No. 26-5023
(Consolidated with Nos. 26-5047 & 26-5049)

United States Court of Appeals for the District of Columbia Circuit

UNITED STATES OF AMERICA, *ET AL.*,

Plaintiffs-Appellees-Cross-Appellants,

v.

GOOGLE LLC,

Defendant-Appellant-Cross-Appellee.

ON APPEAL FROM THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA, NOS. 20-CV-3010 & 20-CV-3715
HON. AMIT P. MEHTA

BRIEF OF ECONOMISTS AND LEGAL SCHOLARS AS *AMICI CURIAE* IN SUPPORT OF NEITHER PARTY

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CERTIFICATE AS TO PARTIES, RULINGS, AND RELATED CASES

Pursuant to Rule 28(a)(1) of the United States Court of Appeals for the District of Columbia Circuit, *amici curiae* Economists and Legal Scholars certify as follows:

A. Parties and Amici

Except for *amici curiae* in this Court, all parties and *amici* appearing before the district court and all parties appearing before this Court are listed in Google LLC's Certificate as to Parties, Rulings, and Related Cases (Document No. 2160428, filed Feb. 23, 2026) and Plaintiffs' Certificate as to Parties, Rulings, and Related Cases (Document No. 2160541, filed Feb. 23, 2026).

B. Rulings Under Review

References to the rulings at issue appear in Google LLC's Certificate as to Parties, Rulings, and Related Cases (Document No. 2160428, filed Feb. 23, 2026) and Plaintiffs' Certificate as to Parties, Rulings, and Related Cases (Document No. 2160541, filed Feb. 23, 2026).

C. Related Cases

This case was previously before this Court in *United States et al. v. Google LLC & Apple Inc.*, No. 25-5016, available at 2025 WL 880552 (D.C. Cir. Mar. 21, 2025). *Amici* is not aware of any other related cases.

Dated: May 29, 2026

Respectfully submitted,

/s/ Ephraim A. McDowell
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STATEMENT REGARDING CONSENT TO FILE AND SEPARATE BRIEFING

All parties consent to the filing of this *amici curiae* brief. *See* Fed. R. App. P. 29(a)(2); Cir. R. 29(b).

Pursuant to Circuit Rule 29(b), undersigned counsel for *amici curiae* certifies that a separate brief is necessary. *Amici* are economists and legal scholars who focus on empirical economic analysis, competition, and antitrust policy. *Amici* have served as expert witnesses in antitrust matters, taught at leading universities, and published dozens of articles on various antitrust topics. Accordingly, they have a unique perspective to offer on the legal issues presented here.

TABLE OF CONTENTS

Page

CERTIFICATE AS TO PARTIES, RULINGS, AND RELATED CASES i

STATEMENT REGARDING CONSENT TO FILE AND SEPARATE BRIEFING iii

TABLE OF AUTHORITIES v

IDENTITY AND INTEREST OF *AMICI CURIAE* 1

INTRODUCTION AND SUMMARY OF ARGUMENT 2

ARGUMENT 8

I. Counterfactuals Are Fundamental To Antitrust Analysis 8

II. Economists Have Numerous Tools To Conduct Reliable Counterfactual Analysis In Assessing Antitrust Remedies 15

CONCLUSION 21

CERTIFICATE OF COMPLIANCE 23

CERTIFICATE OF SERVICE 24

ADDENDUM

TABLE OF AUTHORITIES

Page(s)

Cases

FTC v. Meta Platforms, Inc.,
811 F. Supp. 3d 67 (D.D.C. 2025) 7, 9, 13, 15, 17-18, 21

United States v. Am. Airlines Grp. Inc.,
675 F. Supp. 3d 65 (D. Mass. 2023) 7, 12

