


# The Dead Hand of *Cellophane* and the Federal Google and Facebook Antitrust Cases: Market Delineation Will Be Crucial

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## Abstract

The U.S. Department of Justice (DOJ) and Federal Trade Commission (FTC) monopolization cases against Google and Facebook, respectively, represent the most important federal nonmerger antitrust initiatives since (at least) the 1990s. As in any monopolization case, market delineation will be a central feature of both cases—as it was in the du Pont *Cellophane* case of sixty-five years ago. Without a delineated market, how can one determine whether a company has engaged in monopolization? Unfortunately, there is currently no accepted market delineation paradigm that can help the courts address this issue for monopolization cases. And this void generally cannot be filled by the market delineation paradigm that is embedded in the DOJ-FTC “Horizontal Merger Guidelines”: although this paradigm has had almost forty years of usage and is now well established and well accepted for *merger analysis*, this paradigm generally has no applicability for market delineation in *monopolization* cases. This article expands on this argument and shows the potential difficulties that are likely to arise in this area of market delineation and the consequent problems for both cases. This article also points the way toward a paradigm that offers a sensible approach to dealing with these difficulties.

## Keywords

antitrust, monopolization, market delineation, cellophane, U.S. Department of Justice, Federal Trade Commission, Google, Facebook

## I. Introduction

The federal government’s antitrust cases against Google (by the U.S. Department of Justice’s [DOJ] Antitrust Division) and Facebook (by the Federal Trade Commission [FTC]) represent the most important monopolization cases that have been brought by the federal enforcement agencies in decades.<sup>1</sup>

1. The U.S. Department of Justice (DOJ) case was joined by the Attorneys General of a number of individual U.S. states. In addition, collections of states have filed their own antitrust suits against the two companies. This article will focus on the two federal suits. The DOJ suit—U.S. v. Google LLC—was initially filed on October 20, 2020, in the U.S. District Court for the District of Columbia and is being heard by Judge Amit P. Mehta; it is Case No. 1:20-cv-03010-APM. The Federal Trade Commission (FTC) suit—FTC v. Facebook, Inc.—was initially filed on December 9, 2020, also in the D.C. District Court and is being heard by Judge James E. Boasberg; it is Case No. 1:20-cv-03590-JEB. In October 2021, Facebook, Inc., changed its name to Meta Platforms, Inc. But, as of mid January 2022, Facebook, Inc., has remained the named defendant in this case, and the remainder of this article will refer to the defendant as “Facebook”.

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Both cases were initiated in the waning days of the Trump Administration, but both have been embraced and pursued by the Biden Administration appointees. For the DOJ, one has to reach back to the mid-1990s and the DOJ's prosecution of Microsoft for a case of equal importance. For the FTC, one has to reach back even farther: to the late 1970s and the FTC's "shared monopoly" pursuit of the breakfast cereal industry.

As is true for all such monopolization cases, each enforcement agency will have the burden of delineating one or more relevant markets and demonstrating that the defendant firm has exercised (and/or enhanced) substantial market power within that relevant market.<sup>2</sup> Unfortunately for the agencies, the problem of delineating a relevant market in a monopolization case has been unresolved since it first became prominent in a famous antitrust case of the 1950s: the du Pont *Cellophane*<sup>3</sup> case. *Cellophane* is likely to haunt the agencies—and the other plaintiffs in the other cases. And despite success in the area of merger analysis, the market delineation paradigm that the DOJ developed in 1982—specifically for the antitrust analysis of mergers—has little applicability in the monopolization area and will provide little help for the agencies.

In the absence of a method for delineating relevant markets in a monopolization context, however, the government plaintiffs' burdens of convincingly demonstrating monopolization in each case are likely to be quite difficult to sustain.

As a response to these difficulties, this article offers an outline of a paradigm that properly addresses the delineation issues in a monopolization case and that avoids the pitfalls to which *Cellophane* leads.

## II. Delineating the Relevant Market in a Monopolization Case: The Problem

### A. The "Cellophane Fallacy"

The dilemma of the delineation of the market in a monopolization case is illustrated by a classic 1950s antitrust case: *U.S. v. E.I. du Pont de Nemours & Co.*, 351 U.S. 377 (1956). The DOJ initially brought this monopolization case against du Pont in 1947. The DOJ argued that the relevant market was cellophane and that du Pont had a relatively high market share—around 76 percent—of the cellophane market and had taken a number of exclusionary (monopolization) actions so as to maintain that high market share.

Du Pont, in its defense, claimed that the relevant market was "all flexible wrapping materials," which included aluminum foil, glassine, Pliofilm, polyethylene, cellulose acetate, waxed paper, sulphite paper, vegetable parchment, and kraft paper. In that market, du Pont had only a modest market share—around 20 percent—and thus (du Pont argued) the company could not have been engaging in monopolization.

The initial decision by Judge Paul Leahy in federal district court—*U.S. v. E.I. du Pont de Nemours & Co.*, 118 F. Supp. 41 (1953)—was in du Pont's favor. The DOJ appealed directly to the U.S. Supreme Court,<sup>4</sup> which granted certiorari. After hearing the case (in October 1955), the Supreme Court (by a 4-3 decision) ruled (in June 1956) also in favor of du Pont.

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2. This article will focus on the market delineation issues in these cases and will generally not address the specific actions that the agencies allege to be anticompetitive. However, to provide some initial context: The DOJ argues that Google's annual payments of billions of dollars to Apple (especially) and to other computer and smartphone manufacturers and to cellphone service providers—so as to obtain default installation of its search engine on their devices—are exclusionary and thereby raise rivals' costs and raise the barriers to entry for other search engines. The FTC argues that Facebook's exclusionary actions were its acquisition of Instagram in 2012 and of WhatsApp in 2014 and the restrictive language that Facebook has had in its contracts with app developers that want their apps to be available to Facebook users.
  3. *U.S. v. E.I. du Pont de Nemours & Co.*, 351 U.S. 377 (1956).
  4. At that time it was possible (under the Expediting Act of 1903, 32 Stat. 823, 15 U.S.C. § 28) for the parties to a DOJ-initiated antitrust case to bypass the appellate courts and to appeal the case directly to the Supreme Court. (This provision was repealed by the Tunney Act of 1974, Pub. L. 93-528, 88 Stat. 1708, 15 U.S.C. § 16.)

Central to the favorable rulings for du Pont at both judicial levels was the delineation of the relevant market as encompassing “all flexible wrapping materials”—as du Pont had advocated. In turn, this determination was based on the courts’ reliance on testimony that du Pont was constrained in its ability to raise the price of cellophane by the competition that it faced from the sellers of these other materials: du Pont would lose too many customers to these other sellers if it tried to raise its price. Thus the courts (at both levels) concluded that the relevant market was this wider group of products—within which du Pont could not be monopolizing (since it had only a 20% share of this market).

In the sixty-five years since the Supreme Court’s majority decision,<sup>5</sup> its reasoning as to the determination of the boundaries of the market in a monopolization case has come to be known as the “*Cellophane fallacy*”<sup>6</sup>: the “fallacy” rests on the majority’s misunderstanding of the profit-maximization process for a profit-seeking firm: as is explained in every “Microeconomics 101” class, that maximization process entails the firm’s choosing the price-and-quantity combination (holding other things constant) that yields its highest level of profits in the context of its current environment.

