CPI Columns
US & Canada

February 2022

Innovation: A Bridge to the New Brandeisians?

By Richard J. Gilbert & A. Douglas Melamed

Edited by Justin Stewart-Teitelbaum & Angela Landry

Innovation: A Bridge to the New Brandeisians?

By Richard J. Gilbert & A. Douglas Melamed***

The push to reform antitrust law by more aggressive enforcement strategies and perhaps new legislation has been dominated by self-professed "New Brandeisians," who have a far-reaching populist agenda. They have in many ways overshadowed more centrist reform advocates. But there is one aspect of centrist reform proposals, an increased focus on innovation, that could partly bridge the gap between New Brandeisians and centrist reform advocates.

I. Introduction

The New Brandeisians have taken antitrust enforcement by storm with beachheads at the Federal Trade Commission (Lina Khan) and the White House (Tim Wu). The movement is both a reflection of broader populist sentiments and a backlash to perceived weaknesses in antitrust enforcement dominated by ideas often associated with the Chicago School.[1] The New Brandeisians fault recent past antitrust enforcement for:

- Reliance on the consumer welfare standard to evaluate conduct and mergers;[2]
- Discounting concerns about monopoly's caustic influences on politics and social justice;[3]
- The use of price as a main determinant of consumer welfare to the exclusion of long run effects and social indicia such as inequality and worker welfare;[4] and
- Excessive faith in the ability of markets to correct the abuse of market power, leading to systemic underenforcement.[5]

The rise of the New Brandeisians follows the emergence of "post-Chicago" antitrust economics, which challenges many defendant-friendly presumptions of the Chicago School.[6] These presumptions include: the one-monopoly rent theory, which falsely presumes that firms cannot increase their profits by using vertical restraints such as tying and bundling to extend their monopoly power into adjacent markets; the related presumption that vertical mergers are unlikely to harm consumers; and the beliefs that predatory pricing is unlikely to be a profitable strategy and that prices above short-run average cost are necessarily pro-competitive.

Post-Chicago economics also challenges the Chicago School's faith in the ability of markets to correct abuses of market power.[7] In doing so, it takes aim at the error-cost approach to antitrust enforcement that favors forbearance versus intervention for conduct whose anticompetitive effects cannot be established with a high degree of certainty. In this respect, supporters of the Post-Chicago School of antitrust enforcement share common ground with the New Brandeisians.

---

* Distinguished Professor Emeritus, University of California, Berkeley.
** Professor of the Practice of Law, Stanford University.

[1] See, e.g. ROBERT BORK, THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF (1978).

[2] Lina Khan, *The New Brandeis Movement: America's Antimonopoly Debate*, 9 J. EUR. COMPETITION L. & PRAC. 131, 132 (2018) ("The Chicago School focus on 'consumer welfare,' by contrast, does focus antitrust law on one particular outcome—the supposed welfare of the consumer. This has warped America's antimonopoly regime, by leading both enforcers and courts to focus mainly on promoting 'efficiency' on the theory that this will result in low prices for consumers.").

[3] "As a business gets larger, it begins to enjoy a different kind of advantage having less to do with efficiencies of operation, and more to do with its ability to wield economic and political power, by itself or in conjunction with others." TIM WU, THE CURSE OF BIGNESS: ANTITRUST IN THE NEW GILDED AGE 71 (2018).

[4] "[I]t is a disservice to the [antitrust] laws and their intent to retain such a laserlike focus on price effects as the measure of all that antitrust was meant to do." *Id.* at 135. See also Lina M. Khan, *Amazon's Antitrust Paradox*, 126 YALE L. REV. 710, 710 (2015) (The current framework in antitrust "peg[s] competition to 'consumer welfare,' defined as short-term price effects[.]"); Lina M. Khan & Sandeep Vaheesan, *Market Power and Inequality: The Antitrust Counterrevolution and Its Discontents*, 11 HARV. L. & POL'Y REV. 235 (2017).