United States v. Am. Airlines Grp. Inc.,
No. 23-1802 (1st Cir. Dec. 8, 2023) 7

United States v. Google LLC,
803 F. Supp. 3d 18 (D.D.C. 2025) 1, 3-5, 21

United States v. Google LLC,
747 F. Supp. 3d 1 (D.D.C. 2024) 4, 14, 20

Other Authorities

Alberto Abadie, Alexis Diamond & Jens Hainmueller,
Synthetic Control Methods for Comparative Case Studies: Estimating the Effect of California's Tobacco Control Program, 105 J. Am. Stat. Ass'n 493 (2010) 17

Joshua D. Angrist & Guido W. Imbens, *Identification and Estimation of Local Average Treatment Effects*,
62 Econometrica 467 (1994) 18

Joshua D. Angrist & Jörn-Steffen Pischke, *The Credibility Revolution in Empirical Economics: How Better Research Design is Taking the Con Out of Econometrics*,
24 J. Econ. Persp. 3 (2010) 6

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TABLE OF AUTHORITIES (CONTINUED)

Page(s)

Timothy F. Bresnahan, *Empirical Studies of Industries with Market Power*, in 2 Handbook of Indus. Org. 1011 (Richard Schmalensee & Robert Willig eds., 1989) 14

Communication from the Commission: *Guidance on the Commission's Enforcement Priorities in Applying Article 82 of the EC Treaty to Abusive Exclusionary Conduct by Dominant Undertakings*, 2009 O.J. (C 45) 7 (EC) 11

D.C. Cir. R. 29(b) 1

DOJ & FTC, *Horizontal Merger Guidelines* (Aug. 19, 2010) 9-10

DOJ & FTC, *Merger Guidelines* (Dec. 18, 2023) 10, 19

European Commission, *Draft Communication from the Commission*: *Guidelines on the Assessment of Mergers Under Council Regulation (EC) No 139/2004 on the Control of Concentrations Between Undertakings* (Apr. 30, 2026) 10

Fed. R. App. P. 29(a)(2) 1

John D. Harkrider, DOJ, *Operationalizing the Hypothetical Monopolist Test* (Dec. 19, 2023) 9

James J. Heckman, *Causal Parameters and Policy Analysis in Economics: A Twentieth Century Retrospective*, 115 Q.J. Econ. 45 (2000) 11

Paul W. Holland, *Statistics and Causal Inference*, 81 J. Am. Stat. Ass'n 945 (1986) 6

Timothy J. Muris & Vernon L. Smith, *Antitrust and Bundled Discounts: An Experimental Analysis*, 75 Antitrust L.J. 399 (2008) 18

TABLE OF AUTHORITIES (CONTINUED)

Page(s)

Press Release, The Royal Swedish Academy of Sciences,
The Prize in Economic Sciences 2000 (Oct. 11, 2000) 20
The Prize in Economic Sciences 2002 (Oct. 9, 2002) 20
The Prize in Economic Sciences 2019 (Oct. 14, 2019) 20
The Prize in Economic Sciences 2021 (Oct. 11, 2021) 18, 20

Donald B. Rubin, *Estimating Causal Effects of Treatments in Randomized and Nonrandomized Studies*,
66 J. Educ. Psychol. 688 (1974) 6

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(Richard Schmalensee & Robert Willig eds., 1989) 14

IDENTITY AND INTEREST OF *AMICI CURIAE*[1]

Amici, economists and legal scholars whose work focuses on empirical economic analysis, competition, and antitrust policy, have an interest in ensuring economically sound analysis in antitrust matters. *Amici* have published extensively in the leading economics and law journals, testified as experts before Congress, and served as consultants and expert witnesses in antitrust matters. Their work has been cited and otherwise relied upon by the U.S. Supreme Court and various other courts. A full list of *amici* appears in the Addendum.

Amici submit this brief in support of neither party. Amici, as economists and scholars who routinely employ the methods described herein, are concerned by the district court's refusal to conduct a counterfactual analysis on the grounds that "[s]uch an exercise" was too "challenging" and "[im]precise[]" for the court to conduct. *United States v. Google LLC*, 803 F. Supp. 3d 18, 73 (D.D.C. 2025) ("*Google Remedies*").

