No. 23-60167

IN THE

United States Court of Appeals for the Fifth Circuit

ILLUMINA, INC. AND GRAIL, INC.,
Petitioners,
v.
FEDERAL TRADE COMMISSION,
Respondent.

Petition for Review of an Order of the Federal Trade Commission

BRIEF FOR *AMICI CURIAE* INTERNATIONAL CENTER OF LAW AND ECONOMICS AND LAW AND ECONOMICS SCHOLARS ON BEHALF OF PETITIONERS

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SUPPLEMENTAL STATEMENT OF INTERESTED PERSONS

No. 23-60167
Illumina, Inc. and Grail, Inc. v. Federal Trade Commission.

Pursuant to 5th Cir. R. 29.2, the undersigned counsel of record hereby certifies that, in addition to the persons and entities listed in the Petitioners' Certificate of Interested Persons, the following listed persons and entities as described in the fourth sentence of Rule 28.2.1 have an interest in the outcome of this case. These representations are made in order that the judges of this court may evaluate possible disqualification or recusal.

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In accordance with Federal Rule of Appellate Procedure 26.1, *amicus curiae* International Center for Law and Economics states that it is not publicly traded and has no parent corporations. No publicly traded corporation owns 10% or more of *amicus*. The legal name of *amicus* International Center for Law and Economics is International Policy Network US d/b/a International Center for Law & Economics.

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Cases

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Chicago Bridge & Iron Co. v. FTC, 534 F.3d 410 (5th Cir. 2008) 8

Cont'l T.V., Inc. v. GTE Sylvania Inc., 433 U.S. 36 (1977) 9

Dr. Miles Med. Co. v. John D. Park & Sons Co.,
220 U.S. 373 (1911) 9

FTC v Penn State Hershey Medical Center,
838 F.3d 327 (3d Cir. 2016) 15

FTC v. H.J. Heinz Co., 246 F.3d 708 (D.C. Cir. 2001) 14, 15

FTC v. Wilh. Wilhelmsen Holding ASA,
341 F. Supp. 3d 27 (D.D.C. 2018) 15

Leegin Creative Leather Prods., Inc. v. PSKS, Inc.,
551 U.S. 877 (2007) 9, 25

New York v. Deutsche Telekom AG,
439 F. Supp. 3d 179 (S.D.N.Y. 2020) 21

Otto Bock HealthCare N. Am., Inc., 168 F.T.C. 324 (2019) 15

Republic Tobacco v. North Atlantic Trading Co.,
381 F. 3d 717 (7th Cir. 2004) 7

United States v. AT&T Inc., 310 F. Supp. 3d 161 (D.D.C. 2018),
aff'd, 916 F.3d 1029 (D.C. Cir. 2019) 10, 20

United States v. AT&T, Inc.,
916 F.3d 1029 (D.C. Cir. 2019) 7-8, 10, 14, 15, 20, 21

United States v. Baker Hughes,
908 F.2d 981 (D.C. Cir. 1990) 8, 15, 24

United States v. General Dynamics Corp., 415 U.S. 486 (1974) 23

United States v. H&R Block, Inc., 833 F. Supp. 2d 36 (D.D.C. 2011) 13, 14, 15

United States v. Arnold, Schwinn & Co., 388 U.S. 365 (1967)................ 9

Statutes and Rules

15 U.S.C. § 18, Clayton Act § 7, ... 13, 17

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Fed. R. App. P. 29(a)(4)(e) 2

Other Authorities

Phillip Areeda & Herbert Hovenkamp, Antitrust Law (4th ed. 2017). 5

Henry Ogden Armour & David J. Teece, *Vertical Integration and Technological Integration,* 62 Rev. Econ. & Stat. 470 (1980).. 4, 25

Dennis W. Carlton, *Transaction Costs and Competition Policy*, 73 Int'l J. Indus. Org. 1 (2019).. 4, 25

Malcom B. Coate & Andrew N. Kleit, *Exclusion, Collusion, and Confusion: The Limits of Raising Rivals' Costs*, FTC Bureau of Economics Working Paper No. 179 (1990) 27-28

James C. Cooper, et al., *Vertical Antitrust Policy as a Problem of Inference*, 23 Int'l. J. Indus. Org. 639 (2005)............................28, 29-30

Gregory S. Crawford, et al., *The Welfare Effects of Vertical Integration in Multichannel Television Markets*, 86 Econometrica 891 (2018).. 16, 35

Dep't of Justice, Antitrust Division and FTC, 2020 Vertical Merger Guidelines (2020) 3-4, 11, 15, 27

Dep't of Justice, Antitrust Division & FTC, Horizontal Merger Guidelines (Aug. 19, 2010).. 11

FTC, *Competition and Consumer Protection in the 21st Century: FTC Hearing #3: Multi-Sided Platforms, Labor Markets, and Potential Competition* (Oct. 17, 2018) (transcript), *available at* https://www.ftc.gov/system/files/documents/public_events/1413712/ftc_hearings_session_3_transcript_day_3_10-17-18_0.pdf. 35-36

FTC, *Competition and Consumer Protection in the 21st Century; FTC Hearing #5: Vertical Merger Analysis and the Role of the Consumer Welfare Standard in U.S. Antitrust Law*, (Nov. 1, 2018) (transcript), available at https://www.ftc.gov/system/files/documents/public_events/1415284/ftc_hearings_session_5_transcript_11-1-18.pdf. 33, 35

Justine Hastings, *Vertical Relationships and Competition in Retail Gasoline Markets: Empirical Evidence from Contract Changes in Southern California: Reply*, 100 Am. Econ. Rev. 1227 (2010)....................34

Justine S. Hastings & Richard J. Gilbert, *Market Power, Vertical Integration, and the Wholesale Price of Gasoline*, 33 J. Indus. Econ. 469 (2005)....................33-34

Francine Lafontaine, Vertical Mergers, in FTC, *Competition and Consumer Protection in the 21st Century; FTC Hearing #5: Vertical Merger Analysis and the Role of the Consumer Welfare Standard in U.S. Antitrust Law*, (Nov. 1, 2018) (presentation slides), available at https://www.ftc.gov/system/files/documents/public_events/1415284/ftc_hearings_5_georgetown_slides.pdf. 30-31

