



Judicial Response to the 2010 Horizontal Merger Guidelines

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Abstract

We study how the courts have responded to the 2010 Horizontal Merger Guidelines issued by the U.S. Department of Justice and the Federal Trade Commission. Looking at decided cases, we find that both the government and merging parties rely on the 2010 Guidelines in presenting their cases, each side respectively arguing that it should win if the court properly follows them. The 2010 Guidelines had the strongest effect on the case law in the area of unilateral effects, where a number of courts have embraced them in ways that clearly depart from earlier decisions. The case law now exhibits much greater receptivity to a government showing that the merger will lead to higher prices simply due to the loss of direct competition between the two merging firms. The courts also have followed the 2010 Guidelines by more willingly defining markets around targeted customers. We do not detect any effect on decided cases of the higher concentration thresholds found in the 2010 Guidelines. Both the average pre-merger level of market concentration and the average increase in market concentration alleged by the government in litigated cases to date declined after 2010.

Keywords Mergers · Antitrust · Unilateral effects · Innovation

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1 Introduction

In this article, we study how the courts have responded to the 2010 Horizontal Merger Guidelines (2010 Guidelines, or Guidelines, or 2010 HMGs) that were issued by the U.S. Department of Justice (DOJ) and the Federal Trade Commission (“FTC”). This allows us to assess whether the Guidelines have achieved one of their explicit goals: to “assist the courts in developing an appropriate framework for interpreting and applying the antitrust laws in the horizontal merger context.”¹

Our method for evaluating the judicial response to the 2010 Guidelines is straightforward, albeit qualitative in nature. We have carefully reviewed all judicial decisions in horizontal merger cases since 2000, roughly 10 years before and 10 years after the agencies issued the Guidelines. We look especially for passages where courts cite the Guidelines and where courts address substantive issues that the Guidelines cover. We pay special attention to topics for which the 2010 HMGs made significant changes compared with their predecessor, the 1997 HMGs.²

The 2010 HMGs retained the overall framework for analyzing horizontal mergers that has been in place since the 1982 Merger Guidelines. Notably, they retained the “hypothetical monopolist test” (HMT) as the method of defining relevant markets. They also retained the use of the Herfindahl–Hirschman Index (HHI) for screening mergers and for triggering structural presumptions about likely merger effects, while raising the HHI thresholds to reflect agency practice more accurately. We examine how courts have responded to these new thresholds.

The 2010 HMGs also brought changes of various magnitudes to several important aspects of merger analysis, including: the assessment of unilateral and coordinated competitive effects; the impact of mergers on innovation; the treatment of entry; the evaluation of efficiencies; and the significance of powerful buyers. Perhaps the most important of those changes relates to the role of market definition in merger analysis, with the 2010 Guidelines putting increased focus on direct evidence of competitive effects—especially for unilateral competitive effects. Herbert Hovenkamp described these changes as making the Guidelines “less technocratic, accommodating a greater and more realistic variety of theories about why mergers of competitors can be anticompetitive and, accordingly, a greater variety of methodologies for assessing them.”³

While Hovenkamp found the 2010 Guidelines to be “a striking improvement” over the previous version, others predicted that the revisions—and particularly their focus on unilateral effects and openness to new methodologies—would create problems for the agencies and the courts. Malcolm Coate and Joseph Simons criticized the empirical reliability of unilateral effects models such as those incorporating the

¹ U.S. Department of Justice and Federal Trade Commission, Horizontal Merger Guidelines (August 19, 2010) (hereafter, 2010 Guidelines), §1. Available at <https://www.ftc.gov/sites/default/files/attachments/merger-review/100819hmg.pdf>.

² The 1997 HMGs are the same as the 1992 HMGs except in their treatment of efficiencies.

³ Hovenkamp, H. (2010). Merger policy and the 2010 merger guidelines, retrieved November 21, 2020, from The University of Pennsylvania School of Law website: https://scholarship.law.upenn.edu/faculty_scholarship/1847/.

upward pricing pressure (UPP) analysis that is embraced by the 2010 Guidelines.⁴ Former senior DOJ official Deborah Garza read the then-new Guidelines to “abandon the analytical framework of prior guidelines in favor of describing principal analytical techniques and types of evidence used to assess a merger.”⁵ She interpreted the new Guidelines as “throwing out the structural screens of the older guidelines,” despite the fact that Section 5.3 of the 2010 HMGs embraces the structural presumption. She predicted that “the very efforts the agencies have made to diminish the significance of market shares and concentration should make it more difficult to rely on them in court.”

These fears have not been borne out over the past decade. To the contrary, the 2010 Guidelines have continued to be well accepted by the courts and to assist the case law’s (slow) incorporation of new economic learning and agency experience in analyzing the impact of mergers on competition. In particular, we find that the richer explanation of how the Agencies use qualitative and quantitative evidence to assess competitive effects has favorably influenced the case law and strengthened merger enforcement.

The most significant impact of the 2010 HMGs on the courts has been in the area of unilateral effects. Not coincidentally, the assessment of unilateral effects is the area within merger analysis that has seen the most activity and the most progress among economists in recent years.

Increasingly over the past 30 years, spurred by the 1992 Guidelines, the DOJ and FTC have used modern economic tools to assess unilateral effects. These tools focus on direct competition between the products that are sold by the merging firms (diversion ratios) and the impact of internalizing that competition (price/cost margins) and can involve full-blown merger simulation. Judicial acceptance of these methods was in doubt in 2010 when the FTC and DOJ updated the Guidelines to address and explain assessment of unilateral effects more directly. Those tools have now become well established in the case law.

More generally, we have found numerous examples where the courts embraced the analytical framework provided in the 2010 Guidelines—including especially the guidance that the 2010 HMGs give with regard to the assessment of competitive effects. The process has been similar to past judicial responses to changes in the Guidelines: Courts generally accept the analytical methods that the Guidelines describe; show respect to the experience of the DOJ and the FTC that lies behind the Guidelines changes; but still ground their decisions in principles established by judicial precedent. This is how the Guidelines gradually influence the evolution of the case law.

Critically for effective merger enforcement, we find that the 2010 Guidelines not only preserved the agencies’ ability to invoke structural presumptions but strengthened their hand in demonstrating competitive effects. They also appear to have

⁴ Coate, M. B. & Simons, J. J. (2012). *In defense of market definition*. Antitrust Bulletin, 57, 667–717.

⁵ Garza, D. A. (2010, October). Market definition, the new horizontal merger guidelines, and the long march away from structural presumptions. The Antitrust Source, 10(1). Retrieved from: https://www.americanbar.org/content/dam/aba/publishing/antitrust_source/Oct10_FullSource.pdf

made it harder for merging firms to mount an entry defense in the absence of actual, recent, and successful instances of entry.

2 Universe of Decided Cases

We have examined all judicial decisions in horizontal merger cases since 2000. Our goal in reviewing these decision is to assess how the courts have treated the 2010 Guidelines, with particular focus on the courts' treatment of market definition, structural presumptions, and competitive effects. Recognizing that antitrust doctrine usually evolves slowly through incremental decisions of the federal courts, we examine how courts over the past decade have treated several notable changes to merger analysis found in the 2010 Guidelines.

Table 1 lists all of the horizontal merger cases in which the federal courts have issued decisions since January 2000.⁶ We call these “decided cases.” Decided cases are a subset of “litigated cases.” Litigated cases include merger challenges that were settled prior to a judicial decision and those in which the parties abandoned the merger prior to a judicial decision.

Some observers regard the DOJ and FTC's win/loss records as the ultimate test of whether the agencies' approach to merger enforcement is being accepted or rejected by the courts. For the record, of the 19 merger cases that the DOJ and FTC litigated to a decision in federal court in the 10 years after the 2010 Guidelines were issued, they won 15: a 79% win rate.⁷ This is higher than their combined win rate in federal court over the previous decade—8 of 13, or 62%.⁸

Regardless of the numbers, we caution against making too much of the DOJ and FTC win/loss records. Only a tiny share of all proposed mergers are litigated, and litigation leads to a decision only if no settlement can be reached and the merging parties do not abandon the transaction in the face of a challenge. In this paper, we are less interested in the win rates and more interested in whether the courts have followed the analytical framework of the 2010 Guidelines—particularly in areas where the 2010 Guidelines differ from their predecessor.

To examine how courts have treated the 2010 Guidelines, we have read all of the cases listed in Table 1. For each decision since 2010, we examine for what purpose the court cited the Guidelines, and whether the decision restrained or advanced any of the changes to merger analysis that the 2010 Guidelines introduced. In evaluating the decided cases since 2010, we are particularly interested in how courts have

⁶ Table 1 includes two cases that were decided by the Federal Trade Commission that did not receive appellate review: *Evanston Northwestern Healthcare* and *Otto Bock*. We list these cases for completeness but do not rely on them when discussing the impact of the Guidelines on the courts.

⁷ The win rate falls to 75% (15 of 20) if one includes the loss by the States in the T-Mobile/Sprint case. The win rate rises to 17 of 22 (77%) if one includes the FTC decision in *Otto Bock* and the arbitration decision in *Novelis/Aleris*.

⁸ Including cases in which the merging parties abandoned the transaction in the face of a challenge would, of course, raise the DOJ and FTC win rates. Again, our universe is *decided cases*.

