

THE SLOGANS AND GOALS OF ANTITRUST LAW

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Three popular attempts to define the purpose of antitrust are the idea that it should be concerned with “bigness,” the somewhat more technical idea that its fundamental concern is the “competitive process,” and the currently dominant concern that it should promote some conception of welfare, most commonly termed “consumer welfare.”

“Bigness” as an antitrust concern, traditionally promoted by populists, targets firms based on absolute size rather than share of a market, as antitrust traditionally has done. The bigness approach entails that antitrust cannot be concerned about low prices, or the welfare of consumers and labor. Nondominant firms could not sustain very high prices or cause significant reductions in market output. Concerns about bigness as such almost always translate into protection of small business, or of firms dedicated to older distribution methods or technologies. These firms can be injured by even nondominant rivals who have lower costs or more innovative supply.

The most important advantage of an antitrust policy of protecting the “competitive process” is the phrase’s rhetorical appeal. It invokes a classical liberal bias that sees process rather than substance as the key to good public decision making. However, classical liberalism reaches that point by beginning with a few bedrock substantive starting points, including protection of contract, property rights, and due process. No equivalent bedrock exists for the “competitive process.” As a result, people from the right and the left embrace it, and it cannot produce useful tools for decision making about competition issues. It operates as a slogan, not a goal.

The history of antitrust welfare tests is rooted in neoclassical economics. Today, it is reflected in a “welfare tradeoff” model developed in the 1960s and later named “consumer welfare.” This model is often justified as mandated by antitrust’s statutory language and legislative history. The case law never mentioned consumer welfare as an antitrust concern prior to the late 1970s, however. Rather, it has been explicit from the start that antitrust’s concern is protection from reduced market output and, concurrently, higher prices. Robert Bork did these tests severe damage by finding an increase in “consumer welfare” even from conduct that reduced output significantly and increased prices. The confusion that ensued has corrupted the debate over antitrust goals ever since. It explains at least part of the reason that so many people today regard consumer welfare tests as toothless, identified with higher margins and prices, and lack of competitiveness.

While many speak of “consumer welfare” as an antitrust goal, “welfare” is rarely what they measure. Rather, they estimate changes in output or changes in price. The best statement of a “welfare” test for antitrust is a

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*policy of encouraging markets to produce maximum sustainable output.
“Output” can be measured by quantity, quality, or unrestrained innovation.*

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INTRODUCTION

The U.S. antitrust laws never provide precise definitions of the conduct they prohibit, such as driving at more than 70 miles per hour or paying taxes later than an April 15 deadline. Instead, litigants, agencies, and courts struggle with language that is far less precise, including conduct that “restrains trade,” “monopolizes,” or “substantially lessens competition.”¹ The EU antitrust laws are only slightly

1. 15 U.S.C. §§ 1, 2, 13, 14, 18.

more explicit. While Article 101 of the Treaty on the Functioning of the European Union (TFEU) prohibits several specific types of agreements, these prohibitions are stated in ways that leave broad room for interpretation.² The elaboration of “abuse . . . of a dominant position” in Article 102 is more explicit than section 2 of the Sherman Act but is still ambiguous.³ These ambiguities have broadened the range of the debate over the purpose of the antitrust laws.

Considering U.S. antitrust law, over the years, the courts, enforcement agencies, and others have attempted to provide direction through brief expressions of purpose. One purpose that is promoted by populists on antitrust’s left is the idea that antitrust should be opposed to “bigness.” A second, advocated by people of more diverse ideologies, is that antitrust’s purpose is the “protection of the competitive process.”

A third set of approaches ties antitrust policy to some conception of welfare. An advantage to these approaches is that they are driven by the general economics of welfare, which emphasize competitive markets, productivity, growth, and innovation, as well as broad opportunities for consumer choice and labor. They have the disadvantage of a long history of dispute about meaning and measurement. Also troublesome is the fact that neither the antitrust statutes nor their legislative history ever speak of “welfare.” For nearly a century antitrust case law made almost no mention of economic “welfare” of any kind. The term “consumer welfare” has been widely used since the 1980s, but often criticized as a way of applying welfare concerns to competition policy. That term has two definitions, which can embrace very different ap-

2. Consolidated Version of the Treaty on the Functioning of the European Union art. 101, May 9, 2008, 2008 O.J. (C 115) 47 [hereinafter TFEU], <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX%3A12008E101%3AEN%3AHTML>.

3. *Id.* art. 102, prohibiting:

Any abuse by one or more undertakings of a dominant position within the internal market or in a substantial part of it shall be prohibited as incompatible with the internal market in so far as it may affect trade between Member States.

Such abuse may, in particular, consist in:

- (a) directly or indirectly imposing unfair purchase or selling prices or other unfair trading conditions;
- (b) limiting production, markets or technical development to the prejudice of consumers;
- (c) applying dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage;
- (d) making the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts.

proaches to antitrust policy.⁴ Most of the objections to the consumer welfare approaches very likely stem from a failure to appreciate the differences between the two definitions.

The antitrust statutes themselves never speak of bigness, the competitive process, or welfare of any kind. Nor did any of the antitrust decisions interpreting them prior to the mid-1970s.⁵ In that sense, these statements of antitrust goals are completely nonstatutory. On the other hand, many antitrust decisions dating back to when the Sherman Act was passed identified antitrust violations in terms of restraints on output or price.⁶ Although the number of decisions that discuss “consumer welfare” as an antitrust goal have increased since the 1980s, the courts never actually attempt to measure welfare. What they almost always assess are facts about changes in output or changes in price.⁷

Output Restriction and the Early Sherman Act

Early antitrust decisions wrestled with how to identify the harm caused by an antitrust violation. Their main source was the common law,⁸ where the term “restraint of trade” expressed in section 1 of the Sherman Act applied to restrictions on the volume of output or trade.⁹ This formulation preceded any coherent conception of the idea of “welfare” in modern economics, which is largely a creature of the 1920s and 1930s.¹⁰ By contrast, the term “monopolize” in section 2 did not have a well-developed meaning in 1890. Historically it referred to exclusive grants from the government, including patents.¹¹

4. See *infra*, Section IV.

5. The federal courts used the term “consumer welfare” in two antitrust cases in the 1970s. *Reiter v. Sonotone Corp.*, 442 U.S. 330, 343 (1979) (using the term to justify granting antitrust damages actions to consumers); *United States v. Citizens & S. Nat. Bank*, 422 U.S. 86, 131 n. 1 (1975) (Brennan, J., dissenting) (describing banking joint venture as enhancing consumer welfare; not associating the term with Robert Bork).

6. See Herbert Hovenkamp, *The Antitrust Text*, IND. L.J. (2023) (forthcoming), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4277914.

7. *Id.*

8. Early antitrust scholarship emphasized this point. *E.g.*, Herbert J. Friedman, *The Trust Problem in the Light of Some Recent Decisions*, 24 YALE L.J. 488, 494 (1915) (“the courts have held again and again that the Sherman Act merely gave expression to the English common law relating to monopolies and restraint of trade”); accord Charles Grove Haines, *Efforts to Define Unfair Competition*, 29 YALE L.J. 1 (1919); Albert M. Kales, *Good and Bad Trusts*, 30 HARV. L. REV. 830 (1917).

9. 15 U.S.C. § 1. See Hovenkamp, *supra* note 6.

10. See, *e.g.*, ARTHUR C. PIGOU, *THE ECONOMICS OF WELFARE* (4th ed. 1932); see also J. R. Hicks, *The Scope and Status of Welfare Economics*, 27 OXFORD ECON. PAPERS 307 (1975) (arguing that Pigou was originator of modern welfare economics, although conceding that a case can be made for Pareto, who wrote earlier).

