

NO-FAULT DIGITAL PLATFORM MONOPOLIZATION

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ABSTRACT

The power of today's tech giants has prompted calls for changes in antitrust law and policy which, for decades, has been exceedingly permissive in merger enforcement and in constraining dominant firm conduct. Economically, the fear is that the largest digital platforms are so dominant and its data advantage so substantial that competition is foreclosed, resulting in long-term harm to consumers and to the economy. But the concerns extend beyond economics. Critics worry, too, that the large platforms' tremendous economic power poses risks of social and political harm and threatens our democracy. These concerns have prompted discussions of ways to reinvigorate section 2 of the Sherman Act.

One of those suggestions is no-fault monopolization, a theory that dispenses with the conduct requirement of monopolization. Much of the appeal of no-fault monopolization, first considered in the late 1960s through the 1970s, is that it would sidestep the difficult "bad act" and "anticompetitive effects" requirements of section 2, which are

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particularly difficult to prove in digital platform markets, for reasons that the Article addresses.

This Article discusses why no-fault monopolization would be inadvisable, though stronger section 2 enforcement is long overdue. Rather than adopt an approach with uncertain results that might do more harm than good, I suggest more modest changes tailored to specific problems that could nevertheless reinvigorate section 2. They include greater vigilance in identifying improper conduct, and seeking a steady widening of the scope of exclusionary conduct through bolder choice of cases, moving toward greater flexibility in the analysis of anticompetitive effects, and overcoming some of the skepticism surrounding the legitimacy and value of qualitative evidence, including intent evidence.

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INTRODUCTION

After decades of judicial and agency permissiveness in merger enforcement and in the application of section 2 of the Sherman Act,¹ the law that prohibits monopolization, many are calling for a new antitrust equilibrium.² Industrial concentration has risen steadily in many business sectors in the United States,³ as have firm profits.⁴ The evidence also suggests a weakening of competition⁵ and at least a link between increased market power and widening economic inequality in this country.⁶ Emergent economic literature, moreover,

1. 15 U.S.C. § 2 (2012) (“Every person who shall monopolize, or attempt to monopolize ... shall be deemed guilty of a felony.”).

2. See TIM WU, *THE CURSE OF BIGNESS: ANTITRUST IN THE NEW GILDED AGE* 16-19 (2018); Jonathan B. Baker, *Exclusion as a Core Competition Concern*, 78 ANTITRUST L.J. 527, 529-30 (2013); see also AM. ANTITRUST INST. MONOPOLIZATION CHAPTER, RESTORING MONOPOLY AND EXCLUSION AS CORE COMPETITION CONCERNS: AAI 2016 PRESIDENTIAL TRANSITION REPORT, (Apr. 18, 2016), https://www.antitrustinstitute.org/wp-content/uploads/2018/08/Monopolizationfinal_0-1.pdf [<https://perma.cc/YKK6-UPTL>] (criticizing, among other things, the current lax approach toward section 2 enforcement and urging that agencies take a more aggressive stance toward dominant firm exclusionary conduct).

3. See COUNCIL OF ECON. ADVISERS, *ISSUE BRIEF: BENEFITS OF COMPETITION AND INDICATORS OF MARKET POWER* 4 (2016) [hereinafter *CEA Issue Brief on Competition*], https://obamawhitehouse.archives.gov/sites/default/files/page/files/20160414_cea_competition_issue_brief.pdf [<https://perma.cc/JM57-43BQ>] (citing empirical research and statistical data); Carl Shapiro, *Antitrust in a Time of Populism*, 61 INT'L J. INDUS. ORG. 714, 721-29, <https://faculty.haas.berkeley.edu/shapiro/antitrustpopulism.pdf> [<https://perma.cc/XDH2-FGEF>].

4. See Shapiro, *supra* note 3, at 731-34 (presenting data that shows corporate profits had increased substantially as a percentage of GDP over the past few decades). An increase of profits as a percentage of GDP could suggest the absence of robust competition since competitive forces tend to erode above-normal profits over time. See *CEA Issue Brief on Competition*, *supra* note 3, at 1.

5. See, e.g., *CEA Issue Brief on Competition*, *supra* note 3, at 1. However, economists have pointed out that increased concentration may have innocent explanations and does not necessarily reflect declining competition. See, e.g., Shapiro, *supra* note 3, at 731-32 (citing several empirical studies that suggest increases in industry concentration and corporate profits were likely explained by higher productivity on the part of “super-star” firms, which then manage to “capture a larger slice of the market,” or by more use of information technology systems—both of which would be positive explanations of concentration and would not reflect reduced competition).

6. See Jonathan B. Baker & Steven C. Salop, *Antitrust, Competition Policy, and Inequality*, 104 GEO. L.J. ONLINE 1, 11 (2015) (arguing that “returns from market power go disproportionately to the wealthy,” that is, to shareholders and senior executives); Lina Khan & Sandeep Vaheesan, *Market Power and Inequality: The Antitrust Counterrevolution and Its Discontents*, 11 HARV. L. & POL'Y REV. 235, 235-36 (2017). But see Daniel A. Crane, *Antitrust and Wealth Inequality*, 101 CORNELL L. REV. 1171, 1173-75 (2016) (refuting the assertion that

reveals that large firms can wield monopsony power in the purchase of labor in local markets,⁷ which could partially explain the stubborn stagnation of wages in the past few decades even when, as now, unemployment is low.⁸

Much of the widespread anxiety over excessive private power is focused on the largest digital platforms—primarily Facebook, Google, Amazon, and Apple.⁹ Economically, critics fear that these dominant platforms could foreclose competition by quashing innovation through various strategies such as application cloning¹⁰ or

monopoly power contributes to wealth inequality by arguing, in part, that monopoly rents are broadly shared).

7. See generally COUNCIL OF ECON. ADVISERS, ISSUE BRIEF: LABOR MARKET MONOPSONY: TRENDS, CONSEQUENCES, AND POLICY RESPONSES (2016), https://obamawhitehouse.archives.gov/sites/default/files/page/files/20161025_monopsony_labor_mrkt_cea.pdf [<https://perma.cc/NAA9-PB4T>]; Ioana Marinescu & Herbert Hovenkamp, *Anticompetitive Mergers in Labor Markets*, 94 IND. L.J. 1031, 1038 (2019) (making the case that large firms exercise monopsony power in the purchase of labor in local markets, which has the effect of suppressing wages); Orley C. Ashenfelter et al., *Modern Models of Monopsony in Labor Markets: A Brief Survey* (Inst. for the Study of Labor, Working Paper No. 4915, 2010), <http://www.econstor.eu/bitstream/10419/36902/1/625315251.pdf> [<https://perma.cc/W8VM-XJV4>]; José Azar et al., *Labor Market Concentration* (Nat'l Bureau of Econ. Research, Working Paper No. 24147, 2017), <https://www.nber.org/papers/w24147> [<https://perma.cc/85B8-2AF5>].

8. See ALAN B. KRUEGER & ERIC A. POSNER, THE HAMILTON PROJECT, A PROPOSAL FOR PROTECTING LOW-INCOME WORKERS FROM MONOPSONY AND COLLUSION 4, 6 (2018), http://www.hamiltonproject.org/assets/files/protecting_low_income_workers_from_monopsony_collusion_krueger_posner_pp.pdf [<https://perma.cc/N9UA-F6NE>]; Marinescu & Hovenkamp, *supra* note 7, at 1033-34, 1037-38, 1041; see also RANDY M. STUTZ, AM. ANTITRUST INST., THE EVOLVING ANTITRUST TREATMENT OF LABOR-MARKET RESTRAINTS: FROM THEORY TO PRACTICE, 2, 9 (2018), https://www.antitrustinstitute.org/wp-content/uploads/2018/09/AAI-Labor-Antitrust-White-Paper_0-1.pdf [<https://perma.cc/4P9U-E83N>].

9. See, e.g., John M. Newman, *Antitrust in Digital Markets*, 72 VAND. L. REV. 1497, 1503-04, 1509-10 (2019); Lina M. Khan, Note, *Amazon's Antitrust Paradox*, 126 YALE L.J. 710, 802-03 (2017); Greg Ip, *The Antitrust Case Against Facebook, Google and Amazon*, WALL ST. J. (Jan. 16, 2018, 11:52 AM), <https://www.wsj.com/articles/the-antitrust-case-against-facebook-google-amazon-and-apple-1516121561> [<https://perma.cc/6Q9K-LZLA>]; Jonathan Taplin, *Can the Tech Giants Be Stopped?*, WALL ST. J. (July 14, 2017, 2:34 PM), <https://www.wsj.com/articles/can-the-tech-giants-be-stopped-1500057243> [<https://perma.cc/U6PG-H77Y>].

10. See Elizabeth Dvoskin, *Facebook's Willingness to Copy Rivals' Apps Seen as Hurting Innovation*, WASH. POST (Aug. 10, 2017), https://www.washingtonpost.com/business/economy/facebook-willingness-to-copy-rivals-apps-seen-as-hurting-innovation/2017/08/10/ea7188ea-7df6-11e7-a669-b400c5c7e1cc_story.html [<https://perma.cc/38YY-JA25>]; Betsy Morris & Deepa Seetharaman, *The New Copycats: How Facebook Squashes Competition from Startups*, WALL ST. J. (Aug. 9, 2017, 1:47 PM), <https://www.wsj.com/articles/the-new-copycats-how-facebook-squashes-competition-from-startups-1502293444> [<https://perma.cc/9K8E-T96E>] (reporting on Facebook's copying features of a start-up group video chat app).

acquisitions of nascent start-ups.¹¹ A related fear is that the large platform companies could use their troves of user data to gain early insights into consumer trends, which would allow them to identify and forestall nascent competitive threats.¹² Or, their data advantage could simply be so substantial that it forecloses entry.¹³ But the concerns extend beyond economics. Critics worry, too, that the large platforms' persistent dominance poses risks of social and political harm and threatens our democracy.¹⁴

Unsurprisingly, this angst over the power of the largest tech firms and its potential economic and political implications has prompted discussions of ways to strengthen merger control¹⁵ and to revive

11. *A Lapse in Concentration*, ECONOMIST (Sept. 29, 2016), <https://www.economist.com/special-report/2016/09/29/a-lapse-in-concentration> [<https://perma.cc/LE75-FQX8>] (“Big tech firms also have a penchant for so-called ‘shoot-out’ acquisitions, whereby a startup is bought to eliminate a budding rival.... [I]f small firms cannot become independently big, the market power of incumbents is not sufficiently challenged.”).

12. MAURICE E. STUCKE & ALLEN P. GRUNES, *BIG DATA AND COMPETITION POLICY* 286-87 (2016).

13. See Marina Lao, *Erring on the Side of Antitrust Enforcement When in Doubt in Data-Driven Mergers*, in 1 DOUGLAS H. GINSBURG, *LIBER AMICORUM: AN ANTITRUST PROFESSOR ON THE BENCH* 502-06 (Nicolas Charbit et al. eds., 2018) (discussing the broad competitive issues animating the big data debate, including whether big data presents an entry barrier for online services, whether and how the large digital platforms' collection and use of big data implicates competition and affects consumer welfare, and whether and how antitrust law might address these issues); Damien Geradin & Monika Kuschewsky, *Competition Law and Personal Data: Preliminary Thoughts on a Complex Issue* 2 (Feb. 13, 2013), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2216088 [<https://perma.cc/F38N-LXUY>] (“The acquisition of large volumes of data by ‘first mover’ providers may, however, raise barriers to entry and thus deprive users from the benefits of competition.”); see also EUROPEAN DATA PROT. SUPERVISOR, *PRIVACY AND COMPETITIVENESS IN THE AGE OF BIG DATA: THE INTERPLAY BETWEEN DATA PROTECTION, COMPETITION LAW AND CONSUMER PROTECTION IN THE DIGITAL ECONOMY* ¶¶ 66-68 (Preliminary Opinion) (2014), https://edps.europa.eu/sites/edp/files/publication/14-03-26_competition_law_big_data_en.pdf [<https://perma.cc/BP3L-LP4F>] (“Powerful or dominant undertakings are able to ... create barriers to entry through their control of huge personal datasets ... [which] could prevent the development of competing products from competitors.”).

14. See WU, *supra* note 2, at 21 (“The power that [Facebook, Amazon, Google, and Apple] wield seems to capture the sense of concern we have that the problems we face transcend the narrowly economic. Big tech is ubiquitous, seems to know too much about us, and seems to have too much power over what we see, hear, do, and even feel.”); Khan & Vaheesan, *supra* note 6, at 235-36 (arguing generally that market power contributes to economic inequality, gives firms political clout, and threatens American democracy).

15. Besides strengthening section 2 enforcement, another obvious way to tackle increasing concentration is to engage in a campaign of stronger merger enforcement. For commentaries supporting a stronger merger policy, see, for example, JOHN KWOKA, *MERGERS, MERGER CONTROL, AND REMEDIES: A RETROSPECTIVE ANALYSIS OF U.S. POLICY* 71 (2015) (using retrospective studies to suggest current underenforcement of merger control); Herbert

section 2, a law that has lost much of its potency since the early 1980s.¹⁶ One of the ideas mentioned in connection with section 2 approximates “no-fault” monopolization—that is, dispensing with the conduct requirement of a monopolization cause of action.¹⁷ The no-fault theory, which appears to underlie Senator (and presidential candidate) Elizabeth Warren’s recent policy proposal to break up Amazon, Google, Facebook, and Apple,¹⁸ was first considered in the late 1960s through the 1970s.¹⁹ Initially endorsed by many antitrust intellectuals of the day, including Donald Turner, Philip Areeda, Oliver Williamson and others, a number of ambitious no-fault initiatives introduced during this period ultimately failed.²⁰

The end of the 1970s ushered in the current modern (or conservative) era of antitrust, which favors a limited role for antitrust especially in the context of section 2, effectively ending the no-fault conversation. Courts adopted demanding standards and burdens of proof that made section 2 liability very difficult to establish.²¹ And

Hovenkamp & Carl Shapiro, *Horizontal Mergers, Market Structure, and Burdens of Proof*, 127 YALE L.J. 1996, 1996 (2018) (proposing to increase reliance on the structural presumption in order to strengthen merger enforcement); and Lao, *supra* note 13, at 497, 529-30 (arguing that stronger merger enforcement would be a better solution than section 2 in dealing with competition issues involving big-data companies).

16. See William E. Kovacic, *Failed Expectations: The Troubled Past and Uncertain Future of the Sherman Act as a Tool for Deconcentration*, 74 IOWA L. REV. 1105, 1140-42 (describing the period after 1980 as one of permissiveness toward single-firm conduct and horizontal mergers).

17. Under long-established doctrine, section 2 requires proof of the defendant’s monopoly power in a defined market *and* the use of improper, or “exclusionary,” conduct, in attaining, maintaining, or enhancing that power. See *United States v. Grinnell Corp.*, 384 U.S. 563, 570 (1966); *United States v. Microsoft Corp.*, 253 F.3d 34, 58 (D.C. Cir. 2001).

18. Elizabeth Warren, *Here’s How We Can Break Up Big Tech*, MEDIUM (Mar. 8, 2019), <https://medium.com/@teamwarren/heres-how-we-can-break-up-big-tech-9ad9e0da324c> [<https://perma.cc/FHK5-EKXE>].

19. For thorough and insightful discussions of the no-fault movement and other deconcentration efforts in the late 1960s through 1980, see Harry First, *Woodstock Antitrust*, CPI ANTITRUST CHRON., Apr. 2018, at 59, 62; and Kovacic, *supra* note 16, at 1137-39.

20. See *infra* Part I.

21. See *Verizon Commc’ns Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 414 (2004) (speaking of the costs of antitrust intervention compared to the “slight benefits,” warning against the harms of false positives, and generally imposing a high bar for establishing section 2 liability); Frank H. Easterbrook, *The Limits of Antitrust*, 63 TEX. L. REV. 1, 2-4, 10-11, 15-16 (1984) (setting forth the Chicago School theory that the risks and costs of false positives are higher than that of false negatives because it is easy to confuse procompetitive conduct with anticompetitive conduct, and the adverse effects of false positives tend to be substantial while that of false negatives minimal).

the government rarely brought monopolization cases after the 1970s, *United States v. Microsoft Corp.* being a notable exception.²² This relative inactivity on the section 2 front,²³ coupled with a permissive merger policy, contributed to a perception that antitrust law is not up to the task of tackling dominance issues today, particularly those involving the largest technology platforms.

Frustrations with the limits of antitrust in this regard on the part of some critics brought forth a new movement, sometimes called New Brandeis antitrust (or sometimes, pejoratively, “Hipster” antitrust).²⁴ Although loosely unified by a strong distrust of the largest technology companies and a shared belief that modern antitrust law has abandoned its populist roots, New Brandeis proponents are a varied group who hold different views on how antitrust should be reformed.²⁵ One suggested framework carries echoes of earlier no-fault proposals, by eliminating the exclusionary conduct requirement of section 2 when excess market power is shown.²⁶

22. 253 F.3d 34 (D.C. Cir. 2001). Other section 2 cases that have been brought include: *McWane, Inc. v. FTC*, 783 F.3d 814, 827 & n.10 (11th Cir. 2015); *FTC v. AbbVie, Inc.*, 107 F. Supp. 3d 428, 437 (E.D. Pa. 2015); *In re IDEXX Labs., Inc.*, No. 101-0023, 2013 WL 632874, at *3-5 (F.T.C. Feb. 11, 2013); *In re Pool Corp.*, No. 101-0115, 2012 WL 259752, at *3-6 (F.T.C. Jan. 10, 2012); *In re Transitions Optical, Inc.*, No. C-4289, 2010 WL 1804580, at *2 (F.T.C. Apr. 22, 2010); Statement of the Federal Trade Commission in the Matter of Cardinal Health, Inc., FTC File No. 101-0006 (Apr. 17, 2015), https://ftc.gov/system/files/documents/public_statements/663778Y150420cardinalhealthcommstmt.pdf [<https://perma.cc/S97K-45RY>].

