
TAKING INNOVATION SERIOUSLY: A
DYNAMIC COMPETITION MODEL FOR
ANTITRUST LAW

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Although innovation is often portrayed as a byproduct of competition, innovation and related dynamic aspects of competition are also, and perhaps more so, drivers of competition. The current antitrust framework, as illustrated by merger law and the agency guidelines that bear on that law, emphasizes static, demand-side conditions in defining markets and assessing likely anticompetitive effects. Only after the market has been defined and competitive effects assessed are innovation and dynamic, supply-side developments considered, and then in the context of rebutting anticompetitive findings already made on the basis of the static assessment. In addition, the burden of demonstrating and quantifying the supply-side developments is placed on the merging parties despite their relatively limited access to competitor capabilities, strategies, and plans. The following article suggests a new framework that places the burden of addressing dynamic considerations primarily on the enforcement agencies that must be met before the agencies can establish a presumption of illegality against a proposed transaction or a prime facie case against a competitive practice. It also suggests a more qualitative assessment of innovation and likely supply responses that is elaborated in the accompanying article by Professor David J. Teece.

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I. INTRODUCTION

The “basic objective” of the antitrust laws is “to protect the process of competition for the benefit of consumers, making sure there are strong incentives for businesses to operate efficiently, keep prices down, and keep quality up.”¹ The

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“Dynamic Competition Model” (“DCM”) presented by Professor David Teece in the 2022 William Howard Taft Lecture holds that, from the perspective of economics, innovation is a, if not the, primary engine that drives competition.² The purpose of this Introduction is to explore how antitrust law could consider innovation more centrally in defining markets and assessing competitive effects within the burden-shifting mechanisms that apply to merger and rule of reason analyses.

We use the 2010 Horizontal Merger Guidelines³ (the “Merger Guidelines”) by the Federal Trade Commission (“FTC”) and the Antitrust Division of the Department of Justice (“DOJ,” and with the FTC, the “Agencies” or the “Government”) for the Government’s policy in defining

informational purposes only and does not take into account the qualifications, exceptions, and other considerations that may be relevant to particular situations. Nothing contained herein constitutes, or is to be considered, the rendering of legal advice, generally or as to a specific matter, or a warranty of any kind. Readers are responsible for obtaining legal advice from their own legal counsel. The authors disclaim liability for any errors in, or any reliance upon, this information.

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¹ *The Antitrust Laws*, FTC.GOV, <https://www.ftc.gov/advice-guidance/competition-guidance/guide-antitrust-laws/antitrust-laws> (last visited Aug. 28, 2022) [<https://perma.cc/42TL-XKG2>] [hereinafter *The Antitrust Laws*].

² David J. Teece, *Understanding Big Tech Competition: Towards a Dynamic Competition Approach to Monopoly and Mergers*, 2023 COLUM. BUS. L. REV. 373 (2023); David J. Teece, *Innovating Big Tech Firms and Competition Policy: Favoring Dynamic Over Static Competition*, TPRC49: THE 49TH RESEARCH CONF. ON COMM., INFO. AND INTERNET POLICY (July 20, 2021); J. Gregory Sidak & David J. Teece, *Dynamic Competition In Antitrust Law*, 5(4) J. OF COMP. & ECON. 581, 581 (2009) (innovation “does not merely bring price competition” but “tends to overturn the existing order”).

³ Fed. Trade Comm’n & Dep’t of Just., Horizontal Merger Guidelines § 6.4 (2010) (“Competition often spurs firms to innovate.”) [hereinafter “Merger Guidelines”].

markets and assessing the competitive effects of mergers.⁴ We also refer to merger case law under Section 7 of the Clayton Act (“Section 7”) and two recent cases applying the rule of reason under Section 1 of the Sherman Act (“Section 1”).⁵

For the purpose of this Introduction, we accept the importance of innovation in promoting and sustaining competition and do so with the conviction that Professor Teece is correct in his fundamental assertion that competition is more dynamic than static and that any legal assessment that does not recognize that dynamism is deficient. In our experience of practicing and studying antitrust law (in some cases over several decades), we have seen many instances in which firms have responded to marketplace developments with a creativity and resourcefulness that exceeded expectations. In short, human action is difficult to model.

⁴ Shortly before this article was published and after it was drafted, the DOJ and FTC released, on July 19, 2023, revised draft merger guidelines. U.S. DEPT. OF JUST. & FED. TRADE COMM’N, *Draft: Merger Guidelines*, FTC.GOV (July 29, 2023), https://www.ftc.gov/system/files/ftc_gov/pdf/p859910draftmergerguidelines2023.pdf. The Draft Guidelines are designed to replace the Merger Guidelines that were issued in 2010. Although an analysis of the Draft Guidelines is beyond the scope of this article, the authors observe that all assessments of the Draft Guidelines of which the authors are aware conclude that the Draft Guidelines are more restrictive than the Merger Guidelines of 2010 in the standards by which they would find proposed mergers to be lawful under the Clayton Act. *See, e.g.*, Matthew Freimuth et al., *U.S. Antitrust Agencies Issue Draft Merger Guidelines Formalizing Their Aggressive Approach to Enforcement*, WILLKIE FARR & GALLAGHER (July 23, 2023), <https://www.willkie.com/-/media/files/publications/2023/07/usantitrustagenciesissuedraftmergerguidelinesformalizingtheiraggressiveapproachtoenforcement.pdf>. The authors retain citations to the Merger Guidelines of 2010 to illustrate the manner in which the Merger Guidelines fail to incorporate the dynamic competition model. What is said about the Merger Guidelines of 2010 applies with even more force to the Draft Guidelines.

⁵ As discussed below, courts have cited the Merger Guidelines as providing guidance in the application of Section 7, notwithstanding that the Merger Guidelines are written to facilitate the Agencies’ enforcement of Section 7 in litigation against merging parties. Courts should pause before citing the Merger Guidelines instead of judicial precedent in applying Section 7.

We define “innovation” as an actual or prospective response by a firm (other than the merging parties or Section 1 defendant) to a change in the marketplace. Innovation also includes a prospective or actual change by the merging parties or the Section 1 defendant to advance its position in the marketplace vis-à-vis competitors. Such responses and proposed changes are, or will be, designed to enhance the quantity or quality of the actor’s output and, in varying degrees, will be disruptive of current competitive conditions. Innovative reactions also may come from other firms within the “ecosystem” of the merging parties or Section 1 defendant (i.e., firms that supply, buy from, or have a complementary relationship with the merging parties or Section 1 defendant).

When the changes are undertaken by firms other than the merging parties, they will likely be “supply responses,” in colloquial antitrust vocabulary. When the change has been undertaken by a defendant in a Section 1 case or is proposed by the merging parties, the change will likely be labeled an “efficiencies defense” in current antitrust parlance. For the purpose of our exploration, both types of new competitive conduct will be treated as “innovation” by the relevant actor, as each is a new mode of competitive conduct.

We recognize the importance of the economics literature on managerial capabilities to which Professor Teece refers as providing a roadmap for some of the evidence that would be probative in assessing the likelihood of innovation. Traditional antitrust discovery focuses on business plans, research and development plans and budgets, and objective assets, experience, and capabilities, all of which may be relevant to determining likely sources of innovation. Assessing innovation also includes the testimony of other business owners, though such testimony can be biased against the likelihood or extent of prospective innovation. Testimony by technical and industry experts as well as by venture capitalists is also relevant to assessing the type and likelihood of next-generation competitive initiatives.

For merger law to properly account for innovation, we suggest two developments: (1) the likely occurrence and significance of innovation, usually in the form of supply

responses, should be considered by the court in determining whether the plaintiff has successfully defined its proposed product and geographic markets and identified the participants in those markets; and (2) the court should further consider whether innovation by either the merging parties or other firms would render current market shares sufficiently unstable that any increase in concentration is not likely to substantially lessen competition in the relevant market.

Both propositions would require the court to consider the possible importance of innovation before the court determines whether the merger plaintiff has established a *prima facie* case that yields a presumption of illegality. We further suggest that merger analysis should follow the burden-shifting protocol under Section 1 as recently outlined in *Ohio v. American Express Co.* and *Federal Trade Commission v. Qualcomm*. In *American Express* and *Qualcomm*, innovation was considered in the initial competitive assessment before the burden shifted to defendants to provide a procompetitive justification of their restraints.⁶ Both cases illustrate a respect for the procompetitive effects that innovation can provide that should be adopted in merger litigation and more widely in Sherman Act litigation.