11. See Hovenkamp, *supra* note 6.

Early antitrust decisions adopted the “restrain trade” formulation for both sections of the Sherman Act. Antitrust violations were defined with such definitions as “restrict output” or “restrict production,” often relating restricted output to higher prices. Not only were the two sections of the Sherman Act interpreted so as to be consistent,¹² but so was state antitrust law.¹³

The Republican Platform under which Theodore Roosevelt was elected President in 1900 advocated increased antitrust enforcement against conspiracies to “limit production” and “control prices.”¹⁴ To “monopolize,” as section 2 of the Sherman Act forbids, was a clear reference to an economic conception associated with higher prices and, accordingly, reduced output.¹⁵ Article 102 of The European Union’s TFEU also refers to abuse of a dominant position as “limiting production. . . .”¹⁶

12. *See, e.g.*, *Nelson v. United States*, 201 U.S. 92, 100 (1906) (government indictment under both sections for conspiracy “which restricts the output of the mills, fixes the prices of their products”); *Alexander v. United States*, 201 U.S. 117, 118–19 (1906) (indictment under both sections against a trust for conspiracy “to control and restrict the output of the mills, fix the price of their products”); *Addyston Pipe & Steel Co. v. United States*, 175 U.S. 211, 236 (1899) (explaining how cartel “by controlling two thirds of the output” in the covered territory were “practically able to fix prices”; indictment under both sections); *United States v. Standard Oil Co.*, 173 F. 177 (E.D. Mo. 1909) (challenging contracts under both sections that “limited the production, output, and markets”), *aff’d*, 221 U.S. 1 (1911); *United States v. U.S. Steel Corp.*, 223 F. 55, 61 (D.N.J. 1915), *aff’d*, 25 U.S. 417 (1920) (both sections: “restricting output in order to exact unfair prices”). Numerous decisions are discussed in Hovenkamp, *supra* note 6.

13. *See, e.g.*, *State v. Ark. Lumber Co.*, 260 Mo. 212, 169 S.W. 145, 174 (1913) (applying the Missouri antitrust law “intent to fix the price and limit the output of lumber. . . .”); *State v. Duluth Bd. Of Trade*, 107 Minn. 506, 533-534 (1909) (applying the Minnesota Antitrust Act: “agreeing upon prices to be adopted by all, and restraining the output or quantity of meat shipped”); *Chicago Wall Paper Mills v. General Paper Co.*, 147 F. 491 (7th Cir. 1906) (applying Illinois’ state antitrust law as making it unlawful to “prevent, restrict or diminish the manufacture or output of any such article” (quoting 1891 Ill. Laws 206)).

14. The 1900 Republican party platform stated:

“[W]e condemn all conspiracies and combinations intended to restrict business, to create monopolies, to limit production, or to control prices, and favor such legislation as will effectively restrain and prevent all such abuses, protect and promote competition, and secure the rights of producers, laborers, and all who are engaged in industry and commerce.”

THOMAS HUDSON MCKEE, NATIONAL CONVENTIONS AND PLATFORMS 342–43 (4th ed. 1901). The Democrat Platform would simply condemn “private monopolies” that “control the price of all material.” DEMOCRATIC PARTY PLATFORM OF 1900 (1900), *archived at* <https://www.presidency.ucsb.edu/documents/1900-democratic-party-platform>.

15. 15 U.S.C. § 2; *see also* Herbert Hovenkamp, *Monopolizing Digital Commerce*, 64 WM. & MARY L. REV. 1677, 1689 (2023).

16. *See* TFEU art. 102, *supra* note 2.

Notwithstanding the overwhelming Progressive influence that guided passage of the Clayton Act in 1914, its substantive provisions also use similar and unambiguously economic terms. Further, nothing suggests a shift in focus away from output reductions and higher prices. The Clayton Act provisions condemn price differences, tying, exclusive dealing and mergers, but only when their effects may be to “substantially to lessen competition,” or “tend to create a monopoly.”¹⁷ The Robinson-Patman Act’s deviating terminology, which permitted a violation upon proof of an injury to a particular competitor, was not enacted until 1936.¹⁸

Most statements of antitrust’s purpose are economic, consistent with the language of the statutes. Alternatives that express non-economic goals for antitrust, such as justice or fairness, have been promoted since the antitrust statutes were passed, but they are not reflected in the statutes and have never claimed broad consensus.¹⁹ They invariably fall apart when forced to make specific rules. These alternatives usually boil down to some form of small business protectionism, often based on nostalgia for a time gone by when the economy was governed by smaller firms with less organized distribution systems or more primitive technology. They also reflect the significant power of trade associations and other organizations that support these groups.²⁰

Evaluating Antitrust Law’s Purposes, Slogans, and Goals

In order to have value, a statement of purpose must add some meaning to the language that is already in the statutes. For example, does “consumer welfare” add any substance to Sherman Act section 1’s condemnation of contracts that “restrain trade”? Or does the phrase “protection of the competitive process” add much to determining whether particular conduct “monopolizes” or “lessens competi-

17. See 15 U.S.C. §§ 13 (predatory price discrimination), 14 (tying and exclusive dealing), 18 (mergers).

18. 15 U.S.C. § 13(a) (2018). On the Robinson-Patman Act, see *infra*, notes 151–69 and accompanying text.

19. See Herbert Hovenkamp, *The Invention of Antitrust*, 95 S. CAL. L. REV. (forthcoming 2022). For a forceful defense of the position that antitrust should incorporate non-economic goals, see Robert Pitofsky, *The Political Content of Antitrust*, 127 U. PA. L. REV. 1051 (1979). For a recent attempt, see Sanjukta Paul, *Recovering the Moral Economy Foundations of the Sherman Act*, 131 YALE L.J. 175 (2021).

20. See *infra*, notes 193–207 and accompanying text. See also Herbert Hovenkamp, *Are Monopolists or Cartels the True Source of Anticompetitive US Political Power*, PROMARKET (Aug. 3, 2022), <https://www.promarket.org/2022/08/03/are-monopolists-or-cartels-the-true-source-of-anticompetitive-us-political-power/> [https://perma.cc/JN55-RUXE].

tion”? Here, welfare approaches are likely the most useful because of their economic definitions of competition, monopoly, and growth, as well as their use of economic tools to interpret evidence.

Opposition to “bigness,” “protection of the competitive process,” and “consumer welfare” can also be described as either slogans or goals. Slogans are intended to produce broad assent, even among people who might disagree strongly about specific rules or outcomes. As a statement of principle, a successful slogan is pleasing to hear and difficult to dispute. In the abstract, who can disagree with the idea that antitrust should protect the “competitive process”? “Protection of the competitive process” is a slogan, not a goal.

While slogans can produce widespread assent, they have the disadvantage that they do not identify the conduct that they condemn. Indeed, that is why they can claim such broad consensus. In contrast to slogans, the term “goal” implies an identifiable target, such as a soccer goalpost or a basketball hoop. Goals are less likely to claim broad assent. Once a particular goal is accepted, however, it produces more consensus around a particular outcome. This is not to say that goals are easy to measure, and often they are not. Rather, a goal creates a common set of criteria for measurement. It does not remove every dispute about whether a particular player actually scored.

This paper evaluates the most commonly used expressions about the purpose of antitrust law. The first, control of “bigness,” does not result from statutory interpretation and has never been a declared goal in antitrust legislation or judicial decision making. The Supreme Court has repeatedly rejected it as an antitrust goal.²¹ The second, “protection of the competitive process,” is almost always used as a slogan. While it has rhetorical appeal, no one has yet figured out how it should be applied as a decisional tool. Finally, the idea that antitrust should be concerned with some conception of welfare very likely remains dominant as an articulation of antitrust’s goals, even though ideological abuse and definitional problems have threatened its effectiveness.

I.

“BIGNESS”

A. *Absolute Size as a Target of Antitrust*

While it has never obtained traction in the legal literature, the idea that antitrust should be concerned with corporate “bigness” has

21. See *infra*, note 47 and accompanying text.

been popular with the public since the antitrust movement began and continues to be so.²² It also has the populist rhetorical advantage that it avoids the need for more refined assessment and can make expertise unnecessary. For example, determining whether a firm's product dominates a properly defined relevant market or has market power can be a quite technical exercise. Determining whether a firm is "big" need not be.

