

ANTICOMPETITIVE PRIVACY: TAKING A BITE OUT OF APPLE

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Privacy and antitrust are on a collision course. Large firms with monopoly power or near-monopoly power can build products that ostensibly enhance user privacy while raising rivals' costs and allowing monopolist firms to gain footholds in secondary markets. In this Note, I use the example of Apple's privacy changes, the impact these changes had on digital advertising, and Apple's subsequent expansion of its own digital marketing offerings as a motivating example of how current antitrust doctrine is ill-equipped to handle this new form of monopolist behavior. Privacy is the latest example of an "incommensurability" problem in the final stage of the standard rule of reason analysis. Even if a plaintiff can demonstrate competitive harm from privacy-preserving conduct, courts are constrained in what type of relief they can order.

Fortunately, one of the main federal antitrust enforcers—the Federal Trade Commission—is also the source of much of federal privacy law. It has the authority and expertise to promulgate rules pursuant to section 18 of the Federal Trade Commission Act to address anticompetitive privacy and strike the appropriate balance between competition and consumer protection. Much of the Commission's privacy enforcement has reflected the heavily criticized "notice-and-choice" privacy framework. However, the Commission's recent initiation of the Magnusson-Moss rulemaking process signals an opening to not only move beyond this framework, but also to consider both competition and privacy in the formation of any rule regulating technology firms.

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INTRODUCTION

Though once heralded as paragons of entrepreneurship,¹ high technology companies have increasingly found themselves in regulatory crosshairs. These companies have largely escaped regulation historically. In contrast to the congressional attention the companies receive today, Congress took a *laissez-faire* approach to enable growth of technology companies. As a direct consequence, these companies have grown to be ever-more important loci of economic activity and everyday life.

1. Farhad Manjoo, *The Great Tech War of 2012*, FASTCOMPANY (Oct. 19, 2011), <https://www.fastcompany.com/1784824/great-tech-war-2012> [<https://perma.cc/5Q8E-PPCF>].

Inevitably, this pervasiveness has resulted in controversy. Technology companies have been accused of influencing elections, distorting labor markets, irresponsibly handling user data, suppressing free speech, and many other ills.² Following these scandals, forces across the political spectrum have called for regulation of so-called “big tech.”³

Regulatory approaches differ based on the harm they hope to solve. Two major bodies of regulatory law—privacy and antitrust—are on a collision course. Large firms with monopoly power or near-monopoly power can now build products that both enhance user privacy and raise rivals’ costs. In this Note, I will use the example of Apple’s privacy changes, the impact these changes had on digital advertising, and Apple’s subsequent expansion of its own digital marketing offerings as an example of how current antitrust doctrine is ill-equipped to handle this new form of monopolist behavior.

The remainder of the Introduction traces the history of the privacy/antitrust conflict and provides necessary context on Apple’s conduct as an illustration of this collision. The story of the antitrust/privacy conflict is one of two parallel tales: the rise of the technology giants and the uneven developments in the regulatory architecture. Apple, known for its hardware and operating systems, has long relied on its relationships with developers building data-intensive applications to enhance its competitive position; however, it has recently—in the name of privacy—limited the ways in which developers can use data while building its own first-party applications without the same limitations.

2. Nicholas Confessore, *Cambridge Analytica and Facebook: The Scandal and the Fallout So Far*, N.Y. TIMES (Apr. 4, 2018), <https://www.nytimes.com/2018/04/04/us/politics/cambridge-analytica-scandal-fallout.html> [https://perma.cc/W6EZ-UWAE] (summarizing the Cambridge Analytica scandal, where an analytics firm was able to scrape psychological profile information from Facebook and use the data in the 2016 election); Timothy Noah, *How Amazon Keeps Workers’ Pay Low*, THE NEW REPUBLIC (Oct. 9, 2023), <https://newrepublic.com/article/176074/amazon-keeps-workers-pay-low> [https://perma.cc/Z8ST-B7PE] (describing how Amazon’s employment practices depress wages in the factory warehouse worker market); Adam Gabbatt, *Claims of Anti-conservative Bias by Social Media Firms Is Baseless, Report Finds*, THE GUARDIAN (Feb. 1, 2021, 12:19 PM), <https://www.theguardian.com/media/2021/feb/01/facebook-youtube-twitter-anti-conservative-claims-baseless-report-finds> [https://perma.cc/RX7X-5WME] (reporting how a New York University study examined—and debunked—allegations that social media platforms censor conservative voices).

3. See, e.g., Press Release, Elizabeth Warren, U.S. Sen., Warren, Graham Unveil Bipartisan Bill to Rein in Big Tech (July 27, 2023), <https://www.warren.senate.gov/newsroom/press-releases/warren-graham-unveil-bipartisan-bill-to-rein-in-big-tech> [https://perma.cc/4X6Y-LSUF] (describing a bipartisan piece of legislation—the Bipartisan Digital Consumer Protection Commission Act—introduced by Senators Elizabeth Warren (D-Mass.) and Lindsey Graham (R-S.C.)).

The following two Parts summarize doctrinal developments relevant to technology companies in the law of monopolization and analyze Apple's conduct under this doctrine. As is developed in detail, antitrust doctrine cannot answer the difficult question at the antitrust/privacy interface: if reigning "big tech" requires addressing privacy harms and antitrust harms, how should a conflict between these two goals be resolved? Thus, the final Part proposes how the Federal Trade Commission, pursuant to its section 18 power to promulgate rules, could and should address this conflict.

A. *Privacy and Antitrust: An Emerging Intersection*

Prior to identifying legal theory and application around Apple's use of privacy to harm competitors, it is helpful to understand two trends. First, the objects of privacy regulation—companies using user data—have grown from startups to behemoths. Big technology companies have grown on a steady diet of data and continue to rely on superior data collection and analysis techniques to maintain their dominant positions. This data facilitates customer acquisition, customer retention, and new product launches; some companies have developed monopolies on *data itself*. Second, regulators responded to this rise unevenly, regulating privacy through a patchwork of administrative actions and pursuing illegal monopolization in a limited fashion. The result is a regulatory scheme that has not developed a coherent way to compare privacy and antitrust harms.

1. *The Rise of Data-Driven Bigness*

Companies often acquire market power (and even monopoly power) through the acquisition of personal data. The stories of Alphabet and Amazon are instructive. While Alphabet's products are ostensibly free services for use by the public (e.g., the search engine Google and the video-sharing site YouTube), the company generates revenue by selling advertising space.⁴ Google's dominance in the search advertising market can be directly traced to its acquisition of fine-grained information about users, including data collected from YouTube and Gmail as well as search history.⁵ Though it is debatable if search advertising constitutes a market for antitrust purposes,⁶ Google's dominance is unquestionable

4. Nathan Newman, *Search, Antitrust, and the Economics of the Control of User Data*, 31 YALE J. ON REG. 401, 412–13 (2014) (describing Google's free products as a way to induce users to share information that can be monetized).

5. *Id.* at 413.

6. *See id.* at 417–18 (arguing that search advertising is a valid antitrust market because the search advertising market is "inherently tied to the provision of search

and durable.⁷ Amazon, in addition to using data to strengthen its core businesses, routinely uses sophisticated analysis of marketplace data to expand into new lines of business, allowing it to gain significant share in specific retail product markets.⁸

Additionally, many companies have monopolies in user data itself. There are ample examples of disputes between a dominant firm with a large user base and a correspondingly large data advantage and an upstart that seeks to use that data. In one early example, a court characterized a market for “Twitter Big Data Analytics,” which relied on access to user posts on the social media platform Twitter.⁹ PeopleBrowsr, a firm operating in this market, licensed this data from Twitter; Twitter terminated the agreement, and PeopleBrowsr brought action alleging unfair competition.¹⁰ In a more modern example, data analytics company hiQ built a people analytics platform based in part on scraped LinkedIn data.¹¹ Though LinkedIn seemingly acquiesced to the practice at first, it later threatened suit under the Computer Fraud and Abuse Act, the Digital Millennium Copyright Act, and the common law of trespass.¹² The Ninth Circuit upheld an order granting hiQ’s request for a preliminary injunction against LinkedIn’s efforts to block hiQ’s access to LinkedIn data, in part because the District Court did not abuse its discretion in finding that “hiQ . . . [had] no viable way to remain in

services” and that as a result competition in search advertising impacts both search advertisers and users of search). Even under a broader market of “online advertising,” as of the publication of the preceding article, Google seemed to hold market power. *Id.* at 417 n.71 (describing Google as the leading firm in the online advertising space as measured by revenue despite commanding less than fifty percent of the market).

7. See Akash Sriram & Chavi Mehta, *OpenAI Tech Gives Microsoft’s Bing a Boost in Search Battle with Google*, REUTERS (Mar. 22, 2023, 2:34 PM), <https://www.reuters.com/technology/openai-tech-gives-microsofts-bing-boost-search-battle-with-google-2023-03-22/> [<https://perma.cc/2KFR-CTLT>] (reporting that despite Microsoft’s attempt to capture share by relying on a partnership with OpenAI, Google maintains an eighty percent market share by search volume).

8. Feng Zhu & Qihong Liu, *Competing with Complementors: An Empirical Look at Amazon.com*, 39 STRATEGIC MGMT. J. 2618 (2018) (studying Amazon’s entry patterns into third-party sellers’ product spaces that sell goods on Amazon’s third-party seller platform and concluding that Amazon has the power to undercut and outcompete these product lines).

9. *PeopleBrowsr, Inc. v. Twitter, Inc.*, No. C-12-6120 EMC, 2013 WL 843032, at *1 (N.D. Cal. Mar. 6, 2013). The *PeopleBrowsr* case arose in state court under California’s Unfair Competition Law (“UCL”). *Id.* Twitter sought to remove the action, arguing that the “unfair acts” prong of the UCL invoked section 2 of the Sherman Act. *Id.* Ultimately, the Court disagreed and remanded the action. *Id.* at *5.

10. *Id.* at *1.

11. *hiQ Labs, Inc. v. LinkedIn Corp.*, 31 F.4th 1180, 1187 (9th Cir. 2022).

12. *Id.*

business other than using LinkedIn public profile data.”¹³ Some scholars have suggested extending the “essential facilities doctrine” under antitrust law to police these data monopolies.¹⁴

2. *Uneven Regulation Then, A Hard-to-Resolve Conflict Now*

The rise of monopolist, data-driven platforms has coincided with twin trends in agency enforcement: the dormancy of monopoly regulators and the activity of privacy regulators. Until recent developments, the case against Microsoft in 2001 represented the most recent example of monopoly enforcement under section 2 of the Sherman Act.¹⁵ In the time since the inception of the Microsoft action to present day, online activity has exploded, bringing with it new privacy challenges.¹⁶ Following congressional urging, the Federal Trade Commission (“FTC”) began policing “false or misleading promises regarding the collection, use, and sale of consumers’ personal data,”¹⁷ leading to a body of quasi-rules that filled the gaps left by patchwork federal legislation.¹⁸

Nearly three decades after this initial call to rein in technology companies, calls for regulation sound anew in both privacy and antitrust.¹⁹ In some cases, antitrust law and privacy law achieve the same ends. For example, if user privacy is an axis of competition in a relevant market, a merger review may consider a reduction of privacy choices to be relevant in evaluating the competitive effects of the proposed merger.²⁰ Additionally, regulators tout rules favoring data portability—the ability to copy, move, or transfer data—as promoting

13. *Id.* at 1188–89. Note that this case did not arise under federal or state competition law. However, the Court’s factual determination supports a finding that LinkedIn comprises a market for LinkedIn users.

14. See generally Zachary Abrahamson, *Essential Data*, 124 *YALE L.J.* 867 (2014).

15. See Erika M. Douglas, *The New Antitrust/Data Privacy Law Interface*, 130 *YALE L.J.* F. 647, 652–53 (2021) [hereinafter Douglas, *The New Antitrust*] (describing the recent filing against Google in 2020 as the case that finally broke the drought of public enforcement under section 2).

16. *Id.* at 651–52.

17. *Id.*

18. Daniel J. Solove & Woodrow Hartzog, *The FTC and the New Common Law of Privacy*, 114 *COLUM. L. REV.* 583, 587 (2014).

19. See generally Mark A. Lemley, *The Contradictions of Antitrust Challenges to Platforms*, 36 *ANTITRUST* 22 (Fall 2021) (describing how and why “everyone wants to regulate the big tech companies”).

20. Cf. FED. TRADE COMM’N, F.T.C. FILE NO. 071-0170, STATEMENT OF FEDERAL TRADE COMMISSION CONCERNING GOOGLE/DOUBLECLICK 2 (Dec. 20, 2007), https://www.ftc.gov/system/files/documents/public_statements/418081/071220googledc-commstmt.pdf [<https://perma.cc/KD9Y-UFWJ>] (noting that “although [privacy] issues may present important policy questions for the Nation, the sole purpose of federal antitrust review of mergers and acquisitions is to identify and remedy transactions that harm competition”).

both competition and privacy.²¹ Portability defrays market power by lowering switching costs; both the European Union’s General Data Protection Regulation and California’s Consumer Privacy Act include data portability provisions.²²

However, privacy and antitrust regulation often exist in tension. Some scholars warn that data portability regulations can result in privacy harms, especially if such rules relax the flow of private information.²³ Conversely, portability may lead users—perhaps seeking the benefits that come from economies of scale—to move data from upstart businesses to established players.²⁴ Professor Erika Douglas, in describing the “non-complementarity” of antitrust and privacy, discusses two underlying drivers of this tension. First, privacy as a dimension of quality is hard to compare against other facets of competition—such as price, user experience, and the like.²⁵ Second, privacy law is a separate body of law with objectives separate from antitrust law, which may be challenging to reconcile.²⁶ Under section 1 and section 2 Sherman Act doctrine, the privacy and antitrust tension will rear its head at the last stage of an antitrust analysis, in which an antitrust plaintiff must respond to a defendant’s justification of privacy as a pro-competitive business objective.²⁷

B. *Apple: Privacy is Good for Business*

Privacy and antitrust conflict when it is in a company’s interest to pursue pro-privacy conduct. Apple has such an incentive. The company initially benefited greatly from the expansion of personalized digital advertising. Advertising made it economical to build free applications on Apple’s platforms. However, Apple has begun to heavily invest in its *own* advertising business. Concomitant with this change is a set of business decisions—putatively carried out in the name of privacy—that limit application developers’ access to data.

1. *Digital Advertising: A Brief Primer*

Modern online advertising relies on a complicated system of user tracking and data collection designed to serve advertisements on online platforms that are the “most relevant” to users. The FTC has deemed

21. Douglas, *The New Antitrust*, *supra* note 15, at 656–57.

22. *Id.*

23. Lemley, *supra* note 19, at 24.

24. Douglas, *The New Antitrust*, *supra* note 15, at 657.

25. *Id.*

26. *Id.* at 658.