Table 1 Decided Horizontal Merger Cases 2000–2020

Name	Agency	Complaint filed	Date resolved	Outcome	Notes
<i>Horizontal Merger Cases Brought January 2000 to August 2010</i>					
Heinz/Beech-Nut	FTC	Jul-00	Apr-01	Gov Win	Reversal by DC Circuit
SunGard Data Systems/Comdisco	DOJ	Oct-01	Nov-01	<i>Gov Loss</i>	
Chicago Bridge & Iron/Water Division Pitt-Des Moines	FTC	Oct-01	Jan-08	Gov Win	8th Circuit Affirmed
Libbey/Newell Rubbermaid	FTC	Jan-02	Oct-02	Gov Win	
UPM-Kymmene Oyj/Bemis MACtac	DOJ	Apr-03	Jul-03	Gov Win	
Oracle/Peoplesoft	DOJ	Feb-04	Sep-04	<i>Gov Loss</i>	
Evanston Northwestern/ENH Medical Group	FTC	Feb-04	Apr-08	Gov Win	FTC Decision
Arch Coal/Triton Coal Company	FTC	Apr-04	Jun-05	<i>Gov Loss</i>	
Equitable Resources/People's Natural Gas Company	FTC	Mar-07	Feb-08	Gov Win	
Western Refining/Giant Industries	FTC	Apr-07	May-07	<i>Gov Loss</i>	
Whole Foods/Wild Oats	FTC	Jun-07	Jul-08	Gov Win	Reversal by DC Circuit
Polypore International/Microporous Products	FTC	Sep-08	Jul-12	Gov Win	11th Circuit Affirmed
CCC Information Services/Mitchell International	FTC	Nov-08	Mar-09	Gov Win	
Lundbeck (Ovation Pharmaceuticals)	FTC	Dec-08	Oct-11	<i>Gov Loss</i>	8th Circuit Affirmed
<i>Horizontal Merger Cases Brought August 2010 to July 2020</i>					
Lab Corp/Westcliff Medical Laboratories	FTC	Dec-10	Feb-11	<i>Gov Loss</i>	
ProMedica/St. Luke's Hospital	FTC	Jan-11	Mar-12	Gov Win	
H&R Block/Tax Ac	DOJ	May-11	Oct-11	Gov Win	
OSF Healthcare System/Rockford Health System	FTC	Nov-11	Apr-12	Gov Win	
Bazaarvoice/PowerReviews	DOJ	Jan-13	Apr-14	Gov Win	
Saint Alphonsus: St. Luke's Health System/Saltzer Medical Group	FTC	Mar-13	Feb-15	Gov Win	9th Circuit Affirmed
Sysco/US Foods	FTC	Feb-15	Jun-15	Gov Win	
Steris/Synergy Health	FTC	May-15	Oct-15	<i>Gov Loss</i>	
Staples/Office Depot	FTC	Dec-15	May-16	Gov Win	
Penn State Hershey Medical Center/PinnacleHealth System	FTC	Dec-15	Oct-16	Gov Win	

Table 1 (continued)

Name	Agency	Complaint filed	Date resolved	Outcome	Notes
Advocate Health and Hospitals/NorthShore University System	FTC	Dec-15	Mar-17	Gov Win	
Anthem/Cigna	DOJ	Jul-16	Feb-17	Gov Win	DC Circuit Affirmed
Aetna/Humana	DOJ	Jul-16	Feb-17	Gov Win	
Energy Solutions/Waste Control Specialists	DOJ	Nov-16	Jun-17	Gov Win	
Sanford Health/Mid Dakota Clinic	FTC	Jun-17	Dec-17	Gov Win	8th Circuit Affirmed
Tronox/Cristal	FTC	Dec-17	May-19	Gov Win	
Otto Bock/Freedom Innovations	FTC	Dec-17	Nov-19	Gov Win	FTC Decision
Wilhelmsen Maritime Services/Drew Marine	FTC	Feb-18	Jul-18	Gov Win	
Evonik/PeroxyChem	FTC	Aug-19	Feb-20	<i>Gov Loss</i>	
Sabre/Farelogix	DOJ	Aug-19	Apr-20	<i>Gov Loss</i>	Vacated by 3rd Circuit (Moof)
Novelis/Aleris	DOJ	Sep-19	Mar-20	Gov Win Arbitration	Arbitration
T-Mobile/Sprint	STATES	Jun-19	Feb-20	<i>Gov Loss</i>	States, Not DOJ

Notes: One case was decided through arbitration: Novelis/Aleris. One case that was vacated as moot: Sabre/Farelogix. We include both of these cases in our discussion below. In two cases—Heinz/Beechnut and Whole Foods/Wild Oats—the DC Circuit reversed the District Court. In those cases, we rely on the DC Circuit decision, not the District Court decision. Because they were decided by the district courts before the 2010 Guideline revisions were published, we have placed Polypore and Lundbeck in the prey010 list of cases, despite the fact that they were resolved at the appellate level after 2010

treated the new substantive aspects of the 2010 Guidelines, as those are the changes that demand the most doctrinal evolution to become embedded in case precedent.

Naturally, since the case law evolves slowly, and since the HMGs are useful but certainly not binding on the courts, the impact of the 2010 HMGs—as with previous Guidelines—has been gradual and cumulative. Nonetheless, we find that the 2010 HMGs have already had a significant impact on the outcome of merger challenges and on the development of merger case law.

Our purpose in looking at cases respectively decided before and after 2010 is not to conduct an event study of how the 2010 Guidelines affected some set of variables that are derived from court decisions, but instead to provide a qualitative description of whether—and for what purpose—courts have cited or adopted the new features of the 2010 Guidelines. Reading the pre-2010 cases allows a better understanding of whether a court's approval or adoption of any novel aspect of the 2010 Guidelines had precedent in recent case law and, as such, might have resulted even absent the 2010 Guidelines. For example, a court citing with approval the identification of an innovation effect from a merger might cite to §6.4 of the 2010 HMGs for ease of reference, even though several merger decisions from courts and agencies emphasized innovation effects starting in the mid-1990s. An additional reason to read the pre-2010 cases is to identify the areas of greatest impact of the 2010 Guidelines. We therefore read those cases to see if we can identify any areas in which post-2010 decisions not only nudged the doctrine forward but departed notably from cases that were decided under the previous Guidelines.

3 Impact of the 2010 Guidelines on Judicial Decisions

The 2010 Guidelines differed from the 1992 Guidelines in several evolutionary respects. We say evolutionary because nothing in the 2010 revisions—in our view either now or at the time we participated in the drafting of those revisions—departed radically from the methods or principles through which the 1992 Guidelines had sought to prevent increases in market power through mergers and acquisitions. The 2010 Guidelines incorporated advances in understanding about how best to evaluate the competitive effects of a merger and placed increased emphasis on more direct measurement where possible—particularly with regard to unilateral effects. They also explicitly identified a broader range of potential harms—notably with regard to innovation and coordinated effects. In addition, the 2010 Guidelines updated the agencies' approach to: entry; efficiencies; buyer power (whether as a merger effect or as an offset to merger effects); and failing/flailing firm defenses. Our discussion of the judicial response to the 2010 Guidelines is organized according to these various substantive topics in the Guidelines.

Many of the changes found in the 2010 HMGs involve modifications to concepts and approaches that were already present in the 1992 Guidelines. In this category we put: (1) clarifications with regard to market definition and the proper implementation of the HMT; (2) the delineation of product and geographic markets around targeted customers, which are sometimes called “price discrimination markets;” (3) a greatly expanded treatment of unilateral effects, including upward pricing pressure

(UPP); (4) a broader conceptualization of coordinated effects; and (5) a more skeptical approach to claims that entry will discipline the merged firm, which shifted the emphasis from examining abstract, pro forma entry plans based on the notion of minimum viable scale to seeking evidence of successful entry—guided by a recognition that real-world entrants usually face many obstacles to success, not all of which are easy to discern.

Some changes in the 2010 HMGs involve the introduction of concepts not found in earlier versions of the Guidelines. However, none of these “new” concepts were truly novel: All of them had been developing in the economics and antitrust policy literature during the interval between 1992 and 2010, if not before. In this category we put: (1) a reduced emphasis on market definition and market concentration relative to more direct evidence of competitive effects; (2) explicit mention of bargaining and auctions as modes of competition; (3) explicit analysis of how mergers can harm customers by reducing innovation and product variety; (4) the addition of a section that covers mergers between competing buyers; and (5) the addition of a section that addresses partial acquisitions.

Before we turn to specific substantive issues, it is worth noting that, as a general matter, the courts consistently reference the HMGs and give them considerable respect. This was true prior to 2010 and has continued since then. Many judges note that the Guidelines are helpful and reflect economic learning and agency experience. No decision explicitly rejects any aspect of the Guidelines as flawed or inconsistent with the case law. To the contrary, the litigating parties often spar over the proper *interpretation* of the Guidelines in the case at hand. The court decisions also make clear that merging parties themselves approach their defenses through the lens of the Guidelines. We have found no case in which the merging parties have asked courts to depart from the basic substantive framework of the Guidelines, even as they vigorously contest the government’s application of the Guidelines to their particular merger.