This outcome will mean that every firm—in any market context—should be expected to describe itself as currently constrained by its “competitors” and is thereby unable—profitably—to increase its prices above currently observed levels. And this will be true regardless of whether the firm is one among many that are producing a near-perfectly substitutable commodity product and truly has very little ability to affect the going-market price (and thus to affect the price at which it can sell) or whether the firm instead produces a unique product over which it has more discretion with respect to the price—but at some (relatively high) price it loses too many sales, as some of its erstwhile (or potential) customers decide not to buy from this firm (because the price is too high) and instead to buy “something else” from “someone else.”

Consequently, if du Pont in the 1950s was a profit-maximizing firm, then—of course—it would describe itself as unable profitably to increase the price of cellophane above the level that it was already charging. But this—accurate—description of its market position doesn’t provide any useful information to help determine whether (or not) du Pont was a monopolist and had monopolized. This description can characterize du Pont only as a profit-maximizing firm.<sup>7</sup>

## B. Are There Alternatives?

If asking “can the firm profitably increase its price?” doesn’t provide useful information with respect to the relevant market and the possibility of monopolization, are there alternatives? In principle, “yes.” But thus far in practice, “not so much.”

Again, if we take a page (or a blackboard drawing) from Microeconomics 101, the standard geometric (or math) portrayal of a “monopoly” firm shows that it sells a unique product and charges a price

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5. Which was written by Associate Justice Stanley Reed.

6. See, for example: Donald Turner, *Antitrust Policy and the Cellophane Case*, 70 HARV. L. REV. 281 (1956); Thomas G. Krattenmaker et al., *Market Power and Monopoly Power in Antitrust Law*, 76 GEO. L. J. 241 (1987); Steven C. Salop, *The First Principles Approach to Antitrust, Kodak, and Antitrust at the Millennium*, 68 ANTITRUST L. J. 187 (2000); Jonathan B. Baker, *Market Definition: An Analytical Overview*, 74 ANTITRUST L. J. 129 (2007); and Lawrence J. White, *Market Power and Market Definition in Monopolization Cases*, in ISSUES IN COMPETITION LAW AND POLICY 913 (WAYNE DALE COLLINS ed., American Bar Association, 2008).

7. Clear legal thinking on this matter is not helped by the frequent description of monopoly by lawyers and judges—and even by some economists—as a firm that has the power to “raise its price and restrict output and thereby earn higher profits”; see White, *supra* note 6 and the discussion in Facebook’s response to the FTC’s initial Complaint and in Judge Boasberg’s decision of June 2021. But that “raise price” description applies only to the *transformation* of a competitive industry into a monopoly. The better description is that the monopolist can profitably *maintain* its price above competitive levels. Furthermore, the “raise price” description then encourages the “I can’t currently raise my price, so I can’t be a monopolist” response—which is the *Cellophane fallacy*.

that is above its marginal costs—whereas the competitive firm in a commodity industry is constrained by competition to charge a price that is (roughly) equal to its marginal costs.<sup>8</sup> This portrayal also shows that the monopoly firm earns profits that are above the opportunity costs on its invested capital, whereas the competitive firm earns profits that are only roughly equal to the opportunity costs on its invested capital.

These differences between a monopoly firm and a competitive firm—in prices, and in profits—would seem to offer some possible alternatives to the (fruitless) question of whether the firm can profitably increase its price above current levels.

Each possibility was discussed empirically in an important critique by George Stocking & Willard Mueller<sup>9</sup> of the district court’s reasoning in the *Cellophane* case.<sup>10</sup> We will start with the profit differential.

*1. Profits.* Du Pont also produced and sold rayon—which used the same basic raw materials as cellophane—during the period when the DOJ alleged that the company was monopolizing cellophane. Stocking & Mueller offer an interesting contextual comparison between the two chemicals: in cellophane, du Pont faced only a single small rival; in rayon, du Pont faced as many as eighteen rivals.<sup>11</sup>

Drawing on Markham<sup>12</sup> and an FTC report,<sup>13</sup> Stocking & Mueller<sup>14</sup> showed that du Pont’s profits on its investment were much higher in cellophane than in rayon—despite the fact that its market share in rayon (about 20%, based on du Pont’s share of industry investment in rayon production) was roughly the same as its (about 20%) share of the flexible wrapping materials “market.” Stocking & Mueller thereby argued that this profit differential was supporting evidence for du Pont’s exercise of market power with respect to cellophane—which concomitantly implied that the relevant market was indeed narrower—cellophane—rather than the broader collection of flexible wrapping materials.

Through the 1970s, company-level and aggregated industry-level profit data—usually drawn from reported accounting data, and usually expressed as a rate of return on net worth (or of some roughly equivalent measure of assets)—were used extensively in empirical industrial organization (IO) studies as suggestive indicators of the presence (or absence) of market power.<sup>15</sup> However, two influential articles in the early 1980s—by George Benston<sup>16</sup> and by Franklin Fisher & John McGowan<sup>17</sup>—argued that accounting data were unlikely to yield useful information about whether reported profits—by individual firms or by aggregated industries—were indicative of the presence of market power.

8. A local coffee shop likely charges prices that exceed its marginal costs, which are a result of its distinctiveness. But the coffee shop’s modest size and the ready availability of other (distinctive) coffee shops nearby usually mean that public policy doesn’t consider local coffee shops as posing a serious antitrust problem.
9. George W. Stocking & Willard F. Mueller, *The Cellophane Case and the New Competition*, 45 AM. ECON. REV. 29 (1955).
10. It is worth noting that the Stocking & Mueller article appeared after Judge Leahy’s district court opinion was issued but before the appealed case was argued before the Supreme Court. The dissenting opinion in the Supreme Court decision (which was written by Chief Justice Earl Warren) relied extensively on the Stocking & Mueller article. See *U.S. v. E.I. du Pont de Nemours & Co.*, 351 U.S. 377, 414 (1956).
11. Stocking & Mueller, *supra* note 9, at 61–62.
12. JESSE W. MARKHAM, *COMPETITION IN THE RAYON INDUSTRY* (Harvard University Press, 1952).
13. Federal Trade Commission, *Investments, profits, and rates of return for selected industries*, A Special Report Prepared for the Temporary National Economic Committee, 76th Cong., 3d Sess. (1941).
14. Stocking & Mueller, *supra* footnote 9, at 60–63.
15. For useful survey articles, see Richard Schmalensee, *Inter-Industry Studies of Structure and Performance*, in HANDBOOK OF INDUSTRIAL ORGANIZATION, Volume 2, 951 (RICHARD SCHMALENSSEE & ROBERT D. WILLIG, eds., Elsevier, 1989); and Timothy F. Bresnahan, *Empirical Studies of Industries with Market Power*, in HANDBOOK OF INDUSTRIAL ORGANIZATION, Volume 2, 1011 (RICHARD SCHMALENSSEE & ROBERT D. WILLIG, eds., Elsevier, 1989).
16. George J. Benston, *Accounting Numbers and Economic Values*, 27 ANTITRUST BULL. 161 (1982).
17. Franklin M. Fisher & John J. McGowan, *On the Misuse of Accounting Rates of Return to Infer Monopoly Profits*, 73 AMER. ECON. REV. 82 (1983).