Of course, the submission of evidence is not bifurcated according to the steps in the burden-shifting analytical framework. All evidence is submitted to the record by the plaintiff and defendant before the court reviews the evidence through the burden-shifting prism. But whether evidence, either that of the plaintiff or the defendant, is considered before or after a presumption of illegality arises in a merger case can affect whether the plaintiff successfully meets its burden and whether the defendant assumes the burden of rebutting presumed liability. We thus discuss in some detail when in the analytical path innovation is, and should be, considered in merger and rule-of-reason analyses.

⁶ See *Ohio v. American Express Co.*, 138 S.Ct. 2274, 2282, 2284 (2018); *Fed. Trade Comm'n v. Qualcomm Inc.*, 969 F.3d 974, 989, 1003 (9th Cir. 2020).

Our hope is to invite a debate within the antitrust bar over whether, and to what extent, antitrust law properly accounts for innovation as understood in the DCM.

II. TREATING INNOVATION marginally:
MARKETS ARE DEFINED NARROWLY FROM THE
DEMAND SIDE, SUPPLY RESPONSES ARE
CONSIDERED A FORM OF ENTRY, AND
INNOVATION IS AN “EFFICIENCY” WHOSE
VERIFICATION AND QUANTIFICATION ARE
UNCERTAIN.

Current antitrust law does not take innovation seriously because important elements of its analytical paradigm are unduly static and retrospective. As discussed below, merger antitrust law (a) defines markets and market participants only from the demand side and primarily retrospectively, (b) relegates most supply responses to a form of “entry” as to which the merging parties have the burden of proof and must meet strict criteria, and (c) “innovation” is considered an “efficiency” that must be verified and quantified.

Merger law also awards the plaintiff a presumption of illegality on the basis only of structural criteria. When the combined current market shares of the merging parties exceed 30%, the presumption arises, often without a thorough examination of whether the plaintiff has demonstrated the likely durability of those shares in the face of competitive responses over the ensuing few years.

A. The Merger Guidelines Define Markets Narrowly
Solely From the Demand Side.

Market definition in the Merger Guidelines “focuses solely on demand substitution factors, i.e., on customers’ ability and willingness to substitute away from one product to another in response to a price increase or a corresponding non-price change such as a reduction in product quality or service.”⁷ The Merger Guidelines consider the participants in the relevant

⁷ Merger Guidelines § 4.

market in “the sections addressing the identification of market participants, the measurement of market shares, the analysis of competitive effects, and entry.”⁸

1. Innovation is not considered in defining product or geographic markets.

As we will see, however, the Merger Guidelines consider supply repositioning to be a form of entry, an element of proof usually required of the merging parties. Such dynamic supply responses are not considered in defining markets or identifying market participants, which are the responsibility of the Government. Even as to so-called “rapid” supply shifts, which would identify additional market participants that are not now selling the relevant product, standards are high and guidance is minimal. The Merger Guidelines thus assess transactions on a more static landscape than that contemplated by the DCM and by an antitrust framework that “takes innovation seriously.”

As an initial matter, the Agencies define markets narrowly:

Market shares of different products in narrowly defined markets are more likely to capture the relative competitive significance of these products, and often more accurately reflect competition between close substitutes. As a result, properly defined antitrust markets often exclude some substitutes to which some customers might turn in the face of a price increase even if such substitutes provide alternatives for those customers . . . ⁹

Because the relative competitive significance of more distant substitutes is apt to be overstated by their share of sales, when the Agencies rely on market shares and concentration, they usually do so in the smallest relevant market satisfying the hypothetical monopolist test.¹⁰

⁸ *Id.*

⁹ *Id.*

¹⁰ *Id.* at § 4.1.1.

As just noted, the Agencies determine the relevant product market by applying the hypothetical monopolist test (“HMT”).¹¹ The HMT defines the relevant product market as one in which a hypothetical monopolist can raise prices without losing a sufficient number of customers to substitute products to render the price increase unprofitable.¹² The change in price consists of a small but significant and non-transitory increase in price (“SSNIP”) on the product around which the market is hypothetically defined.¹³

The SSNIP is generally assumed to be “five percent of the price paid by customers for the products or services to which the merging firms contribute value” but can be more or less depending on the circumstances.¹⁴ If a SSNIP could be imposed post-merger on the candidate products such that the hypothetical monopolist would not lose a sufficient number of customers to a substitute product to render the SSNIP unprofitable, the candidate products form a market. If the SSNIP could not be profitably imposed, then the proposed market is too narrow.

Similar tests are used to define the geographic market.¹⁵ For geographic market definition, the HMT “requires that a hypothetical profit-maximizing firm that was the only present or future producer of the relevant product(s) located in the region would impose at least a SSNIP from at least one location, including at least one location of one of the merging firms.”¹⁶

If a SSNIP would succeed (i.e., the hypothetical monopolist would not lose customers to a substitute product outside the proposed geographic market), then the proposed geographic

¹¹ Fed. Trade Comm’n v. Staples, Inc., 190 F.Supp.3d 100, 121–22 (D.D.C. 2016); Merger Guidelines § 4.1.3 (“The Agencies follow the hypothetical monopolist test to the extent possible given the available evidence, bearing in mind that the ultimate goal of market definition is to help determine whether the merger may substantially lessen competition.”).

¹² Merger Guidelines § 4.1.3., § 4.1.4.

¹³ *Id.* at § 4.1.1.

¹⁴ *Id.* at § 4.1.2.

¹⁵ *Id.* at § 4.2.

¹⁶ *Id.* at § 4.2.1.

market is the appropriate starting point for an assessment of market power. If the SSNIP would fail (i.e., the hypothetical monopolist would lose a sufficient number of customers to a substitute product outside the proposed geographic market), then the proposed market is likely too narrow.

The HMT is a “thought experiment” (the Guidelines describe it as a “methodological tool”) that assesses, based on available evidence, what customers would do if the merger occurred and the combined entity imposed a SSNIP.¹⁷ Similarity of end use, switching costs, and numerous other factors are considered.¹⁸ The same test could and should be used to assess what suppliers would do if the merger occurred and the combined entity imposed a SSNIP (or engaged in other anticompetitive or exclusionary conduct) over a period of competitive relevance (usually a few years).¹⁹

The burden of demonstrating a demand response to a SSNIP is on the Agencies under the Guidelines. That is, to prove that a market consists only of a given product, X, the Agencies must show that, in the case of SSNIP, a sufficient number of purchasers of X would not shift away from X to make the SSNIP unprofitable. The Agencies should also have the burden of demonstrating, as part of the market definitional process, that, in the event of a SSNIP, additional suppliers would not begin to produce X, or a product is reasonably substitutable for X, such that the SSNIP would be unprofitable. Indeed, in light of case law recognizing that markets should be defined and that market participants should be identified by supply-side substitutability as well as demand-side substitutability, the failure to apply the HMT to both the supply side and the demand side is contrary to governing law.²⁰

¹⁷ *Id.* at § 4.1.1.

¹⁸ *Id.* at § 4.1.3.

¹⁹ *United States v. H&R Block, Inc.*, 833 F.Supp.2d 36, 74 n.28 (D.D.C. 2011) (“For entry to be considered timely, it typically must occur within approximately two years post-merger.”).

