

293. *Id.* at 721–22.

294. See *infra* this Section.

295. *See* United States v. Baker Hughes Inc., 908 F.2d 981, 982–83 (D.C. Cir. 1990).

296. The Commentary explained that "[e]ach of the Guidelines' sections identifies a distinct analytical element that the Agencies apply in an integrated approach to merger review. The ordering of these elements in the Guidelines, however, is not itself analytically significant, because the Agencies do not apply the Guidelines as a linear, step-by-step progression that invariably starts with market definition and ends with efficiencies or failing assets." U.S. DEP'T OF JUSTICE & FED. TRADE COMM'N, COMMENTARY ON THE HORIZONTAL MERGER GUIDELINES 2 (2006), https://www.ftc.gov/sites/default/files/attachments/merger-review/

analysis in merger cases, proceeding linearly through each factor.[297] In the cases to date under the 2010 Merger Guidelines, by the time that courts reached efficiencies, often they had made up their minds about the competitive effects without engaging in serious analysis of the efficiencies. The 2010 Merger Guidelines were supposed to correct for this bias.

C. Hospital Merger Efficiencies—An Assessment of the Cases

Since the introduction of efficiencies as part of the competitive effects analysis, a number of courts have grappled with how to assess the efficiencies regarding both cost and quality, as we note below.[298] Overall, our assessment is that courts consider cost-based efficiencies in greater depth than quality-based efficiencies. Nevertheless, no court has yet found efficiencies that overcome the presumption in *Baker Hughes*. Similarly, no case has overcome anti-competitive effects as part of the sliding scale that is "extraordinary."[299]

We begin with an analytical summary of the health care cases and their discussion of efficiencies. The FTC lost *In re Adventist Health System/West*[300] before an administrative law judge. In that case, the judge found efficiencies that outweighed the anti-competitive effects.[301] This was based on the scale efficiencies that the two small hospitals would have with regard to price. The judge also discussed quality efficiencies in the form of achieved efficiencies by reduced patient length of stay through improved case management.[302] Yet, the efficiencies discussion was short relative to other claims.

In *FTC v. Freeman Hospital*,[303] the district court found that there would be efficiencies based on economies of scale of the merging parties

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commentaryonthehorizontalmergerguidelinesmarch2006.pdf [https://perma.cc/38RK-ZMVT].

297. *See* Evanston Nw. Healthcare Corp., 144 F.T.C. 1, 459 (2007) ("Although the courts discuss merger analysis as a step-by-step process, the steps are, in reality, interrelated factors, each designed to enable the fact-finder to determine whether a transaction is likely to create or enhance existing market power.").

298. See *infra* this Section.

299. FTC v. H.J. Heinz Co., 246 F.3d 708, 720 (D.C. Cir. 2001).

300. Adventist Health Sys., 117 F.T.C. 224 (1994).

301. *Id.* at 277–78 ("[C]onclude that the full consolidation of UAH and UGH would result, over time, in significant cost savings as compared with the cost which would be incurred by UGH and UAH if they were to operate as separate facilities.").

302. *Id.* at 276.

303. 911 F. Supp. 1213 (W.D. Mo. 1995), *aff'd*, 69 F.3d 260 (8th Cir. 1995).

in a relatively short paragraph.[304] There was no discussion of quality-based efficiencies.

The merger in *FTC v. Butterworth Health Corp.*[305] of hospitals in Grand Rapids, Michigan had both cost and quality efficiencies arguments. Cost-based efficiencies received a significant analysis. The court reasoned that "[t]he parties' experts have provided detailed estimates of the capital expenditure savings and operating efficiencies that would be realized by defendants in the event of merger."[306] The court devoted eight paragraphs to its discussion of cost-based efficiencies.

Regarding quality efficiencies, Butterworth pledged "to provide quality healthcare programs for the underserved without regard to ability to pay."[307] The court's discussion on quality efficiencies was sparse. However, the court noted that "[w]hile both hospitals are presently well-maintained, there is no question that the physical limitations of the Blodgett site significantly hinder Blodgett's ability to continue to successfully compete with Butterworth and attract the best qualified physicians as medical services and technology continue to evolve."[308] Both the cost and quality efficiencies convinced the court that the merger should be permitted to provide for "world-class" facilities in western Michigan.[309]

In *United States v. Long Island Jewish Medical Center*,[310] DOJ challenged the merger of Long Island Jewish Medical Center and North Shore Health Systems, Inc.[311] The court found for the merging parties. After a lengthy analysis, the court concluded that the cost-based efficiencies warranted allowing the merger.[312] The court also incorporated quality-based arguments (in a much shorter analysis) as a justification for allowing the merger. The court did so based on the non-

304. *Id.* at 1224.

