Draft: 11/6/17

INVIGORATING VERTICAL MERGER ENFORCEMENT

Steven C. Salop*

I. Introduction

Vertical merger enforcement has been an intended victim of an overdose of Chicago-School economics and laissez-faire ideology. In our modern market system, vigorous vertical merger enforcement is a necessity. This is particularly important in markets where economies of scale and network effects lead to barriers to entry and durable market power. This article explains why and how vertical merger enforcement can and should be invigorated.

In 1972, the Supreme Court upheld the challenge to the acquisition of the Autolite spark plug company by Ford.[1] Vertical merger enforcement was attacked as economically irrational by Chicago-school commentators, notably expressed by Robert Bork.[2] There were three main arguments. First, the alleged foreclosure was seen as illusory, instead just a neutral rearrangement of supplier-customer relations. Second, competitive harm was seen as implausible because there is only a "single monopoly profit," that would be unaffected by the merger, except under rare circumstances. Third, vertical mergers were seen as highly efficient because they inevitably would reduce downstream prices by "eliminating double marginalization" of the cost of the upstream merging firm on sales by the downstream merging firm. In sum, competitive harm was seen as implausible and 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 of these critiques was reflected in the 1984 Non-Horizontal Merger Guidelines, which set out narrow conditions for vertical merger challenges.[3] However, the first two claims never had a strong economic basis and have been steadily and powerfully debunked by economists, while the third has been substantially weakened.

This article reviews this history, explains the economic flaws in the Chicago-School theories and presents a more balanced approach to the potential competitive effects of vertical mergers. The article also suggests how enforcement might be modernized.

---

* Professor of Economics and Law, Georgetown University Law Center. I have greatly benefited from comments from Jonathan Baker, Daniel Culley, Nancy Rose, Mark Ryan, Jonathan Sallet and Carl Shapiro. I have consulted on some of the matters discussed. All opinions are my own and do not necessary reflect the views of my colleagues or consulting clients.

[1] Ford Motor Co. v United States, 405 U.S. 562 (1972).

[2] ROBERT H. BORK, THE ANTITRUST PARADOX 225-45 (1978).

[3] U.S. DEP'T OF JUSTICE, ANTITRUST DIVISION, NON-HORIZONTAL MERGER GUIDELINES (1984).

II. The Limited Economic Relevance of Three Chicago-School Assumptions Underlying the Vertical Enforcement Landscape

Ford/Autolite was the last vertical merger case to reach the Supreme Court. The last FTC vertical merger case litigated to conclusion was in 1979, and the FTC lost that case.[4] In merger litigation where there are both vertical and horizontal issues, the agencies typically focus only on the horizontal.[5] There also has been little private litigation.[6]

Since 2000, the enforcement agencies have shown only limited interest to vertical merger concerns. Those issues commonly are dismissed during the preliminary analysis or on the basis of a quick look, as merger counselors would confirm. The U.S. agencies challenged 52 vertical mergers over the entire 1994-2016 period and many of these involved horizontal concerns as well.[7] Some others were abandoned under pressure.[8] Enforcement has varied across administrations. The DOJ and FTC brought about 33 challenges during the Clinton administration, including three that were finalized in 2001.[9] The G.W. Bush administration

---

[4] 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 Section 7 liability, not simply foreclosure. Id. at 352-353.

[5] 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 the vertical merger aspect of the merger, which involved combining a physicians' group with a hospital. See Saint Alphonsus Med. Ctr.-Nampa Inc. v. St. Luke's Health Sys., Ltd., 778 F.3d 775 (9th Cir. 2015);

[6] The *St. Luke's* merger case also involved a private challenge which raised vertical foreclosure concerns. While the District Court and the 9th Circuit focused solely on the horizonal overlap, the factual findings were supportive of the vertical foreclosure claim. 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 WASHINGTON L.R. 199, 211(n.52), 221 (2016). Two other private cases are O'Neill v. Coca-Cola Co., 669 F. Supp 217 (N.D. Ill., 1987) (plaintiff denied standing and claims dismissed); HTI Health Services, Inc. v. Quorum Health Group, Inc., 960 F. Supp. 1104 (S.D. Miss. 1997). For further discussion of this latter case, *see Id.* at 219-221.

[7] In contrast, the number of horizontal merger challenges is approximately 30-50 annually. A number of the challenges classified as vertical mergers also involved horizontal merger concerns, and for those, the agency focus placed primarily on the horizontal overlaps.

[8] Steven C. Salop & Daniel P. Culley, *Vertical Merger Enforcement Actions: 1994-2016* (June 30, 2017), http://scholarship.law.georgetown.edu/facpub/1529/. These counts update the earlier enforcement statistics cited in Steven C. Salop & Daniel P. Culley, *Revising the U.S. Vertical Merger Guidelines: Policy Issues and an Interim Guide for Practitioners*, 4 J. ANTITRUST ENFORCEMENT 1 (2015) (hereinafter, *Interim Guide*). These statistics reflect only challenges and clear abandonments in response to concerns. *See* also James A. Keyte and Kenneth B. Schwartz, *Getting Vertical Deals Through the Agencies: "Let's Make a Deal,"* 29 ANTITRUST 10 (2014-2015).