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[1] This brief is filed pursuant to Federal Rule of Appellate Procedure 29(a)(2) and Rule 29(b) of the United States Court of Appeals for the District of Columbia Circuit. *Amici* state that no party or counsel for a party authored this brief in whole or in part, and no one other than *amici* and their counsel have made a monetary contribution to fund the preparation or submission of this brief. All parties have consented to the filing of this brief.

INTRODUCTION AND SUMMARY OF ARGUMENT

Counterfactual analysis is fundamental to the economic analysis of impact. The inquiry focuses on comparing the actual world with the world absent the conduct or policy under study. For example, absent Google's challenged conduct, would Apple have switched away from Google Search and instead made a rival like DuckDuckGo the default search engine on Apple devices and, if so, would consumers have used DuckDuckGo, or would they instead have switched to Google Search?

Counterfactual analysis is also fundamental to designing remedies that go beyond simple injunctive relief and are designed to restore lost competition. The latter necessarily requires an understanding of what the lost competition is that the court is seeking to restore. In either case—whether determining liability or fashioning remedies—such an assessment does not require a precise understanding of the "but-for" world. There is generally no need to determine, for instance, the defendant's exact market shares in the but-for world versus the actual world. Rather, the role of counterfactual analysis is to assess whether challenged conduct caused substantial harm to competition and to tailor remedies to that harm. Remedies that are untethered to a counterfactual

can overshoot the harm to be redressed, veering into improper engineering of market outcomes that never would have come to pass even in the absence of unlawful conduct.

There are numerous economic methods to conduct counterfactual analysis. As discussed below, these include historical comparisons and market episodes, natural experiments, field experiments and controlled studies, and evidence on consumer choice and revealed preferences. In this case, for example, Google advanced a conservative proxy for the but-for world, including evidence from choice screens, which showed that the vast majority of users would choose Google even if it were displayed side-by-side with rival search engines. Tr. 4223:13-25:12; RDXD-33.011; *see also Google Remedies*, 803 F. Supp. 3d at 143 (declining to impose Plaintiffs' proposed choice screen remedies and concluding that, as "Plaintiffs' economic experts have acknowledged," "choice screens are not likely to change the competitive landscape under current or even near-term market conditions").

Despite the range of methods available, counterfactuals have engendered some confusion. In this case, the district court expressly declined to use a but-for or counterfactual analysis in both the liability

and remedies phase of the litigation. *See United States v. Google LLC*, 747 F. Supp. 3d 1, 153-55 (D.D.C. 2024) ("*Google Liability*"); *Google Remedies*, 803 F. Supp. 3d at 71-75. For example, although the court resisted the government's maximalist request to order Google to divest Chrome, it nevertheless imposed structural remedies on Google in pursuit of "'effectively pry[ing] open to competition a market that has been closed.'" *See Google Remedies*, 803 F. Supp 3d at 36-38 (citation omitted) (citing this goal, as well as the aims of "[d]enying the fruits of the violation" and "ensuring that anticompetitive behavior will not recur"). But in determining the appropriate remedy, the court rejected the use of counterfactual analysis. Conducting such a but-for assessment for remedies, the court posited, posed an "intractable" problem and "evidentiary predicament." *Id.* at 73.

The court observed that "[t]o reconstruct the but-for world would require the court to determine how Google Search and its rivals would have evolved had Google not secured exclusive default placement." *Id.* And in its view, "[s]uch an exercise" was too "challenging" and "[im]precise[]" for a court to conduct. *Id.* Indeed, the court suggested that the inability of Google's expert to "precisely specify" a quantitative

answer significantly undermined the strength of his testimony. *Id.* Yet that suggestion misunderstands the point of the testimony, which was not to predict whether "the world will look just like" a prediction, *id.*, but instead to determine whether a remedy is generally tailored to the relevant harm.