27. *Id.* at 662.

this “behavioral advertising,” defined as the “tracking of a consumer’s activities online—including the searches a consumer has conducted, the Web pages visited, and the content viewed—in order to deliver advertising targeted to the individual consumer’s interests.”²⁸

There are two categories of digital advertising as defined by the data they require. “First-party” advertising relies on tracking a user’s activity on a website to collect data that will later be used to surface relevant advertising on the same website.²⁹ An ecommerce website might log a user’s product queries during a website visit. This information is then stored on a user’s computer; the website may retrieve it when that user visits again.³⁰ “Third-party” advertising allows a website to collect information that will be used to advertise on another website.³¹ Online platforms that rely on advertising revenue encourage online businesses to add code to their websites and applications that enables this form of data collection.³²

2. *Apple: From Playing Field to Competitor*

With the introduction of Apple’s iPhone, advertisers gained yet another surface on which to show advertisements. Apple realized that smartphones were becoming indispensable reservoirs of personal information.³³ The company first introduced the “unique device identifier” (“UDID”) to allow for better targeting and cross-application tracking (a form of “third-party” advertising).³⁴ As the name suggests, these functioned as digital social security numbers and could not be “erased, duplicated or obscured.”³⁵ A digital advertiser showing an advertisement on an iPhone could collect, store, and share the UDID

28. Press Release, Fed. Trade Comm’n, FTC Staff Proposes Online Behavioral Advertising Privacy Principles (Dec. 20, 2007), <https://www.ftc.gov/news-events/press-releases/2007/12/ftc-staff-proposes-online-behavioral-advertising-privacy> [https://perma.cc/8X4S-YX92].

29. Steven C. Bennett, *Regulating Online Behavioral Advertising*, 44 J. MARSHALL L. REV. 899, 901 (2011).

30. *Id.*

31. *Id.* at 901–02.

32. *See, e.g., Meta Pixel, META*, <https://www.facebook.com/business/tools/meta-pixel> (last accessed Mar. 14, 2023) [https://perma.cc/FZ9H-V5A6]. For a website seeking to advertise, “pixels” are powerful tools to improve targeted advertising efforts and measure the effectiveness of advertising. *Id.*

33. Alex Health, *What Is a UDID and Why Is Apple Killing Apps that Track Them*, CULT OF MAC (Apr. 7, 2012, 7:30 AM), <https://www.cultofmac.com/160248/what-the-hell-is-a-udid-and-why-is-apple-worried-about-them-feature/> [https://perma.cc/2AZY-QJJN].

34. *Id.*

35. *Id.*

across advertising networks.³⁶ Apple faced significant backlash from privacy advocates and retired UDID in late 2011.³⁷

Two years after UDID's retirement, Apple introduced a new user identifier called "identity for advertisers," or "IDFA."³⁸ IDFA had two privacy-safe features: users were able to reset the value (which made it more difficult for advertisers to rely on IDFA as a persistent store of identity) and turn on a flag called "Limit Ad Tracking" ("LAT"), which prevented advertisers from using the IDFA for targeted advertising.³⁹ To receive privacy protection from LAT, a user needed to be aware of and understand the feature. As a result, at its height, adoption of LAT only hovered around thirty percent of users.⁴⁰

In 2020, Apple announced a major change to the way that application developers could use IDFA.⁴¹ First, users had to actively opt into sharing IDFA with an application, whereas previously users were automatically opted in.⁴² Users gained the ability to individually control application access to IDFA through the "AppTrackingTransparency" framework ("ATT").⁴³ Second, to use IDFA, an application would need to seek permission when a user first opened an app.⁴⁴ The prompt reads "Allow [application name] to track your activity across other companies' apps and website?" in bold text and allows each application a short space to explain why this tracking is necessary.⁴⁵ Users are presented with two options—"Ask App not to Track" or "Allow."⁴⁶ Apple's applications are not required to present the same pop-up message, and users are instead shown a much longer message that frames the choice as one about personalization rather than data tracking and provides context about the purpose and benefits of personalized advertising.⁴⁷ The change was

36. *Id.*

37. *Id.*

38. Mike Sweeney, *Apple's Changes to IDFA in iOS 14: FAQs and the Impact on Mobile Advertising*, CLEARCODE (Jul. 23, 2020), <https://clearcode.cc/blog/apple-idfa/> [<https://perma.cc/3QHA-GDXN>].

39. *Id.*

40. *Id.*

41. Lily Hay Newman, *The New iOS Update Lets You Stop Ads From Tracking You—So Do It*, WIRED (Apr. 26, 2021, 7:00 AM), <https://www.wired.com/story/ios-app-tracking-transparency-advertising/> [<https://perma.cc/UVY4-2T9J>].

42. *Id.*

43. *Id.*

44. *Id.*

45. *Id.*

46. *Id.*

47. Mark Gurman, *Apple Finds Its Next Big Business: Showing Ads on Your iPhone*, BLOOMBERG (Aug. 14, 2022, 9:45 AM), <https://www.bloomberg.com/news/newsletters/2022-08-14/apple-aapl-set-to-expand-advertising-bringing-ads-to-maps-tv-and-books-apps-l6tdqqmg> [<https://perma.cc/XQ9T-C878>]. Apple's prompt, in full,

immediately met with worry and criticism from advertisers; originally slated to launch in December 2020, Apple delayed the launch until April the following year.⁴⁸

In addition to IDFA changes, Apple recently announced a new App Store policy changing its approach to monetization of advertisement-supported applications. Previously, users who created user-generated content on platforms were able to directly pay platforms to expand reach of their content, a practice known as “boosting.” Apple will now require developers to use Apple’s in-app payment system (“IAP”) to accept payment for boosted content.⁴⁹ As was recently at issue in a lawsuit against Apple by Epic Games, Apple collects thirty percent of all payments made through the in-app payment system.⁵⁰ The “boosted post” feature is one of the ways to purchase advertisements on several social media platforms, notably the Meta family of applications.⁵¹ In the *Epic Games* trial, Apple executive Phil Schiller emphasized in his testimony that Apple has not taken a share of advertising revenue from developers previously.⁵² The recent announcement therefore represents a change in long-standing policy.

As Apple changes its relationship with advertising-supported developers, the company is also working to build up its own advertising business. Apple has offered display advertisements within its News

reads “Personalized ads in Apple apps such as the App Store and Apple News help you discover apps, products and services that are relevant to you. We protect your privacy by using device-generated identifiers and not linking advertising information to your Apple ID. Turning on Personalized Ads increases the relevance of ads shown by letting us use data like account information, app and content purchases, and, where available, the types of News stories you read. Apple does not track you or share your personal information with any third parties.” Kinshuk Jerath, *Mobile Advertising and the Impact of Apple’s App Tracking Transparency Policy* (April 26, 2022), https://www.apple.com/privacy/docs/Mobile_Advertising_and_the_Impact_of_Apples_App_Tracking_Transparency_Policy_April_2022.pdf [<https://perma.cc/DM54-95UV>]. Apple previously did not show any prompt at all, and some speculate that the introduction of this prompt was meant to stave off antitrust scrutiny. Scott Ikeda, *Apple: iOS15 Will Ask Permission Before Displaying Our Own Personalized Ads*, CPO MAG. (Sept. 15, 2021), <https://www.cpomagazine.com/data-privacy/apple-ios-15-will-ask-permission-before-displaying-our-own-personalized-ads/> [<https://perma.cc/GX2V-W4DY>].

48. Gurman, *supra* note 47.

49. Jason Aten, *Apple Quietly Rolled Out a Change That Could Be The End of Facebook*, INC. (Oct. 26, 2022), <https://www.inc.com/jason-aten/apple-quietly-rolled-out-a-change-that-could-be-end-of-facebook.html> [<https://perma.cc/5E42-F4JL>].

50. See generally *Epic Games, Inc. v. Apple, Inc.*, 559 F. Supp. 3d 898 (N.D. Cal. 2021), *aff’d in part, rev’d in part and remanded*, 67 F.4th 946 (9th Cir. 2023). The appellate opinion did not substantially alter the conclusions of law at the district court level.

51. Aten, *supra* note 49.

52. *Id.*

and Stocks apps and within the App Store since 2016.⁵³ In June 2022, Apple expanded its advertising offerings, allowing advertisements to be displayed on the front page of the App Store.⁵⁴ Apple is seeking advertisers for non-mobile surfaces, including Apple TV+.⁵⁵

Additionally, public job posting data indicates that Apple is aggressively hiring to expand its advertising business.⁵⁶ Some estimates indicate that Apple may grow its advertising business eightfold by 2026 to thirty billion dollars.⁵⁷ That expansion has paid early dividends; as of October 2021, the ads business is now responsible for fifty-eight percent of iPhone downloads that result from clicking on an advertisement, up from seventeen percent the prior year.⁵⁸

Antitrust regulators have begun to take notice of Apple. The German competition regulation authority, Bundeskartellamt, is looking into the ATT changes as violations under German competition law.⁵⁹ The European Commission recently fined Apple €1.8 billion for provisions in contracts with developers preventing them from directing consumers to payment alternatives outside of the App Store.⁶⁰ Additionally, the Department of Justice's Antitrust Division recently filed suit against Apple alleging antitrust violations, though the complaint does not

53. Chris Stokel-Walker, *Apple Is An Ad Company Now*, WIRED (Oct. 20, 2022, 7:00 AM), <https://www.wired.com/story/apple-is-an-ad-company-now/> [<https://perma.cc/UKH8-3RY2>].

54. *Id.*

55. *Id.*

56. *See id.* (describing that Apple's job posting on public job boards like LinkedIn is directed to hiring individuals with experience building "complex and [growing] platform[s] that help deliver highly optimized advertising content to consumers"). Job listings seem to indicate that Apple, as of October 2022, was set to hire an additional 250 employees in their ad platform division, doubling its size. *Id.*

57. *See id.* (Apple's current advertising revenue is four billion dollars, and a prediction by "[investment] bank Evercore ISI estimates Apple will have a thirty billion dollar ad business by 2026).

58. Sara Fischer, *Apple's Privacy Changes Eat Rivals' Businesses*, AXIOS (Oct. 26, 2021), <https://www.axios.com/2021/10/22/apples-privacy-changes-eat-rival-businesses> [<https://perma.cc/F2ZF-ULF2>].

59. Press Release, Bundeskartellamt, Bundeskartellamt Reviews Apple's Tracking Rules For Third-Party Apps, (June 14, 2022), https://www.bundeskartellamt.de/SharedDocs/Meldung/EN/Pressemitteilungen/2022/14_06_2022_Apple.html [<https://perma.cc/TGE7-RQNX>]. Apple recently joined the Bundeskartellamt's list of companies of "paramount significance for competition across markets," a small group including companies like Amazon, Google, and Meta. Amiera Saadeh, *The German Bundeskartellamt: Apple's in Trouble*, INSIDETELECOM (April 14, 2023), <https://insidetelecom.com/the-german-bundeskartellamt-apples-in-trouble/> [<https://perma.cc/DNL7-8L9U>].

60. Edith Hancock, *EU Hits Apple with €1.8B Antitrust Fine for Abusive App Terms*, POLITICO (Mar. 4, 2024, 7:01 AM), <https://www.politico.eu/article/apple-gets-e1-8b-eu-antitrust-fine-for-abusive-app-terms/> [<https://perma.cc/WGF3-ZVYZ>].

reference the specific conduct discussed here.⁶¹ Apple, for its part, has attempted to defray accusations that its push for privacy is meant to reduce competition in the advertising ecosystem. Apple sponsored a report by a marketing professor at Columbia Business School which concluded that “claims that billions of advertising dollars moved from companies like Meta to Apple due to the introduction of ATT are speculative.”⁶²

I. SHERMAN ACT SECTION 2: DOCTRINAL DEVELOPMENTS FOR TECHNOLOGY REGULATION

To begin to understand how Apple’s conduct might run afoul of antitrust laws, it is necessary to discuss monopolization doctrine. Section 2 of the Sherman Act prohibits unlawful monopolization.⁶³ The Act reads, “[e]very] person who shall monopolize, or attempt to monopolize . . . any part of the trade or commerce among the several States . . . shall be deemed guilty of a felony.”⁶⁴ The text of the law is brief, and a large body of doctrine has developed giving meaning to its sparse language. This Part summarizes the legal standard, with a focus on recent developments relevant to digital platforms.⁶⁵

A. *Defining the Market*

The monopolization offense has two prongs: monopoly power and monopolizing conduct. The Supreme Court first described these prongs in *United States v. Grinnell*.⁶⁶ First, a plaintiff must show that a defendant possesses monopoly power in a specific market.⁶⁷ Monopoly power is the power to set prices or exclude competition in a relevant

61. See generally Complaint, *United States v. Apple Inc.*, No. 2:24-cv-04055 (D.N.J. Mar. 21, 2024), https://s3.documentcloud.org/documents/24492638/govuscourtsnjd54440210_3.pdf [<https://perma.cc/G5SU-FXW5>]; *id.* at 26–29 (alleging that Apple maintains its monopoly power unlawfully in part through “contractual restrictions, fees, and taxes” on so-called super-apps).

62. Jerath, *supra* note 47.

63. 15 U.S.C. § 2.

64. *Id.*

65. Apple’s conduct could be conceived of as both a set of agreements with developers (regulated by section 1 of the Sherman Act) and as a unilateral change in policy (regulated by section 2). Though a recent antitrust case against Apple (*Epic Games*) alleged both types of antitrust violations, the Note will proceed under the assumption that a claim must meet the higher, section 2 standard. See generally *Epic Games, Inc. v. Apple, Inc.*, 559 F. Supp. 3d 898 (N.D. Cal. 2021), *aff’d in part, rev’d in part and remanded*, 67 F.4th 946 (9th Cir. 2023). The preceding discussion thus only examines doctrine relevant to a section 2 claim.

66. 384 U.S. 563 (1966).

67. *Id.* at 571–72.

market.⁶⁸ The first prong requires a careful description of both the market and the defendant's power. In antitrust analysis, markets are the zones of competition, consisting of a set of interchangeable products within a geographic area.⁶⁹ The relevant inquiry considers the relative interchangeability, or "cross-elasticity of demand" of two products.⁷⁰

Courts and regulators rely on both hypothetical analyses and economic realities to determine markets. One common analysis, relying on the principles of cross-elasticity, is the "hypothetical monopolist test" ("HMT"), outlined in a set of guidelines released jointly by the FTC and the United States Department of Justice.⁷¹ Under a HMT approach, one builds a market product-by-product; if for a particular product set, a "hypothetical monopolist" of all the products in the market could profitably introduce a "small but significant, non-transitory increase in price" on any of the products (a "SSNIP"), then the market is complete.⁷² If, however, a SSNIP is not profitable (i.e., if consumers would move to another product), then the product market is incomplete.⁷³ A court may supplement SSNIP analysis with a set of practical indicia reflecting the economic realities of the market.⁷⁴

68. *Id.*

69. *See* *United States v. E. I. du Pont de Nemours & Co.*, 351 U.S. 377, 394 (1956) (describing how it is not possible to monopolize an entire market even if a company has monopolized a single product if there are "market alternatives that buyers may readily use for their purposes"). In *du Pont*, the Court held that the defendant's cellophane monopoly did not constitute monopolization of the entire market of "flexible packaging materials." *Id.* at 400.