305. FTC v. Butterworth Health Corp., 946 F. Supp. 1285 (W.D. Mich. 1996), *aff'd mem.*, 121 F.3d 708 (6th Cir. 1997).

306. *Id.* at 1300.

307. *Id.* at 1306.

308. *Id.* at 1301.

309. *Id.* at 1302.

310. 983 F. Supp. 121 (E.D.N.Y. 1997).

311. *Id.* at 125.

312. *Id.* at 148 ("Among these merger-related savings are: a reduction in personnel in various departments of both hospitals, including the financial departments and pain management; some reduction in the cost of clinical laboratory services and medical supplies; claims recovery costs and utilities; laundry costs; in-house consulting services; and computer and information services. Also, there will be some capital avoidance savings in amounts difficult to ascertain.").

profit status of the hospitals, and the mission of the merging parties, which was "to provide high quality health care to economically disadvantaged and elderly members of the community."[313]

The FTC challenged a hospital merger in Poplar Bluff, Missouri in *FTC v. Tenet Healthcare Corp*.[314] At the district court level, the court took the merging parties to task for failing to provide compelling evidence for supposed cost-based savings based on reducing excess bed capacity, consolidating services, and reducing staffing.[315] The merging parties also claimed potential quality efficiencies based on scale economies. These economies of scale would allow for increased numbers of tertiary medical services, such as open heart surgery, but that such efficiencies were out of market efficiencies (since primary care was the relevant market).[316] Finally the court reasoned that the cost-based efficiencies would not be passed on to consumers.[317]

On appeal the Eighth Circuit reexamined the efficiencies findings of the lower court.[318] It noted, "[w]e further find that although Tenet's efficiencies defense may have been properly rejected by the district court, the district court should nonetheless have considered evidence of enhanced efficiency in the context of the competitive effects of the merger."[319] In a sense, the Eighth Circuit was concerned that the lower court's analysis of efficiencies was spotty. In fact, this is exactly the problem that the overview of cases show more generally—courts pay too little attention to the efficiencies analysis. In *Tenet*, in particular, the Eighth Circuit noted that the lower court did not effectively examine the quality efficiencies, noting that "[t]he reality of the situation in our changing healthcare environment may be that Poplar Bluff cannot support two high-quality hospitals."[320] Similarly, the Eighth Circuit discussed that the lower court placed "an inordinate emphasis on price competition"[321] rather than on quality competition.

313. *Id.* at 149. Subsequent empirical work suggests that the non-profit story is mixed. *See* Jill R. Horwitz & Austin Nichols, *Hospital Ownership and Medical Services: Market Mix, Spillover Effects, and Nonprofit Objectives*, 28 J. HEALTH ECON. 924 (2009); Barak D. Richman, *Antitrust and Nonprofit Hospital Mergers: A Return to Basics*, 156 U. PA. L. REV. 121 (2008).

314. 17 F. Supp. 2d 937 (E.D. Mo. 1998).

315. *Id.* at 948.

316. *Id.*

317. *Id.*

318. *See* FTC v. Tenet Healthcare Corp., 186 F.3d 1045 (8th Cir. 1999).

319. *Id.* at 1054.

320. *Id.* at 1055.

321. *Id.* at 1054, 1055.

In *In re Evanston Northwestern Healthcare Corp.*, the merging parties offered quality improvements in the form of a $120 million investment and the expansion of services in over sixteen service areas.[322] As this was a post-consummated merger challenge, the FTC countered that quality had not actually improved.[323] Where there were quality improvements, the FTC argued that the quality improvements could have been reached short of a merger.[324] The FTC also argued that the purported quality improvements could not justify the post-merger price increases.[325] Nevertheless, quality claims seem to carry some weight for the FTC even though the Commission voted that the merger was anti-competitive. The Commission could have sought structural separation, as FTC complaint counsel had sought (and which we think probably was the correct remedy). However, the Commission noted that full divestiture was not advisable because the improvement in cardiac surgery at Highland Park (a quality efficiency) would not have been sustainable with a divestiture because the lack of scale economies would have meant that the necessary volume without the merger would not have been possible.[326]