3.1 The Role of Market Definition and Market Shares (HMGs §4 and §5)

Going back at least to the Supreme Court’s landmark 1963 decision in *Philadelphia National Bank*, market definition and market shares have been central to the evaluation of mergers under the Clayton Act. The typical route to victory for the government has been to define the relevant market and show that the merger significantly increases concentration in that market, which thus establishes a presumption that the merger is likely to harm competition in that market. The strength of this structural presumption has waned over time, but the agencies almost always follow this route when challenging mergers in court. Indeed, this route is so common that many practitioners seem to believe that defining a relevant market is a *necessary* part of the

plaintiff's case, although the Clayton Act itself is very expansive and contains no such requirement.⁹

The 1992 Guidelines, like their predecessors back to 1968, gave primacy to market definition and market concentration. Section 1—“Market Definition, Measurement and Concentration,”—begins: “A merger is unlikely to create or enhance market power or to facilitate its exercise unless it significantly increases concentration and results in a concentrated market, properly defined and measured. Mergers that either do not significantly increase concentration or do not result in a concentrated market ordinarily require no further analysis.”

The 2010 HMGs preserve the basic elements of market definition and market concentration, but give them less prominence in the overall analysis. Instead of beginning with market definition and market concentration, the 2010 HMGs reflect actual agency practice by first identifying various types of evidence of adverse competitive effects: actual effects observed in consummated mergers; direct comparisons that are based on experience; market shares and concentration in a relevant market; substantial head-to-head competition; and the disruptive role of a merging party.¹⁰ What a come-down for market definition and market concentration to be listed third out of five types of evidence of adverse competitive effects!¹¹

Adding insult to injury, Section 4 in the 2020 HMGs states: “The Agencies’ analysis need not start with market definition.” Experienced practitioners realized that this statement had been true at both agencies for many years prior to 2010; to the extent the 1992 HMGs suggested otherwise, they were badly out of date regarding actual agency practice. Lest there be any doubt, the 2010 HMGs go on to state. “The measurement of market shares and market concentration is not an end in itself, but is useful to the extent it illuminates the merger’s likely competitive effects.” At the same time, the 2010 HMGs very much preserve the structural presumption.

Some commentators in favor of vigorous merger enforcement feared that downplaying market definition and market shares would weaken merger enforcement by making it easier for merging parties to rebut the structural presumption. At the same time, commentators more accustomed to defending mergers feared that downplaying market definition and market shares would embolden the agencies to bring cases without the “rigor” or “discipline” of having to define a relevant market and demonstrate a substantial increase of concentration in that market.

Neither of these fears has been borne out over the intervening 10 years.

⁹ The statute prohibits acquisitions where “in any line of commerce or in any activity affecting commerce in any section of the country, the effect of such acquisition may be substantially to lessen competition, or to tend to create a monopoly.” The “in any line of commerce” and “in any section of the country” language is very inclusive and does not appear to have been written to impose a hurdle to the government’s success in challenging a merger based on an inability to identify the precise boundaries of the line of commerce or section of the country impacted by the merger.

¹⁰ 2010 Guidelines, §2.1.

¹¹ We note that if the 2010 Guidelines placed market definition in modest restraints, they definitely did not send it to the guillotine, which some have advocated. See, e.g. Kaplow, L. (2010). Why (ever) define markets. *Harvard Law Review*, 124(2), 437–517.

As to the first fear, we have not found evidence in the decided cases that the 2010 Guidelines caused any weakening of the structural presumption.¹² For example, in the *Bazaarvoice* case, a post-consummation enforcement action, the merging parties argued that market shares had little probative value, pointing out that the 2010 Guidelines emphasize the importance of other evidence for assessing competitive effects, but the District Court dismissed this argument. That judicial response is hardly surprising, given the black letter case law going back to *Philadelphia National Bank*. Indeed, in almost every case where the government establishes the structural presumption, the government wins.¹³

The bigger issue in practice is what the government must do to *establish* the structural presumption. We believe that the 2010 Guidelines have made it easier for the government to establish the presumption by making it more difficult for the merging parties to dispute the government's market definition based on technical factors that are associated with the implementation of the hypothetical monopolist test.

For example, under the 2010 HMGs, it is harder for the merging parties to argue that products should be included in the relevant market just because there is *some* substitution between those products and the products that are sold by the merging firms. More strongly, by integrating the analysis of market definition with the analysis of unilateral price effects, Section 4 of the 2010 HMGs explains that the hypothetical monopolist test often leads to narrow markets. Indeed, in cases where both the diversion ratios and the margins are moderate or large, there will typically be a relevant market consisting just of the products sold by the two merging parties. Likewise, the 2010 HMGs have made it easier for the government to define markets around targeted customers when the conditions necessary for price discrimination are met.

As to the second fear: the agencies have continued, without exception, to define relevant markets and measure market concentration when they challenge mergers in court. Section 4 in the 2010 HMGs anticipated this, stating: "In any merger enforcement action, the Agencies will normally identify one or more relevant markets in which the merger may substantially lessen competition." Even in cases where courts credited direct evidence of competitive effects and did not rely on structural inferences from market shares, the government nonetheless defined relevant markets.¹⁴ This continuity is hardly surprising, given the applicable case law.

¹² One of us has previously argued that the courts have unduly weakened the structural presumption over the past 30 years. See Hovenkamp, H. and Shapiro, C. (2019). Horizontal mergers, market structure, and burdens of proof," *Yale Law Journal*, 127(7), 1996–2025. But the 2010 Guidelines do not appear to have contributed to this longstanding trend. To the extent that they have made it harder for merging companies to rebut the structural presumption based on ease of entry, they have had the opposite effect.

¹³ The most notable case in recent years in which the structural presumption was rebutted is the *T-Mobile/Sprint* case. In that case, the defense overcame the structural presumption based on: (a) evidence that the acquired firm was declining in competitive significance; (b) evidence of merger efficiencies; and (c) a partial divestiture remedy.

¹⁴ See, e.g., *U.S. v. H&R Block*, 833 F.Supp.2d 36 (D.D.C. 2011); *FTC v. Sysco Corp.*, 113 F.Supp.3d 1 (D.D.C. 2015).

3.2 Defining Relevant Markets (HMGs §4)

The 2010 Guidelines state: “Evidence of competitive effects can inform market definition, just as market definition can be informative regarding competitive effects.”¹⁵ Together with Section 2, “Evidence of Adverse Competitive Effects,” this signals that the market definition exercise should not be performed in isolation from the evaluation of competitive effects. Importantly, the Guidelines make clear that it is the ultimate assessment of effects that is important, for which market definition is a means rather than an end in itself. Section 2.1 lists “market shares and concentration in a relevant market” as just one type of effects evidence, and not even the primary type. The Guidelines also state: “Relevant markets need not have precise metes and bounds.”¹⁶

The 2010 Guidelines emphasize that relevant markets defined using the HMT can be quite narrow. “Groups of products may satisfy the hypothetical monopolist test without including the full range of substitutes from which customers choose. The hypothetical monopolist test may identify a group of products as a relevant market even if customers would substitute significantly to products outside that group in response to a price increase.”¹⁷ The Courts routinely use the HMT, but they also typically invoke qualitative *Brown Shoe* factors when defining relevant product markets.¹⁸

The 2010 Guidelines further state that “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.”¹⁹ These statements anticipate an argument often made by merging firms: that the relevant market asserted by the agencies is too narrow, based on evidence that there is *some* competition between their products and a broader group of products. The 2010 Guidelines explain that the HMT includes *reasonable* substitutes for the products sold by the merging firms, not *all* substitutes. This language is intended to avoid “false negative” outcomes in merger reviews, where anti-competitive mergers are allowed to proceed because the court incorrectly rejects the government’s proposed relevant market as too narrow.

Our reading of the cases indicates that the 2010 Guidelines were successful in this respect. The *H&R Block* case is a leading example of how the 2010 Guidelines helped the court reject a defense argument that the relevant market should be broader than the DOJ’s proposed market. The DOJ asserted that the relevant market was digital do-it-yourself (“DDIY”) tax preparation products. The DOJ’s relevant

¹⁵ 2010 Guidelines, §4.

¹⁶ 2010 Guidelines, §4.

¹⁷ 2010 Guidelines, §4.1.

¹⁸ In *Brown Shoe* the district court said that in defining markets courts should “go to the facts in the case” and make determinations based on “practices in the industry, the characteristics and uses of the products, their interchangeability, price, quality and style.” *United States v. Brown Shoe*, 179 F. Supp. 721, 730 (E.D. Mo. 1959), *affid.* *Brown Shoe v. United States*, 370 U.S. 294 (1962). The Supreme Court in turn listed seven “practical indicia” of competitive interchangeability. 370 U.S. at 325.

¹⁹ 2010 Guidelines, §4.

market did not include tax-assisted or pen-and-paper preparation. The court agreed, notwithstanding the fact that tax-assisted and pen-and-paper preparation compete to some degree with DDIY tax preparation products. In reaching this conclusion, the court relied in part on the testimony of the DOJ's economic expert, Rick Warren-Boulton. Warren-Boulton employed the methods of critical loss analysis that are explained in Section 4.1.3 of the 2010 Guidelines, which corrected an erroneous method of critical loss analysis that had been used with some success by defense economists prior to 2010.²⁰

The *Anthem/Cigna* case further illustrates the impact of the 2010 Guidelines on market definition. The DOJ alleged a relevant product market for the sale of commercial health insurance to national accounts with 5000 employees or more. In assessing this candidate market, the District Court cites the caution from the 2010 Guidelines that "defining a market broadly to include relatively distant product or geographic substitutes can lead to misleading market shares." [p. 195].

