Vertical Mergers and Integration in Digital Markets

John M. Yun

INTRODUCTION

For those seeking antitrust reform, every new acquisition by the largest digital platforms fuels the belief that the U.S. antitrust laws are fundamentally and systematically underenforced—including in the area of vertical mergers. Specifically, there are increasing calls for more aggressive antitrust enforcement, changing legal presumptions, and even proposals to break up big tech firms. Unlike horizontal mergers, however, which involve the combination of direct competitors, vertical mergers involve the acquisition of complements in the production process. Examples include Google’s acquisitions of YouTube, DoubleClick, AdMob, and ITA; Amazon’s acquisition

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1 See, e.g., STIGLER COMM. ON DIG. PLATFORMS, STIGLER CRT., FINAL REPORT 84–85 (2019), https://research.chicagobooth.edu/-/media/research/stigler/pdfs/digital-platforms---committee-report---stigler-center.pdf (“While US antitrust law has long been flexible in combating anti-competitive conduct, there is increasing concern that it has been underenforced in recent years . . . Vertical mergers are rarely challenged by the enforcement agencies, and claimed or expected merger-related efficiencies are often not realized.”).


3 See, e.g., Jonathan B. Baker et al., Five Principles for Vertical Merger Enforcement Policy, 33 ANTITRUST, Summer 2019, at 12, 16 (“The agencies should consider adopting rebuttable presumptions that a vertical merger harms competition when certain factual predicates are satisfied. We set out several possible presumptions here that could be invoked when at least one of the markets is concentrated, and thus, when competitive harm is more likely.”).

4 For instance, during her 2020 presidential campaign, Sen. Elizabeth Warren (D-MA) proposed breaking up big technology companies and regulating them as public utilities. See How We Can Break Up Big Tech, WARREN DEMOCRATS (Mar. 8, 2019), https://elizabethwarren.com/plans/break-up-big-tech.

of Kiva Systems; and Apple’s acquisitions of NeXT, Siri, and Shazam.

In this chapter, we address three issues relating to vertical mergers and antitrust: (1) incorporating the elimination of double marginalization into the analysis of the likelihood of a unilateral price effect rather than treating it as a separate efficiencies defense; (2) recognizing, inter alia, the importance of reduced transaction costs in analyzing the efficiencies commonly associated with vertical mergers; and (3) highlighting that the weight of the empirical evidence continues to support the proposition that vertical mergers are less likely to generate competitive concerns than horizontal mergers.

Why the focus on these three topics? When considering vertical mergers and integration, these issues are inevitably part of a court or agency’s analysis. Even reports calling for antitrust reform and greater market regulation acknowledge the importance of the procompetitive aspects of vertical mergers. While the ultimate focus will be on digital markets, our discussion, however, will be broader and include all sectors. While there are certainly different considerations in understanding firm conduct in digital markets and platforms, there are also important commonalities that transcend sectors.

series of acquisitions has served to entrench Google’s position in search services and search advertising, particularly by providing it with advantages of scope and by reducing competition.”); [UK] Dig. Competition Expert Panel, Unlocking Digital Competition 92–93 (2019), https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/785547/unlocking_digital_competition_furman_review_web.pdf (“This pattern of digital mergers could also be harmful if the newly acquired position in adjacent markets is exploited to harm existing or downstream rivals . . . The news publishing industry has made strong representations that this has occurred through Google’s vertical integration of multiple layers of the digital advertising market.”).

6 See, e.g., Directorate-General for Competition, EUR. Comm’n, Competition Policy for the Digital Era 117–18 (2019), https://ec.europa.eu/competition/publications/reports/kd0419345enn.pdf (“There may indeed be cases in the digital realm where a dominant acquirer buys up innovative targets but later shuts down the relevant innovation. This is, however, not the typical scenario. Frequently, the project of the bought up start-up is integrated into the ‘ecosystem’ of the acquirer or into one of their existing products. Such acquisitions are different from killer acquisitions as the integration of innovative complementary services often has a plausible efficiency rationale. In these cases, the theory of harm becomes more complex.”).
The core economic concepts used to assess efficiencies and potential harms in vertical mergers do not materially differ whether discussing automotive assembly, coal generation, multichannel video programming distribution (MVPD), health care provision, or online search; but, clearly, there are relevant differences when performing detailed assessments. Before delving into these specific issues, however, it is worth briefly discussing the important differences between vertical and horizontal mergers.

