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STEVEN C. SALOP

Invigorating Vertical Merger Enforcement

ABSTRACT. This Feature summarizes why and how vertical merger enforcement should be invigorated. In our modern market system, vigorous vertical merger enforcement is a necessity. Strong enforcement is particularly important in markets where economies of scale and network effects lead to barriers to entry and durable market power. Even when there are parallel vertical mergers, the result may well be an anticompetitive reciprocal dealing, coordinated equilibrium rather than intense competition among efficient integrated firms. Stronger enforcement would involve several steps, including recognition that claims of elimination of double marginalization do not deserve to be silver bullets and that behavioral remedies are generally unable to prevent anticompetitive effects.

AUTHOR. Professor of Economics and Law, Georgetown University Law Center. The author has greatly benefited from comments from Jonathan Baker, Dennis Carlton, Daniel Culley, Serge Moresi, Nancy Rose, Mark Ryan, Michael Salinger, Jonathan Sallet, and Carl Shapiro, as well as the *Yale Law Journal* editors. The author has written articles and consulted on numerous vertical merger and other exclusionary conduct matters, for the merging parties, concerned competitors, and government agencies, including some of the matters discussed here. All opinions are my own and do not necessarily reflect the views of my colleagues or consulting clients. This work was not funded by any entities.

INTRODUCTION

Chicago School economics and laissez-faire ideology have intentionally targeted vertical merger enforcement. This assault has been largely successful. Enforcement has been infrequent, and remedies have been limited. However, in our modern market system, vigorous vertical merger enforcement is a necessity, particularly in markets where economies of scale and network effects lead to barriers to entry and durable market power. This Feature explains why and how vertical merger enforcement should be invigorated. This would involve a more balanced approach to the evaluation of potential competitive harms and benefits, rather than presuming that efficiency benefits are highly likely while competitive harms are unlikely or speculative.

Vertical merger enforcement was attacked as economically irrational by Chicago School commentators, notably by Robert Bork, on three principal grounds.¹ First, while a competitive concern of vertical mergers is that they will lead to rivals being “foreclosed” from inputs or customers, leading to market power by the merged firm, Bork argued that the alleged foreclosure was illusory, seeing instead merely a neutral rearrangement of supplier-customer relations.² Second, Bork viewed competitive harm as implausible because there was only a “single monopoly profit” that would be unaffected by the merger (except under rare circumstances).³ Third, Bork offered the affirmative argument that vertical mergers were invariably highly efficient: for example, they inevitably reduce downstream prices by “eliminating double marginalization” of the cost of the upstream merging firm on sales by the downstream merging firm.⁴ In sum, for these commentators, competitive harm was seen as implausible, and substantial competitive benefits were seen as virtually inevitable. It followed from this logic that there should be a nearly conclusive presumption that vertical mergers are procompetitive, regardless of the market shares of the merging firms in their respective markets. The spirit (although not the letter) of these critiques was reflected in the 1984 Non-Horizontal Merger Guidelines, which set out narrow conditions for vertical merger challenges.⁵

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1. ROBERT H. BORK, *THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF* 225-45 (1978); *see also* RICHARD A. POSNER, *ANTITRUST LAW* 176-211 (1976). In the second edition of his treatise, Judge Richard Posner modified some of his conclusions, notably with respect to exclusionary conduct in “new economy” markets. *See* RICHARD A. POSNER, *ANTITRUST LAW* 193-256 (2d ed. 2001) [hereinafter POSNER 2d ed.].
 2. BORK, *supra* note 1, at 232.
 3. *Id.* at 229.
 4. *Id.* at 226-27.
 5. U.S. DEP’T OF JUSTICE, 1984 MERGER GUIDELINES (1984), <http://www.justice.gov/sites/default/files/atr/legacy/2007/07/11/11249.pdf> [<http://perma.cc/6B5Q-UJCH>].

This Feature disputes the Chicago School account outlined above and explains instead that some (but not all) vertical mergers raise substantial competitive concerns. This analysis proceeds in three Parts: Part I reviews the history and explains the economic flaws in the Chicago School theories. Part II presents a more balanced approach to the potential competitive effects of vertical mergers. Part III outlines the next steps that might be taken to modernize enforcement policy and the law.

I. THE LIMITED ECONOMIC RELEVANCE OF THREE CHICAGO SCHOOL ASSUMPTIONS UNDERLYING THE VERTICAL ENFORCEMENT LANDSCAPE

A major consequence of the Chicago School commentators' flawed economic theories with respect to vertical merger enforcement is that this body of law has remained undeveloped for the past forty years. Consider the following data points: The last vertical merger case analyzed by the Supreme Court was the 1972 merger between Ford and Autolite.⁶ There has been very little private litigation.⁷ The last vertical merger case litigated to conclusion by the Federal Trade Commission (FTC) dates back to 1979, which the FTC lost because it was unable to prove probable anticompetitive effects.⁸ Since that time, vertical merger challenges have been infrequent.⁹ From 1994 to 2016, U.S. agencies have challenged only fifty-two mergers that involved vertical integration, and some of these also involved horizontal overlaps.¹⁰ In merger enforcement involving mergers with

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

7. *Saint Alphonsus Medical Center-Nampa Inc. v. St. Luke's Health System, Ltd.*, 778 F.3d 775 (9th Cir. 2015), also involved a private challenge that raised vertical-foreclosure concerns. While the District Court for the District of Idaho and the Ninth Circuit focused solely on the horizontal overlap, the factual findings were supportive of the vertical-foreclosure claim. See Thomas L. Greaney & Douglas Ross, *Navigating Through the Fog of Vertical Merger Law: A Guide To Counselling Hospital-Physician Consolidation Under the Clayton Act*, 91 WASH. L. REV. 199, 211 n.52, 221-22 (2016). For two other private cases, see *HTI Health Services, Inc. v. Quorum Health Group, Inc.*, 960 F. Supp. 1104 (S.D. Miss. 1997); and *O'Neill v. Coca-Cola Co.*, 669 F. Supp. 217 (N.D. Ill. 1987). In the latter case, the plaintiff was denied standing, and the claims were dismissed. 669 F. Supp. at 226. For further discussion of *HTI Health Services*, see Greaney & Ross, *supra*, at 219-21.

8. *Fruehauf Corp. v. FTC*, 603 F.2d 345 (2d Cir. 1979). The court concluded that it was necessary to show "some probable anticompetitive impact" for liability under Section 7 of the Clayton Act, not simply foreclosure. *Id.* at 352-53.

9. Paul Yde, *Non-Horizontal Merger Challenges: A Solution in Search of a Problem*, ANTITRUST, Fall 2007, at 74, 77 (noting that enforcement actions in the United States are relatively rare).

10. See Steven C. Salop & Daniel P. Culley, *Vertical Merger Enforcement Actions: 1994-2016* (Georgetown Univ. Law Ctr., June 30, 2017) [hereinafter Salop & Culley, *Enforcement Actions*], <http://scholarship.law.georgetown.edu/cgi/viewcontent.cgi?article=2541&context=facpub>

both vertical and horizontal components, the FTC and the Department of Justice (DOJ) typically focused only on the horizontal overlaps.¹¹

Within this general dearth of litigation, some more specific trends can be observed. Enforcement has varied across administrations.¹² Reduced enforcement by the Bush Administration was consistent with its more minimal concerns about exclusionary conduct, as reflected in the DOJ's Section 2 report.¹³ That report was withdrawn by the Obama DOJ in 2009,¹⁴ which showed increased interest in vertical merger concerns.¹⁵ While perhaps unexpected, the Trump DOJ issued a complaint in November 2017 to block the proposed AT&T-Time Warner vertical merger. This merger raised similar concerns as the Comcast-NBC Universal (NBCU) merger, but unlike in that matter, the DOJ apparently

[<http://perma.cc/4HVF-LEAD>]. These counts update the earlier enforcement statistics cited in Steven C. Salop & Daniel P. Culey, *Revising the U.S. Vertical Merger Guidelines: Policy Issues and an Interim Guide for Practitioners*, 4 J. ANTITRUST ENFORCEMENT 1 (2016) [hereinafter Salop & Culey, *Interim Guide*]. These statistics reflect only challenges and clear abandonments in response to concerns. For more analysis, see James A. Keyte & Kenneth B. Schwartz, *Getting Vertical Deals Through the Agencies: "Let's Make a Deal,"* ANTITRUST, Summer 2015, at 10.

11. For example, in the recent *St. Luke's* merger case, the FTC focused on the horizontal overlap in the market for primary physicians, rather than on the vertical merger aspect of the deal, which involved combining a physicians' group with a hospital. See *St. Luke's*, 778 F.3d 775.
12. Salop & Culey, *Enforcement Actions*, *supra* note 10. The DOJ and the FTC brought about thirty-three challenges during the Clinton Administration, including three that were finalized in 2001. The George W. Bush Administration initiated five challenges, and the Obama Administration had fourteen actual and threatened enforcement actions. The Obama Administration threatened actions against the Comcast-Time Warner and Lam-KLA transactions, which were abandoned in 2016. The Comcast-Time Warner transaction was analyzed as the mix of a horizontal and complementary product combination. In News Corp's acquisition of a stake in the parent company of DIRECTV in 2003, and in AT&T's acquisition of DIRECTV in 2015, the DOJ did not take enforcement action in reliance on the FCC's remedy. See AT&T Inc., 30 FCC Rcd. 9131 (2015); General Motors Corp., 19 FCC Rcd. 473 (2004). These latter two media mergers are not included in the enforcement statistics.
13. See *Competition and Monopoly: Single-Firm Conduct Under Section 2 of the Sherman Act*, U.S. DEP'T JUST. (Sept. 2008), <http://www.justice.gov/atr/public/reports/236681.pdf> [<http://perma.cc/CTL8-FA6H>]; see also *Note by the United States for OECD Roundtable on Vertical Mergers*, FED. TRADE COMMISSION (Feb. 15, 2007) [hereinafter *Note by the United States*], <http://www.ftc.gov/sites/default/files/attachments/us-submissions-oecd-and-other-international-competition-fora/07RoundtableonVerticalMergers.pdf> [<http://perma.cc/N264-J74W>].
14. *Justice Department Withdraws Report on Antitrust Monopoly Law*, U.S. DEP'T JUST. (May 11, 2009), <http://www.justice.gov/opa/pr/justice-department-withdraws-report-antitrust-monopoly-law> [<http://perma.cc/GKV6-5UHA>].
15. See Jon Sallet, Deputy Att'y Gen. for Litig., Antitrust Div., U.S. Dep't of Justice, *The Interesting Case of the Vertical Merger* (Nov. 17, 2016), <http://www.justice.gov/opa/speech/file/938236/download> [<http://perma.cc/4GNA-TBGF>].

refused to accept a proffered conduct remedy.¹⁶ The outcome of the trial and whether the current DOJ and FTC will continue to follow this course of increased enforcement remain open questions at the time of this writing.