70. *See id.* at 380 ("[A manufacturer's control in] the relevant market depends upon the availability of alternative commodities for buyers: i.e., whether there is a cross-elasticity of demand . . .").

71. U.S. DEP'T OF JUST. & FED. TRADE COMM'N, MERGER GUIDELINES (Dec. 18, 2023), <https://www.justice.gov/d9/2023-12/2023%20Merger%20Guidelines.pdf> [<https://perma.cc/2FTZ-WNNR>].

72. *Id.* at 4.3.A. Any SSNIP would cause some consumers (those who are "inframarginal") to refrain from purchasing products in the market. However, the monopolist would be able to extract the SSNIP price increase from the remaining consumers. The balance between these two effects determines whether a SSNIP would be profitable.

73. *Id.* One potential issue with this approach is if the current price of a product is already the monopoly price (the price at which even a monopolist cannot profitably raise prices). Applying the SSNIP to a monopolist price would erroneously lead to a larger product mix. This is called the "Cellophane fallacy," after the analysis the Supreme Court conducted in expanding the cellophane market to include all flexible packing materials in *du Pont*. *See* *United States v. Eastman Kodak Co.*, 63 F.3d 95, 105–09 (2d Cir. 1995) (rejecting the government's argument that the district court committed a Cellophane fallacy error when it defined the relevant market for film as world-wide and not just domestic; other empirical analysis supported the district court's conclusion).

74. *Id.* at 325 (describing a submarket as defined by "industry or public recognition of the submarket as a separate economic entity, the product's peculiar characteristics and uses, unique production facilities, distinct customers, distinct prices, sensitivity to

1. *Single Brand Markets: Eastman Kodak*

Single-brand markets represent a special type of market of particular relevance to digital platforms.⁷⁵ In *Eastman Kodak v. Image Technical Services, Inc.*,⁷⁶ the Supreme Court considered whether photocopier and micrographic equipment manufacturer Eastman Kodak was a monopolist in the market for replacement parts.⁷⁷ Following a change in corporate policy, Eastman limited independent service organizations' access to replacement parts and required that customers seeking to purchase parts also purchase maintenance services.⁷⁸ Eastman was not a monopolist in the photocopier market; it argued that competition in that market would police prices in the parts market.⁷⁹ The Court found that Eastman could still exercise power in the parts market for two reasons. First, customers, at the time of purchase, could not accurately determine lifecycle costs in order to discipline prices in the parts market.⁸⁰ Second, it was difficult for customers to switch products once they found out about Kodak's high service prices.⁸¹ *Eastman Kodak's* progeny have led to some confusion about the contours of the single-brand market doctrine.⁸²

Eastman Kodak does not answer whether a change in policy (as was evident in that case) is required to define a single-brand market or if information barriers and switching costs are sufficient.⁸³ The initial market is called a "foremarket" or "a market in which there is competition for a long-lasting product from which demand for a second product derives."⁸⁴ This second product is the "aftermarket."⁸⁵ To recognize an aftermarket, several circuits require that the defendant

price changes, and specialized vendors"); *see also* *Ohio v. Am. Express Co.*, 585 U.S. 529 (2018) (relying on an economic realities analysis in holding that the relevant market in a two-sided, platform-based marketplace consists of a single marketplace for credit card transactions rather than separate markets for consumer credit card services and merchant payment services).

75. *See generally* Matt Rosenthal, Note, *Aftermarket Theory in Digital Markets*, 25 N.Y.U. J. LEGIS. & PUB. POL'Y 211 (2022).

76. 504 U.S. 451 (1992).

77. *Id.* at 459.

78. *Id.* at 458.

79. *Id.* at 465.

80. *Id.* at 473–74.

81. *Id.* at 476.

82. Rosenthal, *supra* note 75, at 220 (“[L]ower courts grapple with the degree of conduct necessary to demonstrate aftermarket market power, the functional relationship between foremarket and aftermarket products, applying *Kodak* to foremarkets consisting of non-durable products, and aftermarkets with multiple producers.”).

83. *Id.*

84. *Epic Games, Inc. v. Apple, Inc.*, 559 F. Supp. 3d 898, 944 n.244 (N.D. Cal. 2021), *aff'd in part, rev'd in part and remanded*, 67 F.4th 946 (9th Cir. 2023).

85. *Id.*

changed policies related to the aftermarket after a consumer had purchased the foremarket product.⁸⁶

Some circuits, led by the Ninth, focus on whether plaintiffs have rebutted the presumption that a defendant's consumers "make a knowing choice to restrict their aftermarket options" when they transact in the foremarket.⁸⁷ In *Newcal Industries v. Ikon Office*, the Ninth Circuit outlined four factors a plaintiff must satisfy: (1) the aftermarket must be "wholly derivative from and dependent on the [foremarket]," (2) the restraint must "relate only to the aftermarket," (3) the defendant's market power must "[flow] from its relationship with consumers," and (4) "[competition] in the initial market . . . does not necessarily . . . discipline anticompetitive practices in the aftermarket."⁸⁸

2. *Multi-sided Marketplaces: American Express*

The relevant antitrust market for some two-sided digital platforms may comprise both sides of the market. The platform analysis is of special relevance to technology companies.⁸⁹ In *Ohio v. American Express*, the Supreme Court considered the question in the context of credit card transactions.⁹⁰ The case concerned American Express's "anti-steering provision," which prohibited merchants from pushing customers to use forms of payment with lower processing fees as a condition of allowing the merchant to accept American Express credit cards.⁹¹ The Court held that the relevant market was neither the market for consumer credit cards, nor the market for merchants who accept credit card fees, but the market for *transactions*.⁹² Thus, the relevant analysis of antitrust harm should consider effects on both the consumers and merchants.⁹³ The Court held that the government had not stated a *prima facie* case because it had failed to demonstrate harm to the transactions market.⁹⁴

B. *Monopoly Power and Contribution to Monopoly*

Closely connected to market analysis is the examination of defendant's putative monopoly power in that market. Both direct and indirect evidence can prove the existence of such power. Direct evidence

86. Rosenthal, *supra* note 75, at 221–22.

87. *Newcal Indus., Inc. v. Ikon Off. Sol.*, 513 F.3d 1038, 1050 (9th Cir. 2008).

88. *Id.* at 1049–50.

89. See Herbert Hovenkamp, *Antitrust and Platform Monopoly*, 130 *YALE L.J.* 1952, 1968 (2021) (analyzing where a platform market is properly a two-sided market).

90. See generally *Ohio v. Am. Express Co.*, 585 U.S. 529 (2018).

91. *Id.* at 540–42.

92. *Id.* at 546.

93. *Id.*

94. *Id.* at 547.

shows that a defendant could profitably maintain supracompetitive pricing.⁹⁵ However, if such evidence is unavailable, indirect evidence—including a combination of high market share and high entry barriers—can show that a firm has monopoly power.⁹⁶

Possessing monopoly power and reaping its fruits are not illegal. Section 2 instead requires analyzing a defendant's conduct *acquiring* or *extending* monopoly power.⁹⁷ Courts ask if the conduct “reasonably appear[s] capable of making a significant contribution to . . . maintaining monopoly power.”⁹⁸ This reflects an important policy underlying American antitrust law—that the promise of being able to one day extract monopoly profits is an important incentive for companies to develop superior products or implement cost-saving measures.⁹⁹

The concerns with disincentivizing efficient practices limit the scope of conduct that raises antitrust liability under section 2. The Supreme Court has provided general guidance on when conduct crosses the threshold from enjoying the benefits of monopoly to illegal monopolization.¹⁰⁰ Some practices receive deference. Courts are unwilling

95. *United States v. Microsoft Corp.*, 253 F.3d 34, 53–54 (D.C. Cir. 2001) (“Where evidence indicates that a firm has in fact profitably [raised prices substantially above the competitive level] . . . the existence of monopoly power is clear.”). Such direct evidence is powerful and can even demonstrate monopoly power in cases where other evidence suggests that the market is competitive. *Cf. McWane v. Fed. Trade Comm’n*, 783 F.3d 814, 831–32 (11th Cir. 2015), *cert. denied*, 577 U.S. 1216 (2016) (finding that antitrust defendant McWane was a monopolist in the domestically produced iron pipe-fitting market despite a recent entry by a competitor; McWane had a hundred percent share in the market and dropped to ninety percent after competitor’s entry, and the market had significant entry barriers).

96. *See, e.g., Lenox MacLaren Surgical Corp. v. Medtronic, Inc.*, 762 F.3d 1114, 1123 (10th Cir. 2014) (concluding that it was not necessary for antitrust plaintiff to show that defendant had the “power to control prices” or “exclude competition”; showing that defendant with a sixty-two percent market share in a market with high entry barriers was sufficient to overcome summary judgment on issue of monopoly power).

97. *Pac. Bell Tel. v. Linkline Commc’ns*, 555 U.S. 438, 447–48 (2009) (“Simply possessing monopoly power and charging monopoly prices does not violate § 2; rather, the statute targets ‘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.’”) (citing *United States v. Grinnell*, 384 U.S. 563, 570–71 (1966)).

98. *Microsoft*, 253 F.3d at 79.

99. *See, e.g., Allied Orthopedic Appliances, Inc. v. Tyco Health Care Grp. LP*, 592 F.3d 991, 1000 (9th Cir. 2010) (affirming summary judgment in favor of defendant manufacturer of medical equipment on claims that introduction of a new patented system that was incompatible with competitors’ products because the “monopolist’s design change [was] an improvement” and therefore “necessarily tolerated by antitrust laws.”) (internal quotation marks removed).

100. Three late twentieth century section 2 cases suggest that an analysis of the conduct requires analysis of the *effects* or *intent* of the conduct. In *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585 (1985), the Court considered the reasons why a monopolist firm might engage in a particular type of conduct. The Court

to recognize “predatory innovation” theories of liability, which allege that a monopolist is developing products for the purpose of excluding rivals.¹⁰¹ Similarly, courts have held that a monopolist generally has a right to refuse to deal with rivals, though this right is not unlimited.¹⁰²

However, tying and exclusivity arrangements—both practices available to large technology platforms—are more likely to receive scrutiny. Tying is the conditioning of the sale or use of one product (the “tying” product, in which the business has monopoly power) on use of another product (the “tied product”). For example, Microsoft was found to be liable for conditioning the use of Windows (an operating system, the market for which Microsoft had a monopoly) on the use of Internet Explorer by making it impossible to remove the browser without rendering the Windows operating system unusable.¹⁰³ Exclusivity as a monopolization offense refers to unilaterally imposed policies on trading partners.¹⁰⁴

C. Justification and “Less Restrictive Means”

Once a plaintiff has presented a prima facie case, defendants have an opportunity to present pro-competitive justifications. In section 2 claims, courts differ in their approach to analyzing pro-competitive

reasoned that conduct that is exclusionary on “some basis other than efficiency” may draw antitrust liability. *Id.* at 605. A key factor in finding liability was the monopolist’s refusal to allow a plaintiff to purchase its products at full price. *Id.* Seven years later, in *Eastman Kodak v. Image Tech. Servs.*, 504 U.S. 451, 483 (1992), the Court instead asked if action had “valid business justifications.” Most recently, the Court, characterizing the *Aspen* decision as “at or near the outer boundary” of section 2 liability, asked if defendant’s conduct “suggested a willingness to forsake short-term profits to achieve an anticompetitive end.” *Verizon Commc’ns Inc. v. L. Offs. of Curtis V. Trinko, LLP*, 540 U.S. 398, 409 (2004).

101. See *Microsoft*, 253 F.3d at 74–75 (declining to impose liability on Microsoft, a monopolist in the operating system market, for developing a version of the Java Virtual Machine that was unique to Windows in order to make it more difficult for Java developers to write cross-platform programs, which Microsoft believed would threaten its monopoly).

102. See *Trinko*, 540 U.S. at 409 (arguing that the *Aspen* decision represented a limited circumstances in which a refusal deal constituted illegal monopolization and emphasizing that in *Aspen* the refusal to deal came after the antitrust defendant had a previous relationship with its rival and was making a decision that could only be justified by long-term “dreams” of monopoly).

103. See, e.g., *Microsoft*, 253 F.3d at 65–66 (declining to overturn the district court’s findings that as part of a scheme to protect monopoly in operating systems market, Microsoft technologically integrated Internet Explorer and Windows such that removal of the browser would “cripple” the operating system).

104. See, e.g., *United States v. Dentsply Intern., Inc.*, 399 F.3d 181, 196 (3d Cir. 2005) (finding that a monopolist in the artificial teeth market engaged in illegal monopolization by imposing a policy that all downstream dealers could not offer competing products).

justifications. Some examine justifications in the analysis of defendant's conduct in the prima facie case.¹⁰⁵ Others instead borrow from the "burden shifting" framework under the section 1 "rule-of-reason" standard and balance the competitive benefit against the anticompetitive harm to determine the overall impact of the monopolizing conduct.¹⁰⁶

Cognizable justifications must have a basis in improving consumer welfare. Maximizing consumer welfare is the consensus goal of modern antitrust law; therefore, conduct that decreases consumer surplus will receive greater scrutiny by an antitrust court.¹⁰⁷ This standard enables easier analysis of tradeoffs inherent in any antitrust case.¹⁰⁸ Only in the rarest circumstances will courts consider non-economic justifications, but these are exceptions rather than the rule.¹⁰⁹

However, the consumer welfare standard presents difficult questions for courts to answer.¹¹⁰ Some effects (like price impacts) are easily quantified. However, as Professor Rebecca Allensworth points

105. See cases cited, *supra* note 100.

106. Under the "rule of reason" in section 1, an antitrust plaintiff carries an initial burden of showing the prima facie case. John M. Newman, *Procompetitive Justifications in Antitrust Law*, 94 IND. L.J. 501, 507 (2019). The burden then shifts to the defendant to proffer pro-competitive justifications for the conduct. *Id.* Some courts then balance the pro- and anti-competitive effects of the conduct to decide whether to impose liability. See, e.g., *United States v. Microsoft Corp.*, 253 F.3d 34, 59 (D.C. Cir. 2001) (describing that if a monopolist's justification "stands un rebutted," then the plaintiff bears the burden—similar to the plaintiff's burden under the rule of reason in section 1—of showing that the anti-competitive effects are outweighed).

107. Newman, *supra* note 106, at 505, 510.

108. *Id.* at 529–30 (discussing the "intractable . . . commensurability problems" created by justifications that concern the non-welfare effects of conduct).

109. See The Hon. Douglas H. Ginsburg, *Balancing Unquantified Harms and Benefits in Antitrust Cases Under the Consumer Welfare Standard*, 2019 COLUM. BUS. L. REV. 824, 834 (finding the Third Circuit case of *United States v. Brown University*, 5 F.3d 658, 661–63 (3d. Cir. 1993), in which the court accepted the social goal of promoting access to education as a possible justification for an agreement between well-regarded universities to only provide need-based financial aid, to be the only case to accept non-economic justifications); see also *Nat'l Soc'y of Pro. Eng'rs v. United States*, 435 U.S. 679, 694–95 (1978) (refusing to recognize the safety rationale advanced by a professional organization's ban on competitive price bidding, calling the justification "nothing less than a frontal assault on the basic policy of the Sherman Act").