The *Anthem/Cigna* case also illustrates the importance of defining markets around targeted customers. The 2010 Guidelines, in Section 3 and Section 4.1.1, emphasize that relevant markets can be defined around targeted customers. These are sometimes called "price discrimination markets." Defining markets around targeted customers was not a new concept, but the 2010 Guidelines gave it much more prominence by including Section 3: "Targeted Customer and Price Discrimination."

The Courts have accepted relevant markets defined around targeted customers in quite a few decided cases over the past 10 years, including: *Sysco*, *Staples*, and *Wilhelmsen*, as well as *Anthem/Cigna*. Defining markets around targeted customers also is critical to geographic market definition in cases where the geographic market is defined based on the location of customers. This concept was present in the 1992 Guidelines, but the 2010 Guidelines greatly expanded and clarified this method of defining the relevant geographic market. The courts have accepted this approach in a number of cases, including *T-Mobile/Sprint*.²¹

Two important topics related to market definition that are *not* mentioned in the 2010 Guidelines have arisen in decided cases since 2010. The first topic is "cluster markets." The *Staples/Office Depot* case provides a good illustration. In that case, the FTC defined the relevant market as the sale and distribution of consumable office supplies to large business customers. This category includes many diverse items, including pens, file folders, and binder clips. The defense objected to this relevant market, but the court agreed with the FTC, stating: "Although a pen is not a

²⁰ On this point, the 2010 Guidelines follow Farrell, J. & Shapiro, C. (2008). Improving critical loss. *Antitrust Source*, 7:3, available at <http://faculty.haas.berkeley.edu/shapiro/critical2008.pdf>.

²¹ One of the reasons that DOJ lost the *Oracle* case was a failure properly to define the relevant geographic market based on the location of customers rather than the location of suppliers. Section 1.22 of the 1992 Guidelines, "Geographic Market Definition in the Presence of Price Discrimination," confused the analysis by asking whether targeted buyers (those in the candidate geographic market) would "defeat the targeted price increase by substituting to more distant sellers in response to a price increase." Section 4.2.2 of the 2010 Guidelines explains that when the geographic market is defined around targeted customers, all suppliers selling into that geographic area are market participants, regardless of their location. "When the geographic market is defined based on customer locations, sales made to those customers are counted, regardless of the location of the supplier making those sales."

functional substitute for a paperclip, it is possible to cluster consumable office supplies into one market for analytical convenience. Defining the market as a cluster market is justified in this case because ‘market shares and competitive conditions are likely to be similar for the distribution of pens to large customers and the distribution of binder clips to large customers.’ Shapiro Report at 007.”²²

Cluster markets also arose in the *Wilhelmsen* case, where the court accepted the FTC’s relevant product market as the supply of marine water treatment (“MWT”) products and services to Global Fleet customers. This is a cluster market because the category of marine water treatment products includes a number of products that are sold together but not substitutes for each other. The court accepted the validity of defining a cluster market that “groups non-substitutable products that face similar competitive conditions.”²³ The next version of the HMGs could usefully address cluster markets and explain the conditions under which it is appropriate to group non-substitutable products into a cluster market.

The second topic of growing importance related to market definition not addressed in the 2010 Guidelines is the treatment of so-called “multi-sided markets.” The Supreme Court’s 2018 decision in the *American Express* case greatly elevated the issue of “multi-sided markets” in antitrust cases.²⁴ In that case, the District Court defined the relevant product market as the provision of credit card services to merchants. The Supreme Court ruled that the relevant market for credit card services must include the cardholder side as well as the merchant side. In practice, this meant that the plaintiff was required to show harm to cardholders and merchants—not just merchants—from American Express’s challenged anti-steering provisions. While Justice Thomas’s opinion is deeply flawed, for reasons well explained in Justice Breyer’s scathing dissent, this is now the law of the land—at least for “two-sided transaction platforms” such as credit card networks.

The *American Express* decision has already led to one incoherent decision in a merger case: *Sabre/Farelogix*. We do not yet know how the *American Express* decision will affect merger challenges in the many other industries that have at least some multi-sided aspects. Examples include: the newspaper, radio, and television industries (listeners/viewers and advertisers); Facebook and Google (users and advertisers); and Apple (users and applications developers). The next version of the HMGs could usefully address market definition in industries such as these with multi-sided elements.²⁵

²² *FTC v Staples*, 190 F. Supp. 3d 100, 117 (D.D.C 2016).

²³ *FTC v Wilhelmsen*, 341 F. Supp. 3d 27, 49 (D.D.C 2018).

²⁴ *Ohio vs. American Express Co.*, 585 U.S. ____ (2018); 138 S. Ct. 2274 (2018).

²⁵ Footnote 4 in the 2010 Guidelines anticipates this issue by indicating that the HMT may best be implemented by considering “the concept of a hypothetical profit-maximizing cartel comprised of the firms (with all their products) that sell the products in the candidate market” rather than the concept of a hypothetical monopolist stripped of ownership of any products outside the candidate relevant market. Revised HMGs could address when to apply the concept of a hypothetical cartel and how best to measure market shares in the resulting relevant market.

Table 2 HHI levels before and after the 2010 guidelines

	Average Pre-Merger HHI	Average Increase in HHI	Average Post-Merger HHI
2000 to 2010	4548	1987	6535
2010 to 2020	3877	1938	5805

3.3 HHI Thresholds (HMGs §5)

The 2010 HMGs raised the HHI thresholds that would trigger a presumption of harm to competition. This change was explained on the basis of transparency: more accurately describing actual Agency practice and, in so doing, restoring the published thresholds as meaningful guidance to potential merging parties.

Based on litigated cases and their outcomes, we are unable to detect any change in merger enforcement associated with this additional transparency. In the decade before the 2010 revisions, we find only two cases in which the agencies challenged mergers based on HHIs below the level of 2500 to which the 2010 Guidelines increased the screen for “highly concentrated” markets. In both of those cases—*Arch Coal* and *Foster* (Western Refining/Giant Industries)—the FTC alleged post-merger HHIs that were above the then-operative screen of 1800 for highly concentrated markets, albeit with small changes from pre-merger levels. In each case the FTC lost its motion to enjoin the transaction because the district court rejected key aspects of the agency’s market definition. Importantly, despite the upward revision of the HHI thresholds in the 2010 Guidelines we find no increase in the HHIs in litigated mergers between the 2000–2010 time period and the 2010–2020 time period—in fact, there was a modest decrease.²⁶ See Table 2.

During the 10-year periods on either side of the 2010 revisions, the agencies have rarely brought cases that are close to the Guidelines levels. Where they have brought such cases—as in *Arch*, *Foster*, and more recently in the states’ challenge to the T-Mobile/Sprint merger—the courts have rejected the challenges, not because the alleged HHIs were not high enough to earn a structural presumption (indeed the courts in *Foster* and *T-Mobile/Sprint* expressly found the presumption to apply), but because the courts accepted proffered defenses and found the agencies’ further proof of competitive effects to be insufficient.

As always, litigated cases are only part of the picture: the FTC and DOJ issue “second requests” for additional information and subsequently settle cases far more often than they challenge them in court. Many of those investigations likely involve lower concentration levels, which might explain why the agencies either settle or

²⁶ The calculation of average HHIs can lead to varying results because multiple parties often offer multiple HHI calculations. For consistency, we have adopted the HHI levels that were alleged by the agency and, where the agency has offered alternative measures, we have chosen the highest of those measures. Where the agency has alleged HHIs in multiple product markets we have used them all. Where the agency has alleged multiple geographic markets, we have used the national market measure for simplicity and to avoid distortions from particular geographic areas (e.g., in health insurance markets where there are many local markets at issue).

abandon many investigations. Systematic data on the HHI levels at issue in second requests are unavailable, and the selective data that might come from settlements released for public comment would likely provide a very incomplete picture of the concentration levels in mergers the agencies investigated did not litigate.

While we bear in mind that “[t]he Agencies evaluate market shares and concentration in conjunction with other reasonably available and reliable evidence for the ultimate purpose of determining whether a merger may substantially lessen competition,”²⁷ a more nuanced analysis of non-litigated cases might shed light on whether the 2010 Guidelines’ adjustments to the HHI thresholds have had more subtle effects on merger reviews or challenges.

3.4 Unilateral Price Effects (HMGs §6.1 and §6.2)

The 2010 Guidelines did not start from a clean slate with respect to unilateral effects. The 1992 Guidelines addressed unilateral effects in §2.2, noting that in differentiated product markets a merger of close competitors could enable the combined firm to capture sales that either party would have lost to the other had it raised prices in the pre-merger market. The 1992 Guidelines suggested that the agencies could rely on data that show at least a 35% combined market share, evidence “that a significant share of purchasers of one merging firm’s product regard the other as their second choice,” and a low likelihood of product repositioning by other competitors to show that the merger would have adverse unilateral effects. How strong that presumption is, or what qualified as a “significant share” of consumers was left open for determination.