This increase in vertical merger enforcement during the Obama Administration and the AT&T-Time Warner complaint are encouraging because the Chicago School's skepticism toward both the competitive risks of vertical mergers and foreclosure more generally has proved to be misguided. That skepticism rests on three main claims: (1) foreclosure is illusory because vertical mergers simply realign vertical relationships rather than reduce supply; (2) anticompetitive foreclosure generally would not be profitable; and (3) vertical mergers are invariably efficient, particularly because of elimination of double marginalization. However, modern economic analysis demonstrates that these theories do not provide a valid basis for such limited enforcement. Instead, modern analysis shows that competitive harm can in fact result from vertical mergers when markets are imperfectly competitive.¹⁷ As discussed in the next Sections, the first two claims never had a strong economic basis and have been steadily and powerfully debunked by economists, while the third cannot carry the burden to support nonenforcement.

A. Foreclosure as Illusory

Most fundamentally, Bork argued that vertical mergers do not foreclose, but rather realign, vertical relationships. *Brown Shoe* is a much studied and much maligned vertical and horizontal merger ruling by the Supreme Court, addressing the Brown Shoe Company's attempted purchase of G.R. Kinney Company, another shoe manufacturer and retailer.¹⁸ Applied to that case, the Chicago

16. Complaint, United States v. AT&T Inc., No. 1:17-cv-02511 (D.D.C. Nov. 20, 2017) [hereinafter AT&T Complaint], <http://www.justice.gov/atr/case-document/file/1012916/download> [<http://perma.cc/SLF3-TLJY>].

17. See, e.g., Jonathan B. Baker, *Exclusion as a Core Competition Concern*, 78 ANTITRUST L.J. 527 (2013); Jeffrey Church, *Vertical Mergers*, in 2 ISSUES IN COMPETITION LAW AND POLICY 1455 (2008); Janusz A. Ordover, Garth Saloner & Steven C. Salop, *Equilibrium Vertical Foreclosure*, 80 AM. ECON. REV. 127 (1990); Patrick Rey & Jean Tirole, *A Primer on Foreclosure*, in 3 HANDBOOK OF INDUSTRIAL ORGANIZATION 2145 (Mark Armstrong & Robert H. Porter eds., 2007); Michael H. Riordan, *Competitive Effects of Vertical Integration*, in HANDBOOK OF ANTITRUST ECONOMICS 145 (Paolo Buccirossi ed., 2008); Michael H. Riordan & Steven C. Salop, *Evaluating Vertical Mergers: A Post-Chicago Approach*, 63 ANTITRUST L.J. 513 (1995); Michael Salinger, *Vertical Mergers and Market Foreclosure*, 103 Q.J. ECON. 345 (1988); David T. Scheffman & Richard S. Higgins, *Vertical Mergers: Theory and Policy*, 12 GEO. MASON L. REV. 967 (2004). Many of these articles also discuss potential efficiency benefits of vertical mergers and reasons why harms may not occur.

18. *Brown Shoe Co. v. United States*, 370 U.S. 294 (1962).

School critique is that while the Brown Shoe Company may supply more of the shoes that it produces to Kinney stores and fewer to competing stores, Kinney may purchase fewer shoes from rival manufacturers but more from Brown. Rather than eliminating rivals' opportunities, the retailers no longer buying from Brown can benefit from the manufacturers no longer selling to Kinney. Thus, there is not real foreclosure. This reasoning famously led Bork to quip about a later case that the FTC should have hosted an "industry social mixer" instead of challenging the merger.¹⁹

While this criticism may have been applicable to *Brown Shoe*—where Brown and Kinney had very low market shares in unconcentrated markets—it is not true in dominant firm or oligopoly markets with entry impediments.²⁰ For example, suppose that Brown was one of only three large shoe manufacturers selling differentiated products and Kinney had a substantial retail market share. If Brown were to raise prices or refuse to sell to Kinney's downstream rivals, that foreclosure may reduce the total supply available to rivals. It also may incentivize Brown's two manufacturing competitors to raise their prices to Kinney's rivals in response, either unilaterally or through coordinated interaction. Unintegrated downstream rivals thus can be disadvantaged, and the merging firm can achieve or enhance market power in one or both markets. This explains why foreclosure is real.

In the proposed AT&T-Time Warner merger, for example, a foreclosure concern is that the merged firm will raise prices of Time Warner content to AT&T's rival video distributors or threaten to withhold that content in order to obtain higher prices. Because video content is not fungible, the concern is that the other distributors cannot simply drop Time Warner content and replace it with other programming without losing some subscribers to AT&T and others. Nor is entry of equally popular competing programming easy. Similar foreclosure issues arose in the Comcast-NBCU merger.²¹ Moreover, the foreclosure concern is now enhanced because Comcast and AT&T would have similar foreclosure incentives and might coordinate their actions. Thus, foreclosure concerns cannot simply be dismissed in oligopoly markets. Instead, a rational vertical merger policy would analyze the likely ability and incentives of the merging firms to engage in various types of foreclosure conduct.

19. BORK, *supra* note 1, at 232; *see also* *Fruehauf Corp. v. FTC*, 603 F.2d 345, 352 n.9 (2d Cir. 1979) (“[A] vertical merger may simply realign sales patterns.”).

20. For simple models of scenarios in which foreclosure is not illusory, *see* Thomas G. Krattenmaker & Steven C. Salop, *Anticompetitive Exclusion: Raising Rivals' Costs To Achieve Power over Price*, 96 *YALE L.J.* 209 (1986).

21. *See infra* text accompanying note 36.

B. Single Monopoly Profit

A second core Chicago School claim is that an unregulated monopolist can obtain only a single monopoly profit, so it would gain no additional market power from foreclosure through tying or vertical merger.²² This theory has gained some judicial acceptance. In her *Jefferson Parish* concurrence advocating elimination of the per se rule against tying, Justice O'Connor opined that "[c]ounterintuitive though [the single monopoly profit theory] may seem, it is easily demonstrated and widely accepted."²³ In *Jefferson Parish*, it was alleged that East Jefferson Hospital would force patients solely to use the Roux anesthesiology group, and this tying arrangement would harm consumers and competition in the local anesthesiology services market. But the single monopoly profit theory would claim that even if the hospital had market power in its hospital market, it had no anticompetitive incentive to leverage that power into the anesthesiology market.²⁴ It would gain no incremental market power or profits by doing so.

Similarly, in *Doman*, a Second Circuit panel (including then-Judge Sotomayor) alluded to the theory in dismissing a complaint against an exclusive distributorship awarded by a lumber supplier (Doman) to a distributor (Sherwood).²⁵ The court noted that

an exclusive distributorship would be counterproductive so far as any monopolization goal of Doman is concerned The power to restrict output to maximize profits is complete in the manufacturing monopoly, and there is no additional monopoly profit to be made by creating a monopoly in the retail distribution of the product.²⁶

This theory is simple but invalid in all but the following extreme conditions²⁷: (i) the upstream merging firm is an unregulated monopolist, protected

22. See, e.g., BORK, *supra* note 1, at 229; POSNER 2d ed., *supra* note 1, at 198-99; Ward S. Bowman, Jr., *Tying Arrangements and the Leverage Problem*, 67 YALE L.J. 19 (1957); Aaron Director & Edward H. Levi, *Law and the Future: Trade Regulation*, 51 NW. U. L. REV. 281 (1956). The theory recognizes an exception if the monopolist is regulated, in which case the merger can be used to evade regulation.

23. *Jefferson Par. Hosp. v. Hyde*, 466 U.S. 2, 36 (1984) (O'Connor, J., concurring) (citing BORK, *supra* note 1, at 372-74; and Philip Areeda, ANTITRUST ANALYSIS 735 (3d ed. 1981)).

24. *Id.* (explaining that tying cannot increase a monopolist's profit).

25. *E & L Consulting, Ltd. v. Doman Indus. Ltd.*, 472 F.3d 23, 29-30 (2d Cir. 2006).

26. *Id.* (citing *Lamoille Valley R.R. Co. v. I.C.C.*, 711 F.2d 295, 318 (D.C. Cir. 1983); and 3 PHILLIP AREEDA & DONALD F. TURNER, ANTITRUST LAW § 725b (1978)).

27. See Jonathan B. Baker, *Taking the Error Out of "Error Cost" Analysis: What's Wrong with Antitrust's Right*, 80 ANTITRUST L.J. 1, 15-17 (2015) (explaining that firms can obtain, extend, and

by prohibitive entry barriers; (ii) its product is used by downstream firms in fixed proportions with all other inputs; and (iii) the downstream market is perfectly competitive. Under these very special conditions, the upstream monopolist would gain no additional monopoly profits by acquiring some downstream firms and foreclosing others to leverage market power into the other market.²⁸

But the market conditions under which the theory applies are far too narrow to create a procompetitive enforcement or legal presumption. The theory does not carry over to the more typical situation where neither merging partner has a monopoly protected by prohibitive entry barriers. If the merging firms face actual or potential competition, their merger can maintain, achieve, or enhance market power.

Consider one simple counterexample in which each merging firm is the monopoly producer in its market. But suppose that each faces the threat of potential competition solely from the other. Absent the merger, each would have the incentive to enter the other's market (or partner with an entrant) in order to increase competition there and allow it to charge a higher price in its own market as demand increases. The vertical merger would extinguish these incentives and thus could preserve the two monopolies, contrary to the single monopoly profit theory. If there were other entrants, they would need to enter both markets simultaneously, which could create increased entry risks and costs which could deter entry. Even if entry is not deterred, it may be delayed.²⁹

Additionally, in oligopoly markets with multiple competitors, vertical mergers can harm competition from input or customer foreclosure, even without coordination. To illustrate, suppose the dominant hospital acquires a key anesthesiology group and the anesthesiology group then stops providing services or raises its prices to other, smaller hospitals. This input foreclosure could raise the costs of rival hospitals. The cost increases would be supported or enhanced if other large competing anesthesiology groups also raise prices in response. These higher prices of the critical anesthesiology input would raise the costs of the smaller hospitals, thereby permitting the merging hospital to enhance its market power. Or, imagine that the dominant hospital stops using other anesthesiologists, relying instead solely on the acquired group, and that conduct leads some smaller competing anesthesiology groups to exit from the market. This customer

maintain market power outside the extreme assumptions required for the theory); Church, *supra* note 17, at 1469, 1472 (same); Einer Elhauge, *Tying, Bundled Discounts, and the Death of the Single Monopoly Profit Theory*, 123 HARV. L. REV. 397, 400-01 (2009) (explaining that absent restrictive assumptions, tying can increase monopoly profits absent efficiencies).

28. The single monopoly profit theory was tested and rejected for railroad markets. Curtis M. Grimm et al., *Foreclosure of Railroad Markets: A Test of Chicago Leverage Theory*, 35 J.L. & ECON. 295 (1992).

