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UNITED STATES OF AMERICA
FEDERAL TRADE COMMISSION
OFFICE OF ADMINISTRATIVE LAW JUDGES

In the Matter of **Illumina, Inc.,** **a corporation,** **and** **GRAIL, Inc.,** **a corporation.**	**DOCKET NO. 9401**

COMPLAINT COUNSEL'S OPPOSITION TO RESPONDENT'S MOTION *IN LIMINE* TO EXCLUDE CERTAIN TESTIMONY OF REBUTTAL EXPERT WITNESS DR. ROTHMAN

This Court should deny Illumina, Inc. ("Illumina") and GRAIL, Inc.'s ("Grail") (collectively, "Respondents") Motion *In Limine* to Exclude Certain Testimony of Rebuttal Expert Witness Dr. Rothman ("Motion"). Respondents seek to exclude all but five paragraphs of Dr. Rothman's rebuttal report because Respondents claim that Dr. Rothman (1) has impermissibly interpreted the Merger Guidelines; (2) failed to consider live testimony that will be given by Illumina employees at trial and perform his own, separate assessment of potential efficiencies when rebutting the expert opinions of Respondents' experts; and (3) gave opinions outside his qualifications when { } Some of Respondents' assertions are nonsensical, many are { } and none support the relief Respondents seek.

First, Dr. Rothman's use of the Merger Guidelines' framework is common practice for economists analyzing efficiencies in merger cases. Respondents try to cast Dr. Rothman's opinions as impermissibly interpreting the Guidelines, however, as he explained in his report, Dr. Rothman simply {

} To the extent Dr. Rothman's opinions involve any interpretation, it is only that a complete absence of substantiation by Respondents' experts of their claims fails to establish cognizable efficiencies.

Second, Respondents' assertion that Dr. Rothman's report should be excluded because he failed to consider live testimony that has not yet occurred is patently absurd—if accepted, the assertion's logic would lead to the exclusion of all rebuttal reports.

Third, Dr. Rothman's { }

BACKGROUND

Respondents produced three expert reports related to claimed efficiencies of Illumina's proposed acquisition of Grail (the "Proposed Acquisition"). Dr. Carlton opined that { } Mr. Serafin opined that { }

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[1] }

[2] { }

[3] { }

Dr. Deverka opined that { }

Dr. Rothman is a highly-qualified professional economist with significant experience applying antitrust analyses to a variety of cases and issues, including the evaluation of efficiencies.[5] Complaint Counsel retained Dr. Rothman as a rebuttal expert only. Dr. Rothman's assignment was clearly defined: { }

After analyzing evidence in the record—including, but not limited to, the evidence cited in Respondents' experts' reports—Dr. Rothman concluded that Respondents' experts failed to present sufficient evidence to establish cognizable efficiencies because Respondents' three experts do not provide enough information to enable Dr. Rothman either to verify (or substantiate) their claims or to determine whether their claimed efficiencies are merger specific.

ARGUMENT

This Court's Scheduling Order in this matter and in prior cases state that "[m]otions *in limine* are strongly discouraged" and that parties should only seek to exclude evidence when it is clearly inadmissible on all potential grounds. *In re Illumina, Inc.*, Docket No. 9401, Scheduling

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[4] { }

[5]

[6]

Order at ¶ 13 (Apr. 26, 2021) (citations omitted); *see also In re LabMD, Inc.*, Docket No. 9357, Order Denying Motions *In Limine* To Exclude Proffered Experts at 2 (May 5, 2014) (Chappell, J.) (*In re LabMD*); *In re McWane Inc.*, Docket No. 9351, Order Denying Motions *In Limine* To Preclude Admission of Expert Opinions And Testimony at 3 (Aug. 16, 2012) (Chappell, J.) (*In re McWane*). "When ruling on the admissibility of expert opinions, in particular, courts consider whether the expert is qualified in the relevant field and examine the methodology the expert used in reaching the conclusions at issue." *In re McWane* at 4 (citing *Daubert v. Merrell Dow Pharmaceuticals*, *Inc.*, 509 U.S. 579 (1993)).

Respondents do not contest Dr. Rothman's qualifications as an economist but rather argue he is not qualified to apply his economic expertise to certain aspects of the industry at issue. Respondents also appear to argue that Dr. Rothman's opinions fall outside the province of an expert and that his opinions are flawed because he does not consider the entire record—both to date and the evidence that will be introduced at trial.

Respondents' arguments are nonsensical. Dr. Rothman is clearly qualified: he is a professional economist with extensive experience in merger analysis and has previously served in a similar capacity analyzing merging parties' claimed efficiencies.[7] Dr. Rothman also applies well-established economic principles to determine whether Respondents' experts have adequately shown that this merger will generate cognizable efficiencies. Respondents fail to meet the high standard to exclude Dr. Rothman's testimony in a bench (or any) trial and their motion should be denied. *See, e.g.*, *In re McWane* at 4.

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[7] *See supra* n.5.