Francine Lafontaine & Margaret E. Slade, *Presumptions in Vertical Mergers: The Role of Evidence*, 59 Rev. Indus. Org. 255 (2021)....................31

Francine Lafontaine & Margaret Slade, *Vertical Integration and Firm Boundaries: The Evidence*, 45 J. Econ. Lit. 629, 677 (2007)....................28

Fernando Luco & Guillermo Marshall, *The Competitive Impact of Vertical Integration by Multiproduct Firms*, 110 Am. Econ. Rev. 2041 (2020) 32-33

Geoffrey A. Manne, Kristian Stout & Eric Fruits, *The Fatal Economic Flaws of the Contemporary Campaign Against Vertical Integration*, 69 Kansas L. Rev. 923 (2020) 32

Daniel O'Brien, *The Antitrust Treatment of Vertical Restraint: Beyond the Possibility Theorems, in* Konkurrensverket, Swedish Competition Authority, Report: The Pros and Cons of Vertical Restraints 22, 36 (2008) 26-27

Janusz A. Ordover, Garth Saloner & Steven C. Salop, *Equilibrium Vertical Foreclosure*, 80 Am. Econ. Rev. 127 (1990) 27

David Reiffen & Michael Vita, *Comment: Is there New Thinking on Vertical Mergers?* 63 Antitrust L.J. 917 (1995) 4, 25, 26

Patrick Rey & Jean Tirole, *A Primer on Foreclosure*, in 3 Handbook of Industrial Organization 2145 (Mark Armstrong & Robert H. Porter, eds.) (2007) 22

Michael A. Salinger, *Vertical Mergers and Market Foreclosure*, 103 Q.J. Econ. 345 (1988) 26

Steven C. Salop, Revising the Vertical Merger Guidelines, in FTC, *Competition and Consumer Protection in the 21st Century; FTC Hearing #5: Vertical Merger Analysis and the Role of the Consumer Welfare Standard in U.S. Antitrust Law*, (Nov. 1, 2018) (presentation slides), available at https://www.ftc.gov/system/files/documents/public_events/1415284/ftc_hearings_5_georgetown_slides.pdf. 32

Steven C. Salop & David T. Scheffman, *Cost-Raising Strategies*, 36 J. Indus. Econ. 19 (1985) 27

Christopher T. Taylor, et al., *Vertical Relationships and Competition in Retail Gasoline Markets: Empirical Evidence from Contract Changes in Southern California: Comment*, 100 Am. Econ. Rev. 1269 (2010) 34

Oliver Williamson, The Economic Institutions of Capitalism (1985)... 4

Joshua D. Wright & Jan M. Rybnicek, *US v. AT&T Time Warner: A Triumph of Economic Analysis*, 6 J. Antitrust Enforcement 3 (2018) 11

Chenyu Yang, *Vertical Structure and Innovation: A Study of the SoC and Smartphone Industries*, 51 Rand J. Econ. 739 (2020) 16

John M. Yun, *Vertical Mergers and Integration in Digital Markets, in* The GAI Report on the Digital Economy (Joshua D. Wright & Douglas H. Ginsburg, eds., 2020) at 245 30

IDENTITY AND INTEREST OF *AMICUS CURIAE* AND SOURCE OF AUTHORITY TO FILE BRIEF

The International Center for Law & Economics ("ICLE") is a nonprofit, nonpartisan, global research and policy center aimed at building the intellectual foundations for sensible, economically grounded policy. ICLE promotes the use of law and economics methodologies, and economic findings, to inform public policy, and has longstanding expertise in antitrust law.

Amici also include 28 scholars of antitrust, law, and economics at leading universities and research institutions across the United States. Their names, titles, and academic affiliations are listed in Appendix A. All *amici* have extensive expertise in antitrust law and economics, and several served in senior positions at the Federal Trade Commission or the Antitrust Division of the Department of Justice.

Amici have an interest in ensuring that courts and agencies correctly apply the standards for evaluating horizontal and vertical mergers, and take into account the benefits commonly associated with vertical mergers.

Amici are authorized to file this brief by Fed. R. App. P. 29(a)(2) because all parties have consented to its filing.

RULE 29(a)(4)(e) STATEMENT

Amici hereby state that no party's counsel authored this brief in whole or in part; that no party or party's counsel contributed money that was intended to fund the preparation or submission of the brief; and that no person other than *amicus* or its counsel contributed money that was intended to fund the preparation or submission of the brief.

INTRODUCTION AND SUMMARY OF ARGUMENT

The FTC's decision to require Illumina to divest Grail rests on at least two misguided premises. The first is that the same scrutiny applies to both horizontal and vertical mergers. The second is that benefits typically associated with vertical mergers do not apply here.

A *horizontal* merger combines firms that compete in the same relevant market, which necessarily reduces the number of firms engaged in head-to-head competition and may eliminate substitutes. That reduction inherently tends to increase prices, but the price effect may be trivial. In addition, market responses (competitive repositioning or new entry) or other benefits of the merger (savings in transaction and other costs, enhanced investment incentives) may neutralize or offset the impetus to higher prices. But because those benefits are not automatic (and the reduction of direct competition is), they must be proven rather than assumed if the merger otherwise poses a significant risk of anticompetitive effects.

A *vertical* merger, in contrast, combines firms with an upstream-downstream (e.g., seller-buyer) relationship—that is, "firms or assets at different stages of the same supply chain." Dep't of Justice, Antitrust

Division and FTC, Vertical Merger Guidelines 1 (2020). Examples include a manufacturer's acquiring a distributor or a firm providing a manufacturing input.