29. Posner focuses primarily on the potential for delay. POSNER 2d ed., *supra* note 1, at 225.

foreclosure could permit the acquired anesthesiology group to gain market power over smaller competing hospitals and clinics. Customer foreclosure also could lead to input foreclosure effects, allowing the merging hospital to increase its prices. In short, the assumption that no additional market power can be gained from a vertical merger cannot be sustained.³⁰

C. *Efficiency Benefits from Elimination of Double Marginalization*

A third Chicago School claim is that vertical mergers are invariably highly efficient. A key driver is the assumption that the downstream merging firm's price will be reduced from the merger. This claim postulates that the upstream firm will transfer its input at marginal cost instead of the higher premerger price, and this elimination of double marginalization (EDM) of the upstream firm's cost will lead the downstream merger partner to reduce its output price.³¹ The Acting Director of the FTC Bureau of Competition recently explained that the prospect of EDM was an "intrinsic" efficiency justification.³² This theory has been used as a ubiquitous justification for weak enforcement.³³

While many vertical mergers, like many horizontal mergers, may entail efficiency benefits, the EDM theory does not prove that vertical mergers are almost always procompetitive. Claims that EDM must lead to lower downstream prices are overstated for several reasons. First, if the upstream firm sells to rivals at a higher price than charged to the downstream merging firm, then diverting sales

30. However, in matters where one of the merging firms is a monopolist, answering the question of why power can be maintained or additional power gained in another market can be a useful analytical tool.

31. BORK, *supra* note 1, at 219; POSNER 2d ed., *supra* note 1, at 228. For the seminal analysis, see Joseph J. Spengler, *Vertical Integration and Antitrust Policy*, 58 J. POL. ECON. 347 (1950). See also Gerard Gaudet & Ngo V. Long, *Vertical Integration, Foreclosure, and Profits in the Presence of Double Marginalization*, 5 J. ECON. & MGMT. STRATEGY 409 (1996). Note that there is no EDM in the rare situation when the single monopoly profit theory applies.

32. D. Bruce Hoffman, Acting Director, Bureau of Competition, Fed. Trade Comm'n, Vertical Merger Enforcement at the FTC 3 (Jan. 10, 2018), http://www.ftc.gov/system/files/documents/public_statements/1304213/hoffman_vertical_merger_speech_final.pdf [<http://perma.cc/37EH-UDKW>]; see also Yde, *supra* note 9, at 75 (describing the intrinsic output-enhancing incentive); Christine Siegwarth Meyer & Yijia (Isabelle) Wang, *Determining the Competitive Effects of Vertical Integration in Mergers*, ECON. COMMITTEE NEWSL., Spring 2011, at 8, http://www.nera.com/content/dam/nera/publications/archive2/PUB_Vertical_Integration_0511.pdf [<http://perma.cc/7MMK-HE3Y>] (describing the "most prominent" efficiency justification).

33. Indeed, the George W. Bush Administration enforcers argued that the "greater the market power (in its respective market) of each party to a vertical merger, the greater the potential for their merger to increase efficiency by eliminating the double markup between them." *Note by the United States*, *supra* note 13, ¶ 25.

to its downstream partner creates an “opportunity cost” resulting from lower upstream profits, which mitigates or eliminates the incentive to reduce the downstream price.³⁴ Second, if the downstream firm’s price reduction would be given to a large number of existing customers relative to the number of new customers diverted from firms that did not buy the upstream firm’s input, then the incentive to cut the downstream price will also be mitigated or eliminated. Third, double marginalization may have been totally or partially eliminated in the pre-merger market by contracts with quantity forcing or “nonlinear” pricing. Fourth, EDM would not be merger-specific if it can be achieved as a practical matter absent the merger. Fifth, there is no EDM if the downstream firm’s technology is incompatible with the upstream firm’s inputs.³⁵ Finally, the existence of EDM does not prove that the merger is procompetitive. An EDM incentive to reduce prices may be dominated by the incentives to raise prices resulting from foreclosure or coordination. Thus, the potential for EDM is not a valid rationale for weak or nonexistent enforcement.

The limitations of EDM are beginning to carry more force. Both the Federal Communications Commission (FCC) and the DOJ were skeptical of the EDM claims in the Comcast-NBCU merger. The DOJ concluded that “much, if not all, of any potential double marginalization is reduced, if not completely eliminated, through the course of contract negotiations.”³⁶ The FCC also noted the opportunity cost concern and concluded that the EDM claims were both overstated and not merger specific.³⁷

D. Modern Incentives Analysis, Error Costs, and Presumptions

The implication of the Chicago School analysis is that vertical mergers are almost always procompetitive and are entitled to a strong legal presumption in

34. This opportunity cost issue was mentioned in passing by Bork, but only in the context of perfect competition in the downstream market, and it did not affect his policy recommendations. BORK, *supra* note 1, at 228.

35. Enghin Atalay et al., *Vertical Integration and Input Flows*, 104 AM. ECON. REV. 1120, 1127 (2014) (finding that almost half of establishments report no internal shipments).

36. Competitive Impact Statement at 30, *United States v. Comcast Corp.*, 808 F. Supp. 2d. 145 (D.D.C. 2011) (No. 1:11-cv-00106) [hereinafter Comcast-NBCU CIS], <http://www.justice.gov/atr/case-document/file/492251/download> [<http://perma.cc/LE6C-U37X>].

37. *Comcast Corp.*, 26 FCC Rcd. 4238, 4335 (2011). For further economic analysis, see William P. Rogerson, *A Vertical Merger in the Video Programming and Distribution Industry: Comcast-NBCU (2011)*, in *THE ANTITRUST REVOLUTION: ECONOMICS, COMPETITION, AND POLICY* 534 (John E. Kwoka, Jr. & Lawrence J. White eds., 6th ed. 2014).

order to avoid false positive errors and overdeterrence.³⁸ Because of the shortcomings of these theories, they do not validly support weak enforcement or highly permissible legal standards.³⁹ A balanced enforcement policy and law instead would recognize that vertical mergers can lead to competitive harms as well as competitive benefits. It would also recognize that efficiency benefits are neither invariably merger-specific nor invariably sufficient to prevent anticompetitive effects.

Some proponents of the outdated Chicago School approach contrast vertical and horizontal mergers, arguing there are intrinsic competitive concerns in horizontal mergers.⁴⁰ They then argue that vertical mergers are the opposite, with intrinsic EDM efficiency benefits and highly unlikely competitive harms.⁴¹ However, these contrasting presumptions do not hold up to careful analysis. For the type of markets that are normally analyzed in antitrust, the competitive harms from vertical mergers are just as intrinsic as are harms from horizontal mergers. While vertical mergers have intrinsic benefits from cooperation, so do horizontal

38. False positive errors involve judicial findings of liability where the conduct actually is procompetitive or involve overdeterrence more generally. False negatives errors are the opposite, finding no liability for anticompetitive conduct and reflecting underdeterrence more generally.

39. The issue is not whether all or most vertical mergers are anticompetitive, but whether some are, and whether enforcers and courts informed with evidence can tell the difference. Three classic examples of a vertically integrated firm engaging in foreclosure conduct are: vertically integrated AT&T using its control over the local exchange network to raise barriers to entry into long distance, conduct that resulted in the disintegration of AT&T, *United States v. AT&T Co.*, 552 F. Supp. 131 (D.D.C. 1982), *aff'd sub nom. Maryland v. United States*, 460 U.S. 1001 (1983); Microsoft engaging in foreclosure conduct towards Netscape in order to raise barriers to entry into desktop operating systems, leading to Section 2 liability, *United States v. Microsoft Corp.*, 253 F.3d 34 (D.C. Cir. 2001); and Verizon delaying access to DSL competitors in violation of FCC regulations in order to maintain its market power in that market, though Verizon escaped liability on other grounds, *Verizon Commc'ns, Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 407 (2004).

40. Hoffman, *supra* note 32, at 2-3.

41. *Id.*; see also Yde, *supra* note 9, at 74-75. Yde's view appears to be premised on the fact that the upstream and downstream markets are both either perfectly competitive, or at least one market is perfectly monopolistic, and protected by prohibitive entry barriers. In these extreme cases, vertical mergers will not have foreclosure effects but may have EDM benefits in the monopoly case. Yde, *supra* note 9, at 75. Yde uses these polar cases to recommend a very cautious policy. *Id.* However, his analysis does not apply to imperfectly competitive markets not at these two polar extremes.

mergers.⁴² Downward pricing pressure from EDM and other sources is not inevitable, and vertical mergers may create significant management integration challenges.⁴³

Consider first the well-understood and accepted notion that there is inherent upward pricing pressure from horizontal mergers in differentiated products markets, even without coordination.⁴⁴ In fact, the same inherent upward pricing pressure occurs for vertical mergers in similar market structures.⁴⁵ An upstream merging firm that is not an unregulated monopolist protected by prohibitive entry barriers has a similar intrinsic incentive to engage in input foreclosure by raising the input price it charges to the rivals of its downstream merger partner. A higher input price has an intrinsic upward effect on the rivals' prices, which permits the downstream merging firm to raise its price.⁴⁶ While this upward pricing pressure may be mitigated or deterred by sufficient upstream competition, repositioning, or anticipated entry (just as it can be in horizontal mergers), and by sufficient downstream competition by nonforeclosed firms, the pricing pressure is an intrinsic incentive. Moreover, the likelihood of price increases is enhanced if other upstream or downstream competitors raise their prices in response to the price increase by the integrated firm, whether unilaterally or in a coordinated fashion, just as for horizontal mergers.⁴⁷

At the same time, absent EDM, there also is an intrinsic incentive in vertical mergers to raise the price of the downstream merging firm as a way to drive additional sales to its upstream merger partner.⁴⁸ EDM and other efficiencies can

42. As stated in the Horizontal Merger Guidelines, "a primary benefit of mergers to the economy is their potential to generate significant efficiencies and thus enhance the merged firm's ability and incentive to compete, which may result in lower prices, improved quality, enhanced service, or new products." U.S. DEP'T OF JUSTICE & FED. TRADE COMM'N, HORIZONTAL MERGER GUIDELINES 29 (2010), <http://www.ftc.gov/sites/default/files/attachments/merger-review/100819hmg.pdf> [<http://perma.cc/8FJX-DEN6>].

43. See, e.g., John Stuckey & David White, *When and When Not To Vertically Integrate*, MCKINSEY Q. (1993), <http://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/when-and-when-not-to-vertically-integrate> [<http://perma.cc/G48C-P6UC>].

44. U.S. DEP'T OF JUSTICE & FED. TRADE COMM'N, *supra* note 42, at 20-21; Yde, *supra* note 9, at 74.

45. These incentives are intuitive on the basis of standard microeconomic analysis of firms producing differentiated products. For a formal treatment of these incentives, see Serge Moresi & Steven C. Salop, *vGUPPI: Scoring Unilateral Pricing Incentives in Vertical Mergers*, 79 ANTI-TRUST L.J. 185 (2013).

46. *Id.* at 193-96.

47. Salop & Culley, *Interim Guide*, *supra* note 10, at 20 (noting that rival upstream firms may raise prices unilaterally or in coordination).