23. It should be noted that the Federal Trade Commission currently has two pending dominant firm conduct cases in the semiconductor and pharmaceutical industries: *FTC v. Shire ViroPharma, Inc.*, 917 F.3d 147, 149 (3d Cir. 2019) (alleging that the branded drug manufacturer was delaying generic competition by constantly making objectively baseless filings to the Food & Drug Administration); and *FTC v. Qualcomm Inc.*, No. 17-CV-00220-LHK, 2019 WL 2206013, at *1 (N.D. Cal. May 21, 2019) (charging Qualcomm with refusing to license its standard-essential patents to rival chipmakers in order to protect its monopoly over processors used in cell phones).

24. See generally Konstantin Medvedovsky, *Hipster Antitrust—A Brief Fling or Something More?*, CPI ANTITRUST CHRON., Apr. 2018 (providing a brief account of “hipster antitrust,” a term he coined, also referred to as New Brandeis antitrust).

25. For commentaries generally considered to be New Brandeisian, see Khan, *supra* note 9, at 710, 762-63; Lina M. Khan, *The Ideological Roots of America’s Market Power Problem*, 127 YALE L.J. F. 960, 960-61 (2018) [hereinafter Khan, *Ideological Roots*]; Khan & Vaheesan, *supra* note 6, at 235-36; Newman, *supra* note 9, at 1501-02; Sandeep Vaheesan, *The Twilight of the Technocrats’ Monopoly on Antitrust?*, 127 YALE L.J. F. 980, 981-82, 993-94 (2018); and Ramsi A. Woodcock, *Inconsistency in Antitrust*, 68 U. MIAMI L. REV. 105, 106, 108 (2013).

26. See Khan & Vaheesan, *supra* note 6, at 285 (proposing a no-fault monopoly and oligopoly law that would not require bad acts to find liability against firms that possess

Current monopolization doctrine in the United States requires proof of a firm's monopoly power in a relevant market, and its use of improper ("exclusionary") conduct to create, protect, or enhance its monopoly.²⁷ The conduct must also have an "anticompetitive effect."²⁸ A no-fault monopolization theory as a deconcentration tool for the technology platform markets would be a radical, paradigm-shifting move that would require legislative action. I argue that reform efforts in this direction would be misplaced for various reasons, at least at this time. If the suggestion is economically motivated, then it would be prudent to have some reliable evidence, not just a rough judgment, that the economic benefits of dispersing the platforms' power outweigh the losses, before any attempt is made to restructure some of the country's most creative and successful companies.²⁹ If the motivation is to address a variety of non-economic harms, such as threats to our democracy, including the problems of "fake news," privacy intrusions, and rising economic inequality, then it is doubtful that no-fault, or antitrust generally, is a particularly good tool to address these serious, but non-competition-related, problems.³⁰ Tax, labor, privacy, and consumer protection laws; and education, job training, social insurance, and other governmental programs directly tailored to the problems at

monopoly power); Woodcock, *supra* note 25, at 116 (implicitly endorsing a no-fault approach by arguing that the conduct requirement of section 2 is a "bias in favor of monopolies" and amounts to a "per se rule in favor of monopolization").

27. See *United States v. Grinnell Corp.*, 384 U.S. 563, 570-71 (1966) (articulating the two elements of the monopolization offense as: "(1) the possession of monopoly power in the relevant market and (2) the willful acquisition or maintenance of that power as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident"); *United States v. Microsoft Corp.*, 253 F.3d 34, 58 (D.C. Cir. 2001) ("A firm violates § 2 only when it acquires or maintains, or attempts to acquire or maintain, a monopoly by engaging in exclusionary conduct 'as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident.'" (quoting *Grinnell*, 384 U.S. at 571)).

28. See *Microsoft*, 253 F.3d at 58-59 ("From a century of case law on monopolization under § 2, however, several principles do emerge. First, to be condemned as exclusionary, a monopolist's act must have an 'anticompetitive effect.' That is, it must harm the competitive process and thereby harm consumers.... Second, the plaintiff ... must demonstrate that the monopolist's conduct indeed has the requisite anticompetitive effect.").

29. See *infra* Part III.A.

30. See *infra* Part III.B.

issue would likely be more effective while at the same time imposing fewer collateral costs.³¹

Furthermore, to the extent that simplicity is the goal, a no-fault approach may prove disappointing as it raises some troubling questions for which there are no easy answers. For example, important issues relating to when no-fault rules should be triggered, what the appropriate measure of power should be, and whether discretion in enforcement should be permissible are all difficult to resolve, rendering the solution hardly as effortless as it might seem.³²

A better solution, in my view, would be to retain the conduct and effects requirements, but work toward a more activist vision of section 2 through an evolution of law and policy in a more pro-plaintiff direction.³³ This could mean greater vigilance in identifying improper conduct and seeking a steady widening of the scope of exclusionary conduct through bolder choice of cases.³⁴ Moving toward greater flexibility in the analysis of anticompetitive effects, an approach that was implicitly endorsed in *United States v. Microsoft Corp.*,³⁵ would be helpful as well. Additionally, the current ineffectualness of section 2 stems largely from the high burdens of proof imposed on plaintiffs, combined with the inherent difficulty of proving dynamic harms.³⁶ In light of that, slightly lessening the plaintiff's evidentiary burden, such as through the adoption of certain rebuttable presumptions and greater acceptance of qualitative evidence, including intent evidence, would alleviate some of the unusual difficulties of proof.³⁷ While these "fixes" may appear modest compared to no-fault and other somewhat vague New Brandeis proposals, they can be more feasibly accomplished and lead to meaningful changes, without the need for major legislative action and without the complete disruption of an existing framework that is conceptually sound.

31. See *infra* Part III.B.

32. See *infra* Part III.C.

33. See *infra* Part IV.

34. See *infra* Part IV.

35. 253 F.3d 34, 58 (D.C. Cir. 2001).

36. See *infra* Part II.C.1.

37. See *infra* Part IV.

In this Article, I focus my discussion on no-fault monopolization, including its drawbacks, and make some alternative suggestions for edging toward stronger section 2 enforcement, but I shall leave the discussion of various other New Brandeis suggestions to others. The Article proceeds as follows: In Part I, I discuss the original no-fault movement, its economic underpinnings, the support it had from intellectuals at the time, and its ultimate failure. In Part II, I discuss the digital platform markets, the enduring dominance of the largest platforms, and the New Brandeis frustration with section 2 law and policy, leading to renewed political interest in no-fault monopolization. In Part III, I discuss why, in my view, reform efforts in the direction of no-fault would be misplaced. And, in Part IV, I propose ways to reinvigorate section 2 through an evolution of law and policy, arguing that these alternatives may be more constructive than drastic measures such as a no-fault approach, or a complete overhaul of the consumer welfare standard.

I. THE NO-FAULT MONOPOLIZATION MOVEMENT, 1969-1980

The no-fault monopolization movement is generally dated from 1969 to 1980,³⁸ although some intellectuals had spoken much earlier against big business.³⁹ For example, Louis D. Brandeis, a fierce champion of small businesses, had written extensively in the early 1900s about the economic, social, and political dangers of “bigness” and about the moral value of small independent businesses.⁴⁰ Nobel Laureate George Stigler, likewise, was concerned about big business

38. See First, *supra* note 19, at 58 (dating the period from 1969 to 1979); Kovacic, *supra* note 16, at 1119-20 (dating the period from 1969 to 1982).

39. See LOUIS D. BRANDEIS, *THE CURSE OF BIGNESS: MISCELLANEOUS PAPERS OF LOUIS D. BRANDEIS* 114 (Osmond K. Fraenkel ed., Kennikat Press 1965) (1934) (arguing in his various writings that no monopoly in the United States was “attained by efficiency alone” or “so superior to its competitors ... as to enable it to control the market solely by reason of its superiority”); CARL KAYSEN & DONALD F. TURNER, *ANTITRUST POLICY: AN ECONOMIC AND LEGAL ANALYSIS* 260-65 (1959) (calling for the restructuring of concentrated industries through new antitrust legislation); HENRY C. SIMONS, *ECONOMIC POLICY FOR A FREE SOCIETY* 246-49 (1948); Ward S. Bowman, Jr., *Toward Less Monopoly*, 101 U. PA. L. REV. 577, 589 (1953) (arguing in favor of a presumption of illegal monopoly power for firms with “more than 10 or 15 percent” market share). As is well known, however, Bowman later changed his views on concentration quite drastically. See, e.g., Robert H. Bork & Ward S. Bowman, Jr., *The Crisis in Antitrust*, 65 COLUM. L. REV. 363, 368 (1965).

40. See generally BRANDEIS, *supra* note 39.

and had embraced a no-fault vision of antitrust in 1952,⁴¹ although he had retreated from his views even before the start of the movement.⁴² No-fault language was also evident in some Supreme Court monopolization opinions authored by Justice William O. Douglas, who wrote in *United States v. Griffith* that “monopoly power, whether lawfully or unlawfully acquired, may itself constitute an evil and stand condemned under § 2 even though it remains unexercised.”⁴³

Critical boosts for the no-fault monopolization idea came in the 1960s with the endorsements of several leading antitrust thinkers, including Donald F. Turner, Oliver E. Williamson, and Phillip E. Areeda. An antitrust icon of his time, Turner argued in 1969 that a firm should be found to have unlawfully monopolized a market if its power “has persisted over a long enough time to indicate relatively impervious barriers to entry, regardless of how it was obtained or maintained, excepting only monopoly based on economies of scale” or on patents.⁴⁴ A few years later, Williamson likewise emphasized “the problem of continued dominance of an industry by a single firm which has obtained its position by lawful means.”⁴⁵ He described that circumstance as a form of “market failure,” and called for “government intervention to upset this condition.”⁴⁶ Areeda’s support of

41. George J. Stigler, *The Case Against Big Business*, FORTUNE, May 1952, at 123, 164, 167 (“The Sherman Act ... cannot cope effectively with the problem posed by big business.... The dissolution of big businesses is ... necessary to increase the support for a private, competitive enterprise economy, and reverse the drift toward government control.”).

42. See GEORGE J. STIGLER, MEMOIRS OF AN UNREGULATED ECONOMIST 97-99 (1988) (explaining that until the 1950s, he “was an aggressive critic of big business,” sharing the prevailing view of economists then that “monopoly posed a major problem in public policy ... and that it should be dealt with boldly by breaking up dominant firms”).

43. 334 U.S. 100, 107 (1948); see also *United States v. Falstaff Brewing Corp.*, 410 U.S. 526, 543 (1973) (Douglas, J., concurring) (warning that big business is an “anathema to the American antitrust dream” and that concentration of power “leads predictably to socialism that is antagonistic to our system”); *United States v. Columbia Steel Co.*, 334 U.S. 495, 535-36 (1948) (Douglas, J., dissenting) (speaking strongly against the “problem of bigness” and speaking of antitrust as a way to ensure that power is “scattered into many hands so that the fortunes of the people will not be dependent on the whim or caprice, the political prejudices, the emotional stability of a few self-appointed men”).

44. Donald F. Turner, *The Scope of Antitrust and Other Economic Regulatory Policies*, 82 HARV. L. REV. 1207, 1220-21 (1969).

45. Oliver E. Williamson, *Dominant Firms and the Monopoly Problem: Market Failure Considerations*, 85 HARV. L. REV. 1512, 1512 (1972) (footnote omitted).

46. *Id.* at 1514-16.

no-fault monopolization was evident as well, writing that “[t]he evils of monopoly are largely independent of the manner in which it is achieved or maintained,”⁴⁷ and urging an approach that tackles “monopoly status” rather than searches for exclusionary practices.⁴⁸

Their views and those of other like-minded antitrust scholars of the time⁴⁹ were apparently very much influenced by the structure-conduct-performance (SCP) paradigm that had dominated economic and antitrust thinking from the 1940s through the 1970s.⁵⁰ Introduced by Edward S. Mason⁵¹ and developed by Joe S. Bain,⁵² this economic paradigm posits that market structure strongly influences or determines conduct, and conduct, in turn, strongly affects market performance.⁵³ Under this framework, knowing the structure of a market would allow one to predict conduct and performance. And if, as the model predicts, concentrated markets likely result in anticompetitive conduct, which, in turn, likely results in poor performance (such as inefficiency), then a no-fault agenda could make sense. Under this theory, more likely than not, the existence of persistent market power would be accompanied by anticompetitive conduct and inefficiencies.⁵⁴ In that event, finding liability based on evidence of substantial market power, without

47. 3 PHILLIP AREEDA & DONALD F. TURNER, *ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION* 35 (1978); see also Gray Dorsey, *Free Enterprise vs. the Entrepreneur: Redefining the Entities Subject to the Antitrust Laws*, 125 U. PA. L. REV. 1244, 1248 (1977).

48. AREEDA & TURNER, *supra* note 47, at 63-67 (proposing a no-fault monopoly policy); see also Eugene V. Rostow, *The New Sherman Act: A Positive Instrument of Progress*, 14 U. CHI. L. REV. 567, 575-76 (1947) (arguing against focusing on conduct that improperly excludes rivals, and in favor of “regarding as illegal the kind of economic power which the economist regards as monopolistic”).

49. See Kovacic, *supra* note 16, at 1137 n.202 (listing some of the literature on no-fault theories of section 2 liability).

50. See Herbert Hovenkamp, *United States Competition Policy in Crisis: 1890-1955*, 94 MINN. L. REV. 311, 350-67 (2009) (discussing the SCP paradigm, its history, and its decline).

51. See generally Edward S. Mason, *Price and Production Policies of Large-Scale Enterprise*, 29 AM. ECON. REV. 61 (1939).

52. See generally JOE S. BAIN, *BARRIERS TO NEW COMPETITION: THEIR CHARACTER AND CONSEQUENCES IN MANUFACTURING INDUSTRIES* (1956).

53. See generally Peter C. Carstensen, *Antitrust Law and the Paradigm of Industrial Organization*, 16 U.C. DAVIS L. REV. 487, 492-504 (1983); Leonard W. Weiss, *The Structure-Conduct-Performance Paradigm and Antitrust*, 127 U. PA. L. REV. 1104, 1105 (1979).

54. See, e.g., Rostow, *supra* note 48, at 568 (“There is a great deal of evidence, in fact, that on the whole Big Business is less efficient, less progressive technically, and relatively less profitable than smaller business.”).

having to identify and analyze a monopolist's alleged bad act, is unlikely to sacrifice efficiencies.⁵⁵

With the backing of antitrust luminaries of the day, a number of no-fault initiatives were considered on the political front during this period. The first involved the 1969 expansive recommendations of the Neal Task Force—President Lyndon Johnson's Task Force on Antitrust Policy—to adopt no-fault monopolization liability theories and otherwise restructure industries deemed overly concentrated.⁵⁶ A few years later, Senator Philip Hart introduced a no-fault monopolization bill, the Monopolization Reform Act of 1976, which would have removed the conduct requirement in section 2 cases brought by the United States.⁵⁷ Between 1972 and 1975, Senator Hart introduced the Industrial Reorganization Act in successive Congresses which, if passed, would have imposed no-fault monopolization liability not only for a single corporation in possession of monopoly power, but also for oligopolies that collectively held such power.⁵⁸ Finally, the National Commission for the Review of Antitrust Laws and Procedures (NCRALP), appointed by President Jimmy Carter,⁵⁹ submitted its Report in 1979 recommending that Congress consider amending section 2 to establish liability for no-fault monopolization for “persistent monopoly power.”⁶⁰

While none of these efforts succeeded, as noted, they had enjoyed the support of many of the leading antitrust scholars of the day,⁶¹ except Robert Bork⁶² and economist George Stigler, who by then had already changed his earlier deconcentration views.⁶³ Many of these

55. *See, e.g., id.* (writing that deconcentration would “eliminate the wastes, the non-use of capacity, and the restrictionism of monopolistic industrial organization”).

56. *See* PHIL C. NEAL ET AL., REPORT OF THE WHITE HOUSE TASK FORCE ON ANTITRUST POLICY (1969), reprinted in ANTITRUST L. & ECON. REV., Winter 1968-69, at 11, 14-15, 65-76.

57. S. 3429, 94th Cong., 122 CONG. REC. 13871 (1976). The bill received no hearings.

58. *See, e.g.,* S. 1167, 93d Cong., 119 CONG. REC. 7319 (1973).

59. Arthur D. Austin, *National Commission for the Review of Antitrust Laws and Procedures: Reports on Symptoms but Ignores Causes*, 54 NOTRE DAME L. REV. 873, 873 (1979).

60. NAT'L COMM'N FOR THE REVIEW OF ANTITRUST LAWS AND PROCEDURES, REPORT TO THE PRESIDENT AND THE ATTORNEY GENERAL vi-ix (1979).

61. *See supra* text accompanying notes 44-48.

62. *See* Kovacic, *supra* note 16, at 1137 nn.200 & 202 (noting that of the academic members on the Neal Task Force, only Robert Bork dissented, and that those who testified in favor of no-fault monopolization before the NCRALP included Phillip Areeda, Walter Adams, Harvey Goldschmid, Louis Schwartz, and Oliver Williamson).

63. Testifying before Congress in 1969, Stigler said of the Neal Task Force

supporters, however, later retracted their endorsements with the ascendance of a new body of economic literature that seriously challenged the SCP theories.⁶⁴ Broadly speaking, this new body of scholarship argued that economies of scale are much more substantial, and firms in concentrated markets behave more competitively, than had been assumed.⁶⁵ This effectively eroded the SCP assumption that persistent monopoly power was likely attributable to exclusionary conduct, not superior conduct or economies of scale.⁶⁶ The reversal of course by these intellectuals when the SCP theory faced severe challenge suggests that the no-fault movement, even in that “big is bad” era which Harry First has called “Woodstock anti-trust,” was not wholly a populist reaction against bigness and its perceived political and social harms. Rather, it was at least partially based on assumptions, rooted in the SCP model, that relatively little would be lost and much would be gained economically by taking a no-fault approach.

recommendations to adopt no-fault monopolization liabilities theories and other deconcentration measures:

I personally have serious misgivings about the Neal proposals for deconcentration. I worry about the fact that where we have substantial large economies of scale, deconcentration puts burdens on us. Where the economies are not large, private rivals have a tendency to enter and eliminate (excess) profits themselves.... There was a time ... when I was enthusiastic for [deconcentration] scheme[s]. I no longer am.

