Feeding the Beast: How Facebook's Monopolization of the Digital Social Advertising Market Harms Consumers and Competition in the Personal Social Networking Market

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ABSTRACT: At this very moment, Facebook's future is at a turning point—both online in the "Metaverse" and also in the courts. In December 2020, the Federal Trade Commission ("FTC") filed a lawsuit against Facebook alleging it had violated Section 2 of the Sherman Act. After initially dismissing the case with leave to amend, on January 11, 2022, the court stated that the agency had plausibly alleged monopolization and allowed the case to proceed. In its complaint, the FTC asserts that Facebook violated U.S. antitrust laws by monopolizing the Personal Social Networking ("PSN") market. In antitrust litigation, very often one of the first and most important steps is alleging the market in which a firm has purportedly engaged in anticompetitive conduct. Although Facebook started and continues to be thought of as a social networking website, today it is just as much an essential advertising platform for businesses who pay for display ads that appear in users' feeds. Indeed, Facebook, which also owns Instagram and WhatsApp under its rebranded parent company Meta, derives nearly all its revenue from advertising and collects at least eighty-two percent of all digital social advertising spending by businesses, with expectations that its market share will only increase. Facebook's Digital Social Advertising ("DSA") services are fueled by vast amounts of social behavioral data that Facebook collects from the PSN side of its platforms—which are free to users. This Note argues that in addition to the PSN market, Facebook also monopolizes the DSA market. Although these two markets are separate,

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dominance of both adds value to Facebook's PSN and DSA products and contributes to the entrenchment of the company's continued monopoly. Thus, to fully appreciate the company's monopolization harms, Facebook should be held accountable for its monopolization of the DSA market.

We're not TV, we're not search. We are social advertising.
—Sheryl Sandberg, former COO, Facebook

INTRODUCTION

In the spring of my senior year in high school, not long after acceptance into college, I received an email (or was it a letter?) from a new website inviting me to create a student profile and meet other students from my campus. It was 2005. The site was called "The Facebook," and it was free and only available to college students. From Iowa, I could see pictures of my roommates and others who would live in my dorm one thousand miles away. We listed our politics, musical interests, and dorm-room numbers. My new "friends" would write kind notes on my Wall, and I wondered how students before me had entered college without it. Within months of joining, Facebook's functionality and users expanded. My younger brother was soon on Facebook, and then parents started joining as well. Not long after, businesses were creating profiles to connect with customers.

Like AOL,[1] MySpace, and other websites that had once been novel but eventually met their digital demise, I expected the same would happen to Facebook. Yet, despite its documented decline in popularity over the years, the company's presence has only continued and expanded.[2] In 2012, it bought Instagram; in 2014, it bought WhatsApp.[3] In October 2021, Facebook

1. I am grateful to my editor for the reminder that some readers may not remember America Online ("AOL"). AOL was once the most popular online service provider and was featured in Nora Ephron's 1998 romcom classic, *You've Got Mail*, starring Meg Ryan, Tom Hanks, and, coincidentally, monopolistic competition. *See* Mark Nollinger, *America, Online!*, WIRED (Sept. 1, 1995, 12:00 PM), https://www.wired.com/1995/09/aol-2 [https://perma.cc/SUX8-RJD5]; YOU'VE GOT MAIL (Lauren Shuler Donner Productions 1998); *You've Got Mail – Monopolistic Competition*, ECON. MEDIA LIBR., https://econ.video/2017/10/15/youve-got-mail-monopolistic-competition [https://perma.cc/ZA5V-P74M]. The movie's title was taken from AOL's iconic log-in announcement. *See* AdventuresinHD, *AOL Dial Up Internet Connection Sound + You've Got Mail (America Online) 90's*, YOUTUBE (Aug. 11, 2014), https://www.youtube.com/watch?v=dudJjUU9Nhs. AOL Instant Messenger was a highly popular precursor to text messaging. *See, e.g.*, Michelle Delgado, *In the 25 Years Since Its Launch, AOL Instant Messenger Has Never Been 'Away,'* SMITHSONIAN MAG. (May 16, 2022), https://www.smithsonianmag.com/innovation/in-25-years-since-its-launch-aol-instant-messenger-has-never-been-away-180980086 [https://perma.cc/M77H-QKMC].

2. *See, e.g.*, Alex Heath, *Facebook's Lost Generation*, THE VERGE (Oct. 25, 2021, 7:00 AM), https://www.theverge.com/22743744/facebook-teen-usage-decline-frances-haugen-leaks [https://perma.cc/2L2R-WRRP] ("Teenage users of the Facebook app in the US had declined by 13 percent since 2019 and were projected to drop 45 percent over the next two years, driving an overall decline in daily users in the company's most lucrative ad market."); Steve Mcclellan, *Is Facebook Getting Uncool for 18-24s?*, ADWEEK (Nov. 16, 2009), https://www.adweek.com/convergent-tv/facebook-getting-uncool-18-24s-100908 [https://perma.cc/F5HL-J35U]; John D. Sutter, *When Did Facebook Become So Uncool?*, CNN BUS. (Apr. 10, 2012, 2:46 PM), https://www.cnn.com/2012/04/10/tech/social-media/facebook-uncool-instagram/index.html [https://perma.cc/2UKM-QNHU]; Trevin Shirey, *History of Facebook Acquisitions [Infographic]*, WEBFX, https://www.webfx.com/blog/marketing/history-of-facebook-acquisitions-infographic [https://perma.cc/C8G8-SFM2].

3. Shirey, *supra* note 2.

announced a rebranding to Meta,[4] and as of the publication of this Note, Facebook has 2.91 billion active users, Instagram 1.478 billion, and WhatsApp 2 billion.[5] Today, Facebook is so much more than the digital space I once used to meet my college roommates. For users, it is a digital archive for photos and remains a way to stay in touch with friends and family; it has also become essential for learning about events, connecting with community groups near and far, and selling furniture that used to be listed on Craigslist.

Over the years, as seemingly every person and entity joined Facebook, people came to feel that if they were not checking their feed regularly, they were missing out.[6] The culture of Facebook quickly changed from the space where my new college friends and I wrote goofy status updates (e.g., "Kate is eating a hamburger."), to an addictive platform where the more that people engaged with it, the more likely they were to compare themselves with others and experience lower self-esteem, anxiety, and depression.[7] Indeed, over the years, Facebook, Instagram, and WhatsApp have become intensely polarizing and negative spaces, and this has been by design: Facebook's business model has come to depend on creating a negative social ecosystem.[8]

Early in its existence, Facebook began incorporating ads into its interface in order to generate revenue and sustain its free platform for users.[9] Facebook decision-makers discovered that the interactions of its millions (now billions) of users—their likes, their follows, their shares—provided invaluable behavioral data that could be used to optimize display ads for businesses. Today, Facebook operates much a like a free magazine, with readers that use one side of the platform, and businesses that pay to advertise to those readers. Unlike a static print publication, however, Facebook takes the data it collects from its users—as well as Instagram's and WhatsApp's—and programs its algorithm to optimize the gathered data and influence users to engage with ads or cause them to

4. Katie Canales, *Facebook Is Changing Its Name to Meta*, BUS. INSIDER (Oct. 28, 2021, 1:18 PM), https://www.businessinsider.com/facebook-new-name-meta-rebrand-metaverse-zuckerberg-apps-2021-10 [https://perma.cc/8HAN-P959].

5. S. Dixon, *Most Popular Social Networks Worldwide as of January 2022, Ranked by Number of Monthly Active Users*, STATISTA (July 26, 2022), https://www.statista.com/statistics/272014/global-social-networks-ranked-by-number-of-users [https://perma.cc/6DGT-X8VT].

6. *See* Jesse Fox & Jennifer J. Moreland, *The Dark Side of Social Networking Sites: An Exploration of the Relational and Psychological Stressors Associated with Facebook Use and Affordances*, 45 COMPUTS. HUM. BEHAV. 168, 168–69 (2015); Zachary G. Baker, Heather Krieger & Angie S. LeRoy, *Fear of Missing Out: Relationships with Depression, Mindfulness, and Physical Symptoms*, 2 TRANSLATIONAL ISSUES PSYCH. SCI. 275, 276–77 (2016); C.R. Blease, *Too Many 'Friends,' Too Few 'Likes'? Evolutionary Psychology and 'Facebook Depression,'* 19 REV. GEN. PSYCH. 1, 7–11 (2015).

7. *See supra* note 6.

8. *See* Kevin Roose, Mike Isaac & Sheera Frenkel, *Facebook Struggles to Balance Civility and Growth*, N.Y. TIMES (Jan. 7, 2021), https://www.nytimes.com/2020/11/24/technology/facebook-election-misinformation.html [https://perma.cc/D4AJ-QUCR].

9. S. Dixon, *Meta's (Formerly Facebook Inc.) Advertising Revenue Worldwide from 2009 to 2021 (in Million U.S. Dollars)*, STATISTA (July 27, 2022), https://www.statista.com/statistics/271258/facebooks-advertising-revenue-worldwide [https://perma.cc/87PY-RJ7X].

otherwise act in ways they may not be aware.[10] Facebook learns from the data it collects and has discovered that negative interactions on its platform increase user engagement.[11] Fake news, conspiracy theories, and body comparisons keep people on the platform and seeing its ads.[12] For example, Facebook was aware of the polarization and conspiracy theories fostered by its platform ahead of the January 6 attacks on the U.S. Capitol, yet the company chose to foster that engagement and not act in part due to that very engagement[13]; Meta executives also know that habitual use of its platforms, especially Instagram, has been shown to increase depression, anxiety, and body shame in teenage girls.[14]

Keeping social media users engaged ensures that Facebook does not face the same fate of its early competitors, and with billions of social media users as a captive audience, the company creates an essential place for businesses to advertise.[15] In 2022, digital advertising revenue—which includes search, display, ecommerce, and social advertising[16]—surpassed that of all other media[17]; Facebook accounts for approximately a quarter of this total, and more specifically, among digital *social* advertising platforms, it collects nearly all the revenue.[18]

Shortly after January 6, 2021, the Federal Trade Commission ("FTC") filed a lawsuit against Facebook for violating U.S. antitrust laws, specifically

10. Mason Marks, *Biosupremacy: Big Data, Antitrust, and Monopolistic Power Over Human Behavior*, 55 U.C. DAVIS L. REV. 513, 516–19 (2021).

11. Roose et al., *supra* note 8.

12. *See id.*

13. Craig Timberg, Elizabeth Dwoskin & Reed Albergotti, *Inside Facebook, Jan. 6 Violence Fueled Anger, Regret over Missed Warning Signs*, WASH. POST (Oct. 22, 2021, 7:36 PM), https://www.washingtonpost.com/technology/2021/10/22/jan-6-capitol-riot-facebook [https://perma.cc/6CYX-H63W].

14. Georgia Wells, Jeff Horwitz & Deepa Seetharaman, *Facebook Knows Instagram Is Toxic for Teen Girls, Company Documents Show*, WALL ST. J. (Sept. 14, 2021, 7:59 AM), https://www.wsj.com/articles/facebook-knows-instagram-is-toxic-for-teen-girls-company-documents-show-11631620739 [https://perma.cc/P5XR-QYYE]; Claire Lampen, *Instagram Knows Just How Damaging It Is for Teen Girls*, THE CUT (Sept. 14, 2021), https://www.thecut.com/2021/09/facebook-very-aware-that-instagram-harms-teen-mental-health.html [https://perma.cc/NWQ6-9E93]; Francesca Gioia, Mark D. Griffiths & Valentina Boursier, *Adolescents' Body Shame and Social Networking Sites: The Mediating Effect of Body Image Control in Photos*, 83 SEX ROLES 773, 773–75 (2020).

15. Nathan Olson, *Facebook Ads for Beginners: Best FB Ads Guide 2020*, SOCIALISER EU (Dec. 27, 2019), https://socialiser.eu/facebook-ads-for-beginners [https://perma.cc/D8J4-AENB].

16. Statista Rsch. Dep't, *Share of Amazon, Facebook, and Google in Net Digital Ad Revenue in the United States from 2019 to 2023*, STATISTA (Mar. 14, 2022), https://www.statista.com/statistics/242549/digital-ad-market-share-of-major-ad-selling-companies-in-the-us-by-revenue [https://perma.cc/XT6S-CH93].

17. A. Guttmann, *Share of Advertising Media Owners Revenue in the United States in 2022, by Medium*, STATISTA (Sept. 1, 2022), https://www.statista.com/statistics/183704/us-advertising-spend-by-medium-in-2009 [https://perma.cc/2VZE-GHDG].

18. *See* Statista Rsch. Dep't, *supra* note 16.

Section 2 of the Sherman Act.[19] The agency claimed that through anticompetitive acquisitions, Facebook had monopolized the market for Personal Social Networking ("PSN"),[20] but it did not include the Digital Social Advertising ("DSA") market.[21]

This Note argues that Facebook monopolizes the DSA market. Part II will provide a brief overview of the Sherman Act, policy developments in U.S. antitrust laws, and the role of defining the relevant product market in litigation. Part III provides background about the FTC's case against Facebook and details the PSN market definition. Part IV gives insight into Facebook's digital social advertising platform and how its advertising practices hurt consumers and businesses. Finally, Part V puts forth a relevant product market framework to analyze Facebook's anticompetitive harms in the DSA market.

I. ANTITRUST & MARKET DEFINITION: A PRIMER FOR THE FTC'S LITIGATION AGAINST FACEBOOK

This Part provides a foundational overview of U.S. antitrust law in the context of the FTC's litigation. Section A dives into antitrust history and the evolution of dominant competition policies beginning in the late 1800s and continuing through today. Section B explains Section 2 of the Sherman Act, the statute under which the FTC's lawsuit against Facebook was brought. Finally, Section C explains market definition, its purpose in antitrust litigation, and the process for defining a relevant product market.