Although there were rejoinders,<sup>18</sup> the two articles carried the day; and since the 1980s, reported profit rates have appeared much more sparingly in IO studies. Although data on price/cost—markup—margins have recently been important in some IO studies,<sup>19</sup> markups are not the same as rates of return on investment; and in an era of the increasing importance of “intellectual capital” (IP)—such as patents, copyrights, and branding/trademarks—which are often not treated as investment for accounting purposes, the relation between markups and any notion of excess profits (since the return on the IP has to be recouped in some fashion) becomes even more problematic.

We will return to this issue of profitability below.

2. *Prices.* If there were (readily recognized) competitive prices for a similar item to which the (alleged) monopoly price could be compared—or even competitive price-cost margins (markups) to which the (alleged) monopoly markup could be compared—then price information might be useful for helping determine whether the firm indeed has market power or is just one among many (perhaps roughly) competitive firms. But recall the context of that Micro 101 blackboard diagram: the product is “unique.” Consequently, comparable items and their prices may be difficult to uncover.<sup>20</sup> And this was surely the case for cellophane.

Stocking & Mueller<sup>21</sup> addressed this issue by examining the temporal pattern of prices of cellophane *as compared with* the prices of the other products in the flexible wrapping materials “market.” Through the 1920s and 1930s, the price of cellophane fell substantially; the prices of the other flexible wrapping materials products (except for aluminum foil, which, like cellophane, was a relatively new product at the time) fell by less or not at all. And during the general inflation of the 1940s, the price of cellophane rose by less than the prices of those other products. Stocking & Mueller concluded that “. . . cellophane’s independence of other wrapping material prices strongly suggests that du Pont was not selling cellophane in an effectively competitive market.”<sup>22</sup>

We shall return below to these pricing issues as well.

### C. What about the Market Delineation Paradigm That Is Used for Merger Analysis?

As was mentioned in the Introduction, since 1982 the DOJ (which was joined in its analysis a few years later by the FTC) has used a specific market delineation paradigm for analyzing mergers:<sup>23</sup> this

18. See, e.g., William F. Long & David J. Ravenscraft, *The Usefulness of Accounting Data: Comment*, 74 AMER. ECON. REV. 494 (1984); Stephen Martin, *The Misuse of Accounting Rates of Return: Comment*, 74 AMER. ECON. REV. 501 (1984); John A. Kay & Colin P. Mayer, *On Applications of Accounting Rates of Return*, 96 ECON. J. 199 (1986); and F. M. Scherer et al., *The Validity of Studies with Line of Business Data: Comment*, 77 AMER. ECON. REV. 206 (1987).

19. See, e.g., Susanto Basu, *Are Price-Cost Margins Rising in the United States? A Discussion of the Evidence*, 33 J. ECON. PERSP. 3 (2019); Steven Berry et al., *Do Increasing Markups Matter? Lessons from Empirical Industrial Organization*, 33 J. ECON. PERSP. 44 (2019); and Jan De Loecker et al., *The Rise of Market Power and the Macroeconomic Implications*, 135 QUART. J. ECON. 561 (2020).

20. An exception arises for goods and services that clearly have local markets—say, wet concrete for construction in metropolitan areas, or airline city-pairs—and the goods or services are comparable across these different (local) markets. If some of the local markets have market structures or other indicia that mark them as likely competitive, then the prices (or markups) in those competitive markets could be used as a benchmark (holding other things constant) for comparisons with the prices (or markups) of firms that are selling in other local markets and that are alleged to be exercising market power. And it is indeed cross-sectional price comparisons of these sorts to which some IO studies turned so as to demonstrate the consequences of market power when profit data were no longer considered to be reliable indicators. See, for example, LEONARD W. WEISS, *CONCENTRATION AND PRICE* (Kluwer, 1989) and DAVID B. AUDRETSCH & JOHN J. SIEGFRIED, eds., *EMPIRICAL STUDIES IN INDUSTRIAL ORGANIZATION: ESSAYS IN HONOR OF LEONARD W. WEISS* (MIT Press, 1992).

21. Stocking & Mueller, *supra* note 9 at 53–57.

22. *Id.* at 56.

23. This paradigm was first announced in the DOJ’s “Merger Guidelines” of 1982. See, for example, Gregory J. Werden, *Market Delineation and the Justice Department’s Merger Guidelines*, 1983 DUKE L. J. 514 (1983); Gregory J. Werden, *Market Delineation under the Merger Guidelines: A Tenth Anniversary Retrospective*, 38 ANTITRUST BULL. 517 (1993); and Gregory J.



paradigm seeks to identify a number of sellers (generally, the smallest number) that—if they were combined into a single firm (the “hypothetical monopolist”)—could successfully exercise market power with respect to a specific product (or products) and with respect to a specific geographic area, in the following sense: this *hypothetical* monopolist could successfully bring about a “small but significant non-transitory increase in price” (SSNIP) from the current (or otherwise expected) price levels.

This market delineation paradigm has proved successful: it has been refined and enriched over the succeeding four decades, and now some version of it is the standard approach for merger analysis by antitrust enforcers in the United States and abroad. One might think (or hope) that this approach could be readily adapted for the Google and Facebook (and other) monopolization cases.

Unfortunately, such an adaptation isn’t feasible for any monopolization case that asserts that the defendant *already* possesses market power. The crucial problem is that merger analysis generally asks a *forward-looking* question: *will* this merger allow the merging parties—either unilaterally or in concert with other firms that sell the same or similar products—to exercise (postmerger) market power (or to enhance any existing market power)? By delineating the collection of firms that could collectively exercise market power, the market delineation paradigm sets the stage for the subsequent analysis that tries to ascertain the likelihood that this merger could create the conditions under which this market power (within the delineated market) could be created or enhanced.

By contrast, a crucial question in a monopolization case is usually whether a company is *already* exercising market power.<sup>24</sup> In an important sense, in the context of this “already exercising” question, the imposition of an SSNIP test on the firm that is alleged to be monopolizing and thus to be already exercising market power is just another example of the *Cellophane* fallacy confusing the issue.<sup>25</sup>

#### D. Why Does Market Delineation Matter?

If du Pont took actions that made entry by other cellophane producers difficult—but the relevant market was truly flexible wrapping materials—then du Pont’s actions would likely have little consequence for that market.<sup>26</sup> But if the market was cellophane, then du Pont’s exclusionary actions would likely have helped create and/or buttress its dominant position and would have meant higher prices for cellophane buyers than if the potential entrants had not been excluded.

There is an additional point—perhaps subtle, but important—that is worth considering: much of the legal consideration of what products are within a relevant market refers to terms such as “inter-operability,” “interchangeability,” “user substitution,” and (sometimes) “cross-elasticity of demand.”<sup>27</sup> But these

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Werden, *The 1982 Merger Guidelines and the Ascent of the Hypothetical Monopolist Paradigm*, 71 ANTITRUST L. J. 253 (2003). In 1992, Werden brought to light an earlier (1959) article by Morris Adelman that had described a similar market delineation paradigm for merger analysis. See Gregory J. Werden, *The History of Antitrust Market Delineation*, 76 MARQ. L. REV. 123 (1992); and Morris A. Adelman, *Economic Aspects of the Bethlehem Opinion*, 45 VIRG. L. REV. 684 (1959).