I. DISTINGUISHING VERTICAL AND HORIZONTAL MERGERS

Since the pioneering work of Ronald Coase, and subsequent research by Oliver Williamson and Benjamin Klein, economists have developed a better understanding of the nature of firms, the transactions that occur within firms, how firms interact with the larger market, and efficiency rationales for vertical integration. Economic research has also developed potentially anticompetitive rationales for vertical integration. Taken together, however, the theoretical literature, without empirical grounding, leaves practitioners, agencies, and courts with ambiguous guidance on the welfare

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consequences of vertical mergers.\textsuperscript{11}

This ambiguity is fundamentally driven by the following facts: (a) vertical mergers do not involve direct competitors;\textsuperscript{12} (b) the elimination of double marginalization puts a downward pressure on pricing and is a consideration that is not present for horizontal mergers;\textsuperscript{13} (c) efficiencies are absolutely central to the welfare assessment of vertical mergers and cannot be treated as a second order concern, as they occasionally are in the assessment of the welfare effects of horizontal mergers;\textsuperscript{14} and yet (d) there is a concern that vertically integrated firms will increase incentives for the post-merger firm to foreclose competitors or, short of that, raise their costs.

In contrast, horizontal mergers inherently involve a degree of competitive overlap and an associated loss of the rivalry between actual and/or potential competitors.\textsuperscript{15} This loss of competition is the basis for the economic models used to predict post-merger price increases and other anticompetitive effects, including merger simulations and, more recently, GUPPIs.\textsuperscript{16} Stated somewhat differently, absent efficiencies, entry, and other dynamic considerations, every horizontal merger involves some, perhaps nominal, loss of rivalry between competitive firms; in measuring a horizontal merger’s effects,

\textsuperscript{12} Of course, a particular merger can have both a vertical and horizontal component.
\textsuperscript{13} See infra Section II.
\textsuperscript{14} See, e.g., Michael B. Bernstein & Justin P. Hedge, Maximizing Efficiencies: Getting Credit Where Credit is Due, ANTITRUST SOURCE, Dec. 2012, at 1 (“Efficiencies are frequently a significant part of the business rationale for a transaction. However, receiving credit for the efficiency-enhancing aspects of a combination in a merger review is often difficult.”).
\textsuperscript{16} GUPPI is an acronym for “Gross Upward Pricing Pressure Index,” which is intended to conceptualize the unilateral effects from mergers on prices from the loss of a rival before adjusting for the effects of entry and efficiencies that put downward pressure on prices. See Steven C. Salop & Serge Moresi, Comment Letter on Updating the Merger Guidelines 18–21 (Nov. 9, 2009), https://www.ftc.gov/sites/default/files/documents/public_comments/horizontal-merger-guidelines-review-project-545095-00032/545095-00032.pdf.
standard, static, economic models typically will predict an associated price increase.\(^{17}\)

Because theoretical ambiguity results when assessing vertical mergers, empirical evaluation of consummated mergers’ welfare effects has been, and remains, an important area of research for guiding antitrust policy. As Professors Francine Lafontaine & Margaret Slade explain, this empirical evaluation allows us to address “what are the consequences of vertical integration for economic outcomes such as prices, quantities, investment, and profits?”\(^{18}\) These questions are “important ultimately as input into the development of sensible vertical merger policy and related government intervention in vertical relationships.”\(^{19}\) Similarly, Professor Joshua Wright proposes a move to “evidence-based antitrust,” which is “a commitment to testing economic theories with economic knowledge and empirical data to support those theories with the best predictive power.”\(^{20}\)

II. ELIMINATION OF DOUBLE MARGINALIZATION IS A UNILATERAL PRICE EFFECT

A central impact of vertical mergers and integration is the elimination of double marginalization (EDM). EDM played a large role in the recently litigated AT&T-Time Warner merger and the report of the government’s expert, Professor Carl Shapiro.\(^{21}\) While EDM is typically discussed as an efficiency defense in a rule of reason analysis, this categorization obscures the relevant economics of internalizing pricing externalities and may encourage the misperception that EDM is a special or unusual form of efficiency.

When separate upstream and downstream entities price their products, they do

\(^{17}\) See, e.g., Farrell & Shapiro, supra note 15, at 113–14.