48. Moresi & Salop, *supra* note 45, at 198.

mitigate or even reverse this upward inherent pricing incentive for the downstream merging firm, just as efficiencies do for horizontal mergers.⁴⁹ However, reversing the upward pricing incentive of this merger partner and instead causing downward pricing pressure is not inevitable for the reasons discussed above. Moreover, even if EDM or other efficiencies do create downward pricing pressure, that downward pressure does not necessarily dominate the upward pricing pressure from the incentive of the upstream merging firm to raise its input price to rivals.

In short, in the real world of imperfectly competitive markets, the direction of the net competitive effect is a question of fact, not theory. While vertical mergers in oligopoly markets should not be subject to near-per se illegality, they also are not entitled to near-per se legality. Both of these per se rules would lead to unacceptable errors. Instead, competitive-effects analysis, enforcement, and law should be balanced and fact-based.

II. A MORE BALANCED VIEW OF THE COMPETITIVE HARMS AND BENEFITS FROM VERTICAL MERGERS

This Part offers a more balanced account of the harms and benefits associated with vertical mergers. Merger analysis under Section 7 focuses on whether the merger may have a significant likelihood of substantially lessening competition.⁵⁰ For vertical mergers, this involves analysis of the relative likelihood and magnitude of competitive benefits and harms.⁵¹ In light of the “incipiency” language of Section 7, the burden on the plaintiff to show likely anticompetitive effects on balance is reduced.⁵² The next Sections summarize this analysis.⁵³

49. *Id.* at 199.

50. A merger violates Section 7 of the Clayton Act if the effect of the merger “may be substantially to lessen competition, or to tend to create a monopoly” in “any line of commerce . . . in any section of the country.” 15 U.S.C. § 18 (2012).

51. For an overview, see Salop & Culley, *Interim Guide*, *supra* note 10. The European Commission issued nonhorizontal merger guidelines in 2007. See Guidelines on the Assessment of Non-Horizontal Mergers Under the Council Regulation on the Control of Concentrations Between Undertakings, 2008 O.J. (C 265) 7 [hereinafter EC Guidelines].

52. See *infra* note 92.

53. For more skeptical views of the need to invigorate vertical merger analysis, see, for example, Michael W. Klass & Michael A. Salinger, *Do New Theories of Vertical Foreclosure Provide Sound Guidance for Consent Agreements in Vertical Merger Cases?*, 40 ANTITRUST BULL. 667 (1995); Scheffman & Higgins, *supra* note 17; and Yde, *supra* note 9.

A. *Competitive Harms*

The potential competitive harms from vertical mergers can be classified in various interrelated ways. First, vertical mergers can lead to anticompetitive effects centered in either the upstream or downstream market.⁵⁴ Second, the mechanism of harm can involve unilateral, coordinated, or exclusionary effects, or a combination. Third, the merger can lead the merged firm to achieve, enhance, or maintain monopoly or market power. Fourth, vertical mergers also can facilitate the harmful exercise of preexisting market power, such as when they permit evasion of price regulation. Fifth, the adverse competitive effects can involve higher prices, lower product quality, or reduced investment and innovation that otherwise would occur absent the merger.

The primary competitive mechanism involves exclusion, though the exclusion can also operate to facilitate or support coordination. This can entail input foreclosure, customer foreclosure, or both. The paradigmatic input foreclosure concern entails the upstream merging firm raising prices or refusing to sell its critical input to one or more actual or potential rivals of the downstream merging firm.⁵⁵ For example, in Comcast-NBCU, an input foreclosure concern was that the firm would raise the price of NBCU programming or possibly withhold it from video competitors, including online video distributors (OVDs).⁵⁶ The AT&T-Time Warner complaint alleges that the merged firm will gain the power to raise the price of Time Warner programming.⁵⁷ Where the upstream market has differentiated products or lacks sufficient competition, or where the foreclosure facilitates upstream coordination in a concentrated market, foreclosure can raise competitors' costs and lead them to reduce output and raise prices, as well as raise barriers to entry.⁵⁸ As a result, the downstream merging firm may gain power to raise or maintain price to the detriment of consumers and competition. This exercise of market power may be unilateral or involve coordination with other nonforeclosed downstream firms, where the input foreclosure reduces the ability of the foreclosed downstream firms to disrupt the coordination.

54. See, e.g., sources cited *supra* note 17; see also sources cited *infra* note 72.

55. This input foreclosure paradigm also applies to mergers between manufacturers and distributors, since distributors provide a distribution input that is required to market a product. For a general analysis of foreclosure, see Steven C. Salop, *The Raising Rivals' Cost Foreclosure Paradigm, Conditional Pricing Practices and the Flawed Incremental Price-Cost Test*, 81 ANTITRUST L.J. 371, 382-95 (2017).

56. Comcast-NBCU CIS, *supra* note 36, at 14.

57. AT&T Complaint, *supra* note 16, at 3.

58. For analysis of these issues and types of relevant evidence, see, for example, Salop & Culley, *Interim Guide*, *supra* note 10, at 18; and Riordan & Salop, *supra* note 17, at 528-41. See also sources cited *supra* note 17.

Customer foreclosure involves the downstream merging firm reducing or ceasing purchases from actual or potential rivals of the upstream merging firm. This foreclosure can lead to one or more upstream suppliers exiting or reducing investment, thereby permitting the upstream merging firm to exercise market power. In the Comcast-Time Warner Cable proposed merger, one concern was that an OVD's failure to obtain distribution on either Comcast or Time Warner Cable would reduce its likelihood of survival. This lack of entry could increase the market power of the cable distributors.⁵⁹

Foreclosed rivals may be actual or potential competitors. Where potential competitors are foreclosed, the exclusionary conduct can be seen as raising barriers to entry and reducing innovation. In the extreme case where one or both of the merging firms is a monopolist, the foreclosure can force entrants to enter both markets simultaneously, which may increase (or even create prohibitive) barriers to entry.⁶⁰

A vertical merger also can eliminate the most likely potential entrant. The LiveNation-Ticketmaster⁶¹ merger provides a useful illustration. Both merging firms had substantial market power in their respective markets—large concert venues and ticketing services, respectively. LiveNation was entering the ticketing market but then merged with Ticketmaster. While the DOJ consent decree required divestiture of ticketing technologies, the ticketing market lost its most powerful future competitor. First, LiveNation could offer ticketing services for its own events to achieve minimum viable scale. Second, as a complementary product provider, it had substantial incentives to enter to disrupt Ticketmaster's market power, as outlined in the earlier discussion of the single monopoly profit

59. For one analysis, see William P. Rogerson, *Economic Theories of Harm Raised by the Proposed Comcast/TWC Transaction (2015)*, in *THE ANTITRUST REVOLUTION: ECONOMICS, COMPETITION, AND POLICY* (John E. Kwoka, Jr. & Lawrence J. White eds., 7th ed. forthcoming 2018). The result of this threat to their survival raised the bargaining power of the merging firms, which could permit them to charge higher interconnection prices, which then raises the costs of the OVDs. In this way, it can lead to input foreclosure effects.

60. Salop & Culley, *Interim Guide*, *supra* note 10, at 16 (explaining that the need for two-level entry can reduce the likelihood of entry). Posner suggests that the need for two-level entry generally would at most delay entry, unless it created a risk premium. POSNER 2d ed., *supra* note 1, at 225. Even if entry is only delayed, delays can create substantial consumer harm during the interim. In addition, the higher sunk costs of two-level entry along with the fear of post-entry competition, and potential reduced ability to enter secretly, can deter entry permanently. Delays also can become permanent if there is only a narrow window of opportunity for new entrants. See PHILIP E. AREEDA & HERBERT HOVENKAMP, *ANTITRUST LAW* 76 (3d ed. 2011).

61. Competitive Impact Statement, *United States v. Ticketmaster Entm't, Inc.*, No. 1:10-cv-00139 (D.D.C. Jan. 25, 2010), <http://www.justice.gov/atr/cases/f254500/254544.htm> [<http://perma.cc/9DN3-V8TX>].

theory.⁶² Thus, it was both economically rational and likely inevitable for LiveNation to continue to invest in its ticketing venture until it succeeded. By merging, the market lost LiveNation as a powerful entrant into ticketing.⁶³

Foreclosure also can facilitate anticompetitive coordination in the upstream or downstream markets. When there are multiple vertically integrated firms, they have an increased ability and incentive to engage in input foreclosure against their unintegrated rivals.⁶⁴ If there are multiple vertical mergers, perhaps in response to one another, the outcome may lead to a broad anticompetitive reciprocal dealing, coordination effects equilibrium with higher consumer prices. Barriers to entry also might rise from rivals facing higher costs.⁶⁵

This anticompetitive reciprocal dealing, coordination effects outcome could be the end game from a series of parallel vertical mergers where no one firm achieves dominance.⁶⁶ To illustrate with a hypothetical example suggested by the AT&T-Time Warner merger, suppose there initially were three competing, differentiated video content providers and three competing, differentiated video distributors, and consumers economically purchase from only a single distributor. Suppose that all three content providers initially supply all three distributors. Suppose next that there are three parallel vertical mergers of the distributors and content providers. These three now-integrated firms might well be able to facilitate credible coordination among themselves with reciprocal contracts charging each other high input prices, perhaps also supported with Most-Favored-Nation clauses (MFNs). The higher prices then would be passed on to consumers.⁶⁷ In

62. See *supra* Section I.B.

63. The DOJ remedy required LiveNation to license its nascent ticketing entity to Anschutz in the hope of creating a new vertically integrated competitor. *Ticketmaster*, No. 1:10-cv-00139, 2010 WL 5699134, at *4 (July 30, 2010).

64. C. Scott Hemphill & Tim Wu, *Parallel Exclusion*, 122 YALE L.J. 1182, 1186 (2013).

65. *Id.* at 1236-40 (arguing that firm conduct that blocks would-be market entrants should be considered a form of monopolization); Krattenmaker & Salop, *supra* note 20, at 246.

66. For a similar analysis of anticompetitive reciprocal dealing in the context of two-way royalties in patent cross-licensing, see Carl Shapiro, *Patent Licensing and R&D Rivalry*, 75 AM. ECON. REV. 25 (1985). For an analysis in the context of standard setting organizations, see A. Douglas Melamed & Carl Shapiro, *How Antitrust Law Can Make FRAND Commitments More Effective*, 127 YALE L.J. 2110 (2018).

67. One might ask why this coordination would not occur in the premerger world if MFNs were used. Premerger MFNs would be a much weaker facilitating practice. If the three downstream distributors had MFNs with upstream content providers, and if those MFNs increased the content prices, the beneficiaries would be the content providers, not the distributors, so there would need to be monitoring of returns and side payments to split up the cartel profits in order to induce the distributors to go along. By contrast, after the vertical mergers, the distributors would be dealing with each other directly, and the reciprocity is a stabilizing force. In addition, if one distributor were to defect, it would lose access to two-thirds of the content, which would reduce its product quality.

this way, they could achieve the equivalent of (or an outcome closer to) the cartel outcome in the downstream video subscription market.⁶⁸ The reciprocal dealing equilibrium also could lead to barriers to entry into the content market.⁶⁹ Consumer harm is even more likely if the three distributors had been powerful enough in the premerger market to negotiate low content prices.