24. An exception would be if the monopolization-based enforcement effort involves a *prospective* exclusionary action: say, a company’s *proposed* program to have its distribution occur through a system of exclusive dealers (whereas currently the company’s distributors are not restricted from selling the products of the company’s competitors). In that situation, the issue is the *prospective* consequences of the proposed action, and the SSNIP (small but significant non-transitory increase in price) paradigm can properly be used to delineate the market and then address the question of whether the defendant’s *proposed* action is likely to allow it to exercise (or enhance) market power. See Gregory J. Werden, *Market Delineation under the Merger Guidelines: Monopoly Cases and Alternative Approaches*, 16 REV. IND. ORG. 211 (2000).
25. Nevertheless, some courts—and even some economists—have been ready to employ the SSNIP test in monopolization cases. For some examples, see White *supra* note 6. And see U.S. v. Microsoft Corp., 84 F. Supp. 2d 9, 15 (1999).
26. But if that were so, why would du Pont bother to take these actions in the first place?
27. Facebook’s initial Motion to Dismiss of March 10, 2021, and Judge Boasberg’s Opinion on June 28, 2021, provide good examples, as does Sean P. Sullivan, *Market Definition*, in RESEARCH HANDBOOK ON ABUSE OF DOMINANCE AND MONOPOLIZATION (PINAR AKMAN, Or Brook & Konstantinos Stylianou, eds., Edward Elgar, 2022).

attributes are usually being assessed at the recently prevailing prices and thus again run afoul of the *Cellophane* fallacy. The defendant firm should currently be charging a price where—for at least some customers (the inframarginal customers)—*the product is not so unique* and those customers are on the cusp of switching (or may have already switched) to buying “something else” from “someone else.”

Instead, these characteristics assessments should be made (if market power really is being exercised) in the context of a *counterfactual, but-for* scenario where the defendant’s alleged anticompetitive, exclusionary actions have not occurred. That but-for scenario describes the relevant market within which the defendant’s alleged anticompetitive actions allowed the defendant concomitantly (or subsequently) to raise the price (or deteriorate the product, etc.) so as to bring the product to its (current) not-so-unique status. We will expand on this important point in Part IV *infra*.

In essence, the plaintiff in a monopolization case always claims that the defendant’s product is unique; the defendant always claims that its product has lots of substitutes. If the assessments are made within the context of current (or recently prevailing) prices, then the defendant has to be correct (if the firm is profit maximizing).<sup>28</sup> Consequently, the plaintiff needs to find some way to show that (counterfactually) the product would be unique at the more competitive price that would be present—but for the defendant’s anticompetitive actions. But, for the reasons that were discussed *supra*, that demonstration is generally difficult,<sup>29</sup> and no methodologies or paradigms have been developed to aid the plaintiff in this process.

### III. Application to the Google and Facebook Cases

#### A. Some Basics

Both Google and Facebook are usually (and correctly) described as operating “platforms” and thereby as operating “networks” that encompass “multi-sided markets”: for Google, the platform that is at issue in the DOJ’s monopolization suit involves online search;<sup>30</sup> for Facebook, the platform involves online social networking.

For Google, the two major sides of its platform are: (1) the online users who are engaged in search and (2) advertisers that want to reach the searchers with ads that are relevant to (and thus targeted at) the searcher and his/her specific search. A third side to the Google search platform comprises the companies whose links-to-websites could appear at the top of the list of “organic” links<sup>31</sup> that Google provides to searchers in response to their search queries.

For Facebook, the two major sides of its platform are (1) the social networking users and (2) advertisers that want to reach the users with ads that are relevant to (and thus targeted at) the networking users. A third side to its platform are the app developers that would like to reach the networking users through the platform.

As has been understood for almost fifty years,<sup>32</sup> networks generally involve externalities: one party’s actions that incidentally affect another party. These are often described as “network externalities” or just “network effects” because they usually involve the size of the network: an additional networking user on, say, the Facebook platform—who joins the platform because of the personal benefits that he/she expects from receiving and sending information—also conveys a positive externality to the other

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28. There are interesting and important antitrust questions that arise if firms are believed not to be profit-maximizing entities. In essence, a “behavioral” paradigm of firm behavior is needed, which might then guide antitrust policies. But these questions are beyond the scope of this article.

29. But see the exception that is discussed in footnote 24.

30. Google also provides Android operating systems for non-Apple wireless mobile phones, which is another platform, and Google owns YouTube, which is yet another platform. These other platforms are not addressed in the DOJ suit.

31. In contrast to paid-advertising links.

32. See Jeffrey Rohlfs, *A Theory of Interdependent Demand for a Communications Service*, 5 BELL J. ECON. MGT. SCI. 16 (1974).

users on the same side of the platform: those other users can receive information from the additional user and they can send information to the additional user. Thus, the larger is the number of networking users that are on the platform, the greater is the benefit to all of the users.<sup>33</sup> The positive externalities of an additional user for the other side of the platform are also important: an additional networking user makes the Facebook platform more valuable for advertisers,<sup>34</sup> which are willing to pay more for ads that are likely to reach more viewers.<sup>35</sup>

For the Google search platform, the network externalities appear to be largely flowing from searchers to advertisers: the presence of an additional searcher on the Google platform is unlikely to provide much direct benefit to other searchers.<sup>36</sup> But the additional searcher will make the platform more valuable for advertisers.

Since the early 2000s,<sup>37</sup> it has been understood that a profit-maximizing firm that owns a multisided platform will take into account these network externalities in its setting of the prices to the various parties on the various sides of its platform. For Google and Facebook, both platforms have chosen zero prices for their searching/networking users and to charge fees to (and thus earn their revenue from) the advertisers on their platforms.<sup>38</sup>

## B. The Market Delineation Issue: The Google Case<sup>39</sup>

1. *The DOJ's Position.* In Section IV of its initial Complaint of October 20, 2020 (at 28-35),<sup>40</sup> the DOJ addresses the relevant market issue: the DOJ argues that there are three relevant markets: (1) general [internet] search services in the United States; (2) search advertising in the United States; and (3) general search text advertising in the United States (which is within the broader search advertising market).

a. *General search services.* The DOJ argues that general search services are “unique because they offer consumers the convenience of a ‘one-stop shop’ to access an extremely large and diverse volume of information across the internet.” The DOJ acknowledges that there are other opportunities for specialized search, such as Amazon, Expedia, or Yelp, but that “they do not offer consumers the same breadth of information or convenience.” The DOJ concludes that “there are no reasonable substitutes for general search services, and a general search service monopolist would be able to maintain quality below the level that would prevail in a competitive market.”

33. This kind of network externality benefit is a familiar one that is readily grasped in the context of a telephone network. There could also be negative network externalities, if more users would mean more congestion of some kind, which would delay or distort the transmission of information.

34. This kind of other-side-of-the-platform externality is also a familiar one and can be readily grasped in the context of over-the-air radio and television broadcasting, where listeners/viewers are valued by advertisers.