A. ANTITRUST'S ORIGINS AND THE CURRENT DISCOURSE

United States federal antitrust law emerged around the turn of the twentieth century in response to growing concern regarding the adverse effects that concentrated economic power was having on American society.[22] Senator John Sherman, the Ohio Republican for whom the Act was named, observed before Congress that "[t]he popular mind [was] agitated with . . . the inequality of condition, of wealth, and opportunity that [had] grown within a single generation out of the concentration of capital into vast combinations to

19. Complaint for Injunctive and Other Equitable Relief at 1, FTC v. Facebook, Inc., No. 20-cv-03590 (D.D.C. filed Jan. 13, 2021); Substitute Amended Complaint for Injunctive and Other Equitable Relief at 1, 77, *FTC*, No. 20-cv-03590 (D.D.C. filed Sept. 8, 2021). See *infra* Section I.B for a discussion of the Sherman Act. At the same time that the FTC filed suit against Facebook, forty-eight State Attorneys General filed a companion lawsuit alleging monopolization of the Personal Social Networking product market. Complaint at 1–6, New York v. Facebook, Inc., No. 20-cv-03589 (D.D.C. filed Dec. 09, 2020). The State's complaint was dismissed without leave and as of this Note's publication is on appeal. Brief for Appellants at 1–3, *New York*, No. 21-7078 (D.C. Cir. filed Jan. 14, 2022); New York v. Facebook, Inc., 549 F. Supp. 3d 6, 49 (D.D.C. 2021). Thus, this Note will focus on the FTC's litigation. *See id.*

20. Substitute Amended Complaint for Injunctive and Other Equitable Relief, *supra* note 19, at 2, 76.

21. *See id.* at 3.

22. Standard Oil Co. of N.J. v. United States, 221 U.S. 1, 56–57 (1911).

control production and trade and to break down competition."[23] Congress and the general population were reacting to the ability of trusts and large corporations—owned by such household names as J.P. Morgan and John D. Rockefeller—to raise prices and manipulate and control trade for private benefit, all at the expense of the general public.[24] To remedy the impact that unbridled corporate power was having on consumers and the economy, Congress passed the Sherman Act in 1890.[25] Section 1 of the Act makes it illegal for multiple businesses to raise prices or otherwise collude to restrain trade,[26] while Section 2 prohibits single firms from monopolizing or attempting to monopolize in restraint of trade.[27] Notably, the antitrust laws were enacted for "the protection of *competition*," which the statute's authors viewed as a cornerstone of democracy.[28]

Congress's focus on mitigating corporate concentration of power continued when, in 1914, it passed Section 7 of the Clayton Act to "prohibit[] the acquisition by one corporation of the *stock* of another corporation when such acquisition would result in a substantial lessening of competition . . . or tend to create a monopoly in any line of commerce."[29] Initially, Section 7 provided many corporate loopholes,[30] but during World War II, amendments to Section 7 were proposed in Congress before changes were enacted in 1950 with the

23. 21 CONG. REC. 2460 (1890).

24. *Id.* at 2462; N. Pac. Ry. Co. v. United States, 356 U.S. 1, 4 (1958) ("The Sherman Act was designed to be a comprehensive charter of economic liberty aimed at preserving free and unfettered competition as the rule of trade. It rests on the premise that the unrestrained interaction of competitive forces will yield the best allocation of our economic resources, the lowest prices, the highest quality and the greatest material progress, while at the same time providing an environment conducive to the preservation of our democratic political and social institutions."); *Standard Oil Co.*, 221 U.S. at 34 n.1; *id.* at 50 (noting that the legislative history "conclusively show[s], however, that the main cause which led to the [Sherman Act] was the thought that it was required by the economic condition of the times, that is, the vast accumulation of wealth in the hands of corporations and individuals, the enormous development of corporate organization, the facility for combination which such organizations afforded, the fact that the facility was being used, and that combinations known as trusts were being multiplied, and the widespread impression that their power had been and would be exerted to oppress individuals and injure the public generally"); N. Sec. Co. v. United States, 193 U.S. 197, 321–24 (1904).

25. Sherman Act, 15 U.S.C. § 1 (2018).

26. *Id.* ("Every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce . . . is hereby declared to be illegal.").

27. *Id.* § 2.

28. Brown Shoe Co. v. United States, 370 U.S. 294, 320 (1962); *see also* 21 CONG. REC. 2457 (1890) (stating that concentrated powers that prevent competition are "inconsistent with our form of government, and [they] should be subject to the strong resistance of the [s]tate and national authorities.").

29. *Brown Shoe*, 370 U.S. at 312–13.

30. *Id.* at 313 ("The Act did not, by its explicit terms, or as construed by this Court, bar the acquisition by one corporation of the *assets* of another. Nor did it appear to preclude the acquisition of stock in any corporation other than a direct competitor." (footnote omitted)).

adoption of the Celler-Kefauver Amendment.[31] This Amendment was in part a response to Hitler's rise in power, which was "facilitated by the German Republic's tolerance of monopolies in key industries."[32] "By the time the Nazis came to power, significant swaths of the German economy were subject to monopolies or near monopolies" in their chemical, steel, military product, heavy machinery, and many other lines of business.[33] Thus,

> [t]he dominant theme pervading congressional consideration of the 1950 amendments was a fear of what was considered to be a rising tide of economic concentration in the American economy . . . . Throughout the recorded discussion may be found examples of Congress' fear not only of accelerated concentration of economic power on economic grounds, but also of the threat to other values a trend toward concentration was thought to pose.[34]

Prior to the 1970s, a "market structure-based understanding of competition" provided the foundation for antitrust policy.[35] Lawmakers and judges understood "that concentrated market structures promote anticompetitive forms of conduct" and that "a market dominated by a very small number of large companies [was] likely to be less competitive than a market populated with many small- and medium-sized companies."[36] In the late '70s, antitrust policy shifted away from economic structuralism and toward theories put forth by the Chicago School of Economics.[37] Popularized by Robert Bork, this school of antitrust thought reinterpreted the statutes and case law, finding that the primary goal of antitrust was "economic efficiency" and, in particular, giving great weight to firms' productive efficiency gains in

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31. *See id.* at 311–16 & nn.19–29. Between 1943 and 1949, sixteen amendments were introduced for Congress's consideration. *Id.* at 311–12. The 1950 revisions addressed the exemption for corporate assets, which had become a serious loophole to get around the Act. *Id.* at 314–17.

32. TIM WU, THE CURSE OF BIGNESS: ANTITRUST IN THE NEW GILDED AGE 80–81 (2018) (noting that Senator Estes Kefauver said at the time, "I am not an alarmist, but the history of what has taken place in other nations where mergers and concentrations have placed economic control in the hands of a very few people is too clear to pass over easily. . . . It either results in a Fascist state or the nationalization of industries and thereafter a Socialist or Communist state." (quoting 96 CONG. REC. 16452 (1950)); *see also* Daniel A. Crane, *Fascism and Monopoly*, 118 MICH. L. REV. 1315, 1333 ("There can be no doubt that the German economy had become extremely consolidated and cartelized by the end of the Weimar Republic and that many dominant German firms and cartels played significant roles in the malevolent business of the Third Reich.").

33. Crane, *supra* note 32, at 1335–36 ("In sum, before Hitler came to power, the German economy had been thoroughly cartelized and monopolized.").

34. *Brown Shoe*, 370 U.S. at 315–16.

35. Lina M. Khan, *Amazon's Antitrust Paradox*, 126 YALE L.J. 710, 718 (2017).

36. *Id.*

37. *See, e.g.*, Robert Pitofsky, *The Political Content of Antitrust*, 127 U. PA. L. REV. 1051, 1051 (1979).

the face of otherwise clear anticompetitive harms.[38] Chicago School proponents also held the belief that antitrust intervention was rarely needed, markets should be allowed to sort themselves out, and businesses would make "rational" decisions that would benefit consumers.[39] These beliefs and values were packaged in perhaps the most lasting invention of the Chicago School, the "consumer welfare standard," which became the dominant metric for assessing antitrust violations. Under the consumer welfare standard, business conduct is anticompetitive for the purposes of the antitrust laws if it raises prices for consumers or lowers output by businesses.[40] Applying the Chicago School approach, firm conduct that previously would have been found to harm consumers was not found to hinder consumer welfare and therefore would not violate antitrust law.[41] Indeed, commentators have found that the Chicago School used "economic tools to justify a *laissez-faire* ideology that was always suspiciously in line with the dictates of big business."[42]

As early as 1979, scholars were raising "concern[s] . . . that if the free-market sector of the economy is allowed to develop under antitrust rules that are blind to all but economic concerns, the likely result will be an economy . . . dominated by a few corporate giants."[43] Nonetheless, the Supreme Court and many lower courts adopted the consumer welfare standard. Through the '90s and into the twenty-first century,[44] the economic approach to the consumer welfare standard evolved to incorporate more sophisticated economics and address the Chicago School metric's "animating principle . . . to achieve less government involvement in markets."[45] Still, the case law that emphasized concentration and market structure continued (and continues) to be ignored, while "[e]conomic factors that are easier to measure—such as impacts on price, output, or productive efficiency in narrowly defined markets—[are still] 'disproportionately important.'"[46]

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38. *Id.*; ROBERT H. BORK, THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF 405 (1978); Leah Samuel & Fiona Scott Morton, *What Economists Mean When They Say "Consumer Welfare Standard,"* PROMARKET (Feb. 16, 2022), https://www.promarket.org/2022/02/16/consumer-welfare-standard-antitrust-economists [https://perma.cc/N5MY-YQ2C]; Herbert J. Hovenkamp & Fiona Scott Morton, *Framing the Chicago School of Antitrust Analysis*, 168 U. PA. L. REV. 1843, 1876 (2020).

39. Khan, *supra* note 35, at 718–21 (noting that for the Chicago School, "market power is always fleeting[,] . . . and hence antitrust enforcement [is] rarely needed.").

40. Herbert Hovenkamp, *Antitrust in 2018: The Meaning of Consumer Welfare Now*, WHARTON U. PA. PUB. POL'Y INITIATIVE, Sept. 2018, at 1, 1 [hereinafter *The Meaning of Consumer Welfare Now*] (explaining that the consumer welfare principle advocates "(1) output that is as high as is consistent with sustainable competition, and (2) prices that are accordingly as low").

41. Khan, *supra* note 35, at 720 n.38.

42. WU, *supra* note 32, at 108; *see also* Samuel & Scott Morton, *supra* note 38.

43. Pitofsky, *supra* note 37, at 1051.

44. *See* Khan, *supra* note 35, at 721–22; *The Meaning of Consumer Welfare Now*, *supra* note 40, at 2–3.

45. Samuel & Scott Morton, *supra* note 38; *see also* Khan, *supra* note 35, at 720 n.38 for a list of scholarly work critiquing the Chicago School's consumer welfare standard.

46. Khan, *supra* note 35, at 722 (citation omitted).

Although artificially higher prices are one of a number of concerns that antitrust addresses, the limited scope of the consumer welfare standard's analysis means that "[f]actually, the [consumer welfare standard] can tolerate very large firms, such as Amazon and Microsoft, provided that their gains are passed on to consumers,"[47] either in reality or in theory. With concentration in industries and a growing divide between the wealthy and the rest of America, the "gains" that the Chicago School and others claimed the consumer welfare standard achieves are being reconsidered, and antitrust policymakers like FTC Chair Lina Khan, U.S. Assistant Attorney General Jonathan Kanter, and Tim Wu, as well as a bipartisan coalition in Congress, are taking a critical look at the belief systems of the 1980s that drove decades of antitrust policy, which they argue has resulted in the concentration of industries—specifically in Big Tech.[48] Khan and Kanter are questioning the antitrust policies that dominated the past forty years and how the weakening of antitrust laws during that period has led to a lack of competition that has "imperil[ed] choice and economic gains for consumers, workers, entrepreneurs, and small businesses."[49] Indeed, the fears detailed in the late 1800s record and during the period after World War II echo sentiments present in antitrust discourse surrounding "Big Tech"[50] today: government leaders are closely scrutinizing the trajectory that led to such concentration of power in a few online platforms and how this power is being abused to the detriment of the public.[51]

B. SHERMAN ACT SECTION 2 AND MONOPOLIZATION

The FTC alleges that Facebook violated Section 2 of the Sherman Act, which addresses conduct by single entities that "monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce."[52] This vague language,[53]

47. *The Meaning of Consumer Welfare Now*, *supra* note 40, at 2; *see also* Pitofsky, *supra* note 37, at 1051–52.

48. *See, e.g.*, Tim Wu, *Opinion: Be Afraid of Economic 'Bigness.' Be Very Afraid.*, N.Y. TIMES (Nov. 10, 2018), https://www.nytimes.com/2018/11/10/opinion/sunday/fascism-economy-monopoly.html [https://perma.cc/W4KJ-WYPH].

49. Press Release, FTC, Federal Trade Commission and Justice Department Seek to Strengthen Enforcement Against Illegal Mergers (Jan. 18, 2022), https://www.ftc.gov/news-events/press-releases/2022/01/ftc-and-justice-department-seek-to-strengthen-enforcement-against-illegal-mergers [https://perma.cc/Z4XV-97SE].

50. Wu, *supra* note 48; *see* Chris Hughes, *Opinion: It's Time to Break Up Facebook*, N.Y. TIMES (May 9, 2019), https://www.nytimes.com/2019/05/09/opinion/sunday/chris-hughes-facebook-zuckerberg.html [https://perma.cc/KKC6-SKS5].

51. *See supra* note 19 for some examples of cases that have recently been filed by the FTC and state attorneys general.

52. Sherman Act, 15 U.S.C. § 2.

53. *See* Standard Oil Co. of N.J. v. United States, 221 U.S. 1, 61 (1911) (noting that the Act was ambiguous as to what "is involved in determining what is intended by *monopolize*" (emphasis added)); Gregory Day & Abbey Stemler, *Infracompetitive Privacy*, 105 IOWA L. REV. 61, 87 (2019)

while initially construed to reach all monopolies,[54] has been interpreted by the Supreme Court to mean that only some monopolies are illegal—those that unduly restrain trade.[55] Before enforcers can establish that a firm has engaged in anticompetitive conduct under a Section 2 violation, they must show: "(1) the possession of monopoly power in the relevant market and (2) the willful acquisition or maintenance of that power as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident."[56]

"Monopoly power," the first element a plaintiff must prove, can be established through evidence that shows control over a large portion of a market.[57] *United States v. Aluminum Company of America* ("*Alcoa*") gave courts thresholds to determine the existence of monopoly power based on a company's share of the market: thirty-three percent market share does not establish monopoly power, "it is doubtful whether . . . sixty-four percent would be enough," and a ninety percent share of the market is definitely "enough to constitute a monopoly."[58] It is important to note that a large company is not in violation of Section 2 per se,[59] and "[t]he mere possession of monopoly power . . . is not . . . unlawful."[60] Indeed, under the second requirement, a plaintiff must show that the monopolist engaged in anticompetitive conduct.[61] In Section 2 cases, courts use rule of reason analysis to determine whether a firm's actions were anticompetitive.[62] Although a full discussion of the framework is outside the scope of this Note, the rule of reason essentially weighs the procompetitive or anticompetitive nature of a firm's conduct.[63] Broadly, what constitutes illegal conduct includes "creating, enlarging, or

("Congress drafted the Sherman Act using broad language, providing few clues or methods to discern illegal conduct.").