\(^{19}\) Id. at 630.


not fully take into account the effect their pricing decisions have upon each other—even though they are part of the same value chain for a given product. Consider, for instance, a two-stage production process involving two independent firms. If we assume that both have downward-sloping demand curves—meaning that marginal revenue declines faster than demand at each stage—then there will be two markups. The markup at each stage results in raising price above marginal cost with a corresponding reduction in output. While an integrated firm could certainly continue to price each stage as if they were two separate entities, to do so would leave potential profits on the table because vertical integration enables the firm to effectively “evade” the markup at the first stage. The result is higher output, profits, and consumer surplus. As Professor Joseph Spengler noted long ago, “ceteris paribus, the greater the ‘monopolistic’ surcharges being levied in earlier stages and the higher the variable cost in later stages . . . the greater will be the price reductions this firm finds advisable.”

Thus, a vertical merger eliminates a pricing externality because the post-merger upstream and downstream units are fully aligned in terms of their pricing incentives. In this regard, EDM is indistinguishable, conceptually, from the unilateral effects that may create an incentive to raise price. Specifically, in the context of mergers, unilateral effects are about the incentive to change price (or quantity, quality, or innovation) as a result of combining two previously independent economic decision-makers, not by achieving some reduction in cost. Just as there is a greater incentive, under certain conditions, to foreclose rivals or to raise rivals’ costs (RRC) post-merger—quite apart from the ability

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22 Note that this markup in price above marginal cost results from the downward-sloping demand and not from antitrust market power per se. For a discussion of the distinction between economic and antitrust market power, see generally, Benjamin Klein, Market Power in Antitrust: Economic Analysis After Kodak, 3 SUP. CT. ECON. REV. 43 (1993).

23 Spengler, supra note 9, at 350.

24 It is worth noting that RRC is really just a form of foreclosure or exclusion, and not a separate theory of harm per se. I thank my colleague Tad Lipsky for raising the question of whether antitrust is well-served from using RRC as a distinct term from foreclosure and exclusion. First, as mentioned, there is no real
to do so—there is an incentive post-merger to lower prices due to the elimination of a markup along the supply chain. Consequently, one cannot accurately assess unilateral effects without accounting for the full set of incentives that could move prices in either direction.

Even though EDM puts downward pressure on prices, it is not fitting to consider EDM as a second-order factor in the calculation of a “net effect,” a phrase closely associated with weighing efficiencies against findings of anticompetitive harm. Rather, “unilateral price effects” actually include EDM—just as a finding that a merger will

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25 For an overview of the intuition behind the theories of harm typically associated with vertical mergers, that is, raising rivals’ costs and foreclosure, see generally, Josh Lustig et al., Economic Tools for Analyzing Vertical Mergers in Healthcare, CPI ANTITRUST CHRON., May 2020.

26 See, e.g., Gopal Das Varma & Martino De Stefano, Equilibrium Analysis of Vertical Mergers, 65 ANTITRUST BULL. (forthcoming 2020) (manuscript at 2–3), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3307150 (“. . . RRC [“raising rivals’ costs”] and EDM are not two separate effects. Instead, they are inseparably linked because the extent of EDM affects the strength of the RRC incentive, making EDM to be not just a stand-alone competitive benefit to be weighed against RRC.”); Daniel P. O’Brien, The Antitrust Treatment of Vertical Restraints: Beyond the Possibility Theorems, in THE PROS AND CONS OF VERTICAL RESTRAINTS 40, 51 (2008), http://www.konkurrensverket.se/globalassets/english/research/report-the-pros-and-cons-of-vertical-restraints-18mb.pdf (“The biggest contribution of the successive monopoly model to the literature, in my view, is to show that Cournot’s insight that the joint pricing of complements leads to lower prices extends to the sequential pricing of complements that occurs between firms in a vertical relationship.”); see also Serge Moresi & Steven C. Salop, vGUPPI: Scoring Unilateral Pricing Incentives in Vertical Mergers, 79 ANTITRUST L.J. 185, 189 (2013) (calling EDM an “efficiency” but clearly considering it an integral part of the merged firm’s unilateral incentives: “A vertical merger can create unilateral incentives for the upstream merging firm to raise the prices of its inputs to the competitors of the downstream merger partner and also can create unilateral incentives for the downstream merging firm to reduce prices as a result of vertical efficiencies, particularly EDM. These are the central incentives driving input foreclosure concerns and efficiency rationales in vertical merger cases.”); Gleb B. Domnenko & David S. Sibley,
induce entry is properly included in a unilateral effects analysis. For these reasons, assessment of EDM is part and parcel of what constitutes unilateral effects, and making this refinement would bring clarity among practitioners and courts.