[9] The carryover matters were Premdor/Masonite (transaction originated September 30, 2000, challenge announced August 2001), AOL/Time Warner (Order issued in 2000, finalized in 2002) and Entergy/Koch Industries) (analyzed in 2000, finalized in January 2001). In News Corp.'s acquisition of a stake in the parent company of DirecTV in 2003 and AT&T's acquisition of DirecTV in 2015, the DOJ did not take enforcement action in reliance of the FCC's remedy. *See* General Motors Corp.

initiated five additional challenges and the Obama administration had fourteen actual and threatened enforcement actions.[10]

Reduced enforcement by the Bush administration was consistent with its lower level of concerns about exclusionary conduct.[11] The Obama administration brought more actions, but it was only half of the Clinton administration level. The Obama administration may have recognized growing concerns over time. In the LiveNation/Ticketmaster merger in 2009, the DOJ focused almost solely on the horizontal overlap in ticketing, not the impact of the combining the largest owner of large concert venues with the dominant provider of ticketing services. In the Comcast/NBCUniversal merger in 2011, the DOJ showed greater concerns and was highly skeptical of the parties' elimination of double marginalization claims. In the Anthem/Cigna horizontal merger litigation in 2016, the DOJ rejected the claimed efficiencies involving the ability to reduce input costs by exercising bargaining leverage over providers, an impact that also might occur in vertical mergers, and the D.C. Circuit agreed.[12] The LAM/KLA vertical merger in 2016 was abandoned over DOJ remedial concerns, which also suggests a harder line.[13]

One reason for limited interest is the fact that the competitive risks of vertical mergers, and foreclosure more generally, are viewed with great skepticism through the lens of the Chicago-School commentary, and those ideas continue to hold force.[14] Their skepticism has three main threads: foreclosure is an illusion; anticompetitive foreclosure generally would not be profitable; and vertical mergers are invariably efficient because of elimination of double marginalization.

---

and Hughes Electronics Corp., Transferors, and the News Corp., Transferee, MB Docket No. 03-124, Memorandum Opinion and Order, 19 FCC Rcd 473 (2004); AT&T Inc. and DIRECTV, MB Docket No. 14-90, Memorandum Opinion and Order, 30 FCC Rcd 9131(2015). These latter two media mergers are not included in the enforcement statistics.

[10] The threats include the Comcast/Time Warner Cable and Lam/KLA transactions, which were abandoned in 2016. The Comcast/Time Warner transaction was analyzed as a horizontal matter, although the parties viewed themselves as complementary products.

[11] *Note by the United States*, OECD Roundtable on Vertical Mergers (February 2007), https://www.ftc.gov/sites/default/files/attachments/us-submissions-oecd-and-other-international-competition-fora/07RoundtableonVerticalMergers.pdf; U.S. DEP'T OF JUSTICE, COMPETITION AND MONOPOLY: SINGLE-FIRM CONDUCT UNDER SECTION 2 OF THE SHERMAN ACT (2008), http://www.justice.gov/atr/public/reports/236681.pdf (2008). This report was subsequently withdrawn in 2009.

[12] United States v. Anthem, Inc., 236 F. Supp.3d 171, 221 (D.D.C. 2017) [hereinafter, *Anthem*].

[13] Jon Sallet, *Remarks as Prepared for Delivery at the ABA Fall Forum: The Interesting Case of the Vertical Merger* 10 (November 17, 2016), https://www.justice.gov/opa/speech/file/938236/download. *KLA-Tencor Announces Termination Of Merger Agreement With Lam Research* (Press Release, October 5, 2016); http://ir.kla-tencor.com/news-releases/news-release-details/kla-tencor-announces-termination-merger-agreement-lam-research.

[14] See BORK, *supra* note 2

However, modern economic analysis makes clear that these theories do not provide a valid basis for such limited enforcement.[15]

A. Foreclosure as an Illusion

The most overarching Chicago-School criticism is that the vertical mergers do not foreclose, but simply realign vertical relationships. Applied to *Brown Shoe*, Brown may supply more shoes to Kinney stores and fewer to competing stores and Kinney may purchase fewer shoes from rival manufacturers but more from Brown.[16] But rather than eliminating rivals' opportunities, the retailers no longer buying from Brown can begin from the manufacturers no longer selling to Kinney. This reasoning famously led Bork to quip in a later case that the FTC should have hosted an "industry social mixer" instead of challenging the merger.[17]

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 general, particularly in oligopoly markets with barriers to entry.[18] If the upstream merging firm raises price or refuses to sell to downstream rivals, that foreclosure may reduce the total supply available to rivals. It also may incentivize other upstream firms to raise their prices to the rivals of the downstream merging firm in response, either unilaterally or through coordinated interaction. Unintegrated 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, not an illusion.

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.[19] This theory has gained some judicial acceptance. In her *Jefferson Parish*

---

[15] *See*, e.g., Janusz A. Ordover, Garth Saloner,& Steven C. Salop, *Equilibrium Vertical Foreclosure*, 80 AMERICAN ECON. REVIEW 127 (1990); Michael H. Riordan & Steven C. Salop, *Evaluating Vertical Mergers: A Post-Chicago Approach*, 63 ANTITRUST L.J. 513 (1995); Jeffrey R Church, *The Impact of Vertical and Conglomerate Mergers on Competition* ix (2004). https://publications.europa.eu/en/publication-detail/-/publication/d95d239c-2844-4c95-80a4-2181e85e8329/language-en; Jeffrey Church, *Vertical Mergers*, *in* 2 ABA SECTION OF ANTITRUST LAW, ISSUES IN COMPETITION LAW AND POLICY 1455 (W. Dale Collins ed., 2008); Michael H. Riordan, *Competitive Effects of Vertical Integration*, *in* HANDBOOK OF ANTITRUST ECONOMICS 145 (Paolo Buccirossi ed., 2008); Jonathan B. Baker, *Exclusion as a Core Competition Concern,* 78 Antitrust L.J. 527 (2013).

[16] *Brown Shoe Co. v. United States*, 370 U.S. 294 (1972).

[17] BORK, *supra* note 2, at 232. *See* also *Fruehauf*, *supra* note 4 at 52 n.9 ("a vertical merger may simply realign sales patterns")

[18] For further details, *see* Thomas Krattenmaker & Steven C. Salop, *Anticompetitive Exclusion: Raising Rivals' Costs to Gain Power Over Price*, 96 YALE L.J. 209 (1986).