The economic consequences of combining complements rather than substitutes are fundamentally different. Whereas the first-order effect of a horizontal merger is upward pricing pressure, the first-order effect of a vertical merger is *downward* pricing pressure. Vertical mergers typically entail the elimination of double marginalization ("EDM"), which is akin to downward pricing pressure (and often considered alongside efficiencies). David Reiffen & Michael Vita, *Comment: Is There New Thinking on Vertical Mergers?* 63 Antitrust L.J. 917, 920 (1995). Vertical integration also typically internalizes externalities in research and development, resulting in greater investment. Henry Ogden Armour & David J. Teece, *Vertical Integration and Technological Innovation,* 62 Rev. Econ. & Stat. 470 (1980). Like horizontal mergers, vertical mergers often confer other benefits such as operational and transactional efficiencies. Dennis W. Carlton, *Transaction Costs and Competition Policy*, 73 Int'l J. Indus. Org. 1 (2019); Oliver Williamson, The Economic Institutions of Capitalism 86 (1985).

Thus, while both types of mergers can create benefits from cost savings, their intrinsic effects move in opposite directions: higher prices and less investment with horizontal mergers, and lower prices and more investment with vertical mergers.

1. The FTC's conclusion that the same scrutiny applies to horizontal and vertical mergers, Opinion 75, conflicts with precedent (and long-standing economic research). Courts and economists alike recognize that vertical integration typically is procompetitive, and it is widely accepted that vertical mergers and horizontal mergers should be evaluated under different presumptions. As the leading antitrust treatise puts it, "[i]n the great majority of cases no anticompetitive consequences can be attached to [vertical integration], and injury to competition should never be inferred from the mere fact of vertical integration." 3B Phillip Areeda & Herbert Hovenkamp, Antitrust Law ¶ 755a (4th ed. 2017). That vertical mergers *can* be anticompetitive—under specific facts and circumstances—does not establish that vertical integration is *likely* to be anticompetitive (it is not) or that there is no useful antitrust distinction between vertical and horizontal mergers (there is).

The Commission did not simply presume that this vertical merger would be anticompetitive, however. It also discounted both the likelihood of efficiencies in vertical mergers and specific evidence of efficiencies associated with the already-consummated merger. As a result, the Commission did not properly assess the likely competitive effects of the merger.

2. The Commission also disregarded evidence of a current and operative constraint on any potential anticompetitive effects of the merger. Illumina's Open Offer appears to be contractually binding, and addresses the risk of foreclosure that is the primary competitive concern here. Proper consideration of the Open Offer should have shifted the Commission further away from presuming harm. Instead, the Commission gave it no weight.

3. The existing standards for vertical merger scrutiny are informed by, and consistent with, economic research regarding vertical mergers and other forms of vertical integration. That research shows that the Commission was wrong to hold that vertical and horizontal mergers should be analyzed identically, and wrong to disregard the well-established benefits of vertical integration. While economic theory

indicates that vertical mergers *can* be anticompetitive, the weight of the empirical evidence overwhelmingly indicates that they *tend* to be procompetitive or competitively neutral. Indeed, the large majority of vertical mergers that have been studied have been found to be procompetitive or benign. That suggests that case-specific evidence is paramount in assessing both potential anticompetitive effects and countervailing pro-consumer efficiencies.

ARGUMENT

I. Vertical and Horizontal Mergers Should Be Scrutinized Differently.

A. Prima Facie Standards and the Government's "Ultimate Burden" Differ in Horizontal and Vertical Merger Cases.

Courts have long recognized that horizontal and vertical mergers are categorically different. "As horizontal agreements are generally more suspect than vertical agreements," courts are "cautious about importing relaxed standards of proof into vertical agreement cases." *Republic Tobacco v. North Atlantic Trading Co.*, 381 F. 3d 717, 737 (7th Cir. 2004). Thus, for vertical mergers, "unlike horizontal mergers, the government cannot use a shortcut to establish a presumption of anticompetitive effect…." *United States v. AT&T, Inc.*, 916 F.3d 1029, 1032 (D.C. Cir.

2019) ("*AT&T II*"). In a vertical merger case, "the government must make a *fact-specific* showing that the proposed merger is likely to be anticompetitive," and the "ultimate burden of persuasion… remains with the government at all times." *Id.* (emphasis added; cleaned up).

As the ALJ's Initial Decision (ID) recognized (at 132), the burden-shifting approach is not bound by any specific, sequential form. Then-Judge Thomas stressed in *United States v. Baker Hughes*, 908 F.2d 981, 984 (D.C. Cir. 1990), that "[t]he Supreme Court has adopted a totality-of-the-circumstances approach…, weighing a variety of factors to determine the effects of particular transactions on competition." As the ALJ aptly put it, the *Baker Hughes* "'burden-shifting language'" provides "'a flexible framework rather than an air-tight rule'"; "in practice, evidence is often considered all at once and the burdens are often analyzed together." ID 132 (quoting *Chicago Bridge & Iron Co. v. FTC*, 534 F.3d 410, 424-24 (5th Cir. 2008)).

The differential treatment of vertical and horizontal mergers parallels the Supreme Court's vertical restraints jurisprudence. The potential anticompetitive effects of vertical restraints are similar to those posed by vertical mergers, as both obtain between firms at different levels of the supply chain.

Over time, the Supreme Court has eliminated *per se* condemnation for vertical restraints. In 1977, the Court rejected *per se* illegality for vertical non-price restraints, *Cont'l T.V., Inc. v. GTE Sylvania Inc.*, 433 U.S. 36, 49, 52 n.19, 58 (1977) (overruling *United States v. Arnold, Schwinn & Co.*, 388 U.S. 365 (1967)), later confirming that "a vertical restraint is not illegal per se unless it includes some agreement on price or price levels." *Bus. Elecs. Corp. v. Sharp Elecs. Corp.*, 485 U.S. 717, 735-36 (1988). Eventually, the Court repudiated the last vertical *per se* prohibition—of vertical minimum price restraints. *Leegin Creative Leather Prods., Inc. v. PSKS, Inc.*, 551 U.S. 877 (2007) (overruling *Dr. Miles Med. Co. v. John D. Park & Sons Co.*, 220 U.S. 373 (1911)). In these decisions, the Court emphasized that any departure from the evidence-specific rule of reason "must be based on demonstrable economic effect, rather than . . . upon formalistic line drawing." *Bus. Elecs.*, 485 U.S. at 724.

These decisions reflect a nearly categorical repudiation of presumptions of illegality in dealings involving entities at different levels of the supply chain. Here, however, the Commission took the opposite approach, presuming anticompetitive effect while rejecting the significance of rigorously established benefits in a way that approaches a *per se* standard. This Court should reject that departure from sound law and economics.