Are there factors that would mitigate the degree to which EDM puts downward pressure on prices in a given merger? Recently, Professors John Kwoka & Margaret Slade highlight a number of potential factors to consider when assessing EDM, including whether the upstream input is used in fixed or variable proportions downstream; whether the benefits of EDM are partially or fully achieved through contracts; and other considerations such as non-monopoly markets, multiproduct firms, and inefficiencies within a firm.27 Certainly, the degree to which EDM is applicable in a given market is a factual matter, as is the degree to which there are upward pressures on prices. Further, some of the considerations that would diminish the benefits of EDM also weaken the incentive to raise rivals’ costs. For instance, EDM is weaker the less essential the upstream input is to the downstream production process.28 Yet, the less essential the merging upstream supplier is to downstream firms, including the integrated firm, then the upstream unit has less ability to raise the costs of downstream rivals—let alone foreclose them. Of course, there are other considerations in play that make simple predictions difficult, which further supports the need to assess EDM concurrently with possible incentives to raise price.29

27 See John Kwoka & Margaret Slade, Second Thoughts on Double Marginalization, 34 ANTITRUST, Spring 2020, at 51. Other recent papers have also raised questions about the applicability of EDM in certain market scenarios. See, e.g., Baker et al., supra note 3, at 15; Cristina Caffarra et al., Kabuki Dances or Rube Goldberg Machines? Vertical Analyses of Media Mergers, CPI ANTITRUST CHRON., Aug. 2018, at 8.

28 See, e.g., Kwoka & Slade, supra note 27, at 52 (“The above description of EDM does not hold, however, when the downstream stage is subject to variable proportions, for in this case, the unintegrated downstream firm can avoid some of the adverse effects of the inflated wholesale price by substituting away from use of that product.”)

29 See, e.g., Das Varma & De Stefano, supra note 26, at 4 (“We show that the weaker the bargaining power of
Another argument for discounting EDM, is that the gains from EDM will be lower—or even zero—if, prior to the merger, the merging parties already had a contract in place to align incentives. On this point, it is also important to note that the mere existence of a contract capable of mitigating double marginalization does not tell us about its efficacy compared to vertical integration. Further, there are costs to contracting, which not only mitigates the ability of contracts to replicate the gains from EDM, but can also suggest merger-specific efficiency gains unrelated to the benefits of EDM.

What about the applicability of EDM to digital platforms? Does it even apply for platforms that have a zero price? EDM is fundamentally about conferring an input cost savings; thus—even if there is not a second markup per se in terms of price—given that the downstream product has a zero-price, there is still a benefit from not receiving an

the upstream firm, larger is the premerger margin earned by rival downstream firms and greater are their incentive and ability to absorb an input price increase when competing against a more efficient rival (the merged firm).”

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30 This point is emphasized in the recently published Vertical Merger Guidelines. See U.S. Dep’t of Justice & Fed. Trade Comm’n, Vertical Merger Guidelines 12 (Jun. 30, 2020), https://www.ftc.gov/system/files/documents/reports/us-department-justice-federal-trade-commission-vertical-merger-guidelines/vertical_merger_guidelines_6-30-20.pdf (hereinafter “VMGs”) (“The Agencies do not, however, reject the merger specificity of the elimination of double marginalization solely because it could theoretically be achieved but for the merger, if such practices are not reflected in documentary evidence. The Agencies will generally take the same approach to evaluate the likely contractual arrangements absent the transaction as the one they use when evaluating raising rivals’ costs or foreclosure.”). See also Baker et al., supra note 3, at 15 (“EDM already might have been achieved before the merger through bargaining that leads to multi-part tariffs, take-or-pay contracts, or other contractual provisions.”).

31 See, e.g., O’Brien, supra note 26, at 63 (“The use of nonlinear contracts can mitigate double-marginalization, but it does not necessarily eliminate it.”); VMGs at 12 (“The Agencies do not, however, reject the merger specificity of the elimination of double marginalization solely because it could theoretically be achieved but for the merger, if such practices are not reflected in documentary evidence.”).

32 See, e.g., Klein et al. (1978), supra note 8, at 298 (“The crucial assumption analysis of this paper is that, as assets become more specific and more appropriable quasi rents are created (and therefore the possible gains from opportunistic behavior increases), the costs of contracting will generally increase more than the costs of vertical integration.”); Williamson (1971), supra note 8, at 113 (“In circumstances, therefore, where protracted bargaining between independent parties to a transaction can reasonably be anticipated, internalization becomes attractive.”). See also infra Section III.
input marked above cost. This benefit can also come in the form of properly aligning incentives without distortions from a mark-up. Further, EDM could be more relevant for the monetization side of a zero-price platform, such as for advertisers. While there is not a great deal of economic research explicitly linking EDM and platforms, the benefits of EDM are clearly applicable to platforms.