[19] Aaron Director & Edward H. Levi, *Law and the Future: Trade Regulation*, 51 Nw. U. L. Rev. 281 (1956); Ward S. Bowman, *Tying Arrangements and the Leverage Problem,* 67 YALE L. J. 19 (1957); BORK *supra* note 2, at 229. The theory recognizes an exception if the monopolist is regulated, in which case the merger can be used to evade regulation.

concurrence advocating elimination of the per se rule against tying, Justice O'Connor opines on the single monopoly theory that "counterintuitive though that assertion may seem, it is easily demonstrated and widely accepted."[20] In that tying case, it was alleged that East Jefferson hospital would force patients solely to use the Roux anesthesiology group and this tying arrangement likely would harm consumers and also competition in the local anesthesiology services market. But the single monopoly profit theory would say 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. It would gain no incremental market power or profits by doing so.

Similarly, in the *Doman* case, 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).[21] The court opined 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."[22]

The theory is deceptively simple, but invalid in all but very extreme conditions.[23] Suppose that the upstream merging firm is an unregulated monopolist, protected by prohibitive entry barriers. Suppose that its product is used by downstream firms in fixed proportions with all other inputs and the downstream market is perfectly competitive. Under these extreme and very special conditions, the upstream monopolist would gain no additional monopoly profits by acquiring a downstream firms and foreclosing others.

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 apply to the 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.

For example, suppose each merging firm is the monopoly producer in its market. But suppose that each faces the threat of potential competition from the other. Absent the merger, each would have the incentive to enter the other's market 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.

---

[20] Jefferson Parish Hosp. Dist. No. 2 v. Hyde, 466 U.S. 2, 36 (1984) (O'Connor, J., concurring) (citing BORK *supra* note 2, at 372-74 and Philip Areeda, ANTITRUST ANALYSIS 735 (3d ed. 1981)).

[21] E & L Consulting, Ltd. V. Doman Industries Ltd., 472 F.3d. 23 (2nd Cir. 2006).

[22] *Id.* at XX. (citing 3 Phillip Areeda & Donald F. Turner, Antitrust Law § 725b (1978).)

[23] Louis Kaplow, *Extension of Monopoly Power through Leverage*, 85 Colum. L. Rev. 515 (1985); 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); *see* also the articles cited, *supra* note 15.

In markets with multiple competitors, vertical mergers can harm competition from input or customer foreclosure. To illustrate, suppose the dominant hospital acquires a key anesthesiology group and the anesthesiology group then stops providing service 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 raises 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, suppose 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 foreclosure could permit the acquired anesthesiology group to gain market power over smaller competing hospitals and clinics. This also could lead to input foreclosure effects, allowing the merging hospital to increase its prices.

While the single monopoly profit theory lacks explanatory power in real world markets, it remains an unspoken defense for limited enforcement.

C. Efficiency Benefits from Elimination of Double Marginalization

A third core claim is that vertical mergers invariably are highly efficient. A key driver is the claim that the downstream merging firm's price will be reduced from the merger. It is postulated that the upstream firm will transfer its input at marginal cost instead of the higher pre-merger price, and this "elimination of double marginalization" ("EDM") of the upstream firm's cost, which will lead the downstream merger partner to reduce its output price.[24] The prospect of EDM commonly is treated as the "most prominent" efficiency justification for vertical mergers.[25] It is used as a ubiquitous justification for weak enforcement.[26]

While many vertical mergers may entail efficiency benefits, just as do horizontal mergers, 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 to its downstream partner creates an "opportunity cost" resulting from lower upstream profits, which mitigates or eliminates the incentive to reduce the downstream price.[27] Second, if the downstream firm's price reduction would be given to a large number of existing

---

[24] The exception would be when the single monopoly profit theory applies.

[25] For example, *see* Christine Siegwarth Meyer & Yijia (Isabelle) Wang, *Determining the Competitive Effects of Vertical Integration in Mergers*, ABA ANTITRUST SECTION ECONOMICS COMMITTEE NEWSLETTER (2011) at 8; http://www.nera.com/content/dam/nera/publications/archive2/PUB_Vertical_Integration_0511.pdf

[26] Indeed, G.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." *Note by United States*, *supra* note 11.

[27] This opportunity cost issue actually 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. *See* BORK, supra note 2, at 228.

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 also will 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 "non-linear" pricing. Fourth, EDM would not be merger-specific if it can be achieved absent the merger, which may well be the case. Fifth, there is no EDM if the downstream firm's technology is incompatible with the upstream firm's inputs. Finally, and most importantly, the existence of EDM does prove that the merger is procompetitive. An EDM incentive to reduce prices may be dominated by the incentives to raise prices resulting from foreclosure. Thus, the potential for EDM is not a valid rationale for weak or non-existent enforcement.

The limitations of EDM are beginning to carry more force. Both the 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."[28] The FCC noted the opportunity cost concern and concluded that the EDM claims were both overstated and not merger-specific.[29]

III. A More Balanced View of the Competitive Harms and Benefits from Vertical Mergers

Because of the shortcomings of these theories, they do not provide a valid for weak enforcement or highly permissible legal standards.[30] Vertical merger enforcement policy and law instead must recognize that vertical mergers can lead to competitive harms as well as competitive benefits.[31] A Section 7 analysis would evaluate both effects to determine whether the merger has a significant likelihood of substantially lessening competition.

---

[28] Competitive Impact Statement, United States v. Comcast Corp., No. 1:11-cv-00106 (D.D.C. Jan. 18, 2011), www.justice.gov/atr/cases/f266100/266158.pdf.