Yale Brozen, *The Concentration-Collusion Doctrine*, 46 ANTITRUST L.J. 826, 828 n.8 (1977); see also *supra* notes 41-42 and accompanying text.

64. See Brozen, *supra* note 63, at 826-29, 828 n.8 (summarizing some commentators' withdrawal of support for deconcentration policies); Kovacic, *supra* note 16, at 1138.

65. See, e.g., ROBERT H. BORK, *THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF* 163-97 (1978) (synthesizing the theories and arguments refuting the assumptions of SCP); Harold Demsetz, *Two Systems of Belief About Monopoly*, in *INDUSTRIAL CONCENTRATION: THE NEW LEARNING* 164, 179 (Harvey J. Goldschmid et al. eds., 1974) (“Since persistent market concentration seems to be associated with economies of scale or other forms of superior performance by existing larger firms in concentrated industries, a move to deconcentrate such industries is very *likely* to increase, not decrease, cost.... Embracing the market concentration doctrine through legislation is thus very likely to penalize the success and superior performance upon which depends the progress and wealth of this nation.”); Sam Peltzman, *The Gains and Losses from Industrial Concentration*, 20 J.L. & ECON. 229, 229-31 (1977) (refuting the assumptions of SCP).

66. See Demsetz, *supra* note 65, at 181; Peltzman, *supra* note 65, at 262.

II. THE AGE OF DIGITAL PLATFORM MARKETS AND NEW BRANDEIS

I discuss below the digital platform markets, including an analysis of the economic characteristics of those markets (such as network effects) that have contributed to their incumbents' enduring dominance. This, in turn, explains the increasing overall dissatisfaction with the limitations of section 2, and the rise of the New Brandeis critics and their renewed interest in no-fault monopolization. I begin the Part, however, with relevant insights on the current conservative antitrust period in order to provide context to the discussion.

A. *Conservative Antitrust from 1980*

The early 1980s marked the end of Woodstock antitrust and the beginning of what is generally considered the “modern,” or conservative, antitrust era. Influenced by scholarship suggesting that differentiating between procompetitive and anticompetitive conduct is very difficult (because conduct that excludes competitors often also benefits consumers by enhancing efficiency),⁶⁷ courts and antitrust agencies worried about committing false positives—that is, mistaking procompetitive practices for anticompetitive exclusion.⁶⁸ The concerns were that false positives would have lasting effects,⁶⁹ chill innovation, and discourage other procompetitive practices, thereby depriving consumers of benefits they would have enjoyed otherwise.⁷⁰ In contrast, false negatives were seen as posing

67. See Frank H. Easterbrook, *When Is It Worthwhile to Use Courts to Search for Exclusionary Conduct?*, 2003 COLUM. BUS. L. REV. 345, 345 (arguing that, because of the benefits of aggressive competition and the difficulty of predicting when competition will become exclusionary, courts should be wary of finding antitrust violations).

68. See, e.g., *Verizon Commc'ns Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 414 (2004) (“Under the best of circumstances, applying the requirements of § 2 ‘can be difficult’ because ‘the means of illicit exclusion, like the means of legitimate competition, are myriad.” (quoting *United States v. Microsoft Corp.*, 253 F.3d 34, 58 (D.C. Cir. 2001))).

69. Easterbrook, *supra* note 21, at 2 (“If the court errs by condemning a beneficial practice, the benefits may be lost for good. Any other firm that uses the condemned practice faces sanctions in the name of stare decisis, no matter the benefits.”).

70. See *Trinko*, 540 U.S. at 414 (“Mistaken inferences and the resulting false condemnations ‘are especially costly, because they chill the very conduct the antitrust laws are designed to protect’.... The cost of false positives counsels against an undue expansion of

more fleeting harms because markets were assumed to be robust and to quickly self-correct.⁷¹ Thus, the trend toward antitrust caution with respect to section 2 and tolerance toward dominant firm conduct began, and talk of no-fault theories ceased.⁷²

During this period, consistent with the desire to minimize false positives, courts adopted demanding standards and burdens of proof designed to err on the side of noninterference with dominant firm conduct.⁷³ The “consumer welfare” paradigm, first endorsed by the Supreme Court in 1979,⁷⁴ became the framework on which modern antitrust is now based.⁷⁵ While consumer welfare has no uniform or even clear definition in antitrust,⁷⁶ it is generally understood to mean that antitrust liability requires finding that the alleged bad conduct caused or is likely to cause consumer harm,⁷⁷ which could include not only higher prices or reduced output, but also quality

§ 2 liability.” (quoting *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 594 (1986))).

71. Easterbrook, *supra* note 21, at 2 (“If the court errs by permitting a deleterious practice, though, the welfare loss decreases over time. Monopoly is self-destructive. Monopoly prices eventually attract entry.”).

72. This cautious approach to section 2 is epitomized in *Trinko*, 540 U.S. at 414 (stressing the need to avoid costly harms of false condemnations, which “chill the very conduct the antitrust laws are designed to protect” (quoting *Matsushita Elec. Indus. Co.*, 475 U.S. 594)). See also Baker, *supra* note 2, at 527-28 (“Exclusionary conduct is commonly relegated to the periphery in contemporary antitrust discourse.... Antitrust commentators associated with the Chicago School have long expressed deep skepticism about exclusion as an antitrust theory, particularly as applied to dominant firm conduct.” (internal citations omitted)).

73. See sources cited *supra* note 21; see also Eleanor M. Fox, *What Is Harm to Competition? Exclusionary Practices and Anticompetitive Effect*, 70 ANTITRUST L.J. 371, 378 (2002) (describing the Chicago School approach as one of “non-intervention unless market conduct was provably inefficient, and ‘inefficient’ was to be given the following narrowest-possible meaning: the conduct must confer market power that would be used to limit output of the product or service, and the conduct must not be justifiable as an attempt to serve the market”).

74. See *Reiter v. Sonotone Corp.*, 442 U.S. 330, 343 (1979).

75. Today, the main debate concerning the consumer welfare standard is whether the “consumer surplus” or the “total surplus” standard should be applied. See generally Steven C. Salop, *Question: What Is the Real and Proper Antitrust Welfare Standard? Answer: The True Consumer Welfare Standard*, 22 LOY. CONSUMER L. REV. 336 (2010).

76. See Barak Y. Orbach, *The Antitrust Consumer Welfare Paradox*, 7 J. COMPETITION L. & ECON. 133, 137-38 (2011) (observing that “consumer welfare” is not a clearly defined term in antitrust, though it has a clear definition in economics).

77. See HERBERT HOVENKAMP, *THE ANTITRUST ENTERPRISE: PRINCIPLE AND EXECUTION* 2 (2005) (“The only articulated goal of the antitrust laws is to benefit consumers, who are best off when markets are competitive.”).

harms and dynamic harms such as diminished innovation.⁷⁸ The term “consumer” in consumer welfare, however, is more or less a term of art that could include intermediate buyers⁷⁹ as well as suppliers,⁸⁰ neither of which are consumers in the literal sense. In this respect, the standard is not as constricted legally as many believe.⁸¹

Accepting the premise that antitrust law is for the protection of competition not competitors⁸²—as the Supreme Court stated long ago⁸³—consumer welfare is in theory a relatively sound concept, as it is designed to filter out conduct that is ultimately harmless to consumers. In practice, however, because nonprice effects are unquantifiable and often unmeasurable, proof is very difficult to establish,⁸⁴ and, for reasons to be discussed later, the difficulties are compounded in digital platform markets.⁸⁵ Along with the demanding burdens of proof imposed on plaintiffs, this has led to a tilting of antitrust law and policy against antitrust enforcement, particularly in the section 2 context.⁸⁶ A backlash against the highly

78. See *infra* note 141 and accompanying text.

79. This is self-evident from the “direct purchaser” rule, which restricts the recovery of damages in an antitrust action to a direct purchaser, even if the direct purchaser passes on the higher costs resulting from the seller’s anticompetitive conduct to the indirect purchasers (the direct purchaser’s customers). *Brick Co. v. Illinois*, 431 U.S. 720, 729, 735 (1977). The doctrine obviously would not exist if intermediate buyers were not considered “consumers” who could be harmed by antitrust violations.

80. See, e.g., *Mandeville Island Farms, Inc. v. Am. Crystal Sugar Co.*, 334 U.S. 219, 235 (1948) (holding that *purchasers’* conspiracy to fix the prices they paid to sugar beet sellers violated the Sherman Act, just as a conspiracy of sellers to fix the prices they charge buyers would constitute a violation).

81. See Marina Lao, *Strengthening Antitrust Enforcement Within the Consumer Welfare Rubric*, CPI ANTITRUST CHRON., Nov. 2019, at 32-34 (discussing the misperceptions of the consumer welfare paradigm).

82. Even Robert Pitofsky, an antitrust progressive and former Chairman of the Federal Trade Commission during the Clinton administration, seemed to agree. See Robert Pitofsky, *The Political Content of Antitrust*, 127 U. PA. L. REV. 1051, 1058 (1979) (stating that “protection for small businessmen against the rigors of competition” is not a proper antitrust concern).

83. See *Brunswick Corp. v. Pueblo Bowl-O-Mat, Inc.*, 429 U.S. 477, 488 (1977); *Brown Shoe Co. v. United States*, 370 U.S. 294, 320 (1962).

84. See *infra* text accompanying note 139 (discussing the fundamental concepts of consumer welfare).

85. See *supra* note 21 and accompanying text; *infra* Part II.C.1.

86. See *supra* notes 21-23 and accompanying text.

permissive approach toward dominant firms and market power was probably inevitable in this age of large digital platforms.⁸⁷

We are now in a populist period, where concerns are running high about big business and especially the immense economic power of the largest technology platforms.⁸⁸ Now, as in the no-fault movement in the 1970s, critics frustrated with the limitations of traditional antitrust enforcement are exploring ideas, including no-fault monopolization theories, for dispersing uncomfortable levels of concentration.⁸⁹

B. Dominance of the Largest Digital Platforms: Network and Lock-in Effects, Enhanced by Personal Data

The dominance of the largest digital technology platforms in their respective core areas, and the breadth of their activities across markets, is undisputed. For example, Google's search engine handles approximately 88 percent of all general Internet searches worldwide;⁹⁰ Amazon garners 82 percent of e-book sales⁹¹ and 45 percent of all e-commerce retail sales in the United States;⁹² and Facebook is by far the most popular social network.⁹³ Additionally,

87. Bill Kovacic (later Chairman of the FTC in President George W. Bush's administration) said thirty years ago that "deconcentration constitutes antitrust's cyclical response to eras of permissiveness in the treatment of market power, whether gained through single-firm conduct or through consolidation," and he presciently predicted that the pendulum would likely swing back to a renewed political interest in and discussion of the "persistent" monopoly problem and various deconcentration measures. Kovacic, *supra* note 16, at 1149.

88. See *supra* text accompanying notes 1-14.

89. See, e.g., *supra* notes 18, 25-26 and accompanying text.

90. *Search Engine Market Share Worldwide 2019*, STATISTA, <https://www.statista.com/statistics/216573/worldwide-market-share-of-search-engines/> [<https://perma.cc/CSD2-5TAJ>].

91. *February 2017 Big, Bad, Wide & International Report: Covering Amazon, Apple, B&N, and Kobo Ebook Sales in the US, UK, Canada, Australia, and New Zealand*, AUTHOREARNINGS.COM, <https://web.archive.org/web/20190218084936/http://authorearnings.com/report/february-2017> [<https://perma.cc/U54J-NVQB>].

92. *Projected Retail E-Commerce GMV of Share of Amazon in the United States from 2016 to 2021*, STATISTA, <https://www.statista.com/statistics/788109/amazon-retail-market-share-usa/> [<https://perma.cc/N8EZ-WWRB>].

93. As of July 2019, Facebook had 72.12 percent of the worldwide social media market, *Social Media Stats Worldwide: July 2018-July 2019*, STATCOUNTER, <http://gs.statcounter.com/social-media-stats> [<https://perma.cc/TH8V-QLKF>], and 50.86 percent of the U.S. social media market. *Social Media Stats United States of America: July 2018-July 2019*, STATCOUNTER, <http://gs.statcounter.com/social-media-stats/all/united-states-of-america> [<https://perma.cc/TBF6-2EJV>].

Google and Facebook together have a 56.8 percent market share of all revenues received nationally from digital advertising,⁹⁴ though Amazon is rapidly gaining market share on them.⁹⁵ Further, each of these companies has expanded into multiple other business sectors as well, either through internal growth or acquisitions, and the breadth and scale of their activities are staggering.⁹⁶

A policy dilemma that confronts antitrust policymakers sorting through the dominance issues of these firms is that, on the one hand, the platforms have benefited consumers immensely,⁹⁷ and their conduct in gaining or enhancing their dominance is not necessarily unlawful under monopolization doctrine.⁹⁸ On the other

94. Daniel Liberto, *Facebook, Google Digital Ad Market Share Drops as Amazon Climbs*, INVESTOPEDIA (June 25, 2019), <https://www.investopedia.com/news/facebook-google-digital-ad-market-share-drops-amazon-climbs/> [<https://perma.cc/HDT8-YL33>].

95. Julie Creswell, *Amazon Sets Its Sights on the \$88 Billion Online Ad Market*, N.Y. TIMES (Sept. 3, 2018), <https://www.nytimes.com/2018/09/03/business/media/amazon-digital-ads.html> [<https://perma.cc/3MXD-ZNPM>].

96. For example, in addition to its search engine, Alphabet, Google's parent company, also offers email (Gmail), video (YouTube), an Internet browser (Chrome), an operating system for mobile (Android), mapping (Google Maps), and numerous other products and services. *Our Products*, GOOGLE, <https://www.google.com/about/products/> [<https://perma.cc/D7TM-DDHF>]; see also Nicolas Petit, *Technology Giants, the "Moligopoly" Hypothesis and Holistic Competition: A Primer* 16-17 (Oct. 20, 2016), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2856502 [<https://perma.cc/665A-28Q2>] (listing all the market lines of Google, Apple, Facebook, Amazon, and Microsoft).

97. Even the harshest critics of the largest tech platforms acknowledge, if grudgingly, their benefits to consumers. See Khan, *supra* note 9, at 714 (conceding that consumers "universally seem to love the company" and adding that Amazon was ranked "the most reputable company in America" in 2016 for the third consecutive year); *id.* at 716 (acknowledging that Amazon "has so clearly delivered enormous benefits to consumers—not to mention revolutionized e-commerce in general"); *A Giant Problem: The Rise of the Corporate Colossus Threatens Both Competition and the Legitimacy of Business*, ECONOMIST (Sept. 17, 2016), <https://www.economist.com/leaders/2016/09/17/a-giant-problem> [<https://perma.cc/DTX4-YB9G>] ("[T]he superstars are admirable in many ways. They churn out products that improve consumers' lives, from smarter smartphones to sharper televisions. They provide Americans and Europeans with an estimated \$280 billion-worth of 'free' services—such as search or directions—a year.").

98. European competition authorities have been much more aggressive toward dominant American digital platform companies. In a decision in 2017, the European Commission found that Google had abused its dominance in preferring its own comparison shopping results over its competitors' services in its display of search results in response to users' shopping-related inquiries and imposed an unprecedented fine of €2.42 billion. European Commission Press Release IP/17/1784, *Antitrust: Commission Fines Google €2.42 Billion for Abusing Dominance as Search Engine by Giving Illegal Advantage to Own Comparison Shopping Service* (June 27, 2017), http://europa.eu/rapid/press-release_IP-17-1784_en.htm [<https://perma.cc/N9BR-L2BU>]. In a second decision in 2018, also against Google, European competition enforcers

hand, their business practices, lawful or unlawful, may suppress innovation in the long run and slow economic growth.⁹⁹ The concern is that if there is no meaningful competition, these tech giants may become less innovative in the future, to the detriment of consumers.¹⁰⁰ Adding to the dilemma is the important role network and lock-in effects, enhanced by data, play in entrenching the power of some of the largest digital platforms in their respective areas of dominance and in strengthening entry barriers.¹⁰¹

Yet simply taking advantage of the inherent competitive benefits of network and lock-in effects is not improper conduct under section 2,¹⁰² nor are these effects necessarily anticompetitive. In fact, they often provide efficiencies that benefit consumers.¹⁰³ Network effects refer to the rise of a platform's value to each individual user as the number of users increases.¹⁰⁴ Facebook, for example, becomes

concluded that Google had abused its dominance by bundling some of its apps on Android, its mobile operating system, and imposed yet another record fine of €4.34 billion. European Commission Press Release IP/18/4581, Antitrust: Commission Fines Google €4.34 Billion for Illegal Practices Regarding Android Mobile Devices to Strengthen Dominance of Google's Search Engine (July 18, 2018), http://europa.eu/rapid/press-release_IP-18-4581_en.htm [<https://perma.cc/TN9K-6FVB>]. Commentary on these decisions in the United States has been quite harsh, with criticism focusing primarily on the lack of consumer harm. *See, e.g.*, Julian Morris, *The European Commission's Google Android Decision Takes a Mistaken, Ahistorical View of the Smartphone Market*, TRUTHONTHEMARKET.COM (July 23, 2018), <https://truthonthemarket.com/2018/07/23/the-european-commissions-google-android-decision-takes-a-mistaken-ahistorical-view-of-the-smartphone-market/> [<https://perma.cc/Q3JN-2HPB>] (quoting FTC Chairman Joseph Simons who said: "Once [the European Commission] find that a company is dominant ... that imposes upon the company kind of like a fairness obligation irrespective of what the effect is on the consumer. Our regulatory ... our antitrust regime requires that there be a harm to consumer welfare—so the consumer has to be injured—so the two tests are a little bit different").

99. *See supra* notes 10-13 and accompanying text.

100. *See, e.g.*, Maurice Stucke & Allen Grunes, *Dancing Around Data*, THE HILL (Dec. 10, 2014, 11:30 AM), <http://thehill.com/blogs/congress-blog/technology/226502-dancing-around-data> [<https://perma.cc/Q5TC-K397>].