35. Whether the externalities of more advertising vis-à-vis the networking users are positive or negative depends on whether the users experience the advertising as useful information or instead as distracting/annoying or perhaps even misleading.

36. The exception would be if searchers share among themselves information on search techniques that would yield better results. An indirect benefit of an additional user to the other users would be if the additional user's searches provides useful information to Google about delivering better results to searchers generally, which could then enable Google to improve its algorithms for delivering information in response to searches.

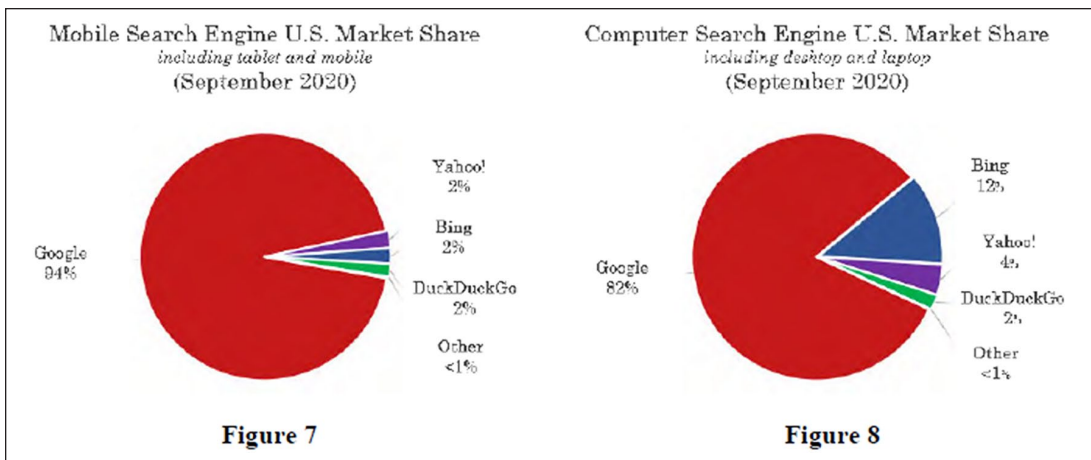
37. See, for example, Jean-Charles Rochet & Jean Tirole, *Platform Competition in Two-Sided Markets*, 1 J. EUROP. ECON. ASSO. 990 (2003).

38. It is important to note that a “free” price that is charged to the searching or networking users need not be an automatic necessity. It is conceivable that either platform might have chosen a “subscription” model, whereby those users are charged some form of fee in return for using the platform. Or, in the other direction, it is conceivable that a platform could even make payments to the users, so as to encourage more users to join the platform (if the additional advertising revenue that the platform would earn exceeded the payments to the users).

39. Additional discussion of the Google case can be found in Lawrence J. White, *U.S. v. Google: A Tough Slog, but Also an Intriguing Possibility*, 44 REG. MAG. 18 (2021).

40. The quotes from the DOJ's arguments that follow in this Part are drawn from these pages of the Complaint. The Amended Complaint of January 15, 2021, is largely identical and makes the same arguments.





**Figure 1.** The U.S. Department of Justice’s data on general search queries.  
Source: U.S. Department of Justice complaint, October 20, 2020, at 31.

The DOJ marshals data from “public data sources” (see Figure 1) that show that as of September 2020, Google had a 94 percent share of mobile general search engine queries and 82 percent of computer general search engine queries;<sup>41</sup> overall, Google accounted for “almost 90 percent of all general search engine queries in the United States.”<sup>42</sup>

*b. Search advertising.* The DOJ argues that the targeted aspect of search advertising makes other forms of advertising—whether offline or online—“not reasonably substitutable for search ads . . . Few advertisers would find alternative sources a suitable substitute for search advertising. Thus, there are no reasonable substitutes for search advertising, and a search advertising monopolist would be able to maintain prices above the level that would prevail in a competitive market.”

The DOJ claims that “based on public estimates . . . Google’s share of the U.S. search advertising market is over 70 percent” and that this market share understates Google’s market power “because many search-advertising competitors offer only specialized search ads and thus compete with Google only in a limited portion of the market.”

*c. General search text advertising.* The DOJ argues that general search text ads are distinct and that “for many advertisers that purchase general search text ads, there are no reasonable alternatives for these ads, which renders these advertisers particularly vulnerable to targeted price increases.” And, again,

Few advertisers would find alternative sources a suitable substitute for search advertising. Thus, there are no reasonable substitutes for search advertising, and a search advertising monopolist would be able to maintain prices above the level that would prevail in a competitive market.

The DOJ similarly claims that “Google’s market share of the U.S. general search text advertising market also exceeds 70 percent” and “well exceeds its share of the search advertising market.”

41. The difference (negative) between Google’s shares of mobile-based and computer-based searches is largely the mirror image of Bing’s larger share in computer-based searches. That is surely due to Microsoft’s installation of Bing (which Microsoft owns) as the default search engine in its Windows operating systems on non-Apple computers.

42. The DOJ also provides a set of annual bar graphs (Complaint, Figure 6, at 30) that show that Google’s “search engine U.S. market share” rose from just under 80 percent in 2009 to just under 90 percent in 2019.

2. *Google's Position.* Google filed its Answer on December 21, 2020. Its Answer document is largely a paragraph-by-paragraph simple denial of all of the DOJ's claims. The document offers little in terms of a substantive defense (but reserves the right to do so at a later stage of the proceedings).

Instead, Google seems to have submitted its defense (as of the end of November 2021) to the "court of public opinion": on a publicly accessible website,<sup>43</sup> the company argues that it faces competition from specialized search engines and that other general search engines are easily accessible and easily installed if users so choose; it is thus implicitly arguing that its share (which it doesn't quantify) of general search queries is irrelevant for assessing the condition of competition for search.<sup>44</sup>

As for advertising, the Google website doesn't address the market delineation issue and simply argues that "We face particularly robust competition . . . Amazon, Facebook, Bing, eBay, Snap, Twitter, Pinterest, Expedia, Kayak, Orbitz and many other companies all compete for commercial advertisements." Google also cites data from the U.S. producer price index (as compiled by the Federal Reserve Bank of St. Louis) that the price of online advertising fell by 40 percent between 2010 and 2020.

3. *An Assessment.* The Google case is still relatively young: the actual trial is not expected to commence until September 2023.

Neither side has marshaled much in the way of analysis or data to support its claims. Especially noteworthy is the absence of a DOJ methodology for supporting its assertions as to the relevant markets in this case.

Instead, the DOJ—predictably—has argued that Google's search and search-linked advertising are in narrow markets—in which Google has high shares—for which "there are no reasonable substitutes" and in which "a . . . monopolist *would* be able to maintain . . . search quality below the level . . . [and advertising] prices above the level that *would* prevail in a competitive market."<sup>45</sup> These market delineation claims are (thus far) based solely on casual observations and descriptions—with no data or analysis to support these claims. Google—predictably—has claimed that it competes vigorously in search and in search-linked advertising (enter *Cellophane*) and that its success has occurred because users freely choose its services, and, similarly, its claims (thus far) are based on casual observations and description—with no data or analysis to support these claims.