[29] Memorandum Opinion and Order at 98, Applications of Comcast Corporation, General Electric Company, and NBC Universal, Inc. for Consent to Assign Licenses and Transfer Control of Licensees, MB Docket No. 10-56, FCC 11-4 (released Jan. 20, 2011), http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-11-4A1.pdf. For further discussion of the economic analysis of this matter, *see* also William P. Rogerson, *Vertical Mergers in the Video Programming and Distribution Industry: The Case of Comcast NBCU,* THE ANTITRUST REVOLUTION: ECONOMICS, COMPETITION, AND POLICY (John E. Kwoka, Jr. and Lawrence J. White, eds.) 534 (2013).

[30] The issue is not whether vertical mergers are always anticompetitive, but rather whether some are. At the Symposium, the author was asked about natural experiments indicating that vertical integration ever would lead to foreclosure or other anticompetitive conduct. Three obvious examples are the following: Before it was dis-integrated, AT&T used its control over the local exchange network to raise barriers to entry into long distance. United States v. AT&T Co., 552 F.Supp. 131 (D.D.C. 1982). Microsoft engaged in foreclosure conduct towards Netscape in order to raise barriers to entry into desktop operating systems. United States. v. Microsoft Corp., 253 F.3d 34 (D.C. Cir. 2001). Verizon delayed access to DSL competitors in violation of FCC regulations in order to maintain its market power in the that market. Verizon Commc'ns, Inc. v. Law Offices of Curtis V. Trinko, 540 U.S. 398, 407 (2004).

[31] For an overview, *see* Salop & Culley, *Interim Guide*, *supra* note 8.

A. Competitive Harms

Vertical mergers can lead to anticompetitive effects centered on either the upstream or downstream market. The mechanism of harm can involve unilateral, coordinated or exclusionary effects, or a combination. The merger can lead the merged firm to achieve, enhance or maintain monopoly or market power. Vertical mergers also can facilitate the harmful exercise of pre-existing market power, such as when it permits evasion of price regulation. These effects can raise prices, reduce product quality or lessen investment and innovation that would occur absent the merger.

The most common competitive concern involves either input foreclosure or customer foreclosure. The paradigmatic input foreclosure concern involves the upstream merging firm raising price or refusing to sell its critical input to one or more actual or potential rivals of the downstream merging firm.[32] Where the upstream market has differentiated products or lacks sufficient competition, or where the foreclosure facilitates upstream coordination, foreclosure can raise competitors' costs and lead them to reduce output and raise prices. Barriers to entry also may be raised. 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 may involve coordination with other non-foreclosed downstream firms, as well as the foreclosed downstream firms.

Customer foreclosure involves the downstream merging firm reducing or ceasing purchases from actual of 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. These effects also may create input foreclosure if these foreclosed firms (or the other upstream competitors) raise their input prices to the competitors of the downstream merging firm.

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.

The LiveNation/Ticketmaster 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 divesture of ticketing technologies, the ticketing market lost its most powerful future competitor. LiveNation was a likely and most powerful entrant for two reasons. First, it could offer ticketing services for its own events to achieve minimum viable scale. Second, as a complementary product provider, it had substantial

[32] 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).

incentives to enter to disrupt Ticketmaster's market power, as outlined in the earlier discussion of the single monopoly profit theory. 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 not only lost LiveNation as a powerful entrant into ticketing, it also lost Ticketmaster as a potential entry sponsor or entrant into the venue market.[33]

Input or customer foreclosure can facilitate anticompetitive coordination in the upstream or downstream market. Anticompetitive coordination also can be facilitated in other ways. If the downstream merging firm had been a disruptive input purchaser that deterred input market coordination, the merger might eliminate this incentive and facilitate the upstream firms exercising market power over downstream firms. If the upstream merging firm had been a maverick seller, whose behavior deterred input market coordination, the merger also 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.[34]

Economists have developed a number of quantitative methodologies to aid the evaluation of foreclosure concerns. 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, holding prices of the merging and rival firms constant and abstracting from any efficiency effects;[35] the "Nash Bargaining Equilibrium" ("NBE") methodology to evaluate the impact of foreclosure threats on negotiated prices;[36] the "vertical 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

---

[33] The DOJ remedy required LiveNation to divest its nascent ticketing entity. However, the remedy did not end up creating a successful new competitor.

[34] 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.

[35] For example, *see* Steven C. Salop, Stanley M. Besen, John R. Woodbury & E. Jane Murdoch, *An Economic Analysis of Primestar's Competitive Behavior and Incentives* (FCC Submission Jan. 7, 1998) (on file with authors); Daniel Rubinfeld, *The Primestar Acquisition of the News Corp./MCI Direct Broadcast Satellite Assets*, 16 REV. INDUS. ORG. 193 (2000); David 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).

[36] *See* William P. Rogerson, *An Economic Analysis of the Competitive Effects of the Takeover of DirecTV by News Corp.* at 3-4, 16-17, In the Matter of General Motors Corp., Hughes Electronics Corp., and the News Corp. Limited Application to Transfer Control of FCC Authorizations and Licenses Held by Hughes Electronics Corp. to the News Corp. Limited, MB Docket No. 03-124 (Jan. 14, 2004), https://ecfsapi.fcc.gov/file/6514183175.pdf. *See* also *Rogerson*, supra note 29; Jonathan B, Baker et.al., *The Year in Economics at the FCC, 2010–11: Protecting Competition Online*, 39 REV. IND. ORG. 297 (2011).

EDM;[37] and, merger simulation models that incorporate the impact of changed incentives of the merging and non-merging firms on the post-merger market equilibrium.

B. Competitive Benefits

A vertical merger may generate cognizable efficiency benefits that can reverse or deter potential anticompetitive conduct. Like requirements contract, a vertical merger can create guaranteed demand for an input supplier or guaranteed supply for a user.[38] It also can "internalize" the spillover benefits that investment by one of the firms has on the profitability of the other. The merger also can spur investment by reducing the risk of hold-up. By increasing product quality (e.g., from better coordination or information sharing between the merging firms) or reducing costs (e.g., through better coordination of production and marketing or distribution, EDM, or increased bargaining leverage over suppliers), the merged firm might gain a unilateral incentive to reduce its quality-adjusted prices, all else held constant. In markets vulnerable to coordination, a merger might reduce the likelihood of coordinated effects by the creation of 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.