²⁰ *Brown Shoe Co. v. United States*, 370 U.S. 294, 323, 325 n. 42 (1962) (recognizing that “the cross-elasticity of production facilities may also be an important factor in defining a product market”); *Gulf States Reorganization*

The Guidelines are notably silent on relevant time frames for assessing responses to a durable SSNIP, even for purposes of entry.²¹ Prior versions of the Guidelines have cited two years for entry assessments and at least one court extended the time for a supply response to a two or three years, thus identifying a time frame over which to assess competitive effects as significantly longer than the immediate term.²²

Grp., Inc. v. Nucor Corp., 721 F.3d 1281, 1286 (11th Cir. 2013), *cert. denied*, 571 U.S. 1199 (2014). (“One way to decide if producers or manufacturers can take business away from a monopolist (or an attempted monopolist) is to analyze the concept of cross-elasticity of supply, which ‘looks at competition from the production end instead of the consumer end.’”); SBC Commc’ns Inc. v. F.C.C., 56 F.3d 1484, 1493 (D.C. Cir. 1995) (“A market need not be defined solely by reference to consumer demand, however. The substitutability of supply is also relevant Supply substitutability is a well-accepted consideration in market definition.”); Twin City Sportservice, Inc. v. Charles O. Finley & Co., Inc., 512 F.2d 1264, 1273 (9th Cir. 1975) (“The evidence before the trial court strongly suggests that there is a high degree of ‘substitutability in production.’ That is, the evidence was sufficient to support a finding that many aspects of the concession operations at the various facilities presenting leisure time events other than major league baseball are the same or similar enough to each other and to those existing at major league baseball parks to be considered substitutable or transferable.”); Carter Hawley Hale Stores v. Limited, Inc., 587 F. Supp. 246, 253 (C.D. Cal. 1984) (“CHH’s proffered product market definition also does not adequately address the two aspects of competition which courts and economists must consider in defining any product market. The first aspect is ‘demand substitutability,’ that is, the extent to which buyers will switch from one supplier to another when the first supplier raises prices The second aspect is ‘supply substitutability,’ that is, the extent to which manufacturers or retailers will switch from manufacturing or retailing one product or in one area to another product or area in response to increased market prices or profits in the latter.”).

²¹ Merger Guidelines § 4.1.1.

²² U.S. Dep’t of Just. & Fed. Trade Comm’n, Horizontal Merger Guidelines § III(B) (1982), <https://www.justice.gov/archives/atr/1982-merger-guidelines> [<https://perma.cc/2WT6-7YNT>]; U.S. Dep’t of Just. & Fed. Trade Comm’n, Horizontal Merger Guidelines § 3.3 (1984), <https://www.justice.gov/archives/atr/1984-merger-guidelines#:~:text=The%20unifying%20theme%20of%20the,if%20the%20market%20were%20competitive> [<https://perma.cc/QG4J-MAJB>]; U.S. Dep’t of Just. & Fed. Trade Comm’n, Horizontal Merger Guidelines 2.22, 3.2, 3.3 (1992), <https://www.justice.gov/archives/atr/1992-merger-guidelines#:~:text=The%20unifying%20theme%20of%20the,a%20significa>

Even though the SSNIP test assumes a “non-transitory” (i.e., durable) increase in price, it does not examine supply or product repositioning over a similarly durable time frame. That asymmetry should be corrected in favor of conducting the competitive assessment over a longer horizon so that competitive dynamics, and the innovation that they yield, can be properly incorporated into the market definitional process.

Instead of applying the HMT to the supply side of the proposed market, the Merger Guidelines consider as potential market participants only suppliers that do not currently supply the relevant product but would “very likely” provide “rapid” supply responses with “direct competitive impact in the event of a SSNIP, without incurring significant sunk costs.”²³ The Merger Guidelines do not define “very likely,” “rapid,” “direct impact,” or “significant” sunk costs, though they do define “sunk costs” as “costs that cannot be recovered outside the relevant market.”²⁴

The demands that the Guidelines place on supply responses (“very likely,” “rapid,” no “significant” sunk costs, and “direct competitive impact”) are inconsistent with the reasonableness standard of product substitutability and the durability of the assumed SSNIP. Those demands distort the Guidelines analysis in favor of static, and against dynamic, competition.

2. Relegating Supply Responses to Entry with the Burden on the Merging Parties

According to the Guidelines, supplier “repositioning” is “a supply-side response that is evaluated much like entry, with consideration given to timeliness, likelihood, and

nt%20period%20of%20time [https://perma.cc/FEF7-KQKM]; U.S. Dep’t of Just. & Fed. Trade Comm’n, Horizontal Merger Guidelines §§ 2.22, 3.2, 3.3 (1997), <https://www.justice.gov/atr/horizontal-merger-guidelines-0> [https://perma.cc/EBR9-BXVA]; Fed. Trade Comm’n. v. Wilh. Wilhelmsen Holding ASA, 341 F. Supp. 3d 27, 67 (D.D.C. 2018) (“In general, [t]he relevant time frame for consideration . . . is two to three years.”) (quoting *Staples*, 190 F.Supp.3d at 133).

²³ Merger Guidelines § 5.1.

²⁴ *Id.*

sufficiency.”²⁵ Supply repositioning, though not defined, presumably requires more than activating dormant capacity or shifting the use of the same capacity without alteration from the production of one product to another. Supply repositioning is likely the type of competitor response to a proposed merger that would constitute the dynamic competitive reaction contemplated by the DCM. Given that the Merger Guidelines place supply repositioning under the rubric of entry, the responsibility of demonstrating supply repositioning is allocated to the merging parties both under the Merger Guidelines and in litigation.²⁶

Entry is considered as a possible mitigant that may diminish or eliminate an anticompetitive effect that has been found in a previously defined relevant market at an earlier stage of the analytic path. “[E]ntry into the relevant market will alleviate concerns about adverse competitive effects only if such entry will deter or counteract any competitive effects of concern so the merger will not substantially harm customers.”²⁷ “Entry is that easy if entry would be timely, likely, and sufficient in its magnitude, character, and scope to deter or counteract the competitive effects of concern.”²⁸ Demonstrating entry is considered part of the defendant’s rebuttal case.²⁹

The DCM would observe that such an analysis is unduly static and retrospective. It does not allow for dynamic customer and supplier responses that would occur prospectively over a few-year period to the change in market

²⁵ *Id.* at § 6.1.

²⁶ *Id.* at § 9 (characterizing entry as that which reverses the price effect previously found and thus a rebuttal to the anticompetitive effect found); *Staples*, 190 F.Supp.3d at 133 (2016) (considering a supply response by Amazon Business as a rebuttal by the merging parties to the FTC’s prima facie case already established).

²⁷ Merger Guidelines § 9.

²⁸ *Id.*

²⁹ *U.S. v. Baker Hughes*, 908 F.2d 981, 984 (D.C. Cir. 1990) (“It is a foundation of section 7 doctrine, disputed by no authority cited by the government, that evidence on a variety of factors can rebut a prima facie case. These factors include, but are not limited to, the absence of significant entry barriers in the relevant market.”).

conditions that would be caused by the merger. Indeed, the DCM refers to product “ecosystems” either as a synonym or substitute for “markets,” though the DCM intends to include as potential market participants firms that sell to or buy from the merging parties or produce a complementary product.³⁰ Those firms, as proposed by the DCM, would be well-situated to produce a next-generation, or otherwise reasonably substitutable, product that will draw customers away from the merged company.

The DCM thus does not attempt to define the narrowest possible market but the group of products and suppliers that are interacting with one another in a dynamic competitive environment over the same durable time period that is assumed for a non-transient price increase.³¹ The object of the analysis is the same as in the Guidelines—to identify reasonably substitutable products and their suppliers. The DCM time horizon, however, is longer. The candidate substitutes are not limited to the overlap products but may include prospective, next-generation substitutes, and the relevant suppliers are not restricted to current producers and those that “very likely” would “rapidly” supply the products with few sunk costs in response to a SSNIP. The Agencies and courts should assess the relevant evidence to determine whether the plaintiff has met its burden in defining a relevant market that includes all current and prospective competitors and reasonably substitutable products.

Such evidence should be received from both the plaintiff and defendants. The defendants will have more insight and support for their own innovation and may be able to identify innovation by competitors or adjacent suppliers that they anticipate. The plaintiff (especially the Agencies), however, should be required to address the possibility (or lack thereof)

³⁰ See generally David J. Teece, *Towards A Dynamic Competition Approach To Big Tech Merger Enforcement: The Facebook-Giphy Example*, COMPETITION POL’Y INT’L (Dec. 6, 2021), <https://www.competitionpolicyinternational.com/towards-a-dynamic-competition-approach-to-big-tech-merger-enforcement-the-facebook-giphy-example/> [https://perma.cc/YJZ9-QQD5].