I. The Merger Guidelines Framework for Evaluating Efficiencies Analysis is Appropriate

Respondents argue that Dr. Rothman invades the province of the factfinder by telling the "factfinder 'what result to reach'" or "'defin[ing] legal terms'."[8] Dr. Rothman does neither. Dr. Rothman neither interprets the Merger Guidelines nor reaches any legal conclusion. As he clearly explains in his report, he { } This is the standard approach used by economic experts in countless merger cases to analyze not only efficiencies, but other issues such as market definition. In fact, Respondents' own expert used the Merger Guidelines in much the same way.[10]

Respondents' characterization of Dr. Rothman's report misunderstands the role the Merger Guidelines should play in both economic analysis and in this merger litigation. The Merger Guidelines are drafted by both economists and attorneys from the Department of Justice and the Federal Trade Commission and set forth an analytical framework that represents both an economic and legal consensus regarding merger analysis. *FTC v. Tronox Ltd.*, 332 F. Supp. 3d 187, 206 (D.D.C. 2018) ("the Merger Guidelines are an excellent summary of a very broad set of tools that are used by economists to engage in antitrust analysis.") (quotation marks and citation omitted).[11] While the Merger Guidelines are not binding on the courts, courts routinely apply them and find them to be a useful description of legal and economic tools available to evaluate mergers. *See, e.g., FTC v. Sysco Corp.*, 113 F. Supp. 3d 1, 38–39 (D.D.C 2015); *see also Community Publishers,*

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[8] Motion at 3 (citations omitted).

[9] { }

[10] *See, e.g.*, Exhibit A }

[11] *See also* Exhibit B (Joseph Farrell & Carl Shapiro, *The 2010 Horizontal Merger Guidelines After 10 Years*, 58 REV. INDUS. ORG. 1) ("Since the first Merger Guidelines were issued by the DOJ 1968, the merger guidelines have been an important channel by which economic research and learning affects antitrust enforcement. Each iteration of the merger guidelines has reflected the economic thinking of the day.").

Inc. v. Donrey Corp., 892 F. Supp. 1146, 1153 n.6 (W.D. Ark. 1995) ("It is well-recognized that the Merger Guidelines do not have the force of law . . . but many courts still cite them, and the expert testimony in this case shows that they represent mainstream economic thinking.") (internal citations omitted).

Dr. Rothman applied the efficiencies analysis prescribed by the Merger Guidelines and analyzed efficiencies alleged by Respondents' experts to assess whether each efficiency could be "verified" and was "merger specific." In his expert opinion, he could not verify the alleged efficiencies nor did he find—based on the facts of this case—that the alleged efficiencies were merger specific.

II. Dr. Rothman Considered Relevant, Available Evidence to Assess Respondents' Experts Opinions

Respondents claim that Dr. Rothman's "opinions would be irrelevant and unreliable because he assessed only a subset of Respondents' evidence."[12] Dr. Rothman's assignment, however, was to assess whether Respondents' experts had established the existence of cognizable efficiencies. After reviewing their reports as well as assessing the record in this case at the time his report was due, Dr. Rothman concluded that Respondents' experts failed to show any cognizable efficiencies existed.[13]

Respondents claim that what is "[n]oticeably missing from the subset of evidence" is "testimony from any GRAIL or Illumina employee" from the trial as well as a { [redacted] } First, to the extent that Dr. Rothman did not consider Illumina or Grail executives' hypothetical trial testimony, it is

[12] Motion at 5.

[13] { [redacted] }

[14] { [redacted] }

because Respondents' experts failed to consider it either, as it does not yet exist. Second, {[REDACTED]} Dr. Rothman responded to the claims and alleged substantiation offered by Respondents' experts. He opined as to whether Respondents' experts showed cognizable efficiencies. {[REDACTED]} This is exactly what he did using well-established methodologies common to antitrust cases. Further, it is well settled that Respondents bear the burden of showing efficiencies. Respondents suggest {[REDACTED]} but this is clearly not Dr. Rothman's responsibility.[16] It is Respondents' burden, and one they have not met.

III. Dr. Rothman is Qualified to Opine on the Economic Implications of FDA and Payer Adoption Evidence

Respondents' experts—including their economic expert—opine that Illumina's FDA and regulatory expertise would enable the combined entity to accelerate FDA and payer approval for Grail's Galleri test.[17] Respondents claim that Dr. Rothman is incapable of analyzing Respondents' experts' claims because {[REDACTED]}

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[15] [REDACTED]

[16] Respondents' Motion Ex. 4 (Horizontal Merger Guidelines) § 10 ("Efficiencies are difficult to verify and quantify, in part because much of the information relating to efficiencies is uniquely in the possession of the merging firms.").

[17] {[REDACTED]}

[18] {[REDACTED]}

But Dr. Rothman {

} rather, he is assessing whether Respondents' experts have provided sufficient evidence to substantiate their claimed efficiencies.[19] Following Respondents' argument to its logical end would require parties to hire specialized experts for each category of efficiencies, effectively turning every antitrust case into a war of attrition focused not on which side has the better argument, but rather who can afford to hire more experts.[20] Thankfully, the law does not require this.

Simply because a merger involves technical issues does not mean that economists cannot testify about efficiencies related to such mergers.[21] For example, Dr. Rothman applied his economics expertise in analyzing claimed efficiencies in the *Wilhelmsen* matter, despite not being a subject-matter expert in marine water treatment chemicals. *Wilhelmsen*, 341 F. Supp. 3d at 72–73. Dr. Rothman is not offering an opinion on regulatory issues; he is using his economic expertise to evaluate the claimed efficiencies alleged by Respondents' experts using the framework provided by the Merger Guidelines.