54. United States v. Trans-Mo. Freight Ass'n, 166 U.S. 290, 335–41 (1897) ("The arguments which have been addressed to us against the inclusion of all contracts in restraint of trade, as provided for by the language of the act, have been based upon the alleged presumption that Congress, notwithstanding the language of the act, could not have intended to embrace all contracts, but only such contracts as were in unreasonable restraint of trade. . . . If the law prohibit[s] any contract or combination in restraint of trade or commerce, a contract or combination made in violation of such law is void, whatever may have been theretofore decided by the courts to have been the public policy of the country on that subject.").

55. *Standard Oil Co.*, 221 U.S. at 61–62. In *Standard Oil*, the Court held that the Act's "omission of any direct prohibition against monopoly" meant that some monopolies are lawful. *Id.*

56. United States v. Grinnell Corp., 384 U.S. 563, 570–71 (1966).

57. *See* United States v. Aluminum Co. of Am. (*Alcoa*), 148 F.2d 416, 424 (2d Cir. 1945).

58. *Id.*

59. *See* Herbert Hovenkamp, *Antitrust and Platform Monopoly*, 130 YALE L.J. 1952, 1958 (2021).

60. Verizon Commc'ns, Inc. v. Law Offs. of Curtis V. Trinko, LLP, 540 U.S. 398, 407 (2004).

61. United States v. Microsoft Corp., 253 F.3d 34, 58 (D.C. Cir. 2001).

62. *See, e.g.*, *id.* at 84–86 (finding anticompetitive tying in a Section 2 case should be subject to "rule of reason" analysis, not per se analysis).

63. *See id.* at 59.

prolonging monopoly power by impairing the opportunities of rivals; and . . . [it] either (a) do[es] not benefit consumers at all, or (b) [is] unnecessary for the particular consumer benefits claimed for [it], or (c) produce[s] harms disproportionate to any resulting benefits."[64] Before the late '70s, rule of reason looked more broadly at a firm's anticompetitive conduct and resulting harms; as noted earlier, under the consumer welfare standard, the analysis narrowed to determine anticompetitive conduct by assessing whether a firm's conduct raised prices.[65] Regardless of the standard, to understand whether a firm is illegally monopolizing a market in order to later establish anticompetitive harm, it is generally[66] essential to first understand and define the market the firm monopolizes.

C. DEFINING THE RELEVANT PRODUCT MARKET

For parties litigating Section 2 claims, an important step after establishing a firm's potential for monopoly power is defining the relevant product market—"the arena" in which the anticompetitive harms will be analyzed.[67] The need to establish the relevant market flows from the "any part" language of the Sherman Act, which says that "monopolization of 'any part' of the nation's interstate or foreign commerce" is illegal.[68] The *Standard Oil* Court construed "any part" to have "both a *geographical* and a distributive significance, that is[,] it includes any portion of the United States and *any one of the classes of things* forming a part of interstate or foreign commerce."[69] Combined, these markets—the geographic market[70] and product market—constitute the relevant market for the purposes of assessing a Section 2 violation.[71]

64. PHILLIP E. AREEDA & HERBERT HOVENKAMP, FUNDAMENTALS OF ANTITRUST LAW § 6.04a (4th ed. 2011 & Supp. 2013).

65. Khan, *supra* note 35, at 719–21.

66. *See* Louis Kaplow, *Why (Ever) Define Markets?*, 124 HARV. L. REV. 437, 438–44 (2010).

67. AREEDA & HOVENKAMP, *supra* note 64, § 5.02. *But see, e.g.*, Sarah Oxenham Allen, Brian Christensen, Joseph Conrad, Nicholas Grimmer & Jennifer Pratt, *Market Definition in the Digital Economy: Considerations for How to Properly Identify Relevant Markets*, AM. ANTITRUST INST., June 17, 2020, at 2 ("Market definition is not always a legal requirement for antitrust claims . . . .").

68. William Holmes & Melissa Mangiaracina, *Actual Monopolization—Defining the Relevant Market and Monopoly Power*, ANTITRUST L. HANDBOOK § 3:4 (2021) (citing Sherman Act, 15 U.S.C. § 2).

69. Standard Oil Co. of N.J. v. United States, 221 U.S. 1, 61 (1911) (emphasis added).

70. In the context of the Facebook antitrust litigation, the geographic market—the United States—is not disputed by the parties and therefore will not be addressed in this Note. Memorandum Opinion at 19–20, FTC v. Facebook, Inc., No. 20-cv-03590 (D.D.C. filed June 28, 2021).

71. Brown Shoe Co. v. United States, 370 U.S. 294, 324–28 (1962).

1. The Purpose of Defining Product Markets

Properly defining a product market is often an essential foundational step for antitrust litigation[72]; without knowing what market a firm is allegedly monopolizing, it can be difficult for a litigant to establish, and for a judge or jury to understand, the effects of a firm's anticompetitive conduct and whether it possesses market power in the relevant market.[73] Product markets are fact-based inquiries.[74] They can include products, services, or a combination of both,[75] and a single product can compete in multiple separate markets.[76] For example, a product market could be baby food[77] or "the sale of consumable office supplies through office supply superstores."[78] Markets do not have to be defined according to general intuition, nor must they fit the expectations or understandings of how "executives and consultants might define" a market for business purposes.[79] Market definition allows a narrowing of analysis to the impacted area of trade so as to better understand a defendant's market power.[80] Courts have held that "the relevant product market should ordinarily be defined as the smallest product market" possible,[81] as opposed to "aggregated . . . larger groupings."[82] Plaintiffs typically argue for a narrow, specific market—

72. United States v. H & R Block, Inc., 833 F. Supp. 2d 36, 50 (D.D.C. 2011) ("Indeed, the relevant market definition is often 'the key to the ultimate resolution of [an antitrust] case because of the relative implications of market power.'" (quoting FTC v. Swedish Match N. Am., Inc., 131 F. Supp. 2d 151, 156 (D.D.C. 2000))).

73. *See generally* Se. Mo. Hosp. v. C.R. Bard, Inc., 642 F.3d 608 (8th Cir. 2011) ("Without a well-defined relevant market, a court cannot determine the effect that an allegedly illegal act has on competition."); Robert Pitofsky, *New Definitions of Relevant Market and the Assault on Antitrust*, 90 COLUM. L. REV. 1805, 1806–07 (1990) ("Definition of relevant market is a critical analytical tool in antitrust enforcement because the legality of business conduct almost always depends upon the market power of the participants."); OECD, DATA-DRIVEN INNOVATION: BIG DATA FOR GROWTH AND WELL-BEING 107 (2015) ("Competition authorities rely on a definition of the relevant market as 'one of the most fundamental concepts underpinning essentially all competition policy issues, from mergers, through dominance/monopoli[z]ation to agreements.'" (citation omitted)).

74. *See* Memorandum Opinion, *supra* note 70, at 2, 10.

75. *See* AREEDA & HOVENKAMP, *supra* note 64, § 5.02.

76. *Market Power—The Relevant Market*, *in* 1 CALLMANN ON UNFAIR COMPETITION, TRADEMARKS & MONOPOLIES § 4:31 (4th ed. 2022).

77. *See, e.g.*, FTC v. H.J. Heinz Co., 246 F.3d 708, 711 (D.C. Cir. 2001) (defining the market as a baby food market, which the court found "[wa]s dominated by three firms").

78. *See, e.g.*, FTC v. Staples, Inc., 970 F. Supp. 1066, 1080 (D.D.C. 1997) ("For the reasons set forth in the above analysis, the [c]ourt finds that the sale of consumable office supplies through office supply superstores is the appropriate relevant product market for purposes of considering the possible anti-competitive effects of the proposed merger between Staples and Office Depot.").

79. Jonathan B. Baker, *Market Definition: An Analytical Overview*, 74 ANTITRUST L.J. 129, 130 (2007).

80. Gregory J. Werden, *Why (Ever) Define Markets? An Answer to Professor Kaplow*, 78 ANTITRUST L.J. 729, 730–32 (2013).

81. United States v. H & R Block, Inc., 833 F. Supp. 2d 36, 59 (D.D.C. 2011).

82. AREEDA & HOVENKAMP, *supra* note 64, § 5.08.

for example, in *United States v. H & R Block, Inc.*, the Department of Justice argued that the relevant product market was digital do-it-yourself ("DIY") tax preparation, i.e., services like TurboTax—while defendants typically argue the market should be construed broadly, e.g., H & R Block argued that the market included all tax preparation, including digital DIY software, accountant services, and DIY pen-and-paper submissions to the Internal Revenue Service.[83] From there, litigators and courts will "identify the firms that participate in the market."[84] In this way, market definition also facilitates analysis of anticompetitive harm.[85] The relevant market provides context to understand the defendant's power, as well as other competition and consumer options, and by limiting analysis to only products or services within the relevant market, monopolistic harms are better understood and analyzed.[86] Broadly, these harms may include increased prices for consumers, decreased product quality, lower output, less innovation by the monopolist,[87] fewer or no consumer choice resulting from market concentration, privacy harms, harms to other businesses or labor, as well as more long-term structural or democratic harms.[88]

2. The Morass of Relevant Product Market Tests

Congress neither provided nor rejected a test to define relevant product markets.[89] As a result, court decisions have led to a multitude of tests, which are often confused, combined, and contradicted.[90] Indeed, antitrust scholar Louis Kaplow has called for abandonment of market definition altogether.[91] The muddled nature of the tests reflect conflicting judicial approaches to antitrust, as well as the difficulty in discerning the boundaries of a market.[92]

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83. *H & R Block*, 833 F. Supp. 2d at 50.

84. Baker, *supra* note 79, at 130.

85. Werden, *supra* note 80, at 732.

86. Gregory J. Werden, *The Relevant Market: Possible and Productive*, ANTITRUST L.J. ONLINE, April 2014, at 1, 2.

87. Dina Srinivasan, *The Antitrust Case Against Facebook: A Monopolist's Journey Towards Pervasive Surveillance in Spite of Consumers' Preference for Privacy*, 16 BERKELEY BUS. L.J. 39, 82 (2019).

88. *See generally* FTC, FTC REPORT TO CONGRESS ON PRIVACY AND SECURITY (2021), https://www.ftc.gov/system/files/documents/reports/ftc-report-congress-privacy-security/report_to_congress_on_privacy_and_data_security_2021.pdf [https://perma.cc/3Z65-7XPU] (considering such harms); FTC, MAKING COMPETITION WORK: PROMOTING COMPETITION IN LABOR MARKETS (2021), https://www.ftc.gov/news-events/events-calendar/making-competition-work-promoting-competition-labor-markets [https://perma.cc/R5R9-GNP2]; Press Release, FTC, *supra* note 49; *see also* Pitofsky, *supra* note 37, at 1051–55.

89. Brown Shoe Co. v. United States, 370 U.S. 294, 320–21 (1962).

90. *See* Pitofsky, *supra* note 73, at 1807 ("Unfortunately, no aspect of antitrust enforcement has been handled nearly as badly as market definition.").

91. Kaplow, *supra* note 66, at 438–44.

92. *See* Pitofsky, *supra* note 73, at 1807–08.

Antitrust litigation initially centered on markets for commodities, for example coal[93] and oil,[94] and while market definition was implied in early cases, it was not until the 1950s that the antitrust concept made its formal appearance.[95] In 1953, the Court adopted the approach of defining markets by cross-elasticity of demand,[96] which essentially "seek[s] to determine the extent to which buyers would switch to or from other suppliers given significant price changes."[97] Three years later, in the *Cellophane* case, the Court introduced the reasonable interchangeability test, where the "market is composed of products that have reasonable interchangeability for the purposes for which they are produced."[98] The test considers whether other products can be substituted without sacrificing price, functionality, or quality; and if there are substitutable products, then it is possible that an "illegal monopoly does not exist."[99] The cross-elasticity of demand and reasonable interchangeability tests, while separate, are often collapsed into one, are nearly identical in what they accomplish, and are still used today.[100]

Six years after *Cellophane*, the Court introduced yet another test for market definition: the "practical indicia" test.[101] This test defines the relevant product market by weighing a variety of factors: "industry or public recognition . . . , the product's peculiar characteristics and uses, unique production facilities, distinct customers, distinct prices, sensitivity to price changes, and specialized vendors."[102] For example, in *Brown Shoe*, the Court determined the relevant product market encompassed stores that sell "men's, women's, and children's shoes," basing its conclusion on analysis of public recognition, manufacturing plant locations, the market's "distinct class of customers," and

93. Appalachian Coals, Inc. v. United States, 288 U.S. 344, 361 (1933), *overruled by* Copperweld Corp. v. Indep. Tube Corp., 467 U.S. 752 (1984).

94. Standard Oil Co. of N.J. v. United States, 221 U.S. 1, 75 (1911).

95. Gregory J. Werden, *The History of Antitrust Market Delineation*, 76 MARQ. L. REV. 123, 128–31 (1992).

96. Times-Picayune Publ'g Co. v. United States, 345 U.S. 594, 612 n.31 (1953) ("For every product, substitutes exist. But a relevant market cannot meaningfully encompass that infinite range. The circle must be drawn narrowly to exclude any other product to which, within reasonable variations in price, only a limited number of buyers will turn; in technical terms, products whose 'cross-elasticities of demand' are small. Useful to that determination is, among other things, the trade's own characterization of the products involved.").

97. Pitofsky, *supra* note 73, at 1817.

98. United States v. E.I. du Pont de Nemours & Co. (*Cellophane*), 351 U.S. 377, 404 (1956).

99. *Id.* at 394.

100. *See id.* at 380–81 ("Every manufacturer is the sole producer of the particular commodity it makes but its control in the above sense of the relevant market depends upon the availability of alternative commodities for buyers: [*i.e.*], whether there is a cross-elasticity of demand between cellophane and the other wrappings. This interchangeability is largely gauged by the purchase of competing products for similar uses considering the price, characteristics[,] and adaptability of the competing commodities.").

