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## THE LOOMING CRISIS IN ANTITRUST ECONOMICS

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### ABSTRACT

*As in so many areas of law and politics in the United States, antitrust's center is at bay. On the right, it is besieged by those who would further limit its reach. On the left, it faces revisionists who propose significantly greater enforcement. One thing the two extremes share, however, is the denigration of the role of economics in antitrust analysis. Two of the Supreme Court's recent antitrust decisions at this writing reveal that economic analysis from the right no longer occupies the central role that it once had. On the left, some proposals display indifference to their economic impact on important participants in the economy.*

*The antitrust laws speak of the conduct they prohibit in economic terms, such as "restraint of trade," "monopoly," and lessening of "competition." They do not embrace any particular economic ideology, such as the Chicago school or institutionalism. Nor do they require the use of any particular economic model, such as perfect competition or oligopoly. This openness gives policy makers a great deal of room, but it is not an invitation to economic nonsense. Further, economics should not be a tool for picking a winning interest group and then manipulating the doctrine to get that result.*

*The Supreme Court's 2019 Apple decision slighted the economics of passed-on consumer harm, a central component in analyzing private damages actions for more than forty years, and one that is critical to measuring competitive injury. In AmEx, the Court neglected the kind of transactional analysis that would have uncovered the true injuries in that case, defined the "relevant market" in such a way as to make that term economically incoherent, rejected a superior methodology for assessing power in favor of an inferior one, misunderstood completely the meaning and appropriate scope of free riding, and lost sight of the fact that marginal rather than total effects are central.*

*Although the progressive wing of antitrust does a better job of identifying the problems that the competitive economy faces, some of its proposed solutions are calculated to make them worse. The pursuit of business concentration or bigness for its own sake will injure both consumers and labor far more than it benefits small business, who appear to be the intended beneficiaries. A proposal to forbid large platforms from selling their own products in competition with the products of others will harm both consumers and most small businesses, although it will benefit some large firms.*

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*When used correctly and without excessive ideology, economics is a powerful, neutral tool for helping people identify injuries to competition and appropriate fixes. Indeed, that is the first and best use of antitrust economics. Both extremes in this debate have ignored the first rule of rational antitrust policy: figure out who is getting hurt, and how.*

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## INTRODUCTION

As in so many areas of law and politics in the United States, antitrust's center is at bay. It is besieged by a right flank that wants to limit antitrust further. On the left, it faces revisionists who propose significantly greater enforcement.

One thing the two extremes share is the denigration of the role of economics in antitrust analysis. The Supreme Court is increasingly revealing that fundamental economic analysis no longer occupies the central role that it once had. On the left, some proposals are economically indefensible and threaten antitrust's boundary limitations to concerns about economic competition.

The antitrust laws speak of the conduct they prohibit in unmistakably economic terms, such as "restraint of trade," "monopoly," and lessening of "competition."<sup>1</sup> They do not embrace any particular economic ideology, such as the Chicago school or institutionalism. Nor do they require the use of any particular economic model, such as perfect competition or oligopoly. This openness gives policy makers a great deal of room, but it is not an invitation to economic nonsense. Antitrust economics should be an analytic and empirical tool for determining how a practice affects competition. This requires an assessment of whom a practice injures and how, as well as what is the optimal form of relief. Antitrust economics should not become an excuse for picking a winning interest group and then manipulating the doctrine to get to that result. Nor, however, should it be a tool for making other kinds of social policy that is not driven by concerns about competition.

This Article first considers the relationship between sound antitrust economics and the trajectory of antitrust decisions over time. Then it briefly examines the role of economics as a science in antitrust analysis. Next, it turns to the Supreme Court's treatment of antitrust economics in two recent decisions at this writing. Finally, it looks at the sharply contrasting approaches of some on antitrust's left flank.

#### A. *The Marginal Antitrust Case*

In the 1960s, the economics of Supreme Court antitrust decisions was indefensible. To be sure, much of the industrial economics of the period was more interventionist than it is today. For example, structuralism as presented in the writings of prominent industrial organization economists, such as Joe Bain, argued for condemning mergers or exclusionary practices that would not be condemned today.<sup>2</sup> By today's standards, the then-dominant structure-conduct-

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<sup>1</sup> These terms are used in the two substantive sections of the Sherman Act, 15 U.S.C. §§ 1-2; and Sections 2, 3, and 7 of the Clayton Act, 15 U.S.C. §§ 13-14, 18.

<sup>2</sup> See, e.g., JOE S. BAIN, BARRIERS TO NEW COMPETITION: THEIR CHARACTER AND CONSEQUENCES IN MANUFACTURING INDUSTRIES 21-24 (1962) (discussing value of condition of entry to firm); JOE S. BAIN, INDUSTRIAL ORGANIZATION 174 (1959); Joe S. Bain, *Conditions of Entry and the Emergence of Monopoly*, in MONOPOLY AND COMPETITION AND THEIR REGULATION 215, 219-26 (Edward H. Chamberlin ed., 1954); Joe S. Bain, *Workable*

performance (“S-C-P”) paradigm exaggerated the threats posed by large firms and concentrated markets.<sup>3</sup>

Nevertheless, the position taken in many Supreme Court decisions during that era went far beyond this economics by any reasonable bounds. Notable examples were the Supreme Court’s use of merger law to condemn efficiencies rather than higher prices;<sup>4</sup> its aggressive position on vertical restraints, particularly nonprice restraints<sup>5</sup> and maximum resale price maintenance;<sup>6</sup> its application of the per se rule to efficient and economically harmless joint ventures;<sup>7</sup> and its exaggerated perceptions about the relationship between intellectual property (“IP”) and monopoly.<sup>8</sup>

While there were also important political changes,<sup>9</sup> the Chicago school acquired its prominence in antitrust economics because the case law provided so

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*Competition in Oligopoly: Theoretical Considerations and Some Empirical Evidence*, 40 AM. ECON. REV. 35, 37-38 (1950).

<sup>3</sup> See HERBERT HOVENKAMP, *THE OPENING OF AMERICAN LAW: NEOCLASSICAL LEGAL THOUGHT, 1870–1970*, at 206-19 (2015) [hereinafter HOVENKAMP, *OPENING OF AMERICAN LAW*]; Herbert Hovenkamp, *United States Competition Policy in Crisis: 1890–1955*, 94 MINN. L. REV. 311, 312 (2009). On the role of structure in antitrust analysis today, see HERBERT HOVENKAMP, *FEDERAL ANTITRUST POLICY: THE LAW OF COMPETITION AND ITS PRACTICE* § 1.7 (6th ed. 2020) [hereinafter HOVENKAMP, *FEDERAL ANTITRUST POLICY*] (discussing how the S-C-P paradigm provided support for challenging mergers solely on basis of market structure without requiring consideration of specific kinds of conduct). On merger law in particular, see Herbert Hovenkamp & Carl Shapiro, *Horizontal Mergers, Market Structure, and Burdens of Proof*, 127 YALE L.J. 1996 (2018). See also Thomas E. Kauper, *Influence of Conservative Economic Analysis on the Development of the Law of Antitrust, in HOW THE CHICAGO SCHOOL OVERSHOT THE MARK: THE EFFECT OF CONSERVATIVE ECONOMIC ANALYSIS ON U.S. ANTITRUST* 40 (Robert Pitofsky ed., 2008).

<sup>4</sup> See, e.g., *Brown Shoe Co. v. United States*, 370 U.S. 294, 344 (1962) (condemning a merger on very small market shares, largely because of its economic integration and efficiency effects).

<sup>5</sup> See, e.g., *United States v. Arnold, Schwinn & Co.*, 388 U.S. 365, 379 (1967) (finding that vertical nonprice restraints are “so obviously destructive of competition that their mere existence is enough” to violate the Sherman Act).

<sup>6</sup> See, e.g., *Albrecht v. Herald Co.*, 390 U.S. 145, 152-53 (1968) (holding that maximum price-fixing agreement is per se illegal restraint of trade under Section 1 of the Sherman Act).

<sup>7</sup> See, e.g., *United States v. Topco Assocs.*, 405 U.S. 596, 598, 608 (1972) (applying Sherman Act to condemn territorial division among cooperative association of small- and medium-sized regional supermarket chains that lacked market power).

<sup>8</sup> See, e.g., *Brulotte v. Thys Co.*, 379 U.S. 29, 32-33 (1964) (“[A] patentee’s use of a royalty agreement that projects beyond the expiration date of the patent is unlawful *per se*.”); *United States v. Loew’s Inc.*, 371 U.S. 38, 45 (1962) (condemning block-booking of motion pictures under per se rule after concluding that copyright creates a presumption of sufficient market power).

<sup>9</sup> In particular, President Lyndon Johnson’s decision not to run and President Richard Nixon’s election as president in 1968 had the effect of turning antitrust policy sharply to the right, particularly on issues relating to merger policy and industrial concentration. See Herbert

much low-hanging fruit.<sup>10</sup> Many economists climbed on board simply because the economics reflected in antitrust decisions was indefensible.<sup>11</sup>

Since that time, however, antitrust case law has moved sharply to the right. The Supreme Court has considerably increased plaintiffs' burdens for pleading<sup>12</sup> and avoiding summary judgment in antitrust cases.<sup>13</sup> It has narrowed private plaintiff antitrust standing<sup>14</sup> and seriously limited challenges to predatory and other strategic pricing.<sup>15</sup> To the extent that courts, including the Supreme Court, have erred in recent years, it has been in ways that favor nonenforcement. Recent judicial applications of antitrust statutes are much narrower than the statutory language, which speaks in broad terms about the harms they prohibit and grant private actions to anyone who is injured. As a result, the "marginal" antitrust case today is far, far less likely to be an expression of overdeterrence.<sup>16</sup> Many members of the federal judiciary, including some on the Supreme Court, now exhibit a strong antienforcement bias.<sup>17</sup>

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Hovenkamp, *Introduction to the Neal Report and the Crisis in Antitrust*, 5 COMPETITION POL'Y INT'L 227, 228 (2009).

<sup>10</sup> See Herbert Hovenkamp & Fiona Scott Morton, *Framing the Chicago School of Antitrust Analysis*, 168 U. PA. L. REV. 1843, 1849-50 (2020) (highlighting how Chicago school's call to use economics in antitrust analysis yielded less enforcement and increased consumer welfare and efficiency).

<sup>11</sup> *Id.* at 1848-49 ("The attractive feature of the [Chicago school] movement was not the ideology of less enforcement regardless of the facts, but rather the idea of using economics to analyze business conduct in an effort to maximize social welfare. The economics angle was the marketing genius of the Chicago School . . .").

<sup>12</sup> See *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 548-49 (2007) (holding that complaint under Section 1 of Sherman Act cannot survive a motion to dismiss when it alleges parallel conduct unfavorable to competition without "factual context suggesting agreement, as distinct from identical, independent action").

<sup>13</sup> See *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 587 (1986) ("[I]f the factual context renders [plaintiffs'] claim implausible—if the claim is one that simply makes no economic sense—[plaintiffs] must come forward with more persuasive evidence to support their claim than would otherwise be necessary [to survive a motion for summary judgment].").

<sup>14</sup> See *Cargill, Inc. v. Monfort of Colo., Inc.*, 479 U.S. 104, 118-19, (1986); *Associated Gen. Contractors of Cal., Inc. v. Cal. State Council of Carpenters*, 459 U.S. 519, 545 (1983); *Ill. Brick Co. v. Illinois*, 431 U.S. 720, 729 (1977). On *Illinois Brick*, see *infra* text accompanying notes 87-91.

<sup>15</sup> See generally *Weyerhaeuser Co. v. Ross-Simmons Hardwood Lumber Co.*, 549 U.S. 312 (2007); *Brooke Grp. Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209 (1993).

<sup>16</sup> See *infra* note 102 and accompanying text (highlighting law's significant underdeterrence in price-fixing context).

<sup>17</sup> Letter from author to Hon. David N. Cicilline, Chair, Subcomm. on Antitrust, Com. & Admin. L., and Hon. F. James Sensenbrenner, Jr., Ranking Member, Subcomm. on Antitrust, Com. & Admin. L. (Apr. 17, 2020) (on file with author) (providing rule of reason cases as an example of the federal judiciary's antienforcement bias).

At the same time, changes in both economic theory and economic methodology have strengthened the case for intervention on economic grounds. Important characteristics of the Chicago school in the 1950s and 1960s were an iconoclastic methodology, severe opposition to economic models that deviated significantly from perfect competition, and extreme trust that in the long run all markets would work themselves to competition.<sup>18</sup> George Stigler, the most notable Chicago school microeconomist of the period, saw oligopoly as a narrow and usually transient exception to perfect competition<sup>19</sup> and, along with Milton Friedman, repudiated the theory of monopolistic competition as untestable.<sup>20</sup> Within the scientific positivism of the day, that repudiation was tantamount to saying that the theory of monopolistic competition lay outside the boundaries of science.<sup>21</sup>

For the Chicago school, these were important defensive positions. The school had developed in large part as a reaction to perceived situational excesses in the economic policies of the 1930s and the New Deal.<sup>22</sup> Stigler in particular objected to the use of economics to respond to external circumstances such as urban renewal or oil embargoes.<sup>23</sup> Indeed, he wrote, the strength of economics as a science is that its main focus is “not drawn from immediate, changing events.”<sup>24</sup>

<sup>18</sup> See Jan Horst Keppler, *The Genesis of ‘Positive Economics’ and the Rejection of Monopolistic Competition Theory: A Methodological Debate*, 22 CAMBRIDGE J. ECON. 261, 274 (1998) (discussing Chicago school’s reaction to monopolistic competition theory).

<sup>19</sup> See generally George J. Stigler, *A Theory of Oligopoly*, 72 J. POL. ECON. 44 (1964).

<sup>20</sup> See GEORGE J. STIGLER, *Monopolistic Competition in Retrospect*, in FIVE LECTURES ON ECONOMIC PROBLEMS 12 (1949) [hereinafter STIGLER, *Monopolistic Competition*] (criticizing Edward Chamberlin’s theory of monopolistic competition); see also CRAIG FREEDMAN, IN SEARCH OF THE TWO-HANDED ECONOMIST: IDEOLOGY, METHODOLOGY AND MARKETING IN ECONOMICS 274 (2016) (noting that Stigler criticized Chamberlin’s theory for being “[i]nherently inapplicable,” “[t]heoretically inconsistent,” “[i]ncapable of providing any additional insights or different results than perfect competition,” and “[d]eficient in showing the methodological advantage of pursuing more realistic assumptions”). On Friedman’s argument that monopolistic competition is untestable, see MILTON FRIEDMAN, *The Methodology of Positive Economics*, in ESSAYS IN POSITIVE ECONOMICS 3, 15 (1953).

<sup>21</sup> See FRIEDMAN, *supra* note 20, at 8-9 (“Only factual evidence can show whether [a theory] is ‘right’ or ‘wrong’ or, better, tentatively ‘accepted’ as valid or ‘rejected.’ . . . [T]he only relevant test of the *validity* of a hypothesis is comparison of its predictions with experience.”).

<sup>22</sup> See Hovenkamp & Morton, *supra* note 10, at 1854 (highlighting Chicago school’s “suspicion of the aggressive antitrust policy of the New Deal” and “general assault on New Deal regulatory policy, with its sector-specific agencies and diverse approaches for different markets”).

<sup>23</sup> George J. Stigler, *The Influence of Events and Policies on Economic Theory*, 50 AM. ECON. REV. 36, 38 (1960) [hereinafter Stigler, *Influence of Events*] (analogizing leading economists responding to urban renewal and oil embargoes to leading chemists working on detergents or headache remedies).

<sup>24</sup> *Id.*

Stigler also objected to efforts to make economics more interdisciplinary—suggesting, for example, that theories of oligopoly were fundamentally about the sociology of groups.<sup>25</sup> A good example is Stigler’s very influential essay on the economics of information.<sup>26</sup> Rather than looking for biological, cultural, psychological, or sociological explanations for the fact that people often act on incomplete or even false information, Stigler found the answer entirely in neoclassical marginal analysis.<sup>27</sup> Information is costly.<sup>28</sup> As a result, a rational maximizing actor will not acquire an infinite amount of it but rather only acquire it to the point that the marginal value of obtaining further information equals the marginal cost of doing so.<sup>29</sup>

Another example is an article Stigler wrote with Gary Becker about individual taste.<sup>30</sup> They argued, contrary to those who observed wide differences in individual taste, that these differences were relatively unimportant for purposes of economic analysis: “[O]ne may usefully treat tastes as stable over time and similar among people . . . .”<sup>31</sup> Within their model, the function of advertising was not to influence people’s tastes but rather to communicate information about price.<sup>32</sup> While Stigler and Becker did not mention monopolistic competition and product differentiation, they were clearly resisting the attempt to describe market behavior in terms of differential consumer preferences. Although individuals’ heterogeneity might concern the other social sciences, assumptions about individuals’ homogeneity drove economics. For Stigler, this was important to maintaining the autonomy of economics as a science. He wrote,

[A]utonomy of a science is surely essential to its existence. A discipline which was in intimate and continuous dependence upon the current output of events or other disciplines would simply not be a discipline; it would be a temporary collection of subjects. It could have no specialists—who would be pathetically obsolete in a few years—nor any accumulated theoretical corpus, for its theory would change with each new liaison or external development.<sup>33</sup>

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<sup>25</sup> See *id.* at 45.

<sup>26</sup> See George J. Stigler, *The Economics of Information*, 69 J. POL. ECON. 213, 213 (1961) (analyzing ascertainment of market price as problem of information).

<sup>27</sup> *Id.* at 215 (“Whatever the precise distribution of prices [of a commodity], it is certain that increased search will yield diminishing returns as measured by the expected reduction in the minimum asking price.”).

<sup>28</sup> *Id.* at 216 (“The cost of search, for a consumer, may be taken as approximately proportional to the number of (identified) sellers approached, for the chief cost is time.”).

<sup>29</sup> *Id.*

<sup>30</sup> George J. Stigler & Gary S. Becker, *De Gustibus Non Est Disputandum*, 67 AM. ECON. REV. 76, 76 (1977) (rejecting traditional view that economic analysis ends upon reaching difference in tastes between people and yields to other subjects).

<sup>31</sup> *Id.*

<sup>32</sup> *Id.* at 84.

<sup>33</sup> Stigler, *Influence of Events*, *supra* note 23, at 45.



Further, Stigler argued, the technical apparatus that the classical political economists had developed was the best not only for its own time but also for the present.<sup>34</sup> For him, the history of economics was little more than a series of refinements in the theory of perfect competition. What he wrote was wishful thinking even at that time, but much more so today:

[T]he concept of perfect competition has defeated its newer rivals in the decisive area: the day-to-day work of the economic theorist. Since the 1930's, when the rival doctrines of imperfect and monopolistic competition were in their heyday, economists have increasingly reverted to the use of the concept of perfect competition as their standard model for analysis. Today the concept of perfect competition is being used more widely by the profession in its theoretical work than at any time in the past. The vitality of the concept is strongly spoken for by this triumph.<sup>35</sup>

That concept was strongly dedicated to developing a model for an economy that worked by itself, with little or no intervention by the state. Products competed on price within that model, and entry was usually regarded as easy unless the state itself imposed barriers.<sup>36</sup> As a result, the strong case that members of the Chicago school made for nonintervention rested on the premise that markets would always revert to competition if left alone. To this, the popular models of imperfect competition were idiosyncratic and short-lived annoyances.<sup>37</sup>

One source of Stigler's hostility toward monopolistic competition theory is that it invited the methods of other disciplines into economic analysis. Monopolistic competition theory was driven by assumptions that ran contrary to classical economic orthodoxy, although they seem obvious even from casual observation—mainly, product differentiation, differential consumer taste, and behaviorism.<sup>38</sup> In the process of defending these ideas, the Chicago school became very self-referential in its methodology, largely distrusting not only outside economists but also people from other disciplines who did not follow along.<sup>39</sup> Ironically, notwithstanding its devotion to Alfred Marshall, Chicago school economics ignored or implicitly rejected Alfred Marshall's very famous

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<sup>34</sup> See GEORGE J. STIGLER, *The Classical Economics: An Alternative View*, in FIVE LECTURES ON ECONOMIC PROBLEMS, *supra* note 20, at 25.

