MERGER BREAKUPS

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One of today’s most pressing antitrust questions is how antitrust should address the conduct of dominant technology companies. Once considered untouchable by antitrust law, these technology behemoths are now the subject of growing calls for antitrust breakup, including through actions by the federal antitrust agencies to challenge and unwind key mergers in the technology space. But nearly every one of the technology mergers identified for ex post challenge and breakup was previously reviewed and cleared by the antitrust agencies pursuant to the existing federal merger review scheme, even after a lengthy investigation in some instances. The calls for the antitrust breakup of these identified technology mergers therefore implicate a much more fundamental antitrust question: should the antitrust agencies more readily challenge mergers that they themselves previously reviewed and cleared pursuant to the existing federal merger review scheme? This Article offers a qualified affirmative response to that question. The antitrust agencies should increase the extent of their challenges to previously reviewed and cleared mergers but should do so in a principled way that respects the significant mitigating factors associated with an expansion in such ex post merger challenges. By conducting that principled analysis, this Article identifies important limiting conditions on the expansion of agency challenges to previously reviewed and cleared mergers.

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INTRODUCTION

A vigorous debate rages within antitrust regarding the appropriate antitrust treatment of dominant technology companies. There is an emerging fear that these companies have grown too large and are exploiting their dominance through conduct injurious to competition and social welfare more generally. Once heralded as the champions of innovation and the modern economy, so-called big technology is increasingly viewed with deep skepticism and scorn. A wide array of

policy proposals have been advanced to address the perceived harms generated by these and other large technology companies, and all of the relevant government actors now are fully engaged on the issue.

The theory that antitrust should be used to break-up the large technology companies has gained considerable traction among many policymakers, scholars, and commentators. One breakup proposal—the one that motivates this Article’s question of interest—is for the federal antitrust agencies to challenge and unwind previously consummated mergers in the technology space. Once considered draconian and extremely unlikely, the prospect of the federal agencies seeking to break-up these technology mergers has now moved from the hypothetical into the possible.

These merger challenges and potential breakups would occur within the existing federal merger review scheme, the Hart-Scott-Rodino Act. That scheme has guided federal merger antitrust review since 1976 and obligates the antitrust agencies to evaluate mergers for their expected competitive effects prior to consummation. Nearly all large mergers are subject to Hart-Scott-Rodino review. And if a merger is subject to this review, the merging parties may not consummate their transaction until the antitrust agencies have reviewed and cleared it.

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4. The pace of antitrust developments is intensifying. An important recent development is the antitrust suit commenced by the Department of Justice and several state Attorneys General against Google. See Press Release, U.S. Dep’t of Just., Justice Department Sues Monopolist Google for Violating Antitrust Laws (Oct. 20, 2020). Also, the House Judiciary Antitrust Subcommittee, which has been especially active in this area, recently issued a sweeping report calling for substantial and fundamental change to antitrust law, including in relation to dominant technology platforms in particular. See Jerrold Nadler & David N. Cicilline, U.S. House of Representaties Subcomm. on Antitrust, Com. & Admin. L., Investigation of Competition in Digital Markets (2020).

5. See infra notes 230–233 and accompanying text.

6. See infra Section III.D.1 (identifying and describing specific technology mergers that have been identified as potential breakup targets).


9. This Article uses “clear” or “cleared” to refer to a circumstance in which the antitrust agencies permit a merger subject to Hart-Scott-Rodino review to proceed, either because neither agency challenges the transaction in connection with the Hart-Scott-Rodino process or because one of the agencies does challenge the transaction in connection with that process but permits the transaction to go forward because the agency enters into a negotiated settlement with the merging parties.
With limited exceptions, each of the various technology mergers that have been identified for potential breakup was reviewed by the antitrust agencies under the Hart-Scott-Rodino Act and permitted to go forward. Take, for instance, Facebook’s 2012 acquisition of Instagram, where the parties properly reported the transaction to the antitrust agencies, with the FTC then investigating the transaction for at least three months before clearing it without any conditions. Other examples of transactions that have been identified for breakup, but which were previously reviewed and cleared by the antitrust agencies under Hart-Scott-Rodino, include: Facebook’s acquisition of WhatsApp, Amazon’s acquisitions of Whole Foods and Zappos, and Google’s acquisitions of DoubleClick and Nest.

The recent calls for the antitrust authorities to unwind these specific technology mergers thus trigger a much more fundamental antitrust question: should the antitrust agencies more readily challenge mergers that they themselves previously reviewed and cleared? Despite its significance, both with respect to the recent and growing calls for the unwinding of the technology mergers above and for antitrust policy in general, there has been no prior work systematically evaluating this question. This Article addresses this gap in the literature by providing a comprehensive analysis of federal antitrust agency challenges to previously reviewed and cleared mergers.

This Article demonstrates that the federal antitrust authorities should amplify, in a principled manner, the extent to which they challenge anticompetitive mergers that they previously reviewed and cleared pursuant to Hart-Scott-Rodino. As the Article first explains, there are strong theoretical reasons why an expansion in such ex post agency merger challenges would enhance consumer welfare, the maximization of which is the functional objective of antitrust. Merger review is an inherently predictive exercise whereby the agencies assess the potential competitive effects of a merger prior to merger consummation using the universe of information available to them at the time of review. As with any predictive exercise, actual outcomes may deviate from predicted

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10. See Facebook, Amendment No. 4 to Registration Statement (Form S-1) at 65 (Apr. 23, 2012).
12. See infra Section III.D.1 (discussing the FTC’s handling of several significant technology mergers).
13. As noted below, the Article uses “merger” in a broad sense to include all transactions subject to Section 7 of the Clayton Act. See 15 U.S.C. § 18.
15. See infra Part I.B.
outcomes, and it is possible that the actual competitive effects of a merger are much more deleterious than predicted. In this case, an ex post challenge to the previously reviewed and cleared merger may be able to abate the merger’s competitive harm.

For empirical evidence supporting an amplification of agency challenges to previously reviewed and cleared mergers, the Article draws on the findings of merger retrospectives, which are important empirical studies that have been largely neglected in legal antitrust scholarship. These studies utilize standard empirical techniques to evaluate whether a given merger generated actual competitive harm. So, for example, if two publishers of legal treatises merge, a merger retrospective can evaluate the extent to which the merger actually caused competitive harm, such as higher treatise prices. Economists have conducted a number of merger retrospectives in recent years, and the bulk of these studies show that the mergers under consideration generated competitive harm, including mergers that were subject to the Hart-Scott-Rodino review process. Based on the findings of the merger retrospectives conducted to date, therefore, the agencies could potentially advance the objectives of antitrust by increasing the number of challenges to previously reviewed and cleared mergers.

At the same time, there are significant reasons to be wary about a shift in antitrust policy that involves a mere ratcheting up of the number of agency challenges to mergers that the agencies previously reviewed and cleared. It is widely recognized that consumer welfare is better enhanced if anticompetitive mergers are challenged and corrected during the merger review process than after the fact. As clearly evidenced by merger enforcement actions occurring before enactment of the Hart-Scott-Rodino Act, there are significant difficulties in crafting an effective antitrust remedy once a merger has been consummated and the merging parties have integrated their assets and operations. For this and other reasons, a post-review, post-clearance merger challenge may be a poor vehicle to alleviate a merger’s competitive harm.

Additionally, the unbridled availability of ex post challenges would diminish the ability and incentives of the antitrust agencies to correct mergers’ competitive effects in their incipiency, before the parties’ assets and operations have been integrated and before the merger has inflicted competitive harm. An expansive and unprincipled amplification in the


17. See infra Section II.A.2.

18. See infra Part II.B.

extent of post-review, post-clearance merger challenges also would generate social harm by disrupting the finality of the merger review process. If mergers that cleared the Hart-Scott-Rodino process are readily subject to after-the-fact challenge, merging parties would have diminished incentives to integrate their operations for fear of having to incur the cost of undoing the integration if the merger is subsequently challenged and may also would have diminished incentives to undertake even a procompetitive merger in the first place.

Because of these mitigating factors, the appropriate policy response is not for the agencies to simply increase the extent to which they challenge mergers that they previously reviewed and cleared. Instead, the optimal policy response is for the agencies to increase the number of post-review, post-clearance challenges, but in a principled way that reflects the potential benefits and costs associated with an expansion in that type of ex post merger challenge.

This Article also undertakes that principled analysis and identifies the circumstances under which the federal antitrust agencies should challenge a previously reviewed and cleared merger, such as the specific technology mergers discussed above. This Article argues that, while the antitrust agencies as a general matter should increase the number of post-review, post-clearance challenges, they should challenge a previously reviewed and cleared merger only if two conditions are met:

1. The preponderance of the agencies’ evidence shows that the merger has or is likely to substantially lessen competition; and,

2. The agencies reasonably believe there is a remedy that would correct the merger’s competitive harm.

These two criteria are general in nature. They not only provide the requirements that must be met before the antitrust agencies challenge any particular merger ex post, but also provide an important limiting structure that cabins the general increase in agency challenges to previously reviewed and cleared mergers that is necessary to restore competition to the affected markets. Because the two limiting criteria are necessary—not sufficient—conditions, the agencies may elect not to challenge a previously reviewed and cleared merger ex post even if both criteria are met.

This Article also lends strong support for expanding federal merger enforcement resources, which have been deteriorating in real terms even though the number of reportable mergers has been increasing. An expansion of federal merger enforcement resources would enable the agencies to undertake the necessary additional ex post merger challenges but also to more thoroughly conduct ex ante merger review. More comprehensive ex ante merger review would generate immediate

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20. See infra Part III.E.
competitive gains but would also mitigate some of the future need to conduct ex post merger challenges, which are generally an inferior means of promoting competition when compared to robust ex ante merger review.\(^{21}\)

This Article is organized as follows: Part I discusses the broad contours of the current federal merger review and enforcement framework, with an emphasis on agency challenges to mergers that the agencies previously reviewed and cleared pursuant to the Hart-Scott-Rodino process. Part II identifies the potential competitive benefits of this shift in antitrust policy and also identifies a set of significant mitigating factors. Part III provides and analyzes this Article’s policy proposal, describing the two limiting conditions that it argues should guide the needed increase in ex post challenges to anticompetitive mergers that the agencies previously reviewed and cleared pursuant to Hart-Scott-Rodino. That Part also outlines the application of those two limiting conditions to the technology mergers that have been identified as potential breakup targets and addresses some additional considerations.

I. THE UNDERLYING LEGAL FRAMEWORK

Motivated by calls for the breakup of dominant technology companies, this Article seeks to analyze the foundational antitrust question of whether the federal antitrust agencies should more readily challenge mergers that they previously reviewed and cleared. As a preliminary step in analyzing that fundamental question, it is necessary to outline the broad contours of the pertinent legal framework, which encompasses both merger review and merger challenge.

A. Merger Notification and Review Under the Hart-Scott-Rodino Act

The current merger review scheme is a relatively new development in the long arc of antitrust, arising in 1976 with the enactment of the Hart-Scott-Rodino Act.\(^{22}\) The Hart-Scott-Rodino Act and its implementing rules\(^{23}\) (collectively, “Hart-Scott-Rodino” or “HSR”) created a mechanism that requires parties to a merger\(^{24}\) to notify the


\(^{24}\) Hart-Scott-Rodino is broad in scope and applies to not just mergers, but also to “consolidations, tender offers, private purchases, other acquisitions of voting securities or noncorporate interests, and acquisitions of certain assets, as well as to the formation of corporate and noncorporate joint ventures.” ABA SECTION OF ANTITRUST L., ANTITRUST LAW DEVELOPMENTS 406 (8th ed. 2017). Section 7 of the Clayton Act, discussed below, is
Department of Justice and the Federal Trade Commission of their proposed transaction prior to consummation; furnish those two agencies with information enabling an antitrust review of the merger; and, defer consummating their merger until completion of those agencies’ review.\textsuperscript{25} Hart-Scott-Rodino is a defining feature of modern United States merger enforcement and is considered to generate significant gain to consumer welfare because it provides a means for the antitrust agencies to review and challenge anticompetitive mergers prior to their consummation.\textsuperscript{26}

If a merger satisfies the HSR filing requirements,\textsuperscript{27} the parties must report the merger to the agencies and abide by a waiting period before consummating it.\textsuperscript{28} Additionally, the merging parties must provide the agencies with detailed information about themselves and the transaction,\textsuperscript{29} including various internal documents bearing on the potential competitive effects of the merger.\textsuperscript{30}

Once the merging parties have made their HSR submissions, a waiting period commences,\textsuperscript{31} and one of the two agencies will be assigned to review the merger.\textsuperscript{32} Using the information it has obtained during the

\begin{itemize}
\item likewise broad in scope and encompasses a wide range of acquisitions, including both stock acquisitions and asset acquisitions. See 15 U.S.C. § 18. This Article uses “merger” to refer to the entire set of transactions encompassed by Section 7.
\item 26. See Baer, supra note 19, at 831–32.
\item 27. Hart-Scott-Rodino’s premerger requirements apply if two requirements are met. First, the transaction must meet certain HSR thresholds, in that the transaction must be sufficiently large and possibly also that one or both of the merging parties must be sufficiently large. 15 U.S.C. § 18a(a). Second, the transaction must not be within one of the Hart-Scott-Rodino exemptions. § 18a(c) (providing statutory exemptions); 16 C.F.R. pt. 802 (2020) (providing additional exemptions).
\item 28. 15 U.S.C. §§ 18a(a)–(b)(1) (30-day waiting period but 15 days in case of a cash tender offer).
\item 29. See 16 C.F.R. pt. 803, App. A (2020). The fact of an HSR filing and its contents are confidential, though companies may note that the transaction is subject to antitrust approval when they announce the transaction or elsewhere. \textit{Id.}
\item 30. The most important category of these documents are so-called 4(c) documents, which are documents “prepared by or for any officer(s) or director(s) . . . for the purpose of evaluating or analyzing the acquisition with respect to market shares, competition, competitors, markets, potential for sales growth or expansion into product or geographic markets.” \textit{Fed. Trade Comm’n, OMB Control No. 3084-0005, Antitrust Improvements Act Notification and Report Form for Certain Mergers and Acquisitions}, at VI (2019), https://www.ftc.gov/system/files/attachments/form-instructions/hsr_form_instructions_9-25-19.pdf [https://perma.cc/6DM6-P8TT]; see also Premerger Notification Off. Staff, Bureau of Competition, \textit{Resetting Our Views on HSR Items 4(c) and 4(d)}, \textit{Fed. Trade Comm’n} (Nov. 28, 2016), https://www.ftc.gov/news-events/blogs/competition-matters/2016/11/resetting-our-views-hsr-items-4c-4d [https://perma.cc/JH3P-M272].
\item 32. DOJ and FTC staff consult, and then the merger is assigned to one of the two agencies. \textit{See, e.g., Premerger Notification and the Merger Review Process, Fed.}
waiting period, the reviewing agency will conduct an initial assessment of the likely competitive effects of the reported merger and determine whether further investigation is necessary. Based on its assessment, the reviewing agency can take one of three actions. The first two options are for the agency to let the waiting period expire or to terminate the waiting period, each of which clears the merger and permits the parties to consummate their transaction.

On the other hand, there is the third option: if the reviewing agency identifies a potential competition issue with the reported merger during the waiting period, the agency can extend the review and request that the parties provide additional information facilitating the agency’s further, and more fulsome, evaluation of the merger. This process, known as a “second request,” ordinarily obligates the merging parties to produce voluminous documents, data, and other information to the reviewing agency in order to facilitate the agency’s competitive effects analysis and imposes considerable costs on the merging parties, as well as the reviewing agency.

Once the parties to the reported merger have substantially complied with the second request, another waiting period commences. During this period, the agency can either close the investigation, thereby allowing the parties to consummate the transaction; or, it can challenge the reported merger. A challenge results in either a settlement in the form of a consent order or decree, which also enables the parties to

33. During the waiting period, the reviewing agency may also obtain information from third parties, such as customers, competitors, or suppliers of the merging parties, germane to the competitive effects analysis and also may request additional information from the merging parties. See ABA SECTION OF ANTITRUST L., supra note 24, at 410 n.418.

34. See Fed. Trade Comm’n, supra note 32.


36. Id.

37. In addition to the production of documents and data, a second request ordinarily also will require merging parties to provide substantial responses to detailed interrogatories relating to the transaction and its potential competitive effects. See ABA SECTION OF ANTITRUST L., supra note 24, at 411. A second request also may involve a number of party and third-party depositions, as well as the production of documents by third parties. See id. at 410 n.418.

38. 15 U.S.C. § 18a(e)(2) (additional 30-day waiting period but 10 days in case of a cash tender offer).

consummate their transaction but with conditions or, if a settlement is not reached, the challenged merger will proceed to litigation.  

The vast majority of mergers subject to Hart-Scott-Rodino are deemed not to pose any substantial competitive threat and, therefore, close without any merger challenge by the antitrust agencies. Data for Fiscal Year 2019 indicate that 2,089 mergers were reported under the HSR Act and that the antitrust agencies challenged just 38 (or approximately 1.8%) of those transactions.

B. Ex Ante Challenges: Merger Challenges Occurring in Connection with Hart-Scott-Rodino Review

Merger review is a fact-intensive exercise that requires the agencies to undertake a case-by-case analysis to determine whether the transaction is likely to lessen competition substantially. The agencies challenge mergers as violations of Section 7 of the Clayton Act, which prohibits acquisitions that may substantially lessen competition or tend to create a monopoly. Harm to competition is evaluated through the lens of

40. See id.


42. See id.

43. See FED. TRADE COMM’N, supra note 35 (“Under the Hart-Scott-Rodino Act, the FTC and the Department of Justice review most of the proposed transactions that affect commerce in the United States and are over a certain size, and either agency can take legal action to block deals that it believes would ‘substantially lessen competition.’”); ANTITRUST DIV., U.S. DEP’T OF JUST., ANTITRUST DIVISION MANUAL, at III-22 (5th ed.), https://www.justice.gov/atr/file/761166/download [https://perma.cc/4JVU-MYKU] (explaining that “[w]hen investigating a transaction that raises significant competitive issues,” agency staff should “seek[] to determine objectively whether a proposed transaction likely will substantially lessen competition”).