Furthermore, in addressing Respondents' experts' efficiencies claims, {

} As Respondents and Dr. Rothman both note, {

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[19] { }

[20] Given Respondents' designation of eight experts in this case, this seems to be their tactic.

[21] *See, e.g.*, *Wilhelmsen*, 341 F. Supp. 3d 27; United *States v. AT&T Inc.*, 310 F. Supp. 3d 161 (D.D.C. 2018).

} This is a commonly accepted approach to ensure that economic experts provide relevant testimony without testifying about topics that are beyond their expertise.[22] As clearly stated in his report, Dr. Rothman is using his economic expertise to evaluate efficiencies claims and he { }

CONCLUSION

For these reasons, Complaint Counsel respectfully requests that the Court deny Respondents' Motion *in Limine* to Exclude Certain Testimony of Rebuttal Expert Witness Dr. Rothman.

Date: August 18, 2021

Respectfully submitted,

/s/ Joseph R. Neely

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[22] *See, e.g.*, Exhibit D (ABA ANTITRUST SECTION, THE MERGER REVIEW PROCESS 500 n.1219. (4th Ed. 2012) ("For example, efficiencies that are related to specific engineering properties are best attested to by an engineer or industry expert, not an economist. The economist may then use the engineer's or industry expert's testimony to draw economic conclusions from the predicted efficiencies.").

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[PROPOSED] ORDER

Upon Respondents' Motion *in Limine* to Exclude Certain Testimony of Rebuttal Expert Witness Dr. Rothman, it is hereby:

ORDERED that Respondents' motion is DENIED.

ORDERED: ______________________________
D. Michael Chappell
Chief Administrative Law Judge

Date: August _____, 2021

Exhibit A

CONFIDENTIAL - REDACTED IN ENTIRETY

Exhibit B

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Review of Industrial Organization (2021) 58:1–11
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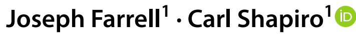
The 2010 Horizontal Merger Guidelines After 10 Years


Joseph Farrell[1] · Carl Shapiro[1]

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Abstract
This paper introduces the Special Issue of the *Review of Industrial Organization* that studies the impact of the 2010 Horizontal Merger Guidelines after 10 years
On August 19, 2010, the U.S. Department of Justice (DOJ) and the Federal Trade Commission (FTC) issued newly updated Horizontal Merger Guidelines (2010 Guidelines) [See https://www.ftc.gov/sites/default/files/attachments/merger-review/100819hmg.pdf.]. The 2010 Guidelines begin by stating:

> "These Guidelines outline the principal analytical techniques, practices, and the enforcement policy of the Department of Justice and the Federal Trade Commission (the "Agencies") with respect to mergers and acquisitions involving actual or potential competitors ("horizontal mergers") under the federal antitrust laws."

Since the first Merger Guidelines were issued by the DOJ 1968, the merger guidelines have been an important channel by which economic research and learning affects antitrust enforcement. Each iteration of the merger guidelines has reflected the economic thinking of the day. Each iteration also has made a substantial impact on merger enforcement and the development of antitrust law. This special issue examines the impact of the 2010 Merger Guidelines after 10 years.

Keywords Antitrust · Mergers · Unilateral effects · Coordinated effects

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Farrell is Professor of the Graduate School at the University of California at Berkeley. Shapiro is Professor of the Graduate School at the University of California at Berkeley and a Senior Consultant at Charles River Associates. Both authors were closely involved in the drafting of the 2010 Horizontal Merger Guidelines when they were officials at, respectively, the Federal Trade Commission and the U.S. Department of Justice. Our opinions are our own. No one has funded this article.

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1 Historical and Legal Context

The proper treatment of horizontal mergers has always been a central public policy question for industrial organization economists.

The Clayton Act 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." (emphasis added)

Major mergers are reviewed *prospectively* by the DOJ or the FTC, so it is not possible to assess their impact on competition directly. Because merger review is a predictive exercise, economic analysis has come to play a central role in merger enforcement. Faced with a proposed merger, the analysis seeks to predict whether that merger "may substantially lessen competition."

In evaluating mergers, antitrust law has typically equated a substantial lessening of competition with substantial harm to customers based on diminished competition.[1] This is a leading example of how antitrust law has embraced the "consumer welfare standard" in recent decades.[2]

A given horizontal merger thus presents a well-defined economic question: Will this merger likely harm customers rather than benefit them? Viewed this way, every horizontal merger involves a fundamental tradeoff: On the one hand, it will eliminate competition between the merging firms and lead to a more concentrated market, so it poses a risk of diminished competition. On the other hand, it may enable efficiencies that could make the merged entity a stronger rival for other firms. Williamson identified this fundamental tradeoff over 50 years ago.[3] Since 1968, the merger guidelines have explained how antitrust enforcers in the United States evaluate mergers and thus—implicitly or explicitly—make this tradeoff.[4]

The 1968 Merger Guidelines placed great emphasis on market concentration, establishing strong presumptions against mergers that raised concentration even modestly. Those Guidelines were fundamentally changed in 1982, making merger enforcement far more lenient. After a minor update in 1984, the next major revision came in 1992, at which time they became a joint product of the DOJ and the FTC. The 1992 Guidelines greatly advanced theories of harm that were based on "unilateral effects": the elimination of competition specifically between the two merging firms. The 1982 guidelines had focused almost entirely on "coordinated effects":

[1] For simplicity, we focus on mergers that diminish competition among sellers, so the injured parties are customers. An analogous analysis applies to mergers that diminish competition among buyers, so the injured parties are suppliers. Section 12 of the 2010 Guidelines, "Mergers of Competing Buyers," addresses that case.