<sup>35</sup> George J. Stigler, *Perfect Competition, Historically Contemplated*, 65 J. POL. ECON. 1, 17 (1957).

<sup>36</sup> For a good analysis, see Jonathan B. Baker, *Taking the Error out of "Error Cost" Analysis: What's Wrong with Antitrust's Right*, 80 ANTITRUST L.J. 1, 8-12 (2015). See also Richard J. Gilbert, *The Role of Potential Competition in Industrial Organization*, J. ECON. PERSPS., Summer 1989, at 107.

<sup>37</sup> See Melvin W. Reder, *Chicago Economics: Permanence and Change*, 20 J. ECON. LITERATURE 1, 15 n.34 (1982) ("[The Chicago school] has refused to treat the economy-wide allocation of resources as the outcome of interaction among imperfect competitors.").

<sup>38</sup> See Keppler, *supra* note 18, at 274.

<sup>39</sup> See *id.*

definition of economics as the “ordinary business of life” whose “more important side” was not the study of wealth but rather “a part of the study of man.”<sup>40</sup>

Stigler himself insisted that a major shortcoming in economics was the lack of empirical testing—something he made the subject of his 1964 presidential address to the American Economic Association.<sup>41</sup> He shared that view with other notable Chicago school economists such as Ronald Coase<sup>42</sup> and Milton Friedman.<sup>43</sup>

Nevertheless, testing eventually proved to be the undoing of Chicago school economics. Today, the propositions that entry into most markets is easy, that competition is robust at all concentration levels, that oligopoly is fragile, and that imperfect competition plays no or at least only a tiny role in the economy have been undermined by a literature that is both theoretically sound and empirically rich.<sup>44</sup>

This idea of reversion to a competitive status quo was the driving force behind the “error cost” analysis developed by the Chicago school in the 1980s. If competition is robust and if oligopoly and other models of imperfect competition are frail and fleeting, then the market itself will correct monopoly, and there is no need for the government to intervene.<sup>45</sup> As a result, the social cost of a false negative (failure to condemn) is low because the market will correct it. By contrast, false positives tend to interfere with this natural market process of purification.<sup>46</sup> Richard Posner, writing as both defender and critic, argued that the core members of the Chicago school denounced even price-fixing only for “tactical reasons.”<sup>47</sup> In fact, they did not regard it as a serious problem worth enforcement resources. First, the social cost of monopoly in any event was very small.<sup>48</sup> Second, cartels were highly unstable and, as a result, their overall

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<sup>40</sup> 1 ALFRED MARSHALL, *PRINCIPLES OF ECONOMICS* 1 (1890) (“Economics is a study of man’s actions in the ordinary business of life; it inquires how he gets his income and how he uses it. Thus it is on the one side a study of wealth and on the other, a more important side, a part of the study of man.”).

<sup>41</sup> George J. Stigler, *The Economist and the State*, 55 *AM. ECON. REV.* 1, 17 (1965) (asserting that economists have been good theorists but need to expand their empirical work).

<sup>42</sup> See R.H. Coase, *The Nature of the Firm*, 4 *ECONOMICA* 386, 386 (1937).

<sup>43</sup> See FRIEDMAN, *supra* note 20, at 14-15.

<sup>44</sup> See Baker, *supra* note 36, at 11-14. With respect to merger policy, see Hovenkamp & Shapiro, *supra* note 3 (using economic theory and evidence to support presumption that horizontal mergers are anticompetitive).

<sup>45</sup> See, e.g., Frank H. Easterbrook, *The Limits of Antitrust*, 63 *TEX. L. REV.* 1, 2-3, 15 (1984) (arguing that monopoly is “self-destructive” because it always attracts entry).

<sup>46</sup> *Id.*

<sup>47</sup> Richard A. Posner, *The Chicago School of Antitrust Analysis*, 127 *U. PA. L. REV.* 925, 932 (1979).

<sup>48</sup> *Id.* at 932-33 (citing Arnold C. Harberger, *Monopoly and Resource Allocation*, *AM. ECON. REV.*, May 1954, at 77).

“misallocative effects would be too slight to warrant inevitably costly public proceedings.”<sup>49</sup>

This error cost analysis, which became conventional in Chicago school antitrust policy, is critically dependent on the assumption that markets work themselves pure. However, if *imperfections* in markets are in fact stable and robust, making competition the more fragile state of affairs, then the error cost analysis is precisely reversed. In that case, a false negative will tend to protect whatever market defect was causing a competitive problem. By contrast, a false positive will impose more competition unnecessarily, but society is still more likely to benefit unless the error is egregious.

Today, these tables have been turned dramatically. Perfect competition has very largely lost its place in economic modeling, except perhaps in diffuse markets for commodities. Simple perfect competition models have given way to models that recognize a wide variety of strategic behavior. Further, these new models seem to be doing much better than perfect competition models in the area of testability.<sup>50</sup>

One example is the important rise of empirical economic analysis of consumer substitution behavior that is applied in unilateral effects theories of merger harm. The theory is that mergers between two firms that are reasonably adjacent in a differentiated product space will predictably yield a price increase. This occurs because more of the sales that a single firm loses in response to a price increase will be recaptured by the merger partner rather than other firms in the market. In perfectly competitive markets, however, sales that are lost as a result of a price increase are simply lost. That is, unilateral effects theory depends on the observation that, although customers substitute among different products in the same market in response to price changes in one, in a differentiated market they do so at different rates.

The model of unilateral effects analysis is completely inconsistent with perfect competition, which assumes that the cross elasticity of demand facing different sellers in the same market is the same and extremely high. If one seller in a market raises price unilaterally, it will immediately lose all its sales.<sup>51</sup> If two sellers in a perfectly competitive market merge and increase their price, they will also lose all of their sales. By contrast, models that account for product differentiation assume that the cross elasticities of demand between pairs of

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<sup>49</sup> *Id.* at 932.

<sup>50</sup> See Baker, *supra* note 36, at 37 (arguing that conservatives’ erroneous assumptions “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”).

<sup>51</sup> In a perfectly competitive market, each firm faces a horizontal residual demand curve, meaning that it would lose all of its sales in response to a unilateral price increase. See Jonathan B. Baker & Timothy F. Bresnahan, *Estimating the Residual Demand Curve Facing a Single Firm*, 6 INT’L J. INDUS. ORG. 283, 284 (1988) (“Under perfect competition with homogeneous products, one firm’s contraction of output will be offset exactly by another’s expansion . . .”).

firms actually vary significantly and that these differences can be empirically measured. As a result, it becomes possible to use the distance between firms in product space to evaluate the price impact of a merger.<sup>52</sup>

Empirical testing requires data about the rates of substitution between pairs of firms in response to one firm's price change. Here, the widespread availability of digitized transaction evidence makes this measurement much easier than it had been previously, certainly during Stigler's time.<sup>53</sup> Today, the theory of unilateral effects is robust and testable, and it accounts for a significant percentage of government merger challenges.<sup>54</sup> It seems clear that imperfect competition models are durable, testable, and unlikely to go away.

### B. *Ideology and Economic Science in Antitrust Policy*

Disputed scientific issues present courts with questions of fact—something that has been clear for nearly two centuries.<sup>55</sup> The Federal Rules of Evidence couch their treatment of expert testimony in this way, requiring the testimony to

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<sup>52</sup> On unilateral effects analysis of mergers, see HOVENKAMP, FEDERAL ANTITRUST POLICY, *supra* note 3, § 12.3d.

<sup>53</sup> On the use of scanner data or other recorded information from digitized transactions in merger analysis, see FTC & U.S. DOJ, COMMENTARY ON THE HORIZONTAL MERGER GUIDELINES 31 (2006), <https://www.ftc.gov/sites/default/files/attachments/merger-review/commentaryonthehorizontalmergerguidelinesmarch2006.pdf> [<https://perma.cc/EFS6-9Y92>]; Carl Shapiro, Deputy Assistant Att'y Gen., Dep't of Just. Antitrust Div., Mergers with Differentiated Products, Address to the Department of Justice (Nov. 9, 1995) (transcript available at 1995 WL 678629) (describing use of scanner data in several merger cases).

<sup>54</sup> See Carl Shapiro, *The 2010 Horizontal Merger Guidelines: From Hedgehog to Fox in Forty Years*, 77 ANTITRUST L.J. 49, 60-85 (2010) (observing shift in merger enforcement towards unilateral effects theory, and explaining update of DOJ's Horizontal Merger Guidelines). Particularly on testability, see Jonathan B. Baker, *Why Did the Antitrust Agencies Embrace Unilateral Effects?*, 12 GEO. MASON L. REV. 31, 34-36 (2003) (observing that unilateral effects theory can predict and empirically demonstrate unilateral price changes resulting from mergers); Andrew R. Dick, *Merger Policy Twenty-Five Years Later: Unilateral Effects Move to the Forefront*, ANTITRUST L. DEVS., Fall 2012, at 25, 25 ("Advances in economic analysis—in particular, the development of formal economic models to analyze how mergers and acquisitions can change firms' pricing incentives and the parallel development of empirical methods designed to test those models—helped propel unilateral effects to the forefront."). For examples of the use of empirical evidence in unilateral effects merger cases, see *FTC v. Sysco Corp.*, 113 F. Supp. 3d 1, 61-72 (D.D.C. 2015) ("The FTC advanced a 'unilateral effects' theory to argue that the merger would harm competition in both the national and local broadband distribution markets."); and *United States v. H & R Block, Inc.*, 833 F. Supp. 2d 36, 81-89 (D.D.C. 2011).

<sup>55</sup> See Louis E. Reik, *The Doe-Ray Correspondence: A Pioneer Collaboration in the Jurisprudence of Mental Disease*, 63 YALE L.J. 183, 188, 191-92 (1953); see also, e.g., *FTC v. Nat'l Urological Grp., Inc.*, 645 F. Supp. 2d 1167, 1190 (N.D. Ga. 2008) ("[W]hat constitutes competent and reliable scientific evidence in this case is a question of fact for expert interpretation.").

be based on “sufficient facts or data.”<sup>56</sup> In its *Daubert v. Merrell Dow Pharmaceuticals, Inc.*<sup>57</sup> decision, the Supreme Court gave as important considerations for evaluating scientific testimony whether it can be tested or falsified and whether a proffered theory has a known or potential rate of error.<sup>58</sup> The leading treatise on scientific evidence emphasizes the same idea.<sup>59</sup>

To be sure, under the Federal Rules of Evidence, judges perform a gatekeeping function in determining the admissibility of proffered scientific evidence. But the courts have also made clear that this function is limited to questions about the expert’s methodology, not his or her ultimate conclusion.<sup>60</sup> It was certainly never intended to permit federal judges to turn scientific issues into questions of law.<sup>61</sup> Indeed, the very concept of admissibility applies only to issues of fact.

In this regard, economics is no different from any other science. Testing its hypotheses and models has been one of economics’ most important functions since the 1950s,<sup>62</sup> leading to an empirical renaissance in industrial economics in the 1980s and after.<sup>63</sup> Today, empirical economics and econometrics make up a significant part of litigation concerning expert testimony.<sup>64</sup> Antitrust litigation in particular makes liberal use of both economic theory and economic evidence.<sup>65</sup> The debate over how antitrust should use economics has many facets, and the extent to which any particular proposition of economics is

<sup>56</sup> FED. R. EVID. 702.

<sup>57</sup> 509 U.S. 579 (1993).

<sup>58</sup> *Id.* at 593-94; *see also* *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 141-42 (1999) (expanding application of *Daubert* factors to testimony of engineers).

<sup>59</sup> DAVID L. FAIGMAN, EDWARD K. CHENG, JENNIFER L. MNOOKIN, ERIN E. MURPHY, JOSEPH SANDERS & CHRISTOPHER SLOBOGIN, *MODERN SCIENTIFIC EVIDENCE: THE LAW AND SCIENCE OF EXPERT TESTIMONY* § 1.15 (2019).

<sup>60</sup> *E.g.*, *Kopplin v. Wis. Cent. Ltd.*, 914 F.3d 1099, 1103-04 (7th Cir. 2019) (“The focus is on the expert’s methodology, not his ultimate conclusions.”).

<sup>61</sup> Nevertheless, some factual conclusions end up becoming legal precedents. *See* Allison Orr Larsen, *Factual Precedents*, 162 U.PA. L. REV. 59, 79-97 (2013) (observing tendency of lower courts to cite Supreme Court cases as authorities on factual, rather than solely legal, subjects).

<sup>62</sup> *See, e.g.*, FRIEDMAN, *supra* note 20, at 3, 14-15.

<sup>63</sup> Timothy F. Bresnahan & Richard Schmalensee, *The Empirical Renaissance in Industrial Economics: An Overview*, 35 J. INDUS. ECON. 371, 371 (1987) (discussing developments that “revitalized empirical work in industrial economics” during the 1980s).

<sup>64</sup> *See* Jeff Todd, *Realistic Assumptions in Economic Models*, 47 HOFSTRA L. REV. 231, 242-44 (2018).

<sup>65</sup> *See* Malcolm B. Coate & Jeffrey H. Fischer, *Daubert, Science, and Modern Game Theory: Implications for Merger Analysis*, 20 SUP. CT. ECON. REV. 125, 153-55 (2012) (arguing that classic microeconomic theories of competition and monopoly are sufficiently robust to be admissible under *Daubert* standard). For an examination of the case law concerning admissibility of expert economic testimony in antitrust cases, *see* 2 PHILLIP E. AREEDA & HERBERT HOVENKAMP, *ANTITRUST LAW* ¶ 309 (5th ed. forthcoming 2021).

testable can be subject to dispute.<sup>66</sup> Nevertheless, economic evidence is concerned with questions of fact that are subject to the usual *Daubert* considerations for admissibility that have become conventional for scientific testimony.<sup>67</sup>

In its *Ohio v. American Express Co.*<sup>68</sup> (“*AmEx*”) decision, the Supreme Court’s majority drew two scientific conclusions as a matter of law. The first was that market power can be established in a vertical case only indirectly, by reference to a relevant market. The second was that, as a matter of law, a two-sided platform cannot compete with a more traditional market but only with other two-sided platforms.<sup>69</sup> While pure questions of statutory interpretation present questions of law,<sup>70</sup> neither of these realistically purported to interpret the language of the Sherman Act. The Sherman Act makes no reference whatsoever to relevant markets or how market power is to be measured.

Further, within the discipline of economics, neither of these questions is particularly controversial, but the Supreme Court reached the wrong answer on both. On the first, economics has made significant strides in the last two decades in measuring market power directly from observed transactional behavior. When the data are available, those methodologies are superior to the traditional approach of defining a relevant market. Further, in digital platforms such as the one involved in the *AmEx* case, the data are available because all the transactions produce digitized records.<sup>71</sup>

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<sup>66</sup> See, e.g., Donald N. McCloskey, *The Loss Function Has Been Mislaid: The Rhetoric of Significance Tests*, AM. ECON. REV., May 1985, at 201, 203-04 (arguing that economists are too easy on themselves on questions of testability); Sam Peltzman, *Ronald Coase and the Methodology of Economics*, 54 J.L. & ECON. S15, S19-20 (2011) (arguing both sides).

<sup>67</sup> A few recent examples of the application of *Daubert* to economic evidence in antitrust cases include: *JFM Mkt. Corp. v. SuperValu, Inc.* (*In re Wholesale Grocery Prods. Antitrust Litig.*), 946 F.3d 995, 1000-03 (8th Cir. 2019) (reviewing and affirming district court’s decision to exclude expert economist testimony regarding antitrust injury under *Daubert*); *Am. Sales Co. v. AstraZeneca LP* (*In re Nexium (Esomeprazole) Antitrust Litig.*), 842 F.3d 34, 65 (1st Cir. 2016) (reviewing and affirming district court’s decision to exclude expert economist testimony regarding market entry under *Daubert*); *ZF Meritor, LLC v. Eaton Corp.*, 696 F.3d 254, 291-94 (3d Cir. 2012) (reviewing and affirming district court’s decision to exclude expert economic testimony regarding damages calculations under *Daubert*); *In re Hydrogen Peroxide Antitrust Litig.*, 552 F.3d 305, 322-24 (3d Cir. 2008) (reviewing district court’s decision to consider expert economist testimony regarding market analysis under *Daubert*). For more comprehensive discussion, see PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION ¶ 309 (4th ed. Supp. 2020) (ebook).

<sup>68</sup> 138 S. Ct. 2274 (2018).

<sup>69</sup> *Id.* at 2280-81.

<sup>70</sup> E.g., *United States v. Washington*, 971 F.3d 856, 861 (9th Cir. 2020) (“Statutory interpretation is a question of law that we review de novo.”); *Stephens ex rel. R.E. v. Astrue*, 565 F.3d 131, 137 (4th Cir. 2009).

<sup>71</sup> See *infra* text accompanying notes 207-208.

Although the issue of proper methodology for market power measurement is technical, it has also become politicized. In the current debate about antitrust policy and large digital platforms, several right-wing groups have objected to the use of econometric methods to assess power. This amounts to subordination of science to ideology and threatens to divorce antitrust policy from economic analysis.<sup>72</sup> The objection is reminiscent of Stalin's objections to the theory of evolution and modern genetics because he regarded them as antisocialist.<sup>73</sup>

The conservatives' objection filed with the House Judiciary Committee neither contains nor cites any economic analysis whatsoever.<sup>74</sup> Indeed, it never says anything on the merits concerning methodologies for assessing market power. It does acknowledge that in markets for evolving technologies regulators are "struggling to apply the correct framework," but it then simply asserts that these regulators should not abandon processes requiring a market definition.<sup>75</sup>

It would be premature to say that the Supreme Court's conclusion in *AmEx* requiring a market definition in vertical cases as a matter of law is part of a more general assault on the use of economics to assess market power. Based on this single data point, however, the Supreme Court and economic analysis seem to be going in opposite directions. As economic methodologies for assessing power are becoming more sophisticated and accurate, the *AmEx* discussion rejects them in favor of a method that has never been particularly accurate, especially not in differentiated markets.

What would be the proper way to assess market power in any area of antitrust litigation, including vertical practices? The answer is the same criteria that guide federal courts' assessments of scientific questions generally. Nothing about market power in vertical practice cases calls for a different approach. The issue would have to be placed in dispute, economists or other experts would be consulted, and their testimony would be evaluated through an examination of the relevant technical literature. The testimony would be considered by the judge, performing the usual gatekeeping function of assessing the expert's credentials and methodology. Then and only then would the issue go to the fact finder. In an equitable challenge such as *AmEx*, the fact finder would also be the trial judge.<sup>76</sup>

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<sup>72</sup> See, e.g., Letter from Ashley Baker, Dir. of Pub. Pol'y, The Comm. for Just., et al., to Ken Buck, Andy Biggs & Matt Gaetz, Members, U.S. House of Representatives 5-6 (Jan. 14, 2021) [hereinafter Letter from Ashley Baker et al.], <https://www.allianceonantitrust.org/blog/conservatives-oppose-third-way-recommendations> [<https://perma.cc/B85K-F3BN>] (representing the views of FreedomWorks, Competitive Enterprise Institute, Digital Liberty, Conservatives for Property Rights, The Bork Foundation, National Taxpayers Union, the Committee for Justice, and others).

<sup>73</sup> See generally Kirill O. Rossianov, *Editing Nature: Joseph Stalin and the "New" Soviet Biology*, 84 *Isis* 728 (1993).