44. See 15 U.S.C. § 18. The FTC also challenges mergers under Section 5 of the FTC Act, which prohibits “unfair methods of competition” and “unfair or deceptive acts or practices.” See id. § 45.

45. Id. § 18.
consumer welfare, the impairment of which includes both price effects and non-pecuniary harms.

In reviewing a reported merger to determine its expected competitive effects, the reviewing agency will conduct a multifaceted analysis based on the information and data available to it at the time of review. If the reviewing agency believes the merger is likely to substantially lessen competition and should be challenged, the merging parties can avoid litigation by negotiating with the reviewing agency and entering into a consent order, in the case of the FTC, or a consent decree, in the case of the Department of Justice (collectively, “consent decree”), that alleviates the agency’s competitive concerns. The consent decree permits the merger to be cleared and to proceed forward, but on the agreed-upon terms. Nearly all challenged mergers are settled through consent decree (or with the parties abandoning or restructuring their transaction) and do not proceed to active litigation.

The relief ordered by a consent decree is tailored to address the merger’s specific harm. Antitrust remedies are generally classified as structural remedies or as behavioral (or conduct) remedies, though any given remedy may have both structural and behavioral components. Structural remedies, as the name implies, impose some structural change on the merging parties, such as a divestiture of assets or some other...

46. Consumer welfare has a particular meaning in antitrust and is best defined as harm to “trading parties on the other side of the market” resulting from a disruption in the competitive process. Hovenkamp & Shapiro, supra note 14, at 2000-01 (“As we use this term, applying the ‘consumer welfare’ standard means that a merger is judged to be anticompetitive if it disrupts the competitive process and harms trading parties on the other side of the market.”). For a well-known critique of antitrust’s adoption of the consumer welfare standard, see Barak Orbach, How Antitrust Lost Its Goal, 81 FORDHAM L. REV. 2253 (2013). For recent work in support of the consumer welfare standard, see A. Douglas Melamed & Nicolas Petit, The Misguided Assault on the Consumer Welfare Standard in the Age of Platform Markets, 54. REV. IND. ORG. 741 (2019); see also Hovenkamp & Shapiro, supra note 14, at 2017–20 (explaining the relative merits of the consumer welfare standard).

47. See infra notes 288–289 and accompanying text.
48. See supra note 24 and accompanying text.
49. Ruane, supra note 39, at 6.
50. Id.
51. Of the 38 agency challenges to reportable mergers occurring in Fiscal Year 2019, 18 were settled with consent decrees, 15 were abandoned or restructured by the parties, and only 5 proceeded to active litigation. See Simons & Delrahim, supra note 41, at 2–3.
53. Id. at 13–14.
Behavioral remedies, in contrast, seek to regulate the conduct of the merging parties.\textsuperscript{55}

C. Ex Post Challenges to Previously Reviewed and Cleared Mergers

If the agencies decide not to challenge the reportable merger in connection with the Hart-Scott-Rodino process or if one agency does challenge the merger but enters into a consent decree, the parties will be cleared to consummate the merger.\textsuperscript{56} In addition to challenging a merger during the merger review process, the agencies also may challenge a reported merger after the transaction has been reviewed and cleared.\textsuperscript{57}

1. AGENCIES’ LEGAL AUTHORITY TO BRING EX POST CHALLENGES TO PREVIOUSLY REVIEWED AND CLEARED Mergers

While Hart-Scott-Rodino provides a mechanism for agency review of and pre-consummation challenges to reported mergers, nothing in the statute prohibits the agencies from challenging a reported merger at some later stage, including after merger review, merger clearance, and merger consummation.\textsuperscript{58} In fact, Section 7(A)(i) of the Hart-Scott-Rodino Act states:

Any action taken by the Federal Trade Commission or the Assistant Attorney General or any failure of the Federal Trade Commission or the Assistant Attorney General to take any action under this section shall not bar any proceeding or any

\textsuperscript{54} Id. at 13.
\textsuperscript{55} Id. at 14–17.
\textsuperscript{56} Ruane, supra note 39, at 6.
\textsuperscript{57} In addition to challenging reported mergers prior to clearance or after merger clearance, the agencies also may and do investigate and challenge mergers that were not reportable under the Hart-Scott-Rodino Act. Agency challenges to non-reportable mergers are not uncommon. Investigations of non-reportable transactions constituted nearly 20\% of the Department of Justice’s merger investigations between 2009 to 2013 and nearly 25\% of these investigations resulted in a challenge. Leslie C. Overton, Deputy Assistant Att’y Gen. for Civ. Enf’t, U.S. Dep’t of Just., Non-Reportable Transactions and Antitrust Enforcement: Remarks as Prepared for the 14th Annual Loyola Antitrust Colloquium, Institute for Consumer Antitrust Studies 2 (Apr. 25, 2014), https://www.justice.gov/atr/file/517791/download [https://perma.cc/X7NX-P3H4].

action with respect to such acquisition at any time under any other section of this Act or any other provision of law.\textsuperscript{59}

Thus, by the express terms of Section 7(A)(i), the fact that the agencies reviewed and cleared a reported merger does not preclude the agencies from challenging the transaction at some later date.\textsuperscript{60} As some commentators have observed, Section 7(A)(i) embodies Congress’ intent to not “penalize the antitrust enforcement agencies if they chose not to use, or only partially use, the Act’s preacquisition notification procedures.”\textsuperscript{61}

Agency practice acknowledges the possibility of later challenges to cleared mergers. For example, FTC letters announcing that a merger investigation has ended without challenge may include language referencing the possibility of subsequent FTC action, such as:

[T]he investigation has been closed. This action is not to be construed as a determination that a violation may not have occurred, just as the pendency of an investigation should not be construed as a determination that a violation has occurred. The Commission reserves the right to take such further action as the public interest may require.\textsuperscript{62}


\textsuperscript{60} Stephe\n M. Axinn, Blaine V. Fogg, Neal R. Stoll & Bruce J. Prager, ACQUISITIONS UNDER THE HART-SCOTT-RODINO ANTITRUST IMPROVEMENTS ACT § 9.07 (2018) ("[T]he government will not later be estopped from challenging an acquisition after it has been consummated because of its failure to take steps to prevent the acquisition during the preacquisition waiting period."); Terry Calvani, Should the Government Reopen Cleared Mergers? Point: The Government Has the Right to Challenge Mergers After Hart-Scott-Rodino Review, 4 ANTITRUST 27, 28 (1990) ("[T]he enactment of the premerger notification provisions did not affect the ability of the federal antitrust enforcement agencies to challenge a transaction after the expiration of the waiting periods created by the statute.").

\textsuperscript{61} Axinn, Fogg, Stoll & Prager, supra note 60, § 9.07.

\textsuperscript{62} Donald S. Clark, CLOSING LETTER TO COUNSEL FOR VALERO ENERGY, FTC FILE No. 161-0220, at 2 (Apr. 5, 2018), https://www.ftc.gov/system/files/documents/closing_letters/nid/161_0220_valero_plains_closing_letter_to_counsel_for_valero.pdf [https://perma.cc/QXS8-3EL7]; see also Calvani, supra note 60, at 28 (citing similar language). Statements by FTC Commissioners issued in connection with consents and merger challenges occasionally include similar language. See, e.g., Orson Swindle & Thomas B. Leary, Statement of Commissioners Orson Swindle & Thomas B. Leary, PepsiCo/Quaker Oats, FTC File No. 011-0059, FED. TRADE COMM’N (Aug. 1, 2001), https://www.ftc.gov/sites/default/files/documents/cases/2001/08/swindlelearypepsistatement.htm [https://perma.cc/4YPC-9QCN] ("If the Commission concludes that competition is threatened as a result of any such practices, it should seek appropriate relief against any firms engaged in anti-competitive conduct, including, if necessary, post-acquisition divestitures.").
An ex post agency challenge to a reported and cleared merger seeking equitable relief, such as a breakup or a conduct remedy, would not be barred by any statute of limitations. Claims for equitable relief are not subject to the Clayton Act’s four-year limitations period, and laches ordinarily cannot be asserted against the government.

2. REMEDIES IN EX POST CHALLENGES TO PREVIOUSLY REVIEWED AND CLEARED MERGERS

Because merging parties ordinarily will close their transaction shortly after they have received merger clearance, an ex post challenge to a previously reviewed and cleared merger usually will occur after the merger has been consummated. As with a challenge during the HSR process, an ex post challenge to a cleared merger can be resolved through a consent decree or through litigation.

If the parties are unable to settle through a consent decree and the agency litigates its post-clearance merger challenge, the agency will be aided by the time-of-suit doctrine announced by the Supreme Court in United States v. E.I. du Pont de Nemours & Co. Under that doctrine, when an agency brings a Clayton Act Section 7 claim challenging a merger, it can rely on market conditions at the time of suit, rather than conditions at the time of the merger, for purposes of establishing that the transaction may substantially impair competition.

If the agency prevails on its Section 7 claim, the court or the Commission will fashion a remedy that is “necessary and appropriate in


64. Id. ¶ 320g (“The [Clayton Act’s 4 year] limitation period applies only to damages action. Equity actions, private or governmental, are not restricted by the statute of limitation.”).

65. See id. (noting the “usual proposition that laches does not run against the government”).


67. See infra Part II.B.

68. Antitrust Div., U.S. Dep’t of Just., supra note 52, at 1.


70. See id. at 592. For additional discussion and analysis of du Pont’s time of suit doctrine, see Scott A. Sher, Closed but Not Forgotten: Government Review of Consummated Mergers Under Section 7 of the Clayton Act, 45 Santa Clara L. Rev. 41, 57–77 (2004) and infra Part III.C (discussing post-clearance suits based on market conditions at time of suit).
the public interest to eliminate the [anticompetitive] effects of the acquisition.”71 In imposing a remedy, the court has “broad equitable authority to [restore competition] despite substantial burdens on the acquirer and others.”72

When the challenged merger has been consummated, courts ordinarily impose a structural remedy, such as a remedy causing the breakup of the merged firm or the divestiture of some of the acquired assets, which are then often supported by facilitating remedies.73 However, the fact of merger consummation does not obligate the tribunal to order a breakup or other structural remedy.74 In some challenges to a consummated merger, if the difficulty of or the costs associated with a breakup are too high, the appropriate remedy may be a conduct remedy that eliminates the merger’s competitive harm.75 An example of a relatively recent challenge to a consummated, though a non-reported, merger in which structural relief was not ordered is the FTC’s successful challenge of Evanston Northwestern Healthcare’s acquisition of Highland Park Hospital.76

71. See du Pont, 353 U.S. at 607.
72. ABA SECTION OF ANTITRUST L., supra note 24, at 428.
74. Opinion of the Commission, supra note 73, at 89, (selecting a conduct remedy over a structural remedy).
75. See id. at 89–90.
76. See infra note 103.
77. See Opinion of the Commission, supra note 73, at 89. The FTC challenged the merger through an administrative proceeding, and the ALJ concluded that the merger violated Section 7 and ordered the breakup of the merged entity. See id. at 6–7. The merging parties appealed and, seven years after the merger had closed, the Commission affirmed the ALJ’s liability ruling but reversed as to the remedy. See id. at 5. The Commission explained that while divestiture is ordinarily the preferred remedy in a Section 7 case, breaking up the two integrated entities in this particular instance would be costly because a significant amount of time had elapsed between the closing of the merger and the conclusion of the litigation and that a breakup could be injurious to consumers because Evanston Northwestern had made improvements to Highland Park. See id. at 89. The appropriate remedy, the Commission concluded, was a conduct remedy. See id. at 5.
3. THE RARITY OF EX POST CHALLENGES TO PREVIOUSLY REVIEWED AND CLEARED MERGERS

Despite the agencies’ ability to challenge reviewed and cleared mergers after the fact and, as discussed below, the potential competitive benefits of such ex post merger challenges, such challenges are extremely rare. A review of publicly available materials, such as agency statements and reports, news reports, and other sources, indicated that the agencies have mounted just four ex post merger challenges to cleared mergers since 2001.79

The most recent ex post agency challenge to a cleared merger is the DOJ’s 2017 challenge to Parker-Hannifin’s acquisition of CLARCOR as it related to certain fuel filtration assets acquired in connection with the larger transaction.80 The parties had reported their merger to the antitrust agencies pursuant to Hart-Scott-Rodino, and the agencies cleared the merger on January 17, 2017, by letting the 30-day waiting period expire without taking any action.81 The parties consummated their transaction shortly thereafter.82

Even though the agencies cleared the merger, the DOJ subsequently commenced investigation,83 potentially in response to consumer complaints that alerted the DOJ of a competitive overlap in the relevant

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78. See infra Part III.A.
79. In addition to the four challenges to reviewed and cleared mergers discussed below, another potential such ex post challenge since 2001 is the FTC’s 2001 challenge to Airgas’s acquisition of Mallinckrodt’s Puritan-Bennett’s medical gas business. See Complaint, In the Matter of Airgas, Inc., No. C-4029 (F.T.C. Dec. 12, 2001), https://www.ftc.gov/sites/default/files/documents/cases/2001/12/airgascmp.htm [https://perma.cc/Q5WN-FNE3]. However, the FTC’s April 2012 Year in Review is ambiguous whether that FTC challenge was a challenge to a reported merger that had been cleared and consummated or instead was a challenge to a non-reportable merger that had been consummated. See Federal Trade Commission, BUILDING ON A STRONG FOUNDATION: THE FTC YEAR IN REVIEW (Apr. 2002), https://www.ftc.gov/sites/default/files/documents/reports_annual/annual-report-2002/ftcyearreview_0.pdf [https://perma.cc/MYV9-NFYF].
82. See id.
fuel filtration markets. The DOJ went on to challenge the merger by filing suit in September 2017, alleging that the transaction as it related to the pertinent fuel filtration assets threatened to result in higher prices, less innovation, and less favorable terms of service.

Parker-Hannifin settled with the DOJ three months later. Because the suit only challenged one component of the merger, the settlement did not result in a full breakup of the merged company. Instead, the settlement just resulted in Parker-Hannifin divesting the specific assets that were the subject of the merger challenge and the source of the competitive harm, which were a relatively small component of the overall transaction.

Additional ex post agency challenges to cleared mergers since 2001 include:

**Chicago Bridge & Iron/Pitt-Des Moines.** The FTC challenged Chicago Bridge & Iron’s merger with Pitt-Des Moines in October 2001, approximately a year after clearance. The agencies let the Hart-Scott-Rodino waiting period expire with no action, thereby clearing the merger, but the FTC nonetheless commenced an investigation of the merger just one week after clearance. The FTC prevailed in its merger challenge, and the Fifth Circuit affirmed the liability finding and the divestiture remedy that ordered a breakup of the merged company.

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84. See Varney, North & D’Amico, supra note 66, at 2 n.4.

85. See U.S. Dep’t of Just., supra note 80.


87. See id. The consent decree also included provisions facilitating compliance and enforcement of the settlement. See id.


90. See id. at 4. The reason for the lack of a second request but commencement of an investigation so quickly after clearance is unknown. Once the investigation had commenced, the parties initially delayed closing their transaction at the request of the FTC but ultimately consummated the merger during the FTC’s investigation and four months after merger clearance. Id. at 4.

91. See Chi. Bridge & Iron Co. v. F.T.C., 534 F.3d 410 (5th Cir. 2008). In order to restore the competitive landscape to what it was before the merger, the remedy not only required Chicago Bridge & Iron to divest the Pitt-Des Moines assets that it had acquired through the merger, but also to divest certain assets that Chicago Bridge & Iron had acquired after the acquisition. See In the Matter of Chi. Bridge & Iron Co., 138 F.T.C. 1024, 1158–77 (2005).
Hearst/Medi-Span. In 2001, the FTC challenged Hearst’s 1998 acquisition of Medi-Span. The parties had reported their transaction pursuant to Hart-Scott-Rodino, and the agencies had cleared it without a second request. Nonetheless, the FTC investigated the merger post-clearance because of consumer complaints about dramatic price increases. As part of the investigation, the FTC learned that Hearst had failed to submit all of the necessary internal documents with its HSR filing. The FTC challenged the merger by filing suit in April 2001. Hearst settled the matter in December 2001 and agreed to divest the Medi-Span business and disgorge its unlawfully acquired profits.

Deere/Precision Planting. On August 31, 2016, the Department of Justice filed suit to challenge Deere’s acquisition of Precision Planting from Monsanto. The parties had reported their transaction pursuant to Hart-Scott-Rodino, and the agencies had cleared it. Nonetheless, the DOJ challenged the merger after clearance, allegedly because a Deere


94. Id. ¶ 21.


96. See Fed. Trade Comm’n, supra note 92.


100. Unlike the other ex post agency challenges to cleared mergers, the parties in the Deere/Precision Planning merger had not yet consummated their cleared merger when the DOJ challenged it. See Monsanto Co., Quarterly Report (Form 10-Q) at 9 (Jan. 6, 2017), https://www.sec.gov/Archives/edgar/data/1110783/000111078317000008/mon-20171130xq1.htm [https://perma.cc/5RJG-R9ZR] (“As a result of [the DOJ’s] suit, the closing date for this transaction is uncertain.”).
competitor complained. In response to the DOJ’s merger challenge, the parties abandoned their transaction.