B. The FTC Did Not Undertake the Necessary Fact-Specific Examination of the Merged Firm's Incentives Given the Merger's Efficiencies.

The FTC had to show that Illumina has a greater incentive to foreclose rivals following—and because of—the merger. Instead, the Commission adopted a standard of review that elides the requirement that, in a vertical merger case where there is "no presumption of harm in play," "the government must make a fact-specific showing that the proposed merger is likely to be anticompetitive" both at the *prima facie* stage and in the final analysis. *United States v. AT&T Inc.*, 310 F. Supp. 3d 161, 192 (D.D.C. 2018) ("*AT&T I*"), *aff'd*, 916 F.3d 1029 (D.C. Cir. 2019); *see AT&T II*, 916 F.3d at 1032.

To be sure, there is little recent case law regarding the standard of review for vertical mergers because the federal antitrust agencies have rarely challenged, let alone litigated, vertical acquisitions. The

Department of Justice challenge to the AT&T/Time Warner merger marked "the first time in 40 years that a court has heard a fully-litigated challenge to a vertical merger." Joshua D. Wright & Jan M. Rybnicek, *US v. AT&T Time Warner: A Triumph of Economic Analysis*, 6 J. Antitrust Enforcement 3 (2018).

Nevertheless, up to now, the agencies have considered likely structural benefits, transactional efficiencies, and potential remedies, along with potential harms, *in toto* and on net, in assessing a merger's likely competitive impact. Hence, the Vertical Merger Guidelines—jointly adopted by the FTC and the Antitrust Division of the Department of Justice in June 2020 (although withdrawn by the FTC while this case was pending)—state that "[t]he Agencies do not challenge a merger if cognizable efficiencies are of a character and magnitude such that the merger is unlikely to be anticompetitive in any relevant market." Vertical Merger Guidelines at 11. Even under the Horizontal Merger Guidelines, "[t]he Agency will not challenge a merger if cognizable efficiencies are of a character and magnitude such that the merger is not likely to be anticompetitive." Dep't of Justice, Antitrust Division & FTC, Horizontal Merger Guidelines § 10 (Aug. 19, 2010).

But here the Commission did not seriously account for likely efficiencies or other benefits that may be derived from practices inconsistent with foreclosure. Put simply, Illumina's ability to profit from the merger without foreclosing rivals reduces its incentive to foreclose. Although the foreclosure incentive may remain on some margins, the question of the greater incentive cannot be resolved without assessing the incentives *against* foreclosure as well as those for it.

Illumina's post-merger incentive to foreclose rivals may be constrained by:

- its interest in revenue realized from a broader array of sequencing clients than the relatively few engaged in multi-cancer early detection (MCED) research;
- the procompetitive—and pro-consumer—cost advantages it is likely to realize from integration with Grail;
- the relatively low risk of entry by close substitutes for Galleri in the near, or even foreseeable, future;
- the Open Offer;
- reputational or transactional harms that may result from refusing to deal with firms in its industry; and

- the litigation and regulatory risks attending attempted foreclosure.

But the FTC presumed away these and other factors that could mitigate the risk of harm.

1. *Presumptions Suitable to Horizontal Mergers Are Not Fit for the Analysis of Vertical Mergers*

The Commission maintains that the same scrutiny applies to efficiencies claims in vertical and horizontal transactions. To justify this conclusion, the Commission declined to "simply take managers' word for efficiencies without independent verification, because then the efficiency defense 'might well swallow the whole of Section 7,' as managers could present large unsubstantiated efficiencies claims and courts would be hard pressed to find otherwise." Opinion 75-76 (quoting *United States v. H&R Block, Inc*., 833 F. Supp. 2d 36, 91 (D.D.C. 2011). But this is a *non sequitur*, and wrong for three reasons.

First, the Commission need not (and the ID did not) "simply take managers' word for efficiencies." As the Initial Decision noted, courts and academic authorities both recognize procompetitive effects, including efficiencies, generally observed with vertical integration. ID 133-35, 196.

See also ID 135 (noting case-specific evidence regarding research and development efficiencies, EDM, and the acceleration of access).

Second, to support its rejection of competitive benefits, the FTC continued to conflate the legal standards for horizontal and vertical mergers, relying only on serial string citations to horizontal merger cases. Opinion 75-76. Because a vertical merger puts direct, downward pressure on prices and upward pressure on complementary investments—the inverse of horizontal merger effects—the reliance on horizontal cases highlights the Commission's failure to recognize the fundamental difference between horizontal and vertical integration. *See AT&T II*, 916 F.3d at 1032.

Third, ignoring that distinction, and the resulting need for a "fact-specific showing" of the likely anticompetitive effects of a vertical merger, *id.* at 1032, the Commission repeatedly relied upon *H&R Block*, which says nothing about standards of review for *vertical* mergers. *H&R Block* involved a *horizontal* merger that allegedly would have produced "an effective duopoly." 833 F. Supp. 2d at 44.

The FTC's Opinion also cites a horizontal merger decision, *FTC v. H.J. Heinz Co.*, 246 F.3d 708, 713 (D.C. Cir. 2001), and *AT&T II*—a vertical merger case—for the proposition that the *Baker Hughes* framework applies to both horizontal and vertical mergers. That is misleading. Again, *AT&T* emphasizes that the distinction between horizontal and vertical mergers precludes similar presumptions of anticompetitive effects, and makes it easier to establish certain recognized efficiency and other benefits of vertical integration. *See AT&T II*, 916 F.3d at 1032; Vertical Merger Guidelines at 5. Not incidentally, the Government lost its merger challenge in *AT&T*, both at trial and on appeal.

2. *The Commission Failed to Give Due Consideration to Evident Benefits*

The Commission also discounted—or ignored—various efficiencies and other benefits on the ground that "efficiencies are 'inherently difficult to verify and quantify.'" Opinion 75 (citing *H&R Block*, 833 F. Supp. 2d at 89). To justify this approach, the Commission cites five horizontal merger matters: *H&R Block*; *H.J. Heinz*; *Otto Bock HealthCare N. Am., Inc.*, 168 F.T.C. 324 (2019); *FTC v. Wilh. Wilhelmsen Holding ASA*, 341 F. Supp. 3d 27 (D.D.C. 2018); and *FTC v Penn State Hershey Medical* Center, 838 F.3d 327 (3d Cir. 2016).