101. *See* Brown Shoe Co. v. United States, 370 U.S. 294, 325 (1962).

102. *Id.*

other market "characteristics peculiar to itself."[103] This test is also still recognized and used by litigators and courts.

Finally, the Hypothetical Monopolist Test ("HMT") arrived in 1982 with the FTC's revised Merger Guidelines—the guidelines that the agency provides to staff as a blueprint for analyzing whether a merger could substantially lessen competition in its relevant market.[104] The HMT is a relevant market analysis framework that begins with the smallest credible market hypothesis and asks whether it would be possible for the defendant company to raise prices by a small but significant nontransitory price increase ("SSNIP"); if the defendant could raise prices without losing customers, then the market has been defined.[105]

Criticisms abound for each and every test, likely because none is entirely adequate. One way litigants and courts resolve the deficiencies of a single test is by applying multiple tests to determine the relevant product market.[106] This can be helpful, because appropriately defining a product market can make or break an litigant's case; thus, it is especially important for the products that make up the market to be well-understood when engaging in market definition.[107] This has proven particularly difficult in technology cases because of the broad range of a product's capabilities and intricacies, as well as the potential for competing in a variety of markets.[108] For example, in *United States v. Microsoft Corporation*, the court of appeals found "that the government had failed to establish 'a precise definition of browsers,'" and it was precluded from amending its market on remand.[109] The defendant, meanwhile, had defined the market for software products broadly as software "consist[ing] of code and nothing else."[110]

3. Market Definition for Multi-sided Platforms

As discussed above, compounding the confusion surrounding market definition is the fact that many platforms have more than one product or service, each with its own distinct customer base.[111] This is certainly the case with Facebook: on one side of its platform, it has users engaging with its free PSN services to connect with family and friends; on another side, it has

103. *Id.* at 326.

104. *See* U.S. DEP'T OF JUST & U.S. FED. TRADE COMM'N, HORIZONTAL MERGER GUIDELINES 8–13 (2010), https://www.ftc.gov/system/files/documents/public_statements/804291/100819hmg.pdf [https://perma.cc/Z2BN-M4UX].

105. *See id.* at 8–11; United States v. H & R Block, Inc., 833 F. Supp. 2d 36, 51 (D.D.C. 2011).

106. *See, e.g.*, *H & R Block*, 833 F. Supp. 2d at 50–52.

107. Andrew Chin, *Antitrust Analysis in Software Product Markets: A First Principles Approach*, 18 HARV. J.L. & TECH. 1, 3–4 (2004).

108. *Id.* at 4.

109. *Id.* (quoting United States v. Microsoft Corp., 253 F.3d 34, 81–82 (D.C. Cir. 2001)).

110. *Id.* (second alteration removed) (quoting Defendant's Revised Proposed Findings of Fact at 263, United States v. Microsoft, Corp., 84 F. Supp. 2d 9 (D.D.C. 1999) (on file with that source's author)).

111. *See supra* notes 107–10 and accompanying text.

businesses using Facebook's DSA services to promote their own products and services to customers; on yet another side, there are developers who launch their own products using Facebook's application programming interface ("API") with the intent to connect with a vast network of social media users.[112]

A two- or multi-sided platform is a term used in antitrust to refer to "a business that depends on relationships between two different, noncompeting groups of transaction partners" or customers.[113] These types of "platform[s] offer[] different products or services to two different groups who both depend on the platform."[114] Examples of products with two-sided markets include newspapers and television stations, which serve subscribers and advertisers; search engines that offer free services to internet users and provide sponsored search advertising to businesses; credit card companies that serve card holders and merchants; ridesharing companies that intermediate between drivers and riders; and personal social networking platforms like Facebook, which cater to social media users and advertisers.[115]

Multi-sided platforms are often distinguishable because of their "'indirect' network effects"[116]—where consumers on each side of the platform benefit from and provide value to the other side's consumers.[117] With indirect network effects, "each added user on one side of the market increases the value of the firm to users on the other side of the market, and vice versa."[118] So

112. Although "app development platform" was not a defined product market in the FTC's complaint, in supporting its Section 2 claim, the agency argued that "Facebook actively invited app developers onto its platform, granting them open access to critical application programming interfaces ('APIs') and tools needed to interconnect with Facebook. This open access policy drove developer and user engagement with Facebook, which in turn helped to fuel Facebook's massive advertising profits." Substitute Amended Complaint for Injunctive & Other Equitable Relief, *supra* note 19, at 4. Once the app developers established their businesses, "Facebook . . . pulled the rug out from under firms perceived as competitive threats." *Id.* The court dismissed this argument in its January 2022 opinion, allowing the remaining case to proceed. Memorandum Opinion at 2, FTC v. Facebook, Inc., No. 20-cv-03590 (D.D.C. Jan. 11, 2022).

113. Herbert Hovenkamp, *Platforms and the Rule of Reason: The* American Express *Case*, 2019 COLUM. BUS. L. REV. 35, 37 (2019).

114. Ohio v. Am. Express Co. (*Amex*), 138 S. Ct. 2274, 2280 (2018).

115. Hovenkamp, *supra* note 113, at 38 ("[A] periodical might obtain very different mixtures of advertising and subscriber revenue. At one extreme, *Consumer Reports* does not sell advertising but derives its revenue entirely from subscriptions and donations. At the other extreme, the local neighborhood shopping flier might be distributed free to customers, with its production and distribution supported entirely by advertising revenues." (footnote omitted)).

116. *Id.* at 39 (citations omitted).

117. *Amex*, 138 S. Ct. at 2280–81; Hovenkamp, *supra* note 113, at 38–39.

118. Kristine Laudadio Devine, *Preserving Competition in Multi-Sided Innovative Markets: How Do You Solve a Problem Like Google?*, 10 N.C. J.L. & TECH. 59, 63 (2008); *see also* David S. Evans & Michael Noel, *Defining Antitrust Markets When Firms Operate Two-Sided Platforms*, 2005 COLUM. BUS. L. REV. 667, 686 ("Indirect network effects between the two sides of a platform promote larger and fewer competing 2SPs. Platforms with more customers in each group are more valuable to the other group. For example, more users make software platforms more valuable to developers, and more developers make software platforms more valuable to users. These positive feedback effects make platforms with more customers on both sides more valuable to these customers.").

Facebook's value to advertisers increases the more social media users engage with the platform, and likewise users engage with the platform for free because advertisers subsidize the cost. Additionally, the more advertising revenue goes toward research and design, the more users in theory benefit.[119] Multi-sided platforms can also face negative "feedback effects," or harm to one side of a business resulting from the actions taken on the other side of the platform.[120] For example, when Facebook loses users to other platforms (e.g., Snapchat), the advertising side of its platform also suffers.

There is no conclusive rule for defining the relevant product markets for multi-sided platforms—the facts of the case, the indirect network effects or interrelated nature of both sides of the platform, and the anticompetitive harm alleged will determine a litigant's approach to product market definition.[121] It may be necessary to define both sides of a platform or only one side.[122] Additionally, there is little case law addressing two-sided market definition,[123] so antitrust academics and enforcers have offered guidance on the subject, and these often serve as the basis for judicial opinions.

The most recent Supreme Court case to address two-sided platforms was *Ohio v. American Express Company* ("*Amex*"). There, the customers on each side of the platform were "merchants who accept credit cards" or "shoppers who use the cards."[124] Based on the facts, the Court found that credit card platforms were simultaneous "transaction platforms."[125] The Court reasoned that both merchant services—the market for those who use credit card machines to accept Amex purchases—and shopper services—the market for those who own a credit card and use it at businesses accepting Amex—should be combined into one single market because the credit card transaction between both sides happened instantaneously.[126] By collapsing the two separate markets into one, the plaintiff had to prove that Amex's anticompetitive conduct caused "*net* harm, taking effects on all groups of consumers into account,"[127] despite the fact that shoppers and merchants

119. *See* Devine, *supra* note 118, at 63.

120. Hovenkamp, *supra* note 113, at 38.

121. Evans & Noel, *supra* note 118, at 696–97.

122. *Amex*, 138 S. Ct. at 2286 (finding that weak indirect network effects from one side of a platform to the other leads to the conclusion that the market should be analyzed as one-sided).

123. *See* David Evans, *Two-Sided Markets*, *in* AM. BAR Ass'n SECTION OF ANTITRUST L., MARKET DEFINITION IN ANTITRUST: THEORY AND CASE STUDIES XI.E (2012); *see also* Times-Picayune Publ'g Co. v. United States, 345 U.S. 594, 628 (1953).

124. *Amex*, 138 S. Ct. at 2297 (Breyer, J., dissenting).

125. *Id.* at 2286 (majority opinion).

126. *Id.* at 2298 (Breyer, J., dissenting). *Amex* is also distinguishable from the FTC's Section 2 monopoly lawsuit against Facebook, because that case involved a Sherman Act Section 1 violation. *See supra* note 19.

127. Aaron M. Panner, *Market Definition and Anticompetitive Effects in* Ohio v. American Express, 130 YALE L.J.F. 608, 609 (2021).

have "different incentives and . . . different competitive dimensions."[128] By defining the market as both merchant and shopper services, the product market became much broader as well, a win for Amex that created further challenges for the plaintiffs' case.[129]

Antitrust practitioners and scholars were quick to criticize the *Amex* opinion as "hardly deliver[ing] a clear and workable standard for judges to go by"[130] and clarified that the Court's holding only applies to "transaction platform[s]."[131] Like other Supreme Court antitrust opinions that center on the facts of the case,[132] the holding is arguably narrow and has even been suggested as being dicta[133]: Justice Thomas, writing for the Court, specified that credit card services were two-sided transaction platforms, a unique subset of two-sided platforms. To distinguish two-sided transaction platforms from others, Thomas compared credit card services to newspapers. "Newspapers that sell advertisements, for example, arguably operate a two-sided platform," Thomas wrote, and the two different markets comprised readers and advertisers.[134] "[T]he value of an advertisement increases as more people read the newspaper[,] . . . [b]ut two-sided transaction platforms, like the credit-card market, are different."[135]

Since *Amex*, lower courts have reasoned that credit card "transaction platforms are 'better understood as suppl[ying] only one product[:]

128. Caio Mario S. Pereira Neto & Filippo Lancieri, *Towards a Layered Approach to Relevant Markets in Multi-Sided Transaction Platforms*, 83 ANTITRUST L.J. 429, 435 (2020).

129. *Id.* With some exceptions, plaintiffs argue narrow product markets while defendants will argue very broad product markets. *See* Pitofsky, *supra* note 73, at 1809 n.11 ("Another way to state the point is that these critics believe that economic markets are broad rather than narrow and that government enforcement policy should reflect that fact, within a less intrusive antitrust regulatory system. Either way, the Guidelines and some of the scholarship seek to change relevant market definition in order to diminish the role of antitrust enforcement.").

130. Lina Khan, *The Supreme Court Just Quietly Gutted Antitrust Law*, VOX (July 3, 2018, 9:40 AM), https://www.vox.com/the-big-idea/2018/7/3/17530320/antitrust-american-express-amazon-uber-tech-monopoly-monopsony [https://perma.cc/LWV2-MEAB].

131. *See* Hovenkamp, *supra* note 113, at 49, 54; Panner, *supra* note 127, at 613–14; Khan, *supra* note 130.

132. *See, e.g.*, Aspen Skiing Co. v. Aspen Highlands Skiing Corp., 472 U.S. 585, 608–11 (1985); Verizon Commc'ns, Inc. v. Law Offs. of Curtis V. Trinko, LLP, 540 U.S. 398, 408–09 (2004) (noting that generally there is no duty to deal under Section 2, except for "the limited exception recognized in *Aspen Skiing*").

133. Panner, *supra* note 127, at 610.

134. Ohio v. Am. Express Co. (*Amex*), 138 S. Ct. 2274, 2286 (2018).

135. *Id.* Many antitrust academics have explored the holding in *Amex*. For more in-depth reasoning regarding the case's narrow holding, see Hovenkamp, *supra* note 113, at 42 ("[O]ne-to-one transactional correspondence does not apply to all two-sided platforms."); Hovenkamp, *supra* note 59, at 1968 ("In *Amex*, the Supreme Court defined two-sided platforms narrowly but idiosyncratically [for purposes of the case].").

transactions'"[136]; others have concluded that transaction platforms are "a subset of two-sided platforms"[137] and therefore are different from two-sided platforms such as health insurance networks and movie-streaming platforms.[138] Scholars have reasoned that "[t]he Court's definition of two-sidedness . . . would not include Google Search, which is supported by advertising but does not feature individual simultaneous transactions between consumers and advertisers."[139] Similarly, Facebook is not a simultaneous transaction platform,[140] but rather a platform that competes for two distinct groups of customers in at least two distinct markets—the PSN market for the users of the social media platform and the DSA market for the advertisers targeting goods and services to PSN users. The next Part discusses the FTC's litigation and the contours of the PSN market, while Part IV discusses the DSA market.

II. THE PSN MARKET AND THE FTC'S SECTION 2 CASE

On December 9, 2020, the Federal Trade Commission filed its lawsuit against Facebook alleging illegal monopolization under Section 2.[141] In the complaint, the agency claimed that Facebook "exercises monopoly power in the market for PSN services," "that the company's dominant market share is protected by barriers to entry into that market," and that it "willfully maintained [monopoly] power through anticompetitive conduct—specifically, the acquisitions of Instagram and WhatsApp."[142] In June 2021, Facebook won its

136. *In re* Nat'l Collegiate Athletic Ass'n Athletic Grant-in-Aid Cap Antitrust Litig., No. 14-cv-02541, 2018 WL 4241981, at *3 (N.D. Cal. Sept. 3, 2018) (alteration in original) (quoting *Amex*, 138 S. Ct. at 2286).

137. Tim Wu, *The* American Express *Opinion, Tech Platforms & the Rule of Reason*, J. ANTITRUST ENF'T (forthcoming) (manuscript at 1, 2) (available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3326667 [https://perma.cc/FNP2-P73B]).

138. Hovenkamp, *supra* note 59, at 1968 ("Facebook and other social-networking sites would not be included" in "[t]he Court's definition of two-sidedness.").