101. *See, e.g.*, Howard A. Shelanski, *Information, Innovation, and Competition Policy for the Internet*, 161 U. PA. L. REV. 1663, 1682-83 (2013) (discussing entrenchment of dominant digital platforms through network effects and switching costs). For an overview of antitrust analysis of multisided digital platform markets, see generally David S. Evans & Richard Schmalensee, *The Antitrust Analysis of Multisided Platform Businesses*, in 1 OXFORD HANDBOOK OF INTERNATIONAL ANTITRUST ECONOMICS 404 (Roger D. Blair & D. Daniel Sokol eds., 2015).

102. Lao, *supra* note 13, at 512-14.

103. *See* Shelanski, *supra* note 101, at 1686.

104. *Id.* at 1682.

more attractive to each user as more people join the network, since there are more friends with whom the user can interact. A platform might benefit too from indirect network effects when third parties produce a variety of attractive complementary products, which increase the utility of the platform and draw more users to it.¹⁰⁵

These effects are further magnified by the importance of consumer data to digital platforms and by the largest platforms' huge data advantage over their smaller rivals.¹⁰⁶ Platforms collect millions of scraps of personal data from consumers visiting their sites. For advertisement-supported platforms such as Facebook and Google, for example, the more user data that is collected, the better advertising can be targeted to individual users,¹⁰⁷ which leads to higher advertising revenues, which supports further investments in quality improvements, which attracts more users, and so on.¹⁰⁸ A smaller rival or potential rival platform, without comparable mounds of personal data, would be at a significant competitive disadvantage.¹⁰⁹

A platform's organic growth of data—collecting, mining, synthesizing, and using that data—however, is generally not considered exclusionary conduct under section 2, even though it may indeed increase entry barriers.¹¹⁰ Moreover, it is impossible to categorically

105. *Id.* at 1683.

106. *See, e.g.*, Stucke & Grunes, *supra* note 100 (arguing that the tech giants significantly outpace their rivals in the amount of big data they possess, which entrenches their power).

107. *See* Andres V. Lerner, *The Role of "Big Data" in Online Platform Competition* 39 (Aug. 26, 2014), https://ssrn.com/so13/papers.cfm?abstract_id=2482780 [<https://perma.cc/5QJ6-WVYQ>].

108. Lao, *supra* note 13, at 503.

109. Some commentators disagree with this view and point to the successes of some platform start-ups with no data that nevertheless managed to enter and topple established incumbents (which had data)—the most famous examples being Facebook's and Google's displacement of MySpace and Yahoo! respectively. *See* Anja Lambrecht & Catherine E. Tucker, *Can Big Data Protect a Firm from Competition?* 14 (Dec. 18, 2015), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2705530 [<https://perma.cc/UD8V-86WH>]; *see also* Geoffrey A. Manne & R. Ben Sperry, *The Problems and Perils of Bootstrapping Privacy and Data into an Antitrust Framework*, CPI ANTITRUST CHRON., May 2015, at 2, 9-10 (asserting that entry barriers into online markets are low and network effects are weak because of the absence of switching costs and lock-in, among other reasons); D. Daniel Sokol & Roisin Comerford, *Antitrust and Regulating Big Data*, 23 GEO. MASON L. REV. 1129, 1136 (2016); Darren S. Tucker & Hill B. Wellford, *Big Mistakes Regarding Big Data*, 14 ANTITRUST SOURCE, Dec. 2014, at 1, 7 (arguing that user data is ubiquitous, cheap, nonrivalrous, and easily accessible, and therefore not an entry barrier).

110. *See* Lao, *supra* note 13, at 512-13 (discussing the various antitrust issues animating

describe the effects as anticompetitive, as data can help platforms deliver substantial consumer benefits. For example, search engines can improve on their search results for search terms going forward by learning from users' past "click-and-query" data (that is, users' actual clicks on the displayed search results for the relevant search term).¹¹¹ Thus, Google, the dominant search engine, is able to greatly enhance the quality of its search results relative to that of smaller search engines, because it has more data from more search activity with which to train its algorithms.

For platforms that are not primarily advertisement-supported, such as Amazon, the effects of data are similarly mixed, and it is also not clear that the organic growth and use of such data is improper. There is little doubt, for example, that having large bodies of user data relating to consumers' browsing practices helps Amazon identify an individual's buying patterns and cater better to his or her needs.¹¹² Knowing the items users searched for and immediately bought, or searched for but did not find, or found but did not buy, or items they placed in their baskets but wavered on buying for some time, or knowing how long their mouses hovered over various items, obviously gives the company valuable relevant information with which to improve its services.

Critics are correct that huge data advantages effectively protect dominant incumbent platforms from competition and serve as entry barriers, thereby further entrenching the incumbent's market power.¹¹³ However, relying on personal data collected on its own platform, without more, is not improper conduct. Equally important, relying on data to better serve customers is a consumer *benefit*, not a consumer harm.¹¹⁴ This reality highlights the futility of attempting to categorically characterize the competitive effects of big data

the big-data debate).

111. *See id.* at 509.

112. *See* Sokol & Comerford, *supra* note 109, at 1135.

113. *See* Lao, *supra* note 13, at 508-10 (analyzing the procompetitive and anticompetitive potential of big data); Nathan Newman, *Search, Antitrust, and the Economics of the Control of User Data*, 31 *YALE J. ON REG.* 401, 405-07, 420-23, 426 (2014) (arguing that it is difficult for the established platforms' rivals, who do not have consumer data initially, to monetize data so as to compete with the incumbents). *See generally* STUCKE & GRUNES, *supra* note 12, at 36-42 (commenting on the competitive significance of big data).

114. *See* Sokol & Comerford, *supra* note 109, at 1129, 1134-35.

as either procompetitive or anticompetitive.¹¹⁵ It underscores as well the challenge policymakers face in deciding when and how to use antitrust law to protect consumers without causing more harm than good through inappropriate interference.

C. *The New Brandeis Frustration with Section 2 Doctrine*

While many commentators have been critical of the narrow interpretation of section 2 since the 1980s,¹¹⁶ enhanced anxiety over the size of the largest tech companies has contributed to the rise of a genre of commentaries that more frontally challenge the antitrust enterprise.¹¹⁷ This group of critiques, which has gained some political traction,¹¹⁸ has been labeled collectively as New Brandeis antitrust.¹¹⁹ Defining New Brandeis would be very difficult—and I shall not attempt to do so here—since those loosely identified with the group hold a variety of views on different issues, including on the antitrust reforms they deem necessary to keep the largest technology platforms in check. Several common threads run through their commentaries, though. They include a strong distrust of economic power generally,¹²⁰ and of the power of the largest technology

115. See Lao, *supra* note 13, at 508-09.

116. See sources cited *supra* note 2; see also Khan & Vaheesan, *supra* note 6, at 236-37; Shapiro, *supra* note 3, at 742-43.

117. See *supra* notes 24-26 and accompanying text.

118. See Consolidation Prevention and Competition Promotion Act of 2017, S. 1812, 115th Cong. (2017) (bill introduced by Sen. Amy Klobuchar to raise the bar for merger approvals; the bill has not had a hearing); Alexis C. Madrigal, *A Silicon Valley Congressman Takes on Amazon*, ATLANTIC (June 19, 2017), <https://www.theatlantic.com/technology/archive/2017/06/ro-khanna-amazon-whole-foods/530805/> [<https://perma.cc/S2M5-EQ4R>] (reporting on Congressman Ro Khanna's view that Congress should look into "reorient[ing] antitrust policy to consider all the factors of economic concentration," including not just consumer price, but also "the loss of jobs, the impact on wages, the impact on local small businesses, and the impact on innovation within an industry"); Warren, *supra* note 18 (putting forth a proposal to pass legislation that would break up Amazon, Facebook, Google).

119. See sources cited *supra* note 25 (listing some of the New Brandeis writings); see also A. Douglas Melamed & Nicolas Petit, *The Misguided Assault on the Consumer Welfare Standard in the Age of Platform Markets*, 54 REV. INDUS. ORG. 741, 744 n.7 (2019) (listing those commentators who are generally considered part of the New Brandeis group). See generally Medvedovsky, *supra* note 24, at 41-46 (giving a short account of the rise of New Brandeis, or "hipster antitrust").

120. The label "New Brandeis" comes from this distrust of bigness, for which Louis Brandeis was well known. See Barak Orbach & Grace Campbell Rebling, *The Antitrust Curse of Bigness*, 85 S. CAL. L. REV. 605, 624-30 (2012) (covering thoroughly Brandeis's concern with

companies in particular,¹²¹ a shared belief that antitrust law should have a broader mission than that of promoting consumer welfare;¹²² and the related belief that current antitrust law, even if aggressively enforced, would not achieve that broader mission, thus requiring an overhaul of the antitrust laws.¹²³

1. *The Conduct Requirement and the Consumer Welfare Standard*

Section 2 of the Sherman Act does not combat “bigness” (or sheer size), nor does it prohibit even significant market power in a relevant market, absent some sort of exclusionary conduct.¹²⁴ Exclusionary conduct generally refers to practices inconsistent with legitimate competition that protects or increases a firm’s monopoly

“bigness”).

121. See, e.g., Wu, *supra* note 2, at 21 (arguing that tech giants’ power seems to “transcend the narrowly economic,” and that they “know too much about us, and seem [] to have too much power over what we see, hear, do, and even feel”); Barry C. Lynn, *America’s Monopolies Are Holding Back the Economy*, ATLANTIC (Feb. 22, 2017), <https://www.theatlantic.com/business/archive/2017/02/antimonopoly-big-business/514358/> [<https://perma.cc/VL4U-JXXL>]. Some New Brandeis commentators seem to treat immense economic power as monopoly power, though in antitrust law, monopoly power has a different meaning. See generally Khan, *supra* note 9 (focusing broadly on Amazon’s immense economic power but never quite identifying in which relevant markets the company has substantial market power).

122. See Khan, *supra* note 9, at 739-43 (arguing that the antitrust laws were intended to serve various interests, including “diversity and access to markets,” that “[f]ocusing antitrust exclusively on consumer welfare [wa]s a mistake,” and that the aims of antitrust included “the protection of producers and consumers from monopoly abuse, and the dispersion of political and economic control” (internal citations omitted)); Zephyr Teachout & Lina Khan, *Market Structure and Political Law: A Taxonomy of Power*, 9 DUKE J. CONST. L. & PUB. POL’Y 37, 37-41 (2014) (arguing that economics is overemphasized in antitrust and that political theory should take precedence); Vaheesan, *supra* note 25, at 991-94 (arguing that the goals of antitrust are broader than consumer welfare, and that the consumer welfare standard also does not fully take into account corporate power); Tim Wu, Opinion, *Be Afraid of Economic Bigness. Be Very Afraid*, N.Y. TIMES (Nov. 10, 2018), <https://www.nytimes.com/2018/11/10/opinion/sunday/fascism-economy-monopoly.html> [<https://perma.cc/Q8PX-WFBA>] (contending that “bigness” poses threats to democracy and creates conditions conducive to dictatorship, which antitrust law fails to take into account).

123. See generally Khan & Vaheesan, *supra* note 6, at 236-37, 266, 268. This perception parallels some of the sentiments that existed in the big-is-bad era. See Stigler, *supra* note 41, at 164 (“The Sherman Act is admirable in dealing with formal conspiracies of many firms, but ... it cannot cope effectively with the problem posed by big business.”).

124. See *Verizon Commc’ns, Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 407 (2004); *United States v. Grinnell Corp.*, 384 U.S. 563, 570-71 (1966).

power by excluding or weakening the firm's rivals.¹²⁵ Significantly, not all conduct that might harm a competitor is captured under section 2.¹²⁶

Notably, simply taking advantage of scale economies and network effects (essentially a form of scale economies), or engaging in internal growth and expansion, is generally not considered unlawful conduct, even if it has the effect of impeding entry or meaningful competition from actual or potential rivals.¹²⁷ Thus, for example, it is certainly correct that the more users gravitate to Facebook, the greater the value of Facebook is to its users, which attracts more users.¹²⁸ The increase in Facebook's user base then allows it to collect more consumer data, which attracts more online advertisers who are able to serve better targeted advertisements to individual users.¹²⁹ This provides greater advertising revenues to Facebook, allowing the company to further improve and expand its products, attracting still more users, and so on.¹³⁰ While this network and feedback effects phenomenon indicates that entry barriers are high in digital platform markets, it does not necessarily describe unlawful conduct.

As to user lock-in, a complaint from critics of the largest platforms is that each tech giant has built its own ecosystem, and entices users to stay within it.¹³¹ In the case of Facebook, for example, it is said that the network's architecture, combined with

125. See Herbert J. Hovenkamp, *The Antitrust Standard for Unlawful Exclusionary Conduct* 9 n.18, 25 (June 6, 2008) (unpublished manuscript on file at Faculty Scholarship at Penn Law), https://scholarship.law.upenn.edu/cgi/viewcontent.cgi?article=2779&context=faculty_scholarship [<https://perma.cc/G2LV-ANM2>].

126. See *Trinko*, 540 U.S. at 407.

127. See *id.* at 407-08.

128. This fits the classic definition of network effects—the value of Facebook to each individual user grows as an increasing number of consumers uses the social media platform, because the individual user then derives more value from it by having more “friends” with whom she can communicate. See *supra* notes 102-04 and accompanying text.

129. See Lao, *supra* note 13, at 503, 509.

130. See *id.*

131. See Allen P. Grunes & Maurice E. Stucke, *No Mistake About It: The Important Role of Antitrust in the Era of Big Data*, ANTITRUST SOURCE, April 2015, at 1, 8 (“Businesses develop strategies to exploit switching costs and lock-in, whether it is the investment of time needed to learn to use a platform, the number of complementary products such as apps that are available, or the fact that most of one’s friends are on Facebook. Indeed, it may be more difficult to move a consumer away from a ‘free’ good or service than one that he or she pays for.”).

network effects, discourages users from switching: their friends are all on Facebook, and they have spent time posting photographs and otherwise building a presence on the network.¹³² The high switching costs then create a lock-in effect and raise entry barriers into the relevant markets.¹³³ Although these observations are substantially true, tempting users to stay within an ecosystem by expanding offerings and adding or improving features, however, can hardly be considered improper conduct.

Identifying exclusionary conduct and making a case for consumer harm is similarly difficult with respect to Amazon. Carl Shapiro, who is sympathetic to the general need for stronger antitrust enforcement, nevertheless said of a New Brandeis critique:

[One] must describe the specific conduct that concerns them and explain how that conduct disrupts the competitive process and harms customers. Simply saying that Amazon has grown like a weed, charges very low prices, and has driven many smaller retailers out of business is not sufficient. Where is the consumer harm?¹³⁴

Herbert Hovenkamp similarly noted that “[o]ne cannot simply lament that Amazon has grown too large,” but must “identify[] what exactly Amazon is doing that should be remedied and what those remedies should look like” when clearly customers are not complaining.¹³⁵

Furthermore, under the consumer welfare standard on which contemporary antitrust is based, the conduct must have “anti-competitive effect”—that is, it must not only exclude rivals but must harm consumers or “harm the competitive *process* and thereby harm consumers.”¹³⁶ “Consumer welfare,” long accepted as the lodestone

132. *See id.*

133. *See id.* at 8-9.

134. Shapiro, *supra* note 3, at 743.

135. Herbert J. Hovenkamp, *Is Antitrust’s Consumer Welfare Principle Imperiled?*, J. CORP. L. (forthcoming 2019) (manuscript at 32) (on file at Faculty Scholarship at Penn Law), https://scholarship.law.upenn.edu/cgi/viewcontent.cgi?article=2987&context=faculty_scholarship [<https://perma.cc/QJ6E-QDQE>].

136. *United States v. Microsoft Corp.*, 253 F.3d 34, 58 (D.C. Cir. 2001); *see also* Timothy J. Muris, *The FTC and the Law of Monopolization*, 67 ANTITRUST L.J. 693, 694 (2000) (“Recent Supreme Court pronouncements have confirmed that no matter how bad a firm’s conduct is, or how injurious to rivals, there can be no Section 2 violation without injury to competition.”).

in antitrust analysis,¹³⁷ curiously has no real definition in antitrust law, but has been variously interpreted.¹³⁸ Under the narrow, orthodox, Chicago-School interpretation championed by Robert Bork, consumer welfare is almost synonymous with allocative efficiency, and, thus, only practices that artificially restrict output are deemed to harm consumers.¹³⁹ The more mainstream view, however, is broader and simply asks if the practice harms competition and ultimately makes consumers worse off.

Contrary to common critiques of the standard, the measure of consumer harm is *not* limited to price or output effects.¹⁴⁰ Diminishment of quality, choice, or innovation alone would qualify as consumer harm as well because these factors clearly impact consumer welfare.¹⁴¹ However, unlike price, nonprice harms are usually unquantifiable and difficult to measure.¹⁴² And, because plaintiffs normally carry the burden of proof, successful challenges to dominant firm conduct absent price effects have been rare in practice. Thus, as applied, the “consumer welfare” standard does tend to focus on price effects.

Certain characteristics of many digital markets compound the difficulty of showing consumer harm. Consumers do not pay a monetary price to use social media, search engines, e-mail, or many other popular platform products; instead, the advertising side of the platforms pays for the opportunity to serve targeted advertising to individual users (made possible by the volumes of personal data the platforms collect from them).¹⁴³ If price were functionally the *only* measure of harm, then showing adverse effects of any alleged exclusionary conduct would indeed be extremely difficult.¹⁴⁴ When

137. *Reiter v. Sonotone Corp.*, 442 U.S. 330, 343 (1979) (quoting ROBERT H. BORK, *THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF* 66 (1978)).

138. See Orbach, *supra* note 76, at 163-64.

139. See BORK, *supra* note 65, at 90-160 (discussing the neoclassical efficiency model’s assumption that only practices that artificially restrict output are economically inefficient).

140. Jonathan B. Baker, *Beyond Schumpeter vs. Arrow: How Antitrust Fosters Innovation*, 74 *ANTITRUST L.J.* 575, 602 (2007).

141. In fact, there is general agreement that innovation is more important to economic growth than price competition. See, e.g., Shelanski, *supra* note 101, at 1674-75.