[5] See, e.g. Lina M. Khan, *The End of Antitrust History Revisited*, 133 HARV. L. REV. 1655 (2020) (reviewing Wu, *supra* note 3).

[6] See, e.g. Daniel A. Crane, *Chicago, Post-Chicago, and Neo-Chicago*, 76 U. CHI. L. REV. 1911 (2009).

[7] See, e.g. Jonathan B. Baker. *Taking the Error Out of "Error Cost" Analysis: What's Wrong with Antitrust's Right*, 80 ANTITRUST L.J. 1 (2015).

Members of the New Brandeis movement diverge from adherents of the Post-Chicago School in important respects. The Post-Chicago School does not condemn monopoly power per se, but only monopoly power that is acquired or maintained by anticompetitive means. The New Brandeisians believe that antitrust enforcement should condemn economic power even if it is not accompanied by conduct that raises prices or reduces output or innovation, because they view economic power and inequality as an existential threat to democracy and social justice. Another distinction is the Post-Chicago School's support for the consumer welfare standard. The New Brandeisians argue that the U.S. antitrust laws had their origins in broader concerns about economic power and inequality, and do not specify the promotion of consumer welfare or any kind of solely economic welfare as their objective.[8]

The criticism that the consumer welfare standard addresses solely short-run effects on prices paid by consumers is mistaken. The consumer welfare standard is about promoting economic welfare by prohibiting anticompetitive conduct or mergers that harm the competitive process by diminishing the competitive constraints imposed by rivals.[9] It is applicable to conduct and mergers that increase market power in that way and that therefore harm or are likely to harm trading partners.[10] The trading partners can be intermediaries that might or might not pass harms onto final consumers, and they can be suppliers that are concerned about monopsony power of their customers. Examples include conduct by producers of television programming that harms distributors of such programming and a merger of hospitals that suppresses wages paid for nurses. And the harm contemplated by the standard is not limited to short-term price effects but can include effects on innovation and product quality.

The New Brandeisians propose "harm to the competitive process" as an alternative to the consumer welfare standard.[11] But the consumer welfare standard itself, as implemented, addresses harm to the competitive process and defines what that harm entails. The New Brandeisians do not define what they mean by "harm to the competitive process" other than to assert that it means something more than the harm defined by the consumer welfare standard. Under the consumer welfare standard, conduct should be challenged only if it harms the competitive process by diminishing the competitive efficacy of rivals and in that way creates or increases market power of one or more firms. In other words, under the consumer welfare standard, harm to the competitive process means the creation, increase, or maintenance of market power. We share the view of most antitrust scholars that this focus has allowed the consumer welfare standard to serve a useful role in antitrust enforcement.[12] To replace consumer welfare with an ill-defined standard such as "protection of the competitive process" risks enforcement decisions that are arbitrary and unpredictable and that benefit neither consumers nor the economy more generally.[13]

---

[8] See, e.g. Khan, *supra* note 5, at 1670–71 (2020) ("Post-Chicago's choice to accept Chicago's normative paradigm stands in contrast with the New Brandeis intervention, which rejects the idea that antitrust law should be centered on promoting consumer welfare.").

[9] See, e.g. A. Douglas Melamed & Nicolas Petit, *The Misguided Assault on the Consumer Welfare Standard in the Age of Platform Markets*, 54 REV. IND. ORG. 741, 746 (2019); A. Douglas Melamed, *Antitrust Law and Its Critics*, 83 ANTITRUST L.J. 269, 271–272 (2020).

[10] See, e.g. Opening Statement of Professor Carl Shapiro, Senate Judiciary Committee Subcommittee on Antitrust, Consumer Protection and Consumer Rights "The Consumer Welfare Standard in Antitrust: Outdated, or a Harbor in a Sea of Doubt?" 13 December 2017 ("As I use the term, applying the "consumer welfare" standard means that a business practice is judged to be anti-competitive if it disrupts the competitive process and harms trading parties on the other side of the market." (italics omitted))

[11] See, e.g. Tim Wu, *The "Protection of the Competitive Process" Standard*, Colum. Pub. L. Rsch. Paper No. 14-612 (2018), https://scholarship.law.columbia.edu/cgi/viewcontent.cgi?article=3293&context=faculty_scholarship.