110. Rebecca H. Allensworth, *The Commensurability Myth in Antitrust*, 69 VAND. L. REV. 1, 4 (2016) ("What are typically offered in antitrust cases as procompetitive and anticompetitive effects are rarely two sides of the same coin, and there is no such monolithic thing as "competition" that is furthered or impeded by competitor conduct. In fact, competition—whether defined as a process or as a set of outcomes associated with competitive markets—is multifaceted. Antitrust law often must trade off one kind of competition for another, or one salutary effect of competition (such as price, quality, or innovation) for another. And in so doing, antitrust courts must make judgments between different and incommensurate values . . .").

out, other dimensions of competition elude quick quantification.¹¹¹ A common tradeoff is price and quality or variety. Though quality changes can be quantified as “quantity-adjusted price,” this analysis can suffer from incomplete data about consumer responses to quality changes and imperfect understandings about the inherent value of variety.¹¹² Separately, conduct may result in short-term losses of welfare and long-term gains from innovation.¹¹³ Antitrust law also does not provide adequate guidance on how to handle trade-offs between different groups of consumers.¹¹⁴

Courts can avoid the balancing inquiry by analyzing alternatives to the charged conduct and determining whether a defendant could achieve the same outcome through a less restrictive alternative (“LRA”).¹¹⁵ Recently, the Supreme Court in *National Collegiate Athletic Association v. Alston* held that businesses are “not [required] . . . to use anything like the *least* restrictive means.”¹¹⁶ This pronouncement has not foreclosed LRA analysis. The existence of an LRA can support a finding of liability if the alternative “represented a significantly . . . less restrictive means of achieving the same procompetitive benefits” as the challenged conduct.¹¹⁷ However, the *Alston* Court warned that business judgments of defendants deserved deference.¹¹⁸ Therefore, even though a LRA analysis could avoid balancing issues, the bar for imposing liability is high.

II. THE CASE AGAINST APPLE

This Part will explore the viability of a section 2 claim against Apple for its pro-privacy decisions. This conduct includes requiring third-party applications to move from an “opt-out” to an “opt-in” user

111. *Id.* at 20.

112. *Id.*

113. *Id.* at 20–22.

114. *Id.* at 24. *But see* *Ohio v. Am. Express Co.*, 585 U.S. 529, 542–47 (2018) (holding that in a two-sided transaction market, a proper antitrust analysis required focusing not only on the harm to one side of the market—in this case, merchants that agree to accept American Express credit card payments—but also on the benefits to the consumers on the other side of the market).

115. *See* C. Scott Hemphill, *Less Restrictive Alternatives in Antitrust Law*, 116 COLUM. L. REV. 927, 937–42 (2016) (discussing in detail the use of the LRA test).

116. *Nat’l Collegiate Athletic Ass’n v. Alston*, 594 U.S. 69, 98 (2021) (emphasis added).

117. *Id.* at 103; *see also* *Epic Games, Inc. v. Apple Inc.*, 559 F. Supp. 3d 898, 1040–42 (N.D. Cal. 2021) (finding that plaintiff Epic Games’ suggestion that Apple adopt a different model for distribution of applications did not meet the burden of showing that the alternatives are “virtually as effective” as the challenged distribution model); *Epic Games, Inc. v. Apple Inc.*, 67 F.4th 946, 990–93 (9th Cir. 2023) (affirming the district court’s conclusions).

118. *Alston*, 594 U.S. at 101–02.

permission standard, mandating that these applications use a specific prompt asking if users want their activity tracked, and changing the IAP policy to require boosted posts to use the IAP system.

The analysis demonstrates how more privacy can lead to antitrust harm. The claim implicates doctrinal intricacies in antitrust law; some make it easier to find liability for technology platform conduct, while others make it more difficult. A court considering this claim might find that Apple's conduct here does not give rise to liability.¹¹⁹ This does not imply absence of competitive harm. Privacy might be socially valuable or what users want; antitrust law does not tell us how to consider this value when companies wield privacy offensively.

A. *Apple, The Monopolist*

Antitrust analysis begins with determining where Apple might be a monopolist. The market for mobile devices is a natural starting point. Even if Apple does not have monopoly power in this market, the analysis is instructive in analyzing the subsequent markets. The smartphone market is a “foremarket” or “a market in which there is competition for a long-lasting product from which demand for a second product derives.”¹²⁰ This second product is the “aftermarket.”¹²¹ The relevant aftermarket is the “mobile advertising platform (“MAP”) market”, defined as the market consisting of the package of data, development platforms, and services that mobile operating system manufacturers offer to developers building advertising-supported applications. Two theories support a finding that Apple holds monopoly power in this market. First, the MAP on iOS devices is controlled wholly by Apple and constitutes a single-brand aftermarket under *Eastman Kodak* and its progeny. Second, the iOS MAP is a relevant submarket of the broader mobile advertising platform market under *Brown Shoe*. The Court's ruling in *American Express* does not alter this analysis.

1. *The Smartphone Market*

Apple operates in a variety of software and hardware markets. The company manufactures and sells desktop and laptop computing devices, smartphones, tablets, smartwatches, wireless headphones, digital media players, smart speakers, and a whole host of accessories compatible

119. See Ikeda, *supra* note 47 (speculating that Apple modified its original plan to avoid regulatory scrutiny).

120. Epic Games, Inc. v. Apple Inc., 559 F. Supp. 3d 898, 944 n.244 (N.D. Cal. 2021).

121. *Id.*

with its flagship products.¹²² Apple has developed the operating systems for its devices, including the iOS operating system for the iPhone¹²³ and the iPadOS operating system for the iPad.¹²⁴ Both platforms support independent development of applications.¹²⁵

Apple likely does not hold monopoly power in the global or United States smartphone markets. The company currently enjoys only a bare majority of smartphone sales in the United States, though this number represents a recent milestone.¹²⁶ This likely does not rise to the level needed for monopoly power, even without considering other factors.¹²⁷ Apple has a higher share when limiting the market to only expensive devices, resulting in a closer case. A recent report found that in the so-called “ultra-premium” segment of the market, representing devices costing over \$1,000, Apple currently accounts for seventy-eight percent of sales globally.¹²⁸ It is unclear whether this translates to similar market share within the United States.

It is unlikely that a subset of the smartphone market is sufficiently distinct to constitute a separate product market. The practical indicia outlined by the *Brown Shoe* Court can determine whether Apple’s

122. *Store*, APPLE, <https://www.apple.com/store> [https://perma.cc/WEP2-UFLT].

123. *iOS 17*, APPLE, <https://www.apple.com/ios/ios-17/> [https://perma.cc/G82L-BKNA].

124. *iPadOS 17*, APPLE, <https://www.apple.com/ipados/ipados-17/> [https://perma.cc/QFT4-4T2U].

125. *Developer*, APPLE, <https://developer.apple.com/> [https://perma.cc/4YS6-ZXJC].

126. Ben Lovejoy, *iPhone US Market Share Hits All-Time High, Overtaking Android; Dominates Global Premium Sales*, 9TO5MAC (Sept. 2, 2022, 7:11 AM), <https://9to5mac.com/2022/09/02/iphone-us-market-share/> [https://perma.cc/TR5P-5X9E]. Therefore, though Apple does not have power now, it may if this trend continues.

127. Typically, antitrust courts require larger shares before even considering factors like barrier to entry. Market shares under sixty percent are typically not sufficient. *See, e.g.,* *Image Tech. Servs., Inc. v. Eastman Kodak Co.*, 125 F.3d 1195, 1206 (9th Cir. 1997) (stating that in an analysis of market share to establish monopoly power, “[courts] generally require a 65% market share”) (citing *Am. Tobacco Co. v. United States*, 328 U.S. 781, 797 (1946)); *see also* *Lenox MacLaren Surgical Corp. v. Medtronic, Inc.*, 762 F.3d 1114, 1123–24 (10th Cir. 2014) (holding that a sixty-two percent market share in a market with high entry barriers was sufficient to overcome summary judgment on issue of monopoly power); *Fed. Trade Comm’n v. Facebook, Inc.*, 581 F. Supp. 3d 34, 46–47 (D.D.C. 2022) (upholding FTC’s suit against Facebook for section 2 violations and accepting agency’s proof of monopoly power in the “Personal Social Networking” market in part because Facebook’s share of monthly active users (MAUs) of PSN services exceeded sixty-five percent for about ten years).

128. Press Release, Counterpoint Rsch., *Premium Smartphone Average Selling Price Reaches Record Q2 High* (Sept. 1, 2022), <https://www.counterpointresearch.com/insights/premium-smartphone-asp-reaches-record-q2-high/> [https://perma.cc/77VT-39ZC] [hereinafter Counterpoint Press Release]. Additionally, Apple’s control of the global “premium” segment, representing devices costing over \$400, is fifty-seven percent and growing. *Id.*

“ultra-premium” share constitutes a separate market.¹²⁹ Though at least one report¹³⁰ has identified the ultra-premium segment as separate from broader mobile device sales, the market likely not “[publicly recognized] . . . as a separate economic entity” or sold by “specialized vendors.”¹³¹ Apple (like many smartphone vendors) sells both ultra-premium and non-ultra-premium phones, with the lowest-priced iPhone selling for \$429.¹³² The more expensive phones do not have “peculiar” features and uses¹³³ but instead have more advanced versions of features that cheaper iPhones have.¹³⁴ The consumers of ultra-premium phones may be unique; these customers exhibit unique shopping behaviors that seem relatively impervious to economic headwinds.¹³⁵ This may still be insufficient, without more, to delineate ultra-premium phones as a distinct market in which Apple has a monopoly.¹³⁶

2. *The Mobile Advertising Platform Market*

A “mobile advertising platform” constitutes any product that supports the development of advertisement-supported applications for mobile devices through developer tools, app distribution, and access to necessary data inputs. In addition to the platform associated with Apple’s iOS, the only other major player in this market is Google’s Android platform.¹³⁷ Apple’s products in this market include the App Store distribution, the necessary data identifiers to enable targeted

129. See Part II.A, *infra*.

130. Counterpoint Press Release, *supra* note 128.

131. *Brown Shoe Co. v. United States*, 379 U.S. 294, 325 (1962).

132. *iPhone SE*, <https://www.apple.com/iphone-se/> [<https://perma.cc/U9HJ-8SWZ>].

133. *Brown Shoe Co.*, 379 U.S. at 325 (1962).

134. See *Compare iPhone Models*, APPLE, <https://www.apple.com/iphone/compare/?modelList=iphone-14-pro,iphone-14> [<https://perma.cc/RN4H-T7JU>] (identifying differences in the zoom and megapixel characteristics between the base and premium tier iPhone cameras and the “Dynamic Island” as a unique feature of the more expensive iPhone model).

135. Counterpoint Press Release, *supra* note 128.

136. While the evidence concerning ultra-premium shoppers is instructive, courts may require more careful analysis of the price effects, including evidence that prices move in response to competition. See *Fed. Trade Comm’n v. Whole Foods Mkt., Inc.*, 548 F.3d 1028, 1039–40 (D.C. Cir. 2008) (holding that “premium natural and organic supermarkets” constituted a market distinct from the supermarket market in part because of the price behavior of Whole Foods and Wild Oats supermarket chains based on the presence or absence of the other in a particular geographic region). A regulator could conduct economic analysis to demonstrate Apple’s ultra-premium pricing strategy relative to competitors in the ultra-premium market. However, such analysis should be done carefully to avoid the “cellophane fallacy” described in note 80, *supra*.

137. See Michael Katz & Jonathan Sallet, *Multisided Platforms and Antitrust Enforcement*, 127 YALE L.J. 2142, 2155–56 (2018) (describing how developers of mobile phone apps participate in the two dominant platforms: Apple and Android).

advertising, and the software packages necessary to build advertising-supported applications. Two possible theories support limiting this market to only the iOS MAP: as a single-brand aftermarket under *Eastman Kodak*, or as a submarket of the broader digital advertising market under *Brown Shoe*. Though the market brings together two parties, the *American Express* holding does not apply.

a. *Eastman Kodak Aftermarket*

Given a product foremarket of smartphones, MAPs constitute an aftermarket. Demand for mobile advertising platforms only exists because people spend significant periods of time on mobile phones. Under *Eastman*, we can consider whether, for a particular smartphone, consumers are well-informed of platform-specific MAP policies and whether the switching costs are high. It is unclear if users are aware and consider MAP policies *ex ante*. On one hand, iPhone users appear to feel an abstract sense of security to a greater extent than Android users.¹³⁸ However, it is well-documented that users are confused by language related to related to privacy and privacy tradeoffs.¹³⁹ For example, restrictions on advertising may result in a higher percentage of apps available for pay.¹⁴⁰ Additionally, even though users may ascribe positive economic value to free services, they may be unwilling to pay for them.¹⁴¹ Available data indicate that switching costs are high: a recent survey found that customers were generally reluctant to switch from one mobile operating system to another, with slightly more switching

138. Bartosz Szczygiel, *iPhone vs Android Users: Key Differences*, NETGURU (Dec. 13, 2022), <https://www.netguru.com/blog/iphone-vs-android-users-differences> [<https://perma.cc/R6GW-5ECA>].

139. See Brooke Auxier et al., *Americans and Privacy: Concerned, Confused and Feeling a Lack of Control over Their Personal Information*, PEW RSCH. CTR. (Nov. 15, 2019), <https://www.pewresearch.org/internet/2019/11/15/americans-and-privacy-concerned-confused-and-feeling-lack-of-control-over-their-personal-information/> [<https://perma.cc/MH6F-UKCV>] (finding that only twenty-two percent of Americans report reading privacy policies either “always” (nine percent) or “often” (thirteen percent), while seventy-four percent read them “sometimes” (thirty-eight percent) or “never” (thirty-six percent)).

140. Reinhold Kesler, *The Impact of Apple’s App Tracking Transparency on App Monetization* at *1 (Oct. 26, 2022), https://papers.ssrn.com/sol3/paperp.cfm?abstract_id=4090786 [<https://perma.cc/KH7Z-8NCW>].

141. Pinar Akman, *A Web of Paradoxes: Empirical Evidence on Online Platform Users and Implications for Competition and Regulation in Digital Markets*, 16 VA. L. & BUS. REV. 217, 259–60 (2022) (reporting results of a survey demonstrating that while fifty percent of respondents positively value social media platforms, eighty percent are not willing to pay for these services).

behavior from Android to iOS.¹⁴² Additionally, just as in *Eastman*, Apple's changes to its IAP policy reflect a change in a long-standing policy of not profiting on advertising revenue.