142. See Melamed & Petit, *supra* note 119, at 750-51, 753.

143. See Lao, *supra* note 13, at 503 (discussing the business model of advertisement-supported multisided digital platforms where the consumer-facing side of the platform is free to users).

144. See Michal S. Gal & Daniel L. Rubinfeld, *The Hidden Costs of Free Goods: Implications*

the monetary price to consumers is zero, any harm from a dominant platform's alleged exclusionary conduct naturally would not be reflected in prices,¹⁴⁵ but rather in loss of quality or innovation.¹⁴⁶

Correctly applied, as earlier discussed, the consumer welfare standard should capture consumers' competition-related harms other than price.¹⁴⁷ However, loss of quality or reduced innovation claims, never easy to establish in any case, are all the more difficult against the largest digital technology companies because of their track record of fast-paced innovation, quality improvements, and substantial investments in research and development.¹⁴⁸ Proving what might have been is always difficult, but it is particularly hard in industries where the incumbents are generally celebrated for their frequent rollout of new and improved products or features,¹⁴⁹

for Antitrust Enforcement, 80 ANTITRUST L.J. 521, 523, 548-49 (2015) (analyzing the difficulty of showing consumer harm in two-sided platform markets where the consumer-facing side of the market is nominally free). Although consumers do not pay a monetary price for use of these platforms, they are not truly free. Consumers "pay" with their attention and their personal data. In theory, it should be possible to assign a monetary value to what consumers "give" for the use of Facebook or the Google search engine, for example, and to evaluate whether any alleged bad act results in consumers having to "give" more for the same use of the platform. As a practical matter, conducting such an analysis would be very challenging.

145. See Shelanski, *supra* note 101, at 1667 ("[T]he usual price-oriented antitrust analysis may be irrelevant in markets where many consumers pay nothing for the services they use and in which firms compete more through technological advancements than through lower prices."). It should be noted that the advertising side of these two-sided platforms does pay, but prices have been declining substantially—suggesting that this market is competitive—and no allegations of adverse price effects on the advertising side have been made. See Ip, *supra* note 9 (noting that the price advertisers pay Google per click has fallen by a third the past three years).

146. Grunes & Stucke, *supra* note 131, at 4-5, 8 (arguing that with less competition, the large platforms have less incentive to innovate or to improve the quality of their offerings, leading to a possible degradation of quality).

147. *But see* Vaheesan, *supra* note 25, at 983 (contending that the consumer welfare antitrust standard has led to courts "rewrit[ing] doctrine not to protect consumers, but to preserve the freedom of dominant and other powerful corporations").

148. See Petit, *supra* note 96, at 21-24 (providing R&D investment data for Google, Microsoft, Facebook, Apple, and Amazon); Rani Molla, *Amazon Spent Nearly \$23 Billion on R&D Last Year—More Than Any Other U.S. Company*, RECODE (Apr. 9, 2018), <https://www.vox.com/2018/4/9/17204004/amazon-research-development-rd> [<https://perma.cc/RN7Y-S9S5>] (reporting that Amazon, Alphabet (Google's parent company), Microsoft, Apple, and Facebook were top-ranked for R&D spending among U.S. companies).

149. Consumers are almost conditioned now to expect something new or improved on the most popular platforms on a regular basis. Not that long ago, for example, we marveled at the ability to get directions on map applications on smartphones. Now, we cease to be amazed even when Google introduces features allowing us to download maps in advance for offline

overall superior service,¹⁵⁰ and huge R&D investments.¹⁵¹ How does one demonstrate, or even credibly claim, that had Google, Facebook, Amazon, or Apple, for example, faced more competition, they would have introduced more innovative products or features?

Yet concerns about the absence of meaningful competition in the major platform markets, and its potential implications in the long run, are legitimate and deserve more attention. Without competition, any firm's incentives to innovate or expand would naturally be reduced,¹⁵² and there would also be no real constraints on the platforms' abilities to exploit their power. Moreover, it is reasonable to surmise that the presence of a super-dominant incumbent such as Google or Facebook in a market, and fear of its strategic conduct, would chill innovation and venture capital investment in any nascent competitor's start-up projects. And, if Facebook or Google can freely copy the features of a start-up's product proven to be a hit with users (that are not subject to intellectual property protection), in addition to fairness issues, one would intuitively expect less incentive to innovate on the part of start-ups and less investor willingness to invest in start-up projects.¹⁵³ This intuition has found some support in recent empirical research showing that Android apps exhibit less innovation when Google vertically integrates into their markets.¹⁵⁴ Section 2 seems ill-equipped to deal with these types of problems involving the large digital platform companies,

use, which is particularly useful for international travel. See Devon Delfino, *How to Download Maps on the Google Maps App for Offline Use When You're Traveling or Don't Have Good Service*, BUS. INSIDER (May, 9, 2019, 9:25 AM), <https://www.businessinsider.com/how-to-use-google-maps-offline> [https://perma.cc/M6G2-7A92].

150. See, e.g., Karen Weise, *Last-Minute Shoppers Increasingly Trust Only Amazon to Deliver*, N.Y. TIMES (Dec. 21, 2018), <https://www.nytimes.com/2018/12/21/technology/amazon-last-minute-gifts-shopping.html> [https://perma.cc/69SG-6MDV]. Even Lina Khan, the face of New Brandeis and probably Amazon's harshest critic, acknowledges the popularity of the company with consumers and its contributions to e-commerce. Khan, *supra* note 9, at 714.

151. See Petit, *supra* note 96, at 21-24.

152. See Jonathan B. Baker, *Market Power in the U.S. Economy Today*, WASH. CTR. FOR EQUITABLE GROWTH (Mar. 20, 2017), <https://equitablegrowth.org/market-power-in-the-u-s-economy-today/> [https://perma.cc/9MZ2-VYCE].

153. See Dwoskin, *supra* note 10 (arguing that Facebook's copying of start-up competitors' product features "is having a profound impact on innovation in Silicon Valley, by creating a strong disincentive for investors and start-ups to put money and effort into creating products Facebook might copy").

154. Wen Wen & Feng Zhu, *Threat of Platform-Owner Entry and Complementor Responses: Evidence from the Mobile App Market*, 40 STRATEGIC MGMT. J. 1336, 1349-51 (2019).

leaving us with unanswerable questions of which innovations consumers may miss because nascent firms are unable to get funding or are unwilling to take risks given the largest platforms' outsized dominance, or which quality improvements may not take place because of the lack of competition.

*2. The Failure of Antitrust, Including Section 2, to Address Social and Political, and Other Noncompetition Harms*¹⁵⁵

The New Brandeis critiques, however, go beyond arguments that, as applied, the consumer welfare standard fails to capture all competition-related consumer harms. They further challenge the limited competition-related economic objectives of antitrust and argue for a more expansive vision.¹⁵⁶ In this view, even aggressive antitrust enforcement under existing law is inadequate because current doctrine fails to take into account the full panoply of social or political harms that might be associated with concentrated economic power.¹⁵⁷

Among the critiques is that excessive market power is unfair to smaller market participants¹⁵⁸ and contributes to economic inequality.¹⁵⁹ Furthermore, economic power tends to yield political power,¹⁶⁰

155. My purpose here is to briefly set forth the gist of the New Brandeis arguments that bigness undermines our democracy and is a source of many of our social and political problems and is not an attempt to discuss these issues in detail.

156. See Khan & Vaheesan, *supra* note 6, at 237; Vaheesan, *supra* note 25, at 981; see also sources cited *supra* note 122. Some antitrust progressives not necessarily identified with the New Brandeis movement also share this perspective. See Harry First & Spencer Weber Waller, *Antitrust's Democracy Deficit*, 81 *FORDHAM L. REV.* 2543, 2544-46 (2013) (arguing generally that antitrust technocrats have sidetracked antitrust's broader mission of preventing concentrations of economic and political power); Maurice E. Stucke, *Reconsidering Antitrust's Goals*, 53 *B.C. L. REV.* 551, 556-57, 595-602, 611-13 (2012).

157. See, e.g., Vaheesan, *supra* note 25, at 984 ("Powerful businesses are using their might to hurt Americans in myriad ways, and consumer welfare captures at most only a subset of these public harms."). This view is reflected as well in the Consolidation Prevention and Competition Promotion Act of 2017, introduced by Senator Amy Klobuchar. S. 1812, 115th Cong. § 2(a)(5) (2017) ("[U]ndue market concentration also contributes to the consolidation of political power, undermining the health of democracy in the United States.").

158. See S. 1812 § 2(a); see also Khan, *supra* note 9, at 741-42.

159. See Khan & Vaheesan, *supra* note 6, at 238-45. The association between excessive market power and economic inequality was actually made earlier by non-New Brandeis antitrust economists, Jonathan Baker and Steven Salop. See Baker & Salop, *supra* note 6, at 11-13.

160. See Khan, *Ideological Roots*, *supra* note 25, at 961 ("Dominant firms' economic power

and political power on the part of large corporations tends to undermine American democracy.¹⁶¹

These concerns are magnified with respect to the largest digital platforms because they control a significant share of our commerce and communications, and impact many aspects of our lives.¹⁶² Google's dominance in search, for example, gives it an outsized influence in shaping our virtual environment.¹⁶³ It determines, through its artificial intelligence-based algorithms, the digital advertisements that we see and the search results that are displayed in response to our search queries. This suggests that the inevitable biases of Google's systems and employees who write the algorithms could influence the information and content that flows to all of us.¹⁶⁴ The New Brandeisians correctly point out that the consumer welfare standard is incapable of factoring these risks into antitrust analysis.¹⁶⁵

As for Facebook, a slew of scandals has recently embroiled the social network. They include the company's mishandling of users' personal data, its role in the Cambridge Analytica incident and in a number of security breaches, and its negligence in allowing Russian meddling and "fake news" to spread during the 2016 U.S. presidential election.¹⁶⁶ The problem is that although these serious

allows them ... to concentrate political power.").

161. See Khan & Vaheesan, *supra* note 6, at 236, 265-67. Some political economists and antitrust progressives not considered part of the New Brandeis group share this concern. See Baker & Salop, *supra* note 6, at 6-8 ("The wealthiest have a disproportionate influence on public policy.... This political effect can make inequality self-reinforcing: the economic power of those at the top gives the wealthy political power, which can be used to entrench and enhance their economic power, further increase their political power, and so on. This vicious cycle creates the possibility that inequality could threaten our democracy."); Pitofsky, *supra* note 82, at 1051 (arguing that an economy "dominated by a few corporate giants" would "breed antidemocratic political pressures").

162. See, e.g., Oren Bracha & Frank Pasquale, *Federal Search Commission? Access, Fairness, and Accountability in the Law of Search*, 93 CORNELL L. REV. 1149, 1173-76, 1174 n.137, 1175 n.140, 1176 n.146 (2008) (arguing that Google's dominance as a search engine allows it to act as a gatekeeper to the Internet).

163. See Farhad Manjoo, *Here's the Conversation We Really Need to Have About Bias at Google*, N.Y. TIMES (Aug. 30, 2018), <https://www.nytimes.com/2018/08/30/technology/bias-google-trump.html> [<https://perma.cc/NER5-DRQK>].

164. *Id.*

165. See sources cited *supra* notes 120-23, 157.

166. See Aric Jenkins, *We're Keeping Track of All of Facebook's Scandals So You Don't Have To*, FORTUNE (Apr. 6, 2018), <https://fortune.com/2018/04/06/facebook-scandals-mark-zuckerberg/> [<https://perma.cc/B686-QS5A>].

transgressions did harm consumers, they were largely not *antitrust* transgressions that Facebook committed in order to protect or enhance its monopoly power. However, probably because laws more specifically targeted to the noncompetition-related misconduct and related problems are nonexistent and woefully inadequate,¹⁶⁷ some have looked to antitrust for a solution and have found it wanting.

Noting, correctly, that even strong antitrust enforcement under the traditional monopolization paradigm will not adequately address some of the problems just discussed, New Brandeis commentators have made various suggestions for reform, including a no-fault approach to monopolization.¹⁶⁸ Under Lina Khan and Sandeep Vaheesan's proposal, no "bad act" would be necessary to find section 2 liability if a firm possesses monopoly power for an extended period of time, such as five years.¹⁶⁹ Another New Brandeis commentator implicitly endorsed no-fault monopolization by arguing that the conduct requirement of section 2 is "bias[ed] in favor of monopolies" and amounts to a "per se rule in favor of monopolization."¹⁷⁰ Senator Elizabeth Warren's recent policy proposal to break up Amazon, Google, Facebook, and Apple—technology firms that have annual global revenue of \$25 billion or more and additionally operate a platform or digital marketplace—likewise represents a no-fault approach.¹⁷¹

In addition to no-fault, other New Brandeis suggestions include replacing the consumer welfare lodestone with various other tests or standards, including a "citizen interest" test¹⁷² and a standard

167. For example, it is generally well known that today's information-based companies tend to employ far fewer workers relative to companies of comparable size in "traditional" industries, due to automation and technological advances. Yet, job retraining or educational initiatives designed to prepare workers for employment in the new economy have not been embraced. As another example, despite consumers' growing concerns about privacy and the security of their data, there are no comprehensive federal privacy or data security laws in the United States. Nor is there systematic regulation over how networks, such as Facebook, must police "fake news" and other false content. See *infra* Part III.B for further discussion.

168. See *The Consumer Welfare Standard in Antitrust: Outdated or a Harbor in a Sea of Doubt?: Hearing Before the Subcomm. on Antitrust, Competition and Consumer Rights of the S. Comm. on the Judiciary*, 115th Cong. 4-5 (2017) (statement of Diana Moss, President, American Antitrust Institute) (summarizing, though disagreeing with, the variety of views and proposals of the antitrust populists, such as New Brandeisians).

169. Khan & Vaheesan, *supra* note 6, at 285-87.

170. Woodcock, *supra* note 25, at 116.

171. See Warren, *supra* note 18.

172. Khan & Vaheesan, *supra* note 6, at 275-76.

that focuses on “our interests as workers, producers, entrepreneurs, and citizens.”¹⁷³ Others have proposed the regulation of the largest digital platforms as public utilities or natural monopolies as a solution.¹⁷⁴ My discussion here of the New Brandeis proposals will be confined to the no-fault theory.

III. NO-FAULT REFORM EFFORTS WOULD BE MISPLACED

As earlier discussed, the sheer dominance of the largest platforms in their respective spheres likely carries a risk of harm to innovation in the long run. Moreover, even granted that the largest tech platforms have delivered impressive consumer benefits so far, it is not off base to suspect that the benefits could be larger still if they faced more meaningful competition.¹⁷⁵ Thus, from an economic perspective alone, the evidence supports reducing concentration and encouraging competition. The more difficult question is whether no-fault monopolization is a desirable or feasible approach to the problem. I conclude that it is not, at least not at this time, though stronger section 2 enforcement is long overdue.

A. Erosion of the Economic Foundation Underlying No-Fault Theory of Section 2 Liability

Despite the initial support from many prominent antitrust intellectuals, in a time that was much more congenial to small businesses than today,¹⁷⁶ earlier attempts to pass no-fault monopolization legislation and other deconcentration initiatives nevertheless all failed.¹⁷⁷ This suggests that even when the conditions for success were most favorable, policymakers and others still had misgivings about finding section 2 liability absent exclusionary conduct. Now,

173. Khan, *supra* note 9, at 737.

174. *See id.* at 797-800; *see also* Bracha & Pasquale, *supra* note 162, at 1206-09 (advocating intensive regulation of Internet search platforms through new federal agencies, such as a Federal Search Commission).

175. *See* Baker, *supra* note 152 (“These platforms have delivered substantial consumer benefits.... Yet consumers and the U.S. economy as a whole would likely benefit even more if they faced greater competition.”).

176. *See supra* notes 40-48 and accompanying text.

177. *See* First, *supra* note 19, at 58-59 (describing the no-fault movement between 1969-1979); Kovacic, *supra* note 16, at 1126-27, 1136-37.

with modern antitrust economic scholarship having raised serious questions about the SCP model that was dominant from the 1940s through the 1970s,¹⁷⁸ more reservations are inevitable, and warranted.

Notably, the no-fault movement had drawn its intellectual strength from the SCP body of economic scholarship.¹⁷⁹ Given the SCP premise that persistent market power is likely associated with anticompetitive conduct and inefficiencies, combatting monopolies directly and seeking to restructure those firms, without identifying bad conduct, seemed efficient.¹⁸⁰ It would promise much benefit without the risk of much loss.

The growth and ascendance in the 1980s of a new body of economic scholarship that severely challenged the SCP assumptions, however, weakened the economic foundation of the no-fault theories and earlier policy proposals. And it eventually led many who had initially endorsed various no-fault initiatives to retract their support.¹⁸¹

Thus, if the idea of a no-fault theory of section 2 liability is economically motivated, it would be more prudent to have some concrete cost-benefit studies to evaluate whether it is likely to be beneficial on balance, rather than to rely on rough judgments. On the one hand, no-fault intervention would very likely inflict some economic welfare losses since, at the very least, it would reduce the benefits generated by the substantial economies of scale and network effects of the large technology platforms lost as a result of intervention. On the other hand, it could increase economic welfare by introducing competition into the dominant firm's market and complementary markets because competition typically benefits consumers. But whether the *net* welfare effect is beneficial requires some solid research. From an economic perspective at least, it seems safer to have some hard evidence that the economic benefits of

178. See, e.g., Oliver E. Williamson, *Economies as an Antitrust Defense: The Welfare Tradeoffs*, 58 AM. ECON. REV. 18, 33-34 (1968) (showing that substantial economies of scale often exist in many markets, and that market power is often based on superior performance); see also Orbach & Rebling, *supra* note 120, at 638 & nn.190-91 (citing to more theoretical and empirical literature that undermined the SCP paradigm). Note that Williamson was initially a no-fault supporter. See *supra* notes 45-46 and accompanying text.

179. See *supra* notes 49-50 and accompanying text.

180. See *supra* notes 54-55 and accompanying text.

181. See Brozen, *supra* note 63, at 826-30, 828 n.8.

dispersing the platforms' substantial market power, absent exclusionary conduct, outweigh the losses before we entertain the idea of restructuring or otherwise disrupting some of the country's most successful companies.