³¹ Teece, *supra* note 2.

of supply and product responses to the proposed merger and to defeat the defendants' arguments on those subjects before a presumption of illegality arises.

3. Courts Have Recognized the Importance of Supply-Side Analyses and Dynamic Competition.

Case law is more receptive to the supply dimension of market definition than are the Merger Guidelines in identifying potential producers of the relevant product identified through an analysis of demand side substitutability.³² In the 1995 predatory pricing and price discrimination case *Rebel Oil Co., Inc. v. Atlantic Richfield Co.*, the Ninth Circuit noted that “defining a market based on demand considerations alone is erroneous,” as “a reasonable

³² *Gulf States Reorganization Grp., Inc. v. Nucor Corp.*, 721 F.3d 1281, 1286 (11th Cir. 2013), *cert. denied*, 571 U.S. 1199 (2014) (“One way to decide if producers or manufacturers can take business away from a monopolist (or an attempted monopolist) is to analyze the concept of cross-elasticity of supply, which ‘looks at competition from the production end instead of the consumer end.’”); *Rebel Oil Co. v. Atlantic Richfield Co.*, 51 F.3d 1421, 1436 (9th Cir. 1995) (“A reasonable market definition must also be based on ‘supply elasticity.’”); *Twin City Sportservice, Inc. v. Charles O. Finley & Co., Inc.*, 512 F.2d 1264, 1273 (9th Cir. 1975) (“The evidence before the trial court strongly suggests that there is a high degree of ‘substitutability in production.’ That is, the evidence was sufficient to support a finding that many aspects of the concession operations at the various facilities presenting leisure time events other than major league baseball are the same or similar enough to each other and to those existing at major league baseball parks to be considered substitutable or transferable.”); *Carter Hawley Hale Stores v. Limited, Inc.*, 587 F. Supp. 246, 253 (C.D. Cal. 1984) (“CHH’s proffered product market definition also does not adequately address the two aspects of competition which courts and economists must consider in defining any product market. The first aspect is ‘demand substitutability,’ that is, the extent to which buyers will switch from one supplier to another when the first supplier raises prices...The second aspect is ‘supply substitutability,’ that is, the extent to which manufacturers or retailers will switch from manufacturing or retailing one product or in one area to another product or area in response to increased market prices or profits in the latter.”).

definition must also be based on supply elasticity.”³³ The court defined supply elasticity as “the responsiveness of producers to price increases” and explained that, “[i]f producers of product X can readily shift their production facilities to produce product Y, then the sales of both should be included in the relevant market.”³⁴

Rebel Oil concerned whether the defendant “engaged in predatory pricing between 1985 and 1989, selling self-serve, cash-only gasoline below marginal cost.”³⁵ In reviewing the plaintiff’s expert report, which purported to define the market, the court found that the “affidavit of Rebel’s expert fails to account for the fact that sellers of full-serve gasoline can easily convert their full-serve pumps, at virtually no cost, into self-serve, cash-only pumps, expanding output and thus constraining any attempt by [defendant] to charge supracompetitive prices for self-serve gasoline.”³⁶ The fact that potential competitors could “convert their full-serve facilities to increase their output of self-serve gasoline require[d] that full-serve sales be part of the relevant market.”³⁷

The Middle District of North Carolina case, *Bepco, Inc. v. Allied-Signal, Inc.*, drew from Rebel Oil and similar cases to insist that, in defining the relevant market, “evidence of cross-elasticities of supply and demand” must be considered together.³⁸ It explained that “[u]nder this analysis, products A and B occupy the same market if, when the producer of product A raises its price to a supracompetitive level, either (1) consumers of product A substitute product B for product A

³³ *Rebel Oil Co., Inc.*, 51 F. 3d at 1436.

³⁴ *Id.*

³⁵ *Id.* at 1429.

³⁶ *Id.* at 1436.

³⁷ *Id.* at 1448. Notwithstanding the Ninth Circuit’s acknowledgement of the importance of supply-side substitutability, the court reversed in part the grant of summary judgment in favor of defendant, finding that defendant “achieved sufficient market power to enforce supracompetitive oligopoly pricing.”

³⁸ *Bepco, Inc. v. Allied-Signal, Inc.*, 106 F. Supp. 2d 814, 823 (M.D.N.C. 2000).

or (2) producers of product B launch new production of product A or expand existing production of product A.”³⁹

The defendant in *Bepco* manufactured truck airbrake systems, and new valves and compressors for those systems, under the name “Bendix.”⁴⁰ The plaintiff accused defendant of violating Sections 1 and 2 of the Sherman Act, as well as Section 3 of the Clayton Act. One of plaintiff’s experts argued that the relevant market solely concerned Bendix products, as it “would be expensive for a consumer with a worn-out Bendix compressor to replace it with a re-manufactured or service new non-Bendix compressor.”⁴¹ The expert opined that “this deterrent to interchanging non-Bendix and Bendix-style compressors and valves by consumers indicate[d] that there is a low cross-elasticity of demand between Bendix and non-Bendix replacement parts.”⁴²

The court, however, found that, if “re-manufacturers of Bendix and non-Bendix parts can easily adjust and reallocate productive capacity between the two products, producers of each style will be restrained from charging supracompetitive prices.”⁴³ The court further explained that the plaintiff “failed to point to any supply-side evidence or other factors which bolster[ed] its contention that only Bendix-style products occupy the relevant markets.”⁴⁴ Both *Rebel Oil* and *Bepco* effectively applied the HMT to both the supply side and the demand side, recognizing early case law that market definition must assess both supply and demand elasticity in the face of a significant and durable change in competitive conditions.⁴⁵ Supply-side effects should not be relegated to entry analysis with the burden and the strict criteria falling upon the defendants.

³⁹ *Id.*

⁴⁰ *Id.* at 816.

⁴¹ *Id.* at 823.

⁴² *Id.*

⁴³ *Id.* at 824.

⁴⁴ *Id.*

⁴⁵ *See Brown Shoe Co. v. United States*, 370 U.S. 294, 325 n.42 (1962).

In *In the Matter of Owens Illinois, Inc., et al.*,⁴⁶ the FTC itself illustrated an analytical methodology that accounted for dynamic supply-side effects both in defining markets and assessing competitive effects. That methodology was implemented before (or without) finding any presumption of illegality based upon a structural analysis. The FTC acknowledged significant cross-material competition in end-use segments of glass containers such that a manufacturer of a glass container in that segment could not sustain a SSNIP.⁴⁷ Crediting such competition across container materials itself recognized dynamic competition on the supply side as part of the market definition process.

In the competitive effects assessment, the FTC further acknowledged that manufacturers of glass containers for elastic end uses could switch their capacity to the inelastic end uses and defeat a price increase in the latter.⁴⁸ The FTC also observed that some buyers could produce the relevant product internally and thereby defeat a SSNIP (e.g., wine producers could manufacture their own glass bottles).⁴⁹ Although the FTC's analysis in *Owens Illinois* could have been organized differently (the supply responses in the competitive effects assessment could have been acknowledged when markets were being defined as "inelastic"), the point remains that *Owens Illinois* stands as an example of a judicial consideration of dynamic competition in assessing a proposed merger under Section 7.

We suggest that, to give innovation its due as a primary driver of competition in a dynamic economy, the Agencies and the courts include supply-side substitution at the market definition stage of the analysis. That would place the burden of addressing supply repositioning on the plaintiff before a presumption of illegality arises, not on the merging parties

⁴⁶ *In the Matter of Owens Illinois, Inc., et al.*, 115 F.T.C. 179 (Feb. 26, 1992).

⁴⁷ *Id.* at 305 (finding it unlikely that a SSNIP could be sustained in the shelf-stable juices market, the distilled spirits market, and the spaghetti sauce market).

⁴⁸ *Id.* at 323–26.

⁴⁹ *Id.* at 328–29.

and not subject to the “strict scrutiny” of the timely, likely, and sufficient criteria for entry. That would also allow for a consideration of dynamic product and service competition earlier in the antitrust assessment of the merger.

B. Addressing Innovation After a Prima Facie Case Is Established and a Presumption of Illegality Arises Marginalizes the Importance of Innovation in Merger Law.