In the DOJ’s challenge to Oracle’s acquisition of PeopleSoft—the one case seriously to address unilateral effects before the 2010 Guidelines—the district court answered both of those open questions in a way that made it very difficult for the government to prevail on a unilateral effects theory. The court characterized the factors identified in the 1992 Guidelines as “a helpful start” but “not sufficient to describe a unilateral effects claim.”²⁸ The court went on to explain the difficulties of determining when the break in the continuum of differentiated products is sufficiently great to lead to increased pricing power for the merging parties. To show such likelihood of price increases, the court found that “a plaintiff must demonstrate that the merging parties would enjoy a post-merger monopoly or dominant position, at least in a ‘localized competition’ space.”²⁹ The court concluded that, because the importance of non-price factors in product differentiation made market definition particularly difficult, “a strong presumption of anticompetitive effects based on market concentration is especially problematic in a differentiated products unilateral effects context.”³⁰ The *Oracle* court therefore raised the bar on unilateral effects claims by requiring a high “localized” market share for the merging parties while

²⁷ 2010 Guidelines, §5.

²⁸ *United States v. Oracle*, 331 F. Supp. 2d 1098, 1117 (N. D. Cal. 2004).

²⁹ *United States v. Oracle* at 1117.

³⁰ *United States v. Oracle* at 1122.

weakening the presumption of harm from market concentration. The court rejected the DOJ's unilateral effects claim for failing sufficiently to prove such a distinct, localized market and, without a structural presumption to rely on, for failing to prove "actual competitive effects" from the merger.³¹

The 2010 Guidelines gave unilateral effects much more prominent and detailed treatment than did the 1992 Guidelines. It is not by accident that the 2010 Guidelines flipped the order of the 1992 Guidelines and discussed unilateral effects in §6 before addressing coordinated effects in §7. In brief, the 2010 Guidelines added to the 1992 Guidelines' discussion of unilateral effects in several important ways.

First, it discusses different types of unilateral effects, notably: effects that arise in differentiated product markets (§6.1); effects when buyers and sellers interact through negotiation or through auctions (§6.2); effects that are related to reductions in output or capacity (§6.3); and effects that are related to diminished innovation or product variety (§6.4). Second, §6.1 establishes that the agencies will consider a broad range of evidence in assessing unilateral effects, similar to the evidence used in the familiar hypothetical monopolist test. Third, the 2010 Guidelines build on our better understanding of the economics of unilateral effects to clarify that unless pre-merger margins are low, unilateral effects do not require that a majority of customers view the merging parties as each other's next-best alternative. Section 6.1 clarifies that "[a] merger may produce significant unilateral effects for a given product even though many more sales are diverted to products sold by non-merging firms than to products previously sold by the merger partner." Last, §6.1 explains that in a differentiated products unilateral effects case, the assessment of upward pricing pressure through diversion analysis does not depend on defining a relevant market or calculating market concentration.

The focus on unilateral effects in the 2010 Guidelines is reflected in cases that the agencies brought to challenge mergers from 2010 forward. Several key cases involved unilateral effects claims, and the agencies were generally successful in those claims. The relevant court decisions referred to §6 of the 2010 Guidelines: sometimes implicitly and other times expressly accepting specific elements of that section, and in at least one case relying on the Guidelines to reject the analysis that the court used in *Oracle*.

There are two notable features of the court decisions involving unilateral effects that followed the 2010 Guidelines: the *prevalence* of unilateral effects theories, and the *acceptance* of unilateral effects theories. With regard to prevalence, of the 21 decided cases that we examined that came after the 2010 Guidelines revisions, at least 10 expressly addressed unilateral effects claims.³³ In addition, the DOJ's theory of harm in its arbitrated case that involved Novelis' acquisition of Aleris was essentially a unilateral effects theory based on the two firms' proximity as competitors in the market for rolled aluminum for automotive applications.³² While in one of these cases—*H&R Block*—the court said it could have upheld the DOJ's challenge

³¹ *United States v. Oracle* at 1165.

³² Arbitration decision, *U.S. v. Novelis Inc. and Aleris Corp.*, March 9, 2020. Retrieved from: <https://www.justice.gov/atr/case-document/file/1257031/download>.

based on coordinated effects alone, the rest of the cases rested substantially if not wholly on unilateral effects theories. We note that the balance of the cases did not reject such theories, but either did not expressly distinguish the kind of harm to competition at issue (as in the FTC's unsuccessful potential competition theory in *Steris*) or never reached the theory of harm because the case failed on market definition (as in *Labcorp*). More important, in several of those cases the courts expressly accepted the government's arguments with decisions that implicitly or—in at least one case expressly—rejected the reasoning of *Oracle*.

The increased use of unilateral effects theories by the agencies after 2010 is likely the product of several factors. First, the increased use of unilateral effects theories after 2010 continued a trend that started with the release of the 1992 HMGs. Second, antitrust enforcers have come to understand better that unilateral effects are inherent in horizontal mergers and are governed primarily by diversion ratios and margins, which involve well-defined lines of investigation. Third, over the past 25 years, the economics literature has paid far greater attention to analyzing unilateral effects than to coordinated effects, which has led to much improved tools. The fourth factor, building on these improvements, is the more detailed explanation of unilateral effects and how to analyze them that is contained in the 2010 Guidelines.

All of these changes mark an important shift from the previous, long-held view that “[w]hen an economic approach is taken in a Section 7 case, the ultimate issue is whether the challenged acquisition is likely to facilitate collusion.”³³ Together, these four factors have increased judicial receptivity to unilateral effects theories, a receptivity that has emerged since the 2010 revisions.

Perhaps the clearest example of such judicial acceptance of unilateral effects came in the DOJ's 2011 challenge to H&R Block's acquisition of Tax Act. In its decision that ruled for the DOJ and blocked the merger, the district court made a marked departure from *Oracle* in addressing the government's unilateral effects claim under Section 6 of the 2010 Guidelines. It bears noting that the court stated that evidence of coordinated effects alone was sufficient to enjoin the transaction but that the court wanted to address unilateral effects because “there has been substantial argument on this topic.” (p. 81) Drawing on the 2010 Guidelines and commentary from academics and others, the court made several findings that opened the door to unilateral effects claims that *Oracle* had largely closed:

First, the court rejected the defendants' argument that such effects were unlikely because the two merging parties were not each other's closest competitor. The court found that “[t]he fact that Intuit may be the closest competitor for both HRB and TaxAct also does not prevent a finding of unilateral effects for this merger.” (p. 83).

Next, the court made clear that market shares were not essential to the proof of unilateral effects. This finding was important because the *Oracle* court had viewed the “especially problematic” nature of drawing inferences about competitive effects from concentration levels in differentiated product markets as a reason to require plaintiffs to prove a particularly high localized market share. The court in *H&R Block* drew exactly the opposite conclusion, and viewed the challenges of making

³³ *Hospital Corp. of America v. FTC*, 807 F. 2d 1381, 1386 (7th Cir. 1986).

such inferences as a reason to make market share evidence less relevant, and therefore *less* of a burden on plaintiffs. The court did not dispense with the government's obligation to delineate a relevant market (see fn. 35 of the opinion).

However, drawing on Section 4 of the 2010 Guidelines as well as scholarly commentary, the court did note the reduced relevance of market definition and market shares for proving unilateral effects. The court specifically noted the proposition in the 2010 Guidelines that the agencies' analysis of competitive effects need not start with market definition and could use analytical tools that "do not rely on market definition." (p. 84). The court therefore "decline[d] the defendant's invitation in reliance on *Oracle* to impose a market share threshold for proving a unilateral effects claim." (p. 85).

Subsequent federal district court decisions built on *H&R Block* to further evolve the judicial acceptance of unilateral effects theories of harm. In 2015, for example, the court in *FTC v. Sysco*³⁶ credited the FTC expert's switching analysis to uphold the agency's claim that the merger of Sysco and US Foods would likely lead to price increases in both national and local markets for "broadline" food distribution services. The FTC's economic expert (Mark Israel) reconstructed bid data to show that the merging parties were each other's closest competitor for national accounts. Given that the parties were the first and second largest players in that national market, combined with the bid data showing Sysco and US Foods to be each other's closest rivals, it is not surprising that the court upheld the unilateral effects claim in that context.

More significant was the court's finding that the FTC had met its burden of showing unilateral effects in local distribution markets. The evidence of the parties' relative positions was less clear in those local markets. The court noted that there was testimony that cast doubt on how closely US Foods and Sysco competed for local accounts but nonetheless found it sufficient that the merger would eliminate "one of the closest competitors in local markets," citing both to the 2010 Guidelines and to *H&R Block*. (p. 70). In this regard the *Sysco* decision reinforced two important points from *H&R Block*: first, that merging parties need not be each other's closest competitors for their merger to have unilateral effects; and second, that there was no burden on plaintiffs to show particularly high market shares in a relevant market in order to prove unilateral effects.