[2] Shapiro has advocated use of the "protecting competition standard" to address confusion that has grown around the "consumer welfare standard." See http://faculty.haas.berkeley.edu/shapiro/consumerwelfarestandard.pdf.

[3] Oliver Williamson (1968), "Economies as an Antitrust Defense: The Welfare Tradeoffs," *American Economic Review*, 58, 18–36.

[4] For a discussion of the history of merger guidelines in the United States, and how the 2010 Guidelines fit into that history, see Carl Shapiro (2010) "The 2010 Merger Guidelines: From Hedgehog to Fox in Forty Years," *Antitrust Law Journal*, 77, 701–759.

the danger that the merger would enhance anti-competitive coordination between the merged firm and its remaining rivals. The treatment of efficiencies was updated in 1997. By and large, the 2010 Horizontal Merger Guidelines updated guidance going back to 1992. During those intervening 18 years, both economic learning and agency enforcement practice had significantly evolved.

The 2010 Guidelines sought to communicate more accurately how the DOJ and the FTC actually analyze horizontal mergers, which centers on the "well-defined economic question" described above. By doing so, it also sought to reinvigorate merger enforcement, within the contours of established case law, both where economic analysis had improved and also where accumulated interpretations of earlier Guidelines had made enforcement more difficult without sound reason.

At a high level, as one of us explained at the time,[5] it was time for the Guidelines to stress the agencies' increasingly substantive focus (will the merger harm customers?—how do we know?…) rather than a process focus (first define markets and calculate concentration; then consider effects, then entry…) that the 1992 Guidelines (section 0.2) had suggested.

The substantive focus in turn affects the kinds of evidence that is considered (2010 Guidelines, section 2) and how that evidence is evaluated and used. This did not mean abandoning traditional processes or technique; rather, it gave them a more flexible role in the service of the fundamental substantive question, and supplemented them with other techniques and evidence, as appropriate. This can be seen in many places; for instance:

- The greater emphasis on a variety of evidence that indicates that a merger may lessen competition;
- The greater openness to identifying harm to certain targeted customers even if other customers are not harmed;
- The explicit statement that "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;"
- The clarification that relevant markets that are defined with the use of the hypothetical monopolist test (HMT) can be quite narrow, excluding a number of substitutes to the products and services that are sold by the merging firms (e.g., Guidelines Example 5), and a discussion of techniques for applying the HMT, such as critical loss analysis;
- The retention of the "structural presumption" that certain mergers that increase market concentration are likely to harm competition, based on updated HHI thresholds that more accurately reflect actual enforcement practice;
- A greatly expanded treatment of unilateral effects that identify diversion ratios and margins, and their combination in the form of upward pricing pressure, as the key metrics to diagnose unilateral price effects[6];

[5] Shapiro, ibid.

[6] In discussing unilateral effects, the 1992 Guidelines (2.211) stated that when "the merging firms have a combined market share of at least thirty-five percent" and certain other conditions hold, market share data may be relied upon to demonstrate consumer harm. This seemed in 2010 to have been overtaken by

- The inclusion of theories of harm in markets where prices are set by auctions or by bargaining;
- The inclusion of theories of harm based on diminished innovation;
- A more expansive treatment of coordinated effects, including not just explicit and tacit collusion but also "parallel accommodating conduct;"
- A more skeptical treatment of the entry defense, with a call for evidence of actual, recent, successful entry, and with a preference for the identification of specific potential entrants[7];
- The inclusion of a section that addresses mergers between competing buyers; and
- The inclusion of a section that addresses partial acquisitions.

The 2010 Guidelines also modified the "narrowest market principle." The 1992 Guidelines (Section 1.11) stated that the Agency "generally will consider the relevant product market to be the smallest group of products that satisfies [the hypothetical monopolist] test." This unexplained announcement risked committing to a methodology that would ignore important competition.

Consider a market with three differentiated products: A, B, and C. Evidence shows that all three are significant substitutes for one another, but B is slightly closer to each of A and C than A and C are to one another. Depending upon the diversion ratios and gross margins, it can easily be the case that, starting with product A, one finds that {A, B} is a relevant market using the hypothetical monopolist test, and likewise that {B, C} is a relevant market if one starts with C.

Now A and C propose to merge. Under the "narrowest market principle," the HMT would generate relevant markets {A, B} and {B, C}, but *not* {A, B, C}, notwithstanding that a hypothetical monopolist over {A, B, C} would have an even greater incentive to raise prices than would a hypothetical monopolist over {A, B} or {B, C}. The 1992 Guidelines therefore would hinder if not block the Agency from challenging the merger between A and C as a three-to-two merger in the {A, B, C} market. The Agency would thus be hindered or blocked from establishing its prima facie case based on the increase in the HHI in the {A, B, C} market from 3333 to 5555. Indeed, advocates for the merger would emphasize that "B is the closest substitute to A" (and likewise to C) and stress that "A and C are not even in the same relevant market!"