1. Establishing a Prima Facie Case

When a plaintiff challenges a merger under Section 7, “[it] must show, by a preponderance of the evidence, that the proposed merger is likely to substantially lessen competition, which encompasses a concept of reasonable probability.”⁵⁰ Section 7 thus imposes upon courts the “uncertain task of assessing probabilities” to determine whether a merger is unlawful.

To facilitate that endeavor, courts engage in a three-step burden-shifting framework that generally mirrors the rule of reason analysis.⁵¹ First, the plaintiff must establish a prima facie case that the merger has a reasonable probability to substantially lessen competition in the relevant product and geographic market.⁵² Once the plaintiff does so, it has established a presumption that the merger is illegal under Section 7.

⁵⁰ *United States v. UnitedHealth Group Incorporated*, Civil Action No. 1:22-cv-0481 (CJN), 2022 WL 4365867 (D.D.C. Sept. 21, 2022), *dismissed*, No. 22-5301, 2023 WL 2717667 (D.C. Cir. Mar. 27, 2023) (quoting *United States v. AT&T, Inc.*, 916 F.3d 1029, 1032 (D.C. Cir. 2019)).

⁵¹ *U.S. v. Baker Hughes*, 908 F.2d 981, 982–83 (D.C. Cir. 1990); *see also* *Fed. Trade Comm’n v. RAG-Stiftung*, 436 F. Supp. 3d 278, 291 (D.D.C. Feb. 2020).

⁵² *AT&T*, 916 F.3d at 1032; *Chicago Bridge & Iron Co. N.V. v. F.T.C.*, 534 F.3d 410, 423 (5th Cir. 2008); *United States v. United Tote, Inc.*, 768 F. Supp. 1064, 1068 (D. Del. 1991).

“[T]he burden of producing evidence then shifts to the defendant.”⁵³ “Although a more compelling prima facie case calls for a more compelling rebuttal, the defendant need not “produce evidence ‘clearly’ disproving future anticompetitive effects,” as such a requirement would force the defendant “to rebut a probability with a certainty” and free the [plaintiff] from its ultimate burden of persuasion.”⁵⁴

If the defendant rebuts the presumption, “the burden of producing additional evidence of anticompetitive effect shifts to the [plaintiff], and merges with the ultimate burden of persuasion, which remains with the [plaintiff] at all times.”⁵⁵ The plaintiff’s “failure of proof in any respect will mean the transaction should not be enjoined.”⁵⁶

The burden-shifting mechanism provides a framework within which the court organizes the evidence that the plaintiff and defendants have placed in the record during their respective cases in chief and their cross-examination of opposing witnesses. If, however, a court finds that the Government has established a prima facie case, the presumption of illegality arises, and the significant burden of rebuttal falls upon the defendant. If the merging parties do not produce sufficiently compelling proof (presumably a preponderance) on a rebuttal element, the rebuttal fails.

To establish a prima facie case, “[a] threshold step . . . is to accurately define the relevant market, which refers to the area of effective competition.”⁵⁷ In defining the relevant market, courts often use the Merger Guidelines effectively as

⁵³ *United Tote*, 768 F. Supp. at 1068.

⁵⁴ *United States v. UnitedHealth Group Incorporated*, Civil Action No. 1:22-cv-0481 (CJN), 2022 WL 4365867, at *6 (D.D.C. Sept. 21, 2022); see also *Baker Hughes*, 908 F.2d at 991 (“The more compelling the prima facie case, the more evidence the defendant must present to rebut it successfully.”).

⁵⁵ *UnitedHealth Group*, 2022 WL 4365867, at *6 (emphasis added).

⁵⁶ *Fed. Trade Comm’n v. Arch Coal, Inc.*, 329 F.Supp.2d 109, 116 (D.D.C. 2004).

⁵⁷ *Fed. Trade Comm’n v. Qualcomm Inc.*, 969 F.3d 974, 992 (9th Cir. 2020); see also *Fed. Trade Comm’n v. Rag-Stiftung*, 436 F. Supp. 3d 278, 291 (D.D.C. 2020) (noting that the FTC must define a product and geographic market to obtain a preliminary injunction).

controlling guidance, thus confirming the importance of the analytical framework with which the Merger Guidelines define markets and account for supply effects.⁵⁸

After the relevant product and geographic markets are defined, a *prima facie* case is established if the plaintiff can prove that the merged entity will control at least 30% of the relevant market. In 1963, the Supreme Court held in *Philadelphia National Bank* that, “[w]ithout attempting to specify the smallest market share which would still be considered to threaten undue concentration, we are clear that 30% presents that threat.”⁵⁹ Despite significant developments in non-merger aspects of antitrust law that account for dynamic competition, the structural presumption in the merger context of *Philadelphia National Bank* has never been overturned or expressly modified. Lower courts routinely find a presumption of illegality when a merger significantly increases concentration in the relevant market.⁶⁰

Rebutting that presumption is difficult because the relevant market and market shares—the infrastructure of any merger analysis—have already been found. Merging

⁵⁸ See, e.g., *Rag-Stiftung*, 436 F. Supp. 3d at 292–93 (quoting from Merger Guidelines); *Fed. Trade Comm’n v. AbbVie Inc.*, 329 F.Supp.3d 98, 128–29 (E.D. Pa. 2018) (discussing hypothetical monopolist test used by FTC expert outside merger context); *Fed. Trade Comm’n v. Staples, Inc.*, 190 F.Supp.3d 100, 117 n.9 (D.D.C. 2016) (“Although the Merger Guidelines are not binding on this Court, the D.C. Circuit has relied on them for guidance in other merger cases.” (citing *FTC v. Sysco Corp.*, 113 F.Supp.3d 1, 38 (D.D.C.2015))).

⁵⁹ *United States v. Philadelphia Nat. Bank*, 374 U.S. 321, 364 (1963).

⁶⁰ *Fed. Trade Comm’n v. Hackensack Meridian Health, Inc.*, 30 F.4th 160, 172 (3d Cir. 2022) (stating that market concentration is a useful indicator of the competitive effects of a merger); *Chicago Bridge & Iron Co. N.V. v. F.T.C.*, 534 F.3d 410, 423 (5th Cir. 2008) (“Typically the Government establishes a *prima facie* case by showing that the transaction in question will significantly increase market concentration, thereby creating a presumption that the transaction is likely to substantially lessen competition.”); *United States v. Aetna, Inc.*, 240 F. Supp. 3d 1, 91 (D.D.C. 2017) (“Mergers that eliminate head-to-head competition between close competitors often result in a lessening of competition.”) (quoting *Staples*, 190 F.Supp. 3d at 131); *Fed. Trade Comm’n v. Sysco Corp.*, 113 F.Supp.3d 1, 52 (D.D.C. 2015).

parties can attempt to rebut the presumption with evidence that current market shares do not reflect likely future conditions. An obvious reason that future conditions may differ is innovation in the form of supply repositioning. Any evidence in support of such repositioning, however, would be evaluated under the stringent criteria of Section 9 of the Merger Guidelines, which require that the supply response be “timely, likely, and sufficient” to forestall the previously inferred price increase.⁶¹ The merging parties must establish those criteria as applied to a third-party firm, which is not likely to cooperate with the merging parties in offering the documents and testimony to support the viability and likelihood of their repositioning or entry.⁶²

2. Comparing a Consideration of Innovation Before and After a Prima Facie Case Is Established

Amazon Business provides an example of a competitor’s apparent ability to foil the merging parties’ attempted rebuttal of a presumption of illegality. In the FTC’s challenge of the 2016 merger of Staples and Office Depot, the court concluded that the FTC had properly defined a relevant market for the supply of consumable office supplies (excluding

⁶¹ Merger Guidelines § 9; *see also Staples*, 190 F.Supp.3d at 133.