Although some claimed efficiencies from horizontal mergers can be hard to verify, many efficiencies from vertical mergers are inherent. Specifically, if upstream and downstream margins are positive, basic economic theory predicts that the merger will mitigate double marginalization. Empirical research confirms this. *See, e.g.,* Gregory S. Crawford, et al., *The Welfare Effects of Vertical Integration in Multi-channel Television Markets*, 86 Econometrica 891 (2018). Similarly, when vertically related firms make complementary investments, theory predicts—and empirical research confirms—that vertical mergers will internalize investment spillovers in a way that tends to expand investment. *See, e.g.,* Chenyu Yang, *Vertical Structure and Innovation: A Study of the SoC and Smartphone Industries*, 51 Rand J. Econ. 739 (2020). Meanwhile, operational and transactional efficiencies can be supported by both theoretical and empirical evidence, as well as case-specific evidence about the merging firms.

Here, the ALJ's findings of fact detail ongoing innovation by Illumina, including improvements to its next generation sequencing (NGS) technologies ranging from the release of new reagents to software updates expected to result from the merger. ID 88-89. The Initial

Decision also describes a complex process of integration between Illumina's NGS technology and the requirements of different MCED testing programs. ID 89-91.

Given the Commission's disregard of efficiencies, it is unclear when or how procompetitive benefits could ever offset the harm alleged to result if the consummated merger were left undisturbed—harm that the Commission did not quantify in either magnitude or likelihood.

3. *The Commission's Speculative Prima Facie Case Fails to Account for the Likely Risk of Actual Harm*

The efficiencies and competitive benefits here seem substantially easier to verify and quantify than the magnitude or likelihood of the supposed harm that the Commission neither quantified nor estimated. The Commission did not seriously try to quantify the effects of the merger on the timing and competitive significance of entry of complex clinical products, such as MCED tests, in early stages of development. Rather, the Commission simply asserted that "likely substantial harms to current, ongoing innovation competition in nascent markets are sufficiently probable and imminent to violate Section 7" of the Clayton Act, Opinion 60-61 (cleaned up). But the Commission identified no evidence to support this assertion, or to refute the ALJ's determinations that MCED tests in development were not poised to enter into competition with Grail's Galleri test, ID 143-144, that most of the research on possible MCED tests was relatively preliminary, ID 144-145, and that most of the tests being investigated appeared to be far from close substitutes for Galleri. ID 145-153; *see also* ID 27-28, 44-61.

Instead, the Commission disputed the legal relevance of those findings, stating that its analysis "rests on harm to current, ongoing R&D efforts, rather than the precise timing or nature of any firm's commercialization of an MCED test." Opinion 56 n. 38. But that harm, too, is assumed rather than observed, and is neither verified nor quantified.

Thus, the Commission's *prima facie* case rests both on a peremptory dismissal of competitive benefits and efficiencies and an uncritical acceptance of speculative theories of harm. Pre-merger, Illumina maintained a substantial ownership interest in Grail of no less than 12%, ID 7-11, yet the Commission did not identify any attempts by Illumina or Grail to interfere with research and development of any MCED test that might enter to compete with Galleri. The only head-to-head R&D competition noted was between Grail and one firm with a pipeline MCED test (Exact/Thrive), on two dimensions: first, various "prelaunch" activities, such as "competing for mindshare with physicians, with health systems, with payers," ID 34; second, competition for research scientists capable of contributing to the development of MCED tests, *id*. But there was neither allegation nor evidence that Illumina or Grail engaged in anticompetitive conduct in these areas, and no obvious way in which Illumina could exploit whatever market power it enjoys in NGS markets to foreclose access to "mindshare" or research scientists.

Given no past, present, or ongoing harm to third-party R&D efforts, there is no basis to ignore the likelihood of entry into the MCED test product market, the likely timing of entry, or the likely competitive significance of entry by particular MCED tests that might be relatively close or poor substitutes for Galleri.

Each of those factors is directly relevant to the present risk of potential harm to future competition. They determine whatever risk ongoing R&D into MCED tests would pose to Grail, and hence affect the merged firm's foreclosure incentives. Equally relevant is the risk to Illumina's core income stream from NGS sales and services should it prove unreliable or capricious in fulfilling its contracts. That core business includes diverse clinical testing well beyond the potential rivals at issue, ID 92-93, with clients including "leading genomic research centers, academic institutions, government laboratories and hospitals, as well as pharmaceutical, biotechnology, commercial molecular diagnostic laboratories, and consumer genomics companies." ID 6.

4. *Evidence of Likely Procompetitive Effects Should Not Be Ignored at Any Stage of Analysis*

Finally, the Commission contends that "[c]ourts have never held that efficiencies alone immunized an otherwise unlawful transaction." Opinion 75. That puts the cart before the horse, as benefits from aligning incentives between producers of complements (what the Commission terms "efficiencies") often determine whether a transaction—especially a vertical transaction—is "unlawful" in the first place.

Most important, the courts have never held that these benefits are irrelevant generally (as the FTC would have it), or to the question whether a transaction is unlawful in the first instance. To the contrary, analysis of a vertical merger must account for the procompetitive benefits and efficiencies it is likely to achieve. *See AT&T I*, 310 F. Supp. at 198 (noting need "to 'balance' whether the Government's asserted harms outweigh the merger's conceded consumer benefits."). Even in horizontal mergers, sufficiently large efficiency benefits may prevent a merger from being illegal. *New York v. Deutsche Telekom AG*, 439 F. Supp. 3d 179, 207 (S.D.N.Y. 2020).

Because *AT&T II* made clear that no presumption of illegality applies to vertical mergers, the Commission properly faces a rigorous burden to prove on case-specific evidence that the proposed merger is *likely* to cause *substantial, actual* harm to competition and consumers—not a possibility of some degree of harm to competition that in theory could harm consumers. The Commission has not carried that burden.