A *Newcal* analysis supports the viability of the iOS MAP as a viable antitrust market. First, the MAP in iOS is "wholly derivative of" and "dependent on" the iPhone.¹⁴³ The MAP on iOS is certainly derivative of the iPhone, as it relies on the software packages and data inputs specific to iOS devices.¹⁴⁴ Additionally, the MAP market is dependent on iPhone because it relies on user demand for iPhone products; without iPhone users, the market would not exist.¹⁴⁵ Second, the conduct at issue relates only to the aftermarket.¹⁴⁶ The prompting requirements dictate how developers must both build applications and use data inputs, and the IAP rule change relates to the distribution of applications.¹⁴⁷ Third, Apple's power in this aftermarket comes from its relationship with purchasers and users of iPhones¹⁴⁸ for reasons similar to the first *Newcal* factor. Finally, competition in the mobile device market likely does not police competition in the MAP market due to the switching costs described above.¹⁴⁹

Though one circuit has expressed skepticism on defining an aftermarket based on a foremarket of mobile operating systems, the concerns identified do not apply to this market definition. In *Epic Games v. Apple*,¹⁵⁰ the court considered a claim against Apple based in part on a pleading that relied on Apple's operating system as a separate market.¹⁵¹ However, the *Epic Games* court considered operating systems as a *consumer* market and concluded that operating systems was not a separate market from smartphones generally because users do not make decisions about purchasing operating systems but rather make decisions about smartphones generally.¹⁵² This criticism does not apply to mobile

142. Eric Griffith, *Why Do People Switch Between Mobile Operating Systems*, PC MAGAZINE (Aug. 23, 2018), <https://www.pcmag.com/news/why-do-people-switch-between-mobile-operating-systems> [<https://perma.cc/G95V-NQDF>].

143. *Newcal Indus., Inc. v. Ikon Off. Sol.*, 513 F.3d 1038, 1049 (9th Cir. 2008).

144. *See* Part I.B, *infra*.

145. *Id.*

146. *Newcal*, 513 F.3d at 1050.

147. *See* Part I.B, *infra*.

148. *Newcal*, 513 F.3d at 1050.

149. *See* Griffith, *supra* note 142 (summarizing a study of 2,500 U.S. consumers and noting that nearly three quarters do not switch mobile operating systems).

150. 559 F. Supp. 3d 898 (N.D. Cal. 2021), *aff'd in part, rev'd in part and remanded*, 67 F.4th 946 (9th Cir. 2023).

151. *Id.* at 955.

152. *See id.* ("Quite simply, it is illogical to argue that there is a market for something that is not licensed or sold to anyone. Competition exists for smartphones which are more than just the operating system. Features such as battery life, durability,

advertising development platforms. Developers do develop separate applications for both platforms and do so specifically because they aim to reach the *users of the operating system*.¹⁵³

While Apple could rely on the lifecycle pricing argument made by the defendant in *Eastman Kodak*, a court may reject this argument as it did in that case. There are two possible groups whose lifecycle pricing considerations might police policies in the MAP market: MAP developers and smartphone customers. Even the largest developers did not compel Apple to scale back its plans; Apple and Meta publicly disagreed about the right approach to user privacy.¹⁵⁴ Though it did delay the launch of ATT, Apple did not back down or change its core features.¹⁵⁵ Additionally, advertisers demand access to the broadest audience possible, limiting the extent to which a developer can discipline changes in quality in the MAP market. Application users likely will not exert pressure. It is unclear if users are sufficiently sophisticated and have homogenous enough preferences to pressure Apple to change policies.¹⁵⁶ Thus, just as printer users were unable to police the prices charged in the replacement parts aftermarket, lifecycle pricing of smartphones likely does not exert competitive pressure on the MAP aftermarket.

b. A Brown Shoe (Sub)market

Per the *Brown Shoe* factors, the iOS mobile development advertising platform is a distinct market deserving of antitrust concern. Courts look to economic realities rather than formalist distinctions in describing markets.¹⁵⁷

ease of use, cameras, and performance factor into the market. Consumers should be able to choose between the type of ecosystems and antitrust law should not artificially eliminate them. In essence, Epic Games ignores these marketplace realities because, as it presumably knows, Apple does not have market power in the smartphone market. (Rather Apple only has 15 percent of global market share in 2020.”). The circuit court did not disrupt this finding. *Epic Games*, 67 F.4th at 973–80.

153. See Katz & Sallet, *supra* note 137, at 2156 (“For instance, it is not possible for an app developer to reach the user of an Android operating system without building an app that works with Android. From an app developer’s perspective, Android has a monopoly in the provision of access to Android smartphone users . . .”).

154. Newman, *supra* note 41.

155. *Id.*

156. Users do not report consistent responses when asked about how much they value applications and how much they might be willing to pay for them. *Cf.* Akman, *supra* note 141, at 259–60; this confusion likely dilutes any desire to consider lifecycle pricing prior to purchasing a mobile device.

157. *Eastman Kodak Co. v. Image Tech. Servs., Inc.*, 504 U.S. 451, 466–67 (1992) (“Legal presumptions that rest on formalistic distinctions rather than actual market realities are generally disfavored in antitrust law. . . . In determining the existence of

Industry experts recognize mobile advertising as deserving of unique recognition within the broader digital advertising space. Mobile advertisements are uniquely able to reach certain sets of consumers and drive business outcomes.¹⁵⁸ In the digital marketing ecosystem, mobile-first vendors are distinct from providers of digital advertising services generally. Mobile advertising has a distinct growth trajectory as a segment of the advertising market. In 2022, digital advertising is estimated to have constituted sixty-two percent of all spending on advertising and is projected to have grown by nearly fifty percent between 2021 and 2024.¹⁵⁹ Mobile advertising represents the largest portion of this growth; of the estimated \$244 billion in the projected total growth in digital advertising, over sixty-three percent is expected to come from an increase in advertising on mobile devices.¹⁶⁰ Analysis often differentiates mobile internet users from desktop users; several emerging markets are mobile-first and are coming online primarily through mobile devices.¹⁶¹ As a result, mobile browsing accounts for nearly sixty percent of global website traffic and over half of website traffic in the United States.¹⁶² Industry analysts focus on and measure mobile advertising as a distinct engine of economic growth.¹⁶³

The MAP market on iOS is distinct because Apple's users are unique. Smartphone users typically only use one of the two major mobile operating systems; developers build applications for both platforms in order to capture the greatest number of users.¹⁶⁴ Historically, the population of iPhone owners and Android owners has looked very different. iPhone users are wealthier, spend more on discretionary items, and tend to spend more on in-app purchases, making them much more valuable acquisition targets for consumer-facing advertisers.¹⁶⁵ This has

market power . . . this Court has examined closely the economic reality of the market at issue . . ."); *see also* *Brown Shoe Co. v. United States*, 370 U.S. 294, 325 (1962) (referencing "practical indicia" as probative of a market definition).

158. *See* Peep Laja, *What You Need to Know About Mobile Users and Their Shopping Behavior*, CXL (Dec 23, 2022), <https://cxl.com/blog/mobile-internet-users-and-their-shopping-behavior/> [<https://perma.cc/6BCD-KFVZ>] (describing how mobile devices have changed the retail purchasing landscape).

159. J.G. Navarro, *Global Ad Spend Distribution 2022, By Medium*, STATISTA (Jan. 6, 2023), <https://www.statista.com/statistics/376260/global-ad-spend-distribution-by-medium/> [<https://perma.cc/D382-SPYF>].

160. *Id.*

161. Laura Ceci, *Share of Global Mobile Website Traffic 2015-2022*, STATISTA (Jan 25, 2024), <https://www.statista.com/statistics/277125/share-of-website-traffic-coming-from-mobile-devices/> [<https://perma.cc/B7AR-VE87>].

162. *Id.*

163. *See* notes 163–67, *infra*.

164. Katz & Sallet, *supra* note 137, at 2155–56.

165. Szczygiel, *supra* note 138.

translated to vast differences in return-on-investment; a study from 2013 found that Facebook advertisements generated 1,790% more return on iPhone devices versus Android.¹⁶⁶ As one court noted, “‘distinct customers,’ paying ‘distinct prices,’ may constitute a recognizable [market].”¹⁶⁷

Available data does not show strong substitution behavior for the iPhone either for users of applications or MAP developers. Both major platforms are remarkably “sticky,” and users do not often switch from one to the other.¹⁶⁸ Mobile purchasing activity is a unique locus of commercial behavior and continues to grow in importance relative to desktop purchasing or in-store behavior.¹⁶⁹ Therefore, for developers, iOS and Android MAPs are not viewed to be substitutes, but rather complements. Developers build products for both platforms.¹⁷⁰ The need to reach a unique set of users who are increasingly relying on their mobile phones, the brand of which they rarely change, all confirm non-substitutability between the iOS MAP and other platforms.

c. One Side or Two?

Apple may counter that even under a market definition that limits the analysis to iOS, the market is two-sided under *Ohio v. American Express*. Under this theory, Apple is a platform connecting one of the following: MAPs to end users, MAPs to advertisers, or advertisers to end users. Thus, any antitrust theory of harm must consider harm to the entire market. This analysis stretches the holding of the *American Express* Court. The holding was narrow and did not reach every two-sided market.¹⁷¹ The Court intended to only reach platforms that “facilitate a single, simultaneous transaction between participants.”¹⁷² While credit card platforms may qualify (as would platforms that provide instantaneous connection between users and providers, like Uber), the users of MAP applications are not typically engaged in only

166. John Koetsier, *Facebook Ad Profit a Staggering 1,790 Percent More on iPhone than Android*, VENTUREBEAT (Oct. 16, 2013), <https://venturebeat.com/social/facebook-ad-profit-a-staggering-1790-more-on-iphone-than-android/> [<https://perma.cc/manage/create?folder=58497>].

167. Fed. Trade Comm’n v. Whole Foods Mkt., Inc., 548 F.3d 1028, 1039 (D.C. Cir. 2008) (citing *Brown Shoe Co. v. United States*, 379 U.S. 294, 325 (1962)).

168. See Griffith, *supra* note 142; Epic Games, Inc. v. Apple Inc., 559 F. Supp. 3d 898 (N.D. Cal. 2021) (“[O]nly about 2 percent of iPhone users [switch] to Android each year . . .”).

169. See, e.g., Laja, *supra* note 158.

170. Katz & Sallet, *supra* note 137, at 2155–56.

171. Hovenkamp, *supra* note 89, at 1968.

172. *Id.* (citing *Ohio v. Am. Express Co.*, 585 U.S. 529, 545 (2018)).

instantaneous connection.¹⁷³ The *American Express* Court explicitly disclaimed advertising business models as applicable to two-sided markets.¹⁷⁴

B. *Monopolizing Conduct and Theory of Harm*

Assuming Apple is a monopolist in the iOS MAP market, a regulator must characterize Apple's behavior as an illegal extension of Apple's monopoly. Two potential characterizations emerge. First, by refusing to provide access to user data under equivalent conditions, Apple is foreclosing access to a necessary input and thereby raising MAP developers' costs. Second, Apple is attempting to leverage its monopoly to extend its reach into the downstream mobile advertising market, hurting competition in the mobile advertising market. Under either theory, we can examine the effect on MAP developers and the effect on users.

1. *Foreclosure*

Under a foreclosure theory, Apple's conduct could constitute a type of monopolistic tie. A monopolist in a "tying" product market conditions use of the tying product on a second product (a "tied" product).¹⁷⁵ Under this theory, an allegation of improper monopolization characterizes the tying of user data on use of the popup functionality within the MAP. Apple's tying extends its monopoly in the MAP market; relative to Apple, MAP developer firms lose the opportunity to acquire data necessary to run advertising platforms.¹⁷⁶ A firm attempting to build a marketing platform to reach the unique group of iOS users would need to re-construct that user base, thus raising its costs.¹⁷⁷ The impact on Meta's business, discussed below, is illustrative of this harm.

173. *Id.*

174. *Id.* (noting that "In *Amex* . . . [t]he Court gave the example of '[n]ewspapers that sell advertisements'" as an example of a market that did not fit under that Court's paradigm).

175. *See* Part II.C, *infra*.

176. *See* *United States v. Microsoft Corp.*, 253 F.3d 34, 79 (D.C. Cir. 2001) (arguing that the causation element of contribution to monopoly does not require direct proof that a competitor *will* achieve monopoly power, but rather if the anticompetitive conduct "is the type . . . that is reasonably capable of contributing significantly to a defendant's continued monopoly power) (internal quotation marks omitted).

177. *Cf.* *Viamedia, Inc. v. Comcast Corp.*, 951 F.3d 429, 452–53 (7th Cir. 2020) (recognizing that "various types of conduct that have the potential to harm competition" and conduct is exclusionary if it "[impairs] rivals' opportunity to compete in a way that is inconsistent with competition on the merits") (internal quotation marks omitted). The phrase "competition on the merits" is often used in antitrust jurisprudence, as is typically contrasted with actions that have no valid business justification. *See, e.g.*,

A potential counterargument to a foreclosure theory is the general right of Apple to refuse to deal with rivals.¹⁷⁸ A foreclosure theory characterizes Apple and MAP developers as rivals in the same market. A defense to the prima facie case could invoke the right to refuse to deal; indeed, several prominent MAP competitors have significant market power themselves.¹⁷⁹ However, the *Trinko* Court left a small aperture for plaintiffs to bring refusal to deal claims under *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*¹⁸⁰ The Court characterized *Aspen Skiing* as within the outer bounds of antitrust liability and held that two features of the fact pattern supported a finding of liability: the “unilateral termination of a . . . voluntary course of dealing” (which suggested “a willingness to forsake short-term profits”) and the subsequent “unwillingness to” engage in mutually beneficial cooperation.¹⁸¹

Apple’s conduct may still fit under the pattern of refusal to deal under *Aspen Skiing*. First, like the ski lift operators in *Aspen*, Apple and MAP developers have historically worked jointly to make ad-supported applications available in a way that benefited both parties. Apple provides the developer tools and distribution, and developers work to create applications that make the iPhone an attractive device.¹⁸² Additionally, Apple’s activity was unilateral and was criticized heavily by MAP developers.¹⁸³ There is no record of Apple rebuffing cooperation with MAP developers; however, further investigation could reveal rebuffed attempts to cooperate.

2. Monopolistic Leveraging

Apple’s conduct can instead be characterized not by its foreclosing effect, but as an attempt to leverage its existing monopoly to gain market

WILLIAM HOLMES & MELISSA MANGIARACINA, ANTITRUST LAW HANDBOOK § 3:5 (Nov. 2023), Westlaw.

178. See *Verizon Commc’ns v. Law Offs. of Curtis V. Trinko, LLP*, 540 U.S. 398, 409–10 (2004) (arguing that firms have a right to refuse to deal with rivals).

179. See, e.g., *Fed. Trade Comm’n v. Facebook, Inc.*, 581 F. Supp.3d 34, 47 (D.D.C. 2022) (acknowledging that the FTC had plausibly shown that Facebook held monopoly power in the “Personal Social Networking” market).

180. 472 U.S. 585 (1985). In *Aspen Skiing*, one ski operator owned three of four ski mountains in a market, while the other operator owned the other. *Id.* at 589–91. The two companies sold a packaged ski lift ticket, but the market leader (*Aspen Skiing Corporation*) unilaterally terminated the agreement and refused to allow *Aspen Highland* to purchase *Aspen Skiing* lift tickets at retail price. *Id.* at 593.

181. *Trinko*, 540 U.S. at 409.