After the issuance of the 2010 Merger Guidelines, additional hospital merger cases have explored efficiencies, as we explain herein. One such case was *FTC v. OSF Healthcare System*,[327] a merger from three to two hospitals in Rockford, Illinois.[328] In that case, the defendants claimed two types of cost-based efficiencies. The first was recurring cost savings due to consolidation (economies of scale).[329] The second was cost savings based upon one-time capital avoidance savings.[330] The court undertook a significant analysis of both types of purported cost efficiencies before holding that neither efficiency was extraordinary to overcome the structural presumption of anti-competitive effects.[331] In contrast, the court gave short shrift to the quality efficiencies. These quality efficiencies were perhaps more compelling than the cost-based efficiencies. The quality improvements could lead to clinical

322. Evanston Nw. Healthcare Corp., 144 F.T.C. 1, 507 (2007).

323. *Id.* at 510–11.

324. *Id.*

325. *Id.*

326. *Id.* at 521–22.

327. 852 F. Supp. 2d 1069 (N.D. Ill. 2012).

328. *Id.*

329. *Id.* at 1089–92.

330. *Id.*

331. *Id.* at 1088–95.

effectiveness. The court dismissed this claim.[332] The parties also argued a second quality claim, that the merger would result in "Centers of Excellence" that would allow the merged hospital to recruit specialists.[333] The court also dismissed this claimed efficiency in short order as too speculative and which might be possible short of a merger.[334] Another case was a trial court decision in *FTC v. ProMedica Health System, Inc.*,[335] in which the court below found no efficiencies.[336]

Overall, the hospital merger cases show that courts rarely spend much focus on their analysis of efficiencies. Often the efficiencies analysis is a throw-away section of a decision—merely a summary, rather than an in-depth analysis of issues that is customary in other areas of the analysis, like defining the relevant product market or questions of entry for example.

D. Efficiencies in St. Luke's

The district court judge in *St. Luke's* identified that the ACA was driving a push to efficiencies in health care.[337] However, while noting the benefits of consolidation, the court found the limits to the specific claimed efficiencies based on the 2010 Merger Guidelines. The district court misidentified the efficiencies as a defense rather than as part of the competitive effects analysis.[338] This misreads how efficiencies have been treated since the 1984 Merger Guidelines, when efficiencies were first treated as a factor in the competitive analysis rather than as a defense.[339] *FTC v. University Health, Inc.* was the first circuit court case to make a more significant embrace of merger efficiencies as a way to rebut claims of anti-competitive effects.[340]

The *St. Luke's* district court judge did recognize the difficulty in adjudicating the case. Given the difficulty of unraveling post-

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332. *Id.* at 1092–93.

333. *Id.* at 1093.

334. *Id.* at 1093–94.

335. No. 3:11-CV-47, 2011 WL 1219281 (N.D. Ohio Mar. 29, 2011).

336. *Id.* at *57–60.

337. *See* Saint Alphonsus Med. Ctr.-Nampa, Inc. v. St. Luke's Health Sys., Ltd., Nos. 12-CV-00560-BLW, 13-CV-00116-BLW, 2014 WL 407446, at *1 (D. Idaho Jan. 24, 2014), *aff'd*, 778 F.3d 775 (9th Cir. 2015).

338. *See* Saint Alphonsus Med. Ctr.-Nampa Inc. v. St. Luke's Health Sys., Ltd. (*St. Luke's*), 778 F.3d 775, 788–93 (9th Cir. 2015).

339. 1984 Merger Guidelines, 49 Fed. Reg. 26,823, 26,834 (June 29, 1984); Greene & Sokol, *supra* note 10, at 2059.

340. *See* Greene & Sokol, *supra* note 10, at 2061–62

consummated mergers, one concluding remark by the judge was interesting:

> In a world that was not governed by the Clayton Act, the best result might be to approve the Acquisition and monitor its outcome to see if the predicted price increases actually occurred. In other words, the Acquisition could serve as a controlled experiment.
>
> But the Clayton Act is in full force, and it must be enforced. The Act does not give the Court discretion to set it aside to conduct a health care experiment.[341]

The stakes in health care are high and because the so-called unscrambling of a merger by remedying a merger that already has been consummated is not easy,[342] this may explain the sustained importance of the structural presumption for mergers.