Thus, while the agencies can mount ex post challenges to cleared mergers, such challenges are currently very rare.

II. ADDITIONAL EX POST MERGER CHALLENGES: POTENTIAL COMPETITIVE BENEFITS AND MITIGATING FACTORS

This Part of the Article analyzes whether the agencies should more readily challenge mergers that they previously reviewed and cleared pursuant to the Hart-Scott-Rodino process. It shows that there are compelling theoretical and empirical reasons why such a modification to merger policy would further competition and advance the aims of antitrust. But this Part also shows that there are important reasons to be cautious about an unprincipled and widespread amplification in the number of agency challenges to previously reviewed and cleared mergers.

A. The Potential Competitive Benefits

There are both significant theoretical and empirical justifications why an expansion in agency challenges to previously reviewed and cleared mergers would further competition and advance the aims of antitrust. Specifically, ex post challenges to previously reviewed and cleared mergers are a way for the agencies to correct past mistakes in cases where the parties in the new merger agreed to provide more competition than they had in the previously reviewed and cleared merger. This Part analyzes whether an expansion of agency challenges to previously reviewed and cleared mergers would further competition and advance the aims of antitrust.


103. The merger at issue in the Evanston Northwest/Highland Park challenge discussed in supra Section I.C.2 was not reported under HSR because the parties apparently received representations from the FTC’s Pre-Merger Notification Office that their transaction was not reportable. See Respondent’s Corrected Appeal Brief at 86, In the Matter of Evanston Nw. Healthcare Corp., No. 9315 (F.T.C. Jan. 12, 2006), https://www.ftc.gov/sites/default/files/documents/cases/2006/01/060112enhappealbriefcorrected.pdf [https://perma.cc/W23P-UEYW]. Additionally, the FTC’s 2010 challenge to Tops Markets’ acquisition of Penn Traffic Company was a post-consummation challenge to a reported transaction but, for reasons relating to the pending bankruptcy of Penn Traffic, the FTC and Tops Markets entered into an agreement permitting the deal to close while the FTC completed its investigation. See Press Release, Fed. Trade Comm’n, FTC Order Requires Tops Markets to Sell Seven Penn Traffic Supermarkets (Aug. 4, 2010), https://www.ftc.gov/news-events/press-releases/2010/08/ftc-order-requires-tops-markets-sell-seven-penn-traffic [https://perma.cc/ZY4B-NKVM]. Finally, while the FTC in 2017 successfully challenged the Whole Foods/Wild Oats merger after consummation, the Whole Foods/Wild Oats transaction does not constitute an example of an agency challenge to a previously reviewed and cleared merger because the FTC never cleared the transaction and instead challenged it in connection with the Hart-Scott-Rodino process. See FTC v. Whole Foods Mkt., 548 F.3d 1028, 1032–33 (D.C. Cir. 2008) (describing procedural history).
cleared mergers would substantially advance competition. This section discusses these theoretical and empirical justifications in turn.

1. THEORETICAL JUSTIFICATION FOR EX POST CHALLENGES

Merger review is an entirely predictive exercise through which the reviewing agency seeks to ascertain the expected competitive effects of the transaction based on all of the information it possesses at the time of review. The reviewing agency’s determination will be guided by the analysis of its economists, which have available an array of sophisticated econometric tools capable of predicting a merger’s competitive effects, such as merger simulations, natural experiments, and analysis capable of evaluating price effects in markets with differentiated goods. Aside from those tools, documentary and testimonial evidence in the form of party and third-party documents, customer and supplier testimony, and information from industry participants and observers are also important inputs in the agency’s evaluation of a merger’s expected competitive effects.

Based on the information available to it, the reviewing agency may be able to properly predict the competitive effects of a merger and, if necessary, craft an effective remedy that alleviates the merger’s expected competitive harm. However, as with any predictive exercise, ex ante merger review may not necessarily always correctly predict a merger’s

104. While court opinions and agency guidelines often reference market concentration levels as the foundation of a merger’s competitive effects analysis, agency economists can and do rely on much more sophisticated analysis to conduct a competitive effects analysis. See Joseph Farrell & Carl Shapiro, Antitrust Evaluation of Horizontal Mergers: An Economic Alternative to Market Definition, 10 B.E. J. THEORETICAL ECON. 1, 3–4 (2010), http://faculty.haas.berkeley.edu/shapiro/alternative.pdf [https://perma.cc/V2WW-84N7]. (“[T]he DOJ and the FTC have perhaps the world’s largest concentration of Ph.D. industrial organization economists, and they do not mechanically rely on concentration and market shares, but seek flexibly to understand the economics of the industry.”). See generally Daniel L. Rubinfeld, Econometric Issues in Antitrust Analysis, 166 J. INSTITUTIONAL & THEORETICAL ECON. 62 (2010).


107. See, e.g., Carl Shapiro, Mergers with Differentiated Products, 10 ANTITRUST 23 (1996) (developing diversion ratios); Farrell & Shapiro, supra note 104, at 2 (developing the Upward Pricing Pressure test).

competitive effects or identify a remedy that fully alleviates the merger’s expected competitive harm.

First, because of resource constraints, which have been increasingly binding in recent years,\textsuperscript{109} the reviewing agency may only be able to obtain a portion of the information pertinent to the competitive effects analysis and, further, may only be able to conduct a portion of the relevant analysis on the information it has obtained.\textsuperscript{110} Another important limitation is that the agency may not be able to obtain all of the data necessary to conduct the competitive effects analysis and, even when the relevant data is available, it may not be in a form that is readily usable by the agency economists.\textsuperscript{111} The agencies’ resource pressures are buttressed by the time pressures of the HSR process, which may independently require the reviewing agency to selectively choose the information it obtains and the analysis it conducts.\textsuperscript{112}

But even in a hypothetical world in which the reviewing agency obtains all of the available information relevant to the merger and conducts all of the relevant analysis, an assessment of the merger’s expected competitive effects would remain a stochastic exercise infused with some inherent uncertainty. And because of that inherent uncertainty, the reviewing agency—even armed with sufficient information and analysis—may still not correctly predict each of the numerous and

\textsuperscript{109} See infra Part III.E.


\textsuperscript{111} As just one example, to identify the competitive effects of a merger involving two differentiated goods, the agencies can evaluate the two goods’ diversion ratio. See U.S. DEP’T OF JUST. & FED. TRADE COMM’N, HORIZONTAL MERGER GUIDELINES, at § 6.1 (2010) (observing that, with respect to a merger involving two differentiated products, the products’ diversion ratio “can be very informative for assessing [the merger’s] unilateral price effects”). The diversion ratio is defined as the percentage of sales lost by one of the products in response to a price increase that would be captured by the other product. See Shapiro, supra note 107, at 23. Thus, its calculation requires the agencies possess the requisite underlying data (though in certain circumstances, the two products’ market shares can be used to estimate the diversion ratio). See, e.g., Carl Shapiro, The 2010 Horizontal Merger Guidelines: From Hedgehog to Fox in Forty Years, 77 ANTITRUST L.J. 49, 61–62 (2010).

\textsuperscript{112} To ameliorate the time pressure associated with investigating a merger in connection with the HSR process, the reviewing agency often will enter into a timing agreement with the merging parties whereby the merging parties agree to not consummate their transaction before a certain date or event. See Bureau of Competition, Getting in Sync with HSR Timing Considerations, FED. TRADE COMM’N (Aug. 31, 2017), https://www.ftc.gov/news-events/blogs/competition-matters/2017/08/getting-sync-hsr-timing-considerations [https://perma.cc/3CMZ-8FFR].
complex ways in which the transaction could impair competition and the expected magnitude of those pathways of competitive harm.\textsuperscript{113}

As an example, suppose the reviewing agency conducts a thorough analysis of a merger that causes the agency to conclude that the merger will not generate competitive harm because the analysis establishes that the market at issue will continue to include a maverick firm capable of disciplining any price increases by the merged firm.\textsuperscript{114} If the maverick firm unexpectedly exits the market, then the merger may generate substantial competitive effects despite the agency’s fully informed ex ante assessment of no competitive effects.\textsuperscript{115} The agencies’ predictions of the merger’s efficiencies also may overstate the viability or the scope of the merger’s actual efficiencies.\textsuperscript{116} These various factors are all the more salient in technology markets, in which market dynamism causes those markets and the goods and services within them to experience significant evolution even over relatively short time horizons.

These factors—resource constraints, time constraints, and inherent uncertainty—may also cause the agencies to enter into a consent that is ex ante correct, in the sense that the agency’s assessment is correctly based on all of the information available to it but that proves to be suboptimal ex post. For instance, suppose that the merging firms conduct business in two relevant markets, market $X$ and market $Y$, and the agency’s ex ante competitive effects predicts adverse competitive effects only in market $X$. In response, the parties negotiate and enter into a consent decree with the reviewing agency, imposing a remedy that completely alleviates the competitive harm in market $X$. If the merger turns out to also impair competition in market $Y$, then the consent will not alleviate the competitive harm in market $Y$.

\textsuperscript{113} By way of analogy, if an individual is given a weighted coin and asked to predict the outcome of a coin toss, then even after observing an infinite number of tosses, there is still some chance that the individual will incorrectly predict the outcome of the next toss.

\textsuperscript{114} In assessing a merger’s likely competitive effects, the agencies assess the presence of and the merger’s effects on any “maverick” firms, which are any firms in the relevant market that “play[] a disruptive role in the market to the benefit of customers.” See U.S. DEP’T OF JUST. & FED. TRADE COMM’N, supra note 111, § 2.1.5.

\textsuperscript{115} One possibility is that the merger causes the maverick firm to exit the market. Another possibility is that the maverick exists for some reason completely independent of the merger. This latter possibility implicates the issue of exogenous competitive effects, discussed infra Part III.C.

\textsuperscript{116} See Brian A. Facey, The Future of Looking Back: The Efficient Modeling of Subsequent Review, 44 ANTITRUST BULL. 519, 523 (1999) (The agencies may incorrectly predict the merger’s proffered efficiencies because “(1) efficiency claims are asserted by self-interested parties who control the information relating to such claims; and (2) they are difficult for both the agencies and the merging parties to predict ex ante.”).
There are additional reasons why a reviewing agency’s ex ante predictions may prove to be incorrect after the merger is consummated. For instance, if the merging parties or third parties misrepresented relevant information to the reviewing agency, then the agency’s ex ante predictions concerning the extent of the merger’s competitive harm may not be correct.117 Or, the agency may simply make a mistake in conducting its ex ante analysis.

The fact that the agencies’ ex ante predictions may ultimately be incorrect provides a theoretical justification for the agencies mounting ex post challenges to previously reviewed and cleared mergers. If the ex ante prediction of a given merger deviates from the actual state of the world following consummation of the merger, then the merger may be generating substantial competitive harm. By challenging the previously reviewed and cleared merger ex post, the agencies can seek to rectify that competitive harm, thereby enhancing consumer welfare. Agency inaction, on the other hand, will cause the competitive harm to persist. The goals of antitrust should not be jettisoned simply because the offending merger was the subject of prior agency review and clearance.

In fact, there are additional theoretical reasons supporting the expansion of agency challenges to previously reviewed and cleared mergers. For instance, the mere threat of a post-review and post-clearance challenge may discipline the parties to a potentially anticompetitive merger from raising prices or otherwise impairing competition.118 In addition, if an agency is unable to challenge a competition-reducing merger in connection with the Hart-Scott-Rodino process because the agency lacks the requisite evidence of likely competitive effects, the availability of a post-clearance challenge provides a pathway for the agency to challenge the merger once it has sufficient evidence of the merger’s actual competitive effects.119 Finally,

117. See, for example, the FTC’s ex post challenge of Hearst’s acquisition of Medi-Span, discussed supra Section I.C.3. As the FTC alleged in its complaint, Hearst’s failure to submit all of the necessary internal documents with its HSR filing “hinder[ed] the ability of the federal antitrust authorities to analyze the competitive effects of the merger.” See Fed. Trade Comm’n, supra note 95.

118. Cf. Robert Pitofsky, Subsequent Review: A Slightly Different Approach to Antitrust Enforcement, Fed. Trade Comm’n (Aug. 7, 1995), https://www.ftc.gov/es/public-statements/1995/08/subsequent-review-slightly-different-approach-antitrust-enforcement [https://perma.cc/4ZGX-PXZT] (The agencies’ public commitment to monitor a merger ex post may cause “parties claiming efficiencies or brushing off the possibility of anticompetitive practices [to] be induced in the years following the merger to pursue more aggressively the efficiencies or avoid more carefully anticompetitive effects.”).

119. The agencies’ evidentiary burdens in establishing competitive effects have been heightened in response to judicial opinions that have narrowed the so-called structural presumption, i.e. the rebuttable presumption that a horizontal merger that increases concentration in an already concentrated market substantially impairs competition. See Jonathan B. Baker, Mavericks, Mergers, and Exclusion: Proving
in the absence of any ex post merger challenge, consumers bear the entire risk of an ex ante review that ends up underestimating a merger’s actual competitive harm. So, a shift in antitrust policy that involves after-the-fact agency challenge to previously reviewed and cleared mergers redistributes some of that risk from consumers to the merging parties.

2. EMPIRICAL EVIDENCE: MERGER RETROSPECTIVES

The justification for ex post agency challenges to mergers that were previously reviewed and cleared is not just theoretical. As this section explains, there is strong empirical evidence that the objectives of antitrust would be advanced through a shift in antitrust policy that resulted in a greater number of post-review, post-clearance agency merger challenges. This empirical evidence comes in the form of merger retrospectives, which are econometric studies that seek to analyze the actual effects of a merger once the merger has been consummated. While economists have conducted a number of merger retrospectives and their importance as an object of study has amplified in recent years, they have largely

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gone neglected in antitrust legal scholarship. The results of those empirical studies have a number of important implications on merger enforcement, including substantiating the potential significant competitive benefits that would flow to consumers if the agencies were to more readily challenge previously reviewed and cleared mergers.

Retrospectives have been conducted on mergers occurring in a variety of sectors, such as airline, banking, consumer products, and healthcare. Numerous retrospectives conclude that the merger or mergers under consideration resulted in competitive harm, despite the fact that the merger may have been the subject of agency antitrust review or even agency challenge prior to consummation. For example, in a well-known retrospective, Ashenfelter and Hosken evaluated the price effects of five mergers in the consumer products sector. Each of the five mergers examined therein was reviewed and cleared by the antitrust agencies, and at least two were subject to agency challenge prior to clearance. Nonetheless, Ashenfelter and Hosken find that there were significant consumer price increases for groups of products sold by the

SAGQ] (last visited Sept. 27, 2020) (listing merger retrospectives conducted by FTC economists). The FTC has also used retrospectives in order to “help[] it improve enforcement accuracy by providing valuable insights into when merger policy has worked, and when it has not.” Michael Vita & F. David Osinski, John Kwoka’s Mergers, Merger Control, and Remedies: A Critical Review, 82 ANTITRUST L.J. 361, 362 (2018).

123. See Luke Froeb, Daniel Hosken & Janis Pappalardo, Economics Research at the FTC: Information, Retrospectives, and Retailing, 25 REV. INDUS. ORG. 353, 362 n.16 (2004) (“[M]ost of the studies estimating the competitive effects of mergers focuses on historically regulated industries where some data are publicly reported, e.g., hospitals, airlines, and banking.”).

124. Orley Ashenfelter & Daniel Hosken, The Effect of Mergers on Consumer Prices: Evidence from Five Selected Case Studies 4–6 (Nat’l Bureau of Econ. Rschs., Working Paper No. 13859, 2008). The five mergers evaluated by Ashenfelter and Hosken were Proctor & Gamble’s acquisition of Tambrands; the conglomerate merger between Guinness and Grand Metropolitan; Pennzoil’s acquisition of Quaker State; General Mills’ purchase of Ralcorp’s branded cereal business; and Aurora Foods’ purchase of Kraft’s breakfast syrup business. See id. at 12–16.

merging firms in four of the five studied mergers, typically in the 3% to 7% range. The authors concluded that because of “the large amount of commerce in [the evaluated] industries, the implied transfer from consumers to manufacturers is substantial.”

Merger retrospectives also have sought to identify the underlying dynamic responsible for a merger’s generation of competitive harm. In a recent study, Miller and Weinberg evaluated the effects of the combination between SABMiller PLC and Molson Coors Brewing, at the time the second and third largest brewers in the United States, that created the brewery behemoth MillerCoors. In connection with the Hart-Scott-Rodino process, the Department of Justice undertook a far-reaching, eight-month investigation of the transaction, relying on extensive information it had obtained from a wide range of market participants, including the merging companies, rival brewers, beer distributors, and retailers.

As part of its pre-consummation review, the DOJ conducted a careful economic analysis of the MillerCoors transaction and concluded that, while concentration in the relevant markets was high, the transaction was unlikely to substantially lessen competition because the two merging companies competed less with each other than the largest market participant, Anheuser-Busch. The competitive effects analysis further predicted that the transaction was likely to generate significant efficiencies in the form of both variable and fixed cost savings and was also unlikely to make it significantly easier for firms in the market to

126. Ashenfelter & Hosken, supra note 124, at 4. The one merger that exhibited little evidence of price effects was Aurora Foods’ purchase of Kraft’s breakfast syrup business. See id. at 26.
127. Id. at 4.
128. Retrospectives also have sought to identify the effectiveness of the remedies that the agencies and the merging parties have agreed to in connection with merger clearance. See, e.g., Osinski & Sandford, supra note 121, at 2.
133. See id. at 351–52.
impair competition through coordinated effects because neither of the merging parties was a coordination-disrupting maverick firm.