The district court's position—that counterfactual analysis is unnecessary in determining antitrust liability or remedies—is puzzling. Counterfactual analysis is not an exotic technique; it is the bread and butter of empirical economics. Comparing observed outcomes to a counterfactual baseline is how economists assess the effects of whatever they are investigating—whether the incidence of tariffs, the investment consequences of proposed regulation, or, directly relevant here, the anticompetitive effects of challenged conduct. In all these cases, a key question when determining whether and how observed outcomes are attributable is to ask: Compared to what? What would the world have looked like without the conduct in question?

This is not merely a pragmatic tool; it is the conceptual foundation of modern causal inference. The dominant framework for causal reasoning in social sciences—the potential outcomes model—defines

causal effects as a comparison between the observed world and the counterfactual world: what outcome was observed under the treatment, compared to what outcome would have been observed in the absence of the treatment.[2] The economics profession has spent the past three decades developing increasingly rigorous methods for conducting this comparison—a body of work sometimes called the "credibility revolution."[3] The assertion that such analysis is "intractable" is difficult to reconcile with the state of the discipline.

Counterfactual analysis is also fundamental to antitrust law, as confirmed by the government's own approach in Sherman Act rule of reason cases. To take one example, the government's expert economist conducted a but-for analysis in the recent Sherman Act case challenging an alliance between American Airlines and JetBlue, using a combination of simulation methods, natural experiments, and ordinary-course

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[2] *See* Donald B. Rubin, *Estimating Causal Effects of Treatments in Randomized and Nonrandomized Studies*, 66 J. Educ. Psychol. 688 (1974); Paul W. Holland, *Statistics and Causal Inference*, 81 J. Am. Stat. Ass'n 945, 947 (1986) (calling the comparison of potential outcomes "the Fundamental Problem of Causal Inference").

[3] Joshua D. Angrist & Jörn-Steffen Pischke, *The Credibility Revolution in Empirical Economics: How Better Research Design is Taking the Con Out of Econometrics*, 24 J. Econ. Persp. 3 (2010).

documents. *See United States v. Am. Airlines Grp. Inc.*, 675 F. Supp. 3d 65, 100, 116 (D. Mass. 2023); JA1895, 1902, *United States v. Am. Airlines Grp. Inc.*, No. 23-1802 (1st Cir. Dec. 8, 2023).

Similarly, in a recent antitrust case in this Circuit, the district court described a field experiment conducted by a single economic expert as offering "the single best evidence" on a central question of market definition. *See FTC v. Meta Platforms, Inc.*, 811 F. Supp. 3d 67, 101 (D.D.C. 2025). There, the expert recruited several thousand participants and tracked their behavior when the cost of using certain products increased—a straightforward counterfactual exercise that proved decisive. *Id.* at 100-01. That experiment was not impossibly complex or prohibitively expensive. It was one of several empirical methods the court considered, but it illustrated that counterfactual analysis in antitrust cases is both feasible and powerfully informative.

In those contexts, no one suggested that a but-for analysis should be abandoned simply because it was not perfectly precise. Constructing a counterfactual or but-for analysis will invariably be somewhat uncertain. But economists mitigate that uncertainty by testing their models and running sensitivities to ensure they can reject hypotheses.

The necessary benchmark remains the but-for world, even if it cannot be known with absolute certainty.

The economics profession has developed a wide array of methods for assessing counterfactual outcomes, ranging from straightforward to sophisticated. A plaintiff bearing the burden of proof should be required to avail itself of at least some of them. What a plaintiff should not be permitted to do is simply assert that counterfactual analysis is "impossible" and thereby excuse itself from the effort entirely, particularly when, as here, the record contains substantial evidence bearing on what the but-for world would likely have looked like.