[12] "The modern consensus among economists and antitrust practitioners is that antitrust law should exist primarily to achieve allocative efficiency and to advance consumer welfare." Daniel A. Crane, *The Economics of Antitrust Enforcement*, *in* 4 ANTITRUST LAW AND ECONOMICS 1, 2 (Keith N. Hylton ed., 2010).

[13] In response to Tim Wu's *The Curse of Bigness,* Judge Douglas H. Ginsburg opines, "[e]xperience prior to adoption of the consumer welfare standard teaches that an antitrust regime with several vague and often conflicting goals creates unpredictable results; that can only chill the business innovations that improve the lives of consumers." Ginsburg, *infra* note 24.

Where we find ourselves on the same page as the New Brandeisians is the belief that antitrust enforcement can productively be somewhat more aggressive than it has been in recent years. The New Brandeisians say that antitrust has been too lax because it is too focused on economics and overlooks ills from economic power that include economic inequality and abuse of political power. We agree that antitrust has been too lax, but we would not abandon the exclusive focus on economic welfare; instead, we would bring antitrust's focus on economic welfare in line with current economic learning. That includes a less permissive approach to mergers and conduct by dominant firms that impairs the ability of rivals to compete.[14]

II. Antitrust and Innovation

One important aspect of current economic learning that has had little impact on antitrust doctrine and judicial decisions concerns the effect of market power on innovation. Antitrust enforcement can prudently be made materially more aggressive by focusing explicitly on innovation. The focus on innovation can take the law partway toward the goals of the New Brandeis movement without abandoning the consumer welfare standard.

Innovation is hugely important for economic welfare, and it has long been appreciated that innovation effects are within the ambit of antitrust enforcement.[15] The Department of Justice and Federal Trade Commission often allege innovation harms from mergers,[16] and they have also done so for single firm conduct.[17] Nonetheless, innovation effects rarely determine the outcomes of merger or monopolization challenges. There appear to be two reasons for the limited influence of innovation concerns in antitrust enforcement.

The first is the legacy of Joseph Schumpeter, whose writings are often cited for the proposition that monopoly power can promote innovation by providing a more stable platform for investment and increasing the profits from discoveries. More recent economic learning challenges this notion. Competition promotes innovation for several reasons. First, having more firms engaged in research and development (R&D) typically makes it more likely that at least one firm will develop a successful innovation.[18] Second, in a more competitive market firms have greater incentives to profit from innovations that take sales from their rivals. Third, firms with monopoly power have a disincentive to invest to create innovations that would cannibalize profits from their existing products. This is the replacement effect first described by Kenneth Arrow:[19] When an innovation is expected to be commercialized in a market for an existing product of the potential innovator, the prospect that the innovation would cause the firms to lose profits on the existing product suppresses the firm's incentive to innovate.

In addition to purely economic reasons why competition promotes innovation, there are organizational and behavioral explanations to favor competition over monopoly for innovation. Established firms develop organizational structures that are specialized to deliver their existing products; such structures create switching costs for these firms to adapt to new products.[20] Moreover, established firms respond to customer preferences for their

[14] See, e.g. JONATHAN B. BAKER, THE ANTITRUST PARADIGM: RESTORING A COMPETITIVE ECONOMY (2019).

[15] See, e.g. Howard A. Shelanski, *Information, Innovation, and Competition Policy for the Internet*, 161 U. PA. L. REV. 1663 (2013); Tim Wu, *Taking Innovation Seriously: Antitrust Enforcement if Innovation Mattered Most*, 78 ANTITRUST L.J. 313 (2012).