II. The Open Offer Undercuts the Commission's *Prima Face* Case and Its Disregard of Potential Remedies.

The Commission's legal error went beyond its application of a misplaced presumption of illegality that is impervious to evidence of the benefits from combining complements. The Commission also failed to recognize key structural differences between horizontal and vertical mergers.

The primary source of potential anticompetitive harm from vertical integration is foreclosure. While foreclosure is not consistently defined, one passable definition is:

> [A] dominant firm's denial of proper access to an essential good it produces, with the intent of extending monopoly power from that segment of the market (the bottleneck segment) to an adjacent segment (the potentially competitive segment).

Patrick Rey & Jean Tirole, *A Primer on Foreclosure*, in 3 Handbook of Industrial Organization 2145, 2148 (Mark Armstrong & Robert H. Porter, eds.) (2007). Because denial of access is a crucial aspect of foreclosure, agreements (or remedies) granting access to essential goods or services can mitigate the risk of foreclosure.

Illumina's "Open Offer" appears to grant such access, yet the Commission failed to give proper weight to its effect on the risk of anticompetitive conduct. In contrast, the ALJ examined the Open Offer in detail, *see*, *e.g.*, ID 98-125, 182-189, finding that it "provides a comprehensive set of protections for Illumina's customers for all aspects of conduct and competition." ID 120. The Commission rejected those findings, relying in part on a mischaracterization of the Open Offer as only a proposed remedy, and in part on an overbroad repudiation of behavioral remedies.

First, the record indicates that the Open Offer is binding under New York law, at least with respect to several firms engaged in MCED research, and that it will remain so through August 2033. ID 103-04.

Firms that have accepted (or will accept) the Open Offer can enforce it whether or not the merger is blocked; and they would have every incentive to do so if Illumina interfered with their R&D efforts. That is not just a proposed remedy, but a fully operative constraint. If accepted, the Open Offer will become part of the institutional framework within which Illumina operates, further reducing or eliminating the firm's incentives and ability to raise its rivals' costs. ID 103-04, 179. *Cf. United States v. General Dynamics Corp.*, 415 U.S. 486, 501-02 (1974) (noting importance of existing contracts in assessing competitive landscape).

That constraint seems especially significant given how few firms might someday enter to compete with Grail's MCED test, and the difficulty inherent in trying to forecast R&D competition so far in advance.

Second, the Commission strains credulity in disregarding the Open Offer on the grounds that behavioral remedies can be hard to monitor and tend to be disfavored. If the Open Offer were incorporated into a consent order, the FTC would have to monitor only a very few agreements. The affected parties would assist in monitoring compliance, well-funded would-be entrants would have every incentive to report any difficulty gaining access to Illumina's sequencing technology, and the FTC could modify the order as needed. Illumina, for its part, would face both the risk of damages imposed under state law and the risk of statutory penalties, among other remedies, for violations of FTC consent orders.

Under the flexible *Baker Hughes* approach, the Commission should have accorded substantial weight to the Open Offer in assessing whether the Illumina-Grail transaction is truly likely to cause harm. This behavioral remedy is neither cumbersome nor ineffective. Given the Open Offer, the Commission does not appear to have established that harm to R&D competition is likely or imminent.

III. The Economics of Vertical Integration Support the Differential Treatment of Vertical and Horizontal Mergers.

Economic and empirical research confirm that the Commission was wrong to conclude that vertical and horizontal mergers should be analyzed identically. Horizontal mergers, by definition, remove a competitor from a relevant market; vertical mergers do not. As the economics literature makes clear, that structural distinction is central to antitrust analysis.

A. In Theory, The Competitive Implications of Vertical Mergers Are Ambiguous.

The Supreme Court's modern vertical restraints decisions underscore the importance of developments in the economic literature for assessing how to evaluate any type of integration under the antitrust laws. The Court removed *per se* prohibitions on vertical restraints in part because "economics literature is replete with procompetitive justifications for" them. *Leegin,* 551 U.S. at 889.

The economics literature is equally "replete with procompetitive justifications" for vertical integration. Vertical integration typically confers benefits, such as eliminating double marginalization, Reiffen & Vita, *supra*, 63 Antitrust L.J. 917; increasing R&D investment, Armour & Teece, *supra*, 62 Rev. Econ. & Stat. 470; and creating operational and transactional efficiencies, Carlton, *supra*, 73 Int'l J. Indus. Org. 1.

The logic behind EDM is simple: Vertical mergers can increase welfare, even if the upstream or downstream firm has market power. When firms "markup" their products over their marginal cost of production, that reduces output and increases the (input or distribution) costs of their (downstream or upstream) rivals. In other words, independent upstream and downstream firms can exert negative externalities on each other that ultimately push prices upwards. When firms have no incentive to consider the effect of their price (and output) determinations on downstream firms' profits, *see, e.g.*, Michael A. Salinger, *Vertical Mergers and Market Foreclosure*, 103 Q.J. Econ. 345 (1988), there is an additional markup over the downstream firm's marginal cost of production, or "double marginalization." Vertical mergers enable firms to coordinate their pricing behavior, eliminating this externality without the negative effects that coordination would entail in horizontal merger cases. *See* Reiffen & Vita, *supra*, 63 Antitrust L. J. at 920.