In the absence of a monopolization paradigm, *Cellophane* is clearly lurking in the background of this case. It will surely be interesting to see what analysis and data do get marshaled when the case goes to trial—in 2023.

## C. The Market Delineation Issue: The Facebook Case

1. *Some Preliminaries.* Despite being filed seven weeks after the DOJ's Google case, the FTC's Facebook case has already (as of mid January 2022) provided many more substantive legal filings and pages of legal arguments:

- The FTC's initial Complaint was filed on December 9, 2020 (fifty-three pages);
- Facebook responded with its Motion to Dismiss the Complaint on March 10, 2021 (fifty-four pages);

43. Google, "Google's free products help people and small businesses across America," <https://blog.google/competition/>.

44. Google acknowledges that it has paid to obtain incumbency installation of its search engine on computers and smartphones (see *supra* footnote 2) but likens the payments to the widely practiced shelf-space payments by food manufacturers to supermarkets: "Like countless other businesses, we pay to promote our services, just like a cereal brand might pay a supermarket to stock its products at the end of a row or on a shelf at eye level . . . But in each case, consumers can and do easily access alternatives."

45. I have italicized "would": Notice that the DOJ has not (yet?) asserted that Google has done any of these things.

- The FTC replied with a Memorandum in Opposition on April 7, 2021 (fifty-six pages);
- Facebook responded with a Support Brief on April 21, 2021 (thirty-four pages);
- Judge Boasberg issued his first Memorandum Opinion on June 28, 2021, which dismissed the FTC’s Complaint but gave the FTC the opportunity to refile an amended complaint (fifty-three pages);
- The FTC filed its Amended Complaint on August 19, 2021 (eighty pages);<sup>46</sup>
- Facebook filed its Motion to Dismiss the Amended Complaint on October 4, 2021 (fifty-five pages);
- The FTC responded with a Memorandum in Opposition on November 17, 2021 (fifty-five pages);
- Facebook filed its Reply Brief in Support of its Motion to Dismiss the Amended Complaint on December 1, 2021 (thirty-two pages); and
- Judge Boasberg issued his second Memorandum Opinion on January 11, 2022, which denied Facebook’s Motion to Dismiss and allowed the case to proceed to discovery (forty-eight pages).

These ten substantive documents have totaled 520 typescript pages. In contrast, the DOJ’s Google case has thus far yielded only the DOJ’s Complaint (sixty-five pages) and Google’s Answer (forty-two pages), which total a mere 107 typescript pages.

2. *The FTC’s Position.*<sup>47</sup> The FTC asserts that “personal social networking services” in the United States is a relevant market. Although it doesn’t specifically identify “social network advertising” as a relevant market, the FTC discusses this form of advertising as if it were a relevant market.

a. *Personal social networking services.* The FTC argues<sup>48</sup> that personal social networking services are focused on personal connections and the interactions with (and efforts to expand) those personal connections. Personal social networking services are “distinct from, and not reasonably interchangeable with” other types of online services. In the latter category, the FTC includes mobile messaging services, specialized social networking services (e.g., LinkedIn, Strava, and Nextdoor), online services that focus on the broadcast or discovery of content that is based on the users’ interests (e.g., Twitter, Reddit, and Pinterest) rather than on their personal connections, and online services that are focused on video or audio consumption (e.g., YouTube, Spotify, Netflix, Hulu, and TikTok).

The FTC argues<sup>49</sup> that Facebook (including Instagram) has a dominant share of this personal social networking services market, based on users’ time spent (exceeding 80% since 2012), daily active users (exceeding 70% since 2016), and monthly active users (exceeding 65% since 2012).<sup>50,51</sup> The FTC names only Snapchat and MeWe as other current providers of personal social networking services. But in 2020, Snapchat’s users spent only about 15 percent as much time on Snapchat as Facebook users

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46. The FTC filed a slightly modified “Substitute Amended Complaint” on September 8, 2021.

47. Unless otherwise indicated, the following discussion draws from the FTC’s Amended Complaint.

48. Amended Complaint, at 54–58.

49. *Id.* at 62–66.

50. The FTC relies (in its Amended Complaint) on data from Comscore: a commercial online data tracking service. In its initial Complaint (at 19), the FTC alleged only that Facebook since 2011 “has maintained a dominant share of the U.S. personal social networking market (in excess of 60%) . . .” but offered no specific support for that claim. Judge Boasberg’s Opinion was sharply critical of the vagueness of this claim, which was the basis for his dismissal of the Complaint (see the discussion *infra*).

51. And the FTC claims that, as a consequence of Facebook’s exclusionary actions (see *supra* footnote 2) and its monopoly power (as demonstrated by its high market shares), “users of personal social networking in the United States have been deprived of the benefits of competition for personal social networking . . . Facebook has been able to provide lower levels of service quality on privacy and data protection than it would have to provide in a competitive market.” See Amended Complaint, at 73.

spent on Facebook, and only about 28 percent of all internet users in each month (on average) used Snapchat. For MeWe, the numbers are far smaller: 0.15 percent and less than 1 percent, respectively.

To buttress its claims that Facebook's dominant position in this relevant market is "durable," the FTC points out that Facebook experienced "a minimal loss of user engagement" in 2018 in the wake of Facebook's widely reported mis-handling of users' data in the Cambridge Analytica incident. Similarly, the FTC points out that the company's "range of serious user privacy and related abuses" (for which it paid a \$5 billion fine in 2019) "harm[ed] users by decreasing quality," but the company did not experience a significant loss of user engagement, which "indicates that Facebook has market power."<sup>52</sup>

*b. Social advertising.* As was mentioned *supra*, the FTC does not specifically use the label "relevant market" when it discusses social advertising, but the agency's discussion of social advertising nevertheless has that flavor: the FTC claims that social advertising "is distinct from other forms of advertising, including other forms of display advertising, search advertising, and 'offline' advertising" (e.g., television, radio, and print) (Amended Complaint, p. 16).<sup>53</sup> The targeting of the ads to the specific characteristics of the user is a major part of the distinctiveness of social advertising.

Although the FTC declines to specify a market share for Facebook's advertising, the agency asserts that "By monopolizing the U.S. market for personal social networking, Facebook also harmed, and continues to harm, competition for the sale of advertising in the United States."<sup>54,55</sup>

Furthermore, as an indicator of Facebook's monopoly power and dominance, the FTC references Facebook's "enormous" (accounting) profits: in 2020, the company earned \$29 billion (worldwide) on a revenue base of \$85 billion. "Since 2013—its first full year as a public company—Facebook's profit margin has significantly exceeded that of the average of the firms that make up the S&P 500, as well as that of the firms in the S&P 500 information technology sector."<sup>56</sup>

*3. Facebook's Position.* All of Facebook's Motions to Dismiss directly address the FTC's claims (unlike Google's Answer document, which simply denies the DOJ claims). With respect to the FTC's claimed personal social networking market, Facebook argues that this market is poorly and inconsistently defined, "with only the vaguest of limits" and that the FTC has offered no support for its specific delineation that would use "the standard analysis of cross-elasticity of demand."<sup>57</sup> And with respect to the FTC's claim (in its initial Complaint) that Facebook had a market share "in excess of 60%," Facebook responds that the FTC offered no support for that claim.<sup>58</sup>

After the FTC offered more specific metrics and market shares and sources for its claims in its Amended Complaint, Facebook became more specific and extensive in its arguments that the personal social networking market was still vague and ill-defined and had no rigorous support and that the Comscore measurements were unreliable.<sup>59</sup>

52. *Id.* at 68–69.