139. *Id.* American and European antitrust laws have many similarities, and in the UK, a court resoundingly rejected *Amex*'s multi-sided platform market analysis in an August 2022 ruling, finding that each side of a platform necessarily requires individual market definition. BGL (Holdings) Ltd. v. Competition & Mkts. Auth. [2022] CAT 36, [96]–[98] (appeal taken from Eng.); *see also* Richard Pike, *UK Court Rejects Two-Sided Market Analysis for Multi-Sided Platforms*, CONSTANTINE CANNON (Aug. 24, 2022), https://constantinecannon.com/antitrust-group/uk-court-rejects-two-sided-market-analysis-multi-sided-platforms [https://perma.cc/FGT4-KTUB] (discussing the decision in *BGL (Holdings) Ltd.* and what it means for market definition issues).

140. *See* Khan, *supra* note 130 (noting the rule established in *Amex* would not apply to Facebook); Hovenkamp, *supra* note 113, at 40; Hovenkamp, *supra* note 59, at 1968.

141. *See* Complaint for Injunctive & Other Equitable Relief, *supra* note 19, at 1. The states' attorneys' general complaint also alleged that Facebook illegally acquired Instagram and WhatsApp and thus violated Section 7 of the Clayton Act. *See* Complaint, *supra* note 19, at 71–75. The FTC's complaint did not allege violation of the Clayton Act, but it did assert that Facebook's violation of Section 2 "thus constitute[d] unfair methods of competition in violation of Section 5(a) of the [Federal Trade Commission] Act, 15 U.S.C. § 45(a)." Complaint for Injunctive & Other Equitable Relief, *supra* note 19, at 50–51.

142. FTC v. Facebook, Inc., 581 F. Supp. 3d 34, 40 (D.D.C. 2022).

motion to dismiss, but the FTC was granted leave to amend its complaint, which it resubmitted in September 2021, followed by another motion to dismiss.[143] In January 2022, the court sided this time with the FTC, finding that the agency had pled a plausible claim for relief and allowing the case to proceed.[144] Section A provides an overview of the PSN market definition, while Section B discusses challenges the FTC faces by defining the product market in this way.

A. THE FTC'S DEFINITION OF THE PSN MARKET

In defining a single relevant product market, the FTC distinguished PSN services as those "that enable and are used by people to maintain personal relationships and share experiences with friends, family, and other personal connections in a shared social space."[145] The complaint argued that three features distinguish platforms in the PSN market from other online services,[146] such as internet search providers or mobile messaging[147]:

> First, [PSN] services are built on a social graph that maps the connections between users and their friends, family, and other personal connections. . . . [PSN] providers use the social graph as the backbone for the features they offer users, including the two other key elements of [PSN] discussed below.
>
> Second, [PSN] services include features that many users regularly employ to interact with personal connections and share their personal experiences in a shared social space, including in a one-to-many "broadcast" format. . . . [PSN] providers can use the social graph to inform what content they display to users in the shared social space and when [they use it], . . . including user-created content like user "news feed" posts, publisher-created content like news articles, and advertisements.
>
> Third, [PSN] services include features that allow users to find and connect with other users, to make it easier for each user to build and expand their set of personal connections.[148]

The agency stated that Facebook and Instagram are within the relevant product market.[149] "[M]obile messaging services" like WhatsApp and iMessage would not be in the relevant market because they are not reasonable

143. *See supra* notes 19, 70.
144. *FTC*, 581 F. Supp. 3d at 40.
145. Complaint for Injunctive & Other Equitable Relief, *supra* note 19, at 15.
146. *Id.*
147. *Id.* at 15–17.
148. *Id.* (paragraph numbers omitted).
149. *See id.* at 54–58.

substitutes.[150] Additionally, "specialized social networking services"—which attract users who want to "shar[e] a narrow and highly specialized category of content with a narrow and highly specialized set of users for a narrow and distinct set of purposes"—are also outside the market.[151] These include professional social networks like LinkedIn.[152] Audio and video streaming services like TikTok, "YouTube, Spotify, Netflix, and Hulu," are also outside the relevant market because they are not substitutes for PSN networks.[153] "Twitter, Reddit, and Pinterest" are "broadcast or discovery" services, and therefore are not PSN services either.[154] The agency crafted a narrow market that includes Facebook, Instagram, and Snapchat.[155]

In its initial motion to dismiss, Facebook argued that it competed in a much broader product market.[156] Facebook assailed the "three-element test" as merely illustrating "one aspect of Facebook's products" and "fail[ing] to provide a plausible basis for identifying which firms provide products that consumers consider acceptable substitutes and which do not."[157] Facebook also argued that the FTC's market definition specifically excluded platforms with features—direct messaging, video streaming, or interest-based connections—that are offered by both Facebook and Instagram as part of their PSN services.[158] The motion noted that it was unclear whether Twitter, Snapchat, TikTok, or Pinterest would be included in the relevant market[159]—though this point was subsequently clarified.[160] Although some aspects of

150. *See id.* at 10–11. Specifically, the agency alleges that WhatsApp could have become a PSN service, but Facebook stifled the messaging platform's innovation when it acquired it, a practice that Facebook did with many other acquisitions. *Id.* at 37, 40 (citing to a message from a Facebook manager prior to WhatsApp's acquisition that paying well over market price for the app was a worthwhile investment because it would "[p]revent[] probably the only company which could have grown into the next FB" (emphasis omitted)).

151. *Id.* at 17.

152. *Id.*; Substitute Amended Complaint for Injunctive & Other Equitable Relief, *supra* note 19, at 56–57.

153. Complaint for Injunctive & Other Equitable Relief, *supra* note 19, at 17.

154. Substitute Amended Complaint for Injunctive & Other Equitable Relief, *supra* note 19, at 57.

155. *Id.* at 56–61. The Substitute Amended Complaint also notes that smaller PSN services like MeWe would also be included and that "less than 1% of U.S. internet users in each month, on average, used MeWe." *Id.* at 61.

156. Memorandum in Support of Facebook, Inc.'s Motion to Dismiss FTC's Complaint at 20–21, FTC v. Facebook, Inc., No. 20-cv-03590 (D.D.C. filed Mar. 10, 2021) [hereinafter Motion to Dismiss Memo].

157. *Id.* at 23–24.

158. *Id.* at 24–26.

159. *Id.* at 24.

160. Substitute Amended Complaint for Injunctive and Other Equitable Relief, *supra* note 19, at 56–61.

Facebook's argument were a bit of a stretch,[161] it did raise salient questions about the scope of the FTC's relevant product market and whether it was too narrowly construed.

After the court dismissed the lawsuit with leave to amend in June 2021,[162] the FTC's amended complaint addressed some of Facebook's critiques and clarified market participants. The new complaint "acknowledge[es] other [past or present] players in the PSN market, including Snapchat, Google+, Myspace, Path, MeWe, Orkut, and Friendster."[163] On January 11, 2022, the court found that the FTC's amended complaint successfully pled a plausible antitrust claim for relief, and the litigation was permitted to proceed.[164]

B. CHALLENGES TO PROVING FACEBOOK'S MONOPOLY POWER IN THE PSN MARKET

In the June 28, 2021 dismissal, the court stated that, despite Facebook's objections, the FTC had pled a plausible relevant product market to overcome a motion to dismiss.[165] The court said that the agency had presented a "theoretically rational" "allegation that users view services with and without a social-graph-based connection-finder as fundamentally different and non-interchangeable" from other services like "'email, messaging, photo-sharing, and video-chats.'"[166] The court added that PSNs were chosen by users for specific reasons: "Whether due to network effects or the norms around what sort of content is generally posted on different platforms, it is not a stretch to imagine that users are reluctant to share a highly personal milestone on LinkedIn or post a video of their child's first steps to YouTube."[167] The court found that the agency sufficiently showed that certain factors like "price, use[,] and qualities" rendered services outside the PSN market "not 'reasonably interchangeable' in the eyes of users."[168]

Despite stating a plausible relevant market in its initial complaint, the court asserted that the FTC's argument was "thin" and that the PSN "market

161. Motion to Dismiss Memo, *supra* note 156, at 27 ("[I]f 'passive consumption' of video is in the market to the extent Facebook offers that feature, the FTC does not and cannot allege that other online services offering supposedly passive consumption of video (the FTC names YouTube, Netflix, and Hulu[)] . . . do not offer adequate substitutes for consuming video on Facebook.").

162. *See supra* note 70.

163. FTC v. Facebook, Inc., 581 F. Supp. 3d 34, 45 (D.D.C. 2022) (internal quotation marks omitted).

164. *Id.* at 65.

165. *See* FTC v. Facebook, Inc., 560 F. Supp. 3d 1, 15–17 (D.D.C. 2021).

166. *Id.* at 16 (first quoting Bayer Schering Pharma AG v. Sandoz, Inc., 813 F. Supp. 2d 569, 577 (S.D.N.Y. 2011); then quoting Motion to Dismiss Memo, *supra* note 156, at 28).

167. *Id.* at 17.

168. *Id.* at 16 (alteration in original) ("Cross-elasticity of demand is a measure of the degree to which 'the rise in the price of [one] good . . . would tend to create a greater demand for other like goods. It is thus one 'measure of reasonable interchangeability.'" (alteration in original) (citations omitted)).

[was] 'idiosyncratically drawn.'"[169] The court said that tenuously defined markets required "more robust . . . market-share allegations."[170] The court concluded that mere allegations that Facebook had a sixty percent share of the PSN market, as well as the assertion that "no other social network of comparable scale exists in the United States," were insufficient to establish a plausible claim of Facebook's monopoly power.[171] In analyzing the FTC's claim of Facebook's power in the relevant product market, the court found that it was "unable to understand exactly what the agency's '60%-plus' [market share] figure [was] even referring to"[172] in a market where free products could not be measured by price, and it questioned why the FTC provided no insight regarding which PSN platforms comprised the remaining forty percent of the market.[173]

In its amended complaint, the FTC maintains that the PSN market is the relevant product market for its Section 2 claim,[174] but it addressed the court's critique, presenting new data that shows Facebook controls a larger share of the PSN market than it had originally put forth: "[I]n 2020, over 80% of U.S. internet users in each month . . . used Facebook," "approximately 54% . . . used Instagram," while the next closest social media competitor, Snapchat, attracted twenty-eight percent of internet users.[175] On a daily basis, eighty to ninety-eight percent of internet users logged onto Facebook.[176] Under *Alcoa*'s market share thresholds to determine what "is enough to constitute a monopoly," these numbers would likely establish a reasonable presumption of monopolization.[177]

Additionally, the FTC's assertion that Facebook maintains monopoly power in the relevant market will only withstand summary judgment if it is able to persuade the court that the relevant product market should be taken as the agency has defined it and is not idiosyncratically drawn. Facebook and Instagram have their own interest-based groups, video streaming, and other services that resemble platforms like YouTube, Pinterest, TikTok, or

169. *Id.* at 17–18.

170. *Id.*

171. *Id.* (internal quotation marks omitted).

172. *Id.*

173. *Id.* at 19–20.

174. Substitute Amended Complaint for Injunctive and Other Equitable Relief, *supra* note 19, at 54.

175. *Id.* at 60–61.

176. *Id.* at 66.

177. United States v. Aluminum Co. of Am. *(Alcoa)*, 148 F.2d 416, 424 (2d Cir. 1945); *see* Memorandum Opinion, *supra* note 112, at 9. Facebook argues that the data the FTC put forth "does not track PSNS usage; it instead tracks users of online services and total time spent on those services (PSNS and non-PSNS alike)," an argument that the court found compelling. *Id.* at 17 (quotation omitted).

LinkedIn.[178] Should other social media services be included in the relevant market? In its motion to dismiss the amended complaint, Facebook zeroes in on this point, arguing that the PSN market is crafted to make the agency's point. Facebook's motion to dismiss questions how the market for "personal social networking services" is defined when many of these platforms have characteristics the agency claims are outside of the relevant market: "mobile messaging," "interest-based . . . connections," and "'passive consumption' of video."[179] If Facebook persuasively argues that more services should be included in the relevant product market, its market share will likely be diluted, weakening the FTC's claim that Section 2 has been violated. Arguing that Facebook has monopolized the DSA market will bolster the PSN argument, while also addressing Section 2 violations in the DSA market.

III. FACEBOOK'S DIGITAL SOCIAL ADVERTISING PLATFORM

Facebook's origin story may be familiar: the platform was launched in Mark Zuckerberg's Harvard dorm room in 2004.[180] It started as a social media platform geared toward college students that offered more privacy than its peers—namely Myspace.[181] In 2004, the company made $382,000 in revenue—the following year $9 million.[182] Revenues grew incrementally, but it was well-known that the company was not profitable in its early years—the social media platform had lost around $50 to $150 million in the years leading up to its initial public offering.[183] It is not uncommon for start-ups to lose money early in their tenure,[184] but as Facebook prepared to go public in 2012, the company had to find a way to monetize a product that was free to users.[185]

178. *See* Pamela Bump, *The 5 Types of Social Media and Pros & Cons of Each*, HUBSPOT (July 21, 2021), https://blog.hubspot.com/marketing/which-social-networks-should-you-focus-on [https://perma.cc/A9YN-SENQ]; FACEBOOK, https://www.facebook.com [https://perma.cc/J2PX-WM6K].

179. Motion to Dismiss Memo, *supra* note 156, at 8, 15–17.

180. *See* Mark Hall, *Facebook*, ENCYC. BRITANNICA (Aug. 12, 2022), https://www.britannica.com/topic/Facebook [https://perma.cc/983M-G528]; Harvard University, FACEBOOK (May 24, 2017), https://www.facebook.com/Harvard/photos/mark-zuckerberg-in-his-old-harvard-dorm-room-at-the-desk-where-he-launched-the-f/10154371428291607 [https://perma.cc/N3LE-AD29].

181. Hall, *supra* note 180.

182. Alexia Tsotsis, *Facebook's IPO: An End to All the Revenue Speculation*, TECHCRUNCH (Feb. 1, 2012, 5:33 PM), https://techcrunch.com/2012/02/01/facebook-ipo-facebook-ipo-facebook-ipo [https://perma.cc/ABP6-BMCA].

183. *See id.*

184. *See* Aaron Holmes, *From Snap to Uber, Here Are 9 Billion-Dollar Tech Companies That Still Aren't Profitable*, BUS. INSIDER (Nov. 27, 2019, 7:53 AM), https://www.businessinsider.com/tech-companies-worth-billions-unprofitable-tesla-uber-snap-2019-11 [https://perma.cc/HD6E-TTCM].