Based on that analysis, the Department of Justice ended its eight-month investigation of the transaction and cleared the merger without imposing any divestitures or any other structural or conduct remedy. In its statement announcing the closing of its investigation, the DOJ explained that “[t]he large amount of . . . savings [expected to result from the transaction] and other evidence obtained by the Division supported the parties’ contention that the venture should make a lower-cost, and therefore more effective, beer competitor.”

Miller and Weinberg’s retrospective evaluates the effects of the MillerCoors transaction. In contrast to the absence of competitive effects predicted ex ante, Miller and Weinberg’s empirical analysis documents a 6% price increase in retail beer prices following the merger. Their empirical analysis also indicates that the increased coordinated effects were the likely source of the observed price increase.

134. Horizontal mergers are evaluated for two types of competitive harm: unilateral price increase by the merged firm and coordinated effects, i.e., collusive conduct by firms in the relevant market. See U.S. DEP’T OF JUST. & FED. TRADE COMM’N, supra note 111, at §§ 6 (unilateral effects), 7 (coordinated effects).

135. See Heyer, Shapiro & Wilder, supra note 132, at 351.

136. See Statement on SABMiller and Molson Coors Joint Venture, supra note 131.

137. Id.

138. See Miller & Weinberg, supra note 130.

139. While Miller & Weinberg’s findings indicate that the MillerCoors transaction resulted in competitive harm contrary to the agencies’ ex ante predications, neither those findings nor the findings from other merger retrospectives should be construed to imply that the agencies are somehow doing a poor job of evaluating mergers ex ante, as those ex ante assessments are made using just the set of information available to the agencies at the time of review. See infra Part III.E (discussing the benefits of enhanced enforcement resources on improved ex ante review).

140. Miller & Weinberg, supra note 130, at 1764 (summarizing the descriptive findings).

141. See id. at 1764–65 (summarizing empirical findings relating to coordinated effects).
While there are exceptions, the bulk of merger retrospectives show that the analyzed mergers generated adverse competitive effects, including with respect to mergers that had been reviewed and cleared pursuant to Hart-Scott-Rodino, even after entry of a consent decree. In a comprehensive study, Kwoka identified a set of 47 prior merger retrospectives that collectively analyzed the competitive effects of the evaluated mergers on 119 products. Kwoka analyzed the prior merger retrospectives and found that the studied mergers resulted in higher prices for 73 of the 119 products (i.e., more than 60% of the products at issue), with the price of the 119 products increasing by an average of 4.31% as a result of the evaluated mergers. As Kwoka observes, we are less interested in average price increases than price increases at the upper tail of the distribution. In that regard, Kwoka finds that for 40 of the 119 products (i.e., nearly one third of the products at issue), the measured price effect exceeds 5% and for 23 products (i.e., nearly 20% of the products at issue), the price change exceeds 10%.

For example, Silvia and Taylor conducted a retrospective on two mergers in the petroleum industry that were each reviewed and investigated by the FTC pursuant to Hart-Scott-Rodino: Sunoco’s 2004 acquisition of El Paso’s New Jersey refinery and Valero’s 2005 acquisition of Premcor’s Delaware refinery. See Louis Silvia & Christopher T. Taylor, Petroleum Mergers and Competition in the Northeast United States 1 (Fed. Trade Comm’n, Working Paper No. 300, 2010), https://www.ftc.gov/sites/default/files/documents/reports/petroleum-mergers-and-competition-northeast-united-states/wp300_0.pdf. Silvia and Taylor found that the two transactions “were largely competitively neutral.”


John Kwoka, Mergers and Product Prices, in MERGERS, MERGER CONTROL, AND REMEDIES 83 (2015). Not all of the mergers evaluated in the 47 retrospectives were reviewed by the agencies pursuant to the Hart-Scott-Rodino Act. For example, one of the mergers predates the Hart-Scott-Rodino Act. See Gu, supra note 143, at 161 (June 1, 1976 merger between Xidex and Scott Graphics). Four other mergers fell below the operative HSR thresholds and therefore were not subject to Hart-Scott-Rodino. See Vita & Osinski, supra note 122, at 368.

See Kwoka, supra note 144, at 94. This estimate’s standard error is not provided. See id.

See id. at 94–95. The median price increase for the 119 products is 0.8%, reflecting the fact that average price increase is in part driven by some extreme positive price increases. Id. at 95. One merger retrospective, for instance, identified a 52.4% increase in one of the products at issue. Id.

Id. Vita and Osinski have critiqued Kwoka’s study. See Vita & Osinski, supra note 122, at 363. For Kwoka’s response to that critique, see John Kwoka, Mergers,
Other meta-evaluations of merger retrospectives similarly conclude that most of the mergers subjected to retrospective analysis generated competitive harm. Ashenfelter, Hosken, and Weinberg evaluated 49 retrospectives and concluded that “[t]he empirical evidence that mergers can cause economically significant increases in price is overwhelming. Of the 49 studies surveyed, 36 find evidence of merger-induced price increases.”149 Many other researchers have reached similar conclusions.150

The results of merger retrospectives thus strongly substantiate the proposition that the nearly sole focus on the ex ante review of mergers with effectively no ex post challenge is generating competitive harm—mergers are being reviewed and cleared, perhaps after agency challenge, but, nonetheless, are impairing consumer welfare. The exact proportion of reviewed and cleared mergers that ultimately go on to generate substantial competitive harm cannot be precisely identified through the existing studies.151 Nonetheless, the fact remains that the retrospectives conducted to date clearly indicate that a non-trivial percentage of agency-reviewed mergers result in competitive harm and that additional ex post merger investigation and challenge could generate substantial benefits to consumer welfare by enabling correction of the manifested competitive harm.152

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149. See Ashenfelter, Hosken & Weinberg, supra note 143 at S78.

150. See, e.g., Joseph Farrell, Paul A. Pautler & Michael G. Vita, Economics at the FTC: Retrospective Merger Analysis with a Focus on Hospitals, 35 REV. IND. ORG. 369, 374 (2009) (“[T]he [merger retrospective] literature has produced a range of results. Merger retrospectives that use case studies, or samples based on ‘close call’ mergers that were not blocked, have repeatedly found post-merger price increases. Although no recent published census of the literature exists, it is almost surely true that price increases are found over half the time.”); Graeme Hunter, Gregory K. Leonard & G. Steven Olley, Merger Retrospective Studies: A Review, 23 ANTITRUST 34 (2008) (Various merger retrospectives conducted between 1990 and 2008 conclude that “the majority of studies that analyze price effects have found post-merger price increases. A significant minority of studies have found no price effects.”); Steven C. Salop & Carl Shapiro, Whither Antitrust Enforcement in the Trump Administration, ANTITRUST SOURCE 1, 6 (Feb. 2017) (“[M]erger retrospective] [s]tudies have shown that merger enforcement and remedies are insufficient, and prices may rise or service may decline.”).

151. Among other things, as many have previously observed, the set of mergers subject to retrospective analysis are not a representative sample of all mergers. See, e.g., Froeb, Hosken & Pappalardo, supra note 123, and accompanying text.

152. This is not the only implication from the body of merger retrospectives. As Steven Salop has explained, the findings of merger retrospectives support ex post agency review of consent decrees. See Steven C. Salop, Modifying Merger Consent Decrees to
and while the findings of the retrospectives conducted to date may be industry dependent, these issues simply mandate care in interpreting the retrospectives’ findings, rather than highlighting some inherent defect in them.  

B. Significant Factors Mitigating the Benefits of Ex Post Challenges

While there are strong theoretical and empirical justifications for the expansion of agency challenges to previously reviewed and cleared mergers, there are several significant mitigating factors. A foundational point in evaluating those mitigating factors is that, if an agency commences a post-review, post-clearance merger challenge, the targeted merger ordinarily will be a consummated merger rather than a proposed merger, as would have been the case if the merger had been challenged in connection with the Hart-Scott-Rodino review process. The reason for this is straightforward: because the agencies will become aware of a merger’s actual competitive effects only after merger closing, any ex post challenge ordinarily will occur only after consummation of the merger.

153. For instance, it is well-understood that the conclusions of a retrospective based on a difference-in-differences analysis will depend on the specific control group and the specific time period, i.e., the “data window,” used in the analysis. See, e.g., Greenfield, supra note 121, at 63–67. See also Gregory J. Werden, Inconvenient Truths on Merger Retrospective Studies, 3 J. ANTITRUST ENF’T 287 (2015) (arguing that merger retrospectives do not alter our understanding of mergers’ competitive effects).

154. For instance, the retrospectives conducted to date ordinarily focus on price effects. See, e.g., Kwoka, supra note 144, and accompanying text. However, non-price determinants of consumer welfare may be the more salient variables with which to evaluate mergers involving technology platforms, given that technology platform providers often do not charge consumers a positive pecuniary price to access or use the platform. See, e.g., John M. Newman, Antitrust in Zero-Price Markets: Foundations, 164 U. PA. L. REV. 149, 151 (2015) (discussing the ubiquity of “zero-price products”).

155. Researchers are mindful of the known methodological considerations, and merger retrospectives often include robustness tests to assess the extent to which the empirical findings are sensitive to the imposed modeling assumptions. See, e.g., Ashenfelter & Hosken, supra note 124, at 26, 31 (analysis conducted using various control groups and data windows).

156. Of course, if the agencies become aware of or predict substantial competitive effects after clearance but before consummation, the agencies could challenge the cleared merger before it is consummated. An example of a pre-consummated challenge to a reviewed and cleared merger is Deere’s acquisition of Precision Planting from Monsanto, discussed in supra Section I.D.3, which was seemingly commenced in response to a competitor complaint.
Furthermore, an ex post challenge may occur substantially after the merger has been consummated.157

The observation that agency challenges to previously reviewed and cleared mergers would involve challenges to consummated mergers reveals important limitations on the agencies’ ability to use ex post merger challenges as a means for improving consumer welfare. Consummated merger challenges are widely understood as often being ineffective vehicles for restoring competition to the affected markets, especially when the challenge occurs years after the merger has closed.158

While many issues plague consummated merger challenges, the primary issue is one of remedies: once a merger is consummated, it may be difficult and costly to devise a remedy that reverses the merger’s competitive effects.159

Unless the merging parties intend to keep the two entities structurally separate after the transaction, once the merger has been consummated, the merging parties will begin integrating the merging entities’ assets and operations. The extent and the nature of this integration depends on the specific transaction, but if the merger is expected to generate cost savings or other efficiencies from the combination, then the merger will involve at least some meaningful level of integration in order to capitalize on those efficiencies. An agency challenge to a consummated merger occurring after the integration of the parties’ assets and operations may have difficulty in devising an implementable remedy that effectively restores competition to the relevant market. A structural remedy in the form of a breakup may be infeasible or impotent in restoring competition because of the difficulty of separating the parties’ commingled assets and operations in a manner that enables the divested units to sufficiently infuse competition into the relevant market.160

The inability of consummated merger challenges to readily restore competition is evidenced by the merger challenges that occurred prior to enactment of Hart-Scott-Rodino, which usually involved challenges to consummated mergers.161 These consummated merger challenges were

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157. See, e.g., supra Section I.C.3 (discussing the Hearst/Medi-Span merger, where the FTC did not challenge Hearst’s 1998 acquisition of Medi-Span until 2001).

158. See Baer, supra note 19, at 830–31.

159. See id.

160. See id. at 830 (“Once a merger takes place and the firms’ operations are integrated, it can be very difficult or impossible to unscramble the eggs and reconstruct a viable, divestable group of assets.”).

161. See id. at 829 (explaining that before Hart-Scott-Rodino “relatively few mergers were challenged at the premerger stage” and observing that the data suggest that nearly 70 percent of challenged mergers between 1956 and 1971 were not detected by the agencies in time for them to seek preliminary relief) (citing Grant S. Lewis,
characterized by lengthy litigation that often culminated in remedies that were understood even at the time to have been ineffective in bringing competition back to the affected markets or to have otherwise generated costs that overwhelmed the remedy’s competitive benefits.  

The most well-known of these pre-HSR challenges to a consummated merger was the transaction at issue in United States v. El Paso Natural Gas Co. 163 This merger challenge generated seven years of litigation, eventually resulting in a Supreme Court ruling in favor of the government and ordering a breakup of the merged entity “without delay.” 164 Despite that directive, the actual breakup took an additional ten years, with more litigation along the way, so that 17 years elapsed between commencement of the post-consummation merger challenge and full implementation of the remedy. 165 While the breakup may have restored competition to the relevant market, the competitive benefits of the remedy potentially were eclipsed by its costs, thus minimizing the social benefits of the government’s victory or even rendering it pyrrhic. 166

Preliminary Injunctions in Government Section 7 Litigation, 17 Antitrust Bull. 1, 2, n.8 (1972)).

162. See, e.g., Kenneth G. Elzinga, The Antimerger Law: Pyrrhic Victories?, 12 J.L. & ECON. 43, 53 (1969) (“One of the greatest problems in relief is restoring the assets of a firm after they have been consumed by a merger. Whenever one firm absorbs another, even if their locations are geographically separate, the personnel remain separate and unchanged, and the assets involved continue in their general premerger state, separating the two firms will present problems. . . . But [these problems] are minor compared to those so often encountered in trying to restore a once viable firm. . . . In some cases the firm to be restored, quite literally, no longer exists.”).


164. Id. at 662.

165. See Baer, supra note 19, at 827.

166. The attorney who represented the acquired company explained:

[C]onsider the extraordinary expenditure of time, as well as resources, which have been devoted to this [divestiture] effort. While there is no tally of the total cost that was made in seeing this case through to complete divestiture, it is safe to say that it ran into many millions, employed hundreds of lawyers, accountants and others, consumed great quantities of the scarce resources of our courts, and left a non-competitive market structure in the gas industry in the west for a decade after that market structure had been declared unlawful by our highest court. Another incalculable, but very significant cost was the substantial loss of the time and talents of key El Paso executives from the important jobs of running a major utility and developing new sources of energy supplies in a time of growing energy shortages because of the inordinate demands made upon them in the defense of this antitrust proceeding.

Id. at 828 (citing The Antitrust Improvements Act of 1975: Hearing on S. 1284 Before the Subcomm. on Antitrust & Monopoly of the S. Comm. of the Judiciary, 94th Cong. 428 (1975) (statement of David K. Watkiss, Attorney)).
Studies confirm the ineffectiveness and costliness of consummated merger challenges occurring prior to enactment of the Hart-Scott-Rodino Act. In an important study, Elzinga evaluated a set of 39 merger challenges occurring prior to Hart-Scott-Rodino to assess whether the associated remedies effectively restored competition to the affected markets.\textsuperscript{167} Elzinga constructed two metrics to evaluate the merger challenges under consideration.\textsuperscript{168} With respect to both metrics, the ordered remedies were evaluated and identified as falling within one of four categories: successful relief, sufficient relief, deficient relief, and unsuccessful relief.\textsuperscript{169} Elzinga concluded that under one of his metrics, only 10 of the 39 merger challenges generated successful or sufficient relief; the remaining 29 of the 39 merger challenges generated either deficient or unsuccessful relief.\textsuperscript{170} The evaluated merger challenges fared even worse under Elzinga’s second metric, with just 4 of the 39 merger challenges identified as generating successful or sufficient relief and the remaining 35 as generating deficient or unsuccessful relief.\textsuperscript{171}

It is of course the case that the scope and sophistication of economic analysis and the nature of merger enforcement and litigation are markedly different now than they were in the decades preceding enactment of the Hart-Scott-Rodino Act in 1976. And for that reason, post-consummation merger challenges today may be able to avoid some of the difficulties that plagued post-consummation merger challenges prior to Hart-Scott-Rodino. But it remains the case that, because additional agency challenges to previously reviewed and cleared mergers would involve challenges to already consummated mergers, these ex post challenges would still need to grapple with the fundamental difficulties of unwinding consummated mergers, such as the inherent difficulty in breaking up the operations and assets of a combined entity in a manner that enables competition to flourish in the affected market.\textsuperscript{172} This is especially the case for mergers that are challenged many years after consummation and integration, such as the technology mergers that are the subjects of the recent calls for ex post agency challenge and breakup, discussed below.

All else being equal, because they do not require separating the comingle assets and operations of an already merged entity, ex ante

\textsuperscript{167} See Elzinga, \textit{supra} note 162, at 46.
\textsuperscript{168} \textit{Id.} at 47.
\textsuperscript{169} \textit{Id.} at 47–52.
\textsuperscript{170} \textit{Id.} at 48 tbl. 1.
\textsuperscript{171} \textit{Id.} at 51 tbl. 2.
\textsuperscript{172} For a thorough discussion of agency challenges to consummated mergers, see Sher, \textit{supra} note 70. \textit{See also} J. Thomas Rosch, Comm'r, Fed. Trade Comm'n, Consummated Merger Challenges—The Past is Never Dead (Mar. 29, 2012). For an argument that breakups may be less administratively costly than ordinarily assumed, see Rory Van Loo, \textit{In Defense of Breakups: Administering a ‘Radical’ Remedy}, \textsc{Cornell L. Rev.} (forthcoming 2020).
merger challenges are a superior method of merger enforcement than merger challenges occurring after review and clearance. Indeed, the significant benefits of ex ante merger review vis-à-vis post-consummation merger challenges was Congress’ key motivator in enacting the Hart-Scott-Rodino Act. An expansion in the number of agency merger challenges to reviewed and cleared mergers would reintroduce many of the same significant impediments and social costs associated with merger enforcement that Hart-Scott-Rodino eliminated.