53. *Id.* at 16.

54. *Id.* at 74.

55. As examples of the harms from the absence of competition, the FTC claims that "Facebook has been repeatedly criticized for its non-transparent and sometimes unreliable advertising reporting metrics, and for the prevalence of fake accounts on its platform, which undermines advertisers' ability to assess the effectiveness of their ads." *Id.* at 74.

56. *Id.* at 69.

57. Motion to Dismiss the Complaint, at 1–2.

58. Facebook also argues throughout that its acquisitions of Instagram and of WhatsApp were approved by the FTC at the time of those acquisitions and that these decisions should not be revisited and also that the acquisitions weren't—and aren't—anticompetitive or exclusionary. (In a notable absence, in neither its Complaint nor its Amended Complaint does the FTC mention its decisions to not challenge these acquisitions.) Similarly, Facebook argues that the restrictive language in its contracts with app developers protected Facebook against free-riding by app developers—and, in any event, Facebook in 2018 ceased including the specific provisions to which the FTC was objecting.

59. Motion to Dismiss the Amended Complaint, at 6–13; Reply Brief in Support, at 4–9.

Since the FTC didn't delineate a relevant market with respect to advertising, Facebook pays little attention to any advertising issues. The company does, however, point out that the FTC ignores "the relentlessly competitive business that provides Facebook with substantially all of its revenues (advertising) . . ." <sup>60</sup> and that the Amended Complaint "is devoid of any facts that could establish that Facebook's advertising prices are above a competitive level . . ." <sup>61</sup>

**4. Judge Boasberg's Two Memorandum Opinions.** Judge Boasberg filed his first Decision on June 28, 2021, with respect to the FTC's request for an injunction against Facebook's "violations of the FTC Act."<sup>62</sup> He dismissed the FTC's Complaint but permitted the FTC to refile an amended complaint, which the FTC did on August 19, 2021.

Judge Boasberg found that the FTC's "allegations do enough to make out a plausible market for PSN [personal social networking] services . . ." <sup>63</sup> However, he added that ". . . the Complaint is undoubtedly light on specific allegations regarding consumer-switching preferences" and described this as "a thin showing" and continued "that the PSN-services product market is somewhat 'idiosyncratically drawn.'" <sup>64</sup>

This "thin showing" then led Judge Boasberg to demand "something more robust from Plaintiff's market-share allegations." However, he found that "the FTC's inability to offer any [emphasis in original] indication of the metric(s) or method(s) it used to calculate Facebook's market share" renders the agency's claim that this market share since 2011 has been "in excess of 60%" <sup>65</sup> as vague and "too speculative and conclusory to go forward."<sup>66</sup> Consequently, he dismissed the FTC's Complaint but granted the agency the ability to file an Amended Complaint, which it did on August 19, 2021—with considerably more detail with respect to Facebook's market share. <sup>67</sup>

Judge Boasberg filed his second Decision on January 11, 2022, with respect to the FTC's Amended Complaint. He denied Facebook's Motion to Dismiss and found that the FTC had now "cleared the pleading bar and may now proceed to discovery . . . the FTC has now alleged enough facts to plausibly establish that Facebook exercises monopoly power in the market for PSN services" (p. 2), although he cautioned that "the agency may well face a tall task down the road in proving [emphasis in original] its allegations" (p. 2).

**5. An Appraisal.** The FTC's Facebook case—similar to the DOJ's Google case—is still at an early stage (despite the larger volume of legal filings). Judge Boasberg's second Decision means that the case will proceed to discovery, which will surely take many months. The full-scale trial on the FTC's request for equitable relief would be yet farther in the future. No trial date has yet (as of mid January 2022) been set.

Although a bit more data has been mustered in the Facebook case with respect to measuring market shares, the crucial issue of the delineation of the relevant market itself remains one of casual observations and descriptions—by both sides. Similar to the DOJ, the FTC has not (yet?) offered a methodology for delineating the market and for addressing the *Cellophane* problem. <sup>68</sup>

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60. Motion to Dismiss the Complaint, at 1.

61. Motion to Dismiss the Amended Complaint, at 19.

62. Complaint, at 51. The FTC also requested equitable relief, which would require a subsequent full-scale trial. In its Google case, the DOJ asked only for equitable relief.

63. First Memorandum Opinion, at 27.

64. *Id.* at 27.

65. *Supra* note 58.

66. *Id.* at 2

67. Judge Boasberg also provided "some guidance to the parties should the case proceed" with respect to the FTC's allegations of exclusionary conduct (*supra* note 2). He found that the FTC would not be able to obtain an injunction with regard to Facebook's pre-2018 restrictive contracts with its app developers (*Id.* at 33–50) but that the FTC may be able to seek injunctive relief vis-à-vis Facebook's acquisitions of Instagram and WhatsApp (*Id.* 50–53).

68. However, as was discussed *supra*, in its Amended Complaint the FTC does mention Facebook's "enormous" profits and that Facebook suffered little loss of users despite the widespread reporting of its data abuses. In this sense, the FTC may be trying to move in the direction that was demonstrated by Stocking & Mueller, *supra* note 9.



## IV. The Needed Paradigm

Thus far the market delineation aspects of the Google and Facebook cases have a familiar pattern: the DOJ and the FTC have alleged relevant markets that are based entirely on casual observations and descriptions. They have offered no methodology and no evidence to support their proposed delineations.<sup>69</sup> The defendants have responded with their own assertions as to the absence of a methodology and the vagueness and ill-defined nature of the plaintiffs' proposed delineations, and—of course—the defendants have claimed, in essence, “Look at all of the competition that we face! We can't be monopolists!”

It is also noteworthy that neither plaintiff has offered some version of

Your Honor, the defendants are surely going to tell you that they face intense competition and substantial consumer substitution. Don't listen to them! That's just the “Cellophane fallacy” [accompanied by an extensive footnote] at work! Instead, your Honor, as we will clearly demonstrate, but for the defendant's anticompetitive/exclusionary actions . . .

Why have the plaintiffs not advanced this argument? It seems highly likely that if they were to do so, they would then have to explain that *current* prices and market conditions are *not* the right place to start the analysis of substitution. Instead, a counterfactual, but-for analysis that assesses the market conditions *that would occur in the absence of the defendants' anticompetitive/exclusionary actions* would be needed. But the plaintiffs are nowhere near the provision of that analysis.

This provides a suitable departure point for an outline<sup>70</sup> of an appropriate paradigm for monopolization cases that—for market delineation purposes—focuses attention *away* from the current market conditions and *toward* the counterfactual scenario. This approach thereby also avoids the pitfalls of the *Cellophane* fallacy.