B. Other More Appropriate and Less Risky Instruments for Addressing Social and Political Ills

Of course, the primary motivation for the no-fault proposals may be noneconomic. Some critics have linked the immense economic power of the largest technology platforms to a variety of social and political ills, including rising economic inequality, the insufficient creation of good jobs, the dearth of opportunities for small businesses, political corruption, privacy intrusions, the problem of “fake news,” and interference with our elections which threaten our democracy.¹⁸² Jonathan Baker and Steven Salop have argued persuasively that stronger and wiser antitrust enforcement can help reduce economic inequality by reducing monopoly profits, since monopoly profits represent a transfer of consumer wealth from consumers to the monopoly's shareholders and senior executives, who generally tend to be more affluent than average consumers.¹⁸³ But, beyond that, antitrust law is not primarily a wealth and income distribution tool. Nor is it tailored specifically to create good jobs, or to address other social and political issues.

182. See WU, *supra* note 2, at 21 (arguing that the problems we face from the large tech platforms go beyond the “narrowly economic”); Khan & Vaheesan, *supra* note 6, at 238-45, 265-67 (asserting that excessive market power contributes to economic inequality, which leads to political inequality, undermining American democracy); Ip, *supra* note 9 (stating that, according to critics, the large technology giants’ “alleged sins run the gamut from disseminating fake news and fostering addiction to laying waste to small towns’ shopping districts”); Neil Irwin, *Are Superstar Firms and Amazon Effects Reshaping the Economy?*, N.Y. TIMES (Aug. 25, 2018), <https://www.nytimes.com/2018/08/25/upshot/big-corporations-influence-economy-central-bank.html> [<https://perma.cc/4LE8-PKFV>] (asserting that the dominance of the “superstar firms” may be depressing wages and slowing economic growth); Steven Pearlstein, *Is Amazon Getting Too Big?*, WASH. POST (July 28, 2017), https://www.washingtonpost.com/business/is-amazon-getting-too-big/2017/07/28/ff38b9ca-722e-11e7-9eac-d56bd5568db8_story.html [<https://perma.cc/JXB4-ELFW>] (reciting the many complaints against Amazon and other technology giants).

183. See Baker & Salop, *supra* note 6, at 14-20 (suggesting that antitrust agencies make reducing inequality a priority in its enforcement efforts, which would include prioritizing cases that benefit the less advantaged over cases where the harms fall mostly on the rich).

I question the advisability of using antitrust law as a primary tool to try to resolve serious societal problems unrelated, or only tangentially related, to market competition. While Amazon may be responsible for the loss of many retail jobs, for example, and the largest technology firms may employ fewer workers relative to firms of comparable size in “traditional” industries,¹⁸⁴ it is not clear that no-fault deconcentration is the right way to deal with these monumental social problems rooted in technological advances. A more direct approach, using existing or new laws and policies targeted to the problems at issue, should deliver better results and have fewer collateral costs. In other words, consumer protection laws or privacy and data security regulations would be better than antitrust at dealing with possible transparency, data security, and consumer deception issues.¹⁸⁵ And tax and labor laws, job-training and education initiatives and so forth would be far better suited than antitrust to tackle the array of other social and political problems.¹⁸⁶

C. Other Vexing Issues

There are other miscellaneous, but vexing, issues that cut against a no-fault approach. They include having to answer various complex questions regarding power and discretion, which makes no-fault far less effortless than it may seem. Moreover, adopting a no-fault

184. Firms that adopt advanced labor-savings technologies can increase output and efficiencies while requiring less labor. See David Rotman, *How Technology Is Destroying Jobs*, 116 MIT TECH. REV., July/Aug. 2013, at 28-33 (arguing automation is eliminating jobs). They would, therefore, employ fewer employees than comparable firms that are less technologically based. *Id.*

185. The European Union, for example, passed the General Data Protection Regulation (GDPR), a comprehensive law that gives protection to individuals over their personal data. EUROPEAN COMM'N, *EU Data Protection Rules*, https://ec.europa.eu/commission/priorities/justice-and-fundamental-rights/data-protection/2018-reform-eu-data-protection-rules/eu-data-protection-rules_en [<https://perma.cc/G7QP-H9ZS>]. See generally Chris Jay Hoofnagle et al., *The European Union General Data Protection Regulation: What It Is and What It Means*, 28 INFO. & COMM. TECH. L. 65, 66-67 (2019).

186. See Robert Litan, *A Scalpel, Not an Axe: Updating Antitrust and Data Laws to Spur Competition and Innovation*, PROGRESSIVE POL'Y INST., Sept. 2018, at 51-58, https://www.progressivepolicy.org/wp-content/uploads/2018/09/PPI_AntitrustandDataLaws_2018.pdf [<https://perma.cc/8DZ8-45TY>] (suggesting some non-antitrust solutions to tackling privacy, data security, and “fake news” problems).

theory of monopolization clearly requires legislative action which adds yet another hurdle.

1. The Complexity of “Power”: Monopoly Power in a Relevant Market vs. Absolute Measures of Power (“Bigness”)

If, as it seems, simplicity is what advocates desire, a no-fault approach will prove disappointing because it raises several complex conceptual and practical questions with no easy answers. For example, when should no-fault rules be triggered? Should they apply only where a firm has persistent monopoly power in a defined relevant *market*, as in the 1970s failed proposals?¹⁸⁷ Or should the measure of power, as in Senator Warren’s plan, turn on absolute values?¹⁸⁸

If the former, it is not clear that the approach would do the job that its proponents seem to want—easily disperse the economic and political power of the technology giants without protracted litigation. With so much at stake, if bad conduct and anticompetitive effects are not required, market definition would become critically important, and courts probably would be unwilling to find a violation unless monopoly power is *clearly* established. However, establishing monopoly power in a relevant market would be a true challenge when the products and services of digital platforms tend to extend across markets and the market delineations are blurry at best. For example, even for a firm such as Amazon, which undoubtedly has immense *economic* power and reaches into many facets of American lives, it is difficult to see in which markets (other than retail book sales) the firm has monopoly power in the antitrust sense.¹⁸⁹ The same is true of Apple. Although Apple famously became the first American firm to reach a market value of \$1 trillion

187. See *supra* notes 56-60 and accompanying text.

188. See *supra* note 18 and accompanying text.

189. Though Amazon has reached, or is poised to reach, a market value of \$1 trillion, its share of e-commerce retail sales is only about 40 percent (and its sale of *all* retail sales, including non e-commerce, is obviously much smaller). See *Projected Retail E-Commerce GMV Share of Amazon in the United States from 2016 to 2021*, STATISTA, <https://www.statista.com/statistics/788109/amazon-retail-market-share-usa/> [<https://perma.cc/RF44-HE9D>]; see also Jeran Wittenstein, *Amazon Flirts with \$1 Trillion Value Amid 8-Day Rally Streak*, BLOOMBERG (July 10, 2019, 6:50 PM), <https://www.bloomberg.com/news/articles/2019-07-10/amazon-back-on-cusp-of-1-trillion-valuation-after-7-day-streak> [<https://perma.cc/8LAF-JV8L>].

in August 2018,¹⁹⁰ it is hard to identify a specific relevant market where it has monopoly power in an antitrust sense.¹⁹¹

It is true that in a traditional section 2 case, a defendant's monopoly power must also be established, and that usually entails defining the market as well.¹⁹² However, courts have been more willing to dispense with strict market definition and calculations of market shares, at least in nonmerger cases, where there is actual evidence of anticompetitive effects.¹⁹³ But if evidence of conduct and its effects is not required, as would be the case under no-fault, then proof of market power would almost necessarily entail defining the market, at least in some broad sense, and determining market share.

If the vision of no-fault is for power to turn, not on market power in a relevant market, but on absolute measures of power—as in Senator Warren's plan—that would be a complete break from the fundamental core of antitrust jurisprudence. It could also be quite arbitrary in operation, as Senator Warren's plan itself demonstrates. Senator Warren's breakup proposal targets tech companies with “annual global revenue of \$25 billion or more” and that operate a platform (or digital marketplace).¹⁹⁴ She further specifies that it is intended to apply to Amazon, Facebook, Google, and Apple.¹⁹⁵ It would seem that Microsoft should be included as well, as its annual

190. See Mark Gurman, *Apple Becomes First U.S. Company to Hit \$1 Trillion Value*, BLOOMBERG (Aug. 2, 2018), <http://www.bloomberg.com/news/articles/2018-08-02/apple-becomes-first-u-s-company-to-hit-1-trillion-market-value> [https://perma.cc/43PL-6ERH].

191. It is common knowledge that the core Apple products and services for which the company is best known—iPhones, iPads, Mac computers and laptops, and music streaming (Apple Music)—all face significant competition.

192. See, e.g., *United States v. Grinnell Corp.*, 384 U.S. 563, 570 (1966) (stating that section 2 of the Sherman Act requires the possession of “monopoly power in the relevant market”).

193. See, e.g., *Todd v. Exxon Corp.*, 275 F.3d 191, 206 (2d Cir. 2001) (“If a plaintiff can show that a defendant's conduct exerted an actual adverse effect on competition ... this arguably is more direct evidence of market power than calculations of elusive market share figures.”).

194. See Warren, *supra* note 18.

195. Senator Warren's original announcement of her breakup proposal did not specifically mention Apple, which meets her criteria for break up; however, she clarified the very next day that the proposal was intended to cover Apple as well. See Nilay Patel, *Elizabeth Warren Wants to Break Up Apple, Too*, VERGE (Mar. 9, 2019, 6:19 PM), <https://www.theverge.com/2019/3/9/18257965/elizabeth-warren-break-up-apple-monopoly-antitrust> [https://perma.cc/B5UK-Z68L].

global revenue exceeds \$25 billion and it owns a platform, the Windows app store, but Microsoft is somehow spared.¹⁹⁶

The very fact that Warren saw fit to exclude Microsoft from her breakup proposal, itself, points to a problem with her approach. Presumably, Warren would exempt Microsoft because she believes that the company does not pose the harms that warrant a mandatory spin-off. But a similarly strong case could be made for exempting Apple as well. Of the largest digital platforms, Apple has probably generated the fewest concerns about the risk of exclusion of potential competitors.¹⁹⁷ Moreover, despite the fact that Apple is famously the first company to reach the \$1 trillion mark in market value, it is not clear how consumers would benefit from a forced spin-off of its Apple app store.

Another issue related to monopoly power is whether it has to be persistent, a condition that was incorporated in the 1970s no-fault proposals¹⁹⁸ but not in Senator Warren's plan. If persistence is required, what should be its measure—number of years? What if a firm's dominance shifts from one market to another market before the requisite number of years is reached? This could happen in markets with fast-moving technologies, where a first market becomes obsolete or greatly diminished in importance, and a second market emerges (whose products subsume the key features and functions of products in the first market).¹⁹⁹ In that case, does the firm's period of prior dominance in the defunct market transfer over

196. See Warren, *supra* note 18; see also Satya Nadella, *Microsoft Annual Report 2018*, MICROSOFT (2018), <https://www.microsoft.com/en-us/annualreports/ar2018/annualreport#primaryR2> [<https://perma.cc/G4BB-6RB7>].

197. See John Koetsier, *Why Apple Got Spared as Elizabeth Warren Targets Amazon, Facebook, Google for Breakup*, FORBES (Mar. 8, 2019, 1:12 PM), <https://www.forbes.com/sites/johnkoetsier/2019/03/08/why-apple-got-spared-as-elizabeth-warren-targets-amazon-facebook-google-for-breakup/> [<https://perma.cc/68MZ-5W7C>] (arguing Apple is not monopolistic because its share of markets is so small).

198. See *supra* notes 57-60 and accompanying text.

199. One example of this is the obsolescence of Apple's iPods, with its iPhones incorporating the iPod's features and functions. See Steve Brachmann, *iPod, iPhone and iPad—A Brief History of Apple iProducts*, IPWATCHDOG (Nov. 25, 2014), <https://www.ipwatchdog.com/2014/11/25/ipod-iphone-and-ipad-a-brief-history-of-apple-iproducts/id=52243/> [<https://perma.cc/XJ6J-5K6L>]. But, in the case of iPods/iPhones, Apple's dominance in the MP3 (music player) market with its iPod did not carry over to the smartphone market, where Apple's iPhone faces substantial competition. See Samuel Gibbs, *iPhone Slump: The Rivals Taking a Bite Out of Apple*, GUARDIAN (Jan. 3, 2019), <https://www.theguardian.com/technology/2019/jan/03/iphone-slump-the-rivals-taking-a-bite-out-of-apple> [<https://perma.cc/GRJ3-DFLR>].

to the new market if the firm gains dominance in the second market as well?

2. *The Problem of Discretion*

Yet another important question is whether a no-fault liability rule would (or should) require courts to grant relief once the power element is satisfied. Or would courts have judicial discretion to consider the importance or peculiar circumstances of the market and the welfare costs of any no-fault intervention before making a determination both on liability and on the remedy? Presumably, enforcement agencies could exercise prosecutorial discretion as they usually do, and decline to bring action (despite clear evidence of a power however it may be defined) if, in their judgment, disrupting that market would be unwise. The exercise of prosecutorial discretion is ordinarily desirable, as we want the government to account for all important factors before making an enforcement decision. However, with a no-fault regime, discretion essentially places antitrust agencies in the role of making important judgment calls on economic regulation, including which industries may be too critical to our economy to be disrupted, rather than on law enforcement. And it is not clear that antitrust agencies should have that role.

If power is to be defined by size or some other absolute measure, the exercise of discretion by antitrust enforcers may be even more troubling. Again, take the example of Senator Warren's breakup plan and her stated intention to have it apply to Amazon, Facebook, Google, and Apple, but apparently not to Microsoft, although all five companies fit the plan's absolute criteria for application.²⁰⁰ Presumably, Warren did not see major harm in allowing Microsoft to keep its Windows app store, notwithstanding the company's large annual global revenue and its operating a platform/marketplace. While she may be (and probably is) correct in her assessment, it highlights a problem with using absolute measures but making exceptions. How does one decide why Microsoft, but not Apple, should be exempted, for example? And who should make that determination?

200. See Warren, *supra* note 18; see also Nadella, *supra* note 196.

3. *The Need for Legislation*

Finally, from a pragmatic standpoint, adding a no-fault monopolization cause of action would require legislative action. Passing any legislation to amend a law that has existed for over 125 years is a daunting task even if Congress were not as dysfunctional as it is today. It is an especially difficult mission when the proposed amendment would depart radically from existing law as a no-fault amendment would. Given the difficulty involved, the uncertain results, and the possibility that more harm than good could be done, it would seem that efforts for stronger and more effective section 2 enforcement would be better (and more safely) spent elsewhere.

IV. REINVIGORATING SECTION 2 THROUGH EVOLUTION OF DOCTRINE AND POLICY

Though a no-fault approach, in my view, would be unwise, this moment of deep social unease over the economic, social, and political power of the largest technology companies provides us with a much needed opportunity to reset the antitrust equilibrium. There is growing agreement that closer antitrust scrutiny and a generally tougher line toward today's largest firms, including those in the technology sector, is long overdue.²⁰¹ Not only is there strong evidence of rising industrial concentration and weakening competition, the economic literature also suggests that competition, more so than

201. See Jonathan B. Baker & Fiona Scott Morton, *Antitrust Enforcement Against Platform MFNs*, 127 YALE L.J. 2176, 2195 (2018) (recommending revision of legal standards for platform MFNs); Jonathan B. Baker, Jonathan Sallet & Fiona Scott Morton, *Unlocking Antitrust Enforcement*, 127 YALE L.J. 1916, 1917-19 (2018) (discussing ways to strengthen antitrust enforcement); Lao, *supra* note 13 (arguing for stronger antitrust enforcement in data-driven mergers); Steven C. Salop, *Invigorating Vertical Merger Enforcement*, 127 YALE L.J. 1962, 1982 (2018) (calling for changes to vertical merger enforcement); Shapiro, *supra* note 3, at 737-43 (discussing stricter cartel enforcement, stricter merger enforcement, and controlling dominant firm conduct as ways to address concerns about rising concentration and high corporate profits); see also AM. ANTITRUST INST. A NATIONAL COMPETITION POLICY: UNPACKING THE PROBLEM OF DECLINING COMPETITION AND SETTING PRIORITIES MOVING FORWARD 8 (Sept. 28, 2016), <https://www.antitrustinstitute.org/wp-content/uploads/2018/08/AAINatlCompPolicy-1.pdf> [<https://perma.cc/G2Q7-4WCA>] ("There is a growing consensus that inadequate antitrust policy has contributed to the concentration problem and associated inequality effects.").

monopoly, tends to drive innovation²⁰² and foster economic growth and prosperity.²⁰³ Thus, preventing dominant firms from foreclosing entry or weakening rivals is important.

Challenging exclusionary conduct is especially important in today's high technology markets because such conduct could oust a nascent threat before the potential rival has had a chance to fully develop its product and, in so doing, eliminate the possibility of future innovation.²⁰⁴ Furthermore, because many of the digital technology markets enjoy network effects and are winner-take-all markets,²⁰⁵ an incumbent's market power tends to be durable, making it all the more imperative to block improper conduct that forecloses potential entry. My aim below is to highlight a few areas where efforts could be made to better constrain dominant firm conduct, particularly on the part of the largest digital companies, and to move antitrust (perhaps incrementally) in a more interventionist direction.

A. Focus on Identifying Exclusionary Conduct, and Seeking an Incremental Expansion of the Scope of Exclusionary Conduct

As discussed earlier, not all conduct that excludes competition is unlawful under section 2.²⁰⁶ Naturally benefiting from network and/or lock-in effects, enhanced by an incumbent's significant data advantage, for example, is not considered unlawful conduct even if it contributes substantially to the largest platforms' entrenched monopoly power. Nor is excluding rivals through innovation a "bad act." However, as even Justice Scalia (known for his solicitude toward dominant firms) has acknowledged, behavior that might be

202. See Baker, *supra* note 140, at 583-87 (discussing empirical evidence that supports the theory that competitive markets, rather than monopolies, are more conducive to innovation).