Also, because of an important temporal consideration, post-clearance merger challenges less effectively rectify mergers’ competitive effects than remedial relief imposed in connection with ex ante merger review. A competitive correction to a merger occurring during the merger review process and prior to the merger’s consummation prevents the merger from impairing competition and undermining consumer welfare. In contrast, a correction to a merger’s competitive effects occurring after review and clearance enables the merger to inflict competitive harm during the period of time spanning merger consummation and implementation of the ex post remedy.

Nonetheless, the inability of ex post challenges to alleviate mergers’ anticompetitive effects as effectively as ex ante review does not nullify the propriety of an expansion to agency challenges to reviewed and cleared mergers since those after-the-fact challenges may still advance consumer welfare in many instances. However, even with respect to the subset of mergers where an ex post challenge would improve consumer welfare, an expansion of post-review, post-clearance agency merger challenges would generate at least some offsetting social cost by lessening the extent to which the agencies engage in valuable ex ante merger review.

The expected mitigation in the thoroughness of ex ante review resulting from heightened challenges to previously reviewed and cleared mergers would be the result of two forces. The first is a resource constraint: the agencies face finite budgets to conduct enforcement

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173. See, for example, Baer, supra note 19, at 826–31 and Sher, supra note 70, at 52–54 for a discussion of the objectives of the Hart-Scott-Rodino Act.

174. See Sher, supra note 70, at 54–56.

175. See Salop, supra note 152, at 16.

activities, and ex ante merger review is costly.\textsuperscript{177} The cost of merger review is especially high with respect to the second request process, which generates voluminous information and data that greatly facilitates agency assessment of a merger’s expected competitive effects.\textsuperscript{178} Because an expansion of ex post merger challenges would leave fewer resources available to the agencies for other merger enforcement, they would be unable to conduct ex ante merger review as vigorously as they currently are, including through the important second request process.

Agency incentives provide a second reason why increased challenges to previously reviewed and cleared mergers may mitigate the thoroughness of ex ante review. Because the agencies would have a safety valve enabling them to subsequently correct any failure in merger review occurring through the Hart-Scott-Rodino process, the availability of post-review, post-clearance challenges may suppress the agencies’ incentives to identify and correct anticompetitive mergers in the first instance. The unconstrained availability of post-clearance challenges also may incentivize an agency to not challenge a seemingly anticompetitive merger ex ante, because by waiting, the agency can amass evidence on the transaction’s actual competitive effects that it can use to mount an effective post-clearance challenge.\textsuperscript{179}

Apart from the effects that an expansion of post-review, post-clearance merger challenges may have on the effectiveness of ex ante merger review, such a shift in merger enforcement policy may generate a distinct set of additional social costs. Chief among these is disruption of the finality of the merger review process, which may undermine consumer welfare in various ways.

As discussed above, agency challenges to reviewed and cleared mergers presently are extremely rare.\textsuperscript{180} For this reason, while the agencies are able to challenge a merger after clearance, agency clearance of a merger effectively signals to the merging parties that their integration will not be subject to further challenge. If merging parties instead were to believe that their cleared transactions could likely be subject to ex post review, they may be disincentivized from promptly or fully completing their integration for fear of having to incur the cost of undoing the integration if the merger is subsequently challenged. The lack of integration would prevent the merger from achieving the extent of its potential efficiencies, which would come at the expense of consumer welfare.

\textsuperscript{177} See infra Part III.E.
\textsuperscript{178} See supra note 37 and accompanying text.
\textsuperscript{179} See Ottaviani & Wickelgren, supra note 119 and Ottaviani & Wickelgren, supra note 176 for the development of a model in which the agency’s postponement of an ex ante merger challenge enables to agency to obtain information about the merger’s competitive effects.
\textsuperscript{180} See supra Section I.C.3.
welfare.\textsuperscript{181} Also, by generating uncertainty about the viability of the merged firm, a lengthy post-review, post-clearance merger challenge may cause the merged firms’ employees, suppliers, creditors, and shareholders to leave or disengage with the merged firm to the ultimate detriment of the merged firm’s consumers.\textsuperscript{182} And perhaps most starkly, to the extent that ex post challenges only imperfectly target mergers that actually impair competition, the risk of an ex post challenge may diminish the incentives for even pro-competitive merger activity.\textsuperscript{183} This consideration is particularly relevant in the technology sector, where entrepreneurial innovation and investment are increasingly fueled by the prospect of being acquired.\textsuperscript{184}

Accordingly, while there would be clear competitive benefits generated by an expansion in agency challenges to previously reviewed and cleared mergers, there are a number of mitigating factors that could offset the associated gains to consumer welfare or otherwise impair social welfare. The next Part of the Article addresses the policy implications of these findings.


\textsuperscript{182} Cf. Rosch, supra note 172, at 20 (observing that, in the context of agency investigations to consummated mergers, because a lengthy investigation can generate marketplace uncertainty, “[c]ustomers, vendors, and even employees may go elsewhere out of a fear that the merged entity will be broken up, even if, ultimately, the agency concludes there is no violation”). However, with respect to ex post challenges to those mergers cleared after entry of a consent, the finality of that outcome is already subject to some uncertainty because, as Salop notes, “DOJ consent decrees contain general language regarding potential modification by the court, and the Commission has the right to reopen and modify FTC orders.” Salop, supra note 152, at 17.

\textsuperscript{183} See, e.g., Terry Calvani & J. Paul McGrath, \textit{Point/Counterpoint: Should the Government Reopen Cleared Mergers?}, \textit{ANTITRUST}, Summer 1990, at 27, 30; see also Ottaviani & Wickelgren, supra note 119, at 3–5 (developing model where availability of ex post merger review causes socially beneficial mergers to be abandoned under certain circumstances); Ottaviani & Wickelgren, \textit{Ex Ante or Ex Post Competition Policy?}, supra note 176, at 357–58 (same).

III. Policy Recommendation: A Principled Increase in Ex Post Merger Challenges

As Part II.A above shows, an expansion of agency challenges to previously reviewed and cleared mergers could generate substantial competitive benefits. As discussed there, strong theoretical reasons favor that expansion, and there is an abundance of supporting evidence in the form of merger retrospectives.\footnote{See supra Part II.A.} Those studies indicate that many mergers, including mergers previously reviewed and cleared through the Hart-Scott-Rodino process, are generating competitive harm.\footnote{See supra Section II.A.2.} At the same time, as shown in Part II.B, there are a number of ways in which an unbridled amplification of agency challenges to previously reviewed and cleared mergers could impair consumer welfare or generate other social costs.

In light of these mitigating factors, the appropriate policy response is not for the agencies to simply ramp up the frequency with which they mount ex post challenges to anticompetitive mergers that they have previously reviewed and cleared. Such a policy shift would disregard the mitigating factors discussed above and could ultimately nullify any possible improvement to competition.\footnote{See supra Part II.B.} Instead, because of the potential costs associated with expanded agency challenges to previously reviewed and cleared mergers, it is necessary to impose at least some principled limitations on when the agencies should challenge mergers that were previously subject to the Hart-Scott-Rodino review process.

As discussed further below, the appropriate policy response is for the agencies to increase the extent to which they challenge previously reviewed and cleared mergers but to undertake such an ex post challenge only if the following two conditions are met:

1. The preponderance of the agencies’ evidence shows that the merger has or is likely to substantially lessen competition; and,

2. The agencies reasonably believe there is a remedy that would correct the merger’s competitive harm.

These limiting requirements satisfy important objectives. First, because they flow directly from the most salient benefits and costs analyzed in Part II above, they further the ultimate objective of enhancing competition. Second, because they are limited in scope and narrowly tailored, they do not unduly restrict the agencies’ ability to conduct the case-by-case analysis that is fundamental to modern merger review. Finally, because the two criteria will be met only if the ex post challenge is sufficiently expected to advance the objectives of antitrust, the criteria

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185. See supra Part II.A.  
186. See supra Section II.A.2.  
187. See supra Part II.B.
help guard against the potential misuse of antitrust policy, such as its use to address non-antitrust conduct or the political misuse of antitrust.

\[\text{A. Limiting Condition One: Preponderance of Agencies’ Evidence Shows Competitive Harm}\]

As discussed in Section I.C.1 above, antitrust law does not prevent the agencies from bringing an ex post Section 7 challenge to a merger that they previously reviewed and cleared. Instead, the Hart-Scott-Rodino Act contemplates that type of ex post merger challenge and expressly permits it.\textsuperscript{189} However, in any Section 7 claim, the agencies must still establish substantial harm to competition.\textsuperscript{190} Therefore, as a precondition to initiating an ex post challenge to a previously reviewed and cleared merger, the agencies should possess \textit{at least} some evidence that the challenged merger has or may substantially lessen competition—in the absence of any evidence of substantial competitive harm, there would be no antitrust basis for the agencies’ merger challenge.

The agencies, though, should be required to possess more than just \textit{some} evidence of the merger’s actual or expected substantial competitive harm before challenging it ex post. First, because of the costs associated with an expansion in post-review, post-clearance merger challenges, and limited enforcement resources, the agencies should focus their ex post enforcement efforts on those mergers that are exerting or expected to exert the most deleterious effect on competition. Requiring the agencies to possess more than just some evidence of the merger’s actual or likely substantial competitive harm before challenging the reviewed and cleared merger ex post serves that objective by excluding those mergers where there is scant evidence of harm to competition.

Second, and more fundamentally, a merger may generate conflicting evidence of its competitive effects. Analysis of a consummated merger’s competitive effects, unlike the competitive effects analysis of a proposed merger, will be able to rely on the merger’s actual competitive effects. See 15 U.S.C. § 18; \textit{United States v. Gen. Dynamics Corp.}, 415 U.S. 486, 505 n.13 (1974) ("Post-merger evidence showing a lessening of competition may constitute an ‘incipiency’ on which to base a divestiture suit . . . .").
a variety of factors, such as the nature of the data used and statistical modeling choices.  

A well-known example of conflicting ex post evidence on competitive effects comes from a set of merger retrospectives conducted on mergers in the petroleum industry. In 2004, the Government Accountability Office (GAO) conducted retrospectives of eight U.S. petroleum mergers to determine those mergers’ effects on wholesale petroleum prices. To conduct its analysis, the GAO worked closely with experts in academia, governmental agencies, and the private sector. The GAO applied sound econometric techniques to data on the mergers’ actual competitive effects and concluded that six of the eight mergers under consideration led to wholesale price increases.

FTC staff subsequently analyzed the GAO’s findings that the bulk of the mergers the GAO evaluated generated competitive harm. FTC staff used the same data as the GAO and retrospectively evaluated the same eight mergers as the GAO but used different statistical modeling assumptions. FTC staff concluded that the GAO’s results were not impervious to the chosen statistical modeling assumptions and that modifying the selected modeling assumptions caused the mergers’ associated price effects to vary greatly. As these studies show, while a particular set of statistical techniques can evidence a merger’s competitive harm, a different set of statistical techniques can show otherwise.

Apart from any statistical-based considerations, there are a variety of other reasons why a given merger may generate conflicting evidence of its competitive effects. For instance, in deciding whether to challenge a particular merger, the agencies give weight to both customer complaints

191. See Ottaviani & Wickelgren, supra note 119; Ottaviani & Wickelgren, supra note 176.


193. See id. at 3.

194. See id. at 80–91.


196. See id. at 4, 21–31.

197. Id. at 2–3, 20; see also Werden, supra note 153, at 291–92 (discussing the GAO study and the FTC staff report); Daniel Hosken, Louis Silvia & Christopher Taylor, Does Concentration Matter? Measurement of Petroleum Merger Price Effects, 100 Am. ECON. REV. 45, 45, 49 (2011) (noting how empirical results indicated that the one merger the GAO’s analysis showed as generating significant competitive effects led to a significant price decrease).
and competitor complaints, albeit weighing the former more than the latter.\textsuperscript{198} If a merger is pro-competitive and enables the merged firm to better compete with the rival firm through lowered prices or enhanced quality, competitors of the merged firm will have an incentive to argue and adduce evidence that the merger is anticompetitive, despite the fact that consumer-focused evidence would show the merger’s pro-competitive effects.\textsuperscript{199}

For these reasons, when deciding whether to challenge a previously reviewed and cleared merger, the agencies ordinarily will have conflicting evidence of the merger’s competitive effects. Because the ultimate objective of ex post challenges is to remedy those mergers that actually are substantially impairing competition, the agencies should base their ex post enforcement decision on the totality of their evidence, rather than just the strata of evidence indicating the merger’s competitive harm. For these same reasons, the agencies should initiate an ex post challenge only when the balance of their evidence shows that the merger has or likely is going to substantially impair competition, which is the consideration mandated by the first limiting condition above.\textsuperscript{200}

Regarding the source of the agencies’ evidence, the agencies potentially will have access to a wide range of evidence concerning a merger’s competitive effects prior to commencing an ex post challenge, including both evidence arising after merger clearance and evidence previously obtained through the merger review process. As to post-clearance evidence, the agencies may obtain evidence informally, such as through customer complaints, or formally through a pre-challenge investigation.\textsuperscript{201} Depending on the scope of the agencies’ post-clearance data, the agencies also may be able to conduct merger retrospectives that

\textsuperscript{198} See supra Section I.C.3 (the FTC’s 2001 challenge to Hearst’s acquisition of Medi-Span was initiated in response to customer complaints, while the DOJ’s 2016 challenge to Deere’s acquisition of Precision Planting was apparently initiated in response to competitor complaints).

\textsuperscript{199} For instance, suppose a vertical merger between a supplier and a retailer enhances competition in that it enables the merged firm to trim supply costs and pass those cost savings on to consumers in the form of lower retail prices. In this case, retail rivals of the merged firm have an incentive to argue that the merger impaired their ability to compete by foreclosing them from the supply market.

\textsuperscript{200} If the ex post challenge proceeds to trial on the merits, then the Section 7 liability analysis will not be based on just the agencies’ evidence but on all of the admissible evidence. See Sher, supra note 70, at 67–70.

are probative of the merger’s competitive effects. A recent proposal by an FTC Commissioner would require parties in selected vertical mergers to provide the FTC with ongoing post-clearance data sufficient for the FTC to undertake a retrospective analysis of the merger.

B. Limiting Condition Two: Reasonable Belief of Corrective Remedy

Agency merger challenges preceding the enactment of the Hart-Scott-Rodino Act show that the net competitive benefit of an ex post challenge to an anticompetitive merger may be significantly undermined for lack of a suitable remedy. To guard against the possibility that the cost of correcting a merger’s competitive harm does not overwhelm the associated benefits, an agency should initiate a challenge to a previously reviewed and cleared merger only if it has a reasonable belief, that at the time of the challenge, there exists a remedy that will correct the merger’s competitive harm. This limiting criterion is similar to the assessment that the agencies make when proposing a remedy in connection with an ongoing merger challenge, but forces a remedial assessment to be made before initiation of an ex post challenge in the first place.

Because of the broad scope of remedies available to the agencies, this second limiting requirement will ordinarily be met. However, breakup or other structural relief may not be a corrective remedy, especially if the merger was consummated many years ago and the

202. Though the merger was not subject to Hart-Scott-Rodino, the post-consummation challenge to Evanston Northwestern’s acquisition of Highland Park, discussed in supra Section I.C.2, was motivated in part by an FTC merger retrospective showing the merger’s competitive harm. See Dionne C. Lomax, A History of Evanston and Analysis of the Merger Remedy, COMPETITION POL’Y INT’L (May 27, 2008), https://www.competitionpolicyinternational.com/a-history-of-ievaston-i-and-analysis-of-the-merger-remedy/ [https://perma.cc/GB7N-37NQ].

203. See FED. TRADE COMM’N, STATEMENT OF COMMISSIONER REBECCA SLAUGHTER IN THE MATTER OF SYCAMORE PARTNERS, STAPLES, AND ESSENDANT (2019) (proposing that when faced with a close vertical merger case, the FTC “should commit publicly, at the time the investigation concludes, to a follow-up retrospective investigation a few years after the merger is consummated and should require the parties to provide whatever data might be necessary to complete it”).

204. See supra Part II.B.

205. See U.S. DEP’T OF JUST., supra note 52 (“Before proposing a remedy to an anticompetitive merger, the Division should satisfy itself that there is a logical nexus between the remedy and the alleged violation—that the remedy both cures the competitive harm and flows from the theory of competitive harm.”).

206. This second requirement, like the first requirement, tracks a substantive aspect of the government’s eventual Section 7 claim (here, appropriate remedy), should the ex post challenge proceed to trial. Specifically, if the agency prevails in its ex post challenge, the court will impose a remedy that effectively restores competition to the affected market. See United States v. E.I. du Pont de Nemours & Co., 353 U.S. 586, 606–607 (1957); see also FED. TRADE COMM’N & U.S. DEP’T OF JUST., supra note 41, at 2, 14–17 (discussing remedies in a Section 7 challenge).
parties’ assets and operations have been thoroughly commingled. In this case, a breakup may impose more competitive costs than benefits, while a conduct remedy may result in a net competitive gain. Additionally, as discussed in more detail below, depending on the specific competitive harm generated by the merger, a structural remedy like a breakup may not alleviate the transaction’s competitive harm. Furthermore, a full breakup should be rejected in favor of a partial divestiture if the former generates competitive costs in excess of competitive benefits but, the latter alleviates the merger’s competitive harm without the imposition of those costs.

Requiring reasonable belief of a corrective remedy necessitates that the agencies evaluate not just the potential actual or expected competitive harm from the merger but also evaluate—before mounting their ex post challenge—the range of available remedies and confirm that there exists a remedy that will result in net competitive benefits and can be imposed through the ex post challenge. Because the viability of a structural remedy ordinarily will ebb as the parties continue to integrate their assets and operations, the reasonable belief of a corrective remedy requirement also incentivizes the agencies to challenge the merger as soon as the preponderance of their evidence shows the merger’s competitive harm.