If the numerical example we explained earlier via formal proof is correct, then the efficiencies needed to be "extraordinary" are not that large. This also changes what the government would need to weigh in deciding whether or not to bring a challenge. Put differently, are there no price increases with quality improvements that may overcome the anti-competitive effects? According to government enforcers, this situation has only been a hypothetical one.[343] Based on our numerical example, such a hypothetical may in fact be possible.

On appeal, the use of efficiencies in the Ninth Circuit was questioned at its most basic level by the circuit court panel.[344] The opinion stated, "[w]e remain skeptical about the efficiencies defense in general and about its scope in particular."[345] The Ninth Circuit has been more critical of efficiencies analysis than any other circuit in the modern antitrust era.

Not only was the Ninth Circuit unduly skeptical of efficiencies, it may have been wrong as to the case law. Put differently, even as a matter of law, the Ninth Circuit overplays its claim that merger efficiencies are illegal.[346] At least implicitly, efficiencies in the merger context have

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341. *St. Luke's*, 2014 WL 407446, at *25.

342. *See* Evanston Nw. Healthcare Corp., 144 F.T.C. 1 (2007) (exemplifying the difficulty in remedying a successful post-consummated merger challenge).

343. Feinstein et al., *supra* note 93, at 883 ("However, it is more difficult to determine how best to balance a possible price increase, on the one hand, and a quality improvement, on the other hand. To date, however, that is not something the federal antitrust agencies have had to do.").

344. *See* Saint Alphonsus Med. Ctr.-Nampa Inc. v. St. Luke's Health Sys., Ltd. (*St. Luke's*), 778 F.3d 775, 790 (9th Cir. 2015).

345. *Id.*

346. *Id.* at 788–89 ("The Supreme Court has never expressly approved an efficiencies defense to a § 7 claim. Indeed, Brown Shoe cast doubt on the defense.").

been recognized by the Supreme Court in *Cargill, Inc. v. Monfort of Colorado, Inc*.[347] In *Cargill*, the issue was antitrust injury in the merger context.[348] The Court explained, "[t]o hold that the antitrust laws protect competitors from the loss of profits due to such price competition [because of efficiencies] would, in effect, render illegal any decision by a firm to cut prices in order to increase market share."[349] The Court went on to explain, "[t]he antitrust laws require no such perverse result, for '[i]t is in the interest of competition to permit dominant firms to engage in vigorous price competition, including price competition.'"[350]

We note a further problem with the Ninth's Circuit's efficiency analysis. The Ninth Circuit noted that prices might go up post-merger.[351] The court did not grapple with the issue of how to deal with price increases on the one hand and improved quality of service on the other. Quite the opposite. The Ninth Circuit explained:

> But even if we assume that the claimed efficiencies were merger-specific, the defense would nonetheless fail. At most, the district court concluded that St. Luke's might provide better service to patients after the merger. That is a laudable goal, but the Clayton Act does not excuse mergers that lessen competition or create monopolies simply because the merged entity can improve its operations.[352]

Such language is unfortunate. Lacking in the opinion was a way to address the situation of improved quality but increased price. Such a situation of the interplay of different types of efficiencies and anti-competitive effects in the context of the sliding scale, had the merging parties assertions of efficiencies been true, would have presented a novel issue, one where the merging parties claimed quality enhancing merger efficiencies in their electronic records system (even if price might have increased).

V. POLICY IMPLICATIONS AND CONCLUSION

Antitrust health care merger law remains unnecessarily murky after the *St. Luke's* appellate decision. It does so in a number of areas. The proper use of efficiencies to rebut the prima facie merger challenge is

347. 479 U.S. 104 (1986).

348. *Id.*

349. *Id.* at 116.

350. *Id.* (quoting Arthur S. Langenderfer, Inc. v. S.E. Johnson Co., 729 F.2d 1050, 1057 (6th Cir. 1984)).

351. *See St. Luke's*, 778 F.3d at 791.