[16] See Richard Gilbert & Hillary Greene, Merging Innovation into Antitrust Agency Enforcement of the Clayton Act, 83 GEORGE WASHINGTON L. R. 1919, 1933 (2015) (finding that 33% of agency merger cases alleged harms to innovation between 2004 and 2014).

[17] See, e.g. Complaint at 12–13, United States v. Microsoft Corp., 87 F. Supp. 2d 30 (No. 98-1232) (May 18, 1998).

[18] See Jennifer Reinganum, *The Timing of Innovation: Research, Development, and Diffusion*, *in* HANDBOOK OF INDUSTRIAL ORGANIZATION 849, 856-59, 865 (Richard Schmalensee & Robert Willig, eds., 1989).

[19] See Kenneth J. Arrow, *Economic Welfare and the Allocation of Resources for Invention*, *in* THE RATE AND DIRECTION OF INVENTIVE ACTIVITY: ECONOMIC AND SOCIAL FACTORS 609, 619–22 (Richard R. Nelson ed., 1962).

[20] See Rebecca M. Henderson & Kim B. Clark, *Architectural Innovation: The Reconfiguration of Existing Product Technologies and the Failure of Established Firms*, 35 ADMIN. SCI. Q. 9, 9 (1990).

existing products and sometimes discount the potential return from entirely new products.[21] For these reasons, it is not surprising that new entrants are the source of many disruptive innovations. Examples include electric vehicles, the smartphone, digital photography, ride-hailing services, mapping, photolithography, and mRNA vaccines.

A second explanation for the limited influence of innovation concerns in antitrust enforcement is the belief that proving an antitrust violation requires proving harm to specific trading partners from the suppression or delay of innovation. But this explanation is also flawed. Proving a violation of the antitrust laws does not require identifying the specific consumers or trading partners that might be harmed by monopoly conduct or an estimate of the magnitude of harm. More important, it does not even require identifying the particular way in which trading partners will be harmed. Instead, antitrust law is based on the fact that conduct that leads to the acquisition or maintenance of market power can be presumed to harm trading partners unless that conduct provides an offsetting efficiency benefit.[22] The presumption that increased seller market power results in higher prices or lower quality, and increased buyer market power results in lower prices paid to suppliers, is supported by ample economic evidence.

While the analysis is more difficult, economic evidence as a whole also supports a presumption that monopoly power suppresses innovation, particularly for innovations that are expected to be monetized in markets in which the innovator has existing products that would be put at risk by the innovation. Moreover, recent evidence also shows that mergers can be presumed under some circumstances to suppress innovation incentives in industries characterized by substantial investment in R&D and innovation, which we call "high-technology industries." The application of these presumptions in individual cases can be challenged with contrary evidence.

Defendants often cite innovation as a defense to the acquisition or maintenance of monopoly power that might otherwise violate the antitrust laws. Profits that a firm can earn from a new technology provide the economic incentive to innovate and support a Schumpeterian argument that successful innovators should be permitted to exploit their innovations with few constraints imposed by antitrust enforcement. Innovation, however, is a continuous process. Innovations build on prior innovations, and conduct by a monopolist that discourages rivalry discourages the incentive and ability for other firms to make new innovations.[23] While monopoly power can promote innovation in some circumstances, it is more often antithetical to innovation, and particularly for the disruptive innovations that can transform industries and society.

Consequently, innovation concerns should have a more prominent role in antitrust enforcement for the modern economy. Before describing this role in more detail, it is important to emphasize that the consumer welfare standard is broad enough to encompass non-price effects such as product quality and innovation. The consumer welfare standard is applicable to all the margins along which firms may compete, including product quality and innovation.[24] What is necessary to apply the consumer welfare standard to innovation is a basis for concluding that the creation or maintenance of market power is likely to reduce innovation, similar to the causal relationship between creation or maintenance of market power and price effects.[25] The connection with innovation effects has been overlooked for most of the history of the antitrust laws because the connection has

[21] For examples of such cognitive failures, see CLAYTON M. CHRISTENSEN, THE INNOVATOR'S DILEMMA: WHEN NEW TECHNOLOGIES CAUSE GREAT FIRMS TO FAIL (1997).