To avoid that kind of error, Section 4.1 in 2010 Guidelines gives the agencies the flexibility to define the market in this example as {A, B, C}. The key passage states: "The hypothetical monopolist test ensures that markets are not defined too narrowly, but it does not lead to a single relevant market. The Agencies may evaluate a merger

Footnote 6 (continued)
advances in understanding of unilateral effects, but was also problematic in that it was misread by some merger advocates as ruling out unilateral effects from mergers with combined share below that threshold. It was thus abandoned.

[7] The 2010 Guidelines also dropped the 1992 Guidelines' discussion of a 2-year threshold for timeliness of entry, which risked becoming interpreted as permission for anticompetitive effects lasting that long.

in any relevant market satisfying the test, guided by the overarching principle that the purpose of defining the market and measuring market shares is to illuminate the evaluation of competitive effects."[8] (emphasis added)

However, defining markets too broadly can also lead to errors. Because "the relative significance of more distant substitutes is apt to be overstated by their share of sales," the inclusion of distant substitutes can bias inferences from market shares. In evaluating a merger between two motorcycle producers (Guidelines Examples 4 and 7), if one includes "cars" in the market, the resulting market shares would greatly overstate the competitive significance of car manufacturers relative to that of other motorcycle manufacturers (a bias that could incorrectly make the merger look either more troubling or less so, depending on whether a merging motorcycle manufacturer also makes many cars). Thus the 2010 Guidelines retain the principle that "when the Agencies rely on market shares and concentration, they *usually* do so in the smallest relevant market satisfying the hypothetical monopolist test." (emphasis added)

The papers in this special issue address many of these specific topics, based on 10 years of experience with the 2010 Merger Guidelines.

2 Individual Papers in this Special Issue

The first two papers in this special issue discuss the 2010 Guidelines from the perspective of the DOJ and the FTC respectively. These two papers are invaluable—especially because so much merger enforcement is not visible to the public, as it involves confidential information and the antitrust agencies seldom explain publicly their reasons when they do not bring an enforcement action. Both papers report that the 2010 Guidelines continue to provide an accurate description of how the two agencies analyze horizontal mergers. Both papers emphasize the centrality of Section 2 of the 2010 HMGs—"Evidence of Anticompetitive Effects" – to merger investigations.

"Ten Years of the 2010 HMG: A Perspective from the Department of Justice," by Craig Peters and Jeff Wilder

Craig Peters and Jeff Wilder report on the DOJ experience with the 2010 Guidelines over the past 10 years. They summarize the DOJ perspective this way: "In our view, the 2010 HMG have aged well. They continue accurately to describe Agency practice and reflect current legal and economic principles of antitrust. Over the past 10 years, the 2010 HMG have only grown in force, as a number of courts have issued opinions endorsing the Agencies' analytical approach to horizontal merger enforcement as outlined in the 2010 HMG."

[8] If the HMT is satisfied for a set of substitute products, it will also be satisfied if another substitute is added to that set. Some judgment is thus needed to decide what relevant market is most informative in a given case. This passage from the 2010 Guidelines explains the principle that should be used when exercising that judgment.

AL TRADE COMMISSION | OFFICE OF THE SECRETARY | FILED 8/18/2021 | DOCUMENT NO. 602335 | Page 18 of 30 |

PUBLIC

Peters and Wilder report that from August 2010 through the first quarter of 2020, the DOJ filed 91 complaints in federal court, 71 of which involved consent decrees that resolved the DOJ's concerns, and 20 of which were "litigation" complaints. They dismiss concerns that the 2010 Guidelines would reduce the ability of the DOJ to challenge mergers based on their impact on market concentration; they cite data and state: "The structural presumption has remained an important element in the Division's horizontal merger cases in the years since." They further report: "In all six of the litigated Division horizontal merger cases that yielded a judicial opinion, the opinions directly cited the 2010 HMG concentration thresholds." They go on to detail various ways in which DOJ merger enforcement has tracked the 2010 Guidelines. Their section on how the DOJ has continue to improve its evaluation of unilateral price effects, following Section 6.1 from the 2010 Guidelines, is especially valuable for antitrust economists.

"The 2010 Horizontal Merger Guidelines at Ten: A View from the FTC's Bureau of Economics," by Alison Oldale, Joel Schrag, Christopher Taylor

Alison Oldale, Joel Schrag, and Christopher Taylor report on the FTC experience with the 2010 Guidelines over the past 10 years. Their overall view is that "the revised Guidelines have contributed positively to the Commission's merger enforcement program." (abstract) Like their DOJ counterparts, they emphasize that Section 2 of the 2010 HMGs, "Evidence of Competitive Effects," has proven to be a very valuable addition to the Guidelines, because it continues to reflect actual FTC practice in assessing mergers and because it helps guide and frame many merger investigations. They detail a number of examples that establish this point.

These authors also confirm what experienced practitioners know: There is a significant distinction between how mergers are investigated and how they are evaluated in court. Merger litigation places considerable weight on market definition and market shares: the means by which the government establishes a prima facie case that the merger is likely to substantially harm competition. The FTC authors explain that market definition and market concentration often play a much smaller role in merger investigations: "If direct evidence of the likely effects of a merger is available, less direct inferences from structural measures of concentration may add little to the analysis and therefore may be of secondary importance in investigations."