352. *Id.* at 791–92.

less in line with economic theory than it need be. It may be that there is an impressive analysis of competitive effects and efficiencies before the agencies.[353] Before the courts, the competitive effects analysis (particularly efficiencies analysis) provided in *St. Luke's* is an accurate (albeit lamentable) reflection of how competitive effects get analyzed before the courts. In such cases, courts stick to the *Baker Hughes* formulation as embodied in *Heinz* without a detailed analysis of what extraordinary efficiencies would entail.[354] This set of presumptions in the case law may explain why we do not see efficiencies realized in decided court cases—it could be selection effect of the cases that go to trial are not the ones with the strongest efficiencies; it could be the procedural presumptions; or it could be that the efficiencies are real but judges simply discount them. The cases suggest in terms of the amount of text offered for efficiencies that judges are discounting efficiencies in their analysis. Before the agencies, in contrast, efficiencies seem to be taken seriously.[355]

In a recent paper, Professor Hovenkamp summarizes the ambiguity of efficiencies under the current statutory scheme.[356] He explains:

> The "substantially lessen competition" language in § 7 is not

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353. We do not reject the possibility that the best cases for efficiencies are those that the antitrust agencies accept by not challenging a proposed merger. *See, e.g.*, Press Release, DOJ, Statement of the Department of Justice Antitrust Division on Its Decision to Close Its Investigation of Delta Air Lines' Acquisition of an Equity Interest in Virgin Atlantic Airways (June 20, 2013), http://www.justice.gov/opa/pr/statement-department-justice-antitrust-division-its-decision-close-its-investigation-delta [https://perma.cc/6QR6-YX8S].

354. *See* FTC v. H.J. Heinz Co., 246 F.3d 708, 715 (D.C. Cir. 2001) ("In United States v. Baker Hughes Inc., we explained the analytical approach by which the government establishes a section 7 violation. First the government must show that the merger would produce 'a firm controlling an undue percentage share of the relevant market, and [would] result[] in a significant increase in the concentration of firms in that market.' Such a showing establishes a 'presumption' that the merger will substantially lessen competition. To rebut the presumption, the defendants must produce evidence that 'show[s] that the market-share statistics [give] an inaccurate account of the [merger's] probable effects on competition' in the relevant market. 'If the defendant successfully rebuts the presumption [of illegality], the burden of producing additional evidence of anticompetitive effect shifts to the government, and merges with the ultimate burden of persuasion, which remains with the government at all times.' Although Baker Hughes was decided at the merits stage as opposed to the preliminary injunctive relief stage, we can nonetheless use its analytical approach in evaluating the Commission's showing of likelihood of success." (internal citations omitted)).

355. *See* MALCOM B. COATE & ANDREW J. HEIMERT, ECONOMIC ISSUES: MERGER EFFICIENCIES AT THE FEDERAL TRADE COMMISSION 1997–2007 (2009), https://www.ftc.gov/sites/default/files/documents/reports/merger-efficiencies-federal-trade-commission-1997–2007/0902mergerefficiencies.pdf [https://perma.cc/2X2X-VSU9]; Thomas B. Leary, Comm'r, FTC, Remarks at the ABA Section of Antitrust Law, 2002 Fall Forum: Efficiencies and Antitrust: A Story of Ongoing Evolution (Nov. 8, 2002), https://www.ftc.gov/public-statements/2002/11/efficiencies-and-antitrust-story-ongoing-evolution [https://perma.cc/E6MM-HDX7].

356. *See* Hovenkamp, *supra* note 240.

> self-defining, and it has meant different things at different times. Lessening competition could be a reference to simple rivalry, or the number of firms in a market. In that case every horizontal merger lessens competition by reducing the number of rivals. The statutory phrase might also refer to general welfare, which would trade off possible consumer injuries against efficiency gains. Finally, it could be a reference to output and lower prices: a merger "substantially" lessens competition if it reduces output in the market, with the result that prices rise. This definition comes closest to the approach to merger policy reflected in the 2010 Horizontal Merger Guidelines and applied today by the antitrust enforcement Agencies and courts.[357]

If Hovenkamp is correct that there are multiple potential meanings to exploring efficiencies under the law and that the Merger Guidelines focus on reduction of output, this leads to some potential concern for antitrust policy. First, courts and agencies do not seem to properly grasp how to address quality-based efficiencies—what to measure and how to apply this if quality goes up even while cost remains the same or even increases.

Without a clear goal as to what quality efficiencies mean, it is difficult to block a merger that reduces quality. Similarly, it is difficult to credit efficiencies to a merger that would enhance quality. This is a hard task because quality can mean so many things depending on the context. The most administrable quality measurement is what the federal government already uses for CMS. However, that fails to include many other important types of quality competition. Quantifying quality-based efficiencies is not an easy task. As Dafny explains, "Quantifying these benefits is particularly difficult because of the dearth of relevant empirical research and the lack of consensus on what should be measured and what value should be assigned to it."[358] Yet, this quantification is important to provide an effective counter-story to the anti-competitive effects analysis. If the agencies and courts provided clearer and more specific guidance of what quality efficiencies to measure, merging parties might better collect data to prove a quality enhancing efficiencies argument.