[22] See, e.g. Richard J. Gilbert & A. Douglas Melamed, *Innovation under Section 2 of the Sherman Act*, 84 ANTITRUST L.J., 1, 10–12 (2021).

[23] The tradeoff involved in antitrust enforcement that promotes rivalry but decreases the reward to innovators is explained in detail in Ilya Segal & Michael Whinston, *Antitrust in Innovative Industries*, 97 AM. ECON. REV. 1703 (2007).

[24] Douglas H. Ginsburg, *Judging a Book: Ginsburg Reviews 'The Curse of Bigness,'* LAW360 (Dec. 3, 2018), https://www.law360.com/articles/1099074.

[25] See Gilbert & Melamed, *supra* note 22, at 10-11.

not been well-appreciated. Recent scholarship has demonstrated these causal effects.

III. Section 2 Enforcement for Innovation

Unlike the New Brandeisians, we believe that penalizing monopolies that are a consequence of a superior product, business acumen, or historic accident would chill entrepreneurship and, in some cases, prevent the emergence of efficient industry structures. Although we acknowledge concerns expressed by the New Brandeisians about the corrosive influence of economic power for democracy and social justice, these concerns are better addressed with policies targeted to the institutions that enable them, such as limitations on permitted lobbying activities, more progressive taxation, better educational opportunities, and worker protections.

We do, however, believe that antitrust enforcement can properly be more aggressive with respect to market power that is acquired or maintained by anticompetitive means. One approach is to pay more attention to innovation effects in enforcement decisions for high-technology industries.

Consider the following example, based on a detailed analysis by Ilya Segal & Michael Whinston.[26] A firm has a monopoly for a type of switch used to route internet traffic, for which there is no close substitute. The firm has exclusive dealing contracts with a significant fraction of the wholesalers that sell switches to installers. The firm has argued that the exclusivity will create certain distribution efficiencies that will result in lower prices or at least make higher prices in the near future unlikely. Although the contracts are potentially anticompetitive, they survive a rule of reason analysis focused solely on short-run price effects. How might the result change if a court also considered innovation effects?

The firm's exclusive dealing contracts would reduce the profit that a competing innovator could earn, relative to a market with no exclusive dealing. This would reduce the incentive for new entrants to innovate in the market for switches, without regard to the number of potential innovators. Moreover, if the contracts increase the profits that the incumbent earns from its existing products, they will reduce even the incumbent's incentive to innovate due to the replacement effect.[27] The net effect is a significant reduction in innovation incentives. The likely harm from reduced innovation incentives can support a conclusion that the incumbent's exclusive dealing arrangements are anticompetitive, even if they would escape antitrust liability if the court focused solely on short-term effects. The presumption that the contracts will harm innovation could be rebutted if the defendant can demonstrate that the exclusive contracts will increase the defendant's incentive to innovate by, for example, increasing appropriability of benefits from investments in R&D.

This is but one example. More generally, evidence supports the following presumptions:

> . . . [P]roof that the conduct at issue either creates or maintains the defendant's monopoly power in the R&D market and does not reduce its share or market power in the [related or "coincident"] product market, or that the conduct creates or maintains the defendant's monopoly power in the product market when it has monopoly power in the R&D market, should be sufficient to establish a rebuttable presumption of harm to innovation. A weaker presumption of reduced innovation can be based on proof that the conduct at issue creates or maintains the defendant's monopoly power in the product market even if the defendant does not have monopoly power in the R&D market. . . . For non-coincident market innovation [i.e., where the innovator does not have profits at risk in the related product market], a rebuttable presumption of harm to competition would require

[26] Segal & Whinston, *supra* note 23, discuss exclusive contracts at 1712–15.

[27] See generally Arrow, *supra* note 19 (first describing the replacement effect).