A version of this anticompetitive reciprocal dealing theory may be an issue in the DOJ complaint in the proposed AT&T-Time Warner vertical merger.⁷⁰ The complaint alleges that the merger would “make oligopolistic coordination more likely” because it “would align the structures of the two largest traditional video distributors, who would have the incentive and ability to coordinate to impede competition from innovative online rivals and result in higher prices.”⁷¹ Coordination concerns would lead to even greater consumer harms if this trend towards vertical integration were to continue with subsequent vertical mergers.

Anticompetitive coordination also can be facilitated in other ways.⁷² If the downstream merging firm had been a disruptive input purchaser that deterred input market coordination, the merger might eliminate this incentive. For example, if Amazon’s low prices hold down the ability of book publishers to coordinate in pricing to other bookstores, an acquisition by Amazon of a publisher might lead Amazon to stop taking actions that disrupt this coordination. In a market where the upstream merging firm has been a maverick seller, whose behavior deterred input market coordination, a vertical merger similarly might eliminate this incentive and facilitate coordination in selling to rivals of its downstream division. Coordination also can be facilitated by one of the merging firms transferring sensitive competitive information to its merger partner, information that can be used to facilitate parallel accommodating conduct, interdependent pricing, or even express collusion.⁷³

68. Alternatively, if each firm forecloses rival distributors from owned content, then consumers would have access to only one-third of the differentiated content, in which case EDM likely would not trump the lower product quality.

69. Each of the three integrated firms would have a greater unilateral incentive to deter content entry, which also could facilitate consciously parallel decisions not to carry the content of new entrants.

70. AT&T Complaint, *supra* note 16.

71. *Id.* ¶ 9; see also *id.* ¶ 41.

72. For technical models, see, for example, Volker Nocke & Lucy White, *Do Vertical Mergers Facilitate Upstream Collusion?*, 97 AM. ECON. REV. 1321 (2007); Volker Nocke & Lucy White, *Vertical Merger, Collusion, and Disruptive Buyers*, 28 INT’L J. INDUS. ORG. 350 (2010); and Hans-Theo Normann, *Vertical Integration, Raising Rivals’ Costs and Upstream Collusion*, 53 EUR. ECON. REV. 461 (2009).

73. Information transfer alternatively can decrease rivals’ incentives to innovate if the merged firm is able to respond more rapidly or even preemptively as a result of earlier warning.

Predicting whether competitive harms from foreclosure likely will occur can be aided by quantitative methodologies developed by economists over the last two decades. These methodologies can be used in conjunction with natural experiments and other economic and documentary evidence. The quantitative methodologies include the vertical arithmetic methodology to gauge whether total foreclosure (i.e., refusal to deal) would be profitable for the merged firm, while holding prices of the merging and rival firms constant and abstracting from any efficiency effects;⁷⁴ the Nash Bargaining Equilibrium methodology to evaluate the impact of foreclosure threats on predicted negotiated prices;⁷⁵ the vertical gross upward pricing pressure index (GUPPI) methodology to gauge partial foreclosure unilateral incentives to raise input prices to rival downstream firms and the resulting upward pricing pressure on rivals' prices, as well as EDM;⁷⁶ and merger simulation models that incorporate the impact of changed incentives of the merging and nonmerging firms on the postmerger market equilibrium.

These quantitative methodologies can be useful. But, while they are framed as if they are precise predicted price changes, they are more imprecise indicators of the direction and strength of incentives. They may ignore impacts on certain prices (e.g., the prices of competing upstream firms). They do not take into account all the possible determinants of prices or interactions among the various prices. Simulation models attempt to take more factors and interactions into account. All these quantitative methodologies also are limited because they generally focus only on a subset of the possible harms that are easiest to quantify with available data. They also generally focus only on unilateral effects and ignore the potential that the merger will facilitate coordination. These quantitative methodologies can be combined with documentary and other evidence to make a

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74. See, e.g., Daniel L. Rubinfeld, *The Primestar Acquisition of the News Corp./MCI Direct Broadcast Satellite Assets*, 16 REV. INDUS. ORG. 193 (2000); David S. Sibley & Michael J. Doane, *Raising the Costs of Unintegrated Rivals: An Analysis of Barnes & Noble's Proposed Acquisition of Ingram Book Company*, in MEASURING MARKET POWER 211 (Daniel J. Slottje ed., 2002); Steven C. Salop et al., *An Economic Analysis of Primestar's Competitive Behavior and Incentives* (Jan. 7, 1998) (FCC Submission) (on file with author); Steven C. Salop et al., *News Corporation's Partial Acquisition of DIRECTV: Economic Analysis of Vertical Foreclosure Claims* (July 1, 2003), <http://ecfsapi.fcc.gov/file/6514283359.pdf> [<http://perma.cc/AN2D-NFKL>].
75. See Affidavit of William P. Rogerson at 3-4, 16-17, *Gen. Motors Corp.*, 19 FCC Rcd. 473 (2004) (MB Docket No. 03-124), <http://ecfsapi.fcc.gov/file/6514183175.pdf> [<http://perma.cc/YP5M-HT6X>]; see also Jonathan B. Baker et al., *The Year in Economics at the FCC, 2010-11: Protecting Competition Online*, 39 REV. INDUS. ORG. 297, 304-06 (2011) (describing the application of the Nash bargaining model to various transactions); Rogerson, *supra* note 37 (describing the application of the Nash model to the Comcast-NBCU merger).
76. Moresi & Salop, *supra* note 45. Other vertical GUPPIs could be derived for different model formulations.

more reliable prediction of the likelihood of anticompetitive effects from the proposed merger.

B. *Competitive Benefits*

A vertical merger may generate cognizable efficiency benefits.⁷⁷ These competitive benefits can reverse or deter potential anticompetitive conduct by creating the ability and incentives to reduce prices, increase quality, expand investment, or speed innovation. First, like a requirements contract, a vertical merger might reduce risk by creating guaranteed demand for an input supplier or guaranteed supply for a customer, either of which can lead to lower costs.⁷⁸ For example, this could be a rationale for a firm like Apple acquiring a flash memory producer. Second, a vertical merger might “internalize” the spillover benefits that investment by one of the firms has on the profitability of the other, which might reduce costs or increase product quality or innovation. An argument along these lines might be used to rationalize Amazon’s acquisition of a robot manufacturer to complement its investments in automation. Third, a merger might also spur investment by reducing the risk of holdup, for example, when a firm that will be investing over time in machines using a developing patented technology purchases the underlying patents. Fourth, a vertical merger may lead to better information sharing or coordination between the upstream and downstream firms, which can increase product quality or reduce costs. Fifth, EDM can lead to incentives to reduce prices. The benefits can enhance competition from unilateral effects. Or, in markets vulnerable to coordination, a merger might reduce the likelihood of coordinated effects by creating a maverick, or it might disrupt oligopoly coordination by decreasing the incentives to coordinate. These various sources of downward pricing pressure could offset and reverse upward pricing pressure from the various sources of potential competitive harms. Of course, benefits lost to rivals (e.g., from reduced cooperation) and integration costs that would reduce competition also must be taken into account.

77. See, e.g., Armen A. Alchian & Harold Demsetz, *Production, Information Costs, and Economic Organization*, 62 *AM. ECON. REV.* 777 (1972); Paul L. Joskow, *Vertical Integration*, in *HANDBOOK OF THE NEW INSTITUTIONAL ECONOMICS* 319 (Claude Menard & Mary M. Shirley eds., 2005); Markus Reisinger & Emanuele Tarantino, *Vertical Integration, Foreclosure, and Productive Efficiency*, 46 *RAND J. ECON.* 461 (2015); see also sources cited *supra* note 17 (discussing efficiencies).

78. See *Standard Oil Co. of Cal. v. United States*, 337 U.S. 293, 306-07 (1949) (describing this guarantee as a benefit of requirements contracts); Dennis W. Carlton, *Vertical Integration in Competitive Markets Under Uncertainty*, 27 *J. INDUS. ECON.* 189, 194 n.5 (1979) (arguing that this guarantee is a benefit of vertical integration); Hemphill & Wu, *supra* note 64, at 1218 (discussing *Standard Oil Co. v. United States*, 337 U.S. 293 (1949), as an example of efficient requirements contracts).

C. Comparing Competitive Harms and Competitive Benefits

Determining the likelihood of an anticompetitive merger involves comparing the likelihood and magnitude of these competitive benefits and harms to determine if consumers and competition are injured on balance. As with horizontal mergers, only merger-specific efficiency benefits should be taken into account in the balance. As discussed below, the burden on the plaintiff is reduced under Section 7.⁷⁹ Because the merging parties have better access to the relevant information, they also bear the burden of producing evidence of efficiency benefits, just as they do elsewhere in antitrust.

Foreclosed rivals in principle might be able to engage in responsive vertical mergers or de novo backward integration on their own. In that case, if vertical integration is efficient, consumers might get the benefit of competition among more efficient vertically integrated firms. This is theoretically possible, particularly where the inputs are homogeneous and there are no barriers to entry. But where the inputs are differentiated, even if each downstream firm integrates with an input supplier in response, all of them could end up losing access to the other differentiated inputs, which can cause harm despite somewhat lower input costs from EDM. This loss of access can be a particular concern in a dynamic, innovative input market, where each of the integrated firms would have access solely to its own input innovations. In addition, the end result could be the anticompetitive reciprocal dealing, coordination effects equilibrium. Thus, one cannot presume that the benefits of the parallel vertical integration would exceed the harms, even if no firm achieves dominance.

A vertical merger may increase the downstream merging firm's ability to negotiate lower prices from other (rival) input suppliers because it can threaten to turn to its upstream partner. In the Anthem-Cigna horizontal merger, however, the court indicated significant skepticism whether such "procurement efficiencies" actually would benefit consumers, and indeed, it suggested that consumers may be harmed on balance.⁸⁰ While increased bargaining leverage might lower the costs of the merged firm, it raises a number of factual issues regarding whether it will lead to consumer benefits. The input price decrease might lead to lower quality inputs, may take a long time to occur, or may not be passed on to consumers. Instead of bargaining for lower prices for itself, the firm instead may bargain for the suppliers to raise the prices they charge its downstream rivals.

79. See *infra* note 92.

80. *United States v. Anthem, Inc.*, 236 F. Supp. 3d 171, 231-59 (D.D.C. 2017), *aff'd*, 855 F.3d 345 (D.C. Cir. 2017).

This could involve an MFN-plus contractual provision, or it might be more informal.⁸¹ Or it may lead to the upstream firms having incentives to raise their prices to the other downstream firms.⁸² Finally, using a merger to increase bargaining power over input suppliers might harm the competitive process by creating buyer-side market power.

III. NEXT STEPS

Inigorating enforcement requires action by both enforcement agencies and courts to modernize vertical merger enforcement policy and update vertical merger law. This involves recognizing the substantial potential harms from vertical and complementary product mergers, foregoing strong procompetitive presumptions in making enforcement decisions, conceding that behavioral remedies are generally insufficient, and thereby requiring divestitures as remedies or taking action to block problematic vertical mergers. Enforcement policy changes could be summarized in revised vertical merger guidelines and then solidified in court decisions evaluating litigated challenges to anticompetitive mergers.