203. See Baker, *supra* note 2, at 560 (arguing that antitrust enforcement "supports economic growth and prosperity by preventing successful incumbent firms and industries from erecting barriers to the entry of rivals with lower costs, superior production technologies, or better products").

204. See *United States v. Microsoft Corp.*, 253 F.3d 34, 79 (D.C. Cir. 2001) (noting that Microsoft's conduct foreclosed two nascent threats before they had a chance to either realize their potential or fail).

205. See Shelanski, *supra* note 101, at 1682-83.

206. See *supra* notes 127-46 and accompanying text.

permissible—or “might even be viewed as procompetitive—can take on exclusionary connotations when practiced by a monopolist.”²⁰⁷

Therefore, cognizant of the dominant platforms’ incentives and abilities to exclude competitors, the agencies could be more vigilant in scrutinizing the dominant platforms’ practices so as to identify conduct that may deviate from competition on the merits and that has the effect of excluding rivals. For instance, while Google’s use of its large datasets to “train” its algorithms²⁰⁸ to return better search results is not improper, and the effects beneficial, even if it does leave rival search engines behind, implementing search algorithms to disadvantage or discriminate against its competitors in a vertical or adjacent market would be a different matter. Where the results are mixed—the algorithmic changes improve search results as well as injure competitors—given the enormous power of the largest digital platforms, placing the onus on the dominant platform to prove that the benefits exceed the harm would be reasonable.

The influential post-Chicago theory of raising rivals’ costs, developed by Thomas Krattenmaker and Steven Salop, could help guide these efforts.²⁰⁹ While the largest platforms’ most often criticized patterns of behavior are not necessarily unlawful under antitrust doctrine,²¹⁰ conduct that protects or enhances a dominant firm’s monopoly power by impeding rivals without benefiting consumers constitutes raising rivals’ costs and should be recognized as exclusionary.²¹¹ The antitrust agencies could expend more resources examining dominant firm practices and probing allegations of this nature, which they have occasionally done. One example involves the FTC’s investigation into Google’s use of proprietary interfaces that made it more cumbersome for its digital advertisers

207. *Eastman Kodak Co. v. Image Tech. Servs., Inc.*, 504 U.S. 451, 488 (1992) (Scalia, J., dissenting).

208. See *How Search Algorithms Work*, GOOGLE, <https://www.google.com/search/howsearchworks/algorithms/> [<https://perma.cc/5TXV-GW8D>].

209. See Thomas G. Krattenmaker & Steven C. Salop, *Anticompetitive Exclusion: Raising Rivals’ Costs to Achieve Power over Price*, 96 YALE L.J. 209, 212-15 (1986) (pioneering the influential “raising rivals’ costs” theory on exclusionary conduct).

210. See *supra* notes 127-46 and accompanying text.

211. The raising rivals’ costs theory postulates that, under specific conditions, firms can create or maintain dominance in a market by engaging in strategies that impede rivals by raising their costs. That can be accomplished through tying arrangements, exclusive dealing, unilateral refusals to deal, or other practices. Krattenmaker & Salop, *supra* note 209, at 213-24, 228, 230-49.

to port their advertisements to additional platforms, without obvious consumer benefits emanating from the practice.²¹² Google retreated from the practice in the face of the FTC investigation,²¹³ illustrating the effectiveness of increased government vigilance.

In light of the importance of personal data in digital platform markets, another area that might benefit from closer scrutiny involves investigating and evaluating whether dominant platforms have constrained their competitors' ability to compete by impeding their access to necessary inputs (personal data) or to customers—such as raising rivals' costs. While simply enjoying the inherent advantages of having large datasets and a wide data advantage is not a “bad act,” burdening rivals by blocking their access to data critical for success would seem to be classic “raising rivals' costs” conduct that could violate section 2.

Another area that might warrant closer attention is where a large platform also competes directly against some of its platform's customers, a situation that Lina Khan, a fierce New Brandeis critic of Amazon, has found most objectionable.²¹⁴ Amazon is not only a dominant online retailer that sells directly to consumers, but it is additionally a marketing platform that hosts other online retailers selling to the same pool of Amazon consumer-customers.²¹⁵ In effect, Amazon competes against those of its merchant customers who sell similar products over Amazon's marketing platform.

This practice or business structure is not necessarily anticompetitive, however, and indeed may be procompetitive, since it offers smaller online retailers without sufficient scale greater exposure to

212. See Jon Leibowitz, Chairman, Fed. Trade Comm'n, Google Press Conference—Opening Remarks of Federal Trade Commission Chairman Jon Leibowitz (Jan. 3, 2013), https://www.ftc.gov/sites/default/files/documents/public_statements/opening-remarks-federal-trade-commission-chairman-jon-leibowitz-prepared-delivery/130103googleleibowitzremarks.pdf [<https://perma.cc/36VG-ADHK>] (describing the FTC's investigation on this issue and Google's commitment to drop the restriction that created the difficulty for advertisers to port their advertisements to additional platforms).

213. See Letter from David Drummond, Chief Legal Officer, Google Inc., to Jon Leibowitz, Chairman, Fed. Trade Comm'n (Dec. 12, 2012), https://www.ftc.gov/system/files/documents/closing_letters/google-inc./130103googleletterchairmanleibowitz.pdf [<https://perma.cc/LZ4S-CZGQ>] (agreeing to remove restrictions on the use of AdWords—its advertising platform—that could make it harder for advertisers to port their advertising across multiple platforms).

214. See Khan, *supra* note 9, at 774-77.

215. See *Start Selling Online: Frequently Asked Questions*, AMAZONSERVS., <https://services.amazon.com/selling/faq.html> [<https://perma.cc/8DR6-SVH5>].

customers than the retailers would otherwise have.²¹⁶ The practice also offers those smaller online retailers convenience and presumably lower costs by providing them an option to turn over the logistics of customer service, shipping, and delivery to Fulfillment-by-Amazon for a fee.²¹⁷ However, there are obvious opportunities for abuse and unfairness. The marketplace setup gives Amazon access to those merchant customers' sensitive sales data which it could use to inform its own business planning and marketing strategies, to the competitive disadvantage of its merchant rivals.²¹⁸

My point here is not that the structure—a dominant online retailer also operating an online platform that hosts (some) competing retailers—is inherently anticompetitive, and should be disallowed as Senator Warren has proposed.²¹⁹ Rather, the point is that, cognizant of the importance of data and the risks to competition this structure poses, the antitrust agencies should develop expertise in digital markets and be vigilant in scrutinizing the platforms' practices to identify and prevent those that might thwart competition on the merits from the platform company's competitors on the platform.

Yet another related area worth exploring would be a dominant platform's discriminatory refusal to deal with a customer because of the customer's competition against the platform in another market. For example, last year Facebook allegedly denied its potential rivals access to its troves of user data while granting access to other nonrival customers.²²⁰ To the extent that these claims are credible, antitrust enforcers should be willing to investigate and bring action, in an attempt to push out the boundaries of unilateral refusals to

216. While a small online retail store may have its own website, it is obviously able to reach a much larger pool of potential customers being on Amazon's marketplace platform, given Amazon's large customer base.

217. Since Fulfillment-by-Amazon is a voluntary service, it is logical that the online merchants who choose to subscribe to it must find the service more convenient and cost effective relative to their assuming these services for their own customers independently. See *Fulfillment by Amazon*, AMAZONSERVS., <https://services.amazon.com/fulfillment-by-amazon/benefits.html> [<https://perma.cc/QM37-FDW9>]; see also Khan, *supra* note 9, at 776-77.

218. See Khan, *supra* note 9, at 776-77.

219. See Warren, *supra* note 18.

220. See Adam Satariano & Mike Isaac, *Facebook Used People's Data to Favor Certain Partners and Punish Rivals, Documents Show*, N.Y. TIMES (Dec. 5, 2018), <https://www.nytimes.com/2018/12/05/technology/facebook-documents-uk-parliament.html> [<https://perma.cc/HT4B-F892>].

deal that were set in *Trinko*. While the Supreme Court seemed to have limited the viability of refusal to deal claims to instances where the dominant firm had a prior course of dealing with the plaintiff,²²¹ the fact that *Trinko* did not involve a selective refusal to deal with competitors could be a distinguishing factor.²²² And that may support an argument that courts could stretch *Trinko* to reach discriminatory refusals to deal similar to the claim made against Facebook.

In *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, a 1986 case which has never been overruled, the Supreme Court condemned dominant firm conduct as exclusionary when it extends or entrenches the firm's market power "on some basis other than efficiency."²²³ *Aspen* elaborated further that exclusionary conduct is "behavior that not only (1) tends to impair the opportunities of rivals, but also (2) either does not further competition on the merits or does so in an unnecessarily restrictive way."²²⁴ This language envisions a broader scope for impermissible conduct under section 2 than is generally assumed today and could support the bringing of a broader range of cases.

In short, closer scrutiny of the largest technology companies' practices to identify suspect conduct, and a greater willingness to rely on more liberal (less "safe") theories of harm, such as raising rivals' costs, could ultimately move us toward a stronger section 2 policy. Likewise, a willingness to bring test cases in appropriate circumstances, with an eye toward persuading courts to expand the scope of exclusionary conduct, would be helpful as well.

221. See *Verizon Commc'ns, Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 409 (2004) ("The refusal to deal alleged in the present case does not fit within the limited exception recognized in *Aspen Skiing*. The complaint does not allege that Verizon voluntarily engaged in a course of dealing with its rivals" that it terminated).

222. In a pre-*Trinko* Seventh Circuit opinion on dominant firm refusal to deal, Judge Posner suggested that an "essential feature" of a unilateral refusal to deal case is "a monopoly supplier's discriminating against a customer because the customer has decided to compete with it." *Olympia Equip. Leasing Co. v. W. Union Tel. Co.*, 797 F.2d 370, 377 (7th Cir. 1986). A good argument can be made that this case survives *Trinko*.

223. 472 U.S. 585, 605 (1985).

224. *Id.* at 605 n.32.

B. Greater Flexibility in the Analysis of Effects

Another way to achieve stronger section 2 enforcement is to move toward greater flexibility in the analysis of anticompetitive effects. As discussed earlier, a primary New Brandeis charge against today's monopolization doctrine is that the consumer welfare standard supposedly prohibits only conduct that results in short-term higher prices or reduced output.²²⁵ While this claim is factually incorrect,²²⁶ successful challenges based on pure nonprice harms are indeed rare.²²⁷ This is, however, due to practical problems of proof and not to any legal deficiencies of the standard, as *United States v. Microsoft Corp.* demonstrates.

One way to remedy this practical problem of proof is to draw inspiration from *Microsoft* and allow for more flexibility in the analysis of effects. This could include a greater willingness to (1) infer consumer harm from harm to the competitive process, (2) give more credence to claims of long run, if somewhat uncertain, harm to innovation, and (3) accord legitimacy and more weight to qualitative evidence, including intent evidence. Alternatively, or additionally, courts could apply rebuttable presumptions of anti-

225. See Khan, *supra* note 9, at 710 (“[T]he current framework in antitrust—specifically its pegging competition to ‘consumer welfare,’ defined as short-term price effects—is unequipped to capture the architecture of market power in the modern economy.”); Tim Wu, *After Consumer Welfare, Now What? The “Protection of Competition” Standard in Practice*, CPI ANTITRUST CHRON., Spring 2018, at 12, 15 (criticizing the “price fixation” of the consumer welfare standard).

226. See, e.g., *United States v. Microsoft Corp.*, 253 F.3d 34, 59 (D.C. Cir. 2001) (incorporating considerations of nonprice economic harms); see also Michael L. Katz & Howard A. Shelanski, *Mergers and Innovation*, 74 ANTITRUST L.J. 1, 1 (2007) (discussing policymakers’ concern with fostering innovation in merger enforcement since the 1980s).

227. The FTC has challenged at least one proposed merger, between Thoratec and HeartWare, based solely on innovation effects. See *In re Thoratec Corp. & HeartWare Int’l, Inc.*, F.T.C. Docket No. 9339, at 1 (July 28, 2009) (Complaint), <https://www.ftc.gov/sites/default/files/documents/cases/2009/07/090730thorateadminccmpt.pdf> [<https://perma.cc/96C4-4U9R>]. Thoratec had a product for patients who suffer from end-stage heart failure, and HeartWare was a potential entrant which had a product in the FDA approval process. *Id.* There were no other firms working to develop a similar competitive product. *Id.* The FTC’s concern was that Thoratec would have less incentive, postmerger, to work toward bringing the HeartWare product to market. See *id.* The parties abandoned the merger after the FTC issued the complaint. See Justine Varieur Cadet, *Thoratec Abandons \$282M Purchase of HeartWare After FTC Block*, HEALTHIMAGING (Aug. 3, 2009), <http://www.healthimaging.com/topics/diagnostic-imaging/thoratec-abandons-282m-purchase-heartware-after-ftc-block> [<https://perma.cc/89DK-QCXY>].

competitive effects under certain conditions, which would considerably reduce the burden of proof on the plaintiff.

1. Drawing Inference of Consumer Harm from Evidence of Harm to the Competitive Process

The consumer effects of dominant firm conduct that have excluded or weakened smaller rivals often are not readily apparent, and demanding actual proof of consumer harm will likely result in underenforcement. In contrast, demonstrating that a dominant firm has undermined the competitive process, such as by competing on some basis other than efficiency,²²⁸ is typically easier. Allowing an inference of consumer harm to be drawn from evidence of harm to the competitive process would, therefore, lessen the burden on a section 2 plaintiff in establishing liability. In fact, the D.C. Circuit seems to have employed this approach in *Microsoft*.

In *United States v. Microsoft Corp.*, Microsoft, which had a monopoly in the relevant operating systems (OS) market through Windows, perceived a threat to Windows from two new non-OS products—Netscape’s browser and Sun’s Java programming language.²²⁹ The Netscape browser and Java, if successfully developed to their full capability, could provide a new way for applications software to access a computer’s OS, which could then weaken Windows’s monopoly in the OS market because consumers would no longer be deterred from switching to another OS due to the dearth of applications software developed for the competing OS.²³⁰

The Government charged that, to protect its Windows monopoly, Microsoft engaged in a variety of exclusionary practices to squash Netscape’s browser and Java before they could potentially succeed in developing the features that could threaten Microsoft’s Windows monopoly.²³¹ There was no evidence, however, that Microsoft’s bad conduct raised prices either for Windows or for browsers (which

228. See *Aspen*, 472 U.S. at 605 (treating acts that extend or entrench a dominant firm’s market power “on some basis other than efficiency” as exclusionary conduct).

229. 84 F. Supp. 2d 9, 28 (D.D.C. 1999).

230. *Id.*; see Marina Lao, *Reclaiming a Role for Intent Evidence in Monopolization Analysis*, 54 AM. U. L. REV. 151, 185-86 (2004) (discussing Microsoft’s concerns regarding the threat to its OS monopoly from middleware platforms).

231. *Microsoft*, 253 F.3d at 58; Lao, *supra* note 230, at 185-86 (summarizing the acts Microsoft took to foreclose Netscape’s browser and Java).

were free to consumers).²³² Nor was there evidence that, but for Microsoft's conduct, Netscape or Java would have succeeded in developing the features that could have transformed those products into viable threats to Windows.²³³ The Court of Appeals, nevertheless, affirmed section 2 liability against Microsoft.²³⁴

In speaking of the need to show “anticompetitive effect[s]” to establish a *prima facie* section 2 case, the court said that the conduct must “harm the competitive *process* and thereby harm consumers.”²³⁵ As there was little tangible evidence of harm to consumers—only the undermining of competition on the merits—the court was effectively drawing an inference of consumer harm from evidence of harm to the competitive process. Along the same lines, in addressing the issue of bad conduct and causation, given that Microsoft's actions crushed the nascent threats from Netscape and Java before either company could prove an ability to erode the Windows monopoly, the court said that “it would be inimical to the purpose of the Sherman Act to allow monopolists free rein to squash nascent, albeit unproven, competitors at will—particularly in industries marked by rapid technological advance and frequent paradigm shifts.”²³⁶ In other words, the court found it unnecessary for the Government to prove the eventual viability of the nascent technologies (thus, harm to consumers) had they not been vanquished early on by Microsoft's anticompetitive conduct.

To the extent that inferring consumer harm from harm to the competitive process, subject to rebuttal by the dominant firm,²³⁷ becomes more routinely accepted, the task of proving unlawful monopolization could be eased. Conduct that harms the competitive process is often not that difficult to observe, and demonstrating disruption of the competition process is easier than identifying

232. See *Microsoft*, 253 F.3d at 58-59.

233. *United States v. Microsoft Corp.*, 87 F. Supp. 2d 30, 44 (D.D.C. 2000) (concluding that “the evidence does not prove that [Netscape's browser and Java] would have succeeded absent Microsoft's actions”); *Microsoft*, 84 F. Supp. 2d at 30 (finding that the “middleware technologies [Netscape's browser and Java] have a long way to go before they might imperil the applications barrier to entry”).

234. See *Microsoft*, 253 F.3d at 46.

235. *Id.* at 58.

236. *Id.* at 79.

237. The dominant firm should be given the opportunity to defeat the inference by proving that consumers benefited from the practice and that the benefit is likely to be long-lasting and substantial, and would outweigh the actual and potential foreclosure effect.

direct harm to consumers. Additionally, this approach is reasonable from an economic perspective because it is reasonable to assume that harm to the competitive process would likely harm consumers in the long run even if direct consumer effects are not immediately apparent. Start-ups, or smaller rivals and potential rivals to dominant firms, would be discouraged from innovating and otherwise competing if dominant firms were able to “compete” through a subversion of the competitive process rather than on the merits.

2. Elevating and Promoting the Theory of Long-Run Innovation Harms, and Creating Presumptions

Antitrust has long recognized that firms in high technology markets often compete more on innovation than on price;²³⁸ consequently, protecting innovation should be a paramount objective. The economic scholarship, moreover, suggests that competition fosters innovation, and overall economic growth and prosperity;²³⁹ thus, the likely effect of suppressing competition would be reduced innovation and economic growth. It follows, then, that antitrust analysis should give substantial weight to the effect of any alleged exclusionary conduct on innovation, with the aim of prohibiting such conduct and encouraging innovation.