185. *See generally* Rebecca Greenfield, *2012: The Year Facebook Finally Tried to Make Some Money*, ATLANTIC (Dec. 14, 2012), https://www.theatlantic.com/technology/archive/2012/12/2012-year-facebook-finally-tried-make-some-money/320493 [https://perma.cc/5VVM-MCSY] (giving a detailed account of Facebook's revenue-generating activity leading up to its IPO).

Luckily, the hoodie-clad Facebook founder[186] had already planted the seeds of profitability. "[I]n 2010, [Zuckerberg] . . . announced that Facebook users no longer [had] an expectation of privacy" and made the "decision to unilaterally release users' personal information."[187] The company launched many initiatives to start generating revenue by capitalizing on the vast collections of behavioral data it had gathered from social media users,[188] and its efforts only ramped up in anticipation of what is now remembered as its "famously bad" initial public offering ("IPO").[189] Facebook launched sponsored posts and Gifts, but mostly it changed the interface to integrate advertisements: ads in the Facebook sidebar, ads in the news feed, ads in the photo viewer, ads at log-in and log-out.[190] By April 2012, when Facebook bought Instagram for more than $700 million,[191] Facebook was no longer simply a social networking platform—it was becoming the world's dominant digital social advertising company.

A. FACEBOOK'S DSA PLATFORM

In 2012, Sheryl Sandberg, who served as Facebook's chief operating officer from 2008 until 2022, said of Facebook: "We're not TV, we're not search. We are social advertising."[192] Digital *social* advertising ("DSA") is a subset of digital advertising, which also includes search advertising, digital display advertising,[193] and ecommerce advertising.[194] Researchers projected

186. Jake Woolf, *Mark Zuckerberg Humblebragged About Only Owning Gray Tees and Hoodies*, GQ (Jan. 25, 2016), https://www.gq.com/story/mark-zuckerberg-facebook-hoodie-tee-gray-post [https://perma.cc/WKP2-SNG3].

187. SHOSHANA ZUBOFF, THE AGE OF SURVEILLANCE CAPITALISM: THE FIGHT FOR A HUMAN FUTURE AT THE NEW FRONTIER OF POWER 273 (2019).

188. *Id.*

189. Greenfield, *supra* note 185. Facebook's activity leading up to the IPO was "closely watched," and its first public offering was much anticipated. *Id.*

> Facebook debuted on the NASDAQ May 18 at $38 and ended just a smidge above it at $38.23—a big disappointment for a company that was supposed to be as big a market presence as Google. But Facebook pretty much had to offer itself up; it had grown too big *not* to go public . . . .

Id.

190. *See id.*

191. *Id.*

192. Substitute Amended Complaint for Injunctive and Other Equitable Relief, *supra* note 19, at 17.

193. *Display Ads*, INTUIT MAILCHIMP, https://mailchimp.com/marketing-glossary/display-ads [https://perma.cc/N66A-8FWC]. "[Display ads] combine[] text, images, and a URL that links to a website where a customer can learn more about or buy products. . . . These ads can be static with an image or animated with multiple images, video, or changing text . . . ." *Id.*

194. Greg Sterling, *Almost 70% of Digital Ad Spending Going to Google, Facebook, Amazon, Says Analyst Firm*, MARTECH (June 17, 2019, 7:55 AM), https://martech.org/almost-70-of-digital-ad-spending-going-to-google-facebook-amazon-says-analyst-firm [https://perma.cc/68UK-PTL6]; *see also* Substitute Amended Complaint for Injunctive and Other Equitable Relief, *supra* note 19, at 16 (contending that "[s]ocial advertising is a distinct form of display advertising").

that $153 billion would be spent on digital advertising in 2022,[195] roughly fifty-two percent of which went to Google and Facebook.[196] Within the DSA market, which accounts for about thirty-three percent of the digital advertising market,[197] Facebook controls eighty-eight percent.[198]

Digital social advertising is distinct from other types of digital advertising, as well as traditional advertising, both in what it offers advertisers and how it works. First, "because users must log in to a personal social network with unique user credentials," platforms have a distinct advantage of tying an account to a stable identity, which in turn makes the account's activities more likely to reflect personal choices.[199] The log-in credentials "enable[] advertisers to target users based on personalized data regarding users' personal connections, activities, identity, demographics, interests, and hobbies."[200] The log-in function is not necessarily unique, but the social behavioral data provided by users through their interactions and responses to other platform users adds incredible value to Facebook's platforms.

Roughly all of Facebook's revenue is generated through digital social advertising,[201] and in 2020, it earned more than $84.2 billion through its DSA

195. Statista Rsch. Dep't, *U.S. Digital Advertising Industry – Statistics & Facts*, STATISTA (Aug. 22, 2022), https://www.statista.com/topics/1176/online-advertising [https://perma.cc/5XKA-EG2R].

196. Statista Rsch. Dep't, *supra* note 16.

197. Claire Beveridge, *56 Important Social Media Advertising Statistics for 2022*, HOOTSUITE (Feb. 24, 2022), https://blog.hootsuite.com/social-media-advertising-stats [https://perma.cc/4UKH-3V4K].

198. Statista Rsch. Dep't, *Social Network Advertising Revenue in the United States in 2021, by Company*, STATISTA (May 5, 2022), https://www.statista.com/statistics/1103339/social-media-ad-revenue-platform [https://perma.cc/UQ5C-KFQB].

199. Complaint for Injunctive and Other Equitable Relief, *supra* note 19, at 14.

200. *Id.*

201. Facebook, Inc., Quarterly Report (Form 10-Q) (Sept. 30, 2021). Facebook's 10-Q quarterly earnings report in 2021 noted:

> We generate substantially all of our revenue from advertising. Our advertising revenue is generated by displaying ad products on Facebook, Instagram, Messenger, and third-party affiliated websites or mobile applications. Marketers pay for ad products either directly or through their relationships with advertising agencies or resellers, based on the number of impressions delivered or the number of actions, such as clicks, taken by users.
>
> We recognize revenue from the display of impression-based ads in the contracted period in which the impressions are delivered. Impressions are considered delivered when an ad is displayed to a user. We recognize revenue from the delivery of action-based ads in the period in which a user takes the action the marketer contracted for. The number of ads we show is subject to methodological changes as we continue to evolve our ads business and the structure of our ads products. We calculate price per ad as total ad revenue divided by the number of ads delivered, representing the effective price paid per impression by a marketer regardless of their desired objective such as impression or action. For advertising revenue arrangements where we are not the principal, we recognize revenue on a net basis.

services.[202] Facebook's advertising is fueled by data the platform collects on users' behaviors. Behavioral researchers discovered relatively early in Facebook's incipiency that through "likes," post clickthroughs,[203] shares, scrolls, as well as other data and metadata that the platform collects, the company not only had access to an enormous amount of "data that scientists would not ever be able to collect"[204] otherwise, but by using this data, it could also accurately predict individual social media users' behaviors and personalities.[205] Indeed, in 2012, an article in *Nature* revealed that Facebook had performed an experiment on its social media users by manipulating voting-related messages that appeared on their news feed around the 2010 midterms.[206] The experimenters "calculated that the manipulated social messages" increased voter turnout and "determined that social messaging was an effective means of tuning behavior at scale."[207] In 2013, another experiment submitted by academics to the Proceedings of the National Academy of Sciences showed the extent to which the online

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> Other revenue consists of revenue from the delivery of consumer hardware products, net fees we receive from developers using our Payments infrastructure, and revenue from various other sources.

Id. (headings omitted).

202. *See* S. Dixon, *Facebook's Global Revenue as of 3rd Quarter 2021, by Segment*, STATISTA (June 3, 2022), https://www.statista.com/statistics/277963/facebooks-quarterly-global-revenue-by-segment [https://perma.cc/AQL5-8ZKZ].

203. A clickthrough is a term used to describe a user's action when they click on a business's advertisement, which redirects them to engage with the product or service. A clickthrough rate is a metric used to measure advertising engagement and charge businesses for their advertisements. *See Clickthrough Rate (CTR): Definition*, GOOGLE, https://support.google.com/google-ads/answer/2615875?hl=en [https://perma.cc/T8SA-BTES].

204. ZUBOFF, *supra* note 187, at 275.

205. *See id.* at 274–75, 300.

206. *Id.* at 298–99. *Nature*'s article, titled *A 61-Million Person Experiment in Social Influence and Political Mobilization*, revealed that

> [i]n [a] controlled, randomized study[,] . . . researchers experimentally manipulated the social and informational content of voting-related messages in the news feeds of nearly 61 million Facebook users while also establishing a control group.
>
> One group was shown a statement at the top of their news feed encouraging the user to vote. It included a link to polling place information, an actionable button reading "I Voted," a counter indicating how many other Facebook users reported voting, and up to six profile pictures of the user's Facebook friends who had already clicked the "I Voted" button. A second group received the same information but without the pictures of friends. A third control group did not receive any special message.
>
> . . . .
>
> The team calculated that the manipulated social messages sent 60,000 additional voters to the polls[,] . . . as well as another 280,000 who cast votes as a result of a "social contagion" effect . . . .

Id. (citing generally Robert M. Bond et al., *A 61-Million-Person Experiment in Social Influence and Political Mobilization*, 489 NATURE 295 (2012)).

207. *Id.*

messages that Facebook users see influence their emotions and therefore behavior, including purchasing patterns.[208]

Facebook is notoriously guarded with the research it conducts on social media users, but leaked company documents reveal that the company uses emotional manipulation through content "to achieve guaranteed outcomes" in order to generate revenue.[209] In 2018, an internal document showed the extent to which Facebook uses its platform to manipulate user behavior and emotions for advertising customers.[210]

> The . . . document . . . outlines a new advertising service . . . : Instead of merely offering advertisers the ability to target people based on demographics and consumer preferences, Facebook instead offers the ability to target [users] based on how they *will* behave, what they *will* buy, and what they *will* think. These capabilities are the fruits of a self-improving, artificial intelligence-powered prediction engine, first unveiled by Facebook in 2016 and dubbed "FBLearner Flow."[211]

This "prediction engine" runs on "trillions of data points every day . . . and then deploys them to the server fleet for live predictions."[212] In this way, the ability to predict user behavior leads to intervention and modification for the benefit of advertisers that drive Facebook's revenue stream.[213] Facebook has found that content that induces fear—"bad for the world" posts, blatantly false news, and "hate bait"—leads to more and sustained engagement and thus is better for driving users to advertisers; fear-based or otherwise negative posts enhance its "news ecosystem quality" and keep users coming back.[214] In sum, the company's leadership, in wanting to drive engagement, intentionally causes anger- and fear-inducing content to run rampant on their platform without due concern for the consequences.

B. Understanding Facebook's Anticompetitive Acquisitions in the DSA Market

It is critical to understand that Facebook's business relies on vast accumulations of data. Data-mining is an industry, and it has been observed that Facebook in many ways "has far more in common with the likes of Equifax

208. *Id.* at 300–01 (citing Adam D. I. Kramer, Jamie E. Guillory & Jeffrey T. Hancock, *Experimental Evidence of Massive-Scale Emotional Contagion Through Social Networks*, 111 PNAS 8788, 8788–90 (2014)).

209. *Id.* at 304–06.

210. Sam Biddle, *Facebook Uses Artificial Intelligence to Predict Your Future Actions for Advertisers, Says Confidential Document*, INTERCEPT (Apr. 13, 2018, 10:28 AM), https://theintercept.com/2018/04/13/facebook-advertising-data-artificial-intelligence-ai [https://perma.cc/4AJV-NMGA].

211. *Id.*

212. ZUBOFF, *supra* note 187, at 278 (citation omitted in original).

213. *See id.*

214. Roose et al., *supra* note 8 (internal quotation marks omitted); *see* Wells et al., *supra* note 14.

and Experian"—the credit-reporting agencies whose businesses rely on collecting vast amounts of data about each American—"than any consumer-oriented company[;] Facebook is essentially a data wholesaler, period."[215] Facebook extracts social behavioral data on its users across platforms "from an incomprehensible number of sources."[216] Facebook collects data by tracking PSN users' actions, "including Liking posts and clicking on ads."[217] Facebook has the ability to track users even when they are not logged on to their platforms,[218] and they can also track user "activity on the rest of the internet . . . [through] pixel tracking and Facebook's third-party ad network"[219] where individual websites install Facebook advertising services. Indeed, Facebook collects user data on approximately thirty percent of the most visited websites and nearly a third "of the top 500 android apps."[220] Facebook tracks users' location data through Instagram, Messenger, and WhatsApp, as well as through data where users connect to the internet via browser or cellphone.[221] Additionally, through its acquisition of Giphy, Facebook has expanded its ability to track users through gifs they share on apps like Snapchat, Slack, Trello, iMessage, TikTok, Tinder, and Twitter.[222]

Once Facebook's business model comes into view—providing free products to users on one side of its platform, harvesting their social behavioral data, and then selling user-targeted advertising based on this data—the company's acquisition of other social media platforms like Instagram and WhatsApp for sums far beyond their value seem more rational.[223] These platforms provide additional forms of social data that can be sold to advertisers, even despite Zuckerberg's claims that WhatsApp is "privacy-focused."[224]

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215. Biddle, *supra* note 210.

216. Day & Stemler, *supra* note 53, at 80.

217. Bennett Cyphers, *A Guided Tour of the Data Facebook Uses to Target Ads*, ELEC. FRONTIER FOUND. (Jan. 24, 2019), https://www.eff.org/deeplinks/2019/01/guided-tour-data-facebook-uses-target-ads [https://perma.cc/B39C-YWET].

218. *See* Day & Stemler, *supra* note 53, at 80.

219. Cyphers, *supra* note 217.

220. *Id.*

221. *See id.*

222. *See* Jay Peters, *Facebook's Giphy Acquisition Might Have Big Implications for iMessage and Twitter*, VERGE (May 16, 2020, 8:30 AM), https://www.theverge.com/2020/5/16/21260104/facebook-giphy-acquisition-twitter-slack-snapchat-apple-imessage-signal-facebook-tinder [https://perma.cc/6D84-82VU].