ARGUMENT

I. COUNTERFACTUALS ARE FUNDAMENTAL TO ANTITRUST ANALYSIS

Counterfactual analysis is fundamental to economics, and it is particularly important for antitrust law. Indeed, such but-for analysis is prevalent throughout assessments of anticompetitive conduct. Merger review, for example, has long rested on counterfactual analysis. "Most merger analysis is necessarily predictive, requiring an assessment of

what will likely happen if a merger proceeds *as compared to what will likely happen if it does not*."[4]

For instance, federal agencies apply (as part of the hypothetical-monopolist test) the "small but significant and nontransitory increase in price" (SSNIP) test to define relevant markets—and assess participants' market power—in assessing proposed mergers. *See Meta*, 811 F. Supp. 3d at 96. The SSNIP test is counterfactual: It asks whether a firm with a monopoly in a narrow market would hypothetically find it profitable to raise prices to a small degree. If so, that market becomes the defined market; if not, the market is widened and the test is repeated until a relevant antitrust market is found. The test relies on hypothetical price increases and but-for analysis, but the Merger Guidelines have nonetheless recognized it as a core tool for decades.[5]

Indeed, the Horizontal Merger Guidelines (HMGs) repeatedly use the phrase "absent the merger" as the baseline for evaluating competitive effects in market definition (§ 4.1.2), unilateral effects (§ 6), coordinated

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[4] DOJ & FTC, *Horizontal Merger Guidelines* 1 (Aug. 19, 2010), https://perma.cc/2F4K-XDT4 (emphasis added).

[5] John D. Harkrider, DOJ, *Operationalizing the Hypothetical Monopolist Test* (Dec. 19, 2023), https://perma.cc/RT5N-85JM.

effects (§ 7), entry (§ 9), and efficiencies (§ 10). The but-for world is the touchstone for merger effects analysis throughout the HMGs. The 2023 Merger Guidelines continue the same framework, explaining, for example, that the Hypothetical Monopolist Test for defining relevant antitrust markets "asks whether the hypothetical monopolist likely would worsen terms *relative to those that likely would prevail absent the proposed merger*."[6]

The U.S. government's approach to mergers and counterfactual analysis aligns with the assessment of mergers abroad. The European Union's recently published *Draft Merger Guidelines* explain that "the Commission assesses whether there is a causal link between the merger and the effects on competition. The Commission therefore carries out a forward-looking analysis of the effects of the merger on competition in comparison with the counterfactual, i.e. comparing the expected future market situation with and without the merger."[7]

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[6] DOJ & FTC, *Merger Guidelines* § 4.3B (Dec. 18, 2023) ("*Merger Guidelines*"), https://perma.cc/SSJ6-WBS4 (emphasis added).

[7] European Commission, *Draft Communication from the Commission: Guidelines on the Assessment of Mergers Under Council Regulation (EC) No 139/2004 on the Control of Concentrations Between Undertakings* ¶ 37 (Apr. 30, 2026), https://perma.cc/WM92-7N9Y.

The same is true of competitive effects analysis in monopolization cases. There, the "assessment will usually be made by comparing the actual or likely future situation in the relevant market (with the dominant undertaking's conduct in place) with an appropriate counterfactual."[8]

In fact, counterfactual reasoning is fundamental not only to antitrust, but also to all empirical economic analysis. Whether economists are assessing the effects of trade policy, evaluating a regulatory intervention, or studying market competition, the central question is how observed outcomes compare to what would have occurred under alternative conditions. As Nobel laureate James Heckman has observed, the "evaluation problem"—determining what would have happened to participants in a program or policy had they not participated—is "at the heart" of the empirical enterprise.[9] The methods

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[8] *Communication from the Commission*: *Guidance on the Commission's Enforcement Priorities in Applying Article 82 of the EC Treaty to Abusive Exclusionary Conduct by Dominant Undertakings*, 2009 O.J. (C 45) 7, 11 ¶ 21 (EC), https://op.europa.eu/s/AgvO.