Indeed, competition policy's critically important distinction between "horizontal" and "vertical" effects is unimportant if we focus exclusively on bigness. A well-established principle of competition policy is that horizontal arrangements (i.e., mergers, cartels) threaten competition most directly by eliminating competition among the participants and increasing the effective market share of the organization. By contrast, vertical arrangements do not eliminate competition between participants and do not directly increase anyone's market share. Further, the case for efficiencies from vertical practices is stronger than for horizontal practices.²³ As a result, the case for evidentiary shortcuts, such as antitrust's per se rule,²⁴ is much weaker for vertical restraints.²⁵

If our only concern were "bigness," or absolute size, the direction of the arrangement would not matter. A horizontal acquisition of a \$10 billion asset makes a firm larger by the same amount as a vertical acquisition of a \$10 billion asset. To be sure, both can be anticompetitive, but that occurs much less frequently for vertical acquisitions.

Making "bigness" itself the evil often ignores many characteristics of large firms that are beneficial and even essential to the economy and society. In this sense, "bigness" operates in populist antitrust rhetoric much like the word "immigrant" does in right-wing populist political rhetoric,²⁶ using a single term to mask a complex phenomenon. The anti-immigrant rhetoric ignores the fact that we are a nation of immigrants, that they have always been central to American eco-

22. See, e.g., FRANK NORRIS, *THE OCTOPUS: A STORY OF CALIFORNIA* (1901); TIM WU, *THE CURSE OF BIGNESS: ANTITRUST LAW IN THE NEW GILDED AGE* (2018).

23. On the important differences between horizontal agreements, see HERBERT HOVENKAMP, *FEDERAL ANTITRUST POLICY: THE LAW OF COMPETITION AND ITS PRACTICE* (6th ed. 2020), Ch. 4 (horizontal), Ch. 9 (vertical).

24. The per se rule condemns practices without requiring proof of market power, or significant evidence of anticompetitive effects. See PHILLIP E. AREEDA & HERBERT HOVENKAMP, *ANTITRUST LAW* ¶1509 (5th ed. 2023) (forthcoming).

25. See, e.g., *NYNEX Corp. v. Discon, Inc.*, 525 U.S. 128 (1998) (purely vertical agreements must be treated under the rule of reason).

26. See, e.g., Laura Finley & Luigi Esposito, *The Immigrant as Bogeyman: Examining Donald Trump and the Right's Anti-immigrant Anti-PC Rhetoric*, 44 *HUMAN. & Soc'Y* 178, 178 (2020).

conomic and social development and diversity, and that new immigration is essential to economic growth. In the same way, the large business firm has been a significant driver of American economic growth, innovation, variety, opportunity, and consumer welfare. There is no “curse” of bigness any more than there is a curse of immigrants. Nevertheless, both have the rhetorical capacity to arouse certain interest groups.

While pre-Sherman Act history is filled with rhetoric about “monopoly,” as a legal term it did not refer to firms of large size, but rather to exclusive grants or privileges. The 1623 British Statute of Monopolies, often identified as the source of British anti-monopoly law, did not identify its targets by size. Rather, it condemned commissions, grants, licenses, charters, and letters patent that conferred exclusive rights.²⁷ In the original British Case of Monopolies which eventuated in passage of the British Act,²⁸ the putative monopolist was Edward Darcy. He was a groom in Queen Elizabeth’s privy chamber, which was a higher level servant in the Queen’s attendance. He received an exclusive grant from the Queen to import playing cards from France, for which he paid 100 Marks annually (roughly \$26,000 today).²⁹ At bottom, the case implicated a dispute between the Crown and Parliament over what Parliament believed to be the Crown’s promiscuous grants of exclusive privileges.

Pre-Sherman Act common law in both England and America did the same, referencing products that enjoyed a state-granted exclusive right as monopolies—not large firms. Many of the pre-Sherman Act decisions discussing “monopoly” were in reference to small structures, such as a single toll bridge that may or may not have had a monopoly right.³⁰ Even the “monopoly” conferred by a patent was often small.³¹

27. Statute of Monopolies 1623, 21 Jac 1 c. 3 § I (Eng.).

28. Darcy v. Allein, 77 Eng. Rep. 1260 (1602). See Sidney T. Miller, *The Case of the Monopolies: Some of its Results and Suggestions*, 6 MICH. L. REV. 1 (1907).

29. Miller, *supra* note 28, at 4. A Mark was roughly two-thirds of a pound, and a pound in Elizabeth’s time was roughly \$400; so the price of the grant was roughly \$26,000 in today’s dollars.

30. The most well-known was *Proprietors of the Charles River Bridge v. The Proprietors of the Warren Bridge*, 36 U.S. 420 (1837), which considered whether a grant of a charter for a toll bridge across the Charles River from Boston to Cambridge implied a monopoly provision when none was stated in the grant. The majority, speaking through Chief Justice Taney concluded that in “grants by the public, nothing passes by implication.” The company in question apparently owned only the one particular bridge. See Reporter’s note, *id.* at 420, and the Chief Justice’s opinion, *id.* at 536–37; see also *Huse v. Glover*, 119 U.S. 543 (1886) (exclusive right to erect a dam and charge a toll for passage through its locks not an unlawful monopoly); *Wright v. Nagle*, 101 U.S. 791 (1879) (contract clause did not prohibit state, which had previously granted a monopoly to a toll bridge company, from chartering a second bridge).

In any event, the patent “monopoly” applies to a particular product or process, saying nothing about the size of the firm who owns it.

Nevertheless, fear of “bigness” is deeply rooted in antitrust’s popular history. For example, Progressive novelist Frank Norris presented a fictional California railroad as an “Octopus” in his 1901 novel of that title, with tentacles strangling many aspects of California agriculture and politics.³² Ida Tarbell referenced the same metaphor in her 1904 *History of the Standard Oil Company*.³³ That same year, *Puck* magazine printed its famous Standard Oil Octopus cartoon, entitled “Next,” depicting the Standard Octopus’s ominous and ever-expanding dominance over American institutions, encircling even the Capital.³⁴



The octopus metaphor was brilliant. It identified large firm size as a menace, but also illustrated the monster’s ominous expansion into secondary markets and its control in all places where power could be maliciously exerted. The operational and sentient core was the octopus’ body, while the mindless tentacles became its virtually unlimited

31. See, e.g., *Adams v. Burke*, 84 U.S. 453, 454–56 (1873) (speaking of a patent monopoly for an improvement in a coffin lid that enabled an identification plate to be observed even when the lid was open).

32. Norris, *supra* note 22.

33. IDA M. TARBELL, *THE HISTORY OF THE STANDARD OIL CO.* 1182 (1904) (speaking of Standard’s policy of buying up rivals, who “fell shivering with dislike into the embrace of this commercial octopus. . .”).

34. Udo J. Keppler, *Next!* (illustration) in *Digital Library*, THE THEODORE ROOSEVELT CENTER AT DICKINSON STATE UNIVERSITY, <https://www.theodorerooseveltcenter.org/Research/Digital-Library/Record?libID=O277854> [<https://perma.cc/FF23-D5FV>].

reach. The metaphor was used decades later in opposition to a firm's vertical integration into related markets.³⁵

Other Progressive writers used that metaphor even earlier,³⁶ as did some courts,³⁷ while still others called it into question.³⁸ Even in these situations, the source of the harm was not large size as such, but the power of the large firm to exclude rivals.

The immense popularity of the “anti-bigness” rhetoric aside, one is hard pressed to find a single antitrust decision that broke up or even disciplined a large firm simply because it was too big. Indeed, early antitrust decisions involving dominant firms typically read like tort cases, with heavy emphasis on bad conduct.³⁹ There is also no language in the antitrust laws that provides a coherent basis for attacking bigness as such.