To operationalize a workable legal test is very difficult on quality enhancing efficiencies. However, the test should not focus on the specific quality in question. The test should allow any form of quantifiable quality efficiencies. The administrability in the test comes

357. *Id.* at 3.

358. Dafny, *supra* note 20, at 198.

from a better articulation of what sort of efficiencies may be required under the "sliding scale"[359] that courts mention but do not articulate a test for along these lines.

Unfortunately, the ultimate end game of the sliding scale is not clear. That is, there is no clear definition in case law or agency guidance regarding what extraordinary efficiencies might mean. Such guidance would be helpful.[360] To suggest that efficiencies need to be extraordinary without explaining what extraordinary means allows courts, such as the appellate court in *St. Luke's*, to question whether efficiencies that would outweigh the competitive effects could ever exist. This opening allowed the Ninth Circuit in *St. Luke's* to provide unwarranted and overly harsh criticism of efficiencies that fly in the face of forty years of efficiencies in both mergers and conduct cases.[361]

Efficiencies are challenging before agencies and courts. As one court explained, "[t]his de facto defense is a difficult one to pursue because the alleged efficiencies are often speculative and vigorously disputed by the testimony of contradicting experts. In addition, the extent to which these efficiencies would endure to the benefit of the consumer is often difficult to measure."[362] The reality is that efficiencies work before the agency if the data is strong. As Chairman Ramirez recently stated,

> [i]n a number of cases, efficiencies have played a role in our decision not to take action against proposed mergers. Moreover, the cases that we bring tend to be ones with evidence of significant anticompetitive effects that are unlikely to be offset by the routine, garden-variety efficiency claims we typically encounter from parties.[363]

Nevertheless, agency pronouncements on the types of efficiency arguments that have worked (and more than just a line or two in a press release) would be helpful to the practitioner community in providing guidance.

At least in the Ninth Circuit, using efficiencies arguments to overcome the *Baker Hughes* presumption is difficult if not impossible.

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359. *See* Sokol & Fishkin, *supra* note 271.

360. *See id.*

361. *See* Saint Alphonsus Med. Ctr.-Nampa Inc. v. St. Luke's Health Sys., Ltd. (*St. Luke's*), 778 F.3d 775, 788–93 (9th Cir. 2015); Shelanski, *supra* note 7.

362. United States v. Long Island Jewish Med. Ctr., 983 F. Supp. 121, 147 (E.D.N.Y. 1997).

363. Edith Ramirez, Chairwoman, FTC, Remarks at the Ninth Annual Global Antitrust Enforcement Symposium, Georgetown University Law Center: The Horizontal Merger Guidelines Five Years Later (Sept. 29, 2015), https://www.ftc.gov/system/files/documents/public_statements/805441/ramirez__georgetown_antitrust_enforcement_symposium_9-29-15.pdf [https://perma.cc/7BT4-687F].

The reliance on "hot documents"[364] in court, rather than focusing on the empirical data, means that the antitrust agencies are sacrificing good case law analysis for storytelling to win cases.[365] This has gone on for some time, most notably in *United States v. Bazaarvoice, Inc*.[366] Not surprisingly, judges focus not on the complex economics of cases but on the bad documents because it provides them an analytical shortcut to reach their preferred outcome. Even if the merging parties could not prove the efficiencies in *St. Luke's*, the lack of a serious focus on the efficiencies deters those mergers that are close calls for the agencies. In the future, such mergers will not be contemplated, which will ultimately hurt consumers.

Bilateral monopoly and vertical merger issues also remain important issues for further analysis. When properly identified, a situation of bilateral monopoly is superior from a welfare perspective than a prior market structure.[367] In situations in which merging parties argue that increased provider concentration is important to counteract the power of payers (insurers), understanding when bilateral monopoly does and does not exist plays a critical role in analyzing the competitive effects of a potential merger. The *St. Luke's* case did not sufficiently grapple with this set of claims. This lack of sophisticated analysis is disappointing because the contours of the power-buyer analysis in the Merger Guidelines remains under-explored in decided cases.[368]

Further, issues of foreclosure remain ones that lack contemporary guidance in merger case law. Ever since the game theory revolution and

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364. David A. Balto, *'Hot' Documents Do Not Tell the Whole Story in Antitrust*, LAW360 (Apr. 9, 2013), http://www.law360.com/articles/430886/hot-documents-do-not-tell-the-whole-story-in-antitrust [https://perma.cc/9YL8-LEGM] (describing "hot documents").