> evidence of the creation or maintenance of monopoly power in an R&D market from alleged anticompetitive conduct. . . .[28]

IV. Merger Enforcement for Innovation

Since the turn of the century, antitrust authorities have added harms to innovation to their arsenal of anticompetitive allegations when they challenge mergers in high-technology industries. However, over the same period, there has been no demonstrable increase in merger enforcement. If anything, agencies have been reluctant to challenge mergers in rapidly evolving industries. The Federal Trade Commission did not challenge Facebook's acquisition of Instagram[29] and conditioned its decision not to challenge Facebook's acquisition of WhatsApp only on a commitment to maintain WhatsApp's privacy policies.[30] The European Commission reviewed, but did not oppose, Facebook's acquisition of WhatsApp because it concluded that WhatsApp was not a close competitor of Facebook in a market for social networking services and had no plans to compete with Facebook absent the merger.[31]

The question we address is whether analysis of innovation effects would support more stringent enforcement for mergers in high-technology markets. One school of thought answers this question solidly in the affirmative. Their argument is that a merger internalizes to both merging parties the costs that one of the parties would incur as a result of innovation by the other and would therefore reduce the incentives for either party to invest in R&D, just as mergers of firms that sell differentiated products internalize the costs that would result if one of the merging parties reduced price and thus create economic pressure for higher prices.[32]

The analogy between "upward pricing pressure" and "downward innovation pressure" from a merger fails under some circumstances. A merger can increase innovation incentives if it enables each party to benefit from innovations made by the other or if it expands demand for products by which the merging parties' would monetize their innovations. And a merger can increase the ability of the merging parties to innovate if it accelerates the discovery of a new product or production process by, for example, combining complementary R&D assets.[33]

Thus, it is not possible to sign the effects of every merger on innovation incentives. It is likely, however, that a merger reduces innovation incentives if: (i) only a few firms compete to make an innovation; (ii) at least one of the merging firms earns profits from selling an existing product that would be jeopardized by innovation; and (iii) technological spillovers, or other complementarities that enable the merging parties to obtain benefits that they could not obtain as standalone entities, are not large.

With regard to the first condition, if there are few firms engaged in relevant R&D, the adverse effect on the incentive to innovate from the merging parties' internalization of business

---

[28] Gilbert & Melamed, *supra* note 22, at 53.

[29] FTC Closes Its Investigation Into Facebook's Proposed Acquisition of Instagram Photo Sharing Program, August 22, 2012. Available at https://www.ftc.gov/news-events/press-releases/2012/08/ftc-closes-its-investigation-facebooks-proposed-acquisition.

[30] Letter From Jessica L. Rich, Director of the Federal Trade Commission Bureau of Consumer Protection, to Erin Egan, Chief Privacy Officer, Facebook, and to Anne Hoge, General Counsel, WhatsApp Inc., April 10, 2014. Available at https://www.ftc.gov/public-statements/2014/04/letter-jessica-l-rich-director-federal-trade-commission-bureau-consumer.

[31] Case M.7217 – Facebook/ WhatsApp Commission decision pursuant to Article 6(1)(b) of Council Regulation No 139/2004, 03.10.2014 C(2014) 7239 final.

[32] See, e.g. Giulio Federico, Gregor Langus & Tommaso Valletti, *A Simple Model of Mergers and Innovation*, 157(C) ECON. LETTERS 136, 136 (2017) ("merging parties always decrease their innovation efforts post-merger"); Giulio Federico, Fiona Scott Morton, & Carl Shapiro, *Antitrust and Innovation: Welcoming and Protecting Disruption,* 20 INNOVATION POL'Y & ECON. 125, 125 (2020) ("A merger between rivals internalizes business-stealing effects arising from their parallel innovation efforts and thus tends to depress innovation incentives").