Further, antitrust tests that target mere size do not work if the goal of the antitrust law is to deliver higher output, lower prices,

35. See, e.g., *Exxon Corp. v. Governor of Maryland*, 437 U.S. 117 (1978) (upholding state statute that prevented gasoline refineries from owning service stations in the state); see *id.* at 143 n. 8 (Blackmun, J., concurring and dissenting in part) (noting that the octopus metaphor was used to describe the practice of refineries acquiring their own retail stations; Justice Blackmun presented this as evidence of legislative capture by the retailers).

36. For example, the racist anti-Chinese cartoonist George Frederick Keller depicted the California railroad system as an octopus in a cartoon entitled “The Curse of California.” G.F. Keller, *The Curse of California* (illustration) in *THE IMAGE OF THE OCTOPUS: SIX CARTOONS, 1882-1909*, <https://nationalhumanitiescenter.org/pds/gilded/power/text1/octopusimages.pdf> [<https://perma.cc/KW7E-52EL>]; see also LYMAN HORACE WEEKS, *THE OTHER SIDE* 5 (1900) (“Pulpit and platform, newspaper and magazine vied with each other in condemning ‘the octopus,’ as the trust came to be termed”).

37. See, e.g., *State ex rel. Hadley v. Standard Oil Co.*, 116 S.W. 902, 1059 (1908) (state corporate law proceeding against Standard monopoly, “the greatest octopus of all the trusts”); *State v. Racine Sattley Co.*, 134 S.W. 400, 671 (Tex. Civ. App. 1911) (similar).

38. In 1900, Progressive economist John Bates Clark described the term “octopus” as inadequate to describe the structural features of trusts. John Bates Clark, *Trusts*, 15 *POL. SCI. Q.* 181, 182 (1900). See also Henry R. Hatfield, *The Chicago Trust Conference*, 8 *J. POL. ECON.* 1, 8 (1899) (noting the accusation of “octopus” levied against the trusts but suspecting their validity and suggesting that the term reflected “the American proclivity for finding some convenient scape-goat on which any and all evils may be laid.”); Norbert Heinsheimer, *The Legal Status of Trusts*, 2 *COLUM. L. TIMES* 51, 58 (1888) (denying that the trust was an octopus; rather it was simply a lower cost way of organizing production). The octopus metaphor was used even earlier to speak about promoters and tricksters who defrauded the public, and later came to be used to describe the railroads. See Richard R. John, *Proprietary Interest: Merchants, Journalists, and Antimonopoly in the 1880s* 10, in *MEDIA NATION: THE POLITICAL HISTORY OF NEWS IN MODERN AMERICA* (Bruce J. Schulman & Julian E. Zelizer, eds., 2018) (tracing history of octopus metaphor in the press).

39. See Hovenkamp, *supra* note 19.

greater consumer satisfaction, greater opportunities for labor, or more innovation. The relationship between these things and firm size is an empirical question, but there is certainly no general evidence that any one of them suffers as firm size is larger. Much of the evidence is to the contrary. Historically, most of the opposition to the emergence of large firms has come from competitors complaining about lower prices or innovations that they could not match.

Large firms often have lower costs and prices than smaller firms. Indeed, that is a principal reason that trade associations made up of smaller firms organized against them.⁴⁰ For a century, large firms have paid higher wages than small firms. Although that difference has diminished in recent years, it remains substantial in the United States.⁴¹ Globally, larger firms have also invested more in innovation than smaller firms.⁴² As a result, stating the antitrust threat as “big-ness” frequently reduces to an attack on low prices, the well-being of consumers and labor, and promotion of innovation as antitrust goals.

Both consumer purchase and labor are “variable” in the sense that they are highly responsive to changes in product output. Each group is better off as output increases.⁴³ By contrast, reduced output protects smaller businesses or those that have not modernized their technologies. To be sure, large size may create opportunities for anticompetitive behavior, but in that case the behavior itself should be identified and prosecuted.

Size works better as a target if the goal of antitrust is to protect firms that are less innovative or sell their products at a higher cost. If a

40. See *infra*, notes 194–207 and accompanying text.

41. See Nicholas Bloom, Faith Guvenen, Benjamin S. Smith, Jae Song & Till von Wachter, *Is the Large Firm Wage Premium Dead or Merely Resting?*, 108 AEA PAPERS & PROCEEDINGS 317, 317 (2018). But see Emanuele Colonnelli, Joacim Tåg, Michael Webb & Stefanie Wolter, *A Cross-Country Comparison of Dynamics in the Large Firm Wage Premium* (Rsch. Inst. of Indus. Econ., Working Paper No. 1196, 2018) (finding that the dynamics of large firm wage premiums “differ substantially across countries” and that the premium in the U.K. has risen since the mid-2000s).

42. For example, German researchers have consistently found this to be true in studies of their own firms. See Julian Baumann & Alexander S. Kritikos, *The Link Between R&D, Innovation and Productivity: Are Micro Firms Different?*, 45 RSCH. POL’Y 1263 (2016); Dirk Czarnitzki & Hanna Hottenrott, *R&D Investment and Financing Constraints of Small and Medium-Sized Firms*, 36 SMALL BUS. ECON. 65 (2011); cf. David B. Audretsch, Marian Hafenstein, Alexander Kritikos & Alexander Schiersch, *Firm Size and Innovation in the Service Sector* (DIW Berlin Discussion Paper No. 1774, 2018) (acknowledging innovation advantages of large firm size in manufacturing but finding the difference insubstantial in provision of services), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3299312.

43. See Herbert Hovenkamp, *Worker Welfare and Antitrust*, 90 U. CHI. L. REV. 511 (2023).

nondominant firm offers higher prices or reduced quality, it will lose too many sales. The market power requirement is designed to address this issue. However, a firm that offers lower prices or greater innovation can injure higher cost or less innovative rivals even if it is not dominant within its market. This was true of the chain stores, for example, who drove many independent retailers out of business even though they had individually nondominant market shares.⁴⁴ In the 1930s even A&P, the large grocery chain that provoked Congress to pass the Robinson-Patman Act, accounted for around fourteen percent of the national market for grocery sales.⁴⁵ Its share was not more than twenty percent in any regional market.⁴⁶ As a result, the value of bigness tests depends on one's *a priori* selection of a goal for antitrust policy. Targeting "bigness" as such usually benefits competitors at the expense of consumers and labor.

Under U.S. law, it is well-established that large size alone cannot be an antitrust offense.⁴⁷ Further, an antitrust policy that condemns "bigness" is not the same as one that aims to reduce the amount of market power in the economy. The functional difference between "market power" and "bigness" as targets of antitrust is that the market power requirement is directly linked to the threat of higher prices or reduced market output. Market power technically defined is the ability to profit by raising prices above cost.⁴⁸ "Bigness" and higher prices or reduced output are not correlated in this fashion.

To be sure, firm size and market power can be correlated in the sense that once a market is defined, size within that market reflects power. But looking at size alone never gets us there. For example, the

44. See *infra*, notes 73–101 and accompanying text.

45. MARC LEVINSON, *THE GREAT A&P AND THE STRUGGLE FOR SMALL BUSINESS IN AMERICA* 303 n. 11 (2011).

46. See Maurice A. Adelman, *Dirlam and Kahn on the A & P Case*, 61 J. POL. ECON. 436, 438 (1953).

47. See, e.g., *United States v. U.S. Steel Corp.*, 251 U.S. 417, 451 (1920) ("[T]he law does not make mere size an offense . . ."); *United States v. Aluminum Co. of America (Alcoa)*, 148 F.2d 416, 430 n.2 (2d Cir. 1945) (quoting *U.S. Steel*, 251 U.S. at 451); see also *United States v. Int'l Harvester Co.*, 274 U.S. 693, 708–09 (1927) ("[Antitrust law] does not make the mere size of a corporation, however impressive, or the existence of unexercised power on its part, an offense, when unaccompanied by unlawful conduct."); cf. *United States v. Line Material Co.*, 333 U.S. 287, 310 (1948) (holding "mere size" of a patent pool was not grounds for condemnation under the Sherman Act). Among more recent decisions, see, e.g., *Viamedia, Inc. v. Comcast Corp.*, 951 F.3d 429, 451 (7th Cir. 2020) (quoting the "mere size" statement from *U.S. Steel* and adding that "judicial decisions interpreting Section 2 have long held that simple possession of monopoly power, or the pursuit of it, is not in itself illegal").