182. See also Griffith, *supra* note 142.

183. Matt Burgers, *Why iOS 14.5 Is Apple’s Biggest Privacy Update Yet*, WIRED (Apr. 27, 2021), <https://www.wired.co.uk/article/ios-14-5-update-app-tracking> [<https://perma.cc/C2U3-8M58>] (describing criticism from advertisers and advertising technology companies, including the public disagreement between Meta and Apple).

power in another market. The Second Circuit first established this theory in *Berkey Photo v. Eastman Kodak Co.*¹⁸⁴ There, the court held that the Sherman Act supported a theory of leveraging even if the monopolist did not actually have or intend to gain monopoly power in the secondary market.¹⁸⁵ Further refining this theory, the Second Circuit held in *Virgin Atlantic Airways Ltd. v. British Airways PLC* that a leveraging theory must involve two separate markets and must allege sufficient facts to show harm.¹⁸⁶ Some courts require that the conduct will “[threaten] monopolization.”¹⁸⁷ The Supreme Court has not squarely addressed monopolistic leveraging, though it has expressed doubt of its viability in establishing antitrust liability.¹⁸⁸

Even if a court accepts leveraging generally, a leveraging claim may not succeed here. The second market would be the mobile advertising market.¹⁸⁹ Apple currently does not hold market power in this market; its share is much smaller than that of major competitors, and it is unlikely that Apple will reach the same scale as market leaders.¹⁹⁰ However, as shown below, Apple’s conduct did or will result in injury to several parties in the mobile advertising ecosystem, thus satisfying the *Berkey-Virgin* standard. Apple could claim that its conduct indicates a commitment to privacy rather than an attempt to secure market power; it has already publicly asserted this defense, pointing to its own, distinct prompt as evidence of its motives.¹⁹¹

3. *Effects of Conduct*

Under either a foreclosure or a leveraging theory, the impact on MAP developer and end advertiser costs constitutes anticompetitive harm. The effect of Apple’s IDFA change was immediate and acute.

184. *Berkey Photo, Inc. v. Eastman Kodak Co.*, 603 F.2d 263 (2d Cir. 1979).

185. *Id.* at 276.

186. *Virgin Atl. Airways Ltd. v. Brit. Airways PLC*, 257 F.3d 256, 272 (2d Cir. 2001).

187. *See, e.g., Fineman v. Armstrong World Indus., Inc.*, 980 F.2d 171, 205 (3d Cir. 1992).

188. *See Verizon Commc’ns v. Law Offs. of Curtis V. Trinko, LLP*, 540 U.S. 398, 415 n.4 (2004) (discussing, in dicta, that the Court of Appeals erred in not considering whether monopolistic leveraging had a “dangerous probability of success” in leveraging a secondary market to monopoly) (citing *Spectrum Sports, Inc. v. McQuillan*, 506 U.S. 447, 459 (1993)). Because the Court found that the conduct at issue was not anticompetitive in the first instance, it did not need to decide the question of whether leveraging constituted a valid theory of harm. *Id.*

189. *See* Part I.B, *infra*.

190. Stokel-Walker, *supra* note 53.

191. Jerath, *supra* note 47.

Over half of users opted out of tracking when shown the prompt.¹⁹² Large advertising-supported companies experienced huge losses in revenue.¹⁹³ The subsequent effect on end advertisers has been similarly pronounced. For many companies, especially those with direct-to-consumer (“DTC”) business models, online advertising helps both build their brands and drive sales.¹⁹⁴ The changes drove more expensive advertising on Facebook and difficulties in measuring the effectiveness of digital advertising; DTC companies are “spending more for worse results, eating into margins.”¹⁹⁵

In addition to costs to developers, Apple’s conduct may increase costs to end users. Apple’s conduct may push developers to switch business models from free, advertising-supported applications to paid applications. Early research seems to indicate that there is an increase in the number of paid applications¹⁹⁶ and a reduction in the fraction of ad-only supported applications, with particular impact on news

192. See *IDFA and Big Tech Impact—One Year Later*, LOTAME SOLS. (Apr. 13, 2022), <https://www.lotame.com/idfa-and-big-tech-impact-one-year-later/> [https://perma.cc/CYT3-ANPT] (reporting multiple estimates of opt-in rates, ranging from fifty-four percent to seventy-five percent; in estimating IDFA’s future impact, Lotame assumed an estimated opt out rate of sixty-five percent).

193. See *id.* (estimating that the impact of IDFA on Facebook, Snapchat, Twitter, and Youtube would be nearly \$16 billion in the following year). Most public information about the lasting impact demonstrates that Meta has faced the largest effects. See, e.g., Daniel Newman, *Apple, Meta, and the \$10 Billion Impact of Privacy Changes*, FORBES (Feb. 10, 2022, 7:40 PM), <https://www.forbes.com/sites/danielnewman/2022/02/10/apple-meta-and-the-ten-billion-dollar-impact-of-privacy-changes/?sh=1c27222472ae> [https://perma.cc/732D-VVPS] (reporting on Meta’s early 2022 quarterly earnings announcement in which it estimated a \$10 billion drop in revenue, leading to Meta’s stock losing just over a quarter of its value immediately and smaller drops in SNAP, TWTR, and PINS). Subsequent reporting in April 2023 indicated that Meta had largely recovered, so any harm was likely confined to a short period. Kali Hays, *Meta Is Recovering from Apple’s Privacy Changes, Wall Street Expects a Return to Major Business Growth*, BUS. INSIDER (Apr. 14, 2023, 2:36 PM), <https://www.businessinsider.com/meta-recovers-from-apple-ad-privacy-hit-major-growth-expected-2023-4> [https://perma.cc/9SS5-3JX9].

194. See Alex Kantrowitz, *The Direct-to-Consumer Craze is Slamming into Reality*, CNBC (Mar. 14, 2022, 8:00 AM), <https://www.cnbc.com/2022/03/14/the-direct-to-consumer-craze-is-slamming-into-reality.html> [https://perma.cc/U85L-XQXD] (describing how many online-only brands rely on social media marketing to reach audiences without having the benefit of a physical storefront).

195. *Id.*

196. Kesler, *supra* note 140, at *2 (indicating that there is a small, but statistically significant, increase in the number of paid applications following Apple’s ATT changes); Cristobal Cheyre et al., *The Impact of Apple’s App Tracking Transparency Framework on the App Ecosystem* (Working Paper, May 19, 2023), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4453463 [https://perma.cc/RX5R-J568] (finding that though app developers did not withdraw after ATT, there was a statistically significant “reduction in the use of Monetization and Ad Mediation SDKs, and an increase in the use of Authentication and Payments SDKs”). Note that this increase in costs may be

publications.¹⁹⁷ These effects could either compel users to pay for once-free applications or exit the market.

Finally, Apple's conduct has thus far improved its position in the market. As noted above, Apple continues to gain share in advertising-driven installation of applications from the App Store.¹⁹⁸ Apple's services division (comprising in part the advertising business) grew 16.3% year-over-year as demonstrated by a recent quarterly earnings report—making it the fastest growing division within the company.¹⁹⁹ The services division was a bright spot for the company in the report and is expected to continue to grow.²⁰⁰ Though the services division includes several other categories, including Apple Music and Apple TV+, the positive results support that even in the very short-term Apple is seeing dividends from its conduct.

C. Justification

Apple could rebut the *prima facie* case by justifying the pro-competitive effects of its conduct. The company would need to justify its conduct with respect to increasing consumer welfare.²⁰¹ Apple has not been shy about the consumer benefits it claims from IDFA; the company has justified ATT changes with reference to changing user expectations around privacy, both in sponsored research²⁰² and in consumer advertising campaigns.²⁰³ In a vivid campaign launched in 2022, Apple dramatized an advertising auction.²⁰⁴ A bewildered user witnessed as an auctioneer sold rights to her “location data” and “late-night texting habits.”²⁰⁵ The user, disgusted, then used her iPhone to turn

“worth” it to users that place monetary value on their privacy. This is discussed in Part III.C, *infra*.

197. Peter Farago & Aman Bansal, *Are App Developers Shifting Revenue Models as Advertising Gets Challenged*, FLURRY (Aug. 13, 2020), <https://www.flurry.com/blog/are-app-developers-shifting-revenue-models-as/> [<https://perma.cc/4VB3-7S72>].

198. Fischer, *supra* note 58.

199. Nathan Rieff, *Apple Services Revenue Climbs in Q4, Despite Companywide Revenue Decline*, INVESTOPEDIA (Nov. 2, 2023), <https://www.investopedia.com/apple-q4-earnings-8385141> [<https://perma.cc/8Y26-H94C>] (noting that while “Apple’s revenue fell year-over-year for the fourth straight quarter,” “[services] revenue . . . hit records”).

200. *Id.*

201. See Part II.D, *infra*.

202. Jerath, *supra* note 47.

203. Chance Miller, *Apple Takes on Data Brokers and Auctions with New ‘Privacy on iPhone’ Ad Campaign*, 9TO5MAC (May 18, 2022, 12:21 PM), <https://9to5mac.com/2022/05/18/apple-privacy-on-iphone-new-ad/> [<https://perma.cc/N6B8-VGR3>].

204. *Id.*

205. *Id.*

off tracking for a fictitious application.²⁰⁶ The screen flashed the phrases “It’s your data” and “iPhone helps keep it that way.”²⁰⁷

Apple’s attempts to frame its conduct as contributing towards the social value of a more private internet would not be cognizable. Privacy as a pro-social justification is unlikely to rebut a prima facie case. The Supreme Court has rejected arguments that justify anticompetitive restraints in support of pro-social ends.²⁰⁸ Such arguments are “nothing less than a frontal assault on the basic policy of the Sherman Act.”²⁰⁹ Nevertheless, some scholars indicate that antitrust doctrine should reject the consumer welfare standard and instead focus on competitive process.²¹⁰

Instead, Apple could advance two possible consumer welfare-driven justifications. First, Apple may argue that its changes benefit interbrand competition in the smartphone market. In *Epic Games*, Apple advanced such a justification.²¹¹ Apple claimed that the restrictions around app distribution at issue in that case “[helped] ensure a safe and secure ecosystem” which serves both users who value privacy and developers who benefit from the correspondingly larger audience.²¹² The privacy benefits came from Apple’s human review of the application at issue, which allowed enforcement of requirements like “privacy labels” that disclose data collection.²¹³ Apple could argue similar privacy benefits exist under the restrictions advanced in this case. The IAP changes for boosted posts are analogous to the distribution restraints at issue in *Epic Games*. This reasoning applies to ATT. The company’s advertising campaign indicates a direct relationship between the changes to Apple’s competitive advantage. Apple could point to the substantial percentage of users who choose to opt out when presented with the choice.²¹⁴ Finally,

206. *Id.*

207. *Id.*

208. See Erika M. Douglas, *Data Privacy as a Procompetitive Justification: Antitrust Law and Economic Analysis*, 97 NOTRE DAME L. REV. REFLECTION 430, 458 (2022) [hereinafter Douglas, *Data Privacy as a Procompetitive Justification*] (characterizing the Court’s decisions in *Nat’l Soc’y of Pro. Eng’rs v. United States*, 435 U.S. 679 (1978), and *Fed. Trade Comm’n v. Ind. Fed’n of Dentists*, 476 U.S. 447 (1986), as rejecting “arguments that restraints on competition were justified simply because the effect of the restraint was to improve public health or safety”).

209. *Nat’l Soc’y of Pro. Eng’rs*, 435 U.S. at 695 (1978).

210. See generally Lina M. Khan, *Amazon’s Antitrust Paradox*, 126 YALE L.J. 710 (2017) (arguing that the text and history of the Sherman Act support a move away from the dominant Chicago School focus on consumer welfare).

211. *Epic Games, Inc. v. Apple Inc.*, 559 F. Supp. 3d 898, 1002–10 (N.D. Cal. 2021).

212. *Id.* at 1002.

213. *Id.* at 1005.

214. See *IDFA and Big Tech Impact—One Year Later*, *supra* note 192 (reporting multiple estimates of opt-in rates, ranging from fifty-four percent to seventy-five

Apple could argue that the prompt alleviates a pervasive information asymmetry problem where users are both unaware that they are being tracked and how their data is being used.²¹⁵

In the alternative, Apple can argue that its changes are meant to correct the supra-optimal amount of data available in the advertising market. It is well-documented that users lack full information about their privacy choices and may as a result share more data than they would if they fully understood the decisions they were making.²¹⁶ Apple could argue that ATT rectifies this failure by moving from opt-out to opt-in, thereby ensuring that users who do provide data are doing so in accordance with their subjective preferences.

A court may view either justification with skepticism. Apple would need to explain why the same rules do not apply to its own advertisements. The prompt Apple displays for its first-party applications frames the opt-in choice as one related to personalization of experience; in contrast, the ATT prompt asks users if they would like to be tracked.²¹⁷ This difference may raise allegations of pretext.²¹⁸ There is little case law on privacy as pretext, and as a result Apple's justification will likely be a matter of first or early impression.²¹⁹ The company, when criticized for this alleged self-preferencing, distinguished its behavior from MAP developer behavior by arguing that its tracking occurs within the Apple ecosystem, while third-party developers are tracking Apple users on surfaces outside the Apple universe.²²⁰ Even if this distinction constitutes a true difference in privacy impact, the ATT changes, in conjunction with both the IAP changes and increased investment in

percent; in estimating IDFA's future impact, Lotame assumed an estimated opt out rate of sixty-five percent). *But see* Akman, *supra* note 141, at 259–60 (reporting the paradoxical preferences of users when presented with privacy choices).

215. *See* Douglas, *Data Privacy as a Procompetitive Justification*, *supra* note 208, at 445–49 (describing privacy disclosure rules that reduce information asymmetry as cognizable as pro-competitive privacy restrictions).

216. *See* Christopher Jon Sprigman & Stephan Tontrup, *Privacy Decisions Are Not Private: How the Notice and Choice Regime Induces Us to Ignore Collective Privacy Risks and What Regulation Should Do About It* 1–2 (N.Y.U. Sch. of L., L. & Econ. Rsch. Paper Series, Working Paper No. 23-22, 2023), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4359681 [<https://perma.cc/K763-AHH8>] (describing how the current “notice-and-choice” framework that forms the basis of U.S. privacy law leads to more collection than might otherwise be expected based on self-reported privacy preferences).

217. *See* Jerath, *supra* note 47.

218. Douglas, *Data Privacy as a Procompetitive Justification*, *supra* note 208, at 466–67 (discussing pro-competitive privacy justifications as subject to the same nonpretextual requirements as any pro-competitive justification).

219. *Id.*

220. Gurman, *supra* note 47.

Apple's own advertising platform, may generate suspicion on the part of a court reviewing the claimed justification.²²¹

D. *Least Restrictive Alternative or Balancing*

Once a cognizable justification is raised, the rule of reason analysis does not end. After the defendant has proffered a non-pretexual, consumer welfare-enhancing justification, the plaintiff must demonstrate that either the pro-competitive benefit can be achieved through less restrictive means or that the balance of competitive effects cuts against allowing the restraint.²²² No court has reached the weighing question when the proffered justification is privacy.²²³ A less restrictive alternative may not be available in this case, and balancing raises difficult questions that antitrust law is ill-equipped to resolve.