<sup>74</sup> Letter from Ashley Baker et al., *supra* note 72, at 5-6.

<sup>75</sup> *Id.* at 6.

<sup>76</sup> *Ohio v. Am. Express Co.*, 138 S. Ct. 2274, 2293 (2018).

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The second question that the Supreme Court resolved as a matter of law was that two-sided platforms compete only with other two-sided platforms.<sup>77</sup> The question was not briefed, and the Court appeared not to understand what competition in the antitrust sense means. The relevant question for antitrust analysis is whether one firm's output exerts sufficient pressure on another firm's output to hold that firm's prices reasonably close to its costs. That is, competition is what limits the market power of a rival firm.

To illustrate, Uber is a ride-hailing platform operating on a two-sided platform. In computing fares, it must weigh a number of considerations. One is the need for "participation balancing" in a two-sided market.<sup>78</sup> That is, Uber needs to balance out its own drivers and its own passengers, producing fares that maximize its profits as between them by providing both sufficient drivers and sufficient riders. At the same time, however, Uber must also set its fares sufficiently low so as to compete with both Lyft, its two-sided platform rival, as well as traditional taxicabs. Customers, after all, are free to choose from any one of the three, as well as other options. So, for example, if Uber lowers its fares, it will switch more passengers away from both its two-sided and traditional taxicab rivals, but it will also lose drivers who can earn more elsewhere; these drivers could go to Lyft, traditional taxicab services, or somewhere else.

Clearly, while platforms such as Uber must engage in participation balancing as between its two sides, traditional firms do the same thing. For example, a traditional taxicab company, or any traditional seller for that matter, must balance wages and other input costs on one side against product prices on the other. The idea that keeping input costs low in order to charge lower prices is hardly a unique feature of platforms.

Should traditional taxicabs be placed in the same relevant market with Uber and Lyft? The Supreme Court, following *AmEx*, would say no. In fact, the answer to that question is not a foregone conclusion. It is possible that traditional taxicab companies have higher costs. As a result, they are not effective competitors against Uber and Lyft when prices are close to the competitive level. For example, traditional taxicab drivers must purchase a costly medallion, or operating license, that Uber's drivers do not purchase. However, the medallion is a fixed cost and very likely does not affect drivers' marginal costs. Another factor is that Uber and traditional taxicabs use essentially the same operating technologies, suggesting that they do compete. Nevertheless, there are differences in how rides are hailed and fares computed. Uber's rates and access are set by a platform app; taxicabs' rates are determined by a commission, and customers obtain access by more traditional means. It is possible that these differences produce significant cost differentials one way or the other. As a result, we may ultimately conclude that Uber and Lyft are not significantly price constrained by the traditional taxicabs, and we would express that conclusion by

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<sup>77</sup> *Id.* at 2287 ("Only other two-sided platforms can compete with a two-sided platform for transactions.").

<sup>78</sup> Erik Hovenkamp, *Platform Antitrust*, 44 J. CORP. L. 713, 722 (2019).



saying that the taxicabs are not in the same relevant market. These would all be empirical questions for the fact finder, however, and almost certainly for expert testimony. Nothing about these issues suggests that the question of whether Uber and traditional taxicabs are competitors for antitrust purposes should be decided as a matter of law and without regard to these facts.

The Court's conclusion that two-sided platforms compete only with other two-sided platforms considerably exaggerates the market power of two-sided platforms that sell in the same markets as traditional stores. To illustrate, Carvana is a two-sided platform that sells used cars. Assuming that it is the only such platform, a court following *AmEx* would be forced to conclude that it is a monopolist. However, if one looks at the full range of consumer used car sales, Carvana's market share as of late 2020 was less than 1%.<sup>79</sup> That makes Carvana's monopoly status ludicrous. In its decision *Philadelphia Taxi Ass'n v. Uber Technologies, Inc.*,<sup>80</sup> the Third Circuit dismissed a complaint of attempted monopolization against Uber, finding in part that Uber's share of ridership "in the context of all the competitors in the Philadelphia taxicab market" was not sufficiently high.<sup>81</sup> According to *AmEx*, however, that was the wrong question to ask. Uber's market share should have been assessed only as against Lyft, its platform competitor. In that case, Uber would have been a dominant firm.<sup>82</sup>

The question of whether two-sided markets and more traditional markets "compete" for antitrust purposes should be addressed in the same way that courts consider other economic questions. In *AmEx*, the Court's error was dicta. The antisteering rule at issue applied only as between payments with competing cards and not to customers who might pay by cash or check. As a result, all of the relevant competing entities were two-sided platforms, and the Court's statement to the effect that a two-sided market competes only with other two-sided markets was unnecessary to the decision.

However, not all dicta are alike. When the Supreme Court makes a categorical statement as a matter of law, the lower courts tend to follow it, whether or not it is dicta. That has already happened in one lower court case involving a merger. The U.S. District Court for the District of Delaware held that a merger between Sabre, a two-sided airline reservation platform, and a firm processing airline reservations in a more traditional way could not be horizontal because two-sided

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<sup>79</sup> See Louis Stevens, *Carvana: A Compelling Narrative with One Major Issue*, SEEKING ALPHA (Sep. 21, 2020, 4:47 PM), <https://seekingalpha.com/article/4375563-carvana-compelling-narrative-one-major-issue> (noting Carvana's 2019 sales of 177,000 vehicles out of 40,000,000 used cars total sold).

<sup>80</sup> 886 F.3d 332 (3d Cir. 2018).

<sup>81</sup> *Id.* at 342 (emphasis omitted).

<sup>82</sup> See Liyin Yeo, *Uber v. Lyft: Who's Tops in the Battle of U.S. Rideshare Companies*, SECOND MEASURE (Jan. 20, 2021), <https://secondmeasure.com/datapoints/rideshare-industry-overview/> [<https://perma.cc/N4EJ-49TM>] (noting that, as of December 2020, Uber had about two-thirds of the Philadelphia rideshare business as between Uber and Lyft).

platforms and more traditional platforms do not compete with each other as a matter of law.<sup>83</sup>

So why did the *AmEx* decision turn these important factual issues into questions of law? As noted earlier, they cannot legitimately be regarded as exercises in statutory interpretation. A cynical answer might be that the Court was result oriented—that the model that the scientific community was increasingly applying did not produce outcomes that the Court’s majority favored. In particular, there may have been a fear that scientific conclusions tend to favor more interventionist positions. The proposition that conservatives are more suspicious of science has some empirical support.<sup>84</sup>

That could explain the conclusion requiring a relevant market definition in a vertical case, but it does not explain the conclusion that two-sided platforms compete only with each other. As noted above, the Court’s scientifically incorrect conclusion about the range of competitors faced by a two-sided platform is at least as likely to increase as to decrease one’s estimates of a firm’s market power, and thus the case for antitrust intervention.

Another explanation, which fares no better, is that the Court’s majority wanted to take some economic questions out of the fact-finding process altogether by treating them as questions of law. That would transfer more rulemaking power away from experts and toward judges. But that still does not answer why, nor why these particular questions. Both are technical, heavily factual, and fall well within the range of economic inquiry in antitrust cases.

#### I. *APPLE V. PEPPER* AND PASSED-ON HARM

In *Apple Inc. v. Pepper*,<sup>85</sup> both the majority opinion and the dissent were detached from the economic issue that has dominated indirect purchaser antitrust jurisprudence in the United States for forty years—namely, how should the law reflect that injuries from a cartel or monopoly overcharge are passed down through the distribution chain from one purchaser to the next, although in varying degrees. The questions that the Supreme Court confronted in *Illinois Brick Co. v. Illinois*<sup>86</sup> more than forty years earlier had to do with difficulties in

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<sup>83</sup> *United States v. Sabre Corp.*, 452 F. Supp. 3d 97, 148-49 (D. Del. 2020), *vacated on other grounds*, No. 20-01767, 2020 WL 4915824 (3d Cir. July 20, 2020). The order was vacated after the parties voluntarily abandoned the transaction.

<sup>84</sup> *E.g.*, Bruce W. Hardy, Meghna Tallapragada, John C. Besley & Shupe Yuan, *The Effects of the “War on Science” Frame on Scientists’ Credibility*, 41 *SCI. COMMUN* 90 (2019). The observation is not recent. *See generally* CHRIS MOONEY, *THE REPUBLICAN WAR ON SCIENCE* (2005).

<sup>85</sup> 139 S. Ct. 1514 (2019).

<sup>86</sup> 431 U.S. 720 (1977). The Court held that its decision followed logically from *Hanover Shoe, Inc. v. United Shoe Machinery Corp.*, 392 U.S. 481, 494 (1968), in which the Court held that a defendant in an antitrust case could not reduce its liability by showing that the plaintiffs had not absorbed the entire overcharge but rather passed it down to its own

estimating passed-on damages and the impact of alternative rules on deterrence of antitrust violations.<sup>87</sup>

Since that time, we have made important advances in the measurement of indirect purchaser damages, many of which do not require the stage-by-stage computation of pass on at all.<sup>88</sup> Several American states,<sup>89</sup> as well as the EU and its member states, have embraced methodologies for addressing the problem. Right now, the state of EU policy on the question is far more advanced than that of the United States.<sup>90</sup> The EU has approached the problem as an empirical one of efficient and reasonably accurate damages measurement. It has largely been able to avoid the ideological baggage that has weighed down indirect purchaser jurisprudence in the United States.

By contrast, the Supreme Court's suggestion in *Illinois Brick* that limiting damages to direct purchasers would improve deterrence has never been validated and must be counted as dubious. It seems more doubtful today than it was when the Supreme Court stated it in 1977.<sup>91</sup> At least the economic case for the indirect purchaser rule is significantly weaker today than it was at that time. One feature of the Supreme Court's indirect purchaser rule is that it turns into a question of law what is rightfully a question of factual economic analysis. A troublesome thing about *Apple v. Pepper* is not that the Court was incorrect in its interpretation of economic developments subsequent to *Illinois Brick* but that it did not engage them at all. For all intents and purposes, *Apple v. Pepper* broke

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purchasers. On the economics and law of *Illinois Brick*, see AREEDA & HOVENKAMP, *supra* note 67, ¶ 346.

<sup>87</sup> *Illinois Brick*, 431 U.S. at 742 (finding it unrealistic to think that evidence introduced by expert witnesses will resolve pass-on issue).

<sup>88</sup> See Herbert Hovenkamp, *Apple v. Pepper: Rationalizing Antitrust's Indirect Purchaser Rule*, 120 COLUM. L. REV. F. 14, 20 (2020) [hereinafter Hovenkamp, *Indirect Purchaser Rule*] (noting that, in most cases, "experts can assess damages without computing pass-on").

<sup>89</sup> On state antitrust indirect purchaser rules, see AREEDA & HOVENKAMP, *supra* note 67, ¶ 2412d.

<sup>90</sup> See *Guidelines for National Courts on How to Estimate the Share of Overcharge Which Was Passed On to the Indirect Purchaser*, 2019 O.J. (C 267) 7 [hereinafter *EU Guidelines*].

<sup>91</sup> See Barak D. Richman & Christopher R. Murray, *Rebuilding Illinois Brick: A Functionalist Approach to the Indirect Purchaser Rule*, 81 S. CAL. L. REV. 69, 92-94 (2007) (finding that indirect purchaser rule strongly leads to underdeterrence); see also Andrew S. Gehring, *The Power of the Purchaser: The Effect of Indirect Purchaser Damages Suits on Deterring Antitrust Violations*, 5 N.Y.U. J.L. & LIBERTY 208, 243-44 (2010) (inconclusive). By contrast, the government argued in an amicus brief in *Apple v. Pepper* that permitting indirect purchaser suits leads to duplicative recoveries. Brief for the United States as Amicus Curiae Supporting Petitioner at 9, *Apple Inc. v. Pepper*, 139 S. Ct. 1514 (2019) (No. 17-204) ("[E]ven if some or all of that overcharge had been passed on to consumers, allowing consumers to sue as well would create an evident prospect of duplicative recovery."); see also ANTITRUST MODERNIZATION COMM'N, REPORT AND RECOMMENDATIONS 271-72 (2007) (warning of duplicative recoveries if indirect purchaser actions were permitted).

the link between the indirect purchaser rule and the economics of passed-on damages.

A. *Why an Overcharge?*

One technical problem with the law of purchaser damages actions under *Illinois Brick* is the largely unquestioned assumption that a court should measure damages at each stage by an overcharge and not by the lost profits that result from reduced sales. The very notion of “passing on” suggests that the measure must be based on the overcharge. The statute does not compel this result. Section 4 of the Clayton Act merely authorizes recovery for an injury sustained by the violation and gives a damages action to “any person.”<sup>92</sup> Further, it states no methodology for measurement. For intermediaries in the distribution chain—that is, for purchasers other than the final consumer—lost output is almost always a more accurate measure of injury and generally does not require apportioning among the parties.<sup>93</sup>

When a cartel or monopolist increases a product’s price, it also reduces output.<sup>94</sup> Just as the price increase, that output reduction is passed on through the distribution chain. All downstream firms are affected by both the loss in volume and perhaps by a reduced margin, or markup, on their sales of the cartelized good. In most situations, the output reduction is a surer thing than the margin reduction. Further, in most cases, measuring the passed-on output reduction is easier than measuring the passed-on overcharge because it remains more uniform as it passes through the distribution chain.

Suppose a distribution chain contains four stages: a manufacturer, distributors, dealers, and consumers. If a manufacturing cartel covering the entire market increases their price, the distributors and dealers will each pass on something between 0% and more than 100% of that overcharge depending on markup policies and the amount of competition they face. The phrase “more than 100%” is apt. If a firm uses a standard markup formula, it may actually increase its margin as a result of the cartel. For example, suppose a grocer routinely adds 30% to the wholesale price of canned vegetables. That is a realistic assumption. Indeed, Apple in the *Apple v. Pepper* case routinely added 30% to the price of the apps that it sells.<sup>95</sup> If the wholesale price is competitive at \$2.00, the grocer will add 60 cents. However, if the wholesale price is secretly cartelized to \$2.50, it will add 75 cents. Far from “absorbing” part of the overcharge, this retailer actually obtains higher margins under the cartel and thus passes on more than

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<sup>92</sup> 15 U.S.C. § 15(a).

<sup>93</sup> Hovenkamp, *Indirect Purchaser Rule*, *supra* note 88, at 24 (discussing differences between pass-on and lost output measurements).

<sup>94</sup> See HOVENKAMP, *FEDERAL ANTITRUST POLICY*, *supra* note 3, § 1.2a.

<sup>95</sup> See Louise Matsakis, *The Supreme Court Will Decide if Apple’s App Store Is a Monopoly*, 2018-2019 SUP. CT. PREVIEW 298, 298 (noting Apple App Store’s 30% commission).

100% of the overcharge. How much it actually passes on is an empirical question readily subject to expert testimony, and it will vary from one situation to another.

By contrast, if this same cartel reduces output from a competitive level of 100 units to 80 units, the aggregate distributors' sales will go from 100 units to 80 units, as will the retailers' sales, all the way down to the final consumer. To be sure, the availability of substitutes and variable proportions can complicate this result. For example, the grocer might respond to reduced sales volume of canned beans by allocating more shelf space to peas or carrots. An overcharge measure will not reflect these substitutions because it looks only to the bean purchases. Likewise, if a cartel of bicycle manufacturers reduces the number of bicycles by 20% from the previous competitive level, their aggregate distributors would resell 20% fewer bicycles, as would the retailers below them. However, these firms might make up some of their losses by selling more scooters or roller skates.<sup>96</sup> A lost profits measure will consider how the dealer's behavior overall changed its profits, accounting for both lost margin and lost sales.

In principle, there is no reason to think that output losses downstream are more difficult to measure than margin losses. Further, in a wide variety of situations, intermediaries are able to pass on close to 100% of the price increase, but they will nearly always suffer as a result of the output reduction. For nearly all intermediaries, injury is best measured not by an overcharge but rather by lost profits—that is, the money that they would have made on the unmade sales. This measure of harm is common in all antitrust cases alleging exclusionary practices.<sup>97</sup> It is also common in a wide range of non-antitrust statutory and common-law claims that involve injured business plaintiffs.<sup>98</sup>

Lost profits are usually measured by the reduction in sales multiplied by the net margin on the unmade sales. That measure accounts for both changes in the markup and the quantity. This number would then have to be adjusted for changes in expenses, plus perhaps an offset for product substitution.<sup>99</sup> In practice, experts often rely on “before-and-after” or “yardstick” models, which compare the situation in the violation market to some other market setting.<sup>100</sup>

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<sup>96</sup> Other intermediaries might substitute in more complex ways. For example, in response to a steel cartel, automakers might use fewer steel parts and more plastic or aluminum parts. However, overcharge damages measurement will be affected in the same way.

<sup>97</sup> See AREEDA & HOVENKAMP, *supra* note 67, ¶ 397.

<sup>98</sup> *E.g.*, Halo Elecs., Inc. v. Pulse Elecs., Inc., 136 S. Ct. 1923, 1933-35 (2016) (lost profits for patent infringement); Broan Mfg. Co. v. Associated Distribs., Inc., 923 F.2d 1232, 1235-36 (6th Cir. 1991) (trademark infringement); Ashland Mgmt. Inc. v. Janien, 624 N.E.2d 1007, 1008-09 (N.Y. 1993) (breach of contract); Trenholm v. Ratcliff, 646 S.W.2d 927, 928-29 (Tex. 1983) (fraud).

<sup>99</sup> See AREEDA & HOVENKAMP, *supra* note 67, ¶ 397 (discussing calculation of damages in form of “but for” profits).

<sup>100</sup> See discussion *infra* Section I.C.

The *Restatement (Second) of Torts* calls for similar measures for business injuries.<sup>101</sup>

B. *Unwarranted Exceptionalism in Antitrust Damages*

When it comes to losses by business plaintiffs, *Illinois Brick* is a piece of obsolete legal exceptionalism that came out of a period when many judges and scholars believed that antitrust was overdeterrent and that courts needed to apply the brakes to broad damages claims. That is hardly the case today. Indeed, in the particular case of price-fixing, the law is significantly underdeterrent.<sup>102</sup> Thanks to four decades of litigating under state antitrust law and a large economic literature, it seems clear that it is time for the law of damages to treat plaintiffs in antitrust cases the same way it treats injured parties in the more general run of business cases. While measuring lost profits in all these cases presents complexities, it is no greater in antitrust cases than for other types of injuries.

Antitrust policy needs to be less categorical and more empirical about assessing passed-on injury from monopolistic or cartel conduct. As the EU Guidelines on indirect purchaser damages recognize, the optimal methodology will vary from case to case, depending on the types of evidence that are available and given a wide variety of market facts.<sup>103</sup> In most cases, except those involving final consumers, lost-profits estimates will be superior to overcharge estimates because they reflect the impact of the violation on *both* margins and volumes. By contrast, overcharge estimates reflect only the impact on margins.

Perversely and incorrectly, reduced volume tends to reduce an intermediary's damages if it is measured only by the overcharge. It can recover the overcharge only on the purchases actually made, which are fewer at the cartel or monopoly price. For example, suppose that two different cartels produce price overcharges of \$1.00 per unit in a market that produced 100 units at the competitive price. One cartel yields an output reduction of 30 units while the other yields an output reduction of 40 units. The second cartel causes greater harm to the economy and to the affected dealer, but that dealer will collect fewer damages because these will be limited to the overcharge on 60 (100-40) units rather than 70 (100-30) units.

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<sup>101</sup> RESTATEMENT (SECOND) OF TORTS § 549 (AM. L. INST. 1977) (describing lost profit damages for fraudulent misrepresentation); *id.* § 774A (tortious interference with contract); *id.* § 821C (public nuisance); *id.* § 937 (conversion).