The authors go on to explain how the FTC has implemented Section 6 of the HMGs when evaluating mergers where the primary concern is with unilateral effects, "which represent the bulk of Commission merger cases in recent years." These examples help bring alive the analytical techniques that are described in Section 6 of the HMG and show how they work in practice. They indicate that Section 7 of the 2010 HMGs, "Coordinated Effects," has had less impact, in part because "there may be some confusion" about how to interpret the concept of parallel accommodating conduct.

"Judicial Response to the 2010 Horizontal Merger Guidelines," by Carl Shapiro and Howard Shelanski

AL TRADE COMMISSION | OFFICE OF THE SECRETARY | FILED 8/18/2021 | DOCUMENT NO. 602335 | Page 19 of 30 |

PUBLIC

Shapiro and Shelanski focus on how the 2010 Guidelines have fared in court. Historically, the merger guidelines have been treated with respect by the courts, and have (gradually) influenced the development of the case law. Shapiro and Shelanski observe this same pattern for the 2010 Guidelines. They find an especially clear shift in how the courts have analyzed unilateral effects. After the DOJ's 2004 loss in its challenge to Oracle's acquisition of PeopleSoft, the DOJ was skittish about challenging mergers based on unilateral effects, and the ability of the government to win in court based on showing significant head-to-head competition between the merging parties was in doubt.

That reluctance dramatically changed following the release and application of the 2010 HMGs—starting with the DOJ's 2011 success in blocking H&R Block proposed acquisition of TaxACT.

Other areas where the 2010 Merger Guidelines have supported stronger antitrust enforcement include market definition, with clarifications of how to implement the hypothetical monopolist test properly—including defining markets around targeted customers—and greater skepticism towards arguments by the merging parties that entry will replace the competition that is lost through the merger.

In contrast, the expanded treatment of coordinated effects that is found in the 2010 Guidelines—including "parallel accommodating conduct" as a form of coordination—has not yet had a significant impact on the case law.

"The 2010 HMGs After Ten Years: Where Do We Go From Here?" by Steven Salop and Fiona Scott Morton

Salop and Scott Morton build on the 2010 Guidelines by identifying further changes that they believe would support stricter merger enforcement. Their starting point is that Congress intended to prohibit mergers that "may" substantially lessen competition; consequently, effective merger enforcement should not place an undue burden of proof on the government to prevail in court when challenging a merger—especially given the resource constraints that face the government. They acknowledge that some of the changes that they advocate would require new legislation—and not merely a change in merger enforcement policy at the DOJ and the FTC.

Salop and Scott Morton recommend creating a presumption against mergers that generate a Gross Upward Pricing Pressure Index (GUPPI) of more than 10%—with no safe harbor based on a low GUPPI. They also favor reversing the increase in the HHI thresholds that was made in the 2010 Guidelines. Complementing these changes, they recommend expanding potential competition analysis to take a tougher approach to mergers between firms that might compete in the future. In particular, they urge the agencies and the courts to focus on the expected impact of possible future competition between the two merging firms—not just on its probability.

Salop and Scott Morton call to "improve the analysis of coordinated effects" as one way to support stricter merger enforcement. They justify this recommendation

AL TRADE COMMISSION | OFFICE OF THE SECRETARY | FILED 8/18/2021 | DOCUMENT NO. 602335 | Page 20 of 30 |

PUBLIC

in part to address what they see as a growing danger of algorithmic coordination.[9] They point out that "except where there is a maverick, coordinated effects analysis has been stuck in a process of weighing a checklist of facilitating and complicating market factors." However, they do not indicate how their desired improvement can be accomplished—other than to recommend a presumption against mergers that involve the acquisition of a "maverick." Further economic research on this topic could be quite valuable—and arguably necessary—to identify workable and effective improvements in the treatment of coordinated effects that could be written into future merger guidelines.

Salop and Scott Morton recommend adding a section to the HMGs to address common ownership by financial funds. This would be a natural extension of Section 13 in the 2010 HMGs, "Partial Acquisitions," which introduced the issue of partial ownership into the HMGs.

"Natural Oligopoly Responses and Coordinated Effects in Merger Analysis," by Joseph Farrell and Jonathan Baker

Farrell and Baker argue that coordinated effects should be understood in the 2010 Guidelines' broad sense: the competitive implications of rivals' responses to oligopolists' price changes. For example, if a firm cuts its price, it probably intends to gain volume from rivals, and that gain can be largely neutralized if those rivals match the price cut.

Farrell and Baker argue that earlier Guidelines—and the way that the game theory revolution in industrial organization economics played out over the past 40 years—inadvertently caused a focus that was too exclusively on two ways to think of oligopoly: Since the 1992 Guidelines, "unilateral effects" are almost always modeled as Nash equilibria in simultaneous-move games, in which each player takes its rivals' moves as given. "Coordinated effects," by contrast, hinge on rivals' responses, but the standard supergame approach emphasizes conscious common understanding and purposive deterrence of deviations, and its standard model often drastically overpredicts highly collusive (such as shared monopoly) outcomes. Farrell and Baker first suggest making that standard model more flexible and realistic by allowing for stochastic transitions between cooperative and competitive states.