Revised guidelines would provide useful guidance to agency and state enforcers, outside counsel, potential merging firms and complaining firms.⁸³ Guidelines also would provide useful guidance to the courts. The courts have shown themselves in recent years to be very skilled in evaluating merger cases, and their evaluations have benefited from the analysis and conclusions embedded in the Horizontal Merger Guidelines.⁸⁴

81. An MFN-plus provision mandates that the downstream firm be given a certain discount below the best price offered to others. MFN-plus provisions given to a large customer tend to raise the absolute level of prices to the nonfavored customers. *See, e.g., United States v. Blue Cross Blue Shield of Mich.*, 809 F. Supp. 2d 665, 669 (E.D. Mich. 2011); Jonathan B. Baker & Judith A. Chevalier, *The Competitive Consequences of Most-Favored-Nation Provisions*, ANTI-TRUST, Spring 2013, at 20, 24.

82. In addition, the lower prices might have customer foreclosure effects in the upstream market that might lead to exit of some input suppliers and higher input prices being charged to other downstream competitors.

83. As explained by the court in a private action attacking Coca-Cola's and PepsiCo's acquisitions of bottlers, "O'Neill [the plaintiff] does not specifically allege how higher prices will result from these alleged consequences of these vertical acquisitions Indeed, O'Neill burdens this court to provide the causal links." *O'Neill v. Coca-Cola Co.* 669 F. Supp. 217, 222-23 (N.D. Ill. 1987).

84. *See, e.g., Anthem*, 236 F. Supp. 3d at 195; *United States v. Bazaarvoice, Inc.*, No. 13-CV-00133-WHO, 2014 WL 203966, at *28 (N.D. Cal. Jan. 8, 2014); *United States v. H&R Block, Inc.*, 833 F. Supp. 2d 36, 52 (D.D.C. 2011).

The 1984 Non-Horizontal Guidelines are out-of-date.⁸⁵ There was no appetite for revising the Guidelines during the George W. Bush or Obama Administrations.⁸⁶ However, the current DOJ Assistant Attorney General (AAG) for Antitrust, Makan Delrahim, was a member of the Antitrust Modernization Commission (AMC) and joined the AMC recommendation to revise the Guidelines.⁸⁷ So perhaps the Guidelines will be revised during this Administration.

New Guidelines would modernize the analysis. They would clarify the analytic methodology and summarize “best practices” with respect to analytics and types of relevant evidence.⁸⁸ They would identify the various types of documentary and economic evidence of competitive effects. They also would analyze a variety of policy issues, including: determination of any structural near-safe harbors and anticompetitive presumptions, whether a showing of higher prices to unintegrated downstream competitors would be sufficient for liability or whether it would also be necessary to show likely harm to customers of the downstream competitors, the timing of enforcement, and the role of concerns about future vertical mergers that might occur in response to the merger under consideration.

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85. James Langenfeld, *Non-Horizontal Merger Guidelines in the United States and the European Commission: Time for the United States To Catch Up?*, 16 GEO. MASON L. REV. 851, 851-52 (2009) (arguing that the 1984 Guidelines need to reflect advances in economics and current policy); Sallet, *supra* note 15, at 1 (explaining that the mechanisms of harm are substantially broader than what the 1984 Guidelines express); *Presidential Transition Report: The State of Antitrust Enforcement*, A.B.A. SEC. ANTITRUST L. 7-8 (Jan. 2017), http://www.americanbar.org/content/dam/aba/publications/antitrust_law/state_of_antitrust_enforcement.authcheckdam.pdf [<http://perma.cc/28TQ-YNDZ>] (recommending revision); *Presidential Transition Report: The State of Antitrust Enforcement 2012*, A.B.A. SEC. ANTITRUST L. 7 (Feb. 2013) [hereinafter *ABA 2012 Transition Report*], http://www.americanbar.org/content/dam/aba/administrative/antitrust_law/at_comments_presidential_201302.authcheckdam.pdf [<http://perma.cc/H7SM-DHU4>] (same); *Report and Recommendations*, ANTITRUST MODERNIZATION COMMISSION 68 (Apr. 2007) [hereinafter *AMC Report*], http://govinfo.library.unt.edu/amc/report_recommendation/amc_final_report.pdf [<http://perma.cc/4253-W39V>] (addressing the failure to update guidelines); cf. EC Guidelines, *supra* note 51 (providing a more modern analysis of input and customer foreclosure).
86. See, e.g., Deborah L. Feinstein, *Are the Vertical Merger Guidelines Ripe for Revision?*, ANTITRUST, Summer 2010, at 5; Scheffman & Higgins, *supra* note 17. Feinstein subsequently became the Director of the FTC Bureau of Competition. *Deborah L. Feinstein*, FED. TRADE COMMISSION, <http://www.ftc.gov/about-ftc/biographies/deborah-l-feinstein> [<http://perma.cc/2N9Y-PN7W>]. David Scheffman was the Director of the FTC Bureau of Economics in 2001-2003. For another articulation of the argument against the adoption of new guidelines, see Yde, *supra* note 9.
87. *AMC Report*, *supra* note 85, at 68. By contrast, Commissioner Donald G. Kempf, Jr., the current DOJ Deputy AAG for Litigation, dissented from that recommendation. *Id.*
88. For a complementary, earlier analysis of this and other issues that would arise in drafting new guidelines, and discussion of the type of evidence that would be relevant for evaluating vertical mergers, see Salop & Culley, *Interim Guide*, *supra* note 10.

Revised Guidelines and the law should incorporate modern economic analysis. The Guidelines could state clearly that enforcement policy is based on the understanding that foreclosure concerns are real, the single monopoly profit theory is invalid except under the most limited specific conditions, and EDM benefits are neither inevitable nor presumptively more significant than potential competitive harms. Enforcement should pay special attention to acquisitions by leading firms, particularly in oligopoly or dominant firm markets subject to network effects or economies of scale. This would include acquisitions of firms that may become significant potential competitors. The agencies also should pay attention to the limitations of behavioral remedies.

Guidelines are not law. Courts have the key role of reviewing the standards embedded in the Guidelines in litigated cases.⁸⁹ Therefore, the courts have the ability to convert the analysis and any enforcement presumptions in the Guidelines into legal standards or reject or revise them.⁹⁰ In this way, judicial outcomes affect future enforcement guidelines. Hearing from a district court and perhaps also the D.C. Circuit might be an important effect of the AT&T-Time Warner litigation.

A. The Requisite Showing of Anticompetitive-Effects Harm Under Section 7

An initial question for agencies and courts is what showing of anticompetitive effects is required under Section 7. It is clear that Section 7 requires evidence of likely anticompetitive effects, not just foreclosure or harm to competitors.⁹¹ Section 7 calls for a prediction, and the “incipiency” standard reduces the burden on the plaintiff to show these effects, relative to cases litigated under Section 1.⁹²

89. See sources cited *supra* note 84.

90. The role of the courts may be very limited if the agencies set overly permissive enforcement standards and fail to challenge and litigate any cases. Challenges by state attorneys general might fill the enforcement gap. And if there is a DOJ consent decree, Tunney Act oversight provides at least a limited role for the courts. For discussion of the Tunney Act, see Joseph G. Krauss et al., *The Tunney Act: A House Still Standing*, ANTITRUST SOURCE (June 2007), http://www.americanbar.org/content/dam/aba/publishing/antitrust_source/Juno07_Krauss6_2of.authcheckdam.pdf [<http://perma.cc/G6D5-CAUM>].

91. On anticompetitive-effects requirements, see *Fruehauf Corp. v. FTC*, 603 F.2d 345, 352-53 (2d Cir. 1979).

92. These incipiency concerns are reflected in the language that the merger “may” substantially lessen competition, which involves probabilities, not certainties. See *Brown Shoe Co. v. United States*, 370 U.S. 294, 323 (1962). As subsequently explained in *Philadelphia National Bank*, merger analysis “requires not merely an appraisal of the immediate impact of the merger upon competition, but a prediction of its impact upon competitive conditions in the future; this is what is meant when it is said that the amended §7 was intended to arrest anticompetitive tendencies in their ‘incipiency.’” *United States v. Phila. Nat’l Bank*, 374 U.S. 321, 362 (1963) (citing *Brown Shoe*, 370 U.S. at 317, 346).

Incipiency also places weight on concerns about the potential effects from subsequent mergers in response to this one.⁹³ Substantiality in principle might be gauged in terms of the likely dollar reduction in effective consumer welfare from higher prices, reduced quality, and slowed innovation. However, as a practical matter, dollar measures generally can only be predicted for some price effects and only very roughly. Thus, qualitative predictions of likely effects will normally be given substantial weight.

One key legal and policy issue raised here is whether it should be sufficient for the government just to prove likely higher prices or other injury to the customers of the upstream firms (i.e., the unintegrated downstream competitors) or whether it is also necessary to show harm to the customers of the downstream competitors. Focusing for simplicity on prices, a potential conflict can arise because a vertical merger that leads to higher upstream (input) prices may be profitable even absent higher downstream output prices or efficiencies.⁹⁴

Attempting to resolve this issue is beyond the scope of this Feature but it will set out the knotty issues. Consider the case of input foreclosure. On the one hand, a court might conclude the antitrust laws are designed to protect consumers, not competitors, and that downstream firms should be viewed simply as competitors, whereas the customers of these downstream firms should be viewed as the consumers. On the other hand, a court might hold it to be sufficient to show likely higher prices charged to the unintegrated downstream firms, who are the direct purchasers. This latter impact could be said to disrupt competition on the merits. Moreover, if the unintegrated downstream firms face higher costs, these higher costs generally will be passed on to their customers to some degree, unless there is a high degree of downstream competition from non-foreclosed competitors that are sufficiently close substitutes.

If evidence of higher prices charged to the downstream firms (or other harm) is deemed sufficient for liability, it raises a question of how merger efficiencies that benefit customers of the downstream merging firm would be taken into account. Which effect would determine the ruling – the lower price to these customers of the downstream firms or the higher price paid by the direct purchasers (who also are the rivals of the downstream merging firm)? Section 7 refers to anticompetitive effects in *any* line of commerce.⁹⁵ The Horizontal Merger Guidelines similarly make it clear that a horizontal merger violates Section 7 if it creates anticompetitive effects in *any* relevant market, which normally involves direct

93. In the context of vertical mergers, *Brown Shoe* also referred to a “trend towards vertical integration.” 370 U.S. at 332-33.

94. The Horizontal Merger Guidelines do not require showing harm to consumers in the case of buy-side harm to upstream sellers. See U.S. DEP’T OF JUSTICE & FED. TRADE COMM’N, *supra* note 42, at 32-33.