I. *Less Restrictive Alternative*

A less restrictive alternative to achieving the same privacy goals does not need to be the *least* restrictive alternative. The *Alston* Court clarified the role of LRAs and demanded that the alternative be “significantly” less restrictive.²²⁴ The *Epic Games* case remains the only example where a U.S. court has explicitly considered less restrictive privacy alternatives.²²⁵ There, the District Court for the Northern District of California expressed the same deference to defendant's business judgment expressed in *Alston*.²²⁶ Plaintiff Epic Games advanced two alternatives to the current App Store distribution model: extending the “enterprise model,” where Apple certifies companies to distribute applications to employees, and the “notarization model,” where Apple could “sign” new App Store applications to ensure they met privacy and security guidelines.²²⁷ The district court rejected both, reasoning that the enterprise model does not allow for human app review (a key component of the privacy protection of the App Store model) and the

221. Douglas, *Data Privacy as a Procompetitive Justification*, *supra* note 208, at 470 (describing a general trend of skepticism towards justifications of privacy in early cases).

222. *Id.* at 471 (describing LRA and balancing as the “heart of the rule of reason analysis”).

223. *Id.*

224. Nat'l Collegiate Athletic Ass'n v. *Alston*, 594 U.S. 69, 103 (2021).

225. *Epic Games, Inc. v. Apple Inc.*, 559 F. Supp. 3d 898, 1040–43 (N.D. Cal. 2021); *see also Epic Games, Inc. v. Apple, Inc.*, 67 F.4th 976, 990–93 (9th Cir. 2023).

226. *Epic Games*, 559 F. Supp. 3d at 1041 (“[A]ntitrust courts must give wide berth to business judgments before finding liability.”) (citing *Alston*, 594 U.S. at 102); *see also Epic Games*, 67 F.4th at 990–92.

227. *Epic Games*, 67 F.4th at 990–92.

notarization model may decrease the overall level of privacy (as occurs on Android).²²⁸ A similar argument could foreclose a LRA challenge to Apple's IAP policies.

An antitrust plaintiff may have difficulties establishing a sufficient less restrictive alternative. Two non-exclusive alternatives emerge. First, Apple could more fully explain the impact of a users' privacy choices (as it does with the prompt it shows for its own applications), including the potential that a higher level of opt-out may lead to more paid applications. To reduce the burden of showing a lengthy explanation to users, the choices could be selected in a "master privacy template."²²⁹ While this proposal may preserve the privacy benefit (indeed, it may expand it by better capturing privacy preferences *ex ante*), it suffers from administration problems. The *Alston* Court expressed hesitancy on the imposition of "[duties] . . . [a court] cannot explain or adequately and reasonably supervise."²³⁰ A court is likely not equipped to make the type of fine-grained analysis necessary to evaluate the efficacy of a privacy remedy. Additionally, this is too great an imposition on a business's independent judgment for a court to prescribe, in contravention of the dicta in *Alston*.

Alternatively, Apple could impose the same prompt on its own applications. While this is administrable and respects Apple's business decision to promote itself as privacy-respecting, it is not clear that it meets the significantly less restrictive standard. On a relative basis, both Apple and MAP developers are equally restricted under this alternative. However, as the District Court in *Alston* noted, the reduction in restriction is a factual inquiry.²³¹ Determining whether equalizing the restraint vitiates Apple's advantage would require such an examination. That analysis might turn on whether Apple experiences similar opt-out rates as other MAPs, since the anticompetitive harms ultimately flow from the opt-out effect. Perhaps Apple's marketing campaigns on privacy have convinced enough of the purchasing public that Apple respects privacy and is more trustworthy than other big technology companies.²³²

228. *Id.*

229. A master privacy template has been proposed as a centralized form of privacy regulation to avoid errors of reasoning that sometime accompany privacy choices. See Sprigman & Tontrup, *supra* note 216, at 50–51.

230. Nat'l Collegiate Athletic Ass'n v. Alston, 594 U.S. 69, 102–03 (2021).

231. See *In re NCAA Athletic Grant-in-Aid Cap Antitrust Litig.*, 375 F. Supp. 3d 1058, 1104 (N.D. Cal. 2019) (finding that the proposed LRA did meet the significance threshold based on findings of fact).

232. Miller, *supra* note 203; see also Douglas, *Data Privacy as a Procompetitive Justification*, *supra* note 208, at 453 (describing survey evidence presented by Apple in *Epic Games* that consumers choose Apple for privacy reasons).

2. *Balancing*

Just as determining less restrictive alternatives presents difficult factual questions, a balancing inquiry quickly runs into a commensurability issue. The doctrinal status of balancing is uncertain; the Supreme Court did not consider balancing in the most recent antitrust case it decided.²³³

One way to balance the harms and benefits requires quantifying the value of privacy and comparing this value against the cost of the harms. Under this approach, a regulator could consider privacy as an element of “quality” and calculate a “quality-adjusted price.”²³⁴ Professor Douglas analyzes privacy from this economic lens, relying on economic studies to support a theory of when privacy is cognizable as a pro-competitive justification.²³⁵ Drawing from two studies on the economics of privacy, Douglas determines that privacy may enhance competition.²³⁶ In one study, Professors Alessandro Acquisti, Curtis Taylor, and Liad Wagman conclude that personalization increases the effectiveness of online advertising up until the point where ads get *too* personalized.²³⁷ The study concludes that this negative response is more pronounced when data collection is covert, and can thus be ameliorated by privacy disclosure that reduces information asymmetry.²³⁸

However, quantification has its limits. To begin, the effect predicted by Acquisti et al. does not bear out in the context of ATT. Privacy disclosures may reduce information asymmetry, but they do so at the expense of advertising effectiveness.²³⁹ Additionally, studies about the economic value of privacy often reveal paradoxical preferences.²⁴⁰ This raises a fundamental issue at the antitrust/privacy interface. Privacy and antitrust have competing priorities, and courts are ill-equipped to draw conclusions about privacy in an antitrust context.²⁴¹ Therefore, a balancing analysis would need to make comparisons between the relative welfare of two groups—MAP developers and users. This is

233. See generally *Alston*, 594 U.S. 69.

234. Allensworth, *supra* note 110, at 19.

235. Douglas, *Data Privacy as a Procompetitive Justification*, *supra* note 208, at 442–43.

236. *Id.*

237. *Id.* (citing Alessandro Acquisti et al., *The Economics of Privacy*, 54 J. ECON. LITERATURE 442 (2016)).

238. *Id.* at 443–44.

239. See Part III.B, *supra*.

240. Cf. Akman, *supra* note 140.

241. Cf. Allensworth, *supra* note 110, at 19–20 (arguing that product quality questions often turn a “judges’ gut-level instincts about what consumers want from their products” when hard data is missing).

a fundamental, normative question that even economic science is ill-equipped to resolve.²⁴²

III. REGULATORY FIXES TO COMMENSURABILITY PROBLEMS: THE CASE FOR FTC RULEMAKING

The previous Part outlined an example of when privacy-preserving conduct by a dominant platform may constitute an antitrust violation. Even if a plaintiff is able to successfully present a prima facie case based on a single-brand market theory and successfully allege a foreclosure or leveraging claim, a pro-competitive privacy justification raises the fundamental issue at the intersection of privacy and antitrust. Privacy is not easily commensurable with other values and is regulated by a separate body of law with its own policy goals.²⁴³ This Part explores taking the issue outside of the ambit of courts entirely and placing it in the hands of regulators.

The central argument is that the FTC, as the agency tasked with both privacy enforcement and antitrust enforcement, should engage in notice-and-comment rulemaking to clarify the balance between privacy and anticompetitive conduct. The FTC has the power to promulgate these rules and is more competent to answer balancing questions than antitrust courts. Though there are drawbacks to FTC rulemaking, these are not fatal.

A. *The Advantage of Administrative Rules*

For a long time, antitrust has operated as a set of common law-like standards administered by courts. Indeed, antitrust finds its origin in English common law.²⁴⁴ The sparse text of the Sherman and Clayton Acts has been given content by a combination of common law jurisprudence and scholarship.²⁴⁵ In a modern defense of this adjudicative mode of antitrust decision-making, Professor Daniel Francis notes issues with both an overly quantitative approach (characterized as a “challenge from the right”) and one that relies on rule-based presumptions (a “challenge from the left”).²⁴⁶ Francis cautions against reliance on economics to

242. *Id.* at 24.

243. See Douglas, *Data Privacy as a Procompetitive Justification*, *supra* note 208, at 457–58.

244. Daniel Francis, *Making Sense of Monopolization: Antitrust and the Digital Economy*, 84 ANTITRUST L.J. 779, 792–806 (2022) (tracing the development of the Sherman Act from English common law).

245. *Id.* at 785–90 (describing the evolution from pre-Chicago school to the rise of the Chicago school and its consumer welfare standard and concluding with a description of the upstart neo-Brandeisians led by now-FTC Chair Lina Khan).

246. *Id.* at 820–24.

replace what are fundamentally normative and legal decisions and simultaneously argues that rules establishing per se legality may “caus[e] real economic harm” and rules establishing rebuttable presumptions will not “lighten the adjudicative load.”²⁴⁷

Rulemaking for privacy-enhancing restraints fills a gap in antitrust law. As Professor Francis concedes, “[r]ules are most plausibly helpful as tools tailor-made—following appropriate investigation and consultation—for specific problems in specific markets”²⁴⁸ The problem here matches this description, and the current rulemaking process provides the necessary investigation and consultation for a carefully-designed rule.²⁴⁹ Despite over a century of antitrust, procompetitive justifications remain an “absolute mystery.”²⁵⁰ Market participants are currently left unaware of what the law is, leading to high costs of enforcement and lengthy trials.²⁵¹ Generalist judges may not be equipped to independently analyze the complicated economic and technical data in antitrust trials that involve novel technologies.²⁵² While recently filed cases and soon-to-be filed ones may shed more light on the matter, the problem of privacy and antitrust is shrouded in darkness while anticompetitive conduct creates “real economic harm.”

Privacy rules can shape antitrust doctrine in two ways. First, agency pronouncements can inform the courts on whether certain practices constitute antitrust harm. Antitrust analysis is highly specialized and complex; as a result, courts look to the FTC to understand how to evaluate antitrust claims.²⁵³ The Supreme Court has shown willingness to let regulation intended to protect competition define the boundary of

247. *Id.*

248. *Id.* at 824.

249. Kurt Walters, *Reassessing the Mythology of Magnuson-Moss: A Call to Revive Section 18 Rulemaking at the FTC*, 16 HARV. L. & POL’Y REV. 519, 539–49 (2022) (describing in detail the rulemaking process under Section 18 of the FTC Act and the Administrative Procedure Act).

250. Transcript of Oral Argument at 24, *Ohio v. Am. Express Co.*, 585 U.S. 529 (2018) (No. 16-1454) (statement of Breyer, J.).

251. See Rohit Chopra & Lina M. Khan, *The Case for “Unfair Methods of Competition” Rulemaking*, 87 U. CHI. L. REV. 357, 359–61 (2020); see also Solove & Hartzog, *supra* note 18, at 607 (describing criticism of FTC adjudicatory actions as leaving companies without “guidance about what they ought to do”).

252. See Chopra & Khan, *supra* note 251, at 359.

253. See Carl Shapiro & Howard Shelanski, *Judicial Response to the 2010 Horizontal Merger Guidelines*, 58 REV. INDUS. ORG. 51, 79 (2021) (arguing that following the adoption of the 2010 Horizontal Merger Guidelines, courts adopted many key provisions in analyzing actions brought under the Clayton Act, even though those provisions that were considered “innovati[ve]”).

antitrust liability.²⁵⁴ Second, the antitrust agencies can choose whether or not to pursue enforcement actions for particular conduct—pursuant to, for instance, guidance akin to the Horizontal Merger Guidelines. The agencies could make explicit whether the privacy rule represents a ceiling or floor for conduct to escape antitrust liability.

B. *The FTC Has Authority to Promulgate Rules*

The Federal Trade Commission's authority extends to areas beyond the Sherman and Clayton Antitrust Acts. The agency was created by the enactment of the Federal Trade Commission Act of 1914 ("FTC Act").²⁵⁵ Upon amendment to the Act in 1938, the FTC's jurisdiction was expanded "to prohibit 'unfair or deceptive acts or practices' in addition to 'unfair methods of competition.'"²⁵⁶ This addition of section 5 brought antitrust and consumer protection squarely within its scope.²⁵⁷ The existence of this authority turns on an interpretation of what constitutes unfairness under section 5. The Supreme Court has interpreted unfairness as reaching anticompetitive conduct beyond enforcement of the Sherman and Clayton Acts.²⁵⁸ Additionally, beginning in 1995 (and at the urging of Congress), the FTC began to regulate privacy under its section 5 powers.²⁵⁹

The FTC has statutory authority to promulgate rules. Historically, the FTC has relied on section 6(g) of the FTC Act to issue notice-and-comment rulemaking under the Administrative Procedure Act ("APA").²⁶⁰ In 1975, Congress enacted the Magnuson-Moss Warranty

254. Douglas, *Data Privacy as a Procompetitive Justification*, *supra* note 208, at 433 (interpreting *Trinko* and other antitrust cases as standing for the proposition that "industry-specific regulatory regimes may supplant antitrust law") (citing *Verizon Comm'ns v. Law Offs. of Curtis V. Trinko, LLP*, 540 U.S. 398, 412 (2004)).

255. *Our History*, FED. TRADE COMM'N, <https://www.ftc.gov/about-ftc/history> [<https://perma.cc/YKX4-D4U6>].

256. Solove & Hartzog, *supra* note 18, at 598.

257. *Id.*

258. *See, e.g.*, *Fed. Trade Comm'n v. Ind. Fed'n of Dentists*, 476 U.S. 447, 454 (1986) ("standard of 'unfairness' under the FTC Act is, by necessity, an elusive one, encompassing not only practices that violate the Sherman Act and the other antitrust laws"); *see also* FED. TRADE COMM'N, POLICY STATEMENT REGARDING THE SCOPE OF UNFAIR METHODS OF COMPETITION UNDER SECTION 5 OF THE FEDERAL TRADE COMMISSION ACT (Nov. 10, 2022) [hereinafter UNFAIR METHODS POLICY STATEMENT], https://www.ftc.gov/system/files/ftc_gov/pdf/p221202sec5enforcementpolicystatement_002.pdf [<https://perma.cc/PBK2-SCA8>] (listing twelve Supreme Court decisions in which the Court indicated the broad power of the FTC extended beyond the Sherman and Clayton Acts).