Another important consideration is the relevance of the merged firm orchestrating an integration in order to thwart the viability of a breakup, as opposed to integration for the purpose of achieving merger efficiencies. While such conduct should be sanctioned, merger remedies should not be punitive and should instead seek to restore the competition to the affected market.

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207. See, for example, the discussion of the Evanston Northwestern-Highland Park merger, supra note 77 and accompanying text.

208. See infra Section III.D.3.


210. See U.S. DEP’T OF JUST., supra note 52, at 2 (“Any remedy must be based on sound legal and economic principles and be related to the identified competitive harm. Tailoring the remedy to address the violation is the best way to ensure that the relief obtained cures the competitive harm.”).

211. See id. at 19.

212. For instance, some have argued that Facebook’s integration of itself, Instagram, and WhatsApp was intended to reduce the likelihood of a breakup. See, e.g., Sally Hubbard, How to Stop Facebook’s Dangerous App Integration Ploy, N.Y. TIMES (Feb. 5, 2019), https://www.nytimes.com/2019/02/05/opinion/facebook-integration.html [https://perma.cc/K2AH-3FY3].

213. See Saint Alphonsus Med. Ctr.-Nampa v. Saint Luke’s Health Sys., Ltd., 778 F.3d 775, 792 (9th Cir. 2015) (“Section 7 remedies should not be punitive . . . .”); Deborah Platt Majoras, Deputy Assistant Att’y Gen., U.S. Dep’t of Just., Antitrust
merged entity is integrating for the purpose of avoiding a breakup, the proper response is for the agencies to immediately file suit challenging the merger seeking preliminary relief and to enjoin the integration (assuming the preponderance of the agencies’ evidence shows the merger’s competitive harm), rather than waiting to challenge the merger at some later stage and pursuing a breakup at that time, partially as a punitive measure targeting the parties’ integrative efforts.

C. Further Considerations

By increasing the frequency of challenges to previously reviewed and cleared mergers, but in a manner consistent with the two limiting conditions given above, this proposed shift in antitrust policy will potentially result in substantial gains to competition. It is worth noting that these two limiting requirements are necessary conditions, not sufficient conditions. Thus, they set forth the circumstances under which the agencies may challenge a previously reviewed and cleared merger but not the circumstances mandating an ex post challenge. As discussed below, there may be reasons why even if the two conditions are met, the agencies nonetheless still may not elect to challenge a previously reviewed and cleared merger ex post. On the other hand, failure to meet the two conditions should preclude an ex post agency challenge.

Another important point is that the limiting requirements relate only to a particular type of antitrust action, i.e., an agency challenge to a previously reviewed and cleared merger. Those limitations would not limit a private plaintiff’s ability to challenge a merger ex post, even if the merger was subject to Hart-Scott-Rodino review and cleared by the agencies.214 The two limiting requirements would also not limit monopolization claims brought under Section Two of the Sherman Act against the merged entity based on the merged firm’s exclusionary conduct.215 On the other hand, if the federal agencies seek to litigate a

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215. While a Clayton Act Section 7 claim targets an anticompetitive merger, Section Two of the Sherman Act targets the inappropriate acquisition or maintenance of
Section Two claim based on the acquisition itself, as opposed to the merged firm’s post-acquisition conduct, then the agencies should pursue that Section Two challenge only if the two limiting conditions are met, as that Section Two challenge would be fundamentally equivalent to an ex post challenge under Section 7 of the Clayton Act. Finally, regardless of the type of Section Two claim, some of this Article’s analysis, such as the potential inability of breakup to serve as a corrective remedy discussed below, are relevant to a Section Two context.

As discussed in Part II.B, a shift towards increased ex post merger challenges may generate social cost by disrupting the current near-finality of the merger review process. By providing some limiting criteria on when the agencies will mount such ex post challenges, the two limiting requirements will ameliorate some of the potential for the heightening of uncertainty in the contours of merger review and enforcement. To further mitigate that uncertainty and better guide merging parties on when their anticompetitive merger may be subject to ex post challenge despite being cleared by the Hart-Scott-Rodino process, the agencies should include the limiting criteria as part of their existing merger guidelines.

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monopoly power. A Sherman Act Section Two monopolization claim has two elements: (1) the firm’s “possession of monopoly power in the relevant market,” and (2) its exclusionary conduct, i.e., “the willful acquisition or maintenance of that [monopoly] power as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident.” United States v. Grinnell Corp., 384 U.S. 563, 570 (1966).


217. See infra Section III.D.3.

218. For recent discussion and critique of the use of breakup as a remedy in non-merger Section Two cases, see Noah J. Phillips, Commissioner, Fed. Trade Comm’n, We Need to Talk: Toward a Serious Conversation About Breakups (Apr. 30, 2019). See also Robert W. Crandall, The Failure of Structural Remedies in Sherman Act Monopolization Cases 1–2, 6–7, 11–12 (AEI-Brookings Joint Ctr. for Regul. Stud., Working Paper No. 01-05, 2001) [https://www.brookings.edu/wp-content/uploads/2016/06/03_monopoly_crandall.pdf [https://perma.cc/JZ5A-MSEZ] (evaluating all monopolization cases brought by the government between 1890 and 1996 not based on a merger or a conspiracy that resulted in structural relief and concluding that there were only four or five such cases and that the remedies in those cases were largely unsuccessful in restoring competition). Additionally, while the agencies have sought breakup as a Section Two remedy in certain well-known cases, such as in the Microsoft and the AT&T cases, the resulting remedies in agency-initiated Section Two civil cases usually were behavioral remedies. Id. at 1, 7 (of all Section Two civil cases brought by the government between 1890 and 1996 ending in governmental victory or consent, 51.2% resulted behavioral remedies; 20.5 involved compulsory licensing; and 28.3 percent resulted in structural remedies).

those criteria to the merger guidelines after the shift in policy would harmonize the guidelines with actual agency practice, which is an important standing objective of the merger guidelines.220

The DOJ and FTC solicit public comment and hold joint public workshops when they revise their merger guidelines.221 For instance, the agencies held workshops and solicited comments when they last revised the Horizontal Merger Guidelines in 2010.222 That process enabled the agencies to obtain the important input of a broad cross-section of experts and stakeholders, including academics, company representatives, labor unions, consumer groups, practitioners, and economic experts.223 The 2010 revision to the Horizontal Merger Guidelines is generally held in high regard, and the resulting guidelines are routinely relied on by merging parties and cited by courts when shaping and applying antitrust law.224 The agencies similarly should solicit public comment for the purpose of reformulating merger policy to include a greater number of ex post agency challenges to previously reviewed and cleared mergers.

These public comments may result in the agencies adopting additional guidelines concerning the expansion of challenges to reviewed and cleared mergers. One important consideration concerns what can be referred to as exogenous competitive effects, defined as a situation in which the competitive harm of a merger is caused by a market change that is directly unrelated to the merger or the merged firm’s conduct, and the merger merely amplifies the associated competitive harm.

20.pdf [https://perma.cc/UU3T-6EEF]. The Horizontal Merger Guidelines presently include a section on evidentiary issues in consummated merger challenges. See U.S. DEP’T OF JUST. & FED. TRADE COMM’N, supra note 111, § 2.1.1.

220. See, e.g., Timothy J. Muris & Bilal Sayyed, Three Key Principles for Revising the Horizontal Merger Guidelines, ANTITRUST SOURCE (Apr. 2010).


222. See, e.g., Shapiro, supra note 111, at 49–50 (explaining that “[t]he process for revising the [Horizontal Merger] Guidelines was lengthy, collaborative, and open” and then describing that collaborative process). The agencies likewise solicited public comment when they recently revised the vertical merger guidelines. Fed. Trade Comm’n & U.S. Dep’t of Just., supra note 221.

223. In addition to voluminous comments received at the public workshops, over 80 written comments were submitted to the agencies in connection with their revision of the Horizontal Merger Guidelines in 2010. Horizontal Merger Guidelines Review Project, FED. TRADE COMM’N (Jan. 14, 2010), https://www.ftc.gov/news-events/events-calendar/2010/01/horizontal-merger-guidelines-review-project-0 [https://perma.cc/GF9J-27HD].

As an example of an exogenous competitive effect, suppose that, after a merger, a maverick firm exits the market for reasons completely unrelated to the merger. Suppose that this exit enables the merged firm to raise prices and also that this price increase is greater than the price increase that would have resulted if the maverick had exited the market in the but-for world in which the merger did not occur. Because the time-of-suit doctrine allows the agency to establish the merger’s expected or actual competitive effects using the market conditions at the time of suit, i.e., after the maverick has exited the market, rather than the time of merger consummation, an ex post challenge to the merger would find competitive harm. The agency theoretically could also establish a causal link between the merger and the competitive harm since the price increase would have been lower in the but-for world in which there was no merger.

The problem, of course, is that despite the finding of a Section 7 violation, the competitive harm in the example is directly attributed to a change in the market that was unrelated to the merger or any conduct by the merged firm, and the merger served merely as a mechanism to amplify the competitive harm caused by the exogenous change. The situation would be different if, for instance, the maverick’s exit was caused by exclusionary conduct by the merged firm that was enabled by the merger. In this case, the competitive harm would be directly attributed to the merged firm’s conduct that caused the maverick to exit, rather than some exogenous market change.

On the one hand, there is a very compelling reason why the agencies should not rely on exogenous competitive effects to establish competitive harm in an ex post challenge to a reviewed and cleared merger: the realized ex post competitive harm is the direct result of some independent market change, rather than the merger or the merged firm’s conduct. But still, there is at least some basis for the agencies to rely on exogenous competitive effects in an ex post merger challenge, as the merger may have amplified the competitive harm of the exogenous change. For instance, in the example above, the maverick firm’s exogenous exit would have caused a smaller price increase if the two firms had not merged. In this sense, while not the direct cause, the merger was at least a causal contributor to the realized competitive harm.

225. See supra Section I.C.2.

226. To see this even more starkly, suppose that there are just three firms in the market, A, B, and C, with each of the firms fully disciplining the price increase of the other two through vigorous head-to-head competition with one another. Suppose that A and B merge and at some point thereafter, C exits the market for reasons unrelated to the merger or the merged firm’s conduct. In this case, firm C’s exit generates a price increase because firm C no longer disciplines the pricing of A and B, which also do not discipline each other because they have merged. Thus, prices after the merger (i.e., after firm C’s exit) will be higher than before the merger. Now, suppose instead that A and B do not
There is a wide difference of opinion among scholars and commentators regarding the extent to which the agencies should rely on or should be able to rely on exogenous competitive effects, or the time of suit doctrine more generally, to establish competitive harm in an ex post-merger challenge. Additional input and analysis by scholars, commentators, and stakeholders in connection with a public comment process would enable a more complete and consensus-based understanding of this and the other issues pertinent to agency challenges to previously reviewed and cleared mergers addressed in this Article and elsewhere.

Meanwhile, as a prudential consideration, the agencies may elect not to bring any ex post challenges that rely solely on exogenous competitive effects, even if the two limiting requirements above are met. Furthermore, there may be other reasons why the agencies may elect not to bring an ex post challenge even though the preponderance of their evidence shows the merger’s substantial competitive effects, and they reasonably believe there is a corrective remedy. For example, if the agencies determine that the expected net competitive gain from their ex post challenge is slight, they may elect to conserve their enforcement resources in order to mount other merger challenges that would have a more pronounced competitive benefit.

Finally, this Article’s policy recommendation for an increase in ex post merger challenges subject to the two limiting requirements can be understood as a partial generalization of Steven Salop’s policy proposal regarding an expansion of the agencies’ ex post review and modification of consent decrees. Under his proposal, consent decrees settling

merge, and firm C exits the market for the same exogenous reasons that caused it to exit the market in the world in which A and B merged. In this no-merger case, the head-to-head competition between A and B causes firm C’s exit to generate no price increase. Thus, in the absence of the merger, the exogenous exit of firm C causes no price increase but does generate a price increase if the firms instead had merged. Accordingly, the merger was pivotal in firm C’s exit generating any competitive harm.

227. See, e.g., PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶ 1205a (4th ed. 2020) (arguing that while noncontrolling acquisitions of stock and temporary acquisitions of assets may be evaluated for equitable purposes based on conditions at the time of suit, “[c]ontrolling and . . . total acquisitions should be judged on the basis of evidence of the situation existing at the time of the acquisition”); Salop, supra note 152, at 19 (observing that “[p]rice increases also could have been caused by changes in demand or costs or other exogenous supply factors not related to the merger” and therefore “the agency . . . must determine the prices relative to those that would have occurred absent the merger”); Sher, supra note 70, at 64–65 (“[I]f the government intends to challenge such a transaction at a later date based on conditions at the time of suit and not at the time the transaction closed, it must demonstrate actual anticompetitive effects and bring a claim under section 2 of the Sherman Act.

228. See Salop, supra note 152; see also Pitofsky, supra note 118 (discussing subsequent review of matters resolved by consent decree). Others have argued that the agencies should conduct ex post reviews of claimed merger efficiencies. See, e.g., Joseph
merger challenges would “include explicit review and modification provisions that would give the agency the power to petition the court to order further relief if the consent decree fails to preserve competition and protect consumer welfare.” This Article’s proposal reaches not only the particular strata of HSR reportable mergers that are challenged and settled through a consent decree, but also the significantly larger set of reportable mergers not challenged ex ante. This Article also adds another layer to Salop’s proposal by identifying a set of conditions that serve to limit ex post challenges to reportable mergers, including ex post challenges to reportable mergers settled through consents.

D. As Applied to the Targeted Technology Mergers

The two limiting conditions circumscribe the necessary expansion of agency challenges to previously reviewed and cleared mergers in a manner that better ensures that the shift in antitrust policy fulfills its objectives of restoring competition to the affected markets. The two conditions are general in nature and apply to any agency challenge to a previously reviewed and cleared merger, independent of industry or merger type, including the specific technology mergers that have been identified for potential ex post challenge and breakup, which are discussed in the first subpart below. Application of those conditions to any one of those mergers is a fact-dependent exercise that turns on the nature and scope of the agencies’ evidence and competitive effects analysis. In order to guide any possible future agency decision challenging the identified technology mergers, the second and third subparts below outline some of the key ways in which the two conditions would bear on the agencies’ ex post challenge decision.

1. THE TARGETED Mergers

The technology mergers that have been identified for challenge and breakup include: Facebook-Instagram and Facebook-WhatsApp;
Amazon-Whole Foods and Amazon-Zappos\textsuperscript{231}; and, Google-DoubleClick, Google-Nest, and Google-Waze.\textsuperscript{232} This subpart briefly discusses these mergers, their perceived competitive harm as described by advocates of their breakup, and the antitrust agencies’ prior review of those mergers. With one exception, each of the technology mergers identified for breakup was previously reviewed and cleared by the federal agencies pursuant to the Hart-Scott-Rodino process.

**Facebook/Instagram.** Facebook’s 2012 acquisition of Instagram is the transaction that is perhaps most frequently identified as a breakup target. The FTC should require Facebook to unwind the acquisition of both WhatsApp and Instagram as breakups. With one exception, each of the technology mergers identified for breakup was previously reviewed and cleared by the federal agencies pursuant to the Hart-Scott-Rodino process.


\textsuperscript{231} \textit{See, e.g.}, Warren, supra note 230 (identifying Amazon-Whole Foods and Amazon-Zappos as breakup targets).

\textsuperscript{232} \textit{See, e.g.}, Blumenthal, supra note 230 (identifying Google-DoubleClick as potential breakup target); Allison Grande, \textit{FTC Urged to Make Google Spin Off Nest After Privacy Flap,} LAW360 (Feb. 21, 2019), https://www.law360.com/articles/1131488/fc-urged-to-make-google-spin-off-nest-after-privacy-flap [https://perma.cc/PH6G-H3K3] (discussing calls by the Electronic Privacy Information Center that the FTC unwind the Google-Nest merger); Warren, supra note 230 (identifying Google-Waze, Google-Nest, and Google-DoubleClick as breakup targets).
target. Facebook announced this acquisition on April 9, 2012, and the transaction was reported to the antitrust authorities pursuant to Hart-Scott-Rodino.

In May 2012, it became known that the FTC was investigating the proposed transaction. In August 2012, about five months after the deal was announced, the FTC announced that it had closed its investigation. The FTC vote to close the investigation was unanimous. At the time of the transaction, Instagram was considered a photo-sharing application, not a social media platform, and thus not viewed to be in head-to-head competition with Facebook, especially since Instagram only had about 30 million users when the transaction was announced. Nonetheless, some experts and scholars had expected the investigation to last up to six to twelve months.

Recent calls for the breakup of the technology mergers do not always identify the specific competitive harm generated by the merger that motivates and serves as the basis of the merger challenge. However, in the case of Facebook-Instagram, the alleged competitive harm caused by the merger includes a loss of innovation and a loss of privacy.