48. William M. Landes & Richard A. Posner, *Market Power in Antitrust Cases*, 94 HARV. L. REV. 937 (1981).

automobile producer Chrysler is thousands of times larger than the only swimming pool contractor in Ozona, Texas, an isolated community of fewer than 3000 people. But this small contractor may wield more market power to the extent that those wishing to install swimming pools in Ozona have no good alternatives. Chrysler, however, must compete with Ford, General Motors, Toyota, Nissan, and others. Notwithstanding its much larger size, Chrysler has less market power.

B. The Clayton Act and the Large Firm; Holding Companies

More permissive corporate law facilitating the growth of larger firms originated in the states in the late 1880s. This shift has been attacked ever since as a “race to the bottom”⁴⁹ that requires federal intervention, mainly in the form of stronger antitrust or securities laws.⁵⁰ However, the federal antitrust laws went along with these permissive laws. Section 8 of the original Sherman Act provided that a corporation was to be regarded as a single “person,” and placed no limits on state power to permit corporations of any size or in any area of activity. It required only that they be lawfully organized under state law.⁵¹ A quarter century later, the Progressive Era Congress doubled down on the Sherman Act definition of “person” to refer mainly to corporations, re-enacting it verbatim in section 1 of the Clayton Act.⁵² Neither provision included biological individuals as “persons,” although they are there by implication. For example, both sections 1 and 2 of the Sherman Act call for imprisonment as a possible criminal penalty, and only biological persons can be imprisoned.

49. Motivated largely by corporate franchise taxes. For example, in the early twentieth century New Jersey obtained about 30% of its annual income from such fees. Joseph F. Mahoney, *Backsliding Convert: Woodrow Wilson and the “Seven Sisters,”* 18 AM. Q. 71, 72 (1966).

50. On securities law, see ADOLF BERLE & GARDINER MEANS, *THE MODERN CORPORATION AND PRIVATE PROPERTY* (Routledge 1932). See also Lucian A. Bebchuk, *Federalism and the Corporation: The Desirable Limits on State Competition in Corporate Law*, 105 HARV. L. REV. 1435 (1992) (arguing that state charter competition leads to undesirable corporate law rules in a number of areas); William L. Cary, *Federalism and Corporate Law: Reflections upon Delaware*, 83 YALE L.J. 663, 705 (1974) (describing the “race for the bottom, with Delaware in the lead” in corporate-governance standards). On empirical support for the idea that New Jersey was a leader during the Progressive Era, see Christopher Grandy, *New Jersey Corporate Chattermongering, 1875-1929*, 49 J. ECON. HIST. 677 (1989).

51. The original § 8 of the Sherman Act provided:

That the word “person,” or “persons,” wherever used in this act shall be deemed to include corporations and associations existing under or authorized by the laws of either the United States, the laws of any of the Territories, the laws of any State, or the laws of any foreign country.

Sherman Antitrust Act, ch. 647, 26 Stat. 209 (1890), codified at 15 U.S.C. § 7 (2018).
52. 15 U.S.C. § 12 (2018).

New Jersey had amended its corporate law in 1888 to permit “holding companies,” or one corporation’s acquisition and ownership of the shares of another.⁵³ This approach was then followed by other states.⁵⁴ By enabling stock transactions, the holding company became a powerful tool for corporate mergers. The government’s first big anti-trust merger case was against a railroad merger formed through a New Jersey holding company.⁵⁵ The challenge was not to the holding company as such, but to its use to bring two competing railroad lines under the control of a single firm.⁵⁶

Progressive opposition to holding companies became part of the 1912 Democratic presidential antitrust platform.⁵⁷ It was possibly a consequence of a meeting between Woodrow Wilson and Louis Brandeis in 1912, shortly before the presidential election.⁵⁸ However, no federal prohibition was ever enacted into the antitrust laws, and the states ignored the Democrats’ entreaty. Indeed, President Wilson’s Congress enacted most of the proposals in the Democrats’ antitrust platform into the Clayton Act, but not the one barring holding companies. To the contrary, the new statute expressly permitted the creation of holding companies, provided they did not engage in other anticompetitive activity:

Nor shall anything contained in this section prevent a corporation engaged in commerce from causing the formation of subsidiary

53. See N.J. Laws, 385, 445 (1888). On the history, see Phillip Blumberg, *The Transformation of Modern Corporation Law: The Law of Corporate Groups*, 37 CONN. L. REV. 605 (2005). For contemporary commentary, see Edward Q. Keasbey, *New Jersey and the Great Corporations*, 13 HARV. L. REV. 198 (1899).

54. Justice Brandeis provided a thumbnail history in *Louis K. Liggett Co. v. Lee*, 288 U.S. 517, 556 n. 32 (1933).

55. *N. Sec. Co. v. United States*, 193 U.S. 197, 301 (1904) (condemning the merger and holding that “the device of a holding corporation for the purpose of circumventing the law” was ineffectual to circumvent federal antitrust law).

56. *Id.* at 320, noting that the combination of the Great Northern Railway Company and the Northern Pacific Railway Company was of “parallel and competing lines across the continent,” and that previously the two lines had been “engaged in active competition for freight and passenger traffic.” This rationale provoked Justice Holmes dissenting statement that the Sherman Act “says nothing about competition.” *Id.* at 403 (Holmes, J., dissenting).

57. See DEMOCRATIC PARTY PLATFORM OF 1912 (1912), <https://www.presidency.ucsb.edu/documents/1912-democratic-party-platform> (“We favor the declaration by law of the conditions upon which corporations shall be permitted to engage in interstate trade, including, among others, the prevention of holding companies . . .”). The Platform also called for limitations on interlocking directors, which was adopted in section 8 of the Clayton Act, 15 U.S.C. § 19, and further limitations on price discrimination, which were adopted in section 2, 15 U.S.C. § 13. On Progressive opposition to holding companies, see J. Newton Baker, *The Evil of Special Privilege*, 22 YALE L.J. 220 (1913).

58. Mahoney, *supra* note 49, 71–72.

corporations for the actual carrying on of their immediate lawful business, or the natural and legitimate branches or extensions thereof, or from owning and holding all or a part of the stock of such subsidiary corporations, when the effect of such formation is not to substantially lessen competition.⁵⁹

By 1932, James C. Bonbright and Gardiner Means, authors of the leading treatise of the day on holding companies, concluded that “nearly all” of the states had amended their corporate laws to permit them.⁶⁰

This statutory definition of a single “person” to include corporations, and even holding companies, has generally determined the dividing line between intrafirm “unilateral” conduct and the conduct of those related to one another by contract. For example, the corporate law change that permitted holding companies also established that an arrangement between a parent company and a wholly owned subsidiary would be regarded as a unilateral act rather than a conspiracy.⁶¹ To that extent, the Progressive Congress that enacted the Clayton Act decisively rejected any attack on corporate bigness as such.

C. “Bigness” and Brandeis

1. Brandeis: Small Firms and Obsolete Technologies

Justice Brandeis is often credited as one of the pioneers of “anti-bigness” as an antitrust goal. In a famous dissent in *Liggett v. Lee*, Justice Brandeis justified the use of discriminatory taxes designed to slow the growth of chain stores because of their large size:

Businesses may become as harmful to the community by excessive size, as by monopoly or the commonly recognized restraints of trade. If the state should conclude that bigness in retail merchandising as manifested in corporate chain stores menaces the public wel-

59. The provision remains in the statute to this day, modified only by a 1980 amendment that extended its reach from corporations “engaged in commerce” to include “or in any activity affecting commerce.” 15 U.S.C. §18 (2018). This reflected the federal expansion of Commerce Clause reach expressed in *Wickard v. Filburn*, 317 U.S. 111 (1942) (extending congressional power over commerce to activities that “affected” commerce).