<sup>102</sup> See, e.g., ORG. FOR ECON. COOP. & DEV., POLICY ROUNDTABLES: CARTEL SANCTIONS AGAINST INDIVIDUALS 7-8 (2003), <https://www.oecd.org/competition/cartels/34306028.pdf> [<https://perma.cc/N4CY-GP8M>] (discussing possibility of sanctions against individuals where punishment imposed by law does not sufficiently deter); Peter G. Bryant & E. Woodrow Eckard, *Price Fixing: The Probability of Getting Caught*, 73 REV. ECON. & STAT. 531, 535 (1991) (finding between .13 and .17 probability of being caught in price-fixing schemes); John M. Connor & Robert H. Lande, *Cartels as Rational Business Strategy: Crime Pays*, 34 CARDOZO L. REV. 427, 435-42 (2012) (discussing effectiveness of corporate sanctions as compared to individual sanctions).

<sup>103</sup> *EU Guidelines*, *supra* note 90.

By contrast, lost profit damages capture what is almost universally regarded as an element of injury in nearly all other business injury cases—namely, that the intermediary suffers reduced volume and thus earns profits on a smaller number of sales. The dealer in the above example would collect lost profit damages that reflect the output reduction multiplied by the lost margin on each lost sale. This reflects the true injury caused by the cartel.

The one exception to the preference for damages based on lost profits is the final consumer who does not resell the product at all. For her, the overcharge is the best measure. There are other, more limited exceptions where the overcharge is the appropriate measure. One is where the price-fixed good is a pure fixed cost to the purchasing business. In general, fixed costs cannot be passed on because they do not show up in marginal costs.<sup>104</sup> For example, a farmer who pays a monopoly price for farmland as a result of a cartel will not be able to add anything to the price of the corn that she grows on it.

For most antitrust exclusionary practices and the very large variety of damages cases involving torts, IP infringement, or other harmful activity, we assess damages by permitting experts to provide models addressed to lost profits and evidence supporting them. Then judges evaluate the models for technical sufficiency and fit under the *Daubert* standards applied under the Federal Rules of Evidence.<sup>105</sup> After that, the evidence can go to the fact finder. The same thing applies to indirect purchaser claims under state antitrust law.<sup>106</sup>

### C. *Innovations in the Computation of Passed-On Damages*

As litigation subsequent to *Illinois Brick* has established in state antitrust cases, even when courts use an overcharge measure, the overcharge need not be

<sup>104</sup> See Robert G. Harris & Lawrence A. Sullivan, *Passing On the Monopoly Overcharge: A Comprehensive Policy Analysis*, 128 U. PA. L. REV. 269, 280-83 (1979) (comparing fixed- and variable-cost changes under monopolies).

<sup>105</sup> E.g., *ZF Meritor, LLC v. Eaton Corp.*, 696 F.3d 254, 291-92 (3d Cir. 2012) (accepting expert's testimony on liability, but applying *Daubert* to reject damages testimony in antitrust case); *LaserDynamics, Inc. v. Quanta Comput., Inc.*, 694 F.3d 51, 78 (Fed. Cir. 2012) (finding that *Daubert* required that patentee's damages be limited to patented feature rather than market value of entire device); *Sys. Dev. Integration, LLC v. Comput. Scis. Corp.*, 886 F. Supp. 2d 873, 884-86 (N.D. Ill. 2012) (applying *Daubert* to assess reliability of damages expert in breach of contract and fiduciary duty case); *Lightlab Imaging, Inc. v. Axsun Techs., Inc.*, 13 N.E.3d 604, 613-14 (Mass. 2014) (rejecting expert's lost profits damages report in contract dispute under *Daubert* as too speculative). On these standards, see *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579 (1993).

<sup>106</sup> E.g., *Howe v. Microsoft Corp.*, 656 N.W.2d 285, 296-97 (N.D. 2003) (noting relevance of *Daubert* evidentiary rules to indirect purchaser antitrust claim); *In re S.D. Microsoft Antitrust Litig.*, 707 N.W.2d 85, 112-14 (S.D. 2005) (same); see also *In re Processed Egg Prods. Antitrust Litig.*, 312 F.R.D. 124, 153-56 (E.D. Pa. 2015) (rejecting expert's indirect purchaser damages model under *Daubert*); *In re Flonase Antitrust Litig.*, 284 F.R.D. 207, 234-35 (E.D. Pa. 2012) (approving expert's methodology for assessing indirect purchaser damages under *Daubert* challenge).

computed at each stage of pass on.<sup>107</sup> *Illinois Brick* itself assumed that it did, and the Court did not even discuss alternative methodologies. Two years later, William M. Landes and Richard A. Posner institutionalized that view in an article defending the decision.<sup>108</sup>

The most common models for estimating damages under both overcharge and lost profit theories are “before and after” and “yardstick.”<sup>109</sup> In a “before-and-after” lost profits model, the expert typically uses regression analysis to examine profits prior to a violation, after its end, or both, discounting for other factors and estimating what the profits would have been during the violation period.<sup>110</sup> In a “yardstick” model, the expert compares profits in the violation market with profits of a similarly situated firm in a comparable market.<sup>111</sup> Neither method is necessary, however, if there are adequate data. For example, if the size of the output reduction and margins are known, estimation of lost profits is relatively straightforward.<sup>112</sup>

Overcharge methodologies are similar except that the expert estimates the overcharge rather than lost profits. Once again, neither the before-and-after nor the yardstick methodologies for computing damages require that a court compute passed-on damages at each stage.<sup>113</sup> Rather, one can estimate damages directly by comparing prices at the violation level and the plaintiffs’ level in the two markets. For example, one might compare with the cartel market a different market assumed to be competitive and then observe the differences in dealer prices in those two markets. We would then have an estimate of the amount of overcharge passed on to consumers without the need to estimate how much of the overcharge was absorbed by distributors or other intermediaries.<sup>114</sup> Experts sometimes term this the “bottom across” model, rather than the “top down” model, which attempts to compute pass on at each stage.<sup>115</sup>

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<sup>107</sup> See Hovenkamp, *supra* note 88, at 15 (discussing to whom overcharge should be allocated under *Illinois Brick*).

<sup>108</sup> William M. Landes & Richard A. Posner, *Should Indirect Purchasers Have Standing to Sue Under the Antitrust Laws? An Economic Analysis of the Rule of Illinois Brick*, 46 U. CHI. L. REV. 602, 634 (1979) (“[T]he rule of *Illinois Brick* . . . is probably the soundest rule from the standpoint of maximizing the effectiveness of antitrust enforcement.”).

<sup>109</sup> See AREEDA & HOVENKAMP, *supra* note 67, ¶ 395b (discussing before-and-after and yardstick measures in overcharge antitrust cases); *id.* ¶ 397e-f (same, in lost profit).

<sup>110</sup> See *id.* ¶ 397e.

<sup>111</sup> *Id.* ¶ 397f (discussing computation used in “yardstick” model).

<sup>112</sup> For an example, see *Formax, Inc. v. Alkar-Rapidpak-MP Equip., Inc.*, No. 11-cv-00298, 2014 WL 3057116, at \*3 (E.D. Wis. July 7, 2014) (estimating lost-profit damages based on lost sales plus effect on margins); see also 1 ROBERT L. DUNN, *RECOVERY OF DAMAGES FOR LOST PROFITS* (6th ed. 2005); Charles J. Goetz & Robert E. Scott, *Measuring Sellers’ Damages: The Lost-Profits Puzzle*, 31 STAN. L. REV. 323, 333-34 (1979).

<sup>113</sup> For an explanation, see Hovenkamp, *Indirect Purchaser Rule*, *supra* note 88, at 19-21.

<sup>114</sup> *Id.*

<sup>115</sup> *E.g.*, *In re Cardizem CD Antitrust Litig.*, 200 F.R.D. 326, 344 (E.D. Mich. 2001).



In *Apple v. Pepper*, neither the majority nor the dissent engaged any of these issues. Indeed, both opinions appear to have abandoned the idea that *Illinois Brick* had anything to do with passed-on damages. For the majority, the only thing that mattered was that the plaintiffs purchased directly from the alleged violator. If one were to select a single buyer for damages, however, it would be more sensible to select the consumers—the *last* purchasers in line—because, in most cases, they absorb the brunt of an overcharge and are the only purchasers who are not in a position to pass anything on. Only for them is the overcharge a presumptively correct measure of damages. The *Apple* majority was correct to sustain the action in that case, but that was a result of the pure happenstance that the alleged violator sold directly to the plaintiffs.

By contrast, the dissent resurrected a doctrine of proximate cause that had died with the marginalist revolution in economics early in the twentieth century.<sup>116</sup> Finally, neither the majority nor the dissenters ever mentioned deterrence, which is rightfully central to any economics-based theory of antitrust enforcement. In sum, the *Apple v. Pepper* indirect purchaser rule both ignored the deterrence question and seemed indifferent to who is actually injured by a cartel or monopoly overcharge.

## II. AMEX AND ANTITRUST ECONOMICS

The Supreme Court's *AmEx* decision embraced a series of economically incoherent principles in the guise of applying antitrust economics. The majority (1) neglected the kind of transactional analysis that has become a hallmark of the economic approach to law; (2) put production complements into the same "relevant market"; (3) held that a relevant market must be defined in a vertical restraints case, even if the economic evidence supported a finding of market power based on more direct and generally more accurate measures; (4) completely misunderstood the economics of free riding, which in the context of vertical restraints is a Chicago school invention (in this case, the defendant's policies clearly made free riding impossible); and (5) lost sight of the fact that coherent economic analysis of any antitrust issue requires assessment of marginal rather than total effects.

### A. *Balancing Harms and Benefits on Two-Sided Markets*

The Supreme Court majority's analysis of two-sided platforms got off on the wrong track when it assumed that harms on one side, in the form of increased merchant prices, would invariably be offset by benefits on the other, cardholder side.<sup>117</sup> For some platform-related queries, this is true. For example, measuring a platform's costs or revenues requires looking at both sides. Over-the-air television or computer search engines that are free to users are not engaged in predatory pricing. They obtain their revenues from advertisers, which are the

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<sup>116</sup> See generally HOVENKAMP, OPENING OF AMERICAN LAW, *supra* note 3, at 106-22.

<sup>117</sup> See *Ohio v. Am. Express Co.*, 138 S. Ct. 2274, 2287-88 (2018).

other side of the platform. Assessing a predation claim alleging below-cost pricing requires looking at both sides.

But this harm/benefit balance does not occur in every situation. Had the Court performed the kind of transactional analysis that Ronald Coase urged and that has become a hallmark of law and economics, it would have seen that the assumption of harms to merchants and offsetting benefits to cardholders did not apply in this case.<sup>118</sup> If the Court had examined each relevant transaction in *AmEx*, it would have seen that the antisteering rules harmed both sides.<sup>119</sup>

To illustrate, suppose that a \$1,000 purchase incurred a 3% (\$30) merchant fee on the AmEx card but a 2% (\$20) fee on a competing card such as Visa. This difference creates \$10 worth of bargaining room in which both parties can make a profit. That is, the merchant's willingness to pay might be greater than the customer's willingness to accept.<sup>120</sup> For example, the merchant might offer the customer a \$5 discount for using the cheaper card. If the incremental perks from using an AmEx card rather than a different card were worth less than \$5 to the customer, it would accept that deal and both parties would be better off. The merchant would pay a lower transaction fee and a customer who accepted the offer would be getting a discount that was worth more to her than any extra benefit the AmEx card might offer. By contrast, if she valued the AmEx perks by more than \$5, she would not accept the offer.<sup>121</sup>

However, the antisteering rule prevented this transaction from occurring. Far from harming one side while benefitting the other, the antisteering rule harmed *both* the merchant and the cardholder who was willing to make the deal. It also harmed Visa, the card issuer who was unable to make the transaction even though its price was lower and it would have been the customer's first choice in an unrestrained market. It did benefit AmEx—but these were not network benefits that needed to be assessed against losses elsewhere on the same platform. They were simply the benefits that accrued from being able to charge a price that was higher than the added value of any provided customer services without losing a sale.<sup>122</sup> This number had nothing to do with the existence of a two-sided platform.

#### B. *Market Definition and Extramarket Effects*

The *AmEx* Court concluded that analyzing the competitive effects of the defendant's antisteering rule required identification of a "single market" when

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<sup>118</sup> Coase, *supra* note 42, at 392-94 (determining boundaries of firm by looking at each individual transaction that a firm makes).

<sup>119</sup> See Hovenkamp, *Platform Antitrust*, *supra* note 78, at 740-43.

<sup>120</sup> E.g., Robert Cooter, *The Cost of Coase*, 11 J. LEGAL STUD. 1, 4 (1982).

<sup>121</sup> See Herbert Hovenkamp, *Platforms and the Rule of Reason: The American Express Case*, 2019 COLUM. BUS. L. REV. 35, 43-44.

<sup>122</sup> That is, looking at the previous example, the fact that the customer would prefer the offer of a \$5 discount meant that she valued use of the AmEx card by less than \$5, while AmEx's excess merchant fee over the Visa card was \$10.

such a definition reflected “commercial realities.”<sup>123</sup> That seems plausible enough. However, it then concluded that both sides of a platform—merchants and cardholders—needed to be placed into the same relevant market.<sup>124</sup> That conclusion violated one of the most cardinal principles of economics since the time of Alfred Marshall or even Augustin Cournot—namely, that markets consist of close substitutes that can steal sales from one another, such that competition forces them to move toward the same price.<sup>125</sup> To be sure, it is a “commercial reality” that a market contains both buyers and sellers, but every market does that.

The Court’s discussion indicates that it was confusing the question of market definition with that of anticompetitive effects. Clearly, one cannot identify harm from higher merchant fees without considering what is happening on the other side to cardholders. Beginning with the proposition that market definition determines the “area of effective competition,” it concluded that “courts must include both sides of the platform—merchants and cardholders—when defining the credit-card market.”<sup>126</sup> A few sentences later the majority suggested that two-sided platforms are best understood as supplying a single product, “transactions.”<sup>127</sup> It then added that in order to have a market, one would require both merchants and cardholders.<sup>128</sup> But every market contains buyers, sellers, and transactions. None of these distinguished a two-sided market from a fish market in the Middle Ages.

Transactions do form one essential service when we evaluate markets. They provide the data that we use for measurement. That is, it is not the merchants themselves who define the market but rather their trading. Trading is measured typically by either the number of units sold or their value, both of which are measures of transactions. The Court confused the question of market definition with the question of who is affected by trading in a particular market. In this case, we want to know whether offsetting benefits that accrued to cardholders

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<sup>123</sup> *Ohio v. Am. Express Co.*, 138 S. Ct. 2274, 2285 (2018) (quoting *United States v. Grinnell Corp.*, 384 U.S. 563, 572 (1966)).

<sup>124</sup> *Id.* at 2287.

<sup>125</sup> *E.g.*, MARSHALL, *supra* note 40, at 384 (“[T]he more nearly perfect a market is, the stronger is the tendency for the same price to be paid for the same thing at the same time in all parts of the market.”); *id.* (defining the market as “the whole of any region in which buyers and sellers are in such free intercourse with one another that the prices of the same goods tend to equality easily and quickly”). Marshall was translating AUGUSTIN COURNOT, *RESEARCHES INTO THE MATHEMATICAL PRINCIPLES OF THE THEORY OF WEALTH* (1838).

<sup>126</sup> *Am. Express Co.*, 138 S. Ct. at 2285-86 (quoting 2 JULIAN O. VON KALINOWKI, PETER SULLIVAN & MAUREEN MCGUILL, *ANTITRUST LAWS AND TRADE REGULATION* § 24.01[4][a] (2d ed. 2020)).

<sup>127</sup> *Id.*

<sup>128</sup> *Id.* at 2287. A credit-card company that processed transactions for merchants but that had no cardholders willing to use its card could not compete with AmEx. *See id.* Only a company that had both cardholders and merchants willing to use its network could sell transactions and compete in the credit-card market.

should be included in our calculation of competitive effects. But that is not a question of market definition. It is one of how harm should be assessed.

In this case, the higher merchant fees showed harm to merchants. Otherwise, they would have no motive to steer. At that point, the issue was whether this harm was justified by greater consumer benefits—not a market definition question at all. In this case, the answer was that there were no greater consumer benefits; affected consumers were also harmed.<sup>129</sup> But that is a different issue.

A “market” defines the group of firms that can profit from collusion;<sup>130</sup> the scope of sales that give meaning to the term “monopolist”;<sup>131</sup> the range of goods and services that people regard as good substitutes for one another;<sup>132</sup> and the range of producers that a firm regards as its competitors for the purposes of deciding whether to enter,<sup>133</sup> how much to produce, or what price to charge.<sup>134</sup> For example, the Merger Guidelines used by the antitrust agencies define markets by identifying the range of goods that are close substitutes.<sup>135</sup>

Conceptually, the idea of a relevant market comes from partial equilibrium analysis in microeconomics, a tool that dates to the time of Alfred Marshall to evaluate market changes that affect the producers of similar goods in a common and observable way.<sup>136</sup> Defining a market in this fashion involves a working assumption that output and pricing of the goods inside the market have no effect on goods outside the market.

Empirically, of course, this is not true. Even well-defined markets have porous boundaries. The goods inside are affected by imperfect substitutes

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<sup>129</sup> See discussion *supra* text accompanying notes 117-122.

<sup>130</sup> See, e.g., Malcolm B. Coate & Jeffrey H. Fischer, *A Practical Guide to the Hypothetical Monopolist Test for Market Definition*, 4 J. COMPETITION L. & ECON. 1031, 1035 (2008).

<sup>131</sup> *Id.* (using “small, but significant, nontransitory increase in price” to determine monopolist in market); see also, e.g., U.S. DOJ & FTC, HORIZONTAL MERGER GUIDELINES § 4.1.1 (2010) (using “hypothetical monopolist” test for market definition).

<sup>132</sup> Coate & Fischer, *supra* note 130, at 1036.

<sup>133</sup> *Id.* at 1037.

<sup>134</sup> Justice Breyer’s dissent found the *AmEx* majority’s new approach to market definition completely unjustified.

Missing from the majority’s analysis is any explanation as to why, given the purposes that market definition serves in antitrust law, the fact that a credit-card firm can be said to operate a “two-sided transaction platform” means that its merchant-related and shopper-related services should be combined into a single market.

*Ohio v. Am. Express Co.*, 138 S. Ct. 2274, 2297-98 (2018) (Breyer, J., dissenting).

<sup>135</sup> U.S. DOJ & FTC, *supra* note 131, § 4 (“Market definition focuses solely on demand substitution factors, i.e., on customers’ ability and willingness to substitute away from one product to another in response to a price increase or a corresponding non-price change such as a reduction in product quality or service.”).

<sup>136</sup> On the development in Alfred Marshall, see HOVENKAMP, OPENING OF AMERICAN LAW, *supra* note 3, at 31-33.

outside, as well as by complements.<sup>137</sup> Nevertheless, by grouping close substitutes in this way and constructing a wall between these and more distant products, courts have been able to draw important conclusions about the existence of market power. As a result, this method of assessing power is well established in antitrust analysis, although tools have now been developed that are more accurate and that make market definition approaches unnecessary in many circumstances.<sup>138</sup> Unfortunately, the *AmEx* Court also ruled out the use of these tools in cases involving vertical restraints.

The Supreme Court was legitimately concerned with one relatively common problem that is hardly unique to two-sided markets: when transactions or other events outside the defined market have a measurable impact on harms or benefits, they must be accounted for.<sup>139</sup> Over the years, antitrust litigation has confronted several approaches to the question of so-called “extramarket” effects. One of the most theoretical and least appealing is the theory of “second best,” which relies on general equilibrium analysis to consider the impact that a practice might have on entities or events outside of the relevant market.<sup>140</sup> For example, under second-best theory, the data might show a welfare improvement in a defined market, but there might be significant out-of-market effects that serve to make things worse off as a whole.<sup>141</sup> The consensus today is that the

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<sup>137</sup> Marshall himself understood this. See ALFRED MARSHALL, *PRINCIPLES OF ECONOMICS*, at xiv (8th ed. 1920), for a defense of the idea that economic analysis should examine a part of the market consisting of a single “commodity” over a restricted time period, assuming that changes within the observed market had no effect on things outside.