233. See supra note 230.
235. See Facebook, Amendment No. 4 to Registration Statement (Form S-1) at 65 (Apr. 23, 2012).
236. See April Dembosky, Watchdog Threat to Facebook Deal for Instagram, FIN. TIMES (May 10, 2012), https://www.ft.com/content/dee1b68e-9ac2-11e1-94d7-00144feabd0 [https://perma.cc/8JDJ-H985].
238. Id.
241. See Dembosky, supra note 236.
242. See Hughes, supra note 230; Wu, supra note 230. See also Dina Srinivasan, The Antitrust Case Against Facebook: A Monopoly’s Journey Towards Pervasive Surveillance in Spite of Consumers’ Preference for Privacy, 16 BERKELEY BUS. L.J. 39 (2019) (arguing that Facebook exercises monopoly power in a manner detrimental to user privacy); Letter from Electronic Privacy Information Center et al., supra note 230. For discussion of privacy as a cognizable antitrust harm, see infra Section. III.D.2.
Facebook/WhatsApp. In February 2014, Facebook announced its $19 billion blockbuster acquisition of WhatsApp.243 Like Facebook-Instagram, Facebook’s acquisition of WhatsApp was subjected to federal antitrust review through the Hart-Scott-Rodino process.244 Because of competition between instant messaging and text messaging, a number of experts at the time did not expect the deal to raise antitrust concerns.245 Some privacy groups, however, expressed significant concern that the deal would undermine user privacy.246

The FTC cleared the Facebook-WhatsApp transaction on April 10, 2014.247 The European Commission cleared the merger some months later and concluded that the transaction would not impair competition because “customers can and do use multiple [communication] apps at the same time and can easily switch from one to another.”248

As with Facebook/Instagram, a loss of privacy has been cited as one of the primary competitive consequences of the Facebook-WhatsApp merger.249

Amazon/Whole Foods. Another blockbuster merger that has been identified as an object for breakup is Amazon’s acquisition of Whole Foods, announced on June 16, 2007.250 As with the two Facebook

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247. See Oreskovic, supra note 244.
mergers discussed above, Amazon’s acquisition of Whole Foods was vetted by the federal antitrust authorities pursuant to Hart-Scott-Rodino’s notification and review process.251

When the transaction was announced and during the FTC’s review, some argued that the transaction would be socially injurious along a variety of important dimensions.252 But antitrust experts observed that there should not be any antitrust issue with the transaction253 because, to the extent the companies were rivals in any relevant market, they commanded a very low share of the market and because the two companies were not in a vertical arrangement with one another.254

On August 23, 2007, approximately two months after Amazon announced the transaction, the FTC announced that it had completed its investigation.255 The Commission determined that it would not pursue the matter further, including the issuance of a second request.256 The primary


254. See Melissa Lipman, Amazon’s Whole Foods Buy Unlikely to Face Antitrust Hurdles, LAW360 (June 19, 2017, 8:06 PM), https://www.law360.com/articles/936085/amazon-s-whole-foods-buy-unlikely-to-face-antitrust-hurdles [https://perma.cc/J3DW-CTUS] (quoting Herbert Hovenkamp for the observation that if the relevant market is general groceries, then Whole Foods commands a small market share).


justification for challenging and potentially breaking-up the Amazon/Whole Foods merger is the protection of small businesses.257

Amazon/Zappos Amazon announced its acquisition of online shoe retailer Zappos on July 22, 2009.258 As with the other transactions above, this transaction was also subject to federal merger review through the Hart-Scott-Rodino process.259 Though the two companies were competitors in a particular market segment, observers did not consider the transaction to pose any significant antitrust concern because of the companies’ limited market shares and the competition they faced from other retailers.260 The transaction closed on October 31, 2009.261

The motivation for the calls to unwind the Amazon/Zappos merger is unstated.

Google/DoubleClick Google announced its acquisition of the online advertising company, DoubleClick, on April 13, 2007.262 The transaction was subject to Hart-Scott-Rodino review.263 On May 29, 2007, Google

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257. See, e.g., Warren, supra note 230 (arguing that companies like Amazon and Facebook destroy small businesses and innovation and thus, should be broken up to restore the balance of power in our democracy, promote competition, and foster innovation); see also Diane Bartz, Reuters, Amazon’s Zappos Buy Seen Clearing Antitrust Review, REUTERS (July 23, 2009, 3:14 PM), https://www.reuters.com/article/zappos-amazon-antitrust/amazons-zappos-buy-seen-clearing-antitrust-review-idUSN2341906020090723 [https://perma.cc/2B2B-B9HX] (arguing that the Whole Foods acquisition gives Amazon an unfair advantage over traditional grocers); Lynn, supra note 252 (arguing that Amazon’s acquisition of Whole Foods would further damage America’s competitive, open market system). For discussion about the extent to which antitrust law should be used to protect small businesses in the absence of harm to consumer welfare, see John B. Kirkwood & Robert H. Lande, The Fundamental Goal of Antitrust: Protecting Consumers, Not Increasing Efficiency, 84 NOTRE DAME L. REV. 191, 207–11 (2008).


259. Zappos.com, Final Prospectus, at 46 (Sept. 25, 2009) (“The Merger is subject to review by the FTC and the DOJ under the HSR Act. Under the HSR Act, [the parties] . . . are required to make pre-merger notification filings and Amazon and Zappos must await the expiration of statutory waiting periods prior to completing the Merger.”).

260. See Bartz, supra note 257.


reported that the FTC was further investigating the transaction and had issued a second request.264

The primary potential antitrust issue with the transaction was a reduction in competition in one or more markets for online advertising, which would result in injury to Google and DoubleClick’s advertising customers: internet-based content providers and advertisers.265 Another identified issue, though not framed solely as an antitrust issue by critics of the merger, was an impairment to the privacy of internet users.266

The FTC extensively investigated the merger, conducting over one hundred interviews and reviewing more than two million pages of documents produced by the parties, as well as thousands of documents produced by third parties in response to subpoenas.267 On December 20, 2007, the FTC announced that it had voted 4-1 to end its investigation and not block the merger.268 The Commission principally evaluated three theories of competitive harm in connection with its investigation and concluded, based on the evidence before it, that the transaction was unlikely to substantially lessen competition.269

With respect to the privacy implications of the merger, the Commission first explained that it “lack[s] legal authority to require conditions to this merger that do not relate to antitrust,” and that “regulating the privacy requirements of just one company could itself pose a serious detriment to competition in this vast and rapidly growing industry.”270 However, the Commission went on to explain that it did investigate the non-price effects of the merger, such as consumer privacy, and had determined that the evidence did not support a conclusion that the merger would have an effect on those non-price factors.271


268. See id. at 1 n.2.

269. Id. at 6.

270. Id. at 2–3.

271. See id. at 2–3. Commissioner Harbour issued a lengthy and detailed dissent in which she first observed that the privacy issues implicated by the merger pertained to the privacy of internet users, not the customers in the relevant markets, i.e., internet-based content providers and advertisers. See Dissenting Statement of Pamela Jones
The recent calls for the ex post challenge and breakup of the Google-DoubleClick merger do not identify the basis for the desired break-up.

**Google/Nest** Google announced its acquisition of Nest Labs, a maker of connected home devices, on January 13, 2014, for $3.2 billion. The transaction was subject to Hart-Scott-Rodino review and was generally considered not to raise any antitrust issues since Google and Nest were not competitors in any relevant market, though some industry and consumer analysts raised privacy concerns with the merger. The agencies cleared the transaction on February 4, 2014.

Not all of the calls for the ex post challenge and breakup of the Google/Nest merger identify the basis for the desired break-up, though one call for break-up is motivated by the merger causing a deterioration of Nest users’ privacy.

**Google/Waze** Google announced that it had acquired online mapping company Waze on June 11, 2013, for approximately $1 billion. In contrast to the other mergers above, Google’s acquisition of Waze was not reported pursuant to Hart-Scott-Rodino and was, therefore, not subject to federal merger review prior to closing. Nonetheless, the

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274. See Supplemental Materials in Support of Pending Complaint, Request for Investigation and Injunction, and Other Relief; Related Commentary Concerning Commission’s Surprising Expedition of Google-Nest Review at 10 n.31, In the Matter of WhatsApp, Inc. (F.T.C.) (citing some of the calls for concern).

275. See id. at 10 n.33.

276. See Grande, supra note 232 (discussing call by Electronic Privacy Information Center that FTC should require Google to divest Nest because of a loss of Nest users’ privacy).


278. See, e.g., Steven Davidoff Solomon, Google’s Effort to Skirt Regulation May Invite More Scrutiny, N.Y. TIMES: DEALBOOK (June 18, 2013, 4:45 PM), https://dealbook.nytimes.com/2013/06/18/googles-effort-to-skirt-regulation-may-invite-more-scrutiny/ [https://perma.cc/2SQJ-HLML]. Despite the massive size of the transaction, the lack of an HSR filing may have been because the companies relied on HSR’s foreign company exemption, the applicability of which some have questioned. See id.
FTC investigated the merger approximately two weeks after the merger was announced and closed.279

The primary antitrust concern with the merger was that it would diminish competition in one or more markets for online mapping because Google, which commanded relatively high market share through Google Maps, would be acquiring a rapidly growing competitor, Waze.280 The FTC investigated the Google-Waze merger for about three and a half months but ultimately decided not to challenge the merger.281 Likewise, the United Kingdom’s Office of Fair Trading (OFT), which also had investigated the merger, ultimately ended its investigation without challenging the merger.282 The OFT issued a written opinion in which it analyzed the expected competitive effects, concluding that the OFT “does not believe . . . that the merger has resulted or may be expected to result in substantial lessening of competition within a market or markets in the United Kingdom.”283

The recent calls for the ex post challenge and breakup of the Google-Waze merger do not identify the basis for the desired break-up.

2. THE FIRST LIMITING CONDITION

The most basic—though most fundamental—observation pertinent to the first limiting condition is that the mere fact that a technology merger created a large market participant does not by itself provide sufficient justification for challenging the merger ex post, or, for that matter, mounting any antitrust action against the merged firm. Evidence of the merger’s actual or expected competitive harm is required—a requirement that flows from the important maxim that antitrust does not prohibit mere

283. See id. at 20.
bigness or market dominance. This observation is especially relevant today, given current sentiments that sometimes seek to improperly impose antitrust liability on large technology companies purely on the basis of market size or market power.

As discussed in the previous subpart, the recent calls for the breakup of leading technology mergers do not always identify the specific potential competitive harm that would justify the agencies challenging and seeking to break-up the particular merger at issue. But that is not uniformly the case, and deterioration of privacy is sometimes identified as an antitrust basis for ex post agency merger challenges. For instance, as discussed, privacy considerations animate much of the discussion of agency breakup of the Facebook/Instagram and Facebook/WhatsApp mergers.

A loss of privacy, if established, is cognizable under antitrust law. While recent popular discussion of antitrust sometimes suggests otherwise, antitrust’s consumer welfare standard is nimble and not limited to just price effects. Instead, that polestar of antitrust also encompasses non-pecuniary injuries to consumer welfare, such as diminished quality, innovation, and consumer choice, and, as the

284. See, e.g., D. Daniel Sokol & Roisin Comerford, Antitrust and Regulating Big Data, 23 GEO. MASON L. REV. 1129, 1130 (2016) (“[B]igness is not an antitrust offense. Rather, antitrust focuses on consumer welfare loss and there has not been a decided merger or a litigated conduct decision that has said otherwise for at least a generation.”).

285. See, e.g., Carl Shapiro, Antitrust in a Time of Populism, 61 INT’L J. INDUS. ORG. 748, 745 (2018) (“The danger to effective antitrust enforcement is that today’s populist sentiments are fueling a ‘big is bad’ mentality, leading to policies that will slow economic growth and harm consumers.”); see also Marina Lao, No-Fault Digital Platform Monopolization, 61 WM. & MARY L. REV. 755 (2020) (discussing and rejecting arguments for adoption of no-fault monopolization, i.e., permitting Sherman Act Section Two monopolization claims to dispense of the exclusionary conduct requirement and be predicated just on the defendant’s monopoly power).

286. See supra Section III.D.1.


288. Id. (explaining that the consumer welfare standard “recognizes the importance of taking a holistic approach to understanding a transaction’s likely long-run impact, including price, quantity, quality, innovation and other effects.”); Daniel P. Crane, Four Questions for the Neo-Brandeisians, ANTITRUST CHRON. Apr. 2018, at 3 (“If current antitrust analysis is too focused on static efficiency, there is nothing within the frame of the consumer welfare standard that prevents pushing it in the direction of dynamic efficiency or some other aspect of consumer value.”); see also Peter P. Swire, Protecting Consumers: Privacy Matters in Antitrust Analysis, CFR FOR AM. PROGRESS (Oct. 19, 2007, 9:00 AM), https://www.americanprogress.org/issues/economy/news/2007/10/19/3564/protecting-consumers-privacy-matters-in-antitrust-analysis/ [https://perma.cc/JZ4P-WRC3] (discussing relationship between privacy and consumer welfare).
antitrust agencies have recently reiterated, a loss of privacy.289 Indeed, the antitrust agencies routinely evaluate non-price factors when conducting a competitive effects analyses.290 In the Google/DoubleClick investigation, for instance, the FTC expressed some hesitation about including privacy considerations in its competitive effects analysis, but it made clear that it had “investigated the possibility that the transaction could adversely affect non-price attributes of competition, such as consumer privacy.”291

To be sure, there are practical difficulties associated with including privacy as an input to a competitive effects analysis. One such practical difficulty is quantifying the harm associated with a deterioration in privacy.292 Another is assessing the net competitive effects of a merger when some non-pecuniary consumer harm, such as an impairment of privacy, is accompanied by some non-pecuniary gain, such as an improvement to some other non-price attribute of the relevant product or service. And, depending on the nature of the harm, conduct that impairs privacy may be better addressed through privacy regulation or consumer


290. See Matthew Jones, Bruce Kobayashi & Jason O’Connor, Economics at the FTC: Non-price Merger Effects and Deceptive Automobile Ads, 53 REV. INDUS. ORG. 593, 595 (2018) (explaining that “[w]hile price effects typically receive the most attention in investigations of proposed mergers, the [agencies’] Horizontal Merger Guidelines recognize that reduced competition can also cause significant losses in consumer welfare through a reduction of non-price benefits to consumers” and noting that non-price effects were the central focus of the FTC’s recent investigation of the proposed merger between two daily fantasy sports game providers); Seth B. Sacher & John M. Yun, Twelve Fallacies of the ‘Neo-Antitrust Movement,’ 26 GEO. MASON L. REV. 1491, 1508 (“There is abundant evidence that the agencies and antitrust generally are concerned with non-price factors in addition to price factors.”).

291. Fed. Trade Comm’n, supra note 267, at 2. Courts recognize that the consumer welfare standard encompasses non-price effects but have not yet developed a doctrine of consumer welfare and privacy. United States v. AT&T, Inc., 916 F.3d 1029, 1045 (D.C. Cir. 2019) (“[T]he court does not hold that quantitative evidence of price increase is required in order to prevail on a Section 7 challenge.”); see generally Gregory Day & Abbey Stempler, 107 IOWA L. REV. 60 (2019) (reviewing case law and finding no cases premising antitrust liability on remedying privacy injuries).

292. Stucke & Steinbaum, supra note 249, at 14–17 (discussing potential difficulties of using privacy as a component of the consumer welfare standard).
protection law than antitrust. To draw an analogy, while a deterioration in product safety constitutes a non-price impairment to consumer welfare, antitrust understandably, and fortunately, is not society’s chosen means of addressing product safety.

It is important to note that the fact that user privacy deteriorated after a merger, such as potentially after the Facebook/Instagram or Facebook/WhatsApp transactions, by itself does not justify the agencies challenging the merger ex post. The reason is one of causation: any post-merger loss in privacy can serve as the proper basis of an agency’s ex post merger challenge only if the impairment in privacy was causally related, directly or indirectly, to the merger. Likewise, while the agencies can bring a non-merger antitrust claim against the merged firm based on a loss of privacy, such as a Sherman Act monopolization claim, the claim must still be based on some specific anticompetitive conduct that is causally connected to the observed loss of privacy.

A merger breakup predicated on competitive effects in the form of loss of privacy also would need to accommodate the fact that users continue to adopt and use the technological platforms targeted for breakup despite increasing user awareness of the privacy considerations. Additionally, the competitive effects analysis would

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293. See, e.g., Maureen K. Ohlhausen & Alexander P. Okuliar, *Competition, Consumer Protection, and the Right [Approach] to Privacy*, 80 ANTITRUST L.J. 121, 138, 153 (2015) (“We contend that . . . commingling of the competition and consumer protection laws . . . is unnecessary and could lead to confusion and doctrinal issues in antitrust without true gains to consumer protection. . . . Although privacy can be (and is today) a dimension of competition, the more direct route to protecting privacy as a norm lies in the consumer protection laws.”); Hal Singer, *Sorry, Mr. Delrahim: Big Tech’s Worst Abuses Can’t Be Cured Without Stiffer Regulation*, PROMARKET (June 17, 2019), https://promarket.org/mr-delrahim-big-tech-worst-abuses-cant-be-cured-without-stiffer-regulation/ [https://perma.cc/C3V7-HBWU] (“Simply adding competition in the tech sector won’t solve problems like privacy abuses or discrimination. Competition is needed, but regulation is a necessary element of any tech solution.”).

294. See Sokol & Comerford, *supra* note 284, at 1157 (citing product safety regulation in support of the argument that the antitrust laws are not designed to address harm to privacy).


296. *Id.*

need to evaluate the totality of the transactions’ competitive effects, including on prices. With respect to the two targeted Facebook transactions, it is notable that Facebook does not charge individual consumers any monetary price to access or use Facebook, Instagram, or WhatsApp.298 Likewise, Google does not charge consumers a monetary price to access or use Google Maps or Waze.299 And while a price analysis of the Amazon/Whole Foods merger necessitates formal empirical analysis based on actual pricing data, there are some indications that the transaction generated some lower prices at Whole Foods stores300 and potentially amplified retail competition along certain dimensions.301 There are also strong indications that Amazon’s acquisition of Zappos has not generated a deterioration in quality.302 Zappos continues to flourish as a retailer, and the attributes that facilitated Zappos’ success in the marketplace prior to the merger, such


as Zappos’ highly regarded customer service, continue after the merger.  