223. Substitute Amended Complaint for Injunctive and Other Equitable Relief, *supra* note 19, at 31, 39–40.

224. Peter Elkind, Jack Gillum & Craig Silverman, *How Facebook Undermines Privacy Protections for Its 2 Billion WhatsApp Users*, PROPUBLICA (Sept. 7, 2021, 5:00 AM), https://www.propublica.org/article/how-facebook-undermines-privacy-protections-for-its-2-billion-whatsapp-users [https://perma.cc/TAR4-VV9T].

If the FTC can establish market share, it must then prove that Facebook has engaged in exclusionary conduct.[225] The FTC puts forth that Facebook engaged in anticompetitive acquisitions of Instagram and WhatsApp.[226] Focusing solely on Facebook's PSN platform ignores the scope of its monopolistic harm: Accounting for DSA services will provide a more comprehensive assessment of Facebook's monopolization harms while also creating a stronger market definition argument.

1. The Instagram Acquisition: Another Platform for Display Ads

The FTC provides persuasive evidence that Facebook engaged in anticompetitive acquisitions.[227] Emails show that when mobile phone apps emerged as dominant competitors to desktop interfaces, Facebook, which started on desktop and migrated to mobile, struggled to keep up in its development and began to see users leave for a new market entrant: Instagram.[228] Instagram launched in October 2010 and within four months had two million users.[229] Facebook, recognizing this emerging competition, began initiatives to enhance its photo-sharing and mobile features. Despite early efforts, Facebook was unable to keep up in its own mobile photo-sharing initiatives, which it recognized were integral to its popularity.[230] Mark Zuckerberg warned in a 2011 email,

> I view this as a big strategic risk for us if we don't completely own the photos space. If Instagram continues to kick ass on mobile or if Google buys them, then over the next few years they could easily add pieces of their service that copy what we're doing now.[231]

As it became clear that Facebook was struggling to compete and that photo taking, sharing, and saving was essential to Instagram's success, the company shifted its focus from competition to acquisition.[232] As Zuckerberg

225. United States v. Grinnell Corp., 384 U.S. 563, 570–71 (1966).

226. *See* Substitute Amended Complaint for Injunctive and Other Equitable Relief, *supra* note 19, at 77.

227. *Id.* at 42–53.

228. *Id.* at 26–27.

229. *Id.* at 26. This number is particularly remarkable because the app was only offered on Apple iOS devices, and only 39.99 million people worldwide bought Apple phones that year. *See id.*; Federica Laricchia, *Unit Sales of the Apple iPhone Worldwide from 2007 to 2018 (in millions)*, STATISTA (July 27, 2022), https://www.statista.com/statistics/276306/global-apple-iphone-sales-since-fiscal-year-2007 [https://perma.cc/CPB6-63WV]. Additionally, Apple phones were only available for those who received cellphone service from AT&T—iPhones were not available from Verizon until February 2011. Jenna Wortham, *As Verizon's iPhone Sales Begin, Gauging the Effects on AT&T*, N.Y. TIMES (Feb. 9, 2011), https://www.nytimes.com/2011/02/10/technology/10phone.html [https://perma.cc/27YN-ZHJ4].

230. Complaint for Injunctive & Other Equitable Relief, *supra* note 19, at 27.

231. *Id.* at 24 (internal citation omitted in original).

232. *Id.* at 24–29.

saw Instagram's PSN user data climb, he reasoned that acquisition was the only option:

> It's a combination of (1) [i.e., neutralizing a potential competitor] and (3) [integrating acquired products into Facebook] . . . . Even if some new competitors spring[] up, buying Instagram, Path, Foursquare, etc now will give us a year or more to integrate their dynamics before anyone can get close to their scale again.[233]

Despite initial reluctance from Instagram's founders, on April 9, 2012, Facebook announced that it would pay one billion dollars to acquire the company—which "ha[d] no revenue and about a dozen employees."[234] Soon thereafter, Facebook's efforts to create a competing product were abandoned.

But Facebook's actions in the PSN market only tell part of the story. At the same time that Facebook's acquisition neutralized a nascent competitor in the PSN market, it also neutralized a competitor in the DSA market. Indeed, while Instagram had not generated revenue at the time of acquisition, in materials and emails, the company's founders revealed that they "planned and expected [Instagram] to be an important advertising competitor" and that "brands [would] pay to either be featured, have their content featured, or run targeted 'instagrams' to people as advertisements."[235] By acquiring Instagram, Facebook acquired a new entrant to the DSA market. Considering the financial impact of Facebook's acquisitions in the DSA market helps explain why they were so integral to the company's dominance in the PSN market. Although Zuckerberg may well have wanted to maintain Facebook's dominance in the PSN market out of ego and a desire to have the largest number of social media users on his network, at the end of the day, social media users pay nothing for the platform's services.[236] "Ultimately, Facebook's staying power depend[ed] on the primary source of its revenue[:] advertising."[237]

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233. *Id.* at 27 (final alteration in original).

234. Jenna Wortham, *Facebook to Buy Photo-Sharing Service Instagram for $1 Billion*, N.Y. TIMES (Apr. 9, 2012, 1:12 PM), https://bits.blogs.nytimes.com/2012/04/09/facebook-acquires-photo-sharing-service-instagram [https://perma.cc/W5QZ-WX78]. The FTC commissioners voted 5–0 to close the investigation into Facebook's acquisition and let the merger continue. Press Release, FTC, FTC Closes Its Investigation into Facebook's Proposed Acquisition of Instagram Photo Sharing Program (Aug. 22, 2012), https://www.ftc.gov/news-events/press-releases/2012/08/ftc-closes-its-investigation-facebooks-proposed-acquisition [https://perma.cc/H5DQ-5FZA].

235. Complaint for Injunctive & Other Equitable Relief, *supra* note 19, at 30 (citation omitted in original).

236. Brian O'Connell, *How Does Facebook Make Money? Six Primary Revenue Streams*, THESTREET (Oct. 23, 2018, 4:29 PM), https://www.thestreet.com/technology/how-does-facebook-make-money-14754098 [https://perma.cc/S94K-P5QM].

237. *Id.*

2. The WhatsApp Acquisition: Another Platform for Social Data Extraction

Facebook's anticompetitive acquisition of WhatsApp cannot be fully appreciated unless the parent company is viewed in its revenue-generating capacity of selling display ads that are powered by social behavioral data. Prior to 2014, Facebook clearly viewed WhatsApp as a serious competitive threat: 2013 board meeting notes reveal that leadership viewed "mobile messaging services [as] 'a threat to [their] core business,'" and they were very concerned about WhatsApp evolving into a social media platform that would pose serious competition to Facebook.[238] Zuckerberg expressed the belief "that messaging is the single most important app on anyone's phone. It may not be the biggest business, but it is almost certainly by far the most used app, and therefore it's a critical strategic point."[239]

In 2011, Facebook Messenger launched as "a direct effort to prevent WhatsApp from gaining scale."[240] But Facebook was unable to create a product that could compete with WhatsApp and its "product and network."[241] As with Instagram, Zuckerberg and others were concerned about WhatsApp's acquisition by another big tech competitor—specifically Google.[242] In 2014, Facebook quelled its concerns when it acquired WhatsApp for $21.8 billion, despite the fact that the platform generated only $10.2 million in revenue in 2013, while it lost a net total of $138 million.[243]

Despite the amount spent, Facebook considered the acquisition of WhatsApp "a 'land grab.'"[244] From a data accumulation standpoint, and in neutralizing a competitor that could compete with it for advertising, WhatsApp's value is clear: "A sophisticated understanding of finance is unnecessary to realize that Facebook had primarily acquired WhatsApp for its users and their personal information."[245] The messaging service "had not only achieved vast scale in Asia and Europe, but was also building share in the

238. Substitute Amended Complaint for Injunctive and Other Equitable Relief, *supra* note 19, at 36 (citation omitted in original).

239. *Id.* (citation omitted in original).

240. *Id.* at 37 ("On the date of its global launch, the product director of Facebook Messenger wrote to his team that: 'We have a great shot of competing with WhatsApp on being the app for serious mobile messaging users worldwide.'").

241. *Id.* at 38 (citation omitted in original).

242. *Id.* at 39.

243. David Gelles, *Facebook's $21.8 Billion WhatsApp Acquisition Lost $138 Million Last Year*, N.Y. TIMES (Oct. 28, 2014, 5:46 PM), https://dealbook.nytimes.com/2014/10/28/facebooks-21-8-billion-acquisition-lost-138-million-last-year [https://perma.cc/A9FX-9GTL].

244. Substitute Amended Complaint for Injunctive and Other Equitable Relief, *supra* note 19, at 40 (citation omitted in original).

245. Day & Stemler, *supra* note 53, at 73–74.

United States."[246] And unlike another serious messaging competitor, iMessage, WhatsApp was available across "major smartphone operating systems."[247]

Although the FTC suggests that WhatsApp would have become a real competitor with Facebook in the PSN market, Facebook's ability to accumulate social behavioral data to maximize its advertising products would be equal incentive for the acquisition. WhatsApp's acquisition helped round out Facebook's portfolio of digital social behavior data extraction platforms: the social media company could mine data not only from users in public social interactions, but now in their private, direct interactions.[248] And while WhatsApp was originally notable for its privacy features, which Facebook promised to retain,[249] these have been stripped away to extract social behavioral data for advertisement optimization.[250]

By not addressing Facebook's monopolization of the DSA market as well as the PSN market, anticompetitive conduct that harms both businesses that advertise as well as social media users will go unaddressed. The next Part defines the DSA product market and illuminates the anticompetitive conduct occurring in that market.

IV. DEFINING FACEBOOK'S DSA MARKET

There are 2.91 billion active users on Facebook, 2 billion on WhatsApp, and 1.478 billion on Instagram; by comparison, there are 557 *million* active users on Snapchat.[251] Although these numbers paint a picture of social networking engagement, they are especially significant when considering that

246. Substitute Amended Complaint for Injunctive and Other Equitable Relief, *supra* note 19, at 37.

247. *Id.*

248. *See* Day & Stemler, *supra* note 53, at 73–74.

249. *See* Cale Guthrie Weissman, *WhatsApp Breaks Promise, Will Now Share User Data with Facebook*, FAST COMPANY (Aug. 25, 2016), https://www.fastcompany.com/4017734/whatsapp-breaks-promise-will-now-share-user-data-with-facebook [https://perma.cc/S977-YSE2] (noting that "WhatsApp has long been considered one of the 'good' tech companies when it comes to privacy" because it does not collect user data and that Facebook promised that none of the privacy features would be changed after it acquired the company).

250. Since 2016, WhatsApp has "shar[ed] user information and metadata with Facebook." Lily Hay Newman, *WhatsApp Has Shared Your Data with Facebook for Years, Actually*, WIRED (Jan. 8, 2021, 1:52 PM), https://www.wired.com/story/whatsapp-facebook-data-share-notification [https://perma.cc/K2QT-BQ96]. Although WhatsApp and Facebook cannot access "[m]essages, photos, and other content [users] send and receive . . . that doesn't mean there isn't still a trove of other data WhatsApp can collect and share about how [users] use the app." *Id.* Facebook can access

> account information like your phone number, logs of how long and how often you use WhatsApp, information about how you interact with other users, device identifiers, and other device details like IP address, operating system, browser details, battery health information, app version, mobile network, language and time zone. Transaction and payment data, cookies, and location information are also all fair game.

Id.

251. S. Dixon, *supra* note 5.

PSN users' actions are captured as data points that fuel Facebook's DSA services.[252] By not accounting for Facebook's DSA market, enforcers will not comprehensively address the social media giant's monopolistic conduct.[253] Section A describes Facebook's market power and anticompetitive conduct in the DSA market. Section B discusses Facebook's harm to other DSA businesses and PSN users. Section C puts forward a framework for DSA market definition. Section D addresses *Amex*.

A. FACEBOOK'S MARKET POWER AND ANTICOMPETITIVE CONDUCT IN THE DSA MARKET

Facebook possesses market power in the DSA Market. Approximately eighty-three percent of advertising dollars spent on DSA platforms go to Facebook.[254] This is a tangible number, measured in dollars spent, that will help overcome a major litigation hurdle facing the free PSN side of the platform: the consumer welfare standard and modern antitrust case law's focus on prices.[255] Additionally, of businesses that use social media for advertising, ninety-three percent place ads on Facebook, seventy-eight percent place ads on Instagram, forty-eight percent place ads on Twitter, while four percent place ads on Snapchat.[256] Under *Alcoa*, sixty-four percent market share is likely not enough to establish a firm's market power, while ninety percent is—everything in between is up for discussion.[257] Thus, ninety-three percent capture of digital social advertising revenue is sufficient to establish DSA market power and satisfy the first requirement of Section 2.[258] But "[t]he mere possession of monopoly power" in a market is not enough—the FTC must show exclusionary conduct.[259] Growth by innovation and earned success may result in a business's possession of monopoly power that is completely lawful.[260] "A firm violates [Section] 2 only when it acquires or maintains, or attempts to acquire or maintain, a monopoly by engaging in exclusionary conduct 'as distinguished from growth or development as a consequence of a superior product, business acumen, or historic

252. *See* ZUBOFF, *supra* note 187, at 304–06 (explaining that an *Australian* report revealed that Facebook's data could "predict how emotions are communicated at different points during the week, matching each emotional phase with appropriate ad messaging for the maximum probability of guaranteed outcomes").

253. *See* Marks, *supra* note 10, at 516–18.

254. Sterling, *supra* note 194.

255. Khan, *supra* note 35, at 716 (noting that the "consumer welfare" standard is "typically measured through short-term effects on price and output").

256. Statista Rsch. Dep't, *Leading Social Media Platforms Used by Marketers Worldwide as of January 2021*, STATISTA (Aug. 3, 2021), https://www.statista.com/statistics/259379/social-media-platforms-used-by-marketers-worldwide [https://perma.cc/R6TE-2VTT].

257. United States v. Aluminum Co. of Am. (*Alcoa*), 148 F.2d 416, 424 (2d Cir. 1945).

258. *Id.*; United States v. Grinnell Corp., 384 U.S. 563, 570–71 (1966).