III. TRANSACTION COST EFFICIENCIES AND MERGER SPECIFICITY

Fundamental to the assessment of vertical mergers and integration are the potential efficiency gains. As the 2020 Vertical Merger Guidelines state, agencies will evaluate efficiency claims as set forth in the 2010 Horizontal Merger Guidelines. Specifically, agencies generally only consider “cognizable” efficiencies—namely, claims that are valid, merger-specific, and verified. Moreover, when evaluating the merger specificity of an efficiency, the 2010 Guidelines say the Agencies “do not insist upon a less restrictive alternative that is merely theoretical.”

Efficiencies are central to the assessment of vertical mergers because they involve combining complementary assets in a production process. This simple truth distinguishes vertical mergers from horizontal ones and is most certainly not to suggest that horizontal mergers cannot realize efficiencies, as the evaluation of efficiencies is

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33 For example, by merging with an upstream input supplier such as a data supplier, the digital platform could better integrate the upstream data throughout the platform without the distortions caused by a markup.

34 See, e.g., E. Glen Weyl, Double Marginalization in Two-Sided Markets (2008) (manuscript at 31), https://ssrn.com/abstract=1324412 (“The basic message of this paper is basic logic of double marginalization extends to two-sided markets.”).

35 See VMGs at 11.


37 Id. at 30. In this context, “valid” means efficiencies that “do not arise from anticompetitive reductions in output or service.” Id.

38 Id.
integral to a rule of reason analysis. It is perhaps important to consider, however, that many efficiencies from horizontal mergers are fundamentally vertical in nature.

In a similar way, vertical mergers can allow firms to realize efficiencies through the combination of assets that, in turn, results in cost savings and greater innovation within the production process. In theory and in certain practices, the benefits of asset integration can be achieved through contract. In fact, the efficiency justifications for vertical controls, such as resale price maintenance, are based on using those controls to replicate the incentives of an integrated firm.

This choice between vertical integration and vertical controls/contracts was formalized in the seminal work of Ronald Coase. Coase’s central thesis is that firms exist because there are transaction costs to use the market, that is, costs to use the price mechanism, which also explains the boundaries of firms. Subsequent to Coase, a robust

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39 See id. at 30–31. Nevertheless, questions remain regarding the degree to which courts accept efficiency defenses in horizontal mergers. See, e.g., Brian Facey et al., Mind the Gap: Merger Efficiencies in the United States and Canada, 32 ANTITRUST, Spring 2018, at 64, 66, (“In the United States, the efficiencies defense generally lands like a dubious alibi—necessarily considered but very seldom credited.”); Erin L. Shencopp & Nathaniel J. Harris, Using Efficiencies to Defend Mergers: The Current Legal Landscape, ANTITRUST SOURCE, April 2019, at 1, 5 (“courts tend to conclude either that the efficiencies are not merger-specific or verifiable, or that the merger will not harm competition and appears to generate efficiencies.”).

40 For instance, consider the cost savings from combining two (previously independent) production processes and selecting the more efficient aspects of each process. In effect, the horizontal merger has the potential to create a new, third, process that integrates the best of both processes.

41 As discussed in the prior section, this is quite different from the benefits of EDM. See supra Section II. EDM removes a “pecuniary externality,” which is the idea that separate units along a supply chain do not incorporate how their pricing decisions impact each other; consequently, an integrated firm will properly internalize those externalities, which ultimately results in both higher profits for the integrated firm and higher surplus for consumers. Importantly, while EDM puts downward pressure on prices, merger-specific efficiencies can both lower prices as well as result in greater levels of innovation and higher quality products.


44 See Coase, supra note 7, at 390–98.
literature developed on transaction costs economics\(^{45}\) and the importance of incorporating such considerations into any antitrust analyses.\(^{46}\) In particular, this literature has demonstrated, both theoretically and empirically, that the decision whether to contract or to vertically integrate is often driven by the relatively high costs of contracting\(^{47}\) as well as by concerns regarding the enforcement of contracts,\(^ {48}\) and opportunistic behavior.\(^ {49}\) This literature suggests that such transaction costs efficiencies in the vertical merger context often will be cognizable and rejects an approach that would presume such efficiencies are not merger-specific because they can theoretically be achieved via contract.\(^ {50}\)

Of course, industries can mature and evolve, which can also change the costs of contracting relative to vertical integration.\(^ {51}\) One potential example is the growth of cloud computing and associated services, which previously had to be developed and performed in-house.\(^ {52}\) This development would seem to lower the cost of entry, including

\(^{45}\) See, e.g., Williamson (1971, 1979) supra note 8.