Finally, a theory of competitive harm of particular importance to the technology space is a dominant firm’s acquisition of a nascent competitor undertaken to prevent or undermine the acquired firm’s future ability to compete with the dominant firm.  

That theory of competitive harm can serve as the basis of an agency challenge to a previously reviewed and cleared merger. However, with respect to at least some of the targeted technology mergers, in particular, the smaller firms acquired in those transactions were not abandoned and instead have thrived in the marketplace. In such a circumstance, the relevant antitrust question the agencies must answer before challenging the merger ex post is whether the acquired firm would have been a more formidable competitor to the acquiring company in the absence of the acquisition.  

3. THE SECOND LIMITING CONDITION  

An agency challenge to a previously reviewed and cleared merger is appropriate also only if the agencies have a reasonable belief of a corrective remedy. For a particular technology merger, though some remedy likely will meet this standard, breakup specifically may not.

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<th>Mergers</th>
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<tr>
<td>Facebook/Instagram</td>
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<td>Facebook/WhatsApp</td>
<td>10/6/14</td>
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<td>Amazon/Whole Foods</td>
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<td>Google/</td>
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303.  

304. See Hemphill & Wu, supra note 110 (manuscript at 10–11).  

305. See Horizontal Merger Guidelines, supra note 111, § 5.3 (“A merger between an incumbent and a potential entrant can raise significant competitive concerns.”).  

306. For instance, Instagram has grown considerably since Facebook acquired the company, which some have argued is evidence of lack of competitive harm. See, e.g., Hearing on Competition in Digit. Tech. Mkts.: Examining Acquisitions of Nascent or Potential Competitors by Digit. Platforms Before the Subcomm. on Antitrust, Competition Pol’y, and Consumer Rts. of the S. Comm. on the Judiciary, 116th Cong. 5–6 (2019) (statement of John M. Yun) (observing that at the time of Facebook’s acquisition, Instagram had no revenues and a just few employees and that since the acquisition, Instagram has grown from 30 million users to over a billion; and observing that “[t]his substantial expansion in users and output are the complete opposite of what we typically consider an anticompetitive outcome”).  

307. See infra note 328 and accompanying text (discussing other potential instances of acquisitions undertaken to suppress a nascent competitor).
One reason why a breakup may not be a corrective remedy is that challenges to the identified technology mergers would occur years after those mergers had been consummated and, in some instances, many years after consummation. Table 1 provides the closing dates of the identified technology mergers. As shown there, the transaction most often identified as a potential breakup target, Facebook/Instagram, was consummated more than eight years ago. The most recent transaction identified as a potential breakup target is Amazon/Whole Foods, which closed more than three years ago; the potential breakup target consummated the furthest back in time is Google/DoubleClick, which was consummated more than twelve years ago.

As evidenced by previous ex post challenges to mergers that were undertaken years after consummation, including those occurring before the enactment of Hart-Scott-Rodino, because of the significant amount of time that has passed between consummation of the targeted technology mergers and any future ex post challenge, it may be extremely difficult to separate the targeted firms in a manner that allows each or both to be capable market participants. While the actual efficacy of breakup as a corrective remedy depends on the specific circumstances—such as the

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<td>DoubleClick</td>
<td>6/11/13</td>
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<td>Google/Waze</td>
<td>2/7/14</td>
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Table 1: Closing Dates of the Technology Mergers Targeted for Challenge and Breakup.


309. See supra Part III.B.
extent of integration between the acquiring firm and the acquired firm,—it is not necessarily the case that a breakup will be a corrective remedy in an ex post challenge to a targeted technology merger.\textsuperscript{310}

A breakup also may not be a corrective remedy depending on the particular manner in which the technology merger is impairing competition.\textsuperscript{311} As an example, a breakup may not ameliorate harm to competition caused by a deterioration in privacy. Even if a breakup infuses competition into the relevant market, that enhanced competition may not be sufficient to cause the two separated firms to curtail their injuries to privacy. Post-breakup, the relevant market may simply be comprised of two privacy deteriorating firms which may be no better for consumers than a single privacy deteriorating firm. And, as others have argued, a breakup intended to cure a deterioration in privacy may instead have the opposite effect and result in greater privacy deterioration.\textsuperscript{312}

Additionally, some of the markets associated with the technology mergers identified for breakup exhibit consumer-side network effects, i.e., a circumstance in which the benefit a consumer derives from using the good or service is positively related to the number of other consumers.

\textsuperscript{310} Some have argued that, as a general matter, breakups of technology companies may be less difficult than in other industries because technology mergers involve relatively less comingling and integration of physical assets than mergers in other industries. See, e.g., John M. Newman, \textit{Antitrust in Digital Markets}, 72 \textit{VAND. L. REV.} 1497, 1557–58 (2019). Again, however, the viability of a breakup as a corrective remedy depends on the characteristics of the particular merger at issue.

\textsuperscript{311} See, e.g., Fiona M. Scott Morton, \textit{Why 'Breaking Up' Big Tech Probably Won’t Work}, \textsc{Yale Insights} (July 18, 2019), https://insights.som.yale.edu/insights/why-breaking-up-big-tech-probably-wont-work [https://perma.cc/3D3M-BXYF] ("[A]n agency must think carefully about the course of each platform’s market power and figure out what remedy—antitrust or otherwise—would create competition in that market. If used indiscriminately, a breakup can actually harm consumers and workers and reduce innovation.").

\textsuperscript{312} See, e.g., Tyler Cowen, \textit{Breaking Up Facebook Would Be a Big Mistake}, \textsc{Slate} (June 13, 2019, 7:30 AM), https://slate.com/technology/2019/06/facebok-big-tech-antitrust-breakup-mistake.html [https://perma.cc/YY7M-CLA3] (in the context of a Facebook breakup, arguing that “[a]s for privacy, these smaller Facebook replacements would be more susceptible to hacks, foreign surveillance and infiltration, and external manipulation—the real dangers to our privacy and well-being”); Aaron Edlin & Carl Shapiro, \textit{Why Breaking Up Facebook Would Likely Backfire}, \textsc{The Mercury News} https://www.mercurynews.com/2019/09/19/opinion-why-breaking-up-facebook-would-likely-backfire/ [https://perma.cc/NCD9-GWWY] (Sept. 23, 2019, 11:32 AM) (arguing that the breakup of Facebook may result in constituent entities that generate social harm more pernicious than the combined company). For a different perspective and analysis of how enhanced competition can spur privacy, see Srinivasan, \textit{supra} note 242 (discussing how Facebook’s competitive gains were once tied to its privacy promises) and Day & Stemler, \textit{supra} note 291 (arguing that increased competition would incentivize companies to enhance user privacy).
using that good or service.\textsuperscript{313} Even in the presence of network effects, a separation of the merged entity can potentially restore competitive balance to the marketplace in the short run. But because the winner-take-all aspect of network effects can enable one of those two firms to readily dominate the relevant market,\textsuperscript{314} and because the resulting dominant firm may engage in competitive conduct no better than its predecessor, the breakup may not ultimately be curative. A breakup of a firm subject to network effects also may undermine consumer welfare if it destroys the benefits of the underlying network efficiencies\textsuperscript{315} or if it results in a less efficient entity dominating the market.\textsuperscript{316}

Finally, markets with two-sided platforms exhibit many of the same breakup considerations as markets with pure consumer-side network effects. Two-sided platforms are intermediaries that facilitate interactions between two distinct user groups where network effects exist across the two sides of the platform, in that the value a user on one side of the platform derives from using the good or service also depends on the number of users on the other side of the platform.\textsuperscript{317} A social media site, for instance, operates a two-sided market by facilitating interactions between users and advertisers.

For many of the same reasons why breakup may not be a corrective remedy in markets with consumer-side network effects, breakup also may not be a corrective remedy in markets in which firms operate two-sided

\textsuperscript{313} See Michael L. Katz & Carl Shapiro, \textit{Systems Competition and Network Effects}, 8 J. ECON. PERSPS. 93, 94 (1994). For example, Facebook’s value to any particular user is higher the greater the number of other users also on the network.

\textsuperscript{314} Katz & Shapiro, supra note 313, at 105–06 ("In markets with network effects, there is natural tendency toward de facto standardization, which means everyone using the same system. Because of the strong positive-feedback elements, systems markets are especially prone to ‘tipping,’ which is the tendency of one system to pull away from its rivals in popularity once it has gained an initial edge.").

\textsuperscript{315} See, e.g., Nicholas Economides, \textit{Antitrust Issues In Network Industries}, in \textit{THE REFORM OF EC COMPETITION LAW: NEW CHALLENGES} 343, 361 (Ioannus Lianos & Ioannis Kokkoris, eds. 2010) (“It is possible to have situations where a breakup of a monopoly into two competing firms of incompatible standards reduces rather than increases social surplus because network externalities benefits are reduced.”).

\textsuperscript{316} In part because of these network effects, some have argued that some of the large technology companies should be regulated like public utilities. See, e.g., Dipayan Ghosh, \textit{Don’t Break Up Facebook—Treat it Like a Utility}, HARV. BUS. REV. (May 30, 2019), https://hbr.org/2019/05/dont-break-up-facebook-treat-it-like-a-utility [https://perma.cc/U979-3S5S]. There is a growing literature on the public utility regulation of information platforms and other technology companies. For discussion of some of the key reasons for and against the public regulation of technology companies, see Peter Swire, \textit{Should the Online Tech Companies Be Regulated as Public Utilities}, LAWFARE (Aug. 2, 2017, 9:00 AM), https://www.lawfareblog.com/should-leading-online-tech-companies-be-regulated-public-utilities [https://perma.cc/YH2V-4897].

platforms.\textsuperscript{318} A breakup of a two-sided platform into two distinct platforms, for instance, may ultimately undermine consumer welfare if the separated platform is replaced by an inferior platform that dominates the market.\textsuperscript{319} The bottom line is that, while breakup may generally be a corrective remedy, there are important reasons why breakup may not necessarily be an appropriate remedy for the technology mergers targeted for ex post challenge and breakup.

\textbf{E. Expanded Enforcement Resources}

As a final policy observation, this Article’s findings in Part II also provide strong support for increasing the antitrust budgets of the two antitrust agencies. As has been documented widely, agency budgets have been flat or decreasing.\textsuperscript{320} Many, including scholars,\textsuperscript{321} members of Congress on both sides of the aisle,\textsuperscript{322} and FTC Commissioners,\textsuperscript{323} have called for greater antitrust enforcement resources.

\begin{itemize}
  \item See, e.g., Marc Rysman, \textit{The Economics of Two-Sided Markets}, 23 J. ECON. PERSPS. 125, 138 (2009) (evaluating the implications of two-sided markets on antitrust, including on the design of antitrust remedies, and observing that “a judge would probably not want to break up a platform into its constituent parts”). For additional discussion of the antitrust implications of two-sided markets, see David S. Evans, \textit{The Antitrust Economics of Multi-Sided Platform Markets}, 20 YALE J. ON REGUL. 325, 355–79 (2003).
  \item See Rysman, supra note 318, at 137 (“Two-sided markets typically have network effects and as such are likely to tip toward a single dominant platform.”).
  \item Maureen K. Ohlhausen, Fed. Trade Comm’n & Makan Delrahim, U.S. DEP’T OF JUST., HART-SCOTT-RODINO ANNUAL REPORT FISCAL YEAR 2017 I (2017) (FTC and DOJ reporting “flat, or effectively decreasing, budgets and restrictions on hiring.”); Marak Delrahim, Assistant Att’y Gen., U.S. Dep’t of Just., Remarks at the 2018 Global Antitrust Enforcement Symposium, It Takes Two: Modernizing the Merger Review Process (Sept. 25, 2018) (“We have limited resources. . . . [O]ver the past ten years the Antitrust Division budget has stayed roughly constant in nominal terms, which means that it has declined in real terms, as salaries and other expenses have risen.”).
  \item See, e.g., Carl Shapiro, \textit{Protecting Competition in the American Economy: Merger Control, Tech Titans, Labor Markets}, 33 J. ECON. PERSPS. 69, 78 (2019) (explaining the need for increased resources to better investigate and challenge proposed mergers).
  \item See Rebecca Kelly Slaughter, Comm’n, Fed. Trade Comm’n, Merger Retrospective Lessons from Mr. Rogers 4 (Apr. 12, 2019) (explaining the FTC’s need for additional antitrust resources); see also Kate Cox, \textit{FTC’s Simon Says Merger Review at All-Time High, Needs More Resources}, CQ Roll Call, 2018 WL 6188782 (Nov. 28, 2018) (reporting that FTC Chairman Joseph Simons stated, when asked about FTC
This Article supports these calls for increasing federal antitrust enforcement resources and provides compelling reasons for doing so. First, as the Article shows, additional ex post merger challenges, if conducted in a principled manner, could substantially improve consumer welfare. These ex post challenges and any agency investigations preceding them will necessitate antitrust resources, especially if some of the challenges proceed to litigation and trial. Additional antitrust enforcement resources would enable the agencies to conduct any warranted ex post challenges without having to offset other important areas of merger enforcement, such as valuable merger review occurring in connection with the Hart-Scott-Rodino process.

Additionally, even holding fixed the number of ex post merger challenges, additional antitrust resources could substantially improve the competitive gains associated with the ex ante merger review process. As the merger retrospectives discussed in Section II.A.2 show, many mergers, including mergers that undergo Hart-Scott-Rodino review, seemingly go on to generate competitive harm.324 While this manifestation of ex post harm can be attributed in large part to the inherent uncertainty of the merger review process, the agencies’ limited antitrust resources are a contributing factor. Merger review is costly, especially the second request process,325 and limited antitrust resources restrain the scope and depth of the agencies’ merger review.

Increased antitrust resources would enable the agencies to more thoroughly review mergers during the Hart-Scott-Rodino process, which would generate both immediate competitive benefits and also nullify some of the need to amplify the number of ex post merger challenges. This is an especially important consideration since the number of reportable mergers has significantly increased.326 Additional enforcement resources also would facilitate agency investigations and challenges to anticompetitive mergers that were not subject to Hart-Scott-Rodino review.327 One important area of inquiry is whether dominant firms, inside and outside of the technology sector, have engaged in non-

resources, that “[o]ur staff is literally almost killing themselves . . . . They’re working so hard on these [merger] litigations. If that remains at historic high levels or increases, we would need more resources for that.”

324. See supra Section II.A.2.
325. See supra Part I.A.
326. OHLHAUSEN & DELRAHIM, supra note 320, at 1 (“Over the past five years, the number of HSR reportable transactions has increased significantly.”). Apart from the number of reportable transactions, merger review is become increasingly more involved because of the increasing volume of information and data generated by commercial entities in the ordinary course that may be pertinent to a merger’s competitive effects.
327. As noted above, the agencies can and routinely do challenge competition-impairing mergers that were not reportable under Hart-Scott-Rodino. See Overton, supra note 57, at 1–2.
reportable acquisitions of nascent competitors in order to prevent those nascent competitors from blossoming into actual competitors.  

Finally, additional antitrust resources would allow the FTC to conduct a greater number of merger retrospectives. Additional retrospective analysis would enable the agencies to identify which specific markets may include mergers that are generating pronounced competitive harm, which in turn would enable the DOJ and FTC to better target any ex post merger challenges. Additional retrospectives also would advance a number of other beneficial objectives, such as enabling the agencies to better assess and refine their ex ante review tools, which will improve ex ante review and, therefore, also dampen some of the need for ex post merger challenges.

CONCLUSION

The antitrust investigations of large technology companies are moving full speed ahead and calls for their breakup are amplifying almost daily. The dismantling of key mergers that have shaped the technological landscape is held out as one potential mechanism to curb the perceived competitive harm generated by those large technology companies. However, before embarking on a wide scale ex post challenge to those mergers, it is important to pause and evaluate the fundamental antitrust question implicated by those specific breakup calls: will the goals of antitrust be advanced if the federal antitrust agencies increase the extent to which they challenge mergers that they previously reviewed and cleared pursuant to the federal merger review scheme?

This Article’s qualified affirmative response to that fundamental question flows directly from the core principles of antitrust and from compelling evidence demonstrating both the significant potential benefits

328. See, e.g., Colleen Cunningham, Florian Ederer & Song Ma, Killer Acquisitions (2019), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3241707 [https://perma.cc/36RK-WQ7X] (using pharmaceutical industry data to show that acquired drug projects are less likely to be developed when they overlap with the acquiring firm’s existing product portfolio and that these “killer acquisitions” disproportionately occur just below the HSR reporting thresholds); Diana L. Moss, The Record Of Weak U.S. Merger Enforcement in Big Tech, AM. ANTITRUST INST. 1–2 (July 8, 2019), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3417978 [https://perma.cc/J7R8-TBDP] (arguing that large technology companies “may purposefully and strategically pursue deals that are unlikely to trigger antitrust concerns,” including transactions that are not reportable under Hart-Scott-Rodino); see also Hemphill & Wu, supra note 110 (manuscript at 27–36) (discussing antitrust analysis of acquisitions of nascent competitors); Mark Glick & Catherine Ruetschlin, Big Tech Acquisitions and the Potential Competition Doctrine: The Case of Facebook 1–2 (Inst. for New Econ. Thinking, Working Paper No. 104, 2019), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3482213 [https://perma.cc/Y7M3-JTJD] (explaining how the potential acquisition doctrine is ill-suited to address the acquisition of nascent competitors).
of an increase in agency challenges to previously reviewed and cleared mergers and significant mitigating factors associated with an unprincipled expansion in such ex post merger policy. This Article’s analysis and conclusions provide an antitrust roadmap going forward, not just with respect to the targeted technology mergers in particular, but the future trajectory of antitrust generally.