365. Michael Cohen, *Comments of Michael Cohen on Bazaarvoice*, ANTITRUST & COMPETITION POL'Y BLOG (Jan. 27, 2014), http://lawprofessors.typepad.com/antitrustprof_blog/2014/01/comments-of-michael-cohen-on-bazaarvoice.html [https://perma.cc/3WCE-RVAZ] ("One lesson of Bazaarvoice may be the simple conclusion that bad documents—of any sort—will land a merger in court, regardless of whether the case should be there.").

366. *See* United States v. Bazaarvoice, Inc., No. 13–CV–00133–WHO, 2014 WL 203966, at *4 (N.D. Cal. Jan. 8, 2014).

367. *See* Blair & Sokol, *Rule of Reason*, *supra* note 171, at 493.

368. 2010 MERGER GUIDELINES, *supra* note 33, § 12 ("The Agencies consider the possibility that powerful buyers may constrain the ability of the merging parties to raise prices. This can occur, for example, if powerful buyers have the ability and incentive to vertically integrate upstream or sponsor entry, or if the conduct or presence of large buyers undermines coordinated effects. However, the Agencies do not presume that the presence of powerful buyers alone forestalls adverse competitive effects flowing from the merger. Even buyers that can negotiate favorable terms may be harmed by an increase in market power."); *see also* John B. Kirkwood, *Powerful Buyers and Merger Enforcement*, 92 B.U. L. REV. 1483 (2012).

a series of papers that examine vertical foreclosure in mergers,[369] there have been a set of theoretical articles that challenged the Chicago belief that vertical mergers should be nearly per se legal.[370] What might constitute practical guidance from case law would better settle these questions. Such guidance could take the form of consents (rather problematic because of the desire of parties to settle to get a deal through) rather than modern vertical merger guidelines or case law.[371] *St. Luke's* could have provided such a decided case based analysis but did not. The development of policy via merger consent decrees and the potential anti-competitive effects of some of these consents may follow directly from the lack of effective case law treatment of vertical merger claims.[372]

The overall impact of the *St. Luke's* case has broader repercussions. The lack of certainty about how best to design efficient health care with lower costs and higher quality creates the possibility of mixed messages being sent to the business community. On the one hand, greater integration through merger or ACOs is to be encouraged. On the other hand, the antitrust risk of such integration being blocked, not always in a way that is predictable based on sound economic reasoning, creates business uncertainty.

The *St. Luke's* case is a missed opportunity, in light of the lack of Supreme Court guidance on mergers, to articulate a clear and well-reasoned analysis of a merger case that encourages cost-reducing and quality-enhancing efficiencies. The lack of clear articulation on efficiencies has a broader impact on ACO analysis, and this lack of clarity might push hospitals to go for an all-or-nothing approach of acquisitions of physician groups. Similarly, lack of sophisticated reasoning on bilateral monopoly and foreclosure suggests that gaps remain in merger analysis in the courts that future cases must address.

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369. *See, e.g.*, Patrick Bolton & Michael D. Whinston, *The "Foreclosure" Effects of Vertical Mergers*, 147 J. INSTITUTIONAL & THEORETICAL ECON. 207 (1991); Janusz A. Ordover et al., *Equilibrium Vertical Foreclosure*, 80 AM. ECON. REV. 127 (1990); Michael H. Riordan & Steven C. Salop, *Evaluating Vertical Mergers: A Post-Chicago Approach*, 63 ANTITRUST L.J. 513 (1995); Michael A. Salinger, *Vertical Mergers and Market Foreclosure*, 103 Q.J. ECON. 345 (1988); Salinger, *supra* note 29.

370. *See, e.g.*, Robert H. BORK, THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF 225 (1978).

371. James A. Keyte & Kenneth B. Schwartz, *Getting Vertical Mergers Through the Agencies: "Let's Make a Deal,"* ANTITRUST, Fall 2015, at 10 (noting that "the relevant guidance comes not from the case law, the Vertical Guidelines, or modern economic theory").

372. John E. Kwoka, Jr., *Does Merger Control Work? A Retrospective on U.S. Enforcement Actions and Merger Outcomes*, 78 ANTITRUST L.J. 619 (2013).