95. Clayton Act, 15 U.S.C. § 18 (2012).

purchasers.⁹⁶ In *Philadelphia National Bank*, the Court rejected the view that a horizontal merger that harms direct customers in one relevant market might be justified by benefits to other customers in another relevant market.⁹⁷ But merger law also stresses that its goal is “the protection of competition, not competitors.”⁹⁸ This suggests some possible ambiguity that courts will ultimately have to resolve in that the unintegrated downstream firms are the direct customers but also are the competitors of the downstream merging firm.

Rather than a uniform standard, one possible resolution could make the legal outcome depend on the mechanism of the harm. If the merger facilitates upstream coordination, then harm to the downstream customers and disruption to competition from that coordination might be found to be sufficient to find liability. But, if coordination is unlikely, then it would be necessary to show harm to these customers of the downstream firms.

Another possible resolution would be to use a burden-shifting rule of reason whereby evidence of likely higher prices charged to these downstream rival firms is sufficient to shift the burden to the merging parties to produce evidence of likely merger-specific benefits. If the parties carry this burden, then the burden would shift back to the plaintiff to show anticompetitive effects on balance to the customers of the downstream firms.

This legal ambiguity is not unique to vertical mergers. Suppose that a horizontal merger increases the firm’s bargaining power over input suppliers, which permits it to obtain lower input prices. If this bargaining power amounts to classical monopsony, it would lead to harm to downstream customers as well as reduced market output, *ceteris paribus*. However, if the increased bargaining power does not amount to classical monopsony, but rather involves countervailing bargaining power over oligopolistic input suppliers, then the input price increase would not automatically lead to reduced market output.⁹⁹ The downstream merging firm might have the incentive to pass on some of the cost savings to its customers, *ceteris paribus*. This raises the question of whether the court would balance the benefits to those customers against the harms to the input suppliers.¹⁰⁰

96. U.S. DEP’T OF JUSTICE & FED. TRADE COMM’N, *supra* note 42, at 30 n.14.

97. 374 U.S. at 370-71.

98. *Brown Shoe*, 370 U.S. at 320 (emphasis omitted).

99. The lower prices could reduce the input suppliers’ incentives to invest, but the same argument would suggest that the lower costs could raise the merged firm’s incentives to invest. For further discussion of these issues, see C. Scott Hemphill & Nancy L. Rose, *Mergers that Harm Sellers*, 127 YALE L.J. 2078 (2018).

100. This issue was potentially raised by the Anthem-Cigna merger, *see supra* note 80 and accompanying text, but the court was skeptical of the cost savings and whether they would be passed on.

In summary, the issue of whether it should be necessary for liability to prove harm to the customers of the downstream firms, or whether it should be sufficient to prove only harm to the unintegrated downstream firms, is still unresolved. This is a key issue for guidelines and the courts.

B. Presumptions

A second question for courts and enforcement guidelines is whether or not to adopt anticompetitive or procompetitive presumptions.¹⁰¹ In the view of this author, vertical merger law and enforcement policy should not presume that the typical vertical merger in an oligopoly market is inherently anticompetitive. Neither should the agencies nor the law adopt the outdated Chicago School view that presumes that foreclosure concerns are inherently unlikely or that efficiency benefits can be presumed to be highly likely to prevent anticompetitive effects on consumers in situations where the merger otherwise raises competitive concerns.¹⁰² That presumption is not supported by Section 7's basic incipency standard or *Ford* and *Fruehauf*. Nor is it supported by theoretical and empirical economic analysis.¹⁰³ That permissible presumption would lead to false negative errors and underdeterrence.

101. For general analysis of the structure and role of antitrust presumptions, see Steven C. Salop, *An Enquiry Meant for the Case: Decision Theory, Presumptions, and Evidentiary Burdens in Formulating Antitrust Legal Standards* (Georgetown Univ. Law Ctr., Nov. 6, 2017), http://ssrn.com/abstract_id=3068157 [<http://perma.cc/KAA4-496S>]. For the application to horizontal mergers, see Steven C. Salop, *The Evolution and Vitality of Merger Presumptions: A Decision-Theoretic Approach*, 80 ANTITRUST L.J. 269 (2015).

102. See *supra* Section I.D. By contrast, the FTC's 2007 submission to the Organisation for Economic Co-operation and Development recommended a very permissive standard that vertical mergers "should be allowed to proceed except in those few cases where convincing, fact-based evidence relating to the specific circumstances of the vertical merger indicates likely competitive harm." *Note by the United States, supra* note 13, ¶ 1.

103. In his recent speech, Bruce Hoffman argued that empirical studies suggest that vertical restraints generally are procompetitive. See Hoffman, *supra* note 32, at 4. Yet he failed to take into account a number of recent empirical studies, including a number of merger natural experiments that more often find anticompetitive effects of vertical mergers or lack of vertical merger efficiencies. See, e.g., Baker et al., *supra* note 75, at 306 (offering evidence of anticompetitive input foreclosure in that the partial vertical merger of News Corp and DIRECTV led to higher prices for Fox (News Corp) content charged to rivals of DIRECTV); Justine S. Hastings & Richard J. Gilbert, *Market Power, Vertical Integration and the Wholesale Price of Gasoline*, 53 J. INDUS. ECON. 469 (2005) (offering evidence consistent with vertical integration leading to higher wholesale prices charged to competitors); Ali Hortaçsu & Chad Syverson, *Cementing Relationships: Vertical Integration, Foreclosure, Productivity, and Prices*, 115 J. POL. ECON. 250 (2007) (concluding that vertical integration did not lead to higher prices, but also rejecting vertical integration efficiencies); Jean-François Houde, *Spatial Differentiation and*

Vertical mergers can lead to efficiency benefits that can prevent or mitigate consumer harms. But, as with horizontal mergers, some or all of these efficiencies (including EDM) might be obtained without a merger. Substantial efficiency benefits also are not inevitable. Benefits accruing to the merging firms also may come at the expense of reduced efficiencies for the unintegrated rivals from loss of access to critical inputs or higher input prices. Other upstream firms might raise their prices in response to input foreclosure, which would tend to lead to higher downstream prices. Increased cooperation between the divisions of the merging firm often would be accompanied by less cooperation between the merging firm and its rivals.¹⁰⁴ As a result, it cannot be presumed that prices

Vertical Mergers in Retail Markets for Gasoline, 102 AM. ECON. REV. 2147 (2012) (offering evidence that an increase in the number of vertically integrated gas stations in Quebec City led to higher prices); Leemore Dafny et al., *The Price Effects of Cross-Market Hospital Mergers* (Nat'l Bureau of Econ. Research, Working Paper No. 22106, 2017) (offering evidence that mergers of complementary hospitals with common customers led to higher prices, a result also inconsistent with the single monopoly profit theory), <http://www.nber.org/papers/w22106> [<http://perma.cc/AFX6-UR63>]; Fernando Luco & Guillermo Marshall, *Vertical Integration with Multi-Product Firms: When Eliminating Double Marginalization May Hurt Consumers* 15 (Oct. 20, 2017) (unpublished manuscript), http://www.ftc.gov/system/files/documents/public_events/1208143/luco_marshall.pdf [<http://perma.cc/85VZ-4FY4>] (offering evidence that Coca-Cola and PepsiCo bottler acquisitions raised prices of Dr. Pepper Snapple products, while reducing prices of Coca-Cola and PepsiCo products). *But see* Gregory S. Crawford et al., *The Welfare Effects of Vertical Integration in Multichannel Television Markets* (Nat'l Bureau of Econ. Research, Working Paper No. 21832, 2017) (offering evidence that vertical integration of cable TV distributors with regional sports networks generally led to lower prices), <http://www.nber.org/papers/w21832> [<http://perma.cc/3L7J-9TCS>]. Hoffman, *supra* note 32, at 4 n.6, cites two earlier survey articles that purported to find little evidence of harms from vertical mergers: James C. Cooper et al., *Vertical Antitrust Policy as a Problem of Inference*, 23 INT'L J. INDUS. ORG. 639 (2005); and Francine Lafontaine & Margaret Slade, *Exclusive Contracts and Vertical Restraints: Empirical Evidence and Public Policy*, in HANDBOOK OF ANTITRUST ECONOMICS, *supra* note 17, at 391. Some of the limited number of vertical merger studies surveyed in these articles were stock market event studies, which do not account for the possible effects of investors' expectations that competitors also will be acquired in subsequent mergers, among other problems. Almost half of the other vertical merger articles involved markets where vertical integration was prohibited by state laws intended mainly to benefit retailers, which limit their value in forming presumptions about markets where vertical mergers might be used to maintain or enhance market power. The two most relevant studies in those surveys involved vertical integration by video distributors into content. But these studies limited their analysis solely to the issue of customer foreclosure. They did not analyze the input foreclosure concerns that have been raised in recent matters, were validated in Baker et al., *supra* note 75, and now are the focus of the AT&T-Time Warner complaint. More generally, Jonathan Baker elsewhere has made the point that it is important to take into account whether econometric studies of allegedly anticompetitive conduct provide biased evidence about the effects of loosening antitrust rules if more intrusive current antitrust rules deter exclusionary conduct in the most problematic markets. *See* Baker, *supra* note 27, at 17-26.

¹⁰⁴. This was an issue in the Google-ITA merger. Competitive Impact Statement at 6-9, *United States v. Google Inc.*, No. 1:11-cv-00688 (D.D.C. Apr. 8, 2011) [hereinafter Google-ITA CIS],

would fall, the speed of innovation would increase, or consumers would benefit on balance.

Legal and enforcement presumptions might depend on market-structure factors. For example, the existence of substantial economies of scale and demand-side network effects can lead to severe incumbency advantages, high barriers to entry, and incentives to use vertical mergers to decrease the likelihood of entry.¹⁰⁵ If, in addition, the incumbent has the ability and incentive to integrate de novo, the cost of false positives falls, relative to false negatives. Where the acquisition target is small or nascent, and the potential harms will occur in the future, it also may be more difficult to make a precise prediction with case-specific evidence. In light of the incipency standard, these observations suggest there might be a modest anticompetitive presumption for mergers involving dominant firms in markets with significant scale economies or network effects.¹⁰⁶ By contrast, there might be a procompetitive presumption for vertical mergers involving firms with low market shares. But for the remaining markets, a neutral competitive-effects presumption might be warranted.

C. Near-Safe Harbors

A third question for courts and enforcement guidelines is whether or not to adopt any safe harbors. A vertical merger does not change concentration in either market. However, market shares and concentration measures can be relevant to the competitive evaluation and might be used to create near-safe harbors.¹⁰⁷ For example, the 1984 Non-Horizontal Merger Guidelines had a safe harbor for markets that were not highly concentrated.¹⁰⁸

<http://www.justice.gov/atr/case-document/file/497671/download> [<http://perma.cc/7Q6P-K72F>]. Similarly, in the proposed Lam-KLA merger, the merged KLA might have gained the incentive to delay access for Lam's rivals. As explained by the Acting AAG for Antitrust, "The proposed transaction presented concerns about the ability of the merged firm to foreclose competitors' development of leading edge fabrication tools and process technology on a timely basis." Don Clark & Ezequiel Minaya, *Lam Research, KLA-Tencor Call Off Merger on Antitrust Concerns*, WALL ST. J. (Oct. 5, 2016, 8:12 PM), <http://www.wsj.com/articles/lam-research-kla-tenor-call-off-merger-on-antitrust-concerns-1475707330> [<http://perma.cc/7CHK-M22Q>].