⁶² *See* Bryan Koenig, *Meta Vies for ‘Critical’ Apple VR Plans, FTC Witness*, LAW360 (Oct. 27, 2022), https://www.law360.com/competition/articles/1544097/meta-vies-for-critical-apple-vr-plans-ftc-witness?nl_pk=23671e30-024c-4eca-b950-fe4e34d64f3f&utm_source=newsletter&utm_medium=email&utm_campaign=competition&utm_content=2022-10-28 (on file with the Columbia Business Law Review); *see also* Kelly Lienhard, *Meta Wants Snap Inc. Docs in FTC Monopoly Case*, LAW 360 (Oct. 27, 2022), https://www.law360.com/competition/articles/1544179/meta-wants-snap-inc-docs-in-ftc-monopoly-case?nl_pk=23671e30-024c-4eca-b950-fe4e34d64f3f&utm_source=newsletter&utm_medium=email&utm_campaign=competition&utm_content=2022-10-28 (on file with the Columbia Business Law Review) (“According to Meta, Snap delayed responding to the subpoena until it eventually refused to provide any of the documents, then offered a few of the requested materials, but only if Meta agreed to pay for them and revise the court’s protective order.”).

ink and toner) that were sold and distributed to large (Fortune 100) business-to-business (“B-to-B”) customers.⁶³ According to the court, Staples and Office Depot held a 79% share of that market, raising a strong presumption of illegality.⁶⁴

The court then concluded that the defendants had not “carr[ie]d] the burden” of demonstrating that Amazon Business would provide an adequate competitive alternative to the merged entity.⁶⁵ The court did not obligate the FTC to prove that Amazon Business could not, or otherwise would not, constrain the merging parties’ competitive conduct with regard to B-to-B customers in light of Amazon’s record of sales innovation and delivery prowess. The court explained that the record contained insufficient evidence that Amazon would be able to expand in a timely (two to three years) and sufficient manner so as to eliminate the merger’s anticompetitive harm.⁶⁶ The party bearing the burden of demonstrating a future contingency bears the greater risk of loss.

Yet, by 2018, Amazon Business reached \$10 billion in sales in office supplies,⁶⁷ indicating a degree of expansion that

⁶³ *Staples*, 190 F.Supp.3d at 127.

⁶⁴ *Staples*, 190 F.Supp.3d at 128 (“Defendants’ market share of the Fortune 100 sample as a whole is striking: Staples captures 47.3 percent and Office Depot captures 31.6 percent, for a total of 79 percent market share.”).

⁶⁵ *Staples*, 190 F.Supp.3d at 133–34 (“Defendants carry the burden of showing that the entry or expansion of competitors will be ‘timely, likely and sufficient in its magnitude, character, and scope to deter or counteract the competitive effects of concern’ Although Amazon Business may successfully address some of these alleged weaknesses in the short term, the evidence produced during the evidentiary hearing does not support the conclusion that Amazon Business will be in a position to restore competition lost by the proposed merger within three years.”(quoting *United States v. H&R Block, Inc.*, 833 F.Supp.2d 36, 73 (D.D.C. 2011))).

⁶⁶ *Staples, Inc.*, 190 F.Supp.3d at 133–36.

⁶⁷ Denise Power, *Amazon Business Bent on Being the Go-To B2B Platform*, U.S. CHAMBER OF COM. CO. (July 16, 2019), <https://www.uschamber.com/co/good-company/the-leap/amazon-business-b2b> [<https://perma.cc/5DQQ-Y7DB>] (“Amazon Business has muscled into this [business supplies] space, earning \$1 billion in its first year, and a whopping \$10 billion in year four. The B2B business that launched in 2015 is on a growth trajectory to reach \$25 billion by 2021, analysts project.”).

appears to have been understated in the court's assessment. Although we do not know the details of that revenue figure, the report attributed the revenue to the "B2B business that launched in 2015" and projected that the business "is on a growth trajectory to reach \$25 billion by 2021."⁶⁸

Those figures appear to compare favorably to figures for Staples and Office Depot that were cited by the court in 2016. The court reported that, "[i]n fiscal year 2014, Staples generated \$22.5 billion in sales, with more than half of all sales coming from office supplies. In fiscal year 2013, 34.8 percent of Staples' total revenue came from the North American commercial segment."⁶⁹ That implies that Staples had about \$5 billion (22.5 times .5 times .35, plus \$1 billion for rounding) in sales of B-to-B office consumables.

The court also reported that, "in fiscal year 2014, Office Depot made \$16.1 billion in revenue, with nearly half of those sales coming from office supplies and 37.4 percent of overall sales from B-to-B business."⁷⁰ That implies that Office Depot had about \$4 billion (16.1 times .5 times .38 plus about \$1 billion for rounding) in sales of B-to-B office consumables.

We do not propose an exact comparison among the B-to-B sales of Staples, Office Depot, and Amazon Business, as we do not have adequate information for that comparison. The information that we do have, however, suggests that the court may have understated the likely growth of Amazon Business. One could only speculate whether that understatement resulted from the merging parties' decision not to put on their own case in chief, a fact that the court noted on several occasions.⁷¹ Had the FTC, before it could establish its prima facie case, had the burden of demonstrating that Amazon Business was not likely to constrain the post-merger conduct of the merging parties, especially given Amazon's delivery expertise and innovative sales practices, the outcome could have been different.

⁶⁸ *Id.*

⁶⁹ *Staples, Inc.*, 190 F.Supp.3d at 112 (internal citation omitted).

⁷⁰ *Id.*

⁷¹ *Id.* at 110, 127, 129, 135, 138 n. 15.

U.S. v. General Dynamics Corp.,⁷² the last significant Supreme Court case to apply Section 7 to the competitive effects of a merger, provides a different approach that should guide lower courts' application of the Baker Hughes burden-shifting mechanism and the consideration of when a *prima facie* case has been established. In *General Dynamics*, the Court acknowledged that "the statistical showing proffered by the Government . . . , the accuracy of which was not discredited by the District Court or contested by the appellees, would . . . have sufficed to support a finding of 'undue concentration' in the absence of other considerations."⁷³ The Court nonetheless affirmed the district court's finding that "other pertinent factors affecting the coal industry and the business of the appellees mandated a conclusion that no substantial lessening of competition occurred or was threatened by the acquisition of United Electric."⁷⁴

The *General Dynamics* Court summarized, "the District Court assessed the evidence of the 'structure, history and probable future' of the coal industry, and on the basis of this assessment found no substantial probability of anticompetitive effects from the merger."⁷⁵ Further, "[b]y determining that the amount and availability of usable reserves, and not the past annual production figures relied on by the Government, were the proper indicators of future ability to compete, the District Court wholly rejected the Government's *prima facie* case."⁷⁶

The Court affirmed both that rejection and, at least implicitly, the consideration of industry evidence before a determination on the *prima facie* case is made.⁷⁷ *General Dynamics* thus found insufficient static, statistical, and structural criteria to establish a *prima facie* case and the accompanying presumption of illegality. That finding provides a sound basis for a court's considering prospective innovation

⁷² *United States v. Gen. Dynamics Corp.*, 415 U.S. 486 (1974).

⁷³ *Id.* at 497–98.

⁷⁴ *Id.* at 498.

⁷⁵ *Id.*

⁷⁶ *Id.* at 510–11 (emphasis added).

⁷⁷ *Id.*

before it grants such a presumption.⁷⁸ Indeed, that methodology more closely aligns with the analytical framework that has been adopted by courts under the rule of reason in Section 1 cases, as we discuss in Part II below.

C. Innovation by the Merging Parties Is Not Properly Accounted for as an Efficiencies “Defense.”

1. Efficiencies Under the Merger Guidelines

The Merger Guidelines address efficiencies after they address entry and impose at least equally stringent criteria for crediting efficiencies as offsetting, or reversing, the anticompetitive effects already found through the market definition and concentration analyses reviewed above. The timing point is significant. Efficiencies are considered only after the court has found a likely anticompetitive effect, and the point of the inquiry is whether the efficiencies by the defendant would avert that effect.

Efficiencies thus operate as an affirmative defense and are the burden of the defendant to establish. As discussed below, however, the “efficiency” of innovation may not address the price increase presumed from static market shares and concentration levels and yet may provide a compelling explanation for procompetitive effects of the merger. Prospective innovation by the merging parties may also indicate that the market is sufficiently dynamic that the respective shares and concentration levels are not good indicators of future competition.