[33] See, e.g., Bruno Jullien & Yassine Lefouili, *Horizontal Mergers and Innovation,* 14 J. COMP. L. & ECON. 364, 365-366 (2018) ("a positive relationship between mergers and innovation is more likely for innovations that enhance demand") and Richard Gilbert, Christian Riis, & Erlend S. Riis, *Innovation, Antitrust Enforcement, and the Inverted-U*, *in* THE ECONOMICS OF CREATIVE DESTRUCTION (Ufuk Akcigit & John Van Reenen, eds.) (forthcoming 2022) ("a merger can increase incentives to invest in R&D under some circumstances when investments accelerate the timing of a discovery").

stealing is likely larger than any appropriation benefit from higher prices or increased output that would cause consolidation to increase innovation incentives. With regard to the second condition, a merger would suppress incentives to innovate by increasing the profits at risk from the innovation if the merging parties supply existing products that are substitutes for each other and the innovation would jeopardize profits from both products. A merger would also suppress the merging parties' incentives to innovate compared to their pre-merger incentives even if only one firm supplies a product at risk from innovation. Although the merger would not increase the profit at risk in this case, the replacement effect would suppress both parties' post-merger innovation incentives, whereas pre-merger only one party would experience a replacement effect.

These conditions, when satisfied for mergers that do not have significant benefits from technological spillovers or complementarities, support antitrust intervention even when static price or quality effects cannot be confidently predicted and therefore provide an additional basis for intervention in otherwise close cases.[34]

The above discussion relates to horizontal mergers. What about vertical mergers in high-technology industries? The short answer is that innovation effects are more complicated and would require analysis of potentially offsetting incentives. Suppose, for example, that most batteries for electric vehicles require a chemical that is supplied by a monopolist. The chemical monopolist proposes to merge with a battery manufacturer. The vertical merger might have efficiency justifications such as the elimination of double marginalization for the essential chemical, which would result in lower prices charged by the battery manufacturer. What about innovation effects? The merged company would have an incentive to raise the cost of its rival battery manufacturers by charging a price for the chemical that is higher than the profit-maximizing price for a standalone chemical monopolist. The higher price would lower the profits for battery innovations that require the chemical and therefore lower the incentive for non-integrated firms to invest in R&D for innovations that require the chemical. This suppression of innovation might be partially offset by an increased incentive for non-integrated firms to invest in R&D for batteries that do not require the monopolized chemical. Furthermore, the elimination of double marginalization can increase the merged firm's profit from — and therefore incentive to invest in — technologies that employ the chemical. However, vertical integration also would reduce the merged firm's incentive to invest in a technology that does not require the monopolized chemical by increasing the firm's profits from its existing batteries and therefore increasing the replacement effect.

V. Conclusions

Members of the New Brandeis movement believe that antitrust enforcement has let us down because it focuses on consumer welfare and not broader societal ills from monopoly. We believe that the consumer welfare standard — which does not focus solely on short-term price effects — has been a useful guidepost for antitrust enforcement, and we oppose efforts to abandon it. Where we agree with the New Brandeisians is that antitrust enforcement has been too weak, largely because many courts appear to have accepted the idea that the costs of too-aggressive enforcement are greater than the costs of too-weak enforcement. Encouraging courts to include innovation concerns in their reviews of unilateral conduct and mergers in high-technology industries could alter this calculus in favor of more aggressive antitrust enforcement. In this respect it is a movement toward the New Brandeisians, although not a bridge that connects their movement to the views of those who support more traditional, economically-focused antitrust enforcement. It might be an especially important movement toward the New Brandeisians

[34] See also Mitsuru Igami & Kosuke Uetake, *Mergers, Innovation, and Entry-Exit Dynamics: Consolidation of the Hard Disk Drive Industry, 1996–2016*, 87 Rev. Econ. Studies 2672, 2675 (2020). (Simulation results that mergers in the hard disk drive industry reduce R&D investment if there are four or fewer firms engaged in R&D prior to the merger.)

because small or new entities are often the source of disruptive innovation in high-technology industries, and innovation-focused antitrust enforcement would be particularly sensitive to conduct or mergers that limit competition from these entities.