105. See, e.g., Joseph Farrell & Paul Klemperer, *Coordination and Lock-In: Competition with Switching Costs and Network Effects*, in 3 HANDBOOK OF INDUSTRIAL ORGANIZATION, *supra* note 17, at 1967. Posner also expresses greater concerns with exclusion in these "new economy" markets. POSNER 2d ed., *supra* note 1, at 252-55.
106. For a far more interventionist policy suggestion, see Lina M. Khan, Note, *Amazon's Antitrust Paradox*, 126 YALE L.J. 710, 792-97 (2017).
107. A near-safe harbor is one that normally is followed but might be ignored in special circumstances.
108. U.S. DEP'T OF JUSTICE, *supra* note 5, at 26.

Courts and agencies should be cautious about adopting near-safe harbors based purely on market shares and concentration. The upstream merging firm may have a relatively small market share, but its own premerger ability and incentive to rapidly expand or engage in maverick behavior may be disciplining the pricing of other upstream firms. In this scenario, the merger might lead to profitable input foreclosure by permitting the other upstream firms to raise their prices and disadvantage its downstream rivals. Similarly, a low market share of the downstream merging firm may not be a good proxy for its premerger role as a disruptive buyer or downstream maverick.¹⁰⁹

However, the agencies might consider a possible near-safe harbor if both markets are unconcentrated, and if concentration also would be low for a modified measure of concentration, where the merging firms are excluded from the concentration calculation.¹¹⁰ The latter calculation is needed to take into account the incentives of nonmerging firms to respond to foreclosure by raising their own prices.

D. Treatment of Complementary Product Mergers

A fourth consideration is the treatment of mergers of firms producing complementary products. These mergers are analytically identical to vertical mergers.¹¹¹ Evaluation of complementary product mergers uses the same economic tools as vertical mergers.¹¹² The competitive concerns and benefits are analogous.¹¹³

109. This same point applies to anticompetitive presumptions based solely on market shares and concentration. The upstream merging firm may currently have a large market share, but numerous other actual and potential competitors may have the ability and incentive to expand rapidly if it forecloses downstream rivals, which can render unprofitable an attempted input foreclosure strategy.

110. Salop & Culley, *Interim Guide*, *supra* note 10 at 14-15.

111. To illustrate, consider a hypothetical merger between a product designer and a product fabricator. For example, the fabricator might purchase a design and then sell the product to customers, or vice versa, in which case the merger would appear vertical. Or, the market may be structured such that the customer contracts with each company separately for the design and fabrication services, in which case the merger will appear complementary.

112. One seeming difference is that some customers may purchase only one of the complementary components. However, this also can occur in the vertical merger context. For example, electrically powered automobiles do not use fuel injectors or spark plugs.

113. The potential competitive harms discussed here should be distinguished from the entrenchment theory in complementary product mergers. Under that theory, the efficiencies from the transaction might lead a more efficient merged firm to capture sales from its rivals sufficient to cause those rivals to exit. *See, e.g.*, *FTC v. Procter & Gamble*, 386 U.S. 568 (1967). Note, however, that a merger alternatively can entrench market power by raising the costs of competitors and entrants.

A few issues may be described differently or present themselves with superficially different conduct. A complementary product merger may lead to increased prices for unbundled purchases, which the merging firms may characterize as a bundled discount but may really be a bundled surcharge, relative to premerger prices. Total foreclosure of one product may present as a refusal to sell the products unbundled, which might be implemented through physical or contractual tying. Or, the merged firm might make its products incompatible with potential entrants' products. However, the basic economic analysis is the same.

E. Timing of Enforcement

A fifth consideration for agencies and ultimately for courts is the timing of enforcement. It has been suggested by some that enforcement policy towards vertical (or complementary product) mergers should be delayed unless and until the merged firm engages in anticompetitive conduct.¹¹⁴ The rationale is that the firm may never attempt exclusionary conduct and the unnecessary remedy may create inefficiencies.

There are several flaws in such a policy of delay.¹¹⁵ First, consumers would suffer harms during the interim until liability has been established and a remedy put into place. The ability of the merged firm to delay resolution of the matter could entail a long lag before the anticompetitive effects are remedied. Second, if enforcement is delayed, it may be impossible to unwind the merger after the fact. The market structure also may have irreversibly changed. For example, the exclusionary conduct of the merged firm may already have caused excluded rivals irreversibly to exit, in which case the only remaining remedy might be price regulation. Third, the anticompetitive conduct may not even be reliably detected after-the-fact, just as coordination may not be detected after a horizontal merger. Fourth, Section 1 and Section 2 standards are more permissive than Section 7. All in all, failure to address these kinds of issues in the context of premerger review could lead to significant consumer harm and underdeterrence.

^{114.} See *ABA 2012 Transition Report*, *supra* note 85, at 8-9.

^{115.} Indeed, the fundamental rationale for the Hart-Scott-Rodino Act is to prevent the delays and limitations inherent in after-the-fact enforcement of Section 7. See 15 U.S.C. § 18a (2012).

F. Remedies for Anticompetitive Vertical Mergers

A sixth consideration relates to remedies. Most vertical merger consent decrees have mandated behavioral (conduct) remedies.¹¹⁶ This reflects confidence that these restrictions can prevent competitive harm while allowing the firms to achieve efficiency benefits that will increase competition. This confidence is sorely misplaced. Consider the general point: a conduct remedy represents an acknowledgement that the merger likely creates incentives to behave in ways that will harm competition. It also represents a belief that the agency has identified and successfully enumerated all the behaviors that might manifest those incentives in the future. But as regulatory economics has made clear, regulated firms surely are better informed about how various actions might allow them to exercise their market power.¹¹⁷ Moreover, the options for anticompetitive behavior likely will evolve over time as market conditions change. Despite this dynamic context and fundamental information asymmetry, consent decrees today also are typically short-lived with little room for modification.¹¹⁸ This short duration may be based on the view that markets will self-correct over the life of the decree or that certain provisions will outlive their usefulness. But market self-correction may not occur, and the consent decree provisions may fail to achieve their goal of preserving competition. It follows that rational and effective consent decrees should permit the agencies and courts to monitor the market and modify the decree if conditions change that make the specific provisions of the decree ineffective in preserving competition.

While these problems with behavioral remedies have generally been acknowledged in the case of horizontal mergers, where structural relief is gener-

116. Keyte & Schwartz, *supra* note 10, at 10, 12-15; Salop & Culley, *Enforcement Actions*, *supra* note 10.

117. See JEAN-JACQUES LAFFONT & JEAN TIROLE, *A THEORY OF INCENTIVES IN PROCUREMENT AND REGULATION* (1993).

118. For example, the consent decree for the Google-ITA merger required that Google provide key products for at least five years. Google-ITA CIS, *supra* note 104, at 9-10. The Comcast-NBCU consent decree expires in September 2018. *United States v. Comcast Corp.*, No. 1:11-cv-00106, 2011 WL 5402137, at *17 (D.D.C. Sept. 1, 2011).

ally required, they have tended to be ignored or downplayed in vertical transactions.¹¹⁹ The current DOJ AAG has taken a strong stand against behavioral remedies.¹²⁰ Remedies such as firewalls, exclusion prohibitions, and antidiscrimination provisions have loopholes and may be unable to be effectively enforced by the agencies or a court. Antidiscrimination provisions such as MFNs can create their own competitive problems.¹²¹

For these reasons, structural relief, such as divestitures of the critical products that raise foreclosure concerns, divestitures sufficient to eliminate postmerger market power concerns, or paid-up licenses for critical intellectual property, should generally be required. In some situations, it will be necessary to enjoin the merger. It also is important to incorporate a process for postmerger competitive reviews that provide the agencies with an opportunity to significantly alter consent decrees if necessary to ensure competitive performance.¹²² While such provisions will place financial risk on the merging parties, that is preferable to putting all the competitive risk on consumers. Requiring the merging firms to bear this risk will also help to deter overreaching claims.

The courts have an important role in remedial design. In litigated cases where the merging firms commit to a remedy as part of their merger defense, courts can take a skeptical view of behavioral remedies. Additionally, courts can

119. The DOJ's remedy policy guide states that "[r]emedial provisions that are too vague to be enforced, or that can easily be misconstrued or evaded, fall short of their intended purpose and may leave the competitive harm unchecked." U.S. DEP'T OF JUSTICE, ANTITRUST DIVISION POLICY GUIDE TO MERGER REMEDIES 13 (June 2011), <http://www.justice.gov/sites/default/files/atr/legacy/2011/06/17/272350.pdf> [<http://perma.cc/6AFQ-LKAJ>]. For example, Luco & Marshall, *supra* note 103, found that the FTC's behavioral remedy failed to prevent price increases for the rival brands bottled by Coca-Cola and PepsiCo.

120. Makan Delrahim, Assistant Att'y Gen., U.S. Dep't of Justice, Keynote Address at American Bar Association's Antitrust Fall Forum (Nov. 16, 2017), <http://www.justice.gov/opa/speech/assistant-attorney-general-makan-delrahim-delivers-keynote-address-american-bar> [<http://perma.cc/Y6V6-FT47>]. This author agrees with his concerns. See Steven Salop, *Blocking the AT&T-Time Warner Merger Is Good Antitrust Economics and Law*, MEDIUM (Nov. 21, 2017), <http://medium.com/@PublicKnowledge/blocking-the-at-t-time-warner-merger-is-good-antitrust-economics-and-law-1845f07ed586> [<http://perma.cc/6JT3-GQC9>]. For example, some consent decrees mandate a binding arbitration remedy for alleged anticompetitive price increases by the merged firm. *E.g.*, Google-ITA CIS, *supra* note 104. That remedy likely would fail because commercial arbitrators are unequipped to determine whether such price increases are competitively unreasonable under the antitrust rule of reason. They can evaluate only whether price increases are "commercially reasonable," a standard that permits a firm with additional bargaining power to charge higher prices.

121. See, e.g., Steven C. Salop & Fiona Scott Morton, *Developing an Administrable MFN Enforcement Policy*, ANTITRUST, Spring 2013, at 15.

122. See, e.g., Steven C. Salop, *Modifying Merger Consent Decrees: An Economist Plot To Improve Merger Enforcement Policy*, ANTITRUST, Fall 2016, at 15.

reject merger settlements with weak remedies and demand a role for judicial oversight and a broader scope for modification of consent decrees.

CONCLUSION

The view that vertical mergers are invariably efficient and procompetitive is a vestige of the Chicago School's outdated economic analysis of exclusionary conduct. In the current economy where market power is more common and concentration is high in many significant markets, and where technology has led to substantial technological and network-effects entry barriers, vertical and complementary product mergers present heightened concerns. It is time to address these concerns and invigorate vertical merger enforcement to protect a vibrant competitive process, innovation, and consumer welfare.