As an initial matter, the Agencies consider only those efficiencies that would arise solely as a result of the merger and disregard efficiencies that could otherwise be achieved in hypothetical alternative ways. “The Agencies credit only those efficiencies likely to be accomplished with the proposed merger and unlikely to be accomplished in the absence of either the proposed merger or another means having

⁷⁸ *Id.* at 494–511.

comparable anticompetitive effects. These are termed merger-specific efficiencies.”⁷⁹

“The Agencies will not deem efficiencies to be merger-specific if they could be attained by practical alternatives that mitigate competitive concerns, such as divestiture or licensing. If a merger affects not whether but only when an efficiency would be achieved, only the timing advantage is a merger-specific efficiency.”⁸⁰ The Agencies will not consider efficiencies “if they are vague, speculative, or otherwise cannot be verified by reasonable means.”⁸¹

Efficiencies must reverse the future price effects that the Agencies have already inferred through the structural analysis outlined above. “To make the requisite determination, the Agencies consider whether cognizable efficiencies likely would be sufficient to reverse the merger’s potential to harm customers in the relevant market, e.g., by preventing price increases in that market.”⁸²

Such efficiencies would likely need to reduce incremental costs, so that the reduction might affect consumer prices and are “more likely to be susceptible to verification.”⁸³ “Other efficiencies, such as those relating to research and development, are potentially substantial but are generally less susceptible to verification and may be the result of anticompetitive output reductions.”⁸⁴ “The Agencies normally give the most weight to the results of this analysis over the short term.”⁸⁵

2. Innovation as an Efficiency Under the Merger

⁷⁹ Merger Guidelines § 10 (footnote omitted but quoted below).

⁸⁰ *Id.* at n. 13

⁸¹ *Id.* at § 10.

⁸² *Id.* (footnote omitted but quoted in part below; emphasis added).

⁸³ Merger Guidelines § 10 (“incremental cost reductions may reduce or reverse any increases in the merged firm’s incentive to elevate price”).

⁸⁴ *Id.*

⁸⁵ *Id.* at n. 15.

Guidelines

Specifically with respect to innovation, the Merger Guidelines “consider the ability of the merged firm to conduct research or development more effectively. Such efficiencies may spur innovation but not affect short-term pricing.”⁸⁶ The absence of an effect on short-term pricing, however, would appear to preclude the more effective research and development from constituting a cognizable efficiency under the Merger Guidelines.

“The Agencies also consider the ability of the merged firm to appropriate a greater fraction of the benefits resulting from its innovations. Licensing and intellectual property conditions may be important to this enquiry, as they affect the ability of a firm to appropriate the benefits of its innovation.”⁸⁷ Again, the Guidelines do not credit the benefits of such “value capture” as a cognizable efficiency, presumably because the appropriation of the benefits would not affect short-term pricing and may not be easily verifiable and quantifiable.

The Merger Guidelines further acknowledge that “[r]esearch and development cost savings may be substantial and yet not be cognizable efficiencies because they are difficult to verify or result from anticompetitive reductions in innovative activities.”⁸⁸ Although the Merger Guidelines grant that a merger may result in “improved quality, enhanced service, or new products,”⁸⁹ all of which would constitute innovation under our definition, the Merger Guidelines provide no framework for assessing the likelihood of such innovation or crediting it in the competitive assessment of the merger.

Notwithstanding the minimal importance accorded innovation in the Merger Guidelines, the Agencies recently challenged the proposed acquisition of Change Healthcare, Inc. (“Change”) by UnitedHealth Group Incorporated (“UHG”) on the ground that the transaction would reduce innovation

⁸⁶ *Id.* at § 10.

⁸⁷ *Id.*

⁸⁸ *Id.*

⁸⁹ *Id.*

in the first-pass claims editing market and the sale of commercial health insurance to national accounts market.⁹⁰ The court found the case unsupported by evidence and based upon an attenuated and unproven theory of causation.⁹¹

The DOJ nonetheless sought to protect in the UHG challenge the innovation (supply responses) among competitors of the merging parties that the Merger Guidelines require the merging parties to demonstrate according to the standards of entry. The DOJ did not prove (or even attempt to prove) that the innovation that would be supposedly eliminated in the UHG case would be timely, likely, and sufficient. Nor did the DOJ verify that such innovation would affect short-term pricing, such that its elimination would be a substantial lessening of competition.

Indeed, the court found that the DOJ failed to prove the likely elimination of any innovation, much less its qualitative or quantitative impact on competition.⁹² In particular, Judge Nichols explained that:

[T]he Government provided zero real-world evidence that rival payers are likely to reduce innovation. The Government did not call a single rival payer to offer corporate testimony that it would innovate less or compete less aggressively if the proposed merger goes through. Nor did any of the rival payer employees who did testify support the Government's theory. To the contrary, all the payer witnesses rejected the notion that the proposed merger would harm innovation.⁹³

The Agencies should respect innovation as an equally important element of competition when a merger is likely to enhance innovation as when it may reduce it.

3. Efficiencies Are Subjected to Strict Scrutiny by

⁹⁰ Complaint at 11, *United States et al. v. UnitedHealth Group Incorporated et al.*, No. 1:22-cv-00481 (D.D.C. Feb. 24, 2022).

⁹¹ *United States et al. v. UnitedHealth Group Incorporated et al.*, No. 22-cv-00481, at 53 (D.D.C. Feb. 24, 2022), *appeal docketed*, No. 22-5301 (D.C. Cir. Dec. 21, 2022) (“Each step of the Government’s argument must be true for its theory to work, yet each step suffers from serious flaws.”).

⁹² *Id.* at 50–53.

⁹³ *Id.* at 50–51.

Courts

The courts have followed the Agencies in skeptically viewing efficiencies as a justification for a merger that has been found likely to lessen competition through a traditional analysis of market definition and concentration. That, too, renders innovation only marginally important in merger analysis and litigation.

In *Saint Alphonsus Med. Ctr.-Nampa Inc. v. St. Luke's Health Sys., Ltd.*, for example, the Ninth Circuit considered an appeal from the injunction of a hospital merger. The district court had noted that “St. Luke’s and Saltzer genuinely intended to move toward a better health care system, and expressed its belief that the merger would ‘improve patient outcomes’ if left intact,” but enjoined the merger based on market share.⁹⁴ After affirming the district court’s finding that plaintiffs had proven their *prima facie* case,⁹⁵ the Ninth Circuit turned to the merging parties’ efficiencies defense.

The Ninth Circuit began by noting that no circuit court had ever found that efficiencies sufficiently offset a *prima facie* case, and on that basis stated that it was “skeptical about the efficiencies defense in general and about its scope in particular.”⁹⁶ The court, however, nevertheless assumed that, “because § 7 of the Clayton Act only prohibits those mergers whose effect ‘may be substantially to lessen competition,’ . . . a defendant can rebut a *prima facie* case with evidence that the proposed merger will create a more efficient combined entity and thus increase competition.”⁹⁷

The Ninth Circuit importantly limited its consideration of what “a more efficient combined entity” would be and, in that regard, found that the merger could not be justified on the ground that it “would allow St. Luke’s to better serve patients.”⁹⁸ Rather, the Ninth Circuit considered only

⁹⁴ *St. Alphonsus Med. Ctr.-Nampa Inc. v. St. Luke’s Health Sys., Ltd.*, 778 F.3d 775, 782 (9th Cir. 2015).

⁹⁵ *Id.* at 787–88.

⁹⁶ *Id.* at 790.

⁹⁷ *Id.* (citing 15 U.S.C. § 18).

⁹⁸ *Id.* at 791.

evidence that the merger would “increase competition or decrease prices,”⁹⁹ as it appeared constrained by a legal paradigm that deems price impact dispositive of Section 7 assessments. Absent such evidence, the court affirmed the issuance of the injunction prohibiting the merger, despite acknowledging that improving patient care is a “laudable goal.”¹⁰⁰ Antitrust law that takes innovation seriously would not force its consideration into a price-only category.