60. JAMES C. BONBRIGHT & GARDINER C. MEANS, *THE HOLDING COMPANY, ITS PUBLIC SIGNIFICANCE, AND ITS REGULATION* 57 (1932); see generally Herbert Hovenkamp, *The Classical Corporation in American Legal Thought*, 76 *Geo. L.J.* 1593, 1669–72 (1988).

61. See, e.g., *Copperweld Corp. v. Independence Tube Corp.*, 467 U.S. 752 (1984) (holding a parent corporation and wholly owned subsidiary are a single person for Sherman Act purposes). But see, e.g., *American Needle, Inc. v. NFL*, 560 U.S. 183 (2010) (holding firms in a joint venture but linked by contract could conspire). See Hovenkamp, *supra* note 6.

fare, it might prohibit the excessive size or extent of that business as it prohibits excessive size or weight in motor trucks⁶² or excessive height in the buildings of a city.⁶³

Justice Brandeis viewed the regulation of firm size as not all that different from regulating the weight of trucks or the height of buildings. Most notable was his belief that chain stores should be limited in size even when there was no prospect of a monopoly and the chains had not engaged in restraints of trade.

The harms flowing from large corporations that Justice Brandeis enumerated included “encroachment upon the liberties and opportunities of the individual,” “the subjection of labor to capital,” monopoly power, and the possibility “that the absorption of capital by corporations, and their perpetual life, might bring evils similar to those which attended mortmain.”⁶⁴ There was also an unspecified “sense of some insidious menace inherent in large aggregations of capital, particularly when held by corporations.”⁶⁵ Beyond that, Brandeis was not very specific about the types of harms that chain stores threatened. His fears about “encroachment upon liberties” appear to be untethered rhetorical flourish, given that the only threat was from multi-store retailers who were successful precisely because consumers liked them.

Brandeis was correct that corporate laws historically “embodied severe restrictions upon size and scope of corporate activity,” and perhaps even served as an “expression of the desire for equality of opportunity.”⁶⁶ Indeed, much of the rage directed at exclusive corporate grants identified them with special privilege and exclusion.⁶⁷ Brandeis lamented that states had gradually removed these restrictions on cor-

62. This is a likely reference to *Hicklin v. Coney*, 290 U.S. 169 (1933) (upholding state law licensing trucks and taxing them based on weight).

63. *Louis K. Liggett Co. v. Lee*, 288 U.S. 517, 574 (1933) (Brandeis, J., dissenting). The reference to the height of buildings was very likely to *Welch v. Swasey*, 214 U.S. 91 (1909) (upholding statute regulating maximum heights of buildings), or else *Village of Euclid v. Ambler Realty Co.*, 272 U.S. 365 (1926) (upholding a zoning law that included height restrictions). For contemporary criticism, see J. Edward Collins, *Anti-Chain Store Legislation*, 24 CORNELL L. REV. 198 (1939).

64. *Liggett*, 288 U.S. at 548. “Mortmain” was the English system of feudal land ownership in which the land itself was held in perpetuity, often by the Church, and all occupants served as tenants of various classes.

65. *Id.*

66. *Id.*; see also Hovenkamp, *supra* note 60, at 1658–80 (pointing out that during the Jackson administration the corporation was democratized so that nearly anyone could incorporate).

67. See HERBERT HOVENKAMP, *ENTERPRISE AND AMERICAN LAW, 1836-1937*, 17–35, 105–24 (1991).

porate size.⁶⁸ As a result, economic power transferred from the owners of large firms (stockholders) to their increasingly influential managers, and these firms were able to dominate the economies and politics of their states.⁶⁹ He concluded that “size alone gives to giant corporations a social significance not attached ordinarily to smaller units of private enterprise.”⁷⁰

The holding company and chain store issues were closely intertwined. James Bonbright observed that the development of the chain store was “greatly facilitated by the device of the holding company”—presumably referring to the fact that the holding company form facilitated stock acquisitions of incorporated small grocers.⁷¹ Many of the chain stores were organized as holding companies.⁷²

In any event, the contemporary political movement was frenzied. Several states passed anti-chain legislation in the mid-twenties, and the Depression sharply accelerated the trend. Between 1931 and 1937, twenty-six states passed such laws.⁷³ Expansive legislative proposals against holding companies fared less well. No general legislation was ever passed. However, the Public Utilities Holding Company Act of 1935 (PUHCA), gave the Securities and Exchange Commission authority to break up or regulate overly broad public utility holding companies that had expanded into geographically broad regions.⁷⁴ It was repealed in 2006 as part of an effort to employ more market-based initiatives for energy policy.⁷⁵

68. *Liggett*, 288 U.S. at 550–64 (elaborating on the removal of size limitations in many states but particularly New Jersey and New York) (citing ADOLF A. BERLE & GARDINER C. MEANS, *THE MODERN CORPORATION AND PRIVATE PROPERTY* (1932)).

69. *Liggett*, 288 U.S. at 564–566.

70. *Id.* at 565.

71. James C. Bonbright, *Recent Developments in the Law of Public Utility Holding Companies—A Comment*, 31 *COL. L. REV.* 208, 208 (1931).

72. Godfrey N. Nelson, *Taxation of Corporate Holding Companies*, 31 *PROC. ANN. CONF. TAXATION UNDER AUSPICES NAT. TAX ASSN.*, 417, 419 (1938) (observing that the chains were “made up to a large extent of corporate holding companies”); see also *Ray v. Farley*, 131 So. 365 (Miss. 1930) (speaking of National Family Stores as holding company); *Lovett v. Lee*, 198 So. 538 (1940) (chain store tax applied to holding company). Multi-station gasoline distributors organized as holding companies were also subjected to the tax. See, e.g., *Standard Oil Co. of N.J. v. Fox*, 6 F. Supp. 494 (S.D. W. Va. 1934), *rev'd* by *Fox v. Standard Oil Co. of N.J.*, 294 U.S. 87 (1935) (upholding the tax).

73. Daniel Scroop, *The Anti-Chain Store Movement and the Politics of Consumption*, 60 *AM. Q.* 925, 925 (2008).

74. See *Gulf States Utilities Co. v. FPC*, 411 U.S. 747 (1973) (applying a quasi-antitrust “public interest” standard under PUHCA).

75. Repealed by the Energy Policy Act of 2005, Pub. L. No. 109-58 §§ 1264, 1274, 119 Stat. 594. See Joshua P. Fershee, *Misguided Energy: Why Recent Legislative*,

In addition to the state anti-chain legislation, Congress passed the Robinson-Patman Act in 1936, intended to limit the growth of large retailers by restricting their ability to obtain or charge lower prices.⁷⁶ It also enacted the Miller-Tydings Act,⁷⁷ designed to protect smaller retailers from price cutters by enabling states to permit resale price maintenance, or “fair trade.”⁷⁸ The common goal of all of this legislation was to protect the traditional family-owned, single-store retailer from the competition of larger firms. Populist demagogue Huey Long was one of the early prominent promoters of progressive chain tax legislation,⁷⁹ proclaiming that he would “rather have thieves and gangsters than chain stores in Louisiana.”⁸⁰

Yet, the chain stores rarely threatened monopoly. First, there were many of them and they competed with each other.⁸¹ Second, they never came close to occupying a monopoly position in the retail markets where they sold.⁸² They did, however, severely injure the previous generation of single-store operators.⁸³

Justice Brandeis acknowledged that the aggregations of capital that corporations produced were “once merely an efficient tool” for conducting private business.⁸⁴ While conceding that larger firms can be more efficient, he concluded from this that they “can, and should,

Regulatory, and Market Initiatives are Insufficient to Improve the U.S. Energy Infrastructure, 44 HARV. J. LEGIS. 327 (2007) (critiquing the repeal).

76. 15 U.S.C. § 13.

77. Miller-Tydings Act of 1937, Pub. L. No. 314, 50 Stat. 693 (1937). The Act was repealed by the Consumer Goods Pricing Act of 1975, Pub. L. No. 94-145, 89 Stat. 801 (amending 15 U.S.C. §§ 1, 45(a)).