The forces to be dealt with are however so numerous, that it is best to take a few at a time; and to work out a number of partial solutions as auxiliaries to our main study. Thus we begin by isolating the primary relations of supply, demand and price in regard to a particular commodity. We reduce to inaction all other forces by the phrase “other things being equal”: we do not suppose that they are inert, but for the time we ignore their activity. This scientific device is a great deal older than science: it is the method by which, consciously or unconsciously, sensible men have dealt from time immemorial with every difficult problem of ordinary life.

*Id.* On the antitrust relevant market as a tool of partial equilibrium analysis, see Gregory J. Werden, *The Relevant Market: Possible and Productive*, ANTITRUST L.J. ONLINE, Apr. 2014, at 1. On the fundamentals, see SUSHENG WANG, *MICROECONOMIC THEORY* 95-126 (4th ed. 2018).

<sup>138</sup> See discussion *infra* text accompanying notes 174-183.

<sup>139</sup> *Am. Express Co.*, 138 S. Ct. at 2286 (noting that decisions of cardholders to have AmEx card and decisions of merchants to accept AmEx cards are both necessary because market is two-sided).

<sup>140</sup> See, e.g., Peter J. Hammer, *Antitrust Beyond Competition: Market Failures, Total Welfare, and the Challenge of Intramarket Second-Best Tradeoffs*, 98 MICH. L. REV. 849, 850 (2000) (recognizing that multiple market failures may increase overall welfare).

<sup>141</sup> *Id.* (noting that market failures impact other markets as well).

general theory of second best is too complex to have much application to antitrust analysis, despite some heroic attempts to make it so.<sup>142</sup>

Another prominent use of partial equilibrium analysis is Oliver Williamson's well-known welfare tradeoff model, which assumed a single market in which participants would feel the welfare effects of reduced competition and increased efficiency.<sup>143</sup> In using it, Williamson acknowledged the problem of second best: "Our partial equilibrium analysis suffers from a defect common to all partial equilibrium constructions. By isolating one sector from the rest of the economy it fails to examine interactions between sectors."<sup>144</sup>

Merger analysis can also require judicial examination of out-of-market effects. For example, a merger of multimarket firms might reduce competition in one market but increase it in another.<sup>145</sup> One legal limitation is that Section 7 of the Clayton Act prohibits mergers that injure competition "in any line of commerce" and in any "section of the country."<sup>146</sup> Those statements do not appear to permit trading harms in one market against gains in a different market.<sup>147</sup> If a merger injures competition "in any line of commerce," then under the statute it literally does not matter if it also produces benefits somewhere else. The 2010 Merger Guidelines take this position by requiring a showing that a merger "is not likely to be anticompetitive in any relevant market."<sup>148</sup>

Yet another example of extramarket effects is the theory of monopoly "leveraging," or the idea that a firm can use its power in one market to obtain an

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<sup>142</sup> For one attempt, see Richard S. Markovits, *Second-Best Theory and the Standard Analysis of Monopoly Rent Seeking: A Generalizable Critique, a "Sociological" Account, and Some Illustrative Stories*, 78 IOWA L. REV. 327 (1993).

<sup>143</sup> Oliver E. Williamson, *Economies as an Antitrust Defense: The Welfare Tradeoffs*, 58 AM. ECON. REV. 18, 20 (1968) [hereinafter Williamson, *Economies*] (highlighting the importance of analyzing trade-offs in antitrust cases). Williamson expanded on the use of partial equilibrium analysis in antitrust and its assumptions in Oliver E. Williamson, *Economies as an Antitrust Defense Revisited*, 125 U. PA. L. REV. 699 (1977).

<sup>144</sup> Williamson, *Economies*, *supra* note 143, at 23.

<sup>145</sup> *E.g.*, *United States v. Phila. Nat'l Bank*, 374 U.S. 321, 370 (1963) (finding that merger presumably harmed competition in market dominated by small banks and smaller loans but would have improved competition in market for larger loans); *see also United States v. Bethlehem Steel Corp.*, 168 F. Supp. 576, 618 (S.D.N.Y. 1958) (finding that anticompetitive consequences in one region could not be offset against lower prices and reduced freight charges in another region); Daniel A. Crane, *Balancing Effects Across Markets*, 80 ANTITRUST L.J. 397, 397 (2015) (discussing rule that prohibits judicial examination of out-of-market effects of mergers).

<sup>146</sup> 15 U.S.C. § 18 (condemning mergers "where in any line of commerce or in any activity affecting commerce in any section of the country, the effect of such acquisition may be substantially to lessen competition, or to tend to create a monopoly").

<sup>147</sup> *See AREEDA & HOVENKAMP*, *supra* note 67, ¶ 972 (arguing that increased efficiencies in a different market do not help consumers who are harmed by merger in relevant market).

<sup>148</sup> U.S. DOJ & FTC, *supra* note 131, § 10, at 30.

advantage in a second market.<sup>149</sup> The theory had a life of several decades, although it was not frequently accepted by courts. The Supreme Court's decision in *Spectrum Sports, Inc. v. McQuillan*<sup>150</sup> very likely put an end to it as a theory of action by requiring that there be a dangerous probability of success of monopoly in the second market. That effectively turned leveraging into part of the law of attempt to monopolize.<sup>151</sup> However, *Spectrum Sports* did not dispose of the basic economic theory that a firm could use its power in one market to obtain advantages or even to monopolize a second market.<sup>152</sup> For example, while subsequent decisions such as *Microsoft* never spoke of leveraging, the theory of action was that a firm used its structural advantage in one market (the Windows operating system) in order to injure competition in a different but complementary market (browsers).<sup>153</sup>

A related and quite frequent use of effects outside of a primary market is the law of tying arrangements. The tying and tied products in these cases are usually complements, such as salt-injecting machines and salt, printers and ink cartridges, cameras and film, or computer operating systems and browsers or other applications.<sup>154</sup> The theory is typically that a firm has significant market power in a primary market and then uses tying to distort competition in the second, or complementary, market. In such cases, we do not define a single market for the tying and tied products; that would be nonsensical. Rather, courts are asked to determine whether the defendant's power in one market is sufficient to cause anticompetitive distortions in the second market, with monopoly being the most extreme one, and then, if it has such power, whether the firm has

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<sup>149</sup> See, e.g., *United States v. Griffith*, 334 U.S. 100, 107 (1948) (“[T]he use of monopoly power, however lawfully acquired, to foreclose competition, to gain a competitive advantage, or to destroy a competitor, is unlawful.”); *Virgin Atl. Airways Ltd. v. British Airways PLC*, 257 F.3d 256, 272-73 (2d Cir. 2001) (rejecting theory on the facts of this case); *Intergraph Corp. v. Intel Corp.*, 195 F.3d 1346, 1359-60 (Fed. Cir. 1999) (largely rejecting the theory); *Berkey Photo, Inc. v. Eastman Kodak Co.*, 603 F.2d 263, 275 (2d Cir. 1979) (accepting the theory but finding it inapplicable).

<sup>150</sup> 506 U.S. 447 (1993).

<sup>151</sup> *Id.* at 459 (holding that a single firm's conduct is illegal only when it threatens to monopolize market); see also *Fineman v. Armstrong World Indus., Inc.*, 980 F.2d 171, 203 (3d Cir. 1992) (recognizing that leveraging claim could only survive if defendants had “monopoly, or a dangerous probability of a monopoly” in relevant market).

<sup>152</sup> See AREEDA & HOVENKAMP, *supra* note 67, ¶ 652 (noting that monopolists can cause negative consequences in a second market).

<sup>153</sup> *United States v. Microsoft Corp.*, 253 F.3d 34, 65 (D.C. Cir. 2001) (“Microsoft designed Windows 98 ‘so that using Navigator on Windows 98 would have unpleasant consequences for users’ . . .”). The district court did speak of leveraging power from the operating system market to the browser market. *United States v. Microsoft Corp.*, 87 F. Supp. 2d 30, 46 (D.D.C. 2000) (holding that Microsoft unlawfully leveraged monopoly power), *aff'd in part and rev'd in part*, 253 F.3d 34 (D.C. Cir. 2001).

<sup>154</sup> AREEDA & HOVENKAMP, *supra* note 67, ¶ 1704 (explaining effects of tying complements on secondary markets).

actually done so.<sup>155</sup> For example, a firm with a dominant share in a computer operating system market might be able to tie an Internet browser and thereby foreclose, or exclude, rivals in the browser market.<sup>156</sup>

Analytically related to tying are vertical mergers, which unite firms that stand in a supplier/buyer relationship, such as a manufacturer and one of its parts suppliers<sup>157</sup> or an Internet or cable services provider and a digital programmer.<sup>158</sup> In general, condemnation requires a showing that the merger tends to exclude rivals in the secondary market or else increase their costs. As with tying, we do not define a single market for both the upstream and downstream good, and it would not be enlightening to do so. Neither do the government's Vertical Merger Guidelines, which were promulgated subsequent to the *AmEx* decision.<sup>159</sup>

In sum, antitrust has been dealing with effects that occur outside the boundaries of a defined relevant market for a long time. It is hardly news that offsetting pressures from a complementary good might affect the strength of an inference of market power. For example, the high price of fuel might limit the market power of automobile makers, or high compensation for Uber drivers might limit ridership.

But defining a relevant market for "automobiles/gasoline" or for "drivers/passengers" will not contribute one whit to our understanding of the situation but will only serve to throw us off track. Defining the market the way the Court did in *AmEx* simply made the market power analysis incoherent.<sup>160</sup> It promises to expose the judicial system to thousands of dollars in wasted resources dealing with questions such as whether Uber drivers and Uber passengers, physicians and patients, or search engine users and advertisers are in the same relevant market. Further, it does this in perverse ways that contribute nothing of value and undermine rather than strengthen the analysis of power. For example, if we began with a group of Uber drivers in St. Paul, the knowledge that there are 1,000 additional drivers in nearby Minneapolis would serve to weaken the inference of their power. By contrast, the knowledge that there were 1,000 additional passengers in Minneapolis would serve to strengthen it. Putting them all in the same market would require us to treat these two groups in the

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<sup>155</sup> See *id.* ¶¶ 1709, 1729 (identifying standards for unreasonable restraints on trade through tying).

<sup>156</sup> *Microsoft*, 253 F.3d at 65-67 (noting that Microsoft's tie of its Windows operating system and Internet Explorer browser virtually ousted rival browser Netscape from the market).

<sup>157</sup> *E.g.*, *Fruehauf Corp. v. FTC*, 603 F.2d 345, 361 (2d Cir. 1979) (approving of vertical merger between wheel supplier and truck trailer manufacturer).

<sup>158</sup> *E.g.*, *United States v. AT&T, Inc.*, 916 F.3d 1029, 1031-32 (D.C. Cir. 2019) (approving of vertical merger due to changes in digital entertainment market).

<sup>159</sup> U.S. DOJ & FTC, VERTICAL MERGER GUIDELINES § 3 (2020), [https://www.ftc.gov/system/files/documents/reports/us-department-justice-federal-trade-commission-vertical-merger-guidelines/vertical\\_merger\\_guidelines\\_6-30-20.pdf](https://www.ftc.gov/system/files/documents/reports/us-department-justice-federal-trade-commission-vertical-merger-guidelines/vertical_merger_guidelines_6-30-20.pdf) [<https://perma.cc/FKG7-SAE2>].

<sup>160</sup> See *Ohio v. Am. Express Co.*, 138 S. Ct. 2274, 2286 (2018) (defining the market for transactions involving both sides of the two-sided platform).



same way, even though their effects on power are precisely the opposite. This is worse than useless.

But the main point is that if one looks at the impact of the antisteering rule, there were no losses on the merchant side to be traded against gains on the cardholder side. There were only losses on both sides.<sup>161</sup>

### C. *Assessing Power on Two-Sided Platforms*

How should power be assessed for antitrust purposes in markets containing two-sided platforms, as was the case in *AmEx*? The inquiry needs to be manageable, even though it can be quite technical. Further, the existence of different effects on the two sides of a digital platform, including feedback effects, complicates the assessment.<sup>162</sup> We have always tolerated a significant amount of inaccuracy in market definition methodologies. Insistence on precision can become a costly rule of nonliability to the extent that it produces too many false negatives. Traditional methodologies that require determination of a relevant market, as the Supreme Court required its *AmEx* decision,<sup>163</sup> are predictably inaccurate. Further, in differentiated markets, they always serve to understate market power.<sup>164</sup> In this case, the whole point of AmEx's business model was its differentiation from alternative cards.

Traditional methods of estimating power from market share of a defined relevant market are termed "indirect." The method relies on a link between market share and market power that is both intuitive and technically capable of proof.<sup>165</sup> The technical proof, however, requires additional information about both the elasticity of demand of the market in which the firm sells and the elasticity of supply of competing or fringe firms.<sup>166</sup> Even then, it relies on assumptions about how the firms will behave.<sup>167</sup> Indeed, if the full technical

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<sup>161</sup> See *supra* text accompanying notes 117-122.

<sup>162</sup> See JENS-UWE FRANCK & MARTIN PEITZ, CTR. ON REGUL. IN EUR., MARKET DEFINITION AND MARKET POWER IN THE PLATFORM ECONOMY § 3.6.1, at 63 (2019), [https://www.cerre.eu/sites/cerre/files/2019\\_cerre\\_market\\_definition\\_market\\_power\\_platform\\_economy.pdf](https://www.cerre.eu/sites/cerre/files/2019_cerre_market_definition_market_power_platform_economy.pdf) [<https://perma.cc/JHK8-SHQT>] (describing how to use hypothetical monopolist test with two-sided platforms).

<sup>163</sup> See discussion *supra* text accompanying notes 118-124.

<sup>164</sup> See David S. Evans, *The Antitrust Economics of Multi-Sided Platform Markets*, 20 YALE J. ON REGUL. 325, 359-60 (2003) ("Market share as a proxy for market power is problematic . . . for businesses that compete in multi-sided platform markets.").

<sup>165</sup> E.g., Duncan Cameron & Mark Glick, *Market Share and Market Power in Merger and Monopolization Cases*, 17 MANAGERIAL & DECISION ECON. 193, 195-96 (1996).

<sup>166</sup> *Id.*; see also William M. Landes & Richard A. Posner, *Market Power in Antitrust Cases*, 94 HARV. L. REV. 937, 944-45 (1981) (asserting that market power can be expressed as a function of the market's elasticity of demand, the elasticity of supply of fringe firms, and the market share).

<sup>167</sup> See Cameron & Glick, *supra* note 165, at 196 (noting the centrality of Cournot assumptions to the calculus).

requirements for deriving power from share were used, proof of power from market share would be just as technical as direct proof. Because most litigation does not produce these numbers and judges rarely discuss them in any technical way, our inferences of power from market share alone are necessarily crude.

Many antitrust decisions do in fact discuss market elasticity of demand and the elasticity of supply of fringe firms, although almost always nontechnically, without a numerical measure, and with different terminology. For example, when a court expresses doubt that a market is well-defined because there seem to be good user substitutes from outside the proposed market, it is talking about the market's elasticity of demand. This was an issue in *Federal Trade Commission v. Whole Foods Market, Inc.*,<sup>168</sup> in which the court struggled mightily with the question of whether there was a well-defined market for "premium natural and organic supermarkets" ("PNOS") or whether more traditional grocers should also be included in the defined market.<sup>169</sup> To the extent that customers were sensitive to price and substituted back and forth between PNOS and traditional markets in response to price changes, the justification for defining such a market is weaker.<sup>170</sup> That is tantamount to saying that a market defined as PNOS has a relatively high market elasticity of demand.

When a court discusses low barriers to entry or mobility, it is speaking about elasticity of supply. For example, in *Rebel Oil Co. v. Atlantic Richfield Co.*,<sup>171</sup> the Ninth Circuit concluded that self-service, cash-only gasoline retailers was not an appropriate relevant market for evaluating a predatory pricing claim.<sup>172</sup> While customers might have strong preferences for self-service versus full-service gas retailers, suppliers could readily switch between the two.<sup>173</sup> That conclusion is tantamount to saying that the defined market faces a relatively high elasticity of supply.

Traditional market definition approaches have the additional liability that they are always incorrect in product-differentiated or spatially differentiated markets. Putting differentiated products into separate markets exaggerates power because

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<sup>168</sup> 548 F.3d 1028 (D.C. Cir. 2008).

<sup>169</sup> *Id.* at 1037 (concluding that narrower market definition was factually justified). Similar situations include *Little Rock Cardiology Clinic PA v. Baptist Health*, 591 F.3d 591, 598 (8th Cir. 2009) (finding that relevant market for medical delivery could not be limited to patients who had private insurance); and *United States v. Oracle Corp.*, 331 F. Supp. 2d 1098, 1159 (N.D. Cal. 2004) (disagreeing with government that relevant market should be limited to "high function" financial management software).

<sup>170</sup> *See Whole Foods*, 548 F.3d at 1041 (holding that FTC had not proven PNOS submarket but had shown price discrimination between core PNOS customers and those that switched back and forth between PNOS and traditional markets).

<sup>171</sup> 51 F.3d 1421 (9th Cir. 1995).

<sup>172</sup> *Id.* at 1437 (finding that relevant market included full-service gasoline retailers).

<sup>173</sup> *E.g., id.* at 1436 (finding that low entry barriers into alleged market for self-serve gasoline undermined antitrust claim); *Tops Mkts., Inc. v. Quality Mkts., Inc.*, 142 F.3d 90, 97 (2d Cir. 1998) (finding that low entry barriers precluded claim that defendant monopolized market for grocery store sites).

it treats the two goods as if they do not compete with each other at all. By contrast, putting them into the same market understates power by treating them as if they were perfect competitors. For example, the “cellophane fallacy,” named after a monopolization case involving that product, occurs when the courts place highly differentiated products into the same market and then simply compute market share by adding up their output on the premise that these diverse goods are perfect competitors.<sup>174</sup> On the other hand, putting two products, such as cellophane and wax paper, into separate markets treats them as if they do not compete at all—a conclusion that is equally wrong. For many goods, cellophane and wax paper may be viable alternative wrapping materials but not for others. Market definition approaches to the assessment of market power are necessarily binary, which means that a particular group of sales must be counted as either inside or outside of the relevant market but not something in between. By contrast, demand responses to changes in costs or prices can be observed and metered as finely as the data permit. As a result, if the data are available, they give a much more accurate assessment of a firm’s market power.

Platforms compete with other platforms as well as nonplatform sellers,<sup>175</sup> but the degree of competition can vary from one situation to another. For some, product differentiation is extensive, indicating that sellers compete on many things in addition to price.<sup>176</sup> For others, such as Uber and Lyft, the platforms are more closely similar to one another, making price competition particularly important.<sup>177</sup> People can download apps for both companies at no charge and readily compare prices before selecting a ride.<sup>178</sup> While some users may have preferences, for the most part they appear to operate as close competitors in those towns where both are available.<sup>179</sup> Any assessment of Uber’s power would certainly require determining the extent to which other providers such as Lyft or traditional taxicabs are able to constrain Uber’s power to set a price.

Clearly there is no basis, however, for putting drivers and riders into the same “market.” It adds nothing to the analysis. Uber’s share could be measured either

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<sup>174</sup> See, e.g., *United States v. E.I. du Pont de Nemours & Co.*, 351 U.S. 377, 400 (1956) (concluding that cellophane was in same market as other flexible wrappings). This holding was criticized in AREEDA & HOVENKAMP, *supra* note 67, ¶ 534b (“Contrary to the Supreme Court, there was not a high cross-elasticity of demand between cellophane and other flexible wrapping materials.”).