\(^{47}\) See, e.g., Bresnahan & Levin, supra note 9, at 853 (“Theoretical work in the first tradition argues that certain features of transactions create particular problems for arm’s-length contracting. These can include difficulty anticipating future contingencies, ambiguity in the nature of tasks and decisions to be carried out, the need to use specific assets, or an inability to measure and verify transaction outcomes.”).


\(^{49}\) See generally Klein et al. (1978), supra note 8.

\(^{50}\) See, e.g., Statement of Professor Francine Lafontaine, Fed. Trade Comm’n, HEARINGS ON COMPETITION AND CONSUMER PROTECTION IN THE 21ST CENTURY, Tr. at 73 (Nov. 1, 2018) (vertical contracts “do not easily generate the same outcome as what a vertical merger could do because of demand uncertainty, risk aversion, information asymmetries, . . . [and] incentive problems.”).

\(^{51}\) See, e.g., George Stigler, The Division of Labor is Limited by the Extent of the Market, 59 J. POL. ECON. 185 (1951).

into digital markets, but it also suggests that efficiencies based on computational and server scale economies are less likely to be merger-specific.

As it applies to digital markets, vertical mergers also can result in efficiencies associated with combining trade secrets, as firms in this sector are particularly likely to use trade secrets as a form of intellectual property protection. One concern with the use of trade secrets is the difficulty in licensing them, or even sharing them in the course of a business relationship, without the potential for large losses from the accidental or intentional disclosure of those secrets. Vertical integration mitigates this potential loss from the sharing of trade secrets.

Other potential efficiencies from integration include the benefits from assurances of supply, particularly during times of uncertainty. This would seem particularly relevant for products that have relatively short life cycles such as smartphone models, as these products are more dependent on properly scheduled product launches. Another benefit of integration is that it can alleviate the difficulties that arise from the possible


55 This idea can be thought of as an extension of the concept that the existence of firms can be partly explained by the need for “controlled information” like technical production information, which can occur more efficiently within the boundaries of a firm. See H.B. Malmgren, Information, Expectations and the Theory of the Firm, 75 Q.J. ECON. 399, 405–11 (1961).

formation of bilateral monopolies within a specific area of complementary technologies.\textsuperscript{57} There are also quality externalities that are internalized with vertical integration that could result in significant benefits to innovation.\textsuperscript{58}

IV. EMPIRICAL EVIDENCE ON THE WELFARE IMPACT OF VERTICAL MERGERS

The importance of EDM and efficiency rationales raise important questions as to the ultimate price, quantity, and quality effects of vertical mergers.\textsuperscript{59} This further elevates the value of empirical evidence of the effects of vertical mergers in terms of informing antitrust policy. Indeed, the U.S. Federal Trade Commission (FTC) devoted a great deal of time on this precise issue at its 2018 hearing on vertical mergers.\textsuperscript{60}

Economics has a long history of empirically evaluating vertical integration.\textsuperscript{61} The

\textsuperscript{57} For instance, in an emerging area of technology, it could be the case that the market is not particularly “thick” in terms of possible substitutes for both the upstream and downstream trading partners. As Stigler explains:

Young industries are often strangers to the established economic system. They require new kinds or qualities of materials and hence make their own; they must overcome technical problems in the use of their products and cannot wait for potential users to overcome them; they must persuade customers to abandon other commodities and find no specialized merchants to undertake this task.

Stigler, supra note 51, at 190. Consequently, a bilateral monopoly could form, which exacerbates issues of opportunism and markups.


\textsuperscript{59} Cf. Spengler, supra note 9, at 347 (“Vertical integration, on the contrary, does not, as such, serve to reduce competition and may, if the economy is already ridden by deviations from competition, operate to intensify competition.”).