C. Comparing Competitive Harms and Competitive Benefits

The determination of the likelihood that the merger is anticompetitive involves comparing the likelihood and magnitude of these competitive benefits and harms. As with horizontal mergers, only merger-specific efficiency benefits should be taken into account in the balance. In light of the incipiency language of Section 7 of the Clayton Act, potential harms would be given relatively more weight and there would be a sliding scale for mergers that raise more significant concerns. Because the merging parties have better access to the relevant information, they should bear the burden of producing evidence of efficiency benefits, just as they do elsewhere in antitrust.

Competitive benefits may dominate harms despite the potential for foreclosure. For example, in the case of input foreclosure, there will be no consumer harm if there is sufficient upstream competition to prevent responsive price increases or where there are sufficient, efficient upstream partners for the unintegrated downstream rivals to prevent them from being disadvantaged. But in situations where the upstream market is concentrated or products are differentiated, upstream competition is less likely to provide adequate protection and prices are more likely to rise from the foreclosure. For example, when downstream firms purchase from multiple differentiated input suppliers, the loss of one supplier from a vertical merger can lead to

---

[37] Serge Moresi & Steven C. Salop, *vGUPPI: Scoring Unilateral Pricing Incentives in Vertical Mergers*, 79 ANTITRUST L.J. 185 (2013). Other vertical GUPPIs could be derived for different model formulations.

[38] Standard Oil Co. v. United States, 337 U.S. 293, 306-307 (1949); (Dennis W. Carlton, *Vertical Integration in Competitive Markets Under Uncertainty*, 27 J. IND. ECON. 189 (1979).

higher costs and inferior products. If foreclosure from this input leads to substantial diversion to the downstream merging firms, consumer harm can result.

It might be suggested that the foreclosed rivals often might be able to engage in responsive vertical mergers or de novo backward integration on their own so that consumers get the benefit of competition among more efficient vertically integrated firms. This is theoretically possible, particularly where the inputs are not differentiated or if there are no barriers to entry. But the potential for subsequent parallel vertical mergers does not assure a competitive outcome. When 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 the differentiated inputs, where can lead to 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 only to its own input innovations. In addition, the outcome may be even worse -- an anticompetitive reciprocal dealing, coordination effects equilibrium with higher consumer prices. While each firm may achieve some EDM for its owned input, each would end up paying higher prices for other differentiated inputs.[39] Barriers to entry also might rise.[40] Thus, one cannot presume that the benefits of the parallel vertical integration would exceed the harms, even if no firm achieves dominance.

This anticompetitive reciprocal dealing, coordination effects outcome could be the end game from a series of vertical telecom mergers. To illustrate, consider a series of vertical mergers in a hypothetical telecom industry, where initially there are three competing, differentiated video content providers and three competing, differentiated video distributors, and where 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 MFNs), which then would be passed on to consumers. In this way, they could achieve the cartel outcome.[41] Consumer harm is even more

[39] One might ask why his coordination would not occur in the pre-merger world if MFNs were used. Pre-merger 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 it product quality.

[40] C. Scott Hemphill and Tim Wu, Parallel Exclusion 122 Yale L.J 1182 (2013).

[41] Alternatively, if each firm forecloses rival distributor 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.

likely if the three distributors were powerful enough in the pre-merger market to negotiate low content prices.[42]

A vertical merger may increase the downstream merging firm's ability to negotiate lower prices from other (rival) input suppliers because it now can turn to its upstream partner. In the *Anthem/Cigna* horizontal merger, the court indicated significant skepticism whether such "procurement efficiencies" actually will benefit consumers, and it suggested that consumers may be harmed on balance.[43] 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. This could involve an MFN-plus contractual provision or it might be more informal.[44] Or it may lead to the upstream firms having incentives to raise the prices to the other downstream firms. In addition, the lower prices might have customer foreclosure effects that might lead to exit and higher input prices being charged to other downstream competitors, in which case consumer prices more likely would rise. Finally, there is the policy issue of whether using a merger to increase bargaining power actually is harming the competitive process.

D. Complementary Product Mergers

A merger of firms producing complementary products is analytically identical to a vertical merger, as illustrated by a hypothetical merger between a product designer and a product fabricator. 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 customer contracts with each company separately for the design and fabrication services, in which case the merger will appear complementary. Evaluation of complementary product mergers uses the same economic tools as vertical mergers.[45] The competitive concerns and benefits are analogous.[46]

---

[42] For a similar analysis of 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. (PAPERS & PROCEEDINGS) 25 (1985). For a similar analysis in the context of standard setting organizations, see Carl Shapiro and A. Douglas Melamed, *How Antitrust Law Can Make FRAND Commitments More Effective*, __ YALE L.R. __ (2018) (forthcoming; this volume).

[43] *Anthem*., *supra* note 12.

[44] 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 non-favored customers.

[45] 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.

[46] The potential competitive harms discussed here should be distinguished from the so-called "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

A few issues may be described differently or present themselves with superficially different conduct. A complementary product merger may involve a price increase for both or just one of the products. The latter scenario might involve higher prices for unbundled purchases over the price of a bundle, which the merging firms will characterize as a bundled discount. Total foreclosure of one product may present as a refusal to sell the products unbundled, which might be implemented though physical or contractual tying. Or, the merged firm might make its products incompatible with potential entrants' products.

IV. Next Steps in Invigorating Enforcement

Invigorating enforcement requires agencies and courts to recognize the substantial potential harms from vertical and complementary product mergers, reduce or eliminate strong procompetitive presumptions in making enforcement decisions, concede that behavioral remedies are generally insufficient, and have the courage to demand injunctions rather than inadequate consent decrees. These enforcement policy changes can be summarized in revised vertical merger guidelines and solidified in court decisions upholding merger challenges.