<sup>175</sup> See *supra* text accompanying notes 77-83.

<sup>176</sup> On this point, see Herbert Hovenkamp, *Antitrust and Platform Monopoly*, 130 *YALE L.J.* 1901 (2021) [hereinafter Hovenkamp, *Antitrust and Platform Monopoly*] (discussing product differentiation among platforms).

<sup>177</sup> See Brett Helling, *Uber vs Lyft: A Side-By-Side Comparison for 2021*, RIDESTER (Jan. 21, 2021), <https://www.ridester.com/uber-vs-lyft/> [https://perma.cc/Z7YE-JV8H] (claiming that when choosing between ride-sharing services “[t]he only decision you need to make is choosing Uber vs. Lyft”).

<sup>178</sup> See *id.*

<sup>179</sup> See *id.* (“In many cities across the U.S. and Canada, Uber and Lyft services may seem practically identical.”).

by ridership (such as passenger miles or number of fares) or revenue, and these numbers could be compared with those of Lyft, traditional taxicab drivers, and perhaps others. For some purposes, such as evaluating restraints on drivers, the number of drivers might be used. For example, if Uber should impose exclusive dealing on its drivers by forbidding them from driving for Lyft or a traditional taxicab company, the challenged restraint would be in the market for drivers and the questions would properly focus on Uber's ability to limit the opportunities of competitors to obtain sufficient drivers. That is so in any exclusive dealing case, where we ordinarily examine market power in some primary market (such as power generation) and the extent of exclusion in some secondary market (such as coal).<sup>180</sup> In the Uber situation, the number and availability of riders could be relevant. For example, scarcity of riders might make an exclusive agreement more damaging to a rival, while an ample supply of riders would make it less so. But placing riders and drivers into the same relevant market would not be a sensible way to address these questions. Indeed, it would make coherent analysis impossible.

By contrast to market share measures, direct measures of market power need not require definition of a relevant market at all.<sup>181</sup> In addition to their other advantages, two things point in favor of more direct measurement when the market in question is a two-sided platform. First, one of the most serious limitations on the use of direct measurement of power is inadequacy of data. Two-sided platforms are generally digital, however, and as a result they preserve fairly complete records of transactions.<sup>182</sup> This means that there are typically useful data about prices, quantities, and shifts in response to changes.<sup>183</sup> Second, the markets are differentiated, some significantly so. This tends to make market share methodologies unreliable, giving more direct measures a comparative advantage.<sup>184</sup>

Direct measurement poses its own complexities. For example, assessing costs on one side while ignoring the other side is likely to be misleading, particularly when looking for such things as power or price-cost relationships.<sup>185</sup> Even here,

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<sup>180</sup> *E.g.*, *Tampa Elec. Co. v. Nashville Coal Co.*, 365 U.S. 320, 335 (1961) (finding coal burning electric utility not guilty of unlawful exclusive dealing because its contracts foreclosed only small percentage of coal market); *see also* AREEDA & HOVENKAMP, *supra* note 67, ¶ 1821b.

<sup>181</sup> Louis Kaplow, *Why (Ever) Define Markets?*, 124 HARV. L. REV. 437, 459 (2010) (recognizing "successful efforts to develop[] a number of more direct means of inferring market power that do not rely on market redefinition").

<sup>182</sup> *See* Helling, *supra* note 177 (relying on digital data to compare prices and features of Uber and Lyft).

<sup>183</sup> *See id.*

<sup>184</sup> *See* Kaplow, *supra* note 181, at 516 (arguing that "the market definition approach has another significant defect," namely that in highly differentiated markets it "uses a subset of available information and employs it in a manner that reduces the reliability of conclusions about market power").

<sup>185</sup> *See* Evans, *supra* note 164, at 356.

however, circumstances vary. Some platforms, such as search engines, take no revenue on the consumer side. As a result, looking at price-cost margins on the consumer side alone tells us nothing. By contrast, a platform such as eBay facilitates direct transactions in merchandise between sellers and buyers. In that case, an examination of a seller's costs, including its sales commission to eBay, could be accurate without considering what is happening on the other side. Notwithstanding the use of a two-sided platform, the sale of a painting on eBay is not really all that different from any other commission sale.

Direct measures of market power on platforms are probably superior for most purposes. For both direct and indirect measures, however, effects on the other must be taken into account. For example, the ability of a platform to increase its price without changing the terms or incurring increased costs on the other side is an indicator of power.<sup>186</sup> In *AmEx*, the plaintiff showed that AmEx faced a low elasticity of demand vis-à-vis its merchants.<sup>187</sup> Indeed, the antiswitching rule was itself a cost to merchants to the extent that it limited their ability to avoid AmEx's high transaction fee.<sup>188</sup> Further, it could not be understood as a simple exercise in participation balancing between the two sides because the rule injured both merchants and cardholders.<sup>189</sup>

In all events, it is essential that observations of price changes not be limited to a single side of the market.<sup>190</sup> In most cases, effects on the other side of the platform must be addressed no matter what the methodology for assessing power. In the *AmEx* case, direct measures indicated that AmEx had significant power.<sup>191</sup> First, as the government showed, AmEx was able to increase its price repeatedly without losing sales.<sup>192</sup> That fact alone is insufficient. A price increase on one side may reflect a consumer benefit or cost increase on the other side. So, we must also consider whether the merchant price increases were matched by increased perks or other costs of serving customers. If merchant

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<sup>186</sup> See *Ohio v. Am. Express Co.*, 138 S. Ct. 2274, 2293 (2018) (Breyer, J., dissenting) (“American Express’ ability to raise merchant prices without losing any meaningful market share, in the District Court’s view, showed that American Express possessed power in the relevant market.”).

<sup>187</sup> See *id.* at 2285-86 (majority opinion) (“[T]he fact that two-sided platforms charge one side a price that is below or above cost reflects differences in the two sides’ demand elasticity . . .”).

<sup>188</sup> See *id.* at 2296 (Breyer, J., dissenting) (observing that “[m]erchants upset about a price increase for merchant-related services cannot avoid that price increase” because of the antisteering rule).

<sup>189</sup> See discussion *supra* Introduction.B (criticizing dicta in *AmEx* that two-sided platforms can only compete with other two-sided platforms).

<sup>190</sup> Michael Katz & Jonathan Sallet, *Multisided Platforms and Antitrust Enforcement*, 127 *YALE L.J.* 2142, 2159 (2018) (arguing that analysts should “consider price changes on one side of the platform while holding prices on the other side constant” in order to adequately “consider cross-platform network effects”).

<sup>191</sup> See *id.*

<sup>192</sup> See *Am. Express Co.*, 138 S. Ct. at 2293.

price increases were not accompanied by changes on the cardholder side of the market, this suggests that AmEx was seeking out its profit-maximizing price by raising prices until too many merchants defected.<sup>193</sup>

Even with the antisteering rule in place, AmEx would not have infinite power to increase merchant fees. Although under an antisteering rule AmEx customers would be indifferent to higher merchant fees, merchants would not be. At some point, the merchants' costs to carry the AmEx card would become so high that the merchants themselves would drop it, foregoing whatever prestige or convenience value the card offered.

#### D. *Inferring Power from Conduct*

Power can often be inferred from the conduct itself. A good example of this is naked price-fixing. We can infer power from the fact of a naked price fix because market power is necessary to make it profitable. Given its significant risks, firms would not do it unless they believed that they could profit from it. To be sure, the firms might be mistaken, believing that they had power when in fact they did not. But setting that aside, the existence of naked price-fixing indicates power. Indeed, we generally define a naked restraint as one that depends on market power for its success.<sup>194</sup> We need not be too concerned about those cases in which the putative cartel overestimates its power because, in the case of naked collusion, overdeterrence is not much of a problem.

Returning to the *AmEx* example, merchant fees are not in and of themselves an indicator of market power. They are simply the price that the card issuer needs to charge to make its card profitable.<sup>195</sup> Further, a higher merchant fee than other cards charge is not necessarily an exercise of market power either, because it may simply reflect higher payouts on the other side in the form of cardholder benefits.<sup>196</sup> But the antisteering rule is different: it prevented a switch away from the high-priced card even when that switch was profitable to both the merchant

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<sup>193</sup> See FRANCK & PEITZ, *supra* note 162, § 3.6.1, at 63 (noting that two-sided platforms charging both user groups may increase prices until merchants defect in order to seek out optimal price).

<sup>194</sup> See AREEDA & HOVENKAMP, *supra* note 67, ¶ 1906a (“We define a particular horizontal agreement as ‘naked’ if it is formed with the objectively intended purpose or likely effect of increasing price . . . [U]nder this definition a naked restraint is a rational act for the defendants only on the premise that they collectively have sufficient power to affect marketwide output and price.” (footnote omitted)).

<sup>195</sup> See *Am. Express Co.*, 138 S. Ct. at 2288 (“Amex’s increased merchant fees reflect increases in the value of its services and the cost of its transactions, not an ability to charge above a competitive price.”).

<sup>196</sup> See *id.* (“Amex uses higher merchant fees to offer its cardholders a more robust rewards program . . .”).

and the customer.<sup>197</sup> That rule cannot be justified as creating an offsetting benefit and must be counted as an exercise in market power.<sup>198</sup>

The antisteering rule made it impossible for a merchant to steer people to a less costly card with respect to those transactions where a cardholder would be inclined to accept the invitation to steer.<sup>199</sup> In a competitive market, the effect of the rule would be that the merchant would drop that card. But the merchants who carried AmEx felt that they needed to accept the card, notwithstanding its higher costs. How much they needed it presents a question of degree, but the fact that AmEx repeatedly increased merchant prices without evidence of offsetting cost increases or significant defections indicates power.

Under steering, cardholders and customers could negotiate to their joint profit-maximizing position. Consumers who placed a small value on AmEx's benefits could use a cheaper card. For their part, merchants could bargain by discounting the price or offering collateral services, such as free delivery, to reflect the merchant costs of a particular payment form. The important thing is that everything would be discounted into the purchase price. One important principle is that payment systems should be neutral and transparent, permitting the parties to negotiate to a mutually beneficial maximum.<sup>200</sup> In the process of injuring its own cardholders, AmEx's antisteering rule also excluded rival card platforms that were ready to offer better terms.

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<sup>197</sup> See discussion *supra* Section II.A (arguing that the antisteering rule at issue in *AmEx* harmed both merchants and card users).

<sup>198</sup> See Dennis W. Carlton & Ralph A. Winter, *Vertical Most-Favored-Nation Restraints and Credit Card No-Surcharge Rules*, 61 J.L. & ECON. 215, 225 (2018) (arguing that antisteering "clause allows the monopolist to leverage its market power to exploit the customers of the competitive good").

<sup>199</sup> *Am. Express Co.*, 138 S. Ct. at 2280 ("The antisteering provision prohibits merchants from discouraging customers from using their Amex card after they have already entered the store and are about to buy something, thereby avoiding Amex's fee.").

<sup>200</sup> See Jean-Charles Rochet & Jean Tirole, *Two-Sided Markets: A Progress Report*, 37 RAND J. ECON. 645, 648 (2006).

*Neutrality in payment systems.* The choice of an interchange fee paid by the merchant's bank, the acquirer, to the cardholder's bank, the issuer, is irrelevant if the following conditions are jointly satisfied: First, issuers and acquirers pass through the corresponding charge (or benefit) to the cardholder and the merchant. Second, the merchant can charge two different prices for goods or services depending on whether the consumer pays by cash or by card; in other words, the payment system does not impose a no-surcharge rule as a condition for the merchant to be affiliated with the system. Third, the merchant and the consumer incur no transaction cost associated with a dual-price system.

*Id.* (footnote omitted). As Rochet and Tirole observe, in a properly functioning market, merchants and customers would move to a wealth-maximizing equilibrium. See *id.* But the minimum conditions are that the parties are free to bargain (i.e., there is no prohibition on steering) and that they have adequate information about the gains that would be available from trading. See *id.*

E. *Market Power in Vertical Cases*

The *AmEx* Court held—without citing any economic evidence or literature—that a relevant market must be established in a vertical case even if alternative methods of estimating power were available.<sup>201</sup> The question was not raised in the petition for certiorari and was not briefed. The Court’s complete statement on the issue, including both analysis and conclusion, is contained in this footnote:

The plaintiffs argue that we need not define the relevant market in this case because they have offered actual evidence of adverse effects on competition—namely, increased merchant fees. We disagree. The cases that the plaintiffs cite for this proposition evaluated whether horizontal restraints had an adverse effect on competition. Given that horizontal restraints involve agreements between competitors not to compete in some way, this Court concluded that it did not need to precisely define the relevant market to conclude that these agreements were anticompetitive. But vertical restraints are different. Vertical restraints often pose no risk to competition unless the entity imposing them has market power, which cannot be evaluated unless the Court first defines the relevant market.<sup>202</sup>

In his dissent, Justice Breyer was clearly flummoxed—as if the majority did not understand that defining a relevant market and direct measurement are *alternative* mechanisms for assessing market power.<sup>203</sup>

Over the last several decades, the usefulness and robustness of direct and more econometric measures of power that do not depend on a market definition have become much more practical and prominent.<sup>204</sup> They are widely used to evaluate horizontal mergers threatening anticompetitive unilateral effects.<sup>205</sup> As noted above, however, they have provoked a reaction from some fairly extreme right-wing groups, although with no economic analysis.<sup>206</sup> Apparently this is because direct measurement provides a way to identify market power in circumstances where it would be difficult to identify using market share measures.

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<sup>201</sup> *Am. Express Co.*, 138 S. Ct. at 2285 n.7.

<sup>202</sup> *Id.* (citations omitted).

<sup>203</sup> *See id.* at 2297 (Breyer, J., dissenting) (“One critical point that the majority’s argument ignores is that proof of actual adverse effects on competition *is, a fortiori*, proof of market power.”).

<sup>204</sup> *See* discussion *supra* Introduction.B (noting developments in economic theory over prior two decades concerning direct measurement of market power from observed transactional behavior); *see also* AREEDA & HOVENKAMP, *supra* note 67, ¶¶ 515-521 (tracing recent developments in direct market analysis); Kaplow, *supra* note 181, at 459 (discussing relative strengths and methodologies).

<sup>205</sup> Joseph Farrell & Carl Shapiro, *Antitrust Evaluation of Horizontal Mergers: An Economic Alternative to Market Definition*, 10 B.E. J. THEORETICAL ECON., no. 1, 2010, at 1, 2; *see also* AREEDA & HOVENKAMP, *supra* note 67, ¶ 913a.

<sup>206</sup> *See supra* text accompanying notes 72-73.



Direct measures of firm responses to changes in demand or cost require transaction information, so one limitation on their use is the availability of data. But in the *AmEx* case, all of the relevant credit card transactions were digitized.<sup>207</sup> Obtaining the data should not pose a significant problem. That is likely the case on nearly all digital platforms. In any event, direct measures of power are very likely superior to inferences drawn from market share, particularly where the products in question are differentiated, as they were in *AmEx*.<sup>208</sup>

Fortunately, there are ways to limit the damage resulting from the Court's requirement of a market definition in a vertical case. Direct methodologies can usually be translated into a conclusion about market boundaries.<sup>209</sup> After all, a market is a grouping of sales for which the firm(s) that control them could sustainably exact a non-cost-justified price increase above the competitive level.<sup>210</sup> Delineating a relevant market is one way of producing an answer to this question, although indirectly from inferences about market share. However, more direct measures can answer the same question as well, through such devices as estimating the residual elasticity of demand that faces the firm.<sup>211</sup> Here, residual elasticity is an estimate of the demand facing an individual firm after the demand for all of its competitors' goods has been excluded.<sup>212</sup>

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<sup>207</sup> See *Am. Express Co.*, 138 S. Ct. at 2280 (“When a cardholder buys something from a merchant who accepts Amex credit cards, Amex processes the transaction through its network . . .”).

<sup>208</sup> See discussion *supra* Section II.C (arguing that methodologies relying on market definition understate market power in differentiated markets).

<sup>209</sup> Cf. AREEDA & HOVENKAMP, *supra* note 67, ¶ 520e (“[D]irect measurement can be an important step in market delineation and is often used in expert reports on market definition.”).

<sup>210</sup> See *id.*

<sup>211</sup> See *id.* ¶ 521c.

<sup>212</sup> See *id.* ¶ 521a; Kaplow, *supra* note 181, at 450 (“The dominant firm’s demand in this model is often described as a residual demand; it sells only to those who continue to buy the product (rather than some other product) and are unable to obtain the product from firms in the competitive fringe.”); see also MICHAEL D. WHINSTON, LECTURES ON ANTITRUST ECONOMICS 100-14 (2006) (explaining direct method of residual demand estimation and depicting residual demand function algebraically); Jonathan B. Baker & Timothy F. Bresnahan, *Empirical Methods of Identifying and Measuring Market Power*, 61 ANTITRUST L.J. 3, 7 (1992) (“The partial residual demand elasticity measures the extent to which a particular rival constrains the ability of a given firm to exercise market power.”); Baker & Bresnahan, *supra* note 51, at 284 (presenting “a new econometric approach to the problem of market power estimation, based on specification and estimation of the residual demand function facing a single firm”). For good historical perspective, see Gregory J. Werden, *The History of Antitrust Market Delineation*, 76 MARQ. L. REV. 123 (1992).

In that case, however, direct measures not only assess the firm's power but also can define the boundary of a relevant market.<sup>213</sup> For example, if price change and response data show that a firm has enough power to charge a monopoly price for product Alpha, we can express that conclusion directly by saying that the maker of Alpha has a certain amount of power. However, then we can also say that product Alpha constitutes a relevant market if the difference between cost and its profit-maximizing price is sufficiently large.

Economic experts assessing unilateral-effects merger cases do a version of this, which courts have come to recognize, even though they generally go through the formality of requiring a market definition as well.<sup>214</sup> On the one hand, the methodologies that are used to assess the price effects of a particular merger in a product-differentiated market do not require a market definition.<sup>215</sup> On the other hand, once this methodology is used to predict a price increase of the necessary magnitude, we can say that the grouping of sales in question constitutes a relevant market.<sup>216</sup>

Although the economist need not reach this additional conclusion about the boundaries of a relevant market in order to predict the price effects of the merger, she may have to do it in order to satisfy the *legal* requirement that the price increase occur in some "line of commerce" and "section of the country," as Section 7 of the Clayton Act requires.<sup>217</sup> In its *Brown Shoe Co. v. United States*<sup>218</sup> decision, the Supreme Court equated "line of commerce" with a product market and "section of the country" with a geographic market.<sup>219</sup> Another way of stating this proposition is that a conclusion about market power based on an econometric measure such as residual demand elasticity becomes evidence of the proposition that the grouping of sales whose residual elasticity is low is a relevant market.<sup>220</sup>

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<sup>213</sup> See AREEDA & HOVENKAMP, *supra* note 67, ¶ 521c (explaining that direct information about residual demand curve "can be combined in an equation that will give the residual demand elasticity, and hence the market power, of the defendant").

<sup>214</sup> Farrell & Shapiro, *supra* note 205, at 12-14 (analyzing direct measures of firm's market power in antitrust evaluation of horizontal mergers as "[m]ore [a]ccurate — [b]ut [m]ore [c]omplex" while acknowledging that "[a]lternatively, one could perform the traditional market definition exercise").

<sup>215</sup> See *id.* at 2 (arguing that "[w]here firms compete to sell differentiated products," direct methods are simpler and "more directly based in economics . . . than the market concentration approach").

<sup>216</sup> See AREEDA & HOVENKAMP, *supra* note 67, ¶ 913b.

<sup>217</sup> See 15 U.S.C. § 18.

<sup>218</sup> 370 U.S. 294 (1962).