259. Verizon Commc'ns, Inc. v. Law Offs. of Curtis V. Trinko, LLP, 540 U.S. 398, 407 (2004).

260. *Id.*

accident.'"[261] Put another way, "anticompetitive conduct falls outside the bounds of 'competition on the merits'"[262] and can take many forms.[263]

What of Facebook's conduct has not been "competition on the merits"? As noted above, in addressing the exclusionary conduct necessary for a Section 2 claim, the FTC asserts that "Facebook has willfully maintained its monopoly power through . . . anticompetitive acquisitions."[264] As Instagram grew its user base and pulled PSN users to its platform, Facebook could not compete, so buying was the better option to maintain and grow its market position.[265] Likewise, Facebook acquired WhatsApp because of the large network the messaging service had built up and the possible threat that WhatsApp would evolve into a PSN platform similar to Facebook that would provide significant competition.[266]

B. FACEBOOK'S HARMS TO PSN USERS AND DSA BUSINESSES

The DSA market exposes additional anticompetitive conduct by Facebook and therefore should be considered to account for past and ongoing

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261. United States v. Microsoft Corp., 253 F.3d 34, 58 (D.C. Cir. 2001) (quoting *Grinnell Corp.*, 384 U.S. at 571).

262. Srinivasan, *supra* note 87, at 90 (quoting *Microsoft Corp.*, 253 F.3d at 56).

263. Herbert Hovenkamp, *The Monopolization Offense*, 61 OHIO STATE L.J. 1035, 1036–37 (2000). Professor Hovenkamp observes:

> Indeed, the abiding problem of antitrust's monopolization offense has been identifying the types of conduct that the law should condemn, given that the statute condemns nothing explicitly but the undefined act of "monopolization." Courts often describe the conduct as "exclusionary," but that term also says very little. It can refer to both anticompetitive conduct and conduct that is procompetitive, like charging a low but profitable price, which excludes rivals who have higher costs; or innovating a more desirable variation, which excludes those who cannot match the innovator's skill. Further, the type of conduct that has been condemned as monopolization has tended to be nonrepetitive and specific to the industry. Strategies that work in one market simply have no application in another.

Id.

264. Substitute Amended Complaint for Injunctive and Other Equitable Relief, *supra* note 19, at 76–77.

265. *Id.* at 26–34.

266. *Id.* at 36–38. Other exclusionary conduct theories may also apply, including barriers to entry for potential competitors as a result of anticompetitive conduct, or lock-in/no escape theories, which are similar to tying. Daniel E. Lazaroff, *Entry Barriers and Contemporary Antitrust Litigation*, 7 U.C. DAVIS BUS. L.J. 1, 7 (2006) (noting that in both *United States v. Am. Tobacco Co.*, 221 U.S. 106 (1911), and *United States v. U.S. Steel Corp.*, 251 U.S. 417 (1920), the Court expressed that "barriers [to entry] were the result of anticompetitive conduct"); *see also Am. Tobacco Co.*, 221 U.S. at 182–83 ("[I]llegal combination is overwhelmingly established by the following consideration[]: . . . the gradual absorption of control over all the elements essential to the successful manufacture of tobacco products, and placing such control in the hands of seemingly independent corporations serving as perpetual barriers to the entry of others into the tobacco trade."). *See generally* John M. Newman, *Antitrust in Digital Markets*, 72 VAND. L. REV. 1497 (2019) ("When a dominant firm gains control of multiple platforms, and users frequently engage with two or more of those platforms concurrently, the dominant firm may be able to impose 'no-escape' harm.").

monopolization harms, as well as its future potential harms in the DSA and PSN markets. Because Facebook lacks competition in the PSN and DSA markets, it has less incentive to focus on the quality and relevance of ads shown to PSN users, instead favoring whichever advertiser is willing to spend the most to achieve the desired outcome—deference that impacts both users and other advertisers.[267] PSN users generally prefer not to have ads on social media, but because leaving Facebook would mean leaving their network of connections, their photos, and other services, they are "less likely to switch away, given the absence of alternative platforms," even if the quality of the product declines because of increased ads.[268] Because users do not have comparable alternatives, Facebook has an "incentive to increase ad load . . . even if the increased number of ads worsens the quality of the platform from the users' perspective."[269] If this were a newspaper that became cluttered with ads at the expense of any substantive news, subscribers would simply switch to another source, but with Facebook, users have no other choice. And for businesses seeking to advertise, output restriction is a concern: "Facebook's market power on the advertising side could create the opposite incentive to limit ad load in order to limit quantity and increase price to advertisers."[270]

Lack of competition from other DSA platforms is also harming businesses by increasing prices and lowering quality for their advertisements. Data show that Facebook has increased the number of ads on its platform[271] and suggest that advertising prices have also increased, costs that businesses arguably would pass on to consumers. In terms of prices, research indicates that Facebook's cost per impression—a number that charges advertising based on the number of users reached[272]—increased significantly over the past four years compared to social networks like Pinterest and Snapchat.[273] Despite the price increase, "some advertisers believe that their ROI (return on investment) on Facebook has been falling over time and that to achieve the same results, they need to increase their spending on Facebook compared to the previous year."[274]

267. COMPETITION & MKTS. AUTH., ONLINE PLATFORMS AND DIGITAL ADVERTISING: MARKET STUDY FINAL REPORT 256 (2020), https://assets.publishing.service.gov.uk/media/5fa557668fa8f5788db46efc/Final_report_Digital_ALT_TEXT.pdf [https://perma.cc/BF5N-LFBF].

268. *Id.* at 255–58.

269. *Id.*

270. *Id.*

271. *Id.* at 259 (explaining that between 2016 and 2019 the impressions served per hour increased from 40–50 to 50–60).

272. Will Kenton, Margaret James & Vikki Velasquez, *Cost Per Thousand (CPM)*, INVESTOPEDIA (Mar. 28, 2022), https://www.investopedia.com/terms/c/cpm.asp [https://perma.cc/D5EL-TWQ4].

273. COMPETITION & MKTS. AUTH., *supra* note 267, at 261.

274. *Id.*

Additionally, Facebook has been accused of inflating ad audience numbers and thus the effectiveness of its DSA product.[275]

Facebook's power in the DSA market also harms PSN users' privacy. Facebook, Instagram, and WhatsApp users unknowingly share many details about themselves via the behavioral data collected,[276] which goes toward enhancing the algorithm to keep users engaging with the platform, while also theoretically optimizing DSA offerings.[277] Even if users are aware of data collection, they likely cannot understand the extent, nor is Facebook required or incentivized to allow them any control over their privacy.[278] Monopolization of the DSA market harms PSN users by leaving them without other social network options should they want more control over how their data is used in the DSA market. Indeed, ample evidence discussed above implies that revenue targets drive the PSN user experience because algorithms are adjusted to maximize engagement with advertisements.[279] And for businesses that do not want to participate in Facebook's use of user data, privacy harms, or manipulative algorithms, there is no comparable alternative. Last year, the outdoor brand Patagonia left Facebook due to the platform's business decisions that enhanced "hate speech and misinformation" to drive PSN user engagement.[280] Because of the power Facebook has in the DSA market, the company's advertising efforts were impaired. The CEO wrote: "This decision has affected our business, and the environmental nonprofits that we support—whose campaigns benefit from the social media amplification that we fund and execute."[281]

C. DSA MARKET DEFINITION

The FTC used practical indicia and reasonable substitutability to define the PSN market in its complaint,[282] and these tests can also be applied to determine the DSA Market. Studies indicate that advertisers turn to DSA platforms, as opposed to search advertising platforms like Google, to increase

275. Jeff Horwitz, *Facebook Accused in Amended Lawsuit of Knowing Ad Audiences Were Inflated*, WALL ST. J. (Mar. 20, 2020, 11:58 PM), https://www.wsj.com/articles/facebook-accused-in-amended-lawsuit-of-knowing-ad-audiences-were-inflated-11584745492 [https://perma.cc/U2Z6-HN35].

276. *See* Pamela Jones Harbour & Tara Isa Koslov, *Section 2 in a Web 2.0 World: An Expanded Vision of Relevant Product Markets*, 76 ANTITRUST L.J. 769, 782–83 (2010).

277. *See* Natasha Singer, *What You Don't Know About How Facebook Uses Your Data*, N.Y. TIMES (Apr. 11, 2018), https://www.nytimes.com/2018/04/11/technology/facebook-privacy-hearings.html [https://perma.cc/GKA5-ECGZ].

278. *See* Harbour & Koslov, *supra* note 276, at 792–93.

279. *See supra* Section III.A.

280. Ryan Gellert, LINKEDIN (Oct. 2021), https://www.linkedin.com/company/patagonia_2/posts [https://perma.cc/M7QM-WANB].

281. *Id.*

282. Substitute Amended Complaint for Injunctive and Other Equitable Relief, *supra* note 19, at 56–59.

brand awareness among specifically targeted audiences.[283] Indeed, "access to valuable user data that enables more granular audience targeting" makes DSA services particularly valuable,[284] and "advertisers, media agencies and suppliers support the view that Facebook has market power."[285] Businesses say that DSA advertising is optimal "for raising brand awareness and reaching new audiences."[286] Other indications of the DSA market include Facebook's internal documents, which show that Facebook views its main DSA competitors as Pinterest, Twitter, and Snapchat.[287]

In terms of substitutions for Facebook advertising,[288] media agencies and advertisers have said "that search [advertising] and display advertising are not substitutable" because customers interact with and purchase from the platforms differently.[289] This excludes Google's search advertising, as well as display ads on third-party websites. That being said, advertisers, Facebook, and other DSA competitors indicate that Google is Facebook's only actual competitive threat.[290] Businesses consistently ranked Facebook as important to their ad spend, followed by Twitter, and then trailed by Snapchat and Pinterest, if they used them at all[291]: Smaller businesses were likely to only use Facebook for advertising, while larger businesses saw other social media platforms like Snapchat as complements when reaching targeted demographics was important.[292]

What distinguishes Facebook the most, and why other platforms are not reasonable substitutes, is Facebook's data. Evidence shows that the platform's data adds "significant value to advertisers in that it allows them to better target audiences. Access to higher quality or more granular data allows for more precise targeting of more specific audiences . . . [and] is particularly valuable when combined with high reach among different audience types using the platform."[293] Furthermore, Facebook's vast datasets allow advertisers to "target specific audiences based on demographic characteristics, interests and location[,]" as well.[294] Based on the views of advertisers, Facebook, and other platforms, as well as consideration of which other platforms would provide

283. COMPETITION & MKTS. AUTH., *supra* note 267, at 243.

284. *Id.* at 245.

285. *Id.* at 250.

286. *Id.*

287. *Id.* at 249.

288. *See supra* Part III.

289. COMPETITION & MKTS. AUTH., *supra* note 267, at 250.

290. *Id.* at 249–50.

291. *See id.* at 248. Advertisers view Facebook's biggest competitor in digital display advertising as Google, but because Google does not compete in social advertising, they are outside of the relevant market. *Id.* at 250.

292. *Id.* at 253–54.

293. *Id.*

294. *Id.* at 15, 254 ("Some advertisers also singled out Facebook's remarketing capability. Facebook's scale allows it to reach a large proportion of advertisers' known customers . . . .").

reasonable substitutes, the DSA market would include Facebook, Instagram, Twitter, Snapchat, and Pinterest. And Facebook and Instagram are overwhelmingly the most important DSA platform for businesses.

D. OBJECTIONS: AMEX

One potential hurdle for asserting that Facebook monopolizes two separate markets is *Amex*. As noted in Part II.C above, the Court in *Amex* held that credit card platforms were "a special type of two-sided platform"—"a 'transaction' platform"—because they "cannot make a sale to one side of the platform without simultaneously making a sale to the other."[295] Rather than connecting two separate markets—cardholders and merchants—the Court found that both sides of the platform should be treated as one single market because of the simultaneous nature of the transaction.[296]

Were the FTC to argue the monopolization of both the PSN and DSA markets, Facebook would likely assert *Amex*: that its platform was a simultaneous transaction. But credit card transaction platforms are different from PSN/DSA platforms, and Justice Thomas's opinion for the Court distinguished that transaction platforms were a subset of two-sided platforms. As an example of a simultaneous transaction, Justice Breyer analogized a farmers' market, which "brings local farmers and local shoppers together, and transactions will occur only if a farmer and a shopper simultaneously agree to engage in one."[297] Thomas contrasted simultaneous transaction platforms with newspapers, where he said readers and advertisers are two separate markets.[298] Accordingly, unlike a credit card transaction platform, where a credit card user is *required* to engage with the merchant services provider in order to engage with Amex's services, Facebook ads are ancillary to a user's experience: advertising on the website is inconsequential to the PSN user's purpose for engaging with Facebook; they use the platform for a myriad of reasons like seeing photos of friends or reading political news, but like in traditional publications, advertisements are secondary to the experience.[299] Additionally, the ads are entirely optional for users to engage with—there is no requirement to click on an advertisement or look at an advertisement, unlike with a credit card transaction. If ads were the object of the experience, Facebook would be an online marketplace or product catalog. But that is not the case: Facebook's DSA platform is competing with other DSA and advertising platforms, while the PSN platform is competing with other PSN

295. Ohio v. Am. Express Co. (*Amex*), 138 S. Ct. 2274, 2280–86 (2018).

296. *Id.* at 2286–87.

297. *Id.* at 2299 (Breyer, J., dissenting).

298. *Id.* at 2286, 2287 n.9 (majority opinion) ("Nontransaction platforms, by contrast, often do compete with companies that do not operate on both sides of their platform. A newspaper that sells advertising, for example, might have to compete with a television network, even though the two do not meaningfully compete for viewers.").

299. *See id.*

platforms.[300] Because the DSA and PSN markets are two separate markets and Facebook is not a two-sided transaction platform, fear of facing an *Amex* defense should not be a barrier for holding Facebook accountable for the monopolization of two separate markets: the PSN market and the DSA market.

CONCLUSION

Facebook has become so much more than just a social media platform since its inception in 2004. Today, it is just as much a platform that many businesses depend on for reaching customers. At the same time, outrage about Meta Platforms' harms to users and the amount of power they wield in the average American's life is making headlines every day. Despite this, more users than ever are on its platforms.

This incongruity has caught the attention of many elected officials, as well as the FTC, which filed suit against Facebook for violating Section 2 of the Sherman Act by monopolizing the PSN market. The agency alleges that Facebook has monopolized the PSN product market, but this market only captures part of the dynamic, part of Facebook's business model, and part of Facebook's anticompetitive conduct and harms. Facebook competes in two relevant product markets—the PSN market and the DSA market—which are both important when discussing the platform's monopolization. By considering Facebook's power in the DSA market, the company's anticompetitive conduct can more comprehensively be addressed.

300. *See id.*