Although lower federal courts generally recognize that efficiencies resulting from the merger may be considered in rebutting the government’s prima facie case,¹⁰¹ they rarely, if ever, find that efficiencies are successful in doing so.¹⁰² That is due, in large part, to the incommensurability of efficiencies and price effects such that the former cannot obviously “outweigh” or reverse the latter once likely price effects are found as part of the prima facie case. In addition, defendants face a heavy burden in demonstrating that even incremental cost savings “would be sufficient to reverse the merger’s potential harm to customers in the relevant market, e.g., by preventing price increases in the market.”¹⁰³

In accordance with the Merger Guidelines, courts assessing efficiencies “undertake a rigorous analysis ... to ensure that those ‘efficiencies’ represent more than mere speculation and promises about post-merger behavior.”¹⁰⁴ Specifically, courts determine whether the efficiencies are “merger specific”—meaning they represent “a type of cost saving that could not be achieved without the merger”—and “verifiable”—meaning “the estimate of the predicted saving

⁹⁹ *Id.*

¹⁰⁰ *Id.* at 791–92.

¹⁰¹ Fed. Trade Comm’n v. Sysco Corp., 113 F.Supp.3d 1, 81 (D.D.C. 2015).

¹⁰² *Id.* (“The court is not aware of any case, and Defendants have cited none, where the merging parties have successfully rebutted the government’s prima facie case on the strength of the efficiencies.”).

¹⁰³ Merger Guidelines § 10.

¹⁰⁴ *Sysco*, 113 F. Supp. 3d at 81 (quoting *FTC v. H.J. Heinz Co.*, 246 F.3d 708, 721 (D.C. Cir. 2001)).

must be reasonably verifiable by an independent party.”¹⁰⁵ We are aware of no instance in which a merger challenge was defeated based on an efficiencies defense. In fact, one court recently issued a ruling excluding any efficiencies evidence (specifically, cost savings associated with the merger) at trial on the ground that the efficiencies had not been “verified” by an independent expert.¹⁰⁶

If the Agencies and courts are to credit innovation as a primary driver of competition in a dynamic economy, they should incorporate considerations of innovation earlier and more prominently in their antitrust analysis of mergers. To that end and in accord with General Dynamics and the Section 1 cases discussed below, courts should require the Government to demonstrate, as part of its prima facie case, that the probable lessening of competition implied by increased concentration will not be offset or “upset” by record evidence of probable innovation by the merging parties or competitors in response to the merger. That would require the Government to demonstrate that the proposed merger would likely substantially lessen competition net of evidence of probable innovation in the relevant market.

III. THE SECTION 1 RULE OF REASON FRAMEWORK BETTER ACCOUNTS FOR INNOVATION.

The Supreme Court summarized the burden-shifting mechanism under the Section 1 rule of reason in *Ohio v. American Express Co.* The Court reported that the plaintiff “has the initial burden to prove that the challenged restraint has a substantial anticompetitive effect that harms

¹⁰⁵ *Id.* (quoting *United States v. H&R Block, Inc.*, 833 F.Supp.2d 36, 89 (D.D.C. 2011) (internal quotation marks omitted) (citing Merger Guidelines § 10)); *see also* *Fed. Trade Comm’n v. Cardinal Health*, 12 F.Supp.2d 34, 62 (D.D.C. 1998) (“In light of the anti-competitive concerns that mergers raise, efficiencies, no matter how great, should not be considered if they could also be accomplished without a merger.”).

¹⁰⁶ *United States v. Bertelsmann SE & Co.*, 2022 U.S. Dist. LEXIS 202847 at *111–12 (D.D.C. 2022).

consumers.”¹⁰⁷ Only then is the defendant obliged to “show a procompetitive rationale for the restraint.”¹⁰⁸ If the defendant makes that showing, then the burden shifts back to the plaintiff to demonstrate that “the procompetitive efficiencies could be reasonably achieved through less anticompetitive means.”¹⁰⁹

The burden-shifting mechanism is articulated in a manner similar to that under Section 7 but requires the plaintiff to establish an anticompetitive effect in the relevant market net of offsetting competitive dynamics, much as General Dynamics. The Section 1 burden-shifting mechanism is not triggered by a structural presumption, as in the merger context, but is rather based on a more nuanced and thorough assessment of competitive effects. Two recent Sherman Act cases—Amex and Qualcomm—illustrate the obligation of the plaintiff to address the impact of innovation on the market before the burden shifts to the defendant for justification.

In Amex, the Court found that the plaintiff had not demonstrated a net anticompetitive effect on both sides of the relevant two-sided market:

As an initial matter, the plaintiffs’ argument about merchant fees wrongly focuses on only one side of the two-sided credit-card market. As explained, the credit-card market must be defined to include both merchants and cardholders. Focusing on merchant fees alone misses the mark because the product that credit-card companies sell is transactions, not services to merchants, and the competitive effects of a restraint on transactions cannot be judged by looking at merchants alone. Evidence of a price increase on one side of a two-sided transaction platform cannot by itself demonstrate an anticompetitive exercise of market power. To demonstrate anticompetitive effects on the two-sided credit-card market as a whole, the plaintiffs must prove that Amex’s antisteering provisions increased the cost of credit-card transactions above a competitive level, reduced the number of

¹⁰⁷ Ohio v. American Express Co., 138 S.Ct. 2274, 2284, 2284 (2018).

¹⁰⁸ *Id.*

¹⁰⁹ *Id.*

credit-card transactions, or otherwise stifled competition in the credit-card market.¹¹⁰

The Amex Court further found that Amex’s anti-steering provisions in fact spurred more competition in the market:

The plaintiffs also failed to prove that Amex’s antisteering provisions have stifled competition among credit-card companies. To the contrary, while these agreements have been in place, the credit-card market experienced expanding output and improved quality. Amex’s business model spurred Visa and MasterCard to offer new premium card categories with higher rewards. And it has increased the availability of card services, including free banking and card-payment services for low-income customers who otherwise would not be served.¹¹¹

In *FTC v. Qualcomm*, the Ninth Circuit similarly employed a more searching assessment of competitive dynamics before finding that plaintiff has established an anticompetitive effect than is typical in a Section 7 case. The Qualcomm court found that a novel business practice first appeared to be anticompetitive but was in fact disruptive in a manner that was beneficial to consumers because it forced rivals to adapt and innovate:

The record suggests that this case is more like *Am. Express*, where a company’s novel business practice at first appeared to be anticompetitive, but in fact was disruptive in a manner that was beneficial to consumers in the long run because it forced rival credit card companies to adapt and innovate Similarly here, companies like Nokia and Ericsson are now “[f]ollowing Qualcomm’s lead” with respect to OEM-level licensing, and beginning in 2015 rival chipmakers began to successfully compete against Qualcomm in the modem chip markets. We decline to ascribe antitrust liability in these dynamic and rapidly changing technology markets without clearer proof of anticompetitive effect.¹¹²

¹¹⁰ *Id.* at 2287 (emphasis added).

¹¹¹ *Id.* at 2289 (emphasis added).

¹¹² *Fed. Trade Comm’n v. Qualcomm Inc.*, 969 F.3d 974, 1003 (9th Cir. 2020) (emphasis added).

Amex and Qualcomm demonstrate that the plaintiff has the initial burden of establishing an anticompetitive effect in the relevant market net of innovation and disruptive effects of the relevant business practice. If innovation is “a,” or indeed “the,” primary engine of competition in a free-enterprise economy, then the likelihood of innovation in the form of dynamic supply responses—by both the defendant(s) and other firms—must be addressed by the plaintiff before a presumption of illegality arises and the burden of justification shifts to the defendants.

IV. CONCLUSION

For merger law to properly account for innovation, we suggest two developments: (1) in determining whether the plaintiff has successfully defined its proposed product and geographic markets and identified the participants in those markets, the court should consider the likely fact and significance of innovation, usually in the form of supply responses by firms other than the merging parties; and (2) the court should further consider whether innovation by either the merging parties or other firms would render the market shares proffered by the plaintiff sufficiently unstable such that any increase in concentration is not likely to substantially lessen competition in the relevant market.

Both propositions would require the court to consider the importance of innovation before the court determines whether the plaintiff has met its burden of establishing a *prima facie* case that yields a presumption of illegality. That analytical framework accords with the last case decided by the Supreme Court, *General Dynamics*, that assessed the substantive application of Section 7. The *General Dynamics* approach is also consistent with the burden-shifting protocol under Section 1 as recently outlined in *American Express Co. and Qualcomm*. In both cases, innovation was considered in the initial competitive assessment before the burden shifted to defendants to provide a procompetitive justification of their restraints.