The 1984 guidelines were premised on the Chicago-School economic and policy approach. They are now woefully out of date. [47] 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. [48] The drafting process would identify and evaluate types of evidence quantitative economic methodologies for gauging foreclosure and competitive effects. They also would resolve and explain the key policy issues, including how to apply the Section 7 incipiency standard.

---

those rivals to exit. *See, e.g.,* FTC v. Procter & Gamble, 386 U.S. 568 (1967). Note, however, that a merger also can entrench market power by raising the costs of competitors and entrants.

[47] Despite significant economic analysis and the recommendations of the Antitrust Modernization Commission in 2007 and the ABA Antitrust Section's Presidential Reports of 2012 and 2016, no efforts have been made to update these Guidelines. American Bar Association Section of Antitrust Law at 7, PRESIDENTIAL TRANSITION REPORT: THE STATE OF ANTITRUST LAW 2012, at 7 (February 2013) (hereinafter, *ABA Transition Report*); www.americanbar.org/content/dam/aba/administrative/antitrust_law/at_comments_presidential_201302.authcheckdam.pdf. The author was a member of the 2012 ABA Taskforce, which did not reach consensus on certain vertical merger enforcement issues. *See also* Antitrust Modernization Commission, REPORT AND RECOMMENDATIONS 68 (2007) (hereinafter *AMC Report*). American Bar Association Section of Antitrust Law, PRESIDENTIAL TRANSITION REPORT: THE STATE OF ANTITRUST ENFORCEMENT, at 7-8 (January 2017), https://www.americanbar.org/content/dam/aba/publications/antitrust_law/state_of_antitrust_enforcement.authcheckdam.pdf. The guidelines issued by the European Commission in 2008 analyze input and customer forclosure explicitly. European Comm'n, Guidelines on the Assessment of Non-Horizontal Mergers Under the Council Regulation on the Control of Concentrations Between Undertakings, 2008 O.J. C265/6.

[48] For a complementary earlier analysis of this and other issues that would arise in new guidelines, and discussion of the type of evidence that would be relevant for evaluating vertical mergers, *see* Salop and Culley, *Interim Guide, supra* note 8.

Revised guidelines would provide useful guidance to agency and state enforcers, outside counsel, and potential merging firms. They also would provide useful guidance to the courts.[49] 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.[50]

Revised enforcement guidelines should incorporate the methodological shift away from the Chicago-School assumptions to incorporate modern economic analysis. Guidelines could state clearly that enforcement policy is based on the understanding that foreclosure concerns are real, that the single monopoly profit theory is invalid except under the most limited specific conditions, and that EDM benefits are neither inevitable nor likely more significant than potential competitive harms. Enforcement should would pay special attention to acquisitions by dominant firms, particularly where the market is subject to network effects or economies of scale. This would include acquisitions of small firms that may become significant potential competitors. The agencies also should pay attention to the limitations of behavioral remedies.

Guidelines are not law, so any presumptions in the guidelines would be only enforcement presumptions, not legal presumptions. Courts have the role of reviewing the standards embedded in the guidelines in litigated cases.[51] Therefore, the courts would have the ability to convert enforcement presumptions into legal presumptions, or reject or revise them.[52]

A. The Requisite Showing of Competitive Harm Under Section 7

Section 7 is an incipiency standard, so the burden on the plaintiff is reduced, relative to Section 1. This incipiency standard should guide judicial outcomes in litigated cases. As agents of the court, this standard should guide agency enforcement decisions as well.

---

[49] 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).

[50] For example, *see* United States v. H&R Block, Inc., 833 F. Supp. 2d. 36 (2011); United States v. Bazaarvoice, Inc., 2014 W.L. 203966 (N.D. Cal. January 8, 2014); *Anthem*, *supra* note 12.

[51] This can be seen in the recent cases, supra note 50. However, there also is a history going back to the issuance of the 1982 and 1984 Horizontal Merger Guidelines of Circuit Courts using the Guidelines to push the analysis further. For example, *see* United States v. Waste Management, Inc. 743 F.2d. 976 (1984) (entry analysis); United States v. Baker Hughes, Inc., 908 F.2d 981 (1990) (rebuttal burden; entry analysis)

[52] 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, the Tunney Act oversight provides at least a limited role for the courts. For discussion of the Tunney Act, *see* Joseph G. Krauss, David J. Saylor & Logan M. Breed, *The Tunney Act: A House Still Standing*, ANTITRUST SOURCE (June 2007); https://www.americanbar.org/content/dam/aba/publishing/antitrust_source/Jun07_Krauss6_20f.authcheckdam.pdf

Section 7 requires a showing of harm to competition, not just foreclosure or harm to competitors.[53] One key legal and policy issue raised is whether it should be sufficient for the government to demonstrate harm to the customers of the upstream firms (i.e., the unintegrated downstream competitors) or whether it also is necessary to show harm to the customers of the downstream competitors. This 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.

To illustrate, 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. If the merger likely facilitates upstream pricing coordination, then harm to the downstream firms would support the latter view.

If harm to the unintegrated downstream firms 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 downstream customers or the higher price paid by the direct purchasers, who are the rivals of the downstream merging firm? Section 7 refers to harm in any line of commerce.[54] The Horizontal Merger Guidelines make it clear that a horizontal merger violates Section 7 if it creates anticompetitive effects in *any* relevant market.[55] In *Philadelphia National Bank*, the Court rejected the view that a horizontal merger that harms customers in one relevant market might be justified by benefits to other customers in another relevant market.[56]

[57]But, merger law also expresses a concern that the goal of the law is the "protection of competition, not competitors."[58] In a vertical merger, unintegrated downstream firms are competitors of the downstream merging firm. But, if they face higher costs that are passed on consumers, then there often will be competitive harm. This suggests some possible ambiguity that courts ultimately will have to resolve.