They then turn to what the 2010 Guidelines (Section 7) call "parallel accommodating conduct": a pattern of competitive responses that 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." Farrell and Baker develop this concept by considering Stackelberg leader-and-follower price dynamics, which they argue may often align with firms' "non-purposive" responses. They show how the strength of the "emboldening/weakening" effect relates to the familiar antitrust concept of diversion ratios, and illustrate by simulating two simple three-to-two mergers.

[9] See, for example, Emilio Calvano, Giacomo Calzolari, Vincenzo Denicolò, and Sergio Pastorello (2020), "Artificial Intelligence, Algorithmic Pricing, and Collusion," 110 *American Economic Review* 3267–3297.

AL TRADE COMMISSION | OFFICE OF THE SECRETARY | FILED 8/18/2021 | DOCUMENT NO. 602335 | Page 21 of 30 |

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"Quantitative Methods for Evaluating the Unilateral Effects of Mergers," by Nathan Miller & Gloria Sheu

The final three papers focus on the analysis of unilateral effects: the section of the 2010 Guidelines that has received by far the most attention in recent years in the economics literature.

Miller and Sheu provide an extremely valuable guide to the methods that are actually used in practice to assess unilateral effects, as updated and expanded in the 2010 Guidelines. They "describe the quantitative modeling techniques that are used in horizontal merger review for the evaluation of unilateral effects, and discuss how the 2010 Horizontal Merger Guidelines helped legitimize these methods and motivate scholarly research." As they point out, "the modeling techniques we describe here are the result of an ongoing interplay between current academic research and antitrust practice." Miller and Sheu's impressive treatment is both sophisticated and accessible.

Miller and Sheu consider pricing competition in markets with differentiated products, procurement auctions, and quantity competition in markets with homogeneous products. For each topic, they demonstrate the basic theory that has been developed in the academic literature and explain how that theory is implemented in practice. By far the most work involves pricing competition in markets with differentiated products. Miller and Sheu explore in depth the relationship between measures of upward pricing pressure, pass-through rates, and the price effects of mergers that are based on a full merger simulation. They make a convincing case that measures of upward pricing pressure often can be used to generate a first-order approximation of the merger simulation's predictions of a merger's impact on prices. They recommend a presumption against mergers that increase the HHI by at least 200 points.[10]

"Mergers with Differentiated Products: Where Do We Stand?" by Tommaso Valletti & Hans Zenger

This paper also focuses on unilateral effects—including effects on innovation—with the use of illustrations from a number of European merger cases. Valletti and Zenger emphasize that the analytical techniques that relate to unilateral effects that were introduced, clarified, or emphasized in the 2010 Guidelines have since evolved into standard practice: both in the United States and in Europe. The 2010 Guidelines helped spur the evolution toward a greater use of economic tools in merger assessment that was already ongoing in 2010 at the European Commission.

Valletti and Zenger helpfully introduce the idea of "implied market shares" that are associated with diversion ratios between the products that are sold by the

[10] Their elegant solution is to establish a presumption against mergers for which the post-merger HHI exceeds 2500 *or* for which the HHI increases by at least 200 points. The presumption based on the post-merger *level* of the HHI would capture mergers that may substantially harm competition based on *coordinated* effects, and the screen based on the change in the HHI would capture mergers that may harm competition based on *unilateral* effects. On the latter, see Volcker Nocke and Michael Whinston (2020), "Concentration Screens for Horizontal Mergers." For comparison, the 2010 Guidelines (Section 5.3) describe presumptions when *both* the level and the increase in the HHI are substantial.

two merging firms. These are the market shares that would give the same diversion ratios if diversion were proportional to market share. Many observers who are familiar with using market shares may find these "implied market shares" more intuitive and easier to interpret than are diversion ratios. They explain the practical virtues of two tools that have seen much greater usage in Europe since 2010: the Gross Upward Pricing Pressure Index (GUPPI) and the Compensating Marginal Cost Reduction (CMCR). In some cases, the European Commission has used these tools at the initial screening stage, and later use merger simulation to inform its final decision.

Valletti and Zenger go on to offer a highly instructive "comparative analysis" of the various analytical tools that are used to assess unilateral price effects. As they point out, there is a tradeoff between complexity and precision: The more complex and more precise tools—notably merger simulation—require more data and more assumptions. GUPPIs tend to understate a merger's impact on price by ignoring feedback effects. They report that at the European Commission there has been a trend toward using merger simulation with linear demand—in contrast with the U.K. Competition and Markets Authority, which has more often relied on price pressure indices.

Valletti and Zenger also discuss at length unilateral *innovation* effects; the authors build on Section 6.4 in the 2010 Guidelines, which introduced innovation effects into the HMGs. They demonstrate how much progress has been made in this area over the past 10 years: both in the academic literature and in practice. While innovation effects are inherently difficult to predict, we have much more experience evaluating these effects now than we did prior to the release of the 2010 Guidelines.