[9] James J. Heckman, *Causal Parameters and Policy Analysis in Economics: A Twentieth Century Retrospective*, 115 Q.J. Econ. 45, 46 (2000).

for addressing this problem have been the subject of sustained development across economics, statistics, and the social sciences for more than half a century.[10]

In practice, economic experts in U.S. antitrust litigation can and do undertake these counterfactual analyses, even in complex industries. One notable example is the economic analysis offered by the government and its economic expert in *United States v. American Airlines Group Inc.*, 675 F. Supp. 3d 65 (D. Mass. 2023). There, the government sought to halt an agreement between American Airlines and JetBlue to "operate as one airline for most of their flights in and out of New York City and Boston" as an unreasonable restraint of trade. *Id.* at 73-74. The government expert's assessment of likely competitive effects—a counterfactual—became central to its position that the court should reject a structural outcome, using a combination of simulation methods, natural experiments, and ordinary-course documents. *See* Trial Tr. 143-44 (Miller Testimony), *United States v. Am. Airlines Grp. Inc.*, No. 21-cv-11558 (D. Mass. Oct. 27, 2022), Dkt. No. 315 (the "question of what the

[10] *See generally* Jonathan B. Baker & Daniel L. Rubinfeld, *Empirical Methods in Antitrust Litigation: Review and Critique*, 1 Am. L. & Econ. Rev. 386 (1999) (surveying the application of these methods to antitrust).

but-for world is, is sort of central to understanding what the net benefit is").

The same principles apply in monopolization cases under Section 2 of the Sherman Act. A firm's dominant market position may be due to a combination of anticompetitive conduct *and* procompetitive conduct, and the court must be careful to address the effects of only the former. Absent counterfactual analysis, the court risks mistakenly assigning liability or overshooting the target and penalizing a company simply for having the better product. This need to disentangle pro- from anticompetitive causes is why the court in *FTC v. Meta* noted that, "[w]hile the Court finds that observational evidence compelling, it recognizes that those results might be contaminated by other changes in a messy world. More persuasive are results from experiments." 811 F. Supp. 3d at 99 (citation omitted).

The use of counterfactuals was particularly necessary here because the district court's own findings suggest that Google would have maintained a leading market position even without its anticompetitive conduct. For example, the court found that prior to Google's illegal actions, "80% of all general search queries, whether entered on a desktop

computer or mobile device, flowed through Google." *Google Liability*, 747 F. Supp. 3d at 38. Further, the court determined that Google "has long been the best search engine, particularly on mobile devices." *Id.* at 144. Despite its market share, Google "continued to innovate in search," especially in the mobile sector, while its competitors were "slow to recognize the importance of developing a search product for mobile" and never caught up. *Id.* This innovation led Google's partners to "continue to select Google as the default because its search engine provides the best bet for monetizing queries." *Id.* All this could be true regardless of whether Google also engaged in anticompetitive conduct to ensure its success.

This point underscores why counterfactual analysis is not merely helpful but necessary. Economic research has repeatedly demonstrated that market outcomes cannot be reliably predicted from market structure alone. The relationship between structure, conduct, and performance is an empirical question that cannot be answered by assumption.[11]

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[11] *See, e.g.*, Timothy F. Bresnahan, *Empirical Studies of Industries with Market Power*, in 2 Handbook of Indus. Org. 1011, 1012-57 (Richard Schmalensee & Robert Willig eds., 1989); Richard Schmalensee, *Inter-Industry Studies of Structure and Performance*, in 2 Handbook of Indus. Org. 951 (1989).

The implications for this case are significant. A firm's large market share does not, by itself, tell a court how much of that share was attributable to anticompetitive conduct versus legitimate competitive success. Counterfactual analysis can effectively disentangle a monopolist's anticompetitive advantages from its legitimate competitive successes and investments. As the court noted in *FTC v. Meta*, the FTC failed to meet its burden of proof because its "experts did not assess whether any of these alternatives could be responsible for Meta's high profits." 811 F. Supp. 3d at 89. The court emphasized that "[t]he agency bears the burden of proving that Meta is a monopoly, yet the mere fact of high profits could show any number of alternatives, none of which the FTC rebutted." *Id.* (citations omitted).