Another important aspect of *Sysco* is the evidence that the court credited to prove unilateral effects. As in *H&R Block*, the court did not ignore market definition and in fact separated the case into respective analyses of national and local markets for broadline distribution. However, in evaluating competitive effects in each of those relevant markets the court focused not on market shares and inferences from concentration levels but instead on direct evidence from switching data, business documents, and witness testimony. In this way the decision emphasizes the departure from *Oracle* that began with *H&R Block* and advances the objectives of the 2010 Guidelines.

Four additional cases that came after *Sysco* also advanced the judicial acceptance and understanding of unilateral effects analysis. First, in *FTC v. Staples Inc.*, the court cited Section 6 of the 2010 Guidelines for the basic proposition, which underlies all unilateral effects analysis, that "mergers that eliminate head-to-head

competition between close competitors often result in a lessening of competition.”³⁷ As in *Sysco*, the court credited bidding data that showed that the merging parties were frequent, direct competitors. Second, in *U.S. v. Anthem*, the court not only reinforced the precedent that began with *H&R Block*, but also accepted the analytical approach, outlined in Section 6.1 of the 2010 Guidelines, of using the value of diverted sales between the merging parties to assess the likelihood of post-merger upward pricing pressure (UPP).³⁴ The court engaged in a serious discussion of DOJ expert David Dranove’s diversion and UPP analysis, as well as the critiques of that analysis made by the merging parties’ expert economists: Mark Israel and Robert Willig. Although the court did not rely entirely on Dranove’s analysis to uphold the government’s challenge—the court also relied on business documents from the parties that were consistent with the DOJ’s unilateral effects arguments—it is notable that the court never took issue with the mode of economic analysis that both sides of the case deployed. *Anthem* therefore marks the incorporation of competitive effects through diversion analysis into the case law and the judicial treatment of unilateral effects.

Third, a different judge on the same U.S. district court accepted diversion analysis to prove unilateral effects in *U.S. v. Aetna*. Again, the court engaged seriously with the analysis that was presented by DOJ expert Aviv Nevo and the counter-analysis that was presented by the parties’ expert Jonathan Orszag. Importantly, the court rejected the contention that for a diversion analysis to be persuasive evidence of the relevant market in which to assess unilateral effects, it must calculate a diversion ratio for every product that is potentially in the relevant market.³⁵

In particular, the court found that where the totality of the evidence—including qualitative evidence—points to a relevant set of competitors, the government’s diversion analysis did not need to go beyond that set of competitors to be accepted by the court. The *Aetna* court thereby further embedded the recognition of unilateral effects and acceptance of the 2010 Guidelines’ approach to those effects in the case law. While this precedent falls within one federal judicial district, that for the District of Columbia, and while *Oracle* remains on the books in the Northern District of California, the post-2010 decisions of the district court in Washington D.C. are particularly important because the federal agencies can, and very often do, file complaints there to enjoin mergers and need not resort to courts that have a less hospitable precedent.

Fourth, in the *Wilhelmsen* case, the FTC’s economic expert Aviv Nevo quantified anti-competitive effects based on gross upward pricing pressure and based on merger simulation. The court accepted this analysis—with its emphasis on diversion ratios and margins—despite some concerns about data limitations, and wrote: “Thus, the court concludes that Dr. Nevo’s GUPPI analysis and merger simulation model strengthen the FTC’s prima facie case that the proposed merger will substantially lessen competition in the relevant antitrust market.”⁴⁰

³⁴ 236 F. Supp. 3d 171 (D. D. C. 2017), p. 212.

³⁵ 240 F. Supp. 3d 1 (D.D.C. 2017), p. 39.

3.5 Innovation and Product Variety (HMG §6.4)

The antitrust agencies and courts have for several decades invoked a merger's effects on innovation as a relevant consideration in assessing whether a merger will reduce competition.³⁶ The extent to which innovation effects could supply a free-standing (that is, free of more traditional price and output concerns) basis for challenging a deal was unclear. Up through the 1990s, a careful reading of the caselaw suggested that innovation was increasingly invoked but never the primary basis for enforcement decisions.³⁷ During the 2000s, the agencies began to regard innovation as the primary issue in their reviews of certain transactions.³⁸ Especially in markets where an incumbent firm was buying an innovator directly within its core line of business, the FTC in particular began to focus on the incentives to bring the innovator's product to market and on the impact on the pace of subsequent generations of innovation. In 2009, the FTC challenged the acquisition by Thoratec—an incumbent producer of left ventricular assist devices (“LVADs”) for the U.S. market—of HeartWare: an emerging rival with an innovative new LVAD in clinical trials. The FTC found the transaction was likely to slow innovation that would benefit patients who needed the devices while awaiting heart transplants. The FTC based its complaint entirely on the fact that the merged entity would have less incentive than the standalone target company to bring the new device to market rapidly and to continue innovating thereafter.³⁹

Section 6.4 of the 2010 Guidelines was designed to capture the reasoning behind innovation-based challenges such as *Thoratec/HeartWare* and to set innovation on firmer footing as an independent consideration in merger reviews where applicable.⁴⁰ Specifically, Section 6.4 places innovation effects in the framework of unilateral effects, examining whether the elimination of head-to-head competition between the specific merging parties is likely to “diminish innovation competition

³⁶ See, e.g., Katz, M. L. & Shelanski, H. A. (2007). Mergers and innovation. *Antitrust Law Journal*, 74(1), 1–85 (2007) (surveying cases). Courts have also over the decades occasionally raised innovation concerns in non-merger cases. *United States v. Aluminum Co. of Amer.*, 148 F.2d 416, 427 (2d Cir. 1945) recognized the effects of market power on innovation, although innovation concerns did not play a significant role in the decision. Innovation played a more central role in *United States v. Automobile Manufacturers Ass'n*, 307 F. Supp. 617, 618 (C.D. Cal. 1969), in which the court found the leading American automobile manufacturers had conspired “to eliminate competition in the research, development, manufacture and installation of motor vehicle air pollution control equipment ... in violation of Section 1 of the Sherman Act” (aff'd in part and appeal dismissed in part, 397 U.S. 248).

³⁷ Gilbert, R. & Tom, W. (2001). Is innovation king at the antitrust agencies? The intellectual property guidelines five years later. *Antitrust Law Journal*, 69(1), 43–86.

³⁸ See, e.g. Genzyme Corp./Novazyme Pharm., Inc., No. 021–0026, at 6 (FTC Jan. 13, 2004) (Statement of Chairman Timothy J. Muris). Retrieved from: <http://www.ftc.gov/os/2004/01/murisgenzymestmt.pdf>; Complaint, Thoratec Corp. & HeartWare Int'l, Inc., No. 9339 (FTC July 28, 2009). Retrieved from: <http://www.ftc.gov/os/adjpro/d9339/090730thorateadminccmpt.pdf>.

³⁹ <https://www.ftc.gov/sites/default/files/documents/cases/2009/07/090730thorateadminccmpt.pdf>.

⁴⁰ The ideas behind Section 6.4 are developed in much greater depth in Shapiro, C. (2012). Competition and innovation: did Arrow hit the bull's eye. In Lerner, J. & Stern, S. (Eds.), *The Rate & Direction of Inventive Activity Revisited* (361–404). National Bureau of Economic Research, University of Chicago Press.

by encouraging the merged firm to curtail its innovative efforts below the level that would prevail in the absence of the merger. That curtailment of innovation could take the form of reduced incentive to continue with an existing product-development effort or reduced incentive to initiate development of new products.”

To assess whether such effects might exist, Section 6.4 draws on exactly the kind of analysis that the FTC used in *Thoratec*: “[t]he Agencies evaluate the extent to which successful innovation by one merging firm is likely to take sales from the other, and the extent to which post-merger incentives for future innovation will be lower than those that would prevail in the absence of the merger.” In this regard Section 6.4 sets forth a framework for a “downward innovation pressure” (or “DIP”) analysis that is directly analogous to an “upward pricing pressure” (or “UPP”) analysis.⁴¹

Several cases that came after the 2010 Guidelines revision refer to Section 6.4 and address innovation considerations. However, it remains hard to determine the extent to which Section 6.4 has caused a difference in *decided* cases since 2010 from those that discussed innovation in the decade before. For example, in *H&R Block*, the district court does mention the importance of innovation as a dimension of competition and specifically noted TaxACT’s “impressive history of innovation.”⁴² But the court did not develop the point and immediately pivoted to connecting innovation to price competition and TaxACT’s potential role as a maverick in the relevant market.⁴³ The decision does not consider innovation any differently than many cases that came before: as a factor but not the central one in the court’s analysis.

A much stronger articulation of innovation considerations—and one that is more specifically tied to Section 6.4, appears in the district court’s decision in *Anthem*. One of the core findings of that decision was that the merger would reduce innovation: a critical dimension on which health insurers compete for national accounts.⁴⁴ More specifically, the court found that because Cigna’s provider discounts were not as strong as those that other carriers offered, “Cigna has relied upon innovation, directing its focus on ways to improve member health and employer cost outcomes.”⁴⁵ The court found that Cigna’s innovation in turn spurred its rivals to the same. Notably, the court cited evidence that Anthem directly responded to Cigna’s innovations and was more willing to engage in collaborative models with providers as Cigna offered such innovative models to providers.⁴⁶ The court therefore found that the transaction would lead to the Section 6.4 scenario in which post-merger innovation would be below the level that would occur absent the merger. In affirming the district court’s decision, the U.S. Court of Appeals for the D.C. Circuit found

⁴¹ See Section 8, Innovation Competition, in Farrell, J. & Shapiro, C (2010). Antitrust evaluation of horizontal mergers: an economic alternative to market definition. B.E. Journal of Theoretical Economics, 10:1. Article 9. Retrieved November 20, 2020 from <https://faculty.haas.berkeley.edu/shapiro/alternative.pdf>.