78. LAURA PHILLIPS SAWYER, *AMERICAN FAIR TRADE: PROPRIETARY CAPITALISM, CORPORATISM, AND THE ‘NEW COMPETITION,’ 1890-1940* (Cambridge Univ. Press, 2018); JOSEPH C. PALAMOUNTAIN, JR., *THE POLITICS OF DISTRIBUTION 235-54* (1955). For contemporary reaction and analysis, see Note, *Resale Price Maintenance: The Miller-Tydings Enabling Act*, 51 HARV. L. REV. 336 (1937).

79. Carl G. Ryant, *The South and the Movement Against Chain Stores*, 39 J. S. HIST. 207, 213 (1973).

80. Carl H. Fulda, *Food Distribution in the United States, the Struggle Between Independents and Chains*, 99 U. PA. L. REV. 1051, 1051 (1951).

81. FREDERICK JOHN HARPER, *THE ANTI-CHAIN STORE MOVEMENT IN THE UNITED STATES, 1927-1940* 1-2 (1981) (noting estimates that there were 3000 competing chains, defined as four or more stores, in 1900 but 95,386 chains by 1929).

82. *Id.* at 3-4 (finding chain stores in the aggregate represented four percent of total retailing in 1921, grew to sixteen percent by 1927 and to twenty percent by 1929, and, after that, slowing).

83. On the history and development of the numerous chains and their threats to small merchants, see Richard C. Schragger, *The Anti-Chain Store Movement, Localist Ideology, and the Remnants of the Progressive Constitution, 1920-1940*, 90 IOWA L. REV. 1011 (2005); Fulda, *supra* note 80.

84. *Louis K. Liggett Co. v. Lee*, 288 U.S. 517, 565 (1933) (Brandeis, J., dissenting).

contribute more to the public revenues.”⁸⁵ He added, however, that “the state need not rest the difference in tax rates on a ground so debatable as the assertion that efficiency increases with size.”⁸⁶

Brandeis did not acknowledge that one purpose of the chain store taxes was not simply to make them pay their fair share, but to drive them out of business entirely. A few years later, Representative Wright Patman and seventy-five congressional co-sponsors proposed “death sentence” legislation that would have done exactly that.⁸⁷ The entire chain store episode represents an enormous failure of democratic processes, in which legislatures paid little attention to consumers who were voting with their feet. Rather, they listened to small retailer associations that were better organized.

Liggett v. Lee was not an antitrust case, but rather a challenge to a state taxation law. Before long, however, the political movement against chain stores would become an antitrust issue with passage of the Robinson-Patman Act (RPA),⁸⁸ although it was preceded by state legislation as early as 1913.⁸⁹ The RPA was pure interest group legislation, passed at the behest of the United States Wholesale Grocer Association. Its General Counsel Henry B. Teegarden drafted the bill⁹⁰ and was heavily involved in the amending process.⁹¹

Prior to the RPA, concerns about vertical integration were central in the debates over holding companies and chain stores. The RPA ignored the issue. That was not true of the Federal Trade Commission

85. *Id.* at 573.

86. *Id.* at 572–73.

87. See Harper, *supra* note 81, at 322, 387 (“The ‘death sentence’ component to the schedule was a multiplier provision whereby the total tax was to be multiplied by the number of states including the District of Columbia, in which the chain had its stores. Thus a chain like the R. W. Woolworth Co. operating in every state would be liable to a tax of \$49,000 on each of its stores in excess of 500.”); 80 CONG. REC. 8133 (1936); 84 CONG. REC. 345–347 (1939); *Excise Tax on Retail Stores: Hearings on H.R. 1 Before the H. Ways & Means Comm.*, 76th Cong. 115 (1940).

88. 15 U.S.C. § 13.

89. See Ewald T. Grether, *Fair Trade Legislation Restricting Price Cutting*, 1 J. MARKETING 344 (1937); Ewald T. Grether, Note, *Experience in California with Fair Trade Legislation Restricting Price Cutting*, 24 CAL. L. REV. 640 (1936).

90. See *Prohibition on Price Discrimination: Hearings on H.R. 8442 Before the H. Comm. on the Judiciary*, 74th Cong. 9 (1935) (“Mr. Teegarden wrote this bill.”); see also PALAMOUNTAIN, *supra* note 78, at 197–98 (noting Teegarden’s authorship of the bill). And see MARC LEVINSON, *THE GREAT A&P AND THE STRUGGLE FOR SMALL BUSINESS IN AMERICA* 160–166 (2011) (noting alignment of interest groups).

91. See U.S. DEPARTMENT OF JUSTICE, REPORT ON THE ROBINSON-PATMAN ACT 114–24 (1978). For more on Teegarden’s role, see Cecil E. Weller, Jr., *Joseph Taylor Robinson and the Robinson-Patman Act*, 47 ARK. HIST. Q. 29 (1988); Andrew I. Gavil, *Secondary Line Price Discrimination and the Fate of Morton Salt: To Save it, Let it Go*, 48 EMORY L.J. 1057, 1071–76 (1999).

(FTC), whose own chain store investigation had noted the impact of vertical integration in retailing.⁹² Summarizing its own final report, the FTC concluded:

When the Commission came to consider the social and economic advantages and disadvantages of chain-store merchandising from the legal standpoint, it was evident that many of the economic advantages possessed by the chains were of a character that is in conformity with existing law. Such advantages as those flowing from the integration of production and of wholesale and retail distribution, from the savings involved in avoiding credit and delivery service, and from the ability of chains to realize the benefits of large-scale advertising areas all plainly beyond the present scope of statutory law. Nor did the Commission recommend any change in the law in order to eliminate such advantages. Such a program would involve radical interference with the rights of private ownership and initiative, virtual abandonment of the competitive principle, and destruction of the public advantage represented by lower prices and lower cost of living.⁹³

The FTC's relatively balanced conclusions should have provoked Congress to pause a year later to consider both the advantages and threats that vertical integration in retailing posed, but it did not. Congress' own hearings leading up to the RPA relied exclusively upon representatives of the independent grocery industry and did not even request testimony from the FTC or the Justice Department.⁹⁴ The bill was actively opposed by Representative Emanuel Celler of New York, a liberal who was later a co-sponsor of the very pro-enforcement Celler-Kefauver Act of 1950, which strengthened federal merger law.⁹⁵ Celler argued that the bill was intended to protect "independents unable to meet competition which is easily met by their efficient fellow dealers."⁹⁶ He concluded that the bill was "obviously inimical to the consumer, and intended, under cover of devious but innocent appearing wording, to assure profitable business to a trade class regardless of the efficiency of service rendered the consumer."⁹⁷

92. Fed. Trade Comm'n, *Final Report on the Chain Store Investigation*, S. Doc. No. 4, 74th Cong., 1st Sess. (1935).

93. FED. TRADE COMM'N, ANNUAL REPORT (1935), https://www.ftc.gov/sites/default/files/documents/reports_annual/annual-report-1935/ar1935_0.pdf.

94. See Hugh Hansen, *Robinson-Patman Law: A Review and Analysis*, 51 FORDHAM L. REV. 1113, 1122-3 (1983) (noting that no witnesses were called from DOJ, the FTC, the ABA, or "members of the bar, economists or consumers").

95. Act of December 29, 1950, 64 Stat. 1125, codified at 17 U.S.C. §17 (2018).

96. H.R. Rep. No. 2287, 74th Cong., 1st Sess. 17 (1936).

97. *Id.*

The antitrust movement against chain stores presents interesting similarities to the twenty-first century movement against large digital platforms, including Alphabet (Google), Amazon, Apple, and Meta (Facebook). First, its origins were largely populist, ignoring much of the economics of business organization and innovation. Second, it was a largely reactionary response to significant innovations in retailing and distribution that consumers loved but that seriously injured firms committed to older methods.⁹⁸ Among these was a dramatic reduction in the demand for independent “brokers,” or intermediaries that were important to small retailers but often absorbed into the vertically integrated operations of the chains.⁹⁹ Third, the movement rested on heavily exaggerated theories of harm as well as poor analysis of the problem. This became particularly apparent with passage of the RPA.