<sup>219</sup> See *id.* at 324 ("[J]ust as a product submarket may have § 7 significance as the proper 'line of commerce,' so may a geographic submarket be considered the appropriate 'section of the country.'" (quoting 15 U.S.C. § 18)); Hovenkamp & Shapiro, *supra* note 3, at 2015.

<sup>220</sup> Cf. AREEDA & HOVENKAMP, *supra* note 67, ¶ 913b ("In cases where a merger facilitates a significant 'unilateral' price increase for a grouping of sales that was not an obvious relevant

The court in *United States v. H & R Block, Inc.*,<sup>221</sup> a merger challenge, was particularly candid about this approach:

“As a matter of applied economics, evaluation of unilateral effects does not require a market definition in the traditional sense at all.” This is so because unilateral effects analysis focuses on measuring a firm’s market power directly by “estimating the change in residual demand facing the post-merger firm. ‘Residual demand’ refers to the demand for a firm’s goods after the output of all other competing firms has been taken into account.” If market power itself can be directly measured or estimated reliably, then in theory market definition is superfluous, at least as a matter of economics, because “[i]dentifying a market and computing market shares provide an indirect means for measuring market power.” . . . As a legal matter, however, a market definition may be required by Section 7 of the Clayton Act. The Court is not aware of any modern Section 7 case in which the court dispensed with the requirement to define a relevant product market . . . .<sup>222</sup>

Thus, in a vertical case, as in a horizontal case, a court could consider direct evidence of market power, which was strong in *AmEx*, but express that conclusion in terms of a relevant market.

#### F. *The Meaning and Scope of Free Riding*

The *AmEx* majority also misunderstood how free riding works. It suggested that rival card issuers might be taking a free ride on AmEx’s business model, which relied on high merchant fees with high offsetting rewards to customers.<sup>223</sup> The Court apparently believed that a Visa cardholder could free ride on AmEx’s benefits simply by acquiring a Visa card and keeping it in his pocket.<sup>224</sup> In fact, however, one can obtain the AmEx rewards only by actually using the AmEx card, and the amount of the award is tied to the amount of the AmEx card transaction.<sup>225</sup>

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market prior to the merger, the appropriate conclusion is that the merger has identified a new grouping of sales capable of being classified as a relevant market.”).

<sup>221</sup> 833 F. Supp. 2d 36 (D.D.C. 2011).

<sup>222</sup> *Id.* at 84-85 n.35 (first alteration in original) (citations omitted) (first quoting PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION ¶ 913a (3d ed. 2007); and then quoting *id.* ¶ 532a).

<sup>223</sup> See *Ohio v. Am. Express Co.*, 138 S. Ct. 2274, 2290 (2018).

<sup>224</sup> *Id.* (arguing that AmEx’s antisteering provision “can prevent retailers from free riding”).

<sup>225</sup> See *id.* at 2304 (Breyer, J., dissenting) (“American Express pays rewards to cardholders only for transactions in which cardholders use their American Express cards, so if a steering effort succeeds, no rewards are paid.”); cf. *Chi. Pro. Sports Ltd. P’ship v. Nat’l Basketball Ass’n*, 95 F.3d 593, 600-01 (7th Cir. 1996) (finding that when payments are made in proportion to how services are delivered, the ride is not free).

Justice Breyer's dissent noted the error: "[p]lainly . . . investments tied to card use . . . are not subject to free-riding."<sup>226</sup> For example, free riding occurs when one dealer is able to profit from a second dealer's promotional services because these services cannot be directly priced into the purchase of the product.<sup>227</sup> It plainly has no application in a case such as *AmEx*, where card-user benefits were specifically tied to actual purchases with the AmEx card.<sup>228</sup> A cardholder who wants the additional travel miles that AmEx promises cannot obtain them simply by owning an AmEx card; she must actually use the card to purchase the airline ticket.<sup>229</sup>

The economics of free riding has been used to champion relaxation of antitrust rules respecting vertical restraints such as resale price maintenance, and with good results.<sup>230</sup> But an essential ingredient in those situations is an investment whose returns can readily be commandeered by someone else.<sup>231</sup> The classic example is point-of-sale retailer services that must be provided prior to sale and can be priced only through the product. That enables a competitor to steal the sale by inducing customers to obtain the services from the full-service dealer but then to purchase the product at a lower price from the free rider.<sup>232</sup> Resale price maintenance can address this problem by requiring both dealers to charge the same minimum price. As a result, the customer has no incentive to switch. When the benefits can be obtained only through purchase of the product, however, there is no opportunity for free riding. In *AmEx*, the card services and the sale are not even capable of being priced out separately. The only way to get the AmEx services is to use the AmEx card for the purchase to which the services apply. Free riding is not possible.

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<sup>226</sup> *Am. Express Co.*, 138 S. Ct. at 2304 (Breyer, J., dissenting) (first and second alterations in original) (quoting *United States v. Am. Express Co.*, 88 F. Supp. 3d 143, 237 (E.D.N.Y. 2015)).

<sup>227</sup> See HOVENKAMP, FEDERAL ANTITRUST POLICY, *supra* note 3, § 11.3.

<sup>228</sup> See *Am. Express Co.*, 138 S. Ct. at 2304 (Breyer, J., dissenting) (noting that AmEx tied its rewards to card use).

<sup>229</sup> See *id.*

<sup>230</sup> See Lester G. Telser, *Why Should Manufacturers Want Fair Trade?*, 3 J.L. & ECON. 86, 93-94 (1960) ("Because some retailers bootleg his product to others who resell it without special services at lower retail prices, the same mechanism of free riding at the expense of retailers who do provide special services and charge higher prices comes into play. Therefore, the manufacturer . . . needs to prevent price cutting to induce them to offer special services jointly with his product.").

<sup>231</sup> See *id.*

<sup>232</sup> See *id.*

G. *Marginal vs. Total Effects*

Competition occurs at the margin. Marginalism is the late nineteenth and early twentieth centuries' most important contribution to economic analysis.<sup>233</sup> Measuring effects at the margin means that one cannot simply look at totals or averages. Rather, the question is how much a particular act changes a particular outcome. Speaking about the importance of marginal analysis in law, Judge Frank Easterbrook observed that “[t]he Court’s efforts to influence future conduct are doomed unless it appreciates how incentives work. . . . [P]eople look at marginal rather than average effects.”<sup>234</sup> Marginalism in economics is not one of those things that divides conservatives and moderates. It has become fundamental to economic analysis of all kinds. Marginalism in economics enables modern price theory and industrial organization, cost-benefit analysis, and economic analysis of social cost and externalities.

Antitrust’s rule of reason is in fact a stylized variation of cost-benefit analysis, with the important qualifier that the fact finder must determine not merely whether a practice reduces welfare but whether it does so by limiting competition.<sup>235</sup> In the rule of reason antitrust case *NCAA v. Board of Regents of the University of Oklahoma*,<sup>236</sup> for example, the Court had to determine whether the competitive harm from a particular rule—limiting teams to four nationally televised games per year—was justified by some offsetting benefit.<sup>237</sup> Because of limitations in our fact-finding ability, we try to do this without “balancing,”<sup>238</sup> but we do so by examining *incremental* harms and benefits. For example, the important antitrust question in the *NCAA* case is not whether the NCAA as an institution is so competitively harmful that it must be dissolved. That might be the question in a *per se* challenge to a cartel. Neither can we say, however, that, because the NCAA is a good thing, its rule limiting the output of televised games

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<sup>233</sup> For a history focusing on the United States, see generally HOVENKAMP, *OPENING OF AMERICAN LAW*, *supra* note 3.

<sup>234</sup> Frank H. Easterbrook, *Foreword: The Court and the Economic System*, 98 HARV. L. REV. 4, 33 (1984) (“[People] substitute among opportunities until they receive approximately the same reward from each of their activities (whether buying or doing). They buy or do a little more of one thing and a little less of something else until it is not worthwhile to make further changes. At that point the marginal gains of each activity are approximately the same. Change the returns on the margin and people alter their behavior; change the returns somewhere inside the margin and people are unlikely to alter their behavior in the desired way — if at all.”); *see also id.* at 13 (criticizing court that “sees only the gross effects — averages rather than the margins on which people are trading”).

<sup>235</sup> *See, e.g., Ohio v. Am. Express Co.*, 138 S. Ct. 2274, 2284 (2018) (“To determine whether a restraint violates the rule of reason, . . . the plaintiff has the initial burden to prove that the challenged restraint has a substantial anticompetitive effect that harms consumers in the relevant market.”).

<sup>236</sup> 468 U.S. 85, 104 (1984).

<sup>237</sup> *Id.* (describing “essential” antitrust inquiry as “whether or not the challenged restraint enhances competition”).

<sup>238</sup> *See AREEDA & HOVENKAMP, supra* note 67, ¶ 1507.

is just fine. One must gauge the marginal anticompetitive effects of the challenged rule against any marginal benefits offered for it.

The *AmEx* majority lost sight of the fact that effects at the margin are what counts. This would involve, first, assessing the marginal harms to competition caused by the antisteering rule and then looking for offsetting benefits from that rule that might serve to justify it. What marginalist analysis does not do is look at the entire enterprise or business model, proclaim it a good thing, and be finished.

The *AmEx* majority wrote,

Amex’s higher merchant fees are based on a careful study of how much additional value its cardholders offer merchants. On the other side of the market, Amex uses its higher merchant fees to offer its cardholders a more robust rewards program, which is necessary to maintain cardholder loyalty and encourage the level of spending that makes Amex valuable to merchants. That Amex allocates prices between merchants and cardholders differently from Visa and MasterCard is simply not evidence that it wields market power to achieve anticompetitive ends.<sup>239</sup>

However, the challenge in this case was not to AmEx’s overall business model, which we can presume offered cardholders in the aggregate overall value in excess of overall costs. For example, in the *NCAA* case, the challenge was not to the legitimacy of the NCAA or its business model. Rather, it was to the incremental effect of a limitation on each member team’s televised games.<sup>240</sup>

By the same token, the question in *AmEx* was not whether AmEx’s business model requiring higher fees in exchange for larger cardholder benefits was anticompetitive. Rather, it was whether the antisteering rule produced *incremental* harms to competition that were greater than any incremental benefits. The people affected by steering would be those *marginal* customers who would have accepted a steering offer had it been made, as well as those merchants who would have profited by incentivizing a customer to switch to a lower price card.

The Second Circuit had also confused the question of total versus marginal effects: “Because the NDPs affect competition for cardholders as well as merchants, the Plaintiffs’ initial burden was to show that the NDPs made *all* Amex consumers on both sides of the platform—*i.e.*, both merchants and cardholders—worse off overall.”<sup>241</sup> But “all consumers” is clearly wrong. Many

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<sup>239</sup> *Am. Express Co.*, 138 S. Ct. at 2288 (citations omitted).

<sup>240</sup> *NCAA*, 468 U.S. at 99 (“By restraining the quantity of television rights available for sale, the challenged practices create a limitation on output . . . .”); *see also* AREEDA & HOVENKAMP, *supra* note 67, ¶¶ 1502-1504, 1511.

<sup>241</sup> *United States v. Am. Express Co.*, 838 F.3d 179, 205 (2d Cir. 2016), *aff’d sub nom.* *Ohio v. Am. Express Co.*, 138 S. Ct. 2274 (2018). The Second Circuit used the term “nondiscriminatory provisions,” or NDPs, to describe AmEx’s policies “barring merchants from (1) offering customers any discounts or nonmonetary incentives to use credit cards less

customers were not affected at all. For example, the restraint on the number of televised games in the *NCAA* case did not affect those who did not watch any televised games. Rules imposing resale price maintenance affect only discounters that would otherwise charge a lower price. Standard-setting and other boycott rules affect only producers at risk of violating a standard.<sup>242</sup> The marginal cardholders in the *AmEx* case were those who would have switched in response to a steering offer because they valued the switch more than the foregone AmEx perks.

When the government is seeking an injunction against a practice rather than complete destruction of the defendant's business method, then the issue is limited to the competitive effect of that particular rule. Here, the affected customers were those that would have switched to a less costly card but for the anti-steering rule. The value that they placed on the defendant's perks was less than the incremental price to merchants of using the AmEx card.<sup>243</sup>

As the district court observed, other AmEx cardholders would decline the merchant's offer to switch because, for them, the value of the perks was at least as high as the merchant's acceptance fee, or at least as high as that portion of the fee that the merchant offered them for switching.<sup>244</sup> Of course, these cardholders were unaffected by the antisteering rule. Cardholders whose behavior was actually changed by the rule were worse off, thus creating lost value on both sides of the platform.

A factual finding that the Supreme Court did not disturb was that merchants passed on AmEx's higher fees through higher product prices across the board. Because merchants could not price discriminate between customers who used an AmEx card and those who used a cheaper card, these higher prices affected even people who did not use the AmEx card at all.<sup>245</sup> While this factual finding is certainly troubling, it was not necessary to condemn the antisteering rule and is thus something of a red herring. The question is whether consumer effects "at the margin" were harmful, and for this the place to look is those consumers who were affected by it.

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costly for merchants to accept, (2) expressing preferences for any card, or (3) disclosing information about the costs of different cards to merchants who accept them." *Id.* at 184.

<sup>242</sup> See AREEDA & HOVENKAMP, *supra* note 67, ¶ 2231.

<sup>243</sup> See *supra* notes 120-22 and accompanying text.

<sup>244</sup> *United States v. Am. Express Co.*, 88 F. Supp. 3d 143, 220 (E.D.N.Y. 2015) ("[E]ven if a merchant is inclined to steer away from American Express, the cardholder would still have the freedom to use an Amex card if the cardholder decides the rewards offered by American Express are of greater value than the discount, in-kind perk, or other benefit offered by the merchant."), *rev'd on other grounds*, 838 F.3d 179 (2d Cir. 2016), *aff'd sub nom.* *Ohio v. Am. Express Co.*, 138 S. Ct. 2274 (2018).

<sup>245</sup> *Id.* at 208 ("[I]nflated merchant discount rates are passed on to all customers—Amex cardholders and non-cardholders alike—in the form of higher retail prices."); *id.* at 215-18 (discussing how antisteering rules have resulted in higher prices to both merchants and consumers).

#### H. *Competition and “Welcome Acceptance”*

One of the most fundamental principles of economics is that market participants are rational actors, which means that they maximize their profits within the array of choices that they are presented.<sup>246</sup> Given appropriate information, they will make decisions that maximize their own value. In defending the antisteering rule, the Court concluded that a dealer offering a customer a discount for purchasing with an alternative card “undermines the cardholder’s expectation of ‘welcome acceptance’—the promise of a frictionless transaction.”<sup>247</sup> “A lack of welcome acceptance at one merchant makes a cardholder less likely to use Amex at all other merchants.”<sup>248</sup> The Court described this lack of welcome acceptance as an “externality [that] endangers the viability of the entire Amex network.”<sup>249</sup>

It is difficult to come up with a more antimarket rationale than this one. Informing a customer about a cheaper alternative is neither an externality nor an affront to consumer rationality. It is in fact fundamental to the workings of competitive markets. To be sure, telling a consumer about to buy a name brand that the house or generic brand is cheaper might hinder the consumer’s “welcome acceptance” of the name brand—but that is simply the way competition works.

The “welcome acceptance” argument is impossible to harmonize with the premise that consumers make choices in a way that maximizes their own welfare. “Welcome acceptance” in this case apparently meant that the buyer should be prevented from even knowing that a cheaper alternative was available. The Second Circuit had decided that permitting consumers to make informed choices about options was generally desirable but that “welcome acceptance” could be a viable defense on a credit card platform because loss of a sale via steering could have a negative impact on both sides.<sup>250</sup>

Certainly, loss of “welcome acceptance” on one product could undermine a firm’s business model by impairing earnings elsewhere. For example, a consumer induced to buy an electric automobile after a dealer’s comparisons of gasoline and electric vehicles might impact the market for gasoline. The Court seemed to think that providing a consumer with a better deal in a primary good was a bad thing if it had an impact on some secondary good. By contrast, the

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<sup>246</sup> See, e.g., MARTIN KOLMAR, PRINCIPLES OF MICROECONOMICS: AN INTEGRATIVE APPROACH 269-70 (2017).

<sup>247</sup> *Am. Express Co.*, 138 S. Ct. at 2289 (quoting *Am. Express Co.*, 88 F. Supp. 3d at 156).

<sup>248</sup> *Id.*

<sup>249</sup> *Id.*

<sup>250</sup> See *United States v. Am. Express Co.*, 838 F. 3d 179, 191 (2d Cir. 2016) (“Although merchants across various industries regularly try to ‘steer’ their customers toward certain purchasing decisions via strategic product placement, discounts, and other deals, steering within the credit-card industry can be harmful insofar as it interferes with a network’s ability to balance its two-sided net price.”), *aff’d sub nom.* *Ohio v. Am. Express Co.*, 138 S. Ct. 2274 (2018).



district court took the only economically rational view of the situation: “Allowing merchants to actively participate in their customers’ point-of-sale decisions would remove the artificial barrier that now segregates merchant demand from the price of network services . . . .”<sup>251</sup>

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Do *Apple v. Pepper* and *AmEx* signal a new direction among the majority of the Supreme Court, in which fidelity to fundamental economics is no longer important? It may be too early to say, but these two opinions are not very encouraging. The Supreme Court in the 1960s was rightfully accused of torturing economics to any degree necessary to achieve a preconceived result. Today, it seems to be doing a new version of the same thing.<sup>252</sup>

### III. ATTACKING BIGNESS OR PROTECTING CONSUMERS?

Antitrust policy’s leftward tail also suffers from deficiencies in economic reasoning, although very different ones. In their favor, they do a better job than the right does of acknowledging that the United States is experiencing a monopoly problem, reflected in unreasonably high price-cost margins,<sup>253</sup> a declining share of labor participation, and higher concentration.<sup>254</sup> However, some of the proposed solutions are policy misfires, likely to make the problem worse rather than better. These result in large part from lack of careful economic analysis.

The principal goal of antitrust policy under the consumer welfare principle is to facilitate markets that produce maximum output consistent with sustainable competition.<sup>255</sup> High output benefits consumers through lower prices, but it also benefits labor and other input suppliers who have more business as output increases. The proposals addressed here cannot be understood as attempts to achieve this goal. Rather, they are pursuing something else—perhaps size for its

<sup>251</sup> *Am. Express Co.*, 88 F. Supp. 3d at 220-21.

<sup>252</sup> See Hovenkamp & Scott Morton, *supra* note 10, at 1848 (commenting that judicial enforcement of antitrust policy in the mid-twentieth century was “excessively interventionist. Courts often either used no economics or poor economics to make decisions”).

<sup>253</sup> See Carl Shapiro, *Antitrust in a Time of Populism*, 61 INT’L J. INDUS. ORG. 714, 738 (2018).

<sup>254</sup> See, e.g., NANCY L. ROSE, CONCERNS ABOUT CONCENTRATION (2019), <https://economicstrategygroup.org/wp-content/uploads/2019/12/Maintaining-the-Strength-of-American-Capitalism-Concerns-About-Concentration.pdf> [<https://perma.cc/Z9MA-Q8R9>] (summarizing economic data and conclusions regarding concentration); see also GREG JENSEN, ATUL NARAYAN, OLIVER SIMON & LAUREN FORMAN, BRIDGEWATER ASSOCS., PEAK PROFIT MARGINS? A US PERSPECTIVE (2019), <https://www.bridgewater.com/research-library/daily-observations/peak-profit-margins-a-us-perspective/peak-profit-margins-a-us-perspective.pdf>.

<sup>255</sup> On the meaning of this definition, see Herbert Hovenkamp, *Antitrust Harm and Causation*, 99 WASH. U.L. REV. (forthcoming 2021).

own sake, or perhaps a kind of tort theory of harm to rivals. Whatever their true purpose may be, they are not defensible as antitrust policy.