⁴² 833 F. Supp. 2d at 79.

⁴³ Id.

⁴⁴ 236 F. Supp. 3d at 229–230.

⁴⁵ Id at 230.

⁴⁶ Id at 230–231.

that “Cigna is a leading innovator in collaborative patient care. That threat to innovation is anticompetitive in its own right.” The D.C. Circuit thus accepted the premise of Section 6.4 that reduction in innovation in itself could constitute a cognizable harm to competition that is the basis for enforcement.⁴⁷

Other cases that addressed innovation effects have emphasized a different aspect of Section 6.4: “[t]he Agencies also consider whether the merger is likely to enable innovation that would not otherwise take place, by bringing together complementary capabilities that cannot be otherwise combined or for some other merger-specific reason.” If downward pressure on innovation can be a basis for challenging a merger, the potential for an upward shift in innovation can be a basis for allowing a deal to proceed.

In two cases where the government plaintiffs alleged harm to innovation, the district court rejected the allegation and instead credited the defendants’ arguments that the merger would instead enable innovation that otherwise could not occur: In a since-vacated decision in *Sabre/Farelogix*, the district court rejected the DOJ’s contention that the merger should be blocked because Farelogix was “an innovative disruptor in the market for ‘booking services’”: a market in which Sabre and the other two leading global players had allegedly long tried to stifle innovation.⁴⁸ The court began by citing *Anthem* (in turn citing Guidelines Section 6.4) for the proposition that a merger harms competition if it reduces innovation. The court then, however, rejected the DOJ’s claims that in this case the acquisition would eliminate an innovator, even while acknowledging Farelogix’s disruptive innovations of the past. The court downplayed the importance of Farelogix on grounds that no party had provided evidence of more recent innovations by Farelogix. The court then described contrary record evidence and appeared simply to accept at face value testimony from Sabre’s Chief Technology Officer that the merger would enable greater innovation in the future.⁴⁹

The district court in *T-Mobile/Sprint* similarly rejected concerns about harm to innovation and instead found that the increased scale and strength of the merged entity would more likely produce innovation—especially in the light of Sprint’s financial and operational weakness.⁵⁰

While *Sabre/Farelogix* and *T-Mobile/Sprint* did not find harm to innovation, both cases nonetheless made innovation a central issue to be determined, and thereby recognized it as an issue in its own right for the assessment of a merger’s legality. In this regard, those cases add to the others that were discussed above in incorporating the 2010 Guidelines approach to innovation incrementally into the case law.⁵¹

⁴⁷ *U.S. et al. v. Anthem et al.*, 855 F. 3d 345, (D.C. Cir. 2016).

⁴⁸ *U.S. v. Sabre et al.*, Case 1:19-cv-01548-LPS at 1 (D. Del 2020), *vacated* [citation for July 2020 CA3 order vacating the district court judgment].

⁴⁹ *Id.* at 90–91.

⁵⁰ Cite to p.47 of WL version of decision.

⁵¹ For an informative discussion of how innovation effects are handled in merger analysis, see chapter 7 of Gilbert, R.J. (2020), *Innovation matters: competition policy for the high-technology economy*, Cambridge Mass.: MIT Press.

Looking forward, we expect there to be more cases in which innovation plays a central role in the evaluation of a merger's economic effects.⁵²

3.6 Coordinated Effects (HMGs §7)

Section 2.1 of the 1992 Guidelines placed specific requirements on the government relating to coordinated effects: “Successful coordinated interaction entails reaching terms of coordination that are profitable to the firms involved and an ability to detect and punish deviations that would undermine the coordinated interaction.” They further state that “the Agency will examine the extent to which post-merger market conditions are conducive to reaching terms of coordination, detecting deviations from those terms, and punishing such deviations.”

The 2010 Guidelines broaden the concept of coordinated interaction so it does not require that the firms agree on how they will coordinate and enforce that agreement by punishing deviations from the agreed-upon terms. More specifically, Section 7 of the 2010 Guidelines explains that coordinated interaction can involve “parallel accommodating conduct” as well as explicit and tacit collusion. Section 7 states: “Parallel accommodating conduct includes situations in which each rival’s response to competitive moves made by others is individually rational, and not motivated by retaliation or deterrence nor intended to sustain an agreed-upon market outcome, but nevertheless emboldens price increases and weakens competitive incentives to reduce prices or offer customers better terms.” For example, parallel accommodating conduct can arise if one firm acts as the leader and initiates price changes, and the other firms follow. This mode of behavior can occur in the absence of any prior agreement and in the absence of any punishments for deviation from the leader/follower pattern. In this regard, the 2010 HMGs broaden the economic inquiry in a Section 7 analysis of coordinated effects beyond the narrower focus on collusion that had accumulated in earlier case law—in part based on earlier HMGs.⁵³

The introduction of parallel accommodating conduct into the Guidelines was intended to broaden the ways that the government could establish coordinated effects, which would make merger enforcement more consistent with how economists understand oligopolists to interact. We have not found examples of the courts’ explicitly embracing “parallel accommodating conduct.” However, there are cases where the courts have accepted the danger of post-merger coordinated interaction without requiring the government to specify the terms on which that coordination will take place. For example, in the *H&R Block* case, the court states: “In this case, the government contends that coordination would likely take the form of mutual recognition that neither firm has an interest in an overall ‘race to free’ in which

⁵² For a recent explanation of how this analysis can proceed – looking at recent merger investigations and classifying a variety of innovation effects – see Federico, G., Scott Morton, F. & Shapiro, C. (2019). Antitrust and innovation: welcoming and protecting disruption, in Lerner, J. & Stern, S. (Eds.), *Innovation Policy and the Economy* (125–190). National Bureau of Economic Research, University of Chicago Press.

⁵³ See, e.g. footnote 38 above and the associated quote from Judge Posner’s decision in *Hospital Corp.*

high-quality tax preparation software is provided for free or very low prices.”⁵⁴ The court found this theory convincing—based in part on “a highly persuasive historical act of coordination between HRB and Intuit that supports this theory.”⁵⁵

Notably, in the H&R Block case, the court was asking whether the merging parties had presented sufficient evidence to *rebut* the structural presumption that anticompetitive coordinated effects would result from the merger. In contrast, in *T-Mobile/Sprint*, the court found that the defense had rebutted the structural presumption by other means, so the burden was again on the plaintiff to show that anti-competitive coordination would increase the likelihood of anti-competitive effects. In that context, while the court did not reject the notion of parallel accommodating conduct, it found that the relevant market was “not particularly vulnerable to coordination.”⁵⁶

Overall, we do not find that the introduction of parallel accommodating conduct into the 2010 Guidelines has had a significant effect on the case law so far.⁶² In part this reflects the fact that the case law has been rooted in coordinated effects for decades—often framed in terms of whether the merger will increase the risk of explicit or tacit collusion. In part, however, this also reflects the fact that economists have done far less over the past 25 years to develop methods of quantifying coordinated effects than they have done to develop methods quantifying unilateral effects.

3.7 Powerful Buyers (HMGs §8)

Merging firms often argue that they will not be able to raise prices, despite the elimination of competition between the merging firms, because they sell to “powerful buyers” that will discipline such price increases. The agencies have long been skeptical of such arguments. The 1992 Guidelines explained that large buyers may be able to disrupt coordination but were silent on the issue of powerful buyers in the context of unilateral effects.

Section 8 in the 2010 Guidelines, “Powerful Buyers,” begins by noting: “Powerful buyers often are able to negotiate favorable terms with their suppliers. Such terms may reflect the lower costs of serving these buyers, but they also can reflect price discrimination in their favor.”

Section 8 in the 2010 Guidelines focuses attention not on whether powerful buyers have been able to obtain lower prices than other buyers historically, but on how the merger will affect these buyers. They note that powerful buyers may be able to protect themselves by threatening to integrate vertically upstream, and that powerful buyers may be able to disrupt coordinated effects. But many cases involve unilateral

⁵⁴ *U.S. v. H&R Block*, p. 77.

⁵⁵ *U.S. v. H&R Block*, p. 78.

⁵⁶ *State of New York, et. al v. Deutsche Telekom AG et. al.*, par. 41. Retrieved November 21, 2020 from <https://www.courtlistener.com/recap/gov.uscourts.nysd.517350/gov.uscourts.nysd.517350.409.0.pdf>. The Court was convinced by the testimony of the T-Mobile executives that they would continue to compete aggressively after the merger – notwithstanding their much larger market share and the much more concentrated market that would result from the merger. “The Court finds that the fact of aggressive competition over the past decade is not so easily reversed.” Par 42.

effects in industries where buyers are unable to integrate vertically upstream. In that context, the 2010 HMGs express skepticism about the powerful buyer defense. The key passage states:

“However, the Agencies do not presume that the presence of powerful buyers alone forestalls adverse competitive effects flowing from the merger. Even buyers that can negotiate favorable terms may be harmed by an increase in market power. The Agencies examine the choices available to powerful buyers and how those choices likely would change due to the merger. Normally, a merger that eliminates a supplier whose presence contributed significantly to a buyer’s negotiating leverage will harm that buyer.”