\textsuperscript{61} See, e.g., Joskow, supra note 42; Scott E. Masten, The Organization of Production: Evidence from the Aerospace Industry, 27 J. L. & Econ. 403 (1984); Kirk Monteverde & David J. Teece, Supplier Switching Costs and Vertical Integration in the Automobile Industry, 13 Bell J. Econ. 206 (1982).
two most widely cited economic studies that summarize the empirical evidence on vertical integration are Lafontaine & Slade and Cooper et al.\textsuperscript{62} After comprehensively reviewing prior vertical integration research, Lafontaine & Slade conclude: “[C]onsistent with the large set of efficiency motives for vertical mergers that we have described so far, the evidence on the consequences of vertical mergers suggests that consumers mostly benefit . . .”\textsuperscript{63} Similarly, Cooper et al. report: “Most studies find evidence that vertical restraints/vertical integration are procompetitive.”\textsuperscript{64} Additionally, O’Brien states that “the empirical literature on [resale price maintenance and exclusive territories], vertical integration, and non-linear contracting suggests that these practices have been used to mitigate double marginalization and induce demand increasing activities by retailers. With few exceptions, the literature does not support the view that these practices are used for anticompetitive reasons.”\textsuperscript{65}

The evidence they summarize remains valuable and should be considered in policy discussions regarding vertical mergers; although, it must be acknowledged that the studies are now over a decade old. In a 2018 comment to the FTC, the Global Antitrust Institute (GAI) aimed to update the empirical evidence on vertical mergers with an evaluation of some more recent studies.\textsuperscript{66} Specifically, the GAI examined published research in peer-reviewed journals between 2009 and 2018 that empirically analyzed the welfare consequences of vertical mergers in the U.S.\textsuperscript{67} The following table summarizes

\begin{itemize}
\item Lafontaine & Slade, \textit{supra} note 18, at 663.
\item Cooper et al., \textit{supra} note 62, at 658.
\item O’Brien, \textit{supra} note 26, at 76.
\item The comment did not offer an exhaustive list of the literature but a snapshot of research available on EconLit and in a general web search and encouraged further research on the topic. \textit{See id.} at 6. Of the original thirteen papers examined, one should have been omitted: Orley C. Ashenfelter et al., \textit{Efficiencies Brewed}: 258
the findings of these empirical studies.68

Pricing and Consolidation in the US Beer Industry, 46 RAND J. ECON. 328 (2015), because it did not study a vertical component of the examined merger. Further, some questions arose regarding whether another included study, Crawford et al., was properly characterized as showing, on net and on average, positive welfare effects. See Gregory S. Crawford et al., The Welfare Effects of Vertical Integration in Multichannel Television Markets, 86 ECONOMETRICA 891 (2018). On this point, however, others have reached the same conclusion as the GAI commenters about Crawford et al.’s overall findings. For instance, Froeb et al. observe: “Crawford et al. . . . find that vertical integration between regional sports networks and cable TV distributors results in increased geographic distribution of the networks and a corresponding increase in consumer and total welfare.” Luke M. Froeb et al., Economics at the Antitrust Division: 2017-2018, 53 REV. INDUS. ORG. 637, 649 (2018). In a later article, the authors of the original Crawford et al. study summarize their results in the following manner:

We also are able to examine how [anticompetitive and procompetitive effects] net out for consumer welfare. We find a fair amount of heterogeneity, with some markets showing complete foreclosure and consumer losses from vertical integration at our point estimates. (However, we are not able to statistically reject the possibility that those individual cases had no consumer harm.) Overall, however, on average across 26 [regional sports networks], we find that there would be a statistically significant positive effect on consumer welfare from vertical integration, despite the incentives for foreclosure that it would create.

Crawford et al., AT&T/Time Warner and Antitrust Policy Toward Vertical Mergers, CPI ANTITRUST CHRON., July 2019, at 3.

68 Note that the table is simply a quick snapshot of the studies’ findings, and they should be read in their entirety to get the full context.

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<thead>
<tr>
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<th>Year</th>
<th>Industry</th>
<th>Data/Technique</th>
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<td>Multichannel</td>
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<td>2010</td>
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<td>Cross-Sectional</td>
<td>Film Run Adjustments</td>
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<tr>
<td>Forman &amp; Gron</td>
<td>2011</td>
<td>Insurance</td>
<td>Panel</td>
<td>Adoption of Information Technology</td>
<td>+ (at one level) &amp; no effect (at another level)</td>
<td>not addressed</td>
</tr>
<tr>
<td>Malik</td>
<td>2011</td>
<td>Pharmaceutical</td>
<td>Panel</td>
<td>New Product Development</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Cohen</td>
<td>2013</td>
<td>Retail Milk</td>
<td>Panel</td>
<td>Simulated Effects on Price from Vertical Divestiture</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Atalay et al.</td>
<td>2014</td>
<td>Various</td>
<td>Panel</td>
<td>Productivity</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Baker et al.</td>
<td>2014</td>
<td>Hospitals</td>
<td>Panel</td>
<td>Price-Spending Hospital Admissions</td>
<td>+</td>
<td>mixed to negative</td>
</tr>
<tr>
<td>Austin</td>
<td>2015</td>
<td>Retail Gasoline</td>
<td>Panel</td>
<td>Price</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Gil &amp; Warzynski</td>
<td>2015</td>
<td>Video Games</td>
<td>Panel</td>
<td>Price</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Quantity</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Quality</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Koch et al.</td>
<td>2017</td>
<td>Hospitals</td>
<td>Panel; Difference-in-Differences</td>
<td>Physician Hospital Utilization Spending</td>
<td>+</td>
<td>mixed</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>not addressed</td>
</tr>
<tr>
<td>Crawford et al.</td>
<td>2018</td>
<td>Multichannel</td>
<td>Panel</td>
<td>Price</td>
<td>mixed to positive</td>
<td>mixed to positive</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Television</td>
<td></td>
<td></td>
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</table>