"Effects of the 2010 Horizontal Merger Guidelines on Merger Review, Based on Ten Years of Practical Experience," by Dennis Carlton & Mark Israel

The third and final paper that focuses on unilateral effects offers a contrarian view: Carlton and Israel articulate many of the arguments that merging firms typically make in defense of their deals. The authors support the exercise of defining relevant markets and measuring market shares to establish safe harbors, but *not* to establish strong anti-competitive presumptions: "a finding that a market has a large number of significant competitors should be a safe harbor for a merger, but finding high market shares for the merging parties should, at most, point to the need for further analysis and should create, at most, a weak presumption in favor of finding harm from the merger."

Carlton and Israel also express considerable skepticism about price pressure tools such as upward pricing pressure (UPP), stating: "we believe UPP has been overused, leading the agencies to focus scarce investigative time and resources on UPP even when more direct evidence from natural experiments is available." They further state: "UPP analysis is a type of (incomplete) structural approach. A superior structural approach is merger simulation." They further assert that "the attention UPP has garnered detracts from the use of 'natural experiments,' which

are much less structural and instead look at what happened to price after some event."

We agree that natural experiments can be highly valuable, as is explained in Section 2.1.2 of the 2010 Guidelines. Carlton and Israel also call for more merger retrospectives; this is a widely held view that we share. The FTC recently announced additional efforts in this direction.

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Exhibit C

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Exhibit D

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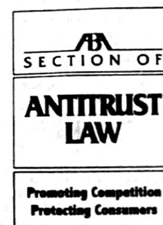
The Merger Review Process

A Step-by-Step Guide to U.S. and Foreign Merger Review

Fourth Edition



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This volume should be officially cited as:

ABA SECTION OF ANTITRUST LAW,
THE MERGER REVIEW PROCESS: A STEP-BY-STEP GUIDE TO U.S. AND FOREIGN MERGER REVIEW, FOURTH EDITION
(2012)

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Of course, simply meeting the Rule 702 standards for admissibility does not imply that a judge or jury will find economic analyses to be persuasive. The next section discusses best practices in the role of economists in court.

3. Best Practices in Court

a. Making Economics Accessible

In contrast to dialogue with the agencies that often includes scrutiny of highly technical aspects of economic analysis, arguments for court must be prepared in simple, "lay" terms.[1214] Nevertheless, economic analysis is most persuasive when the economist's audience appreciates the underlying economic logic of the analysis in addition to its implications. A proper balance must be cultivated between the expression of technical precision and simplification such that economic evidence can be easily understood by noneconomists (namely, judge and jury).[1215]

1214. *See* Gotts & Hemli, *supra* note 1203, at 1242 (stating that "One of the biggest practical hurdles facing economic and econometric evidence lies in explaining the methodologies and results in terms that non-economist lawyers and judges can comprehend.").

1215. *See* Baye, *supra* note 1175, at 4 (stating that "An exceptional economist can explain the relevant issues in terms that anyone can understand. Lawyers who attempt to economize by using their own knowledge of economics to sort all this out are not getting the most out of their economists."); Werden, *supra* note 1197, at 604 (stating that "Perhaps the most potent force, and certainly the most pernicious, is the mistaken notion that economic testimony should be simplified to the point that it no longer contains any discernable economics. Lawyers often underestimate both the ability of economists to explain key concepts in ways judges can understand, and the ability of judges to comprehend those concepts when properly explained."); and DeMasi & Clarke, *supra* note 1213 (stating that "An expert who cannot use her testimony to educate jurors, therefore, risks losing the very audience she seeks to persuade.").

b. Integrating Economic and Legal Analysis

When preparing for court, economists should work closely with counsel to integrate their analyses into counsel's legal framework.[1216] This can be accomplished by including economic arguments (or supporting citations to an expert report) as the evidence for legal arguments, and it can also be accomplished through expert testimony at trial.

c. Refraining from Advocacy or Speculation

Economists are most successful in informing triers of fact when they do not overreach their expertise and when they limit their evidentiary reliance to established facts and the tools of economics.[1217] The economist's role in court must be limited to presenting evidence based on expert analysis. Due to differences in current economic thinking and historical court rulings, there may be room for disagreement with established legal views, but economists should present their arguments without straying from the facts of the case and the context of the merger under review.[1218] Similarly, economists should refrain from testifying to institutional details or theories that are speculative or beyond their economic expertise.[1219]

1216. *See* Importance of Economic Analysis in Competition Cases, United Nations Conference on Trade and Development (UNCTAD), Intergovernmental Group of Experts on Competition Law and Policy, 10th Session, July 7-9, 2009, USA Response to Questionnaire, *available at* http://www.unctad.org/sections/wcmu/docs/ciclp2009_s4_USA_en.pdf; and Werden, *supra* note 1197, at 612 (stating that economic analysis "is most useful when deeply integrated into a competition case").
1217. *See* Scheffman, *supra* note 1174, at 3 (stating that "merger investigations generally turn on facts rather than advocacy").
1218. *See* DeMasi & Clarke, *supra* note 1185, at 1 (stating that "there is an inherent institutional tension between the discipline of economics, which continually refines its hypotheses and models, and the law, which seeks to establish settled precedent [citation omitted]").
1219. For example, efficiencies that are related to specific engineering properties are best attested to by an engineer or industry expert, not an economist. The economist may then use the engineer's or industry expert's testimony to draw economic conclusions from the predicted efficiencies.

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I hereby certify that on August 18, 2021, I filed the foregoing document electronically using the FTC's E-Filing System, which will send notification of such filing to:

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