Without that analysis, finding liability and fashioning remedies risk punishing a company for having the better product, and risk harming the consumers who benefit from it.

II. ECONOMISTS HAVE NUMEROUS TOOLS TO CONDUCT RELIABLE COUNTERFACTUAL ANALYSIS IN ASSESSING ANTITRUST REMEDIES

Counterfactual analysis is inherently predictive and thus necessarily lacks perfect precision. It asks what would likely have

occurred under conditions that, by definition, were not observed. That inherent uncertainty does not make the exercise futile—any more than the inherent uncertainty of weather forecasting makes it futile to check the forecast before deciding whether to carry an umbrella.

By the same token, it is not necessary to know by exactly how many percentage points Google's market share would have decreased but-for the assessed conduct to make counterfactual analysis essential. Instead, the key to predictive counterfactual analysis is to look for evidence that provides insights into the but-for world. Economists recognize that such methods include:

- **Historical comparisons and market episodes**. Where a market has experienced periods with and without the challenged conduct, or where a similar market has operated under different conditions, economists can compare outcomes directly. This is one of the simplest and most intuitive forms of counterfactual analysis. In this case, the record appears to contain substantial historical evidence bearing on the but-for world: Google's market share before the challenged conduct took effect, episodes in which distribution partners switched defaults (and consumer responses to those

switches), and the behavior of consumers when presented with alternatives through mechanisms like choice screens.

- **Natural experiments**. Events outside the parties' control can create conditions that approximate the but-for world. A regulatory change in a foreign jurisdiction, a partner's unilateral decision to alter defaults, or a service outage can reveal how consumers and competitors would behave under alternative conditions. Economists have well-developed methods for analyzing such episodes, including difference-in-differences estimation and synthetic control methods.[12] In *FTC v. Meta*, for example, economists analyzed TikTok's ban in India and a Meta service outage in 2021 as natural experiments shedding light on competitive substitution. The court found this evidence persuasive. 811 F. Supp. 3d at 67, 101-03. The 2021 Nobel Prize in Economics was awarded in significant part for demonstrating that natural

[12] *See generally* Alberto Abadie, Alexis Diamond & Jens Hainmueller, *Synthetic Control Methods for Comparative Case Studies: Estimating the Effect of California's Tobacco Control Program*, 105 J. Am. Stat. Ass'n 493 (2010).

experiments are "a rich source of knowledge" and for developing the analytical frameworks to draw causal conclusions from them.[13]

- **Field experiments and controlled studies**. In some cases, it is possible to construct a direct test of consumer behavior under counterfactual conditions. Field experiments in which researchers observe real-world behavior in controlled settings have become increasingly common in economics and have recently been employed in antitrust litigation. In *FTC v. Meta*, the court relied heavily on a field experiment in which several thousand participants were tracked as they reallocated their time in response to changes in the cost of using certain applications, calling the experiment "the single best evidence" on a central question of market definition. 811 F. Supp. 3d at 101. Laboratory experiments have likewise been applied to antitrust questions.[14] Such

[13] *See* Press Release, The Royal Swedish Academy of Sciences, *The Prize in Economic Sciences 2021* (Oct. 11, 2021); *see also* Joshua D. Angrist & Guido W. Imbens, *Identification and Estimation of Local Average Treatment Effects*, 62 Econometrica 467 (1994).

[14] *See, e.g.*, Timothy J. Muris & Vernon L. Smith, *Antitrust and Bundled Discounts: An Experimental Analysis*, 75 Antitrust L.J. 399 (2008) (testing theoretical predictions of foreclosure from bundled discounting and finding that predicted consumer harm did not materialize).

experiments need not be elaborate or prohibitively expensive; the essential requirement is a design that isolates the variable of interest and measures outcomes under alternative conditions.