### A. The Needed Paradigm

The market delineation process for a monopolization case should proceed as follows:<sup>71</sup>

- (a) There needs to be a clear statement that the current market conditions are *not* the appropriate context for discussions of product substitutability, uniqueness, interchangeability, and so on. To persist in these discussions in this current-market context is simply to skate too close to the *Cellophane* fallacy.
- (b) Instead, there needs to be a clear counterfactual scenario:<sup>72</sup> *but for* the defendant's anticompetitive/exclusionary actions (which have little or no efficiency justifications), the relevant conditions in the marketplace would be substantially different:
  - There would be one or more additional firms that would be selling competitive products/services that would be roughly similar to that of the defendant; and/or any existing firms that have been weakened by the defendant's exclusionary actions would be competing more vigorously;

69. The plaintiffs have marshaled some data to support their claims that the defendants have high market shares. But the strength of those claims rests—at least partially—on the strength of the market share delineations.

70. I stress that this is an outline. The full development of these ideas is beyond the scope of this article.

71. For a somewhat similar proposal, see Philip B. Nelson & Lawrence J. White, *Market definition and the identification of market power in monopolization cases: A critique and a proposal*, STERN SCHOOL OF BUSINESS, NEW YORK UNIVERSITY, DEPARTMENT OF ECONOMICS WORKING PAPER EC-03-26, [https://papers.ssrn.com/sol3/Delivery.cfm/2451\\_26179.pdf?abstractid=1292646&mirid=1](https://papers.ssrn.com/sol3/Delivery.cfm/2451_26179.pdf?abstractid=1292646&mirid=1). However, that proposal focused more on the context of a monopolization suit that might be brought by a private plaintiff.

72. In more formal terms: there needs to be a model—with empirical support—that would support the claims that are being made.

- Prices would be lower;<sup>73</sup> and/or
  - Quality would be higher; and/or
  - A wider variety of qualities would be offered by this larger group of firms; and
  - A larger quantity of the product would be bought/consumed; and thus
  - Consumers/users would be better served.
- (c) This group of (counterfactual) firms—including the defendant—that would be selling these roughly similar products constitutes the *relevant market*: it can be monopolized (with a consequent higher price, etc.), to the detriment of consumers—as the defendant’s anticompetitive/exclusionary actions have demonstrated. The analogy with the Merger Guidelines paradigm is *now* appropriate.
- (d) In this counterfactual scenario, the defendant would clearly face more competitive conditions as a consequence of the rival firms (that would be offering roughly similar products to that of the defendant) that would be able to survive in the absence of the defendant’s anticompetitive/exclusionary actions. At the same time, as a consequence of the lower prices and improved quality, the *product category*—in essence, the relevant market—would be more distinct (in relation to the “outside” products that, at the higher postmonopolization price, appear to be more substitutable for the defendant’s product).

## B. An Illustrative Example

A relatively simple example may be useful in illustrating these points: suppose that there is a single airline that flies between City A and City B. Suppose also that this airline has purchased all of the arrival/departure gates at City B’s airport, so that no other airline is able to offer service between A and B.

Consistent with the “Microeconomics 101” discussion in Part II *supra*, the profit-maximizing incumbent airline would be expected to charge a price for flights at which some potential customers have decided instead to purchase something else: perhaps a (lower price) bus ticket between A and B; or they decide instead to drive between A and B; or they decide simply to not travel between A and B (and buy “something else” from “someone else”). In essence, at its profit-maximizing price, the airline is reaping profits from its high-willingness-to-pay customers (who find the airline’s service “unique” and not interchangeable) and is competing (at the margin) with bus companies and self-driving and with the other activities for those on-the-cusp customers.<sup>74</sup> And if asked, the airline’s management would likely describe the airline as competing in the “all-forms-of-transportation-between-A-and-B” market.<sup>75</sup>

Now suppose that an antitrust enforcement agency (or an aggrieved private party) brings a monopolization suit against the incumbent airline. In this suit, the plaintiff claims that the airline’s purchase of all of the departure gates at B constituted an anticompetitive, exclusionary act that allowed the airline to monopolize the relevant market: the market for airline transportation services between A and B.

73. In the context of the Google and Facebook cases: recall from *supra* footnote 38 that “free” need not be the only price that could be charged for online search or for online personal social networking services. It is possible that the counterfactual competitive price for these services would involve a payment from the platform to the users.

74. Of course, if the airline could distinguish between these two (or more) groups at the time of ticketing, the airline would try to charge different prices to the different groups: that is, practice price discrimination. (It would also need to prevent arbitrage and to deal with the customer unhappiness when the high-price customers discover that roughly equivalent tickets are being sold at lower prices to the on-the-cusp customers.) For the purposes of this simple illustration, we assume that the airline cannot distinguish among its customers, and thus we rule out price discrimination.

75. And, parenthetically, if the airline were to propose a merger with a bus company that transports passengers between A and B, this would likely be the relevant market.

The airline, of course, would immediately respond that the relevant market is the market for all forms of transportation between A and B, and in *that* market, the airline competes fiercely against buses and self-driving and . . . And the airline would provide some efficiency justification for its purchase of all of the airport gates at B.

The plaintiff would then explain that the airline's claim that it "competes fiercely" is just the *Cellophane* fallacy at work. Instead, the plaintiff would explain, the appropriate analysis requires an examination of the but-for (counterfactual) scenario, in which the airline had not purchased all of the airport gates at B:<sup>76</sup> as a consequence, one or more additional airlines would have entered and would be offering service between A and B; prices would be lower and/or quality of service would be higher; and more passengers would be flying between the two cities. At the lower prices, bus service and self-driving would be less attractive and less used by travelers.

In essence, at these lower (more competitive) prices airline travel would be more distinct and would constitute a relevant market—that became monopolized as a consequence of the defendant airline's anticompetitive, exclusionary actions.

To support empirically its but-for analysis with respect to its claims as to the increased competition that would occur in the absence of the defendant's monopolistic gate purchases, the plaintiff would turn to the numerous studies of air passenger travel between city-pairs in the United States. Those studies could be used to infer how many airlines (with their concomitant prices and frequency of service, etc.) could otherwise be expected to provide air travel services between a pair of cities that were roughly the same distance apart as A and B, that had metro areas with populations that were similar in sizes and demographics as A and B, and so on.

### C. A Summing Up

The essence of this proposed approach is to shift the analysis *away* from the current market conditions and instead to focus the analysis—and the delineation of the relevant market—on the but-for, counterfactual scenario of market conditions in the absence of the defendants' anticompetitive/exclusionary actions. This would be a substantial change from the current approach by the plaintiffs in the Google and Facebook cases—and a radical change with respect to how the plaintiffs have approached market delineation.

## V. Conclusion

The burden will be on the plaintiffs in the federal Google and Facebook cases to convince their respective judges (and, likely, the D.C. Circuit Court of Appeals) of the validity of their relevant market delineations. Perhaps the DOJ and the FTC will be able to marshal convincing pricing and/or profit data (a la *Stocking & Mueller*, *supra* note 9). But the absence of a market delineation paradigm will surely make the agencies' tasks considerably more difficult.

This essay has offered the outline of a market delineation paradigm that is appropriate for monopolization cases. Perhaps it will be useful in clarifying the Google and Facebook cases, as well as future monopolization cases that are brought to the courts.

### Author's Note

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76. The plaintiff would also rebut the airline's claim that the purchase of all of the gates was an efficiency-enhancing action.

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