259. Solove & Hartzog, *supra* note 18, at 598.

260. Walters, *supra* note 249, at 529 (describing how, from 1962 to 1974, the FTC promulgated nearly three dozen rules); *see also* 15 U.S.C. § 6(g) (allowing the FTC to

Act, adding section 18 to the FTC Act and modifying the procedural requirements for the FTC to engage in consumer protection rulemaking.²⁶¹ In the three years that followed, the FTC initiated twenty rulemaking proceedings.²⁶² In response, Congress once again amended the FTC Act to require advance notices of proposed rulemaking.²⁶³ Coinciding with the rise of the Chicago school of antitrust, FTC rulemaking entered hibernation, punctuated only by rulemaking pursuant to specific congressional grants and rulemaking to repeal previous rules.²⁶⁴

Despite a period of dormancy, an emerging culture shift is increasing political will to re-start the rulemaking process. Both the President and members of Congress have urged the FTC to promulgate section 18 rules related to digital privacy.²⁶⁵ The Commission itself has staked its position that under sections 6(g) and 18 of the FTC Act it has the power to promulgate “trade regulation rules” that may be enforced by filing a civil suit under section 5.²⁶⁶ Several scholars express optimism that the FTC will begin relying on its rulemaking authority more heavily during current Chair Lina Khan’s administration.²⁶⁷ Pursuant to its section 18 authority, the FTC recently concluded an advanced notice of proposed rulemaking (“ANPR”) on possible regulatory solutions for “commercial surveillance and data security practices.”²⁶⁸

C. *FTC Competence and Content of a Rule*

The FTC’s enforcement authority lends it expertise in both privacy and competition law. Working within section 5, the Commission has become the federal authority on privacy law.²⁶⁹ The FTC routinely opens investigations and begins adjudicatory proceedings; it has issued

“from time to time . . . make rules and regulations for the purpose of carrying out the provisions of this subchapter”).

261. Walters, *supra* note 249, at 530.

262. *Id.* at 531.

263. *Id.* at 532.

264. *Id.* at 533–36.

265. *Id.* at 538.

266. *A Brief Overview of the Federal Trade Commission’s Investigative, Law Enforcement, and Rulemaking Authority*, FED. TRADE COMM’N, <https://www.ftc.gov/about-ftc/mission/enforcement-authority> [<https://perma.cc/P8NX-YDWS>] [hereinafter FTC Overview] (last revised May 2021) (explaining the FTC’s authority to investigate, adjudicate, and promulgate rules).

267. Walters, *supra* note 249, at 578–79.

268. *See* Trade Regulation Rule on Commercial Surveillance and Data Security, 87 Fed. Reg. 51,273 (proposed Aug. 22, 2022) (to be codified at 16 C.F.R. Chap. 1). While the ANPR did not explicitly request responses related to the intersection of antitrust and privacy, the topics for which comments were requested included several that might apply to anticompetitive, but privacy-enhancing conduct. *Id.*

269. Solove & Hartzog, *supra* note 18, at 600.

complaints on 170 occasions.²⁷⁰ The agency has broad discretion in both deciding what cases to take and in fashioning remedies, even in cases where the parties agree to settle.²⁷¹ Remedies might include prohibition on wrongful activities, monetary penalties, requirement of consumer notification, data deletion orders, changes to privacy policies, and requirements that putative violators establish privacy programs.²⁷² Crucially, the FTC's privacy jurisprudence concerns more than simple violations of privacy policies; it extends to actions deemed "unfair" as well.²⁷³

The FTC's reliance on section 5 for competition enforcement further supports the agency's competence. The unfairness standard under FTC privacy jurisprudence focuses on a set of themes relevant to questions of balance between antitrust and privacy. Statutory authority supporting the FTC's exercise of power explicitly demands this balancing.²⁷⁴ The FTC has long been one of the two agencies responsible for policing anticompetitive conduct and has deep expertise in this area.²⁷⁵ The following subparts consider how the FTC can use its experience to promulgate new rules.

1. *FTC Privacy Settlement Practice: "Notice-and-Choice"*

The FTC's privacy settlement practice can provide the basis for a rule governing what constitutes appropriate notice of data collection. The FTC has developed theories around unfairness that capture specific types of privacy-eroding practices; specifically, the agency has filed complaints arguine that collecting data without appropriate notice is unfair.²⁷⁶ While MAP data collection may have faced this complaint prior to Apple's changes, it is possible that Apple's decision to subject only third parties to the ATT prompt raises suspicions that Apple's first-party data collection is deceitful. In *FTC v. Echometrix, Inc.*, the FTC found that a broad statement describing data use—not dissimilar to the one Apple uses for its own applications—insufficiently disclosed the use of the information being collected.²⁷⁷ One simple approach

270. *Id.* at 610.

271. *Id.* at 614.

272. *Id.* at 615–17.

273. *Id.* at 638–39.

274. See 15 U.S.C. § 45(n) (cabining the FTC's authority to reach conduct that "causes or is likely to cause substantial injury to consumers which is not reasonably avoidable by consumers themselves and not outweighed by countervailing benefits to consumers or to competition").

275. See UNFAIR METHODS POLICY STATEMENT, *supra* note 257.

276. Solove & Hartzog, *supra* note 18, at 641–42.

277. *Id.* at 636–37.

might be to define the standard of disclosure and clarify that the same standard applies equally to both first- and third-party data use. Unlike the federal courts, constrained by the shadow cast by *Alston*, the FTC has more leeway to implement rules regardless of whether they might be sufficiently less restrictive to a company's course of conduct.

However, while this rule has the benefit of relying on a large body of evidence collected from previous investigations, it may lead to infra-optimal levels of privacy. Such a rule would operate squarely within the "notice-and-choice" model that has informed much of the FTC's privacy jurisprudence.²⁷⁸ Under this framework, the agency does not make privacy decisions for users, but instead compels companies to adequately inform users of the consequences of the privacy choices they make.²⁷⁹ Thus, this regime places significant control in the hands of data collecting entities and creates opportunities for notice to be framed to encourage users to hand over more data than they might otherwise prefer.²⁸⁰

2. *Beyond Notice-and-Choice: Considering Other Models of Privacy Protection*

The FTC could instead promulgate regulation that goes beyond the current state of notice-and-choice. Professors Christopher Jon Sprigman and Stephan Tontrup argue that notice-and-choice creates opportunity to "cheap[ly] and easily manipulate[]" user trust by framing the request for data in such a way to engender trust.²⁸¹ They point to Apple's changes as evidence that nudging users to make privacy choices before using a product can lead to a more accurate reflection of privacy choices.²⁸² Their solution is to mandate that data collection entities pull user preferences from a "master privacy template," where users have an opportunity to make privacy choices *ex ante*.²⁸³ Sprigman and Tontrup imagine a centralized, FTC-managed database that a technology company could easily query and consumers could easily update.²⁸⁴ The FTC is well-positioned to design such a template and likely received helpful data describing the challenges users face following its recent advanced

278. *Id.* at 634.

279. *Id.*

280. See Sprigman & Tontrup, *supra* note 216, at 45.

281. *Id.*

282. *Id.* at 52–53.

283. *Id.* at 50–52.

284. *Id.*

notice of proposed rulemaking.²⁸⁵ If the FTC proposes a master privacy template rule, there will be further opportunity to refine the proposal.

The recent ANPR demonstrates that the FTC is considering a rule beyond the notice-and-choice approach embodied in prior FTC actions. In the notice itself, the agency described its “case-by-case” enforcement approach and noted that “enforcement alone without rulemaking may be insufficient to protect consumers from significant harms.”²⁸⁶ The agency has signaled that it is considering a move to “privacy defaults,” like the master template approach outlined above. The ANPR announcement notes that foreign jurisdictions had begun implementing privacy regulations, including the EU, Brazil, and Canada, and that these regimes have “reduced the emphasis on providing notice and obtaining consent and have instead stressed additional privacy ‘defaults.’”²⁸⁷ The agency additionally noted that five states had pursued similar privacy regimes.²⁸⁸

D. Addressing Potential Issues

1. Risks of Litigation

One possible concern with FTC rulemaking is the risk of litigation that overturns rules and creates unfavorable precedent. Regulators may be hesitant to promulgate rules for fear that they may face an administrative law challenge. This concern may be especially acute following the current Supreme Court’s signals that it is skeptical of the deference traditionally afforded to administrative agencies.²⁸⁹

However, current case law suggests that rules may withstand administrative law attack. First, much of the process under section 18 is not subject to judicial review.²⁹⁰ The preliminary and final regulatory analyses and the final statement of basis and purpose—which must include a statement about the prevalence of the conduct at issue—are nonjusticiable.²⁹¹ However, challengeable elements of the rulemaking

285. Trade Regulation Rule on Commercial Surveillance and Data Security, 87 Fed. Reg. 51,273 (proposed Aug. 22, 2022) (to be codified at 16 C.F.R. Chap. 1).

286. *Id.* at 51,279–80. The Commission goes on to describe in detail the various ways in which rulemaking is advantageous to ad-hoc enforcement actions. *Id.*

287. *Id.* at 51,276–77.

288. *Id.*

289. *See, e.g., West Virginia v. Env’t Prot. Agency*, 597 U.S. 697 (2022) (holding that, pursuant to the “major questions doctrine,” the Agency exceeded its authority under the Clean Air Act when it promulgated the “Affordable Clean Energy” rule requiring coal power plant operators to make physical improvements to meet the “best system of emission reduction” standard).

290. *See* 15 U.S.C. §§ 57a(e)(5)(C), 57b-3(c)(1).

291. *Id.*

process (under both section 18 and the Administrative Procedure Act) may not lead to courts overturning rules with great frequency. Section 18 requires that a rule be supported by “substantial evidence . . . taken as a whole.”²⁹² The D.C. Circuit has held this standard to be equivalent to the “arbitrary and capricious” standard under the APA.²⁹³ Courts have upheld multiple rules under the APA standard.²⁹⁴ While none of these cases implicated the boundary between privacy and antitrust, they support a general conclusion that courts may uphold FTC rules.

Additionally, pending legislation may obviate any major questions challenge. The American Data Privacy and Protection Act, currently pending in Congress, explicitly confers privacy rulemaking and enforcement authority on the Federal Trade Commission.²⁹⁵

2. *Industry Capture*

Another possible concern is the agency’s potential for industry capture, leading to both instability of rules and rules that entrench dominant player power. Generally, industries subject to regulation are politically organized and well-funded.²⁹⁶ Aggressive lobbying, coupled with the comparatively diffuse nature of pro-consumer advocacy, may lead to “regulatory capture” and policies that favor incumbents over upstarts.²⁹⁷

The FTC’s structure counteracts this effect. Relative to the typical rulemaking process under the APA, the FTC’s rulemaking authority requires additional steps. Prior to commencing rulemaking, section 18 requires that the FTC publish a statement in the Federal Register (and share it with Congress) detailing “a brief description of the area of inquiry under consideration,” the “objectives which the Commission seeks to achieve,” “possible regulatory alternatives,” and an invitation

292. *Id.* at 57a(e)(3)(A).

293. *See* Consumers Union of U.S., Inc. v. Fed. Trade Comm’n, 801 F.2d 417, 422 (D.C. Cir. 1986) (“We have held that in the context of the APA, the substantial evidence test (which is applied only to formal adjudication and formal rulemaking, *see* 5 U.S.C. § 706(2)(E)) and the arbitrary and capricious test (which governs review of *all* proceedings, *see* 5 U.S.C. § 706(2)(A)) “are one and the same” insofar as the requisite degree of evidentiary support is concerned.”).

294. Walters, *supra* note 249, at 550–51.

295. American Data Privacy Protection Act, H.R. 8152, 117th Cong. § 401 (2022). The proposed bill establishes a new “Bureau of Privacy” and reiterates that the enforcement of the Act includes rulemaking.

296. Andrew I. Gavil, *The FTC’s Study and Advocacy Authority in Its Second Century: A Look Ahead*, 83 GEO. WASH. L. REV. 1902, 1911 (2015).

297. *Id.*

to the public to comment on the rulemaking.²⁹⁸ At the next stage, once the FTC publishes its official notice of proposed rulemaking, Congress has thirty days to weigh in prior to publication in the Federal Register.²⁹⁹ Finally, following the notice, section 18 mandates informal oral hearings during which interested parties may make oral presentations, subject to cross-examination if there are “disputed issues of material fact” at issue.³⁰⁰ Upon the close of public input, oral hearings are publicly released alongside a recommended decision.³⁰¹ Once the FTC reaches a decision, the agency must release a statement of basis and purpose, describing the practices restricted by the rule and justifying the unfairness or deceptive nature of the conduct and publish findings on the economic impact of the rule.³⁰²

3. *Competitive Harm*

Finally, there is a probability that regulation will produce competitive harm. The concern with private corporations introducing privacy changes is that this conduct hurts consumers; might the cure be worse than the disease? Regulation raises entry barriers, making it more difficult for competitors to enter a market.³⁰³ Thus, FTC regulation could lead to fewer market players, all else equal. Though the companies that exist in the market might comply with privacy rules, they would have less incentive to aggressively compete on non-privacy dimensions with less competitive pressure from new entrants.

Though some harm to competition may not be avoided, this is not a flaw of a regulatory scheme. Given the FTC’s expertise and statutory authority, the agency is best positioned to strike the appropriate balance between privacy protection and harm to competition. Indeed, the FTC has discretion to pursue enforcement action.³⁰⁴ The Commission could choose to only pursue privacy enforcement actions on larger companies. These putative targets may be large enough to cause the most serious

298. Walters, *supra* note 249, at 542 (citation omitted). The FTC recently concluded an ANPR concerning commercial surveillance. See Trade Regulation Rule on Commercial Surveillance and Data Security, 87 Fed. Reg. 51,273 (proposed Aug. 22, 2022) (to be codified at 16 C.F.R. Chap. 1).

299. Walters, *supra* note 249, at 544.

300. *Id.* at 545–46.

301. *Id.* at 548.

302. *Id.*

303. See *Lenox MacLaren Surgical Corp. v. Medtronic, Inc.*, 762 F.3d 1114, 1125 (10th Cir. 2014) (noting that FDA compliance represented an entry barrier in the market for a type of medical device).

304. See FTC Overview, *supra* note 266 (“[T]he Commission *may* initiate an enforcement action . . . if it has “reason to believe” that the law is being or has been violated . . .”) (emphasis on “may” added).

privacy harm and avoid deterring much smaller startups from entering the market for fear of incurring significant compliance costs.

CONCLUSION

By virtue of their reach, large technology companies present both privacy and antitrust concerns; these two bodies of law are not always harmonious. Relying on Apple as an example, this Note presents a theory of antitrust liability based on conduct that increases user privacy but harms competition. Privacy enters the rule of reason antitrust analysis at the justification stage. Assuming the justification is cognizable, an antitrust regulator would be hard-pressed to develop a theory of balancing or a less restrictive alternative to justify imposition of liability. This speaks to both the general problem of incommensurability in antitrust law and the competing objectives of privacy and competition law.

While current doctrine is unable resolve this conflict, antitrust regulators can turn to administrative rulemaking. The same agency that pursues antitrust enforcement has deep experience developing privacy rules and is best suited to strike the balance between preserving privacy and maintaining competition. The notice-and-choice regime that has dominated privacy regulation in the past thirty years represents one approach to a potential rule; however, as the Commission has hinted, rulemaking provides an opportunity to consider other, more effective approaches. Though agency rulemaking is not without its drawbacks—the vulnerability to major questions attack, the possibility of industry capture, and the chance of competitive harm—these are not insurmountable challenges. Hopefully, the recent kick-off of the long-dormant Magnusson-Moss process leads to a resolution of the conflict between antitrust and privacy law.