The legal outcome might depend on the cause of the harm. If the merger facilitates upstream coordination, then harm to the downstream customers might be sufficient to find liability. But suppose that there likely is no coordination, but the harm occurs because the higher costs of the

---

[53] On anticompetitive effects requirement, *see Freuhalf*, *supra* note 4 at 352-253.

[54] Clayton Act, 15 U.S.C. §18.

[55] 2010 Horizontal Merger Guidelines at n.14

[56] United States v. Philadelphia Nat'l Bank, 374 U.S. 321, 370-71(1963).

[57] By way of comparison, the Horizontal Merger Guidelines do not require showing harm to consumers in the case of buy-side harm to upstream sellers. *See* 2010 Horizontal Merger Guidelines §12

[58] Brown Shoe Co. v. United States, 3709 U.S. 294, XX (1962).

foreclosed downstream rivals firm permit the downstream merging firm to gain market power. In this situation, the anticompetitive profit from the merger is premised on the harm to the customers of the downstream firms. If this is the anticompetitive effect, then it might be necessary to show harm to these customers of the downstream firms.

Another possibility would be to find that producing evidence of likely harm to these downstream rival firms is sufficient to shift the burden to the merging parties to establish sufficient evidence of competitive benefits to the customers of the downstream firms. Absent sufficient evidence of of these benefits, under a particular (and perhaps enhanced) burden of production, then the merger would be found to violate Section 7. But the parties can show sufficient evidence of those benefits, then the merger would escape liability. Revised Merger Guidelines would formulate and state this enforcement policy, subject to review by the courts in litigated cases. This article will not attempt to resolve this issue.[59]

This knotty issue is not unique to vertical mergers. Suppose that a horizontal merger reduces the firm's costs so that it has the incentive to lower prices. But, suppose that it also increases their bargaining power over input suppliers, which permits them to obtain lower prices from those input suppliers. If this bargaining power amounts to classical monopsony, it can lead to harm to downstream customers as well by reducing output, but the other cost reductions may prevent any consumer harm. 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 output.[60] The downstream merging firm would 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.[61]

B. Enforcement Presumptions

An invigorated vertical merger policy would not presume that efficiency benefits almost always prevent competitive harm. That enforcement presumption is not supported by theoretical and empirical economic analysis.[62] It also is inconsistent with deterrence policy in that the merging

[59] The author previously has advocated that consumer harm always must be shown as the requisite anticompetitive effect, at least absent upstream coordination. *See* Krattenmaker and Salop, *supra* note 18 at 247. Riordan and Salop, *supra* note 15at 548-49. However, these other approaches seem worthy of further consideration.

[60] 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.

[61] This issue potentially was raised in the Anthem/Cigna merger, supra note 12, but the court was skeptical of the cost savings and whether cost savings would be passed on.

[62] It has been suggested that empirical studies demonstrate that vertical mergers generally lead to efficiency benefits or are competitively benign. For example, *see* James C. Cooper, et al., *Vertical Antitrust Policy as a Problem of Inference*, 23 INT'L J. INDUS. ORG. 639 (2005); Francine Lafontaine & Margaret Slade, *Exclusive Contracts and Vertical Restraints: Empirical Evidence and Public Policy*, *in* HANDBOOK OF ANTITRUST ECONOMICS (Paolo Buccirossi, ed., 2008). For discussion of the limitations of such empirical studies, *see* Ralph A. Winter, *Vertical Restraints and Antitrust Policy: A Reaction to Cooper, Froeb, O'Brien, and Vita*, 1 COMPET. POLICY INT'L 75 (2005); Baker, *supra* note **Error!**

firms have better access to information supporting claimed efficiency benefits. It obviously also is inconsistent with the Section 7 incipiency standard. Indeed, these same economic analysis and empirical studies have been used to advocate for per se legality for intrabrand vertical restraints under Section 1.[63] Yet, in *Leegin*, where incipiency was not even a factor and where the concern was less worrisome intrabrand restraints, the Court opted for the conventional rule of reason.[64]

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. Increased efficiency benefits also may come at the expense of reduced efficiency and harms to the unintegrated rivals, whether 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.[65] As a result, it cannot be presumed that prices would fall or that consumers would benefit on balance.

Legal and enforcement presumptions often depend on market structure factors. In determining the appropriate competitive effects presumptions for vertical mergers, the existence of substantial economies of scale and demand-side network effects also are relevant factors. These conditions can lead to severe incumbency advantages and high barriers to entry that can lead to durable monopoly power. Vertical and complementary product mergers can reduce *innovation* competition and increase entry barriers that maintain that monopoly power.[66] If, as will often be

---

Bookmark not defined. at 17-26. Such studies have the general problem that the industries studied were not random but were determined by the availability of relevant data. In these particular studies, few discussed in the articles involve vertical mergers, except in situations where vertical integration was prohibited by state law. For example, the vertical merger articles reviewed by Lafontaine and Slade's only involve legal bans on vertical mergers in gasoline retailing. Cooper et. al. also reviews several studies of vertical integration in cable TV that find mixed results. In addition, a later rigorous study by FCC economists of a partial vertical merger by News Corporation and DirecTV found that the merger did lead to higher prices for Fox (News Corporation) content charged to rivals of DirecTV. Baker et. al., *supra* note 36.

[63] Leegin Creative Leather Products, Inc. v. PSKS, Inc., 551 U.S. 877, 902-904 (2007). Indeed, there were four votes on the Court to maintain per se illegality.