The 2010 Guidelines go on to state: “Furthermore, even if some powerful buyers could protect themselves, the Agencies also consider whether market power can be exercised against other buyers.”

In *Sanford Health*, the defense argued that the presence of a powerful buyer—Blue Cross Blue Shield of North Dakota—would preclude any anti-competitive effects that might otherwise result from the merger. The court roundly rejected that argument, relying on and citing the above passage from Section 8 of the 2010 Guidelines.⁵⁷

3.8 Entry (HMGs §9)

The 1982 Guidelines stated in Section III.B: “If entry into a market is so easy that existing competitors could not succeed in raising price for any significant period of time, the Department is unlikely to challenge mergers in that market.” To operationalize this inquiry, the 1982 Guidelines explain that “the Department will hypothesize a price increase of five percent and ask, how much new entry would be likely to occur within two years.”

The 1992 Guidelines developed these ideas further, stating (Section 0.2) that “the Agency assesses whether entry would be timely, likely and sufficient either to deter or to counteract the competitive effects of concern.” This “timely, likely and sufficient” language proved to be very influential, as it was embraced by the courts.

However, much of the “Entry Analysis” in Section 3 of the 1992 Guidelines, which was designed to evaluate whether entry would be profitable, did not prove workable in practice. The problem with that analysis is that it was done very explicitly “without attempting to identify who might be potential entrants.” This “pro forma” mode of entry analysis—with its focus on an abstract notion of a generic “minimum viable scale” —did not prove to be reliable. In reality, each potential entrant would have its own strategy and its own set of capabilities, as is well understood in the literature on competitive strategy.

⁵⁷ *FTC v. Sanford Health*, Conclusions of Law, par. 37. Retrieved November 21, 2020 from <https://law.justia.com/cases/federal/appellate-courts/ca8/17-3783/17-3783-2019-06-13.html>.

The 1992 Guidelines might therefore be either under-inclusive or over-inclusive of potential entrants depending on the specific marketplace and the specific potential entrants that exist. Furthermore, in the real world there often are numerous obstacles to entry, above and beyond the need to make (sunk) investments that will be lost if the entry effort winds up being unsuccessful.

The 2010 Guidelines therefore simplified the analysis of entry by focusing attention on evidence of actual, recent entry and on the identification of particular firms that would be likely to enter in response to an anti-competitive post-merger price increase. “The Agencies consider the actual history of entry into the relevant market and give substantial weight to this evidence.” (Section 9) “Where an identifiable set of firms appears to have the necessary assets that others lack, or to have particularly strong incentives to enter, the Agencies focus their entry analysis on those firms.” (Section 9) This is how the 2010 Guidelines reframed the well-accepted “timely, likely, and sufficient” test. That test applies not only to entry by suppliers that are new to the relevant market, but also to expansion by existing market participants.

The most recent *Staples/Office Depot* case provides a good illustration of how this approach has played out in court. In that case, the court found that the FTC had established its *prima facie* case by showing that the merger would greatly increase concentration in the market for the sale and distribution of consumable office supplies to large firms. “Defendants’ sole argument in response to Plaintiffs’ *prima facie* case is that the merger will not have anti-competitive effects because Amazon Business, as well as the existing patchwork of local and regional office supply companies, will expand and provide large B-to-B companies with competitive alternatives to the merged entity.”⁵⁸ Ultimately, the court rejected the “Amazon defense” by noting that “several significant institutional and structural challenges face Amazon Business.” This was an analysis of a specific supplier, very much focused on real-world capabilities and obstacles, just as is called for by the 2010 Guidelines. The “sufficiency” prong of the entry test was important in this case: While Amazon Business would likely grow over time, the evidence did not show that it would come close to replacing the competition from Office Depot that would be lost due to the proposed merger.

3.9 Mergers of Competing Buyers (HMGs §11)

Section 11 of the 2010 Guidelines— “Mergers of Competing Buyers” —explains how the DOJ and FTC will “evaluate whether a merger is likely to enhance market power on the buying side of the market.” This concern was present in the 1992 Guidelines, which state: “The exercise of market power by buyers (‘monopsony power’) has adverse effects comparable to those associated with the exercise of market power by sellers. In order to assess potential monopsony concerns, the Agency will apply an analytical framework analogous to the framework of these Guidelines.”

⁵⁸ *FTC v. Staples/Office Depot*, p. 133.

The 2010 Guidelines elevate this topic and explain how the agencies determine whether a merger between competing buyers is likely to enhance market power on the buyer side. Importantly, the 2010 Guidelines state: “The Agencies do not view a short-run reduction in the quantity purchased as the only, or best, indicator of whether a merger enhances buyer market power. Nor do the Agencies evaluate the competitive effects of mergers between competing buyers strictly, or even primarily, on the basis of effects in the downstream markets in which the merging firms sell.” This highlights the impact of the merger on the counterparties (suppliers) that may be subject to increased buyer power rather than on the customers of the merging firms.⁵⁹

Very few decided mergers involve issues of buyer power—either before or after 2010. Among the decided cases from the past decade, the *Anthem/Cigna* case stands out as the most instructive—especially with regard to the interaction between buyer power upstream and possible pass-through of lower costs to customers downstream. In that case, the DOJ alleged that the merger would give the merged entity monopsony power as a purchaser of services from medical providers.

The District Court determined that the medical cost efficiencies that were claimed by Anthem were not merger-specific or verifiable, so it did not reach that question (p. 253). Nonetheless, the District Court stated: “But since the efficiencies defense is based not on any economies of scale, reduced transaction costs, or production efficiencies that will be achieved by either the carriers or the providers due to the combination of the two enterprises, but rather on Anthem’s ability to exercise the muscle it has already obtained by virtue of its size, with no corresponding increase in value or output, the scenario seems better characterized as an application of market power rather than a cognizable beneficial effect of the merger” (p. 253).

The appeals court upheld the District Court that the claimed efficiencies were not merger-specific, so it also did not need to reach the question of whether the merger would have given Anthem enhanced buyer power in the purchase of services from medical providers. The dissent did credit the efficiencies that were claimed by Anthem, stating: “The District Court clearly erred, therefore, in concluding that the merger would substantially lessen competition in the market in which insurance services are sold to large employers.” The dissent would have remanded the case to the District Court to determine whether the merger would give the merged entity monopsony power in the upstream market where it purchases services from medical providers.

However, the concurring opinion deconstructs the dissent piece by piece, beginning with this statement: “First, there is no dispute that, to have any legal relevance, a proffered efficiency cannot arise from anticompetitive effects” (p. 369). The concurring opinion closes by stating that “securing a product at a lower cost due to increased bargaining power is not a procompetitive efficiency when doing so ‘simply transfers income from supplier to purchaser without any resource savings’” (p. 371, quoting Areeda and Hovenkamp).

⁵⁹ See Hemphill, C. S. & Rose, N. (2018). Mergers that harm sellers. *Yale Law Journal*, 127(7), 2078–2109.

We expect that Section 11 of the 2010 Guidelines will have greater impact in the years ahead, not only in the agricultural sector, where mergers between processors purchasing from farmers have been challenged as harming farmers, but also in *labor* markets. We expect that in the future the DOJ and the FTC will evaluate selected mergers to see if they reduce competition in the hiring of workers in certain occupations in certain geographic markets such as commuting zones.

4 Conclusions

In this paper we have tried to assess how specific innovations found in the 2010 HMGs have fared in the courts. Because of the incremental nature of common law evolution through the adjudicative process, changes to antitrust case law come slowly and unevenly. But because the HMGs are intended to reflect agency practices and because merger review is a significant activity of the FTC and DOJ, we would expect over time to see those practices inform litigation positions that the agencies take before the courts and, in turn, to see the courts either incorporate or reject aspects of those practices.

In the 10 years since the FTC and DOH issued the 2010 HMGs, those agencies litigated to block mergers more often than they did in the 10 years before those revisions. We have tried to show above where decided cases have involved new aspects of the HMGs that were introduced in 2010 and where those judicial decisions have either refuted or borne out concerns about those revisions.

At a broad level, we find no instances in which the courts rejected any of the 2010 innovations. Nor do we find any instance in which any aspect of the 2010 HMGs— notably the reduced emphasis on market definition or the higher HHI thresholds— created an impediment for the DOJ or the FTC in bringing or proving a case in court. The structural presumption remains the central route by which the government wins merger challenges in court.

Beyond that, numerous courts have either discussed or expressly accepted key elements of the 2010 revisions, with the clearest impact being the increased acceptance in the courts of challenges based on unilateral effects. While the courts have made more incremental steps in incorporating the provisions in the 2010 Guidelines that relate to coordinated effects, powerful buyers, mergers of competing buyers, and entry, those changes have started to appear in merger challenges before for the courts and to be at least mentioned in relevant decisions. All of this suggests that the 2010 HMGs will have further influence on the evolution of the case law going forward.

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