A. *Mergers and Consumer Welfare*

Senators Cory Booker, Richard Blumenthal, Amy Klobuchar, and Edward Markey are cosponsors of merger legislation<sup>256</sup> that is focused far too much on increased concentration or absolute size for its own sake and too little on the threat of consumer harm.<sup>257</sup> Indeed, one portion of the bill would pursue mergers of very large firms simply because they are large, regardless of concentration or predicted impact on prices and even if the firms are not competitors.<sup>258</sup>

Such a bill needs a coherent theory of economic harm, or else explicit recognition that it is giving up on an economic approach to merger law altogether. On the one hand, the link between concentration and high margins is provable.<sup>259</sup> On the other, the link between absolute size and prices is not proven. An economic basis for pursuing conglomerate mergers or other mergers between noncompetitors may exist, but it is not articulated in this bill. One strong possibility, which policy makers need to take more seriously, is large digital

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<sup>256</sup> Consolidation Prevention and Competition Promotion Act of 2019, S. 307, 116th Cong. (2019).

<sup>257</sup> See Hovenkamp & Shapiro, *supra* note 3, at 2021-24.

<sup>258</sup> In a case brought by the United States, the Federal Trade Commission, or a State attorney general, a court shall determine that the effect of an acquisition described in this section may be materially to lessen competition or create a monopoly or a monopsony if—

....

(B)(i) as a result of such acquisition, the acquiring person would hold an aggregate total amount of the voting securities and assets of the acquired person in excess of \$5,000,000,000 (as adjusted and published for each fiscal year beginning after September 30, 2020, . . . to reflect the percentage change in the gross national product for such fiscal year compared to the gross national product for the year ending September 30, 2019); or

(ii)(I) the person acquiring or the person being acquired has assets, net annual sales, or a market capitalization greater than \$100,000,000,000 (as so adjusted and published); and

(II) as a result of such acquisition, the acquiring person would hold an aggregate total amount of the voting securities and assets of the acquired person in excess of \$50,000,000 (as so adjusted and published) . . . .

S. 307, § 3; *see also* Hovenkamp & Shapiro, *supra* note 3, at 2023 (“This provision does not require that the merging firms be competitors or potential competitors, or even in a supplier-customer relationship, provided the size thresholds are met.”).

<sup>259</sup> Hovenkamp & Shapiro, *supra* note 3, at 2001 (discussing presumption that “more concentrated markets tend to have higher prices and higher price-cost margins, all else equal”).

platform acquisitions of small firms, many of which are noncompetitors. These are not singled out in this bill.<sup>260</sup>

Many of the conglomerate merger cases that have actually been litigated involved firms making complementary products. Such mergers can definitely create advantages over rivals. Just as vertical mergers, they eliminate the need for market transactions and much of the coordination that use of the market entails. For example, they can enable purchasers to buy a completed product or a full line.

What a new statute should require, however, is some theory that serves to explain when such mergers can result in reduced output and higher prices. Indeed, the approach taken in the recently released Vertical Merger Guidelines could be extended to at least some conglomerate mergers.<sup>261</sup> No theory of competitive harm is offered in the proposed bill, however, other than the fact that firms are becoming too large. The first and most obvious consequence of mergers of complements is better coordination and reduced costs and, thus, benefits to consumers. As in the case of vertical mergers, condemnation should be the exception rather than the rule, although exceptional cases certainly exist.

Such mergers were occasionally condemned in the 1960s, but largely on indefensible economic theories. In *Federal Trade Commission v. Procter & Gamble Co.*,<sup>262</sup> the Supreme Court condemned a merger between a maker of household cleansers and a maker of household bleach (Clorox). The defendants raised efficiencies as a defense.<sup>263</sup> In this case, the merger enabled the firm to market and advertise a full line of household cleaning and laundry products and to create economies of scale in advertising and purchasing.<sup>264</sup> Speaking for the

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<sup>260</sup> On these acquisitions, see Hovenkamp, *supra* note 176. Another possibility is “portfolio theory,” accepted in one case by the European Commission but not currently accepted in the United States. See Commission Decision on General Electric/Honeywell, 2001 O.J. (L 48) [hereinafter GE/Honeywell]; Götz Drauz, *Unbundling GE/Honeywell: The Assessment of Conglomerate Mergers Under EC Competition Law*, 25 FORDHAM INT’L L.J. 885, 897-901 (2002). For a less favorable assessment, see Eric S. Hochstadt, *The Brown Shoe of European Union Competition Law*, 24 CARDOZO L. REV. 287, 390 (2002) (suggesting that the GE/Honeywell decision was motivated by EU’s concern for protecting competitors generally). Another possibility is some variation of the “potential competition” doctrines, which do not reach all conglomerates but only those that eliminate the opportunities for potential competition. In any event, those theories have not been applied in the United States for decades. See AREEDA & HOVENKAMP, *supra* note 67, ¶¶ 1121-1135 (assessing “perceived potential entrant” doctrine and “actual potential entrant” doctrine).

<sup>261</sup> U.S. DOJ & FTC, *supra* note 159, § 1 (outlining “the principal analytical techniques, practices, and enforcement policies of the Department of Justice and the Federal Trade Commission . . . with respect to a range of transactions often described as vertical mergers and acquisitions”).

<sup>262</sup> 386 U.S. 568 (1967).

<sup>263</sup> *Id.* at 574 (explaining that defendant chose to acquire Clorox because of benefit to both companies relative to sales, distribution, manufacturing, and marketing efforts).

<sup>264</sup> See *id.* at 599-601 (Harlan, J., concurring).

majority, Justice Douglas did not reject the factual basis for these claims. Rather, the Court held that “[p]ossible economies cannot be used as a defense to illegality.”<sup>265</sup> The Court did not really condemn the merger because it created these efficiencies but rather held that if the merger appeared anticompetitive on other grounds (in this case, the elimination of potential competition) then Procter & Gamble could not raise efficiency as a defense.<sup>266</sup>

In *Allis-Chalmers Manufacturing Co. v. White Consolidated Industries, Inc.*,<sup>267</sup> another merger of complements, the Third Circuit went further. It condemned the merger of a firm that made steel rolling mills and a firm that made the electric wiring installations for such mills. A complete installation required one mill plus one wiring harness, so the two entities were perfect complements. The court offered the theory that the merger would create “the only company capable of designing, producing and installing a complete metal rolling mill,” and this “would raise higher the already significant barriers to the entry of others” into the market.<sup>268</sup> That analysis effectively made competitors the beneficiaries and consumers the victims of merger policy.

#### B. *Segregating Platform Sales*

A proposal endorsed by Senator Elizabeth Warren during her presidential campaign was focused less on mergers and more on dominant firms—in particular, the large digital platforms. She proposed that large Internet sellers, such as Amazon, be prevented from selling both their own products and those of competing sellers on the same platform.<sup>269</sup> More thought should have been given to the impact of such a policy on competition or consumers or, for that matter, even to identifying who is injured when a firm such as Amazon sells

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<sup>265</sup> *Id.* at 580.

<sup>266</sup> *Id.* at 578-80 (concluding that the merger was fraught with illegally anticompetitive effects).

<sup>267</sup> 414 F.2d 506 (3d Cir. 1969).

<sup>268</sup> *Id.* at 518. GE/Honeywell, *supra* note 260, reached a somewhat similar conclusion in the EU.

<sup>269</sup> See 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/DM3U-69SW>] (suggesting breaking up large entities in tech sector and passing “legislation that requires large tech platforms to be designated as ‘Platform Utilities’ and broken apart from any participant on that platform”). This also appears to be an element in an antitrust case that the EU Competition Authority recently brought against Google, although at this time it is not clear that the EU will insist on separation of in-house and third-party sales. Rather, the press release makes the weaker statement that “[d]ata on the activity of third party sellers should not be used to the benefit of Amazon when it acts as a competitor to these sellers.” See European Commission Press Release IP/20/2077, Antitrust: Commission Sends Statement of Objections to Amazon for the Use of Non-Public Independent Seller Data and Opens Second Investigation into its E-Commerce Business Practices (Nov. 10, 2020).

both its own house brands and the brands of rivals in close comparison on the same site.

Many of the brands that compete with Amazon's own brands are sold by large firms, and often at margins that are significantly higher than Amazon's margins. For example, Amazon sells its own AmazonBasics batteries in competition with brands that include Delco, Duracell, Energizer, and Rayovac. It sells AmazonBasics toasters in competition with Black & Decker, Hamilton Beach, and KitchenAid (owned by Whirlpool). It sells AmazonBasics plastic storage containers in competition with brands that include Anchor Hooking, Glad, and Rubbermaid. AmazonBasics office supplies sell in competition with 3M, whose competing products include Post-It notes and Scotch Tape.

Forcibly separating Amazon's brands from the offerings of these companies will almost certainly reduce downward pricing pressure on these national name brands, resulting in higher prices for consumers. Few small firms will be benefitted. Most of the benefits will accrue to companies like 3M (the largest maker of office supplies in the United States), Berkshire Hathaway (who owns Duracell), Black & Decker (America's largest manufacturer of small appliances and power tools), or Samsonite (the world's largest luggage manufacturer, which competes with AmazonBasics luggage).

At the same time, under the Warren proposal, Amazon could sell AmazonBasics or its other store brands only on a separate website. If it chose to do so, there would of course be less competitive pressure on their prices as well. As a result, prices on both the third-party website and the Amazon products website would rise. Of course, each platform would be smaller to the extent that it would not carry the products on the other platform.

I doubt very much that Senator Warren is consciously pursuing a policy of enriching Berkshire-Hathaway, Black & Decker, or 3M at the expense of consumers. More likely, her advisors were so fixated on the rhetoric of bigness that they never sat down to figure out who was getting harmed or benefitted by this proposal.

To be sure, some small sellers would fare better if Amazon's website did not offer their goods in competition with Amazon brands. Senator Warren's proposal would have affected, as an example, a laptop computer stand sold on Amazon by Rain Design, a relatively small firm, at a price that hovers between \$40 and \$43.<sup>270</sup> Amazon offers its own, somewhat different rival stand at about half that price, \$19.99.<sup>271</sup> Several other companies offer similar stands on

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<sup>270</sup> See Spencer Soper, *Got a Hot Seller on Amazon? Prepare for E-Tailer to Make One Too*, BLOOMBERG (Apr. 20, 2016, 7:00 AM), <https://www.bloomberg.com/news/articles/2016-04-20/got-a-hot-seller-on-amazon-prepare-for-e-tailer-to-make-one-too> (discussing the effect of AmazonBasics products on companies like Rain Design); *Rain Design 10032 mStand Laptop Stand, Silver (Patented)*, AMAZON, [https://smile.amazon.com/Rain-Design-mStand-Laptop-Patented/dp/B000OOYECC/ref=sr\\_1\\_1?keywords=rain+design+laptop+stand&qid=1577046924&sr=8-1](https://smile.amazon.com/Rain-Design-mStand-Laptop-Patented/dp/B000OOYECC/ref=sr_1_1?keywords=rain+design+laptop+stand&qid=1577046924&sr=8-1) (last visited Feb. 15, 2021).

<sup>271</sup> *AmazonBasics Laptop Desk Stand for PC and Macbook - Silver*, AMAZON, <https://smile.amazon.com/AmazonBasics-DSN-01750-SL-Laptop-Stand-Silver/dp/B00WR>

Amazon, most of them cheaper than the Rain Design stand. A search for “adjustable laptop stand” reveals more than twenty similar, though distinguishable, products ranging in price from roughly \$19 to roughly \$45. Rain Design is near the top of that range and the AmazonBasics product near the bottom. While the products perform the same general function, they are differentiated, which means that different customers might value one over the other.

Several things are wrong with this proposal. First, there is no evidence indicating whether the most likely competitors of Amazon’s store brands are small firms, like Rain Design, or much larger firms, like Berkshire-Hathaway, Samsonite, or 3M. There does not appear to be a good study on the issue. However, basic economics suggest that Amazon will introduce its own house brands in areas that offer promising opportunities for entry and profit. These would be markets characterized by a large sales volume and high margins in relation to the entry investment. The promises of high volume and a high markup on existing products are common inducements to entry. Further, the market for household batteries or consumer luggage is undoubtedly many times larger than the market for laptop stands.

Second, no claim is made that the AmazonBasics’s laptop stand infringes upon a utility patent, a design patent, or any other IP right owned by Rain Design.<sup>272</sup> Before we can declare as “unfair” one firm’s design of a lower cost (or lower margin) product, we must have some criterion of fairness.<sup>273</sup> In this case, protecting consumers from high prices does not appear to be one of them, but protecting a seller’s high margins from rivals willing to sell a noninfringing product for less apparently is.

Suppose we forced Amazon to discontinue sales of either the Rain Design stand or the AmazonBasics stand. Amazon would almost certainly dump Rain Design. The principal impact would be that Rain Design could no longer sell its stand on the Amazon website. No one seems to have thought about that. Indeed, it replays an error that antitrust well-wishers have committed time and time again. In an effort to protect small businesses, the courts fashioned harsh rules

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DS0AU/ref=sr\_1\_11?keywords=rain+design+laptop+stand&qid=1577047065&sr=8-11 (last visited Feb. 15, 2021).

<sup>272</sup> The Amazon entry for the Rain Design stand indicates that it is patented but does not claim infringement against Amazon. However, Rain Design has sued another firm for trademark, trade dress, copyright, and patent infringement of a product identified as a laptop stand. See *Rain Design, Inc. v. Spinido, Inc.*, No. 17-cv-03681, 2018 WL 4904894, at \*3 (N.D. Cal. Oct. 9, 2018) (dismissing complaint on jurisdictional grounds). For more details, see generally Memorandum of Points and Authorities in Support of Motion for Default Judgment, *Rain Design, Inc.*, 2018 WL 7138290 (No.17-cv-03681).

<sup>273</sup> Cf. *Fashion Originators’ Guild of Am., Inc. v. FTC*, 312 U.S. 457, 464 (1941) (condemning effort by fashion manufacturers to create their own IP system and enforce it via store boycotts).

condemning such practices as exclusive dealing<sup>274</sup> or maximum resale price maintenance<sup>275</sup> where no injury to competition was in sight. The effect of these antitrust rules was to make dealing with independent small firms so costly that the larger businesses opted instead not to deal with them at all. The result was to make life even more difficult for the small businesses that the courts intended to protect.

Amazon's practice of selling both its own products and those of rivals in close juxtaposition almost certainly benefits consumers by permitting close price comparisons. When Amazon introduces a product such as AmazonBasics AAA batteries in competition with Duracell, prices will go down. There is no evidence to suggest that the practice is so prone to abuse or so likely to harm consumers in other ways that it should be categorically condemned. Rather, it is an act of partial vertical integration similar to other practices that the antitrust laws have confronted and allowed in the past. One close analogy is dual distribution, which occurs when a firm sells through both independent franchisees and its wholly owned stores.<sup>276</sup> Such practices nearly always increase output, benefitting consumers and typically even independent competing firms.

An important lesson from the history of antitrust enforcement is that one must always consider how a firm will respond to an antitrust decree. For example, telling a firm such as Amazon that it may no longer sell its own AmazonBasics toaster on its website in competition with toasters made by Black & Decker, Cuisinart, or Sunbeam requires Amazon to choose among several options: it might (1) produce a second website, offering its own products on one and products sold by third-party vendors on the other; (2) exit from the market for its own brands and sell only the brands of other firms; or (3) do just the opposite, terminating its sales arrangements with third-party firms and selling only its house brands. Amazon would take the most profitable course. Option (1) would benefit the outside sellers because they would no longer have to compete with Amazon on the same website. Option (2) would also clearly benefit the outside sellers because they would not have to compete with Amazon at all. Option (3) would harm the outside sellers because they could no longer sell on any Amazon website. *None* of these options benefits consumers. Output is likely to go down

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<sup>274</sup> See *Standard Oil Co. of Cal. v. United States*, 337 U.S. 293, 319-20 (1949) (Douglas, J.) (objecting that condemning exclusive dealing under aggressive standard would force refiners to build their own gasoline stations and cease dealing with independents); see also Herbert Hovenkamp, *The Law of Vertical Integration and the Business Firm: 1880-1960*, 95 IOWA L. REV. 863, 884 (2010) (agreeing with *Standard Oil* dissent and stating that "legal policy often had the perverse effect of destroying the very small businesses it was intended to protect").

<sup>275</sup> *Albrecht v. Herald Co.*, 390 U.S. 145, 153 (1968) (condemning newspaper's limits on prices charged by delivery agents); see also Hovenkamp, *supra* note 274, at 907 ("*Albrecht* virtually guaranteed that large numbers of manufacturers would simply stop using independent dealer networks and switch to ownership vertical integration.>").

<sup>276</sup> See HOVENKAMP, FEDERAL ANTITRUST POLICY, *supra* note 3, § 11.6e.

and prices up under all of them, for each reduces the amount of competition between Amazon and outside vendors.

Antitrust under the consumer welfare standard would find all of these options, if forced by a court decree, unacceptable. Under a different standard, such as protecting third-party businesses, different outcomes would affect them in different ways. Here, it is important to keep in mind that most of these businesses are not small, although they are smaller than Amazon. Second, we would not know how small businesses would be affected unless we could predict which of these options Amazon would choose.<sup>277</sup> That is very likely a problem in predicting Amazon's profit-maximizing option or options. For that, economics would be essential no matter what our underlying goal.

Finally, while no good case can be made for structural separation of inside and outside sales, agreements that involve third-party vendors are still subject to Section 1 of the Sherman Act and, in some cases, Sections 3 and 7 of the Clayton Act. Here the antitrust laws can exercise essential control. Practices such as exclusive dealing, loyalty discounts, or most favored nations are remediable, as are anticompetitive acquisitions, but only provided that they are shown to cause reduced output, higher prices, or some other consumer harm. Lawsuits filed in late 2020 against Google and Facebook by federal and state antitrust enforcers allege a variety of these.<sup>278</sup> Misuses of information provided by third-party sellers might also be actionable, under either competition or consumer protection standards. The result in nearly all cases finding an antitrust violation would be an injunction. These solutions are less dramatic but likely to be much more effective.<sup>279</sup>

#### CONCLUSION

When used correctly and without excessive ideology, economics is a powerful, neutral tool for assessing injuries to competition and identifying appropriate fixes. Indeed, that is the first and best use of antitrust economics. It does not always require difficult mathematics or highly technical analysis but sometimes just informed common sense about how markets work and who is affected by policy changes. As described above, both the right and the left have ignored the first rule of rational antitrust policy: figure out who is getting hurt, and how. Fundamental to this inquiry is proper segregation of questions of fact

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<sup>277</sup> For a discussion of various options, see Patrick F. Todd, *Digital Platforms and the Leverage Problem*, 98 NEB. L. REV. 486, 491 (2019) (“[A]ll three of these proposals, to varying degrees, would abandon the interests of consumers in favor of less efficient small businesses, at the expense of consumer welfare.”).

<sup>278</sup> See generally Hovenkamp, *Antitrust and Platform Monopoly*, *supra* note 176.

<sup>279</sup> Another possibility is restructuring Amazon's decision-making so as to make it collaborative among stakeholders and thus reachable under Section 1 of the Sherman Act. For such a proposal, see Hovenkamp, *Antitrust and Platform Monopoly*, *supra* note 176 (manuscript at 78).



from questions of law or policy. The latter is too often just ideology by another name.

Neither the majority nor the dissenting opinions in *Apple v. Pepper* paid much attention to the factual question of who is harmed as an injury is passed along from a cartel or monopolist to its successive purchasers. The majority in *AmEx* seemed so taken with two-sided markets, the latest shiny object among market theories, that it abandoned careful market analysis in order to assess harms and benefits. The progressive proposals for mergers and platform separation fare no better. Proposals like the one calling for the separation of platforms and third-party markets seem calculated to harm precisely the people they are intended to benefit.