[64] *Id.* at 879. In that the rule of reason requires the plaintiff to demonstrate that anticompetitive effects are "more likely than not," this represents an implicit presumption that the conduct is competitively neutral or marginally procompetitive. For further details of this approach and the overall role of antitrust presumptions, *see* Steven C. Salop, *An Enquiry Meet for the Case: Decision Theory, Presumptions, and Evidentiary Burdens in Formulating Antitrust Legal Standards,* SSRN TBA

[65] For example, in the Lam/KLA merger, KLA already cooperated with all of its customers in the premerger market. Moreover, even if Lam gained quicker access, the merged KLA would have the incentive to delay access Lam's rivals. Since there was pre-merger cooperation, the incremental gains from cooperation accruing to the merging firm were more likely to fall short of the loss of cooperation suffered by the rivals. (The author consulted on this transaction with a firm that was opposed to the transaction.)

[66] *See* also Church, *supra* note 15,

the case, 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 harms may occur in the future, it also may be more difficult to for the agencies to make a precise prediction with case-specific evidence. In light of the incipiency concerns of merger analysis, these facts might suggest a significant anticompetitive presumption for mergers involving dominant firms in markets with significant scale economies or network effects that create entry barriers.[67] By contrast, there might be a competitively neutral or a weak procompetitive presumption for mergers involving firms with low market shares.

C. Near-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 or anticompetitive presumptions.[68] For example, the 1984 Vertical Merger Guidelines had a safe harbor for markets that were not highly concentrated.[69]

The agencies and courts should be cautious about adopting near-safe harbors or strong anticompetitive presumptions based purely 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 attempted input foreclosure strategy. By contrast, the upstream merging firm may have a relatively small market share, but its own pre-merger ability and incentive to rapidly expand or engage in maverick behavior may be disciplining the pricing of other upstream firms. In this latter 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 role as a disruptive buyer or downstream maverick.

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

D. Timing of Enforcement

It has been suggested that enforcement policy towards vertical (or complementary product) mergers should be delayed unless and until the merged firm engages in anticompetitive conduct.[70] The rationale is that the firm may never attempt exclusionary conduct and the

---

[67] For a more interventionist policy suggestion, see Lina A. Khan, *Note: Amazon's Antitrust Paradox*, 126 YALE L.J. 710, 792-97 (2017)

[68] A near-safe harbor is one that normally is followed, but might be ignored in special circumstances (e.g., evidence of collusion or strong maverick behavior).

[69] *Supra* note 3, at ¶4.131.

[70] *ABA Transition Report, supra* note **Error! Bookmark not defined.** at 8–9.

unnecessary remedy may create inefficiencies. There are several flaws in a policy of delay. Indeed, the fundamental rationale for Hart-Scott-Rodino Act was to prevent the delays and limitations inherent in after-the-fact enforcement of Section 7.[71]

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 harm is remedied. Second, if enforcement is delayed, it may be impossible to unwind the merger after the fact. The market structure 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 are more permissive than Section 7. All in all, failure to address these kinds of issues in the context of pre-merger review could lead to significant consumer harm and under-deterrence.

E. Remedies for Anticompetitive Vertical Mergers

The typical vertical merger consent decree has behavioral (conduct) remedies.[72] This apparently 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 a clear acknowledgement that the merger will give the firm the market power and incentives to behave in ways that will harm competition. It also represents a claim that the agency has identified and successfully and precisely enumerated all the behaviors that might manifest those incentives in the future. Consider also the hubris on this claim. As regulatory economics has made clear, regulated firms surely are better informed about how various actions might allow them to exercise the market power from the merger.[73] Moreover, the options for anticompetitive behavior likely will evolve over time as market conditions change. Despite this fundamental asymmetric information and dynamic context, consent decrees typically are short-lived. They also do not permit the agencies and courts to monitor the market and modify the decree as conditions change, unlike the situation for regulated firms.

While these problems with behavioral remedies have generally been acknowledged in the case of horizontal mergers, where structural relief is generally required, they tend to be ignored in vertical transactions.[74] Moreover, remedies such as firewalls, exclusion prohibitions, or antidiscrimination provisions have loopholes and may be unable to be effectively enforced by the

---

[71] 15 U.S. Code § 18.

[72] Keyte & Schwartz, *supra* note 8.

[73] Jean-Jacques Laffont & Jean Tirole, A THEORY OF INCENTIVES IN PROCUREMENT AND REGULATION (1993)

[74] 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." Dep't of Justice, *Antitrust Division Policy Guide to Merger Remedies* (June 2011), https://www.justice.gov/sites/default/files/atr/legacy/2011/06/17/272350.pdf.

agencies or a court. Antidiscrimination provisions such as MFNs can create their own competitive problems.[75]

It follows that structural relief such as divestitures of the critical products that raise foreclosure concerns, or divestitures sufficient to eliminate post-merger market power concerns, or paid-up licenses for critical intellectual property, may be required. In other situations, it may be necessary to enjoin the merger. It also is important to incorporate a process for post-merger competitive reviews that provide the agencies with an opportunity to alter consent decrees if necessary to ensure competitive performance.[76] While such provisions will place financial risk on the merging parties, it is preferable to putting all the competitive risk on consumers. Requiring the merging firms to "put their money where their mouth is" also will help to deter overreaching claims.

VI. Conclusions

The view that vertical mergers are invariably efficient and procompetitive is a vestige of outdated economic analysis of exclusionary conduct. In the current economy where concentration is high in many significant markets and technology have led to substantial entry barriers, there are heightened concerns from vertical and complementary product mergers. It is time to bring these concerns and vertical merger enforcement up-to-date to ensure a vibrant competitive process and protection of competition, innovation and consumer welfare.

[75] For example, *see* Steven C. Salop & Fiona Scott Morton, *Developing an Administrable MFN Enforcement Policy,* 27 ANTITRUST 15 (Spring 2013).

[76] For example, *see* Steven C. Salop, *Modifying Merger Consent Decrees: An Economist Plot to Improve Merger Enforcement Policy*, 31 ANTITRUST 15 (2016).