Exclusionary conduct in high technology markets carries a particularly high risk of harm to innovation because, as in *Microsoft*, it often means driving out a nascent technology or innovation in the early stages of development,²⁴⁰ depriving it of the opportunity to develop to its full potential without hindrance. Yet, applying a conventional measure of harm would likely result in the finding of no consumer harm, *precisely* because the nascent product was unproven when it was quashed by the dominant firm’s bad conduct. Obviously, whether a particular upstart constituted a reasonable

238. See Shelanski, *supra* note 101, at 1684-85 (discussing the centrality of innovation to digital platform markets).

239. For a survey of the extensive economic literature relating to competition and innovation, see generally Richard Gilbert, *Looking for Mr. Schumpeter: Where Are We in the Competition-Innovation Debate?*, in 6 INNOVATION POLICY AND THE ECONOMY 159 (Adam B. Jaffe et al. eds., 2006).

240. See *United States v. Microsoft Corp.*, 84 F. Supp. 2d 9, 30 (D.D.C. 1999) (finding that the “middleware technologies have a long way to go before they might imperil the applications barrier to entry”).

nascent threat or whether the threat was too tentative or remote to support that finding is a question of fact, in a specific case.

Nevertheless, antitrust agencies could and should be more aggressive in putting forward innovation effects as the theory of harm when a nascent rival is crushed, even if there is a fair amount of uncertainty as to the viability of the threat. Resolving doubts about innovation effects in favor of promoting entry is justified, given the importance of innovation to high technology markets, because suppressing competition would likely chill innovation from rivals and potential rivals. Equally important, requiring proof of a high likelihood that a dominant firm's bad conduct against a nascent threat caused anticompetitive harm could have the perverse result of "encourag[ing] monopolists to take more and earlier anticompetitive action" against a nascent competitor.²⁴¹ Also, as the court of appeals noted in *Microsoft*, it is only right that "the defendant is made to suffer the uncertain consequences of its own undesirable conduct."²⁴²

Easing proof of harm to innovation could take the form of adjusting burdens of proof and adopting the use of presumptions. Antitrust courts today tend to be far more concerned about the risks of false positives than false negatives, largely because of the belief that the former is more costly than the latter.²⁴³ Mistakenly condemning procompetitive conduct, it is thought, would chill innovation and have lasting adverse effects whereas mistakenly overlooking anticompetitive conduct should have fleeting impact because markets tend to self-correct.²⁴⁴ Recent commentary has already cast considerable doubt on these conservative error-cost

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

242. *Id.* (quoting 3 PHILLIP AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW 78 (4th ed. 2013)).

243. See Jonathan B. Baker, *Taking the Error Out of "Error Cost" Analysis: What's Wrong with Antitrust's Right*, 80 ANTITRUST L.J. 1, 37 (2015) (criticizing conservative antitrust "assumptions [that] systematically overstate the incidence and significance of false positives, understate the incidence and significance of false negatives, and understate the net benefits of various rules by overstating their costs").

244. See Easterbrook, *supra* note 21, at 2-4 (making the argument that false positives are more costly than false negatives in antitrust cases because false positives will deter procompetitive conduct, and the efficiencies of the conduct falsely condemned will be lost forever, whereas the adverse effects of false negatives are less consequential because they will dissipate quickly as the market self-corrects).

assumptions,²⁴⁵ and in the context of digital platform markets, the assumptions are even more suspect. Digital platform markets have substantial network effects, which render them less susceptible to market self-correction. Thus, the assumption that markets quickly self-correct, thereby minimizing the effects of false negatives, is highly questionable in these markets.

This suggests that some recalibration of the rules to acknowledge the risks and high costs of false negatives, and to reduce the overstated fears of false positives, is overdue. The adjustment could simply take the form of adopting presumptions and burden-shifting. One of the drawbacks of the current heavily fact-intensive approach to proving effects is that while it may minimize false positives, the risk of false *negatives* is necessarily higher if the plaintiff bears the full burden of proof on factors that are inherently difficult to prove. Using presumptions and a burden-shifting framework would lighten that burden.

Conceptually, this suggestion would call for a presumption of anticompetitive effect to attach if the plaintiff demonstrates that a firm with monopoly power engaged in conduct that is outside the norm of what is considered competition on the merits, and the conduct foreclosed actual or nascent rivals in the relevant market or in a vertical/adjacent market. The defendant would have the opportunity to rebut the presumption by offering a nonpretextual business justification and showing that the procompetitive benefits exceed the anticompetitive harms. This framework would be slightly more pro-plaintiff than that applied in *Microsoft* where the plaintiff has to first demonstrate the anticompetitive effect of the conduct,²⁴⁶ after which the burden shifts to the defendant only to proffer a nonpretextual business justification.²⁴⁷ If the defendant is able to do so, under the *Microsoft* framework, the burden shifts back to the

245. See, e.g., Baker, *supra* note 243.

246. *Microsoft*, 253 F.3d at 58-59 (“[T]he plaintiff, on whom the burden of proof of course rests, ... must demonstrate that the monopolist’s conduct indeed has the requisite anticompetitive effect” to establish a *prima facie* case).

247. *Id.* at 59. (“[I]f a plaintiff successfully establishes a *prima facie* case under § 2 by demonstrating anticompetitive effect, then the monopolist may proffer a ‘procompetitive justification’ for its conduct. If the monopolist asserts a procompetitive justification—a nonpretextual claim that its conduct is indeed a form of competition on the merits because it involves, for example, greater efficiency or enhanced consumer appeal—then the burden shifts back to the plaintiff to rebut that claim.” (internal citations omitted)).

plaintiff to either rebut the justification or to demonstrate that the anticompetitive harms exceed the procompetitive benefits.²⁴⁸

C. Respecting Qualitative Evidence

“Modern” antitrust’s anxiety over false positives (while being curiously sanguine about false negatives) has led to a strong bias in favor of quantitative, as opposed to qualitative, evidence. While quantitative evidence is undoubtedly desirable if it exists, skepticism about the legitimacy and value of qualitative evidence is damaging to antitrust enforcement because, quite simply, quantitative evidence of some important consumer harms is typically nonexistent or difficult to compile.

Affording greater respect for qualitative evidence could significantly ease the plaintiff’s burden of proving harms that are largely unquantifiable. This is especially important in markets where companies compete more on innovation and quality than on price because any alleged reductions in quality and innovation resulting from a dominant firm’s bad conduct are unlikely to be reflected in quantitative data. Giving a role to qualitative evidence as suggested here, in fact, is not a novel idea. Faced with the reality that empirical data is sometimes unavailable or too difficult to compile, agencies have relied on, and courts have accepted, qualitative evidence in different settings, such as in the definition of a relevant antitrust market.²⁴⁹

For instance, while courts may speak in economic terms of having to determine the “cross-elasticity of demand” to define a relevant market,²⁵⁰ the data necessary to empirically estimate demand elasticities—including cost information for multiple products—may be unavailable. In that case, agencies have offered, and courts have accepted, qualitative evidence indicating which products consumers view as acceptable alternatives to the product in question in order

248. *Id.* (“[I]f the monopolist’s procompetitive justification stands unrebutted, then the plaintiff must demonstrate that the anticompetitive harm of the conduct outweighs the procompetitive benefit.”).

249. *See, e.g.*, Jonathan B. Baker, *Market Definition: An Analytical Overview*, 74 ANTITRUST L.J. 129, 132-33 (2007).

250. *See United States v. E.I. Du Pont De Nemours & Co.*, 351 U.S. 377, 394, 400 (1956).

to define the market, in place of empirical evidence of demand elasticities.²⁵¹

Consider, too, the precise technical rules for market definition set forth in the Department of Justice and the Federal Trade Commission Joint Horizontal Merger Guidelines—the hypothetical monopolist SSNIP (small but significant nontransitory increase in price) test.²⁵² The SSNIP test is designed to determine whether alternative products are sufficiently acceptable from the buyer’s perspective to serve as a competitive constraint on the seller of the product(s) in the candidate market.²⁵³ It does so by asking whether a hypothetical monopolist of the product in question can profitably raise prices by a small but significant amount and hold the price increase for a nontransitory period²⁵⁴ (typically 5 percent for one year).²⁵⁵ If a SSNIP can be implemented, the market is deemed properly defined.²⁵⁶ If a SSNIP cannot be implemented because too many sales would be lost to substitute products, rendering the hypothetical SSNIP unprofitable, the market definition would be expanded to include those reasonable substitutes, and the test would be repeated iteratively with the expanded group of products until a SSNIP can be implemented, at which point the market is properly defined.²⁵⁷

The hypothetical monopolist SSNIP test is a precise economic tool, but, in practice, the quantitative evidence needed to operationalize it is sometimes not readily available, in which case *qualitative* evidence is offered, in addition to or instead of quantitative evidence.²⁵⁸ The qualitative evidence could include, for example, anecdotal evidence, market executives’ testimony as to how buyers responded after a previous price increase, informal buyer surveys, evidence relating to industry participants’ behavior, the views of industry experts as to which products they see as likely substitutes

251. *See, e.g., id.* at 394, 400, 402-03.

252. *See generally* U.S. DEPT. OF JUSTICE & FED. TRADE COMM’N, HORIZONTAL MERGER GUIDELINES § 4.1.1 (2010), https://www.ftc.gov/system/files/documents/public_statements/804291/100819hmg.pdf [<https://perma.cc/4A5J-MRU9>].

253. *See id.*

254. *Id.*

255. *Id.* § 4.1.2.

256. *See id.* § 4.1.1.

257. *See id.*

258. *See Baker, supra* note 249, at 139.

for buyers, and so forth.²⁵⁹ In other words, antitrust law as practiced does not always insist on quantitative evidence—if necessary, anti-trust agencies search for and offer reliable and appropriate qualitative evidence.

My suggestion here is to lift the skepticism sometimes shown toward qualitative evidence and to promote greater acceptance of it. Given the fact that harms to innovation cannot be easily quantified, treating qualitative evidence dismissively would likely result in more false negatives, while working to develop reliable qualitative evidence and to accord it due respect should help reinvigorate section 2 enforcement.

D. Intent Evidence

Another closely related suggestion involves reclaiming a role for intent evidence in monopolization analysis. It is true that most courts and commentators today tend to dismiss intent evidence as irrelevant and unhelpful to monopolization analysis,²⁶⁰ reasoning that “the ‘intent’ to create a monopoly anticompetitively cannot be distinguished from the intent to do so competitively.”²⁶¹ I disagree with that view and have written elsewhere that intent evidence is relevant because it can inform the analysis of effects.²⁶² Intent evidence can serve as a guide to, and a proxy for, effects when effects cannot be empirically proven as is often the case,²⁶³ because

259. *Id.* at 139-41 (listing examples of qualitative evidence of buyer substitution that could be used to define the market in merger analysis).

260. *See* Cal. Dental Ass’n v. FTC, 224 F.3d 942, 948 (9th Cir. 2000) (describing most intent evidence as being of “no value” and referring to analyses of intent as being a “relatively fruitless inquiry” in antitrust rule of reason cases); FTC v. Freeman Hosp., 69 F.3d 260, 270 n.14 (8th Cir. 1995) (rejecting opinion and intent evidence); A.A. Poultry Farms, Inc. v. Rose Acre Farms, Inc., 881 F.2d 1396, 1402 (7th Cir. 1989) (“Intent does not help to separate competition from attempted monopolization.... Traipsing through the warehouses of business in search of misleading evidence both increases the costs of litigation and reduces the accuracy of decisions.”); 3 PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW 5 (4th ed. 2013) (“[B]ad intent is easily proven but seldom serves to distinguish situations where the defendant’s conduct deserves condemnation from those in which it should be left alone.”).

261. Herbert Hovenkamp, *The Monopolization Offense*, 61 OHIO ST. L.J. 1035, 1039 (2000).

262. *See, e.g.*, Lao, *supra* note 230, at 157.

263. *See id.* at 157, 196-97.

“no one is likely to know better the probable effects of a practice than the firm engaging in it.”²⁶⁴

If corporate statements or documents show that a dominant firm’s actions were intended to eliminate a nascent rival in order to prevent a possible future threat to its dominance, it would be reasonable to infer from that intent that the effects of the action were anticompetitive even if there was no clear showing of competitive harm.²⁶⁵ A careful review of the opinions of both the court of appeals and the district court in *Microsoft*, perhaps the most important monopolization case of the last few decades, suggests that the courts did precisely that. Though reliance on intent was never explicitly acknowledged, both opinions were replete with references to Microsoft’s anticompetitive intent.²⁶⁶ They pointed to numerous internal corporate documents, senior executive statements, and other evidence of Microsoft’s intentions to destroy Netscape as a potential competitor and to deceive another potential competitor, in order to prevent a possible future threat to its Windows OS monopoly.²⁶⁷

Those opposed to the use of intent evidence have mainly asserted that procompetitive and anticompetitive intent are difficult to distinguish,²⁶⁸ that intent evidence is subjective and unreliable,²⁶⁹ and that juries may mistakenly find corporate anticompetitive intent based on an employee’s use of aggressive war and sports metaphors to describe their dealings with a competitor.²⁷⁰ In my

264. *Id.* at 157.

265. *Id.* at 197 (“[I]ntent evidence can provide helpful clues as to effects, for who would know better the likely effects of its conduct than the firm responsible for it.”).

266. See *United States v. Microsoft Corp.*, 253 F.3d 34, 76-77 (D.C. Cir. 2001) (citing internal Microsoft documents, such as emails, that confirmed that Microsoft intended to deceive Java developers); *United States v. Microsoft Corp.*, 84 F. Supp. 2d 9, 107-10 (D.D.C. 1999).

267. See *Microsoft*, 253 F.3d at 76-77; *Microsoft*, 84 F. Supp. 2d at 107-08; see also Lao, *supra* note 230, at 153-54 n.8 (citing other references to Microsoft’s intent in both the D.C. District Court and D.C. Circuit Court opinions).

268. See, e.g., Joseph F. Brodley & Ching-to Albert Ma, *Contract Penalties, Monopolizing Strategies, and Antitrust Policy*, 45 STAN. L. REV. 1161, 1163 (1993) (“[I]ntent evidence is generally inferior to objective evidence because competitive and anticompetitive motivations are often indistinguishable.”); Hovenkamp, *supra* note 261, at 1039.

269. See, e.g., RICHARD A. POSNER, *ANTITRUST LAW: AN ECONOMIC PERSPECTIVE* 190 (1976) (“Any doctrine that relies upon proof of intent is going to be applied erratically at best.”).

270. *Id.* (“Especially misleading here is the inveterate tendency of sales executives to brag to their superiors about their competitive prowess, often using metaphors of coercion that are

view, these problems are overstated.²⁷¹ Though anticompetitive and procompetitive intent may sometimes be difficult to distinguish, factfinders in our judicial system are accustomed to making these types of determinations.²⁷² Courts are not strangers to the task of making fine factual distinctions. As for the argument that subjective intent evidence is suspect because corporate executives' loose talk of destroying a competitor, not meant to be taken literally, may be misconstrued as anticompetitive intent, my response is that this is precisely the type of assessment that factfinders are competent to make.²⁷³

There is nothing to indicate that juries [or judges] are more naïve and susceptible to error in discerning intent in antitrust than in other cases. As long as [steps are taken to ensure that] the subjective statements carry certain indicia of credibility [before they are given weight], they can be helpful in interpreting the objective steps taken by a dominant firm, even when the objective steps themselves are ambiguous.²⁷⁴

In my view, monopolization analysis would be well served by according more respect to intent evidence, and this is particularly true in markets where innovation competition is important, such as those involving the largest digital platforms. Where effects are difficult to prove, turning to intent evidence as a guide to, or a proxy for, effect could ease the task of establishing section 2 liability.

CONCLUSION

Antitrust, long used to lying in the legal and technocratic shadows, has improbably found itself at the center of a public discourse on concentration, excessive economic and political power, wealth and income inequality, and problems relating to the

compelling evidence of predatory intent to the naïve.”).

271. See Lao, *supra* note 230, at 199-205 (summarizing objections to intent evidence and refuting them).

272. See *id.* at 200.

273. *Id.* at 207 (“Assessing whether a particular statement has significance or should be ignored as ‘a clumsy choice of words to describe innocent behavior’ is *precisely* the function of juries in our judicial system.” (internal citation omitted)).

274. *Id.* at 158.

seemingly entrenched dominance of the largest digital platforms.²⁷⁵ The new political salience of antitrust has provided us with a much needed opportunity to rethink contemporary antitrust law and policy, particularly with respect to monopolization.

Reform efforts in the direction of a no-fault monopolization approach, however, would be misplaced.²⁷⁶ Economically, it is not at all clear that no-fault intervention to disperse market power is likely to be beneficial on balance. If the motivation is noneconomic, the antitrust laws were not designed to specifically tackle the serious social and political problems critics have linked to the digital platforms. Applying and, if necessary, enacting specific laws and regulations tailored to those problems would be more effective and constructive. Moreover, if (as it seems) simplicity is what advocates are after, a no-fault approach is unlikely to deliver since it raises a number of difficult conceptual and practical questions that are not easily answerable.

Rather than adopt an approach with uncertain results that would completely disrupt the current antitrust paradigm, it may be more productive to seek to reinvigorate section 2 through more modest changes.²⁷⁷ These changes could include making greater efforts to identify exclusionary conduct and to work toward extending its scope, relying on raising rivals' costs and other more liberal theories of harm. More flexibility in the analysis of consumer harm would also be helpful. This could include allowing inference of consumer harm to be drawn from evidence of harm to the competitive process, elevating and promoting the theory of long-run innovation harm, and easing proof of such harm by adopting rebuttable presumptions of anticompetitive harm in certain situations. Finally, overcoming some skepticism surrounding the legitimacy and value of qualitative evidence, including intent evidence, would reduce the burden of proof for establishing liability and, thereby, strengthen section 2 enforcement.

275. *See supra* Part II.

276. *See supra* Part III.

277. *See supra* Part IV.