- **Simulations.** Economists regularly use economic models to simulate outcomes under counterfactual conditions. In merger analysis, for instance, the Department of Justice and the FTC use simulation tools to predict post-merger price increases. As those agencies have explained, such models "give an indication of the scale and importance of competition," even if they do not "precisely predict outcomes." *Merger Guidelines*, *supra*, at 36. Similar simulation methods could be employed to assess, for example, how a firm's market share would likely have evolved in the absence of challenged conduct, based on observable parameters such as product quality, investment levels, and consumer switching costs.
- **Evidence on consumer choice and revealed preferences**. Direct evidence of how consumers make decisions (drawn from testimony, surveys, or observational data) can be a powerful indicator of what the but-for world would look like. When Apple's witness testified that there was "no price that Microsoft could ever

> offer [Apple]" to induce it to switch from Google to Bing as its default search engine, *Google Liability*, 747 F. Supp. 3d at 95 (quoting Tr. at 2519:10-11 (Cue)), that testimony provided meaningful evidence about the but-for world. The same is true for the "Mozilla experiment" in which up to 80% of users switched to Google when Yahoo was made the default on the Firefox browser.

The lesson is not that every antitrust case requires a controlled experiment or a Nobel Prize-caliber study. It is that theoretical predictions about competitive harm are not self-validating but instead require empirical testing. The methods for conducting such tests are well established, widely used, and have been recognized by four Nobel Prizes in the past quarter century.[15]

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[15] *See* Press Release, The Royal Swedish Academy of Sciences, *The Prize in Economic Sciences 2000* (Oct. 11, 2000) (James J. Heckman, for methods for analyzing selective samples; Daniel L. McFadden, for methods for analyzing discrete choice); *The Prize in Economic Sciences 2002* (Oct. 9, 2002) (Vernon L. Smith, for laboratory experiments); *The Prize in Economic Sciences 2019* (Oct. 14, 2019) (Abhijit Banerjee, Esther Duflo, & Michael Kremer, for their experimental approach to alleviating global poverty); *The Prize in Economic Sciences 2021* (Oct. 11, 2021) (David Card, Joshua D. Angrist, & Guido W. Imbens, for empirical contributions to labor economics and methodological contributions to the analysis of causal relationships).

"In the real world, however, no evidence is perfect." *Meta*, 811 F. Supp. 3d at 106. Consequently, no single method is required, and no single method need be dispositive. Economists routinely draw on multiple, complementary sources of evidence, and the more sources that point in the same direction, the greater the confidence that the estimate of the but-for world is reliable.

CONCLUSION

Counterfactual analysis is fundamental to impact analysis and to understanding the lost competition that a court is seeking to restore. The district court's conclusion that such analysis is "intractable," *Google Remedies*, 803 F. Supp. 3d at 73, is inconsistent with established economic methodology, with the government's own practice in other antitrust cases, and with the recent successful use of empirical methods in antitrust litigation in this Circuit. The tools exist.

Dated: May 29, 2026

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CERTIFICATE OF COMPLIANCE

This brief complies with the type-volume limitation set forth in Federal Rule of Appellate Procedure 29(a)(5) because it contains 3,984 words, excluding the parts of the brief exempted by Federal Rule of Appellate Procedure 32(f) and Rule 32(e)(1) of the United States Court of Appeals for the District of Columbia Circuit.

This brief complies with the typeface requirements of Federal Rule of Appellate Procedure 32(a)(5) and the type-style requirements of Federal Rule of Appellate Procedure 32(a)(6) because it was prepared in a proportionally spaced typeface using Microsoft Word in Century Schoolbook 14-point font.

Dated: May 29, 2026

/s/ Ephraim A. McDowell
Ephraim A. McDowell

CERTIFICATE OF SERVICE

I hereby certify that, on May 29, 2026, I electronically filed the foregoing Brief of Economists and Legal Scholars as *Amici Curiae* in Support of Neither Party with the Clerk of the Court for the United States Court of Appeals for the District of Columbia Circuit using the Court's CM/ECF system, and served copies of the foregoing via the Court's CM/ECF system on all ECF-registered counsel.

Dated: May 29, 2026

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