While vertical integration can certainly raise rivals’ costs and foreclose rivals in...
theory, there is only limited empirical evidence supporting such a finding to a degree that legal presumptions should change. Thus, on net and on average, we find the following statement from the prior 1984 Merger Guidelines still holds today: “Although non-horizontal mergers are less likely than horizontal mergers to create competitive problems, they are not invariably innocuous.”70 Since 1984, the empirical literature has continued to support the validity of this statement—the economic roots of which date back to the original work of Spengler.71

Recent economic work has challenged the analysis, interpretation of results, and policy implications that emerged from the prior scholarship on vertical mergers and integration.72 While these recent works have raised a number of relevant points and should also be considered in policy discussions, the evidence remains that empirically evaluated vertical mergers, taken as a whole, do not result in outcomes that are consistent

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a mixed, although somewhat negative, picture of vertical integration from the perspective of the privately insured.”); Joshua Karl Austin, Vertical Integration and Pricing Outcomes in Retail Gasoline Markets, 35 ECON. BULL. 1 (2015); Ricard Gil & Frederic Warzynski, Vertical Integration, Exclusivity, and Game Sales Performance in the US Video Game Industry, 31 J.L. ECON. & ORG. 143, 166 (2015) (“Our results indicate that the superior performance of integrated games is mainly due to better timing of release strategies through softer competition at release, and inherently higher quality of video games.”); Thomas G. Koch et al., How Vertical Integration Affects the Quantity and Cost of Care for Medicare Beneficiaries, 52 J. HEALTH ECON. 19 (2017); Gregory S. Crawford et al., The Welfare Effects of Vertical Integration in Multichannel Television Markets, 86 ECONOMETRICA 891 (2018).


71 See Spengler, supra note 9, at 347–50.

72 See, e.g., Marissa Beck & Fiona Scott Morton, Evaluating the Evidence of Vertical Mergers (Feb. 26, 2020), https://ssrn.com/abstract=3554073. Specifically, the authors criticize Lafontaine & Slade, Cooper et al., and the GAI comment’s interpretation of the empirical evidence. Their main conclusion is “that the empirical evidence evaluated in these articles does not show that vertical mergers are generally procompetitive, or generally anticompetitive” because “many studies cannot determine the net effect of the vertical integration on welfare.” Id. at 2–3. We certainly agree with the authors that studies in the literature find procompetitive, anticompetitive, and mixed results. We also agree that interpreting empirical results in terms of welfare and antitrust is messy and not always ideal. See, e.g., Bresnahan & Levin, supra note 9, Section III. We do not believe, however, that the extant empirical literature—even adopting the authors’ interpretations of individual studies, a number of which are debatable—supports a change in presumptions regarding vertical mergers.
with a hypothesis that vertical mergers, and vertical integration, are generally anticompetitive. Rather, the results are more consistent with the finding that vertical mergers, to the extent that we can determine the impact on welfare, can be competitively neutral, procompetitive, anticompetitive, or cause mixed welfare effects. Thus, the current state of the evidence is consistent with continuing to evaluate vertical mergers under a full rule of reason analysis.

CONCLUSION

Vertical integration is fundamental to a well-functioning market economy, whether in traditional industrial sectors or in digital markets. Vertical mergers can achieve that integration in a manner that internalizes pricing externalities—that is, through EDM—and solves problems associated with high transaction costs, opportunistic behavior, and dampened incentives to innovate. Naturally, vertical mergers can also raise anticompetitive concerns of rival exclusion that could lead to adverse outcomes for consumers. Antitrust agencies and courts have properly relied on a rule of reason framework to assess vertical mergers because of the need to weigh these benefits with the potential for harm.