In a vertical merger, EDM is likely automatic. *Id.* That is "precisely opposite of the outcome that arises under the frequently used Cournot oligopoly model of horizontal competition with substitute products. Under Cournot oligopoly, joint pricing raises price; under Cournot complements [as in a vertical merger], it lowers price." Daniel O'Brien, *The Antitrust Treatment of Vertical Restraint: Beyond the Possibility*

Theorems, in Konkurrensverket, Swedish Competition Authority, Report: The Pros and Cons of Vertical Restraints 22, 36 (2008).[1]

To be clear, vertical mergers are not *necessarily* procompetitive. An integrated firm may have an incentive to exclude rivals, *see* Steven C. Salop & David T. Scheffman, *Cost-Raising Strategies*, 36 J. Indus. Econ. 19 (1985), and a vertical merger *can* have an anticompetitive effect if the upstream firm has market power and the ability, post-acquisition, to foreclose its competitors' access to a key input. *See* Janusz A. Ordover, Garth Saloner & Steven C. Salop, *Equilibrium Vertical Foreclosure*, 80 Am. Econ. Rev. 127 (1990). In that regard, raising rivals' costs can "represent[] a credible theory of economic harm" if other conditions of exclusionary conduct are met. Malcom B. Coate & Andrew N. Kleit, *Exclusion, Collusion, and Confusion: The Limits of Raising Rivals' Costs*, FTC Bureau of Economics Working Paper No. 179 (1990). But this is merely a *possibility*, not a likely conclusion without solid empirical evidence: "The circumstances… in which [raising rivals' costs] can occur

[1] Many discussions of the competitive effects of vertical mergers, including the Vertical Merger Guidelines, conflate EDM, investment benefits, and transactional efficiencies.

are usually so limited that [it] almost always represents a minimal threat to competition." *Id.* at 3.

The implications of vertical mergers are thus theoretically ambiguous, *not* typically anticompetitive. But while the Commission now seeks to equate horizontal and vertical mergers,

> [a] major difficulty in relying principally on theory to guide vertical enforcement policy is that the conditions necessary for vertical restraints to harm welfare generally are the same conditions under which the practices increase consumer welfare.

James C. Cooper, et al., *Vertical Antitrust Policy as a Problem of Inference*, 23 Int'l. J. Indus. Org. 639, 643 (2005).

This structural ambiguity weighs against any presumption against vertical mergers, and suggests the importance of empirical research in formulating standards to evaluate vertical transactions.

B. Empirical Research Establishes that Vertical Mergers Tend to Be Procompetitive In Practice.

Empirical evidence supports the established legal distinctions between horizontal mergers and vertical mergers (as well as other forms of vertical integration), indicating that vertical integration tends to be procompetitive or benign.

A meta-analysis of more than seventy studies of vertical transactions analyzed groups of studies for their implications for various theories or models of vertical integration, and for the effects of vertical integration. From that analysis

> a fairly clear empirical picture emerges. The data appear to be telling us that efficiency considerations overwhelm anticompetitive motives in most contexts. Furthermore, even when we limit attention to natural monopolies or tight oligopolies, the evidence of anticompetitive harm is not strong.

Francine Lafontaine & Margaret Slade, *Vertical Integration and Firm Boundaries: The Evidence*, 45 J. Econ. Lit. 629, 677 (2007).

On the contrary, "under most circumstances, profit-maximizing vertical integration decisions are efficient, not just from the firms' but also from the consumers' points of view." *Id.* And "[a]lthough there are isolated studies that contradict this claim, the vast majority support it…." *Id.* Lafontaine and Slade accordingly concluded that "faced with a vertical arrangement, the burden of evidence should be placed on competition authorities to demonstrate that that arrangement is harmful before the practice is attacked." *Id.*

Another study of vertical restraints finds that, "[e]mpirically, vertical restraints appear to reduce price and/or increase output. Thus, absent a good natural experiment to evaluate a particular restraint's effect, an optimal policy places a heavy burden on plaintiffs to show that a restraint is anticompetitive." Cooper, et al., *supra*, 23 J. Indus. Org. at 639.

Subsequent research has reinforced these findings. Reviewing the more recent literature from 2009-18, John Yun concluded "the weight of the empirical evidence continues to support the proposition that vertical mergers are less likely to generate competitive concerns than horizontal ones." John M. Yun, *Vertical Mergers and Integration in Digital Markets*, in The GAI Report on the Digital Economy (Joshua D. Wright & Douglas H. Ginsburg, eds., 2020) at 245.

Leading contributors to the empirical literature, reviewing both new studies and critiques of the established view of vertical mergers, maintain a consistent view. For example, testifying at a 2018 FTC hearing, Francine Lafontaine, a former Director of the FTC's Bureau of Economics, acknowledged that *some* of the early empirical evidence is less than ideal, in terms of data and methods, but reinforced the overall conclusions of her earlier research "that the empirical literature reveals consistent evidence of efficiencies associated with the use of vertical restraints (when chosen by market participants) and, similarly, with vertical integration decisions." Francine Lafontaine, Vertical Mergers (Presentation Slides), in FTC, *Competition and Consumer Protection in the 21st Century; FTC Hearing #5: Vertical Merger Analysis and the Role of the Consumer Welfare Standard in U.S. Antitrust Law*, Presentation Slides 93 (Nov. 1, 2018) ("*FTC Hearing #5*"), available at https://www.ftc.gov/system/files/documents/public_events/1415284/ftc_hearings_5_georgetown_slides.pdf. *See also* Francine Lafontaine & Margaret E. Slade, *Presumptions in Vertical Mergers: The Role of Evidence*, 59 Rev. Indus. Org. 255 (2021).

In short, empirical research confirms that the law properly does not presume that vertical mergers have anticompetitive effects, but requires specific evidence of both harms and efficiencies.

C. New Research Does Not Undermine the Prevailing View of Vertical Mergers.

Critics of prevailing legal standards and agency practice have pointed to a few studies that might cast doubt on the ubiquity of benefits associated with vertical mergers. We briefly review several of those studies, including those discussed at the FTC's 2018 "Competition and Consumer Protection in the 21st Century" hearings that purported to suggest that the "econometric evidence does not support a stronger procompetitive presumption [for vertical mergers]." Steven C. Salop, *Revising the Vertical Merger Guidelines* (Presentation Slides), in *FTC Hearing #5, supra*, Presentation Slides 25. In fact, these studies do not undermine the longstanding economic literature. *See* Geoffrey A. Manne, Kristian Stout & Eric Fruits, *The Fatal Economic Flaws of the Contemporary Campaign Against Vertical Integration*, 69 Kansas L. Rev. 923 (2020). "[T]he newer literature is no different than the old in finding widely procompetitive results overall, intermixed with relatively few seemingly harmful results." *Id.* at 951.

One oft-cited study examined Coca-Cola and PepsiCo's acquisitions of some of their downstream bottlers. Fernando Luco & Guillermo Marshall, *The Competitive Impact of Vertical Integration by Multiproduct Firms*, 110 Am. Econ. Rev. 2041 (2020). The authors presented their results as finding that "vertical integration in the US carbonated-beverage industry caused anticompetitive price increases in products for which double margins were not eliminated." *Id.* at 2062. But the authors actually found that, while such acquisitions were associated with price increases for independent Dr Pepper Snapple Group products, they were associated with *price decreases* for both Coca-Cola and PepsiCo products bottled by vertically integrated bottlers. Because the products associated with increased prices accounted for such a small market share, "vertical integration did not have a significant effect on the price index when considering the full set of products." *Id.* at 2056. Overall, the consumer impact was either an efficiency *gain* or no significant change. As Francine Lafontaine characterized the study, "in total, consumers were better off given who was consuming how much of what." *FTC Hearing #5, supra*, Transcript 88 (statement of Francine Lafontaine), *available at* https://www.ftc.gov/system/files/documents/public_events/1415284/ftc_hearings_session_5_transcript_11-1-18.pdf.

In another study often cited by skeptics of vertical integration, Justine Hastings and Richard Gilbert examined wholesale price changes charged by a vertically integrated refiner/retailer using data from 1996-98. Justine S. Hastings & Richard J. Gilbert, *Market Power, Vertical Integration, and the Wholesale Price of Gasoline*, 33 J. Indus. Econ. 469 (2005). They observed that the firm charged higher wholesale prices in cities where its retail outlets competed more with independent gas stations, and concluded that their observations were consistent with the theory of raising rivals' costs. *Id.* at 471.

In subsequent research, however, three FTC economists publishing in the American Economic Review examined retail gasoline prices following the 1997 acquisition of an independent gasoline retailer by a vertically integrated refiner/retailer. Their estimates suggested that the merger was associated with minuscule—and economically insignificant—price increases. Christopher T. Taylor, et al., *Vertical Relationships and Competition in Retail Gasoline Markets: Empirical Evidence from Contract Changes in Southern California: Comment*, 100 Am. Econ. Rev. 1269 (2010).

Hastings explains the discrepancy with Taylor et al., by noting the challenges of evaluating vertical mergers with incomplete data or, simply, different data sets, as seemingly similar data can yield very different results. Justine Hastings, *Vertical Relationships and Competition in Retail Gasoline Markets: Empirical Evidence from Contract Changes in Southern California: Reply*, 100 Am. Econ. Rev. 1227 (2010). But that observation does not undercut Taylor et al.'s findings. Rather, it suggests caution in drawing general conclusions from this line of research, even with regard to gasoline/refiner integration, much less to vertical integration generally.

Other commonly cited studies are no more persuasive. For example, one study examined vertical mergers between cable-programming distributors and regional sports networks using counterfactual simulations that enforced program access rules. Crawford, et al., *supra*, 86 Econometrica 891. While some have characterized their findings as "mixed" (*FTC Hearing #5, supra*, Transcript 54 (statement of Margaret Slade))—suggesting that vertical integration could have some negative as well as positive effects—their overall results indicated "that vertical integration leads to significant gains in both consumer and aggregate welfare." Crawford, et al., *supra*, 86 Econometrica at 893-894.

Harvard economist Robin Lee, a co-author of the study, concluded that the findings demonstrated that the consumer benefits of efficiency gains outweighed any harms from foreclosure. As he testified at the FTC's 2018 hearings,

> our key findings are that, on average, across channels and simulations, there is a net consumer welfare gain from integration. Don't get me wrong, there are significant foreclosure effects, and rival distributors are harmed, but these negative effects are oftentimes offset by sizeable

> efficiency gains. Of course, this is an average. It masks considerable heterogeneity.

FTC, *Competition and Consumer Protection in the 21st Century: FTC Hearing #3: Multi-Sided Platforms, Labor Markets, and Potential Competition*, Transcript 101 (Oct. 17, 2018), *available at* https://www.ftc.gov/system/files/documents/public_events/1413712/ftc_hearings_session_3_transcript_day_3_10-17-18_0.pdf.

While these studies indicate that vertical mergers can sometimes lead to harm, that point was never disputed. What is important is that the studies do not support any general presumption against vertical mergers or, indeed, any revision to either the legal distinction between horizontal and vertical mergers or to what was, up to now, established agency practice in merger review. The weight of the empirical evidence plainly indicates that vertical integration tends to be procompetitive; hence, no presumption of anticompetitive effects or of illegality should apply, and none should have been applied here.

CONCLUSION

There is much at stake here. The potential for harm from the merger seems speculative, but the benefits seem conspicuous and substantial, not only reducing the risk of net competitive harm but promising significant enhancement to consumer welfare. As the Commission observed, "better screening methods to detect more cancers at an earlier stage … have the potential to extend and improve many human lives." Opinion 3. Those benefits should not be forestalled by speculation about possible harms that ignores the differences between vertical and horizontal mergers.

The FTC's decision should be reversed.

June 12, 2023

Respectfully submitted,

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APPENDIX A

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CERTIFICATE OF SERVICE

Pursuant to Fed. R. App. P. 25(d) and 5th Cir. R. 25.2.5, I hereby certify that on June 12, 2023, I filed the foregoing Brief with the Clerk of the Court for the United States Court of Appeals for the Fifth Circuit by using the Court's CM/ECF system; service on counsel for all parties was accomplished by electronic mail or by service through the Court's electronic filing system.

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CERTIFICATE OF COMPLIANCE

The foregoing brief contains 6,485 words excluding the parts of the brief exempted by Fed. R. App. P. 32(f), and thus complies with the type volume limitation of Fed. R. App. P. 32(a)(7)(B).

This brief complies with the typeface requirements of Fed. R. App. P. 32(a)(5)(A) and the type-style requirements of Fed. R. App. P. 32(a)(6) because it has been prepared in a proportionally spaced typeface using Microsoft Word Office 2016 in 14-point Century Schoolbook font.

Additionally, I certify that (1) any required redactions have been made in compliance with 5th Cir. R. 25.2.13; and (2) the document has been scanned with the most recent version of Norton Security virus detector and is free of viruses.

June 12, 2023

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