Finally, the debate was heavily driven by interest group politics.¹⁰⁰ The movement was supported by established independent merchants and those with older technologies who were well-organized politically. It rarely offered any benefits to consumers and labor, the other two interest groups most seriously affected. Largely for this reason, the anti-chain store movement withered after a few years in the face of overwhelming consumer choice.¹⁰¹

Justice Brandeis’ dissent in *Liggett* was included in an edited collection of his writings published in 1934 as *The Curse of Bigness*.¹⁰² Apart from *Liggett* and one additional Supreme Court dissent, all of the compiled works were written prior to Brandeis’ appointment to the

98. See, e.g., Fulda, *supra* note 80.

99. *Id.* at 1065–68. Brokerage limitations were enacted into the Robinson-Patman Act (“RPA”). See 15 U.S.C. § 13(c); Fed. Trade Comm’n v. Henry Broch & Co., 363 U.S. 166 (1960) (holding a food broker who reduced his commission to close a sale violated the RPA).

100. See, e.g., PALAMOUNTAIN, *supra* note 78, at 159–87; Harper, *supra* note 78, at ii (describing trade associations as akin to “medieval guilds”). They often campaigned for regulation preventing individual store expansion (e.g., prohibiting green grocers from selling bread). Many of these trade association activities were expressly sanctioned by the National Recovery Administration during the New Deal. See Harper, *supra* note 78, at iii; see also *United States v. Swift & Co.*, 286 U.S. 106 (1932) (refusing to modify earlier Sherman Act consent decree so as to permit large meat packer from selling other groceries, at the behest of the American Wholesale Grocers’ Association).

101. See Paul Ingram & Hayagreeva Rao, *Store Wars: The Enactment and Repeal of Anti-Chain-Store Legislation in America*, 110 AM. J. SOC. 446 (2004); see also PALAMOUNTAIN, *supra* note 82, at 183–99 (noting growth of chains notwithstanding the movement).

102. See *Louis K. Liggett Co. v. Lee*, 288 U.S. 517 (1933) (Brandeis, J., dissenting), reprinted in *THE CURSE OF BIGNESS: MISCELLANEOUS PAPERS OF LOUIS D. BRANDEIS* (Osmond K. Fraenkel & Clarence M. Lewis eds., 1934) [hereinafter *CURSE OF BIGNESS*].

Court in 1916. The other Supreme Court dissent that the authors selected was from *New State Ice Company v. Liebmann*.¹⁰³ The dissent reflected Brandeis' skepticism about another industry undergoing changes in both technology and distribution. There, the majority struck down an Oklahoma statute that required commercial ice producers to obtain a license, which required proof of "public convenience and necessity."¹⁰⁴ In his dissent, Justice Brandeis first rationalized this requirement by arguing that ice production included equipment that was subject to interest on loans and depreciation. As a result, the success of a business depended on the volume of trade that each firm obtained. The purpose of this requirement was to "protect the public interest by preventing waste."¹⁰⁵ Of course, any industry with fixed costs would fall into that category. Second, he observed that Oklahoma had declared the business of producing ice to be a "public utility."¹⁰⁶ Justice Brandeis said little about the merits of this declaration other than the fact that ice should be healthy, but he observed that the declaration of which industries are public utilities is a prerogative of the state.¹⁰⁷

The ice licensing requirements had been created at the behest of the National Association of Ice Industries, an interest group of small, independent ice producers organized into separate state associations. At the time of the litigation, the Associations' members controlled eighty-four percent of the ice commercially produced in the United States.¹⁰⁸ Some states had even gone so far as to regulate the price of ice.¹⁰⁹ One concern of the Association was ice sales from ice "peddlers," or travelling sales agents that increased the delivery range of large ice plants.¹¹⁰ They emerged as the market experienced rapid growth in the 1920s through the development of cheaper electric ice plants that typically undersold local producers. The result was that the

103. *New State Ice Co. v. Liebmann*, 285 U.S. 262 (1932).

104. *Id.* at 281–82 (Brandeis, J., dissenting).

105. *Id.* He continued, "The introduction in the United States of the certificate of public convenience and necessity marked the growing conviction that under certain circumstances free competition might be harmful to the community, and that, when it was so, absolute freedom to enter the business of one's choice should be denied." *Id.*

106. *Id.* at 283.

107. *Id.* at 284.

108. Brief for Petitioner, *New State Ice Co. v. Liebmann*, 285 U.S. 262 (1932), 1932 WL 33240, at *27–28.

109. See *Southwest Utility Ice Co. v. Liebmann*, 52 F.2d 349, 355 (10th Cir. 1931) (noting that Arkansas and Oklahoma regulated ice prices and including a description of the industry).

110. On the role of peddlers, see *State ex rel. Kimbrell v. People's Ice, Storage & Fuel Co.*, 246 Mo. 168 (1912) (sustaining a *quo warranto* claim that large ice companies who employed peddlers were attempting to monopolize market).

industry experienced excess capacity just as it was on the verge of collapsing.¹¹¹

In addition to combatting the peddlers, the ice industry also used other means to restrict output. For example, the FTC's 1925 report on trade associations observed that one trade association rule made it "unethical" for a truck delivering ice cream to also sell ice.¹¹² The harm there seems clear: given substantial joint costs for equipment, the cost of delivering ice and ice cream together from the same vehicle was lower than the cost of delivering each one separately.

The more imposing and ultimately fatal threat to the ice industry was not the peddlers, however, but rather electric refrigeration.¹¹³ The traditional means of refrigeration utilized ice harvested from frozen lakes or, a little later, manufactured in commercial plants.¹¹⁴ The mechanical refrigerator, which was first introduced into retail establishments and a little later into homes in the early twentieth century, eventually killed the ice industry.¹¹⁵ In his 1922 presidential address to the Association of Ice Industries, President J.G. Black called the electric refrigerator a "menace" that needed to be controlled. "There are some places and conditions," he warned, "where a machine will render a more satisfactory service than we can hope to with ice."¹¹⁶

111. See L. B. Breedlove, *The Ice Industry: Its Economics and Future*, 8 J. LAND & PUB. UTILITY ECON. 234 (1932). For fact findings in the lower court, see *New State Ice Co. v. Liebmann*, 42 F.2d 913, 917–18 (1930) ("[I]t is clearly shown the act of the Legislature here under consideration in its actual operation and effect has had the result in many cities and towns of the state of absolutely destroying all competition in the manufacture and distribution of ice . . . [and] enhancing the price charged . . .").

112. FED. TRADE COMM'N, REPORT ON OPEN-PRICE TRADE ASSOCIATIONS 306 (1925) [hereinafter OPEN-PRICE TRADE ASSOCIATIONS REPORT], [https://babel.hathitrust.org/cgi/pt?id=UC1.\\$b46743&view=1up&seq=9&skin=2021](https://babel.hathitrust.org/cgi/pt?id=UC1.$b46743&view=1up&seq=9&skin=2021).

113. For a good brief history of the industry, see A. R. Stevenson, Jr., *Refrigeration*, 208 J. FRANKLIN INST. 143 (1919).

114. See Andrew Robichaud, *Frozen Over: Making Ice and Knowing Nature in Nineteenth-Century America*, 27 ENV'T HIST. 519 (2022).

115. See Jonathan Rees, *Refrigeration Nation: A History of Ice, Appliances, and Enterprise in America* (2013) (detailing the rise of American mechanical refrigerator, its introduction into American homes early in the twentieth century, and the decline of the ice industry).

116. See J.G. Black, President, Nat'l Assoc. of Ice Indus., President's Address (Oct. 11, 1922), in 5 PROC. OF THE ANN. CONVENTION OF THE NAT'L ASSOC. OF ICE INDUS., at 36; Breedlove, *supra* note 111 at 237, 240 (noting, in 1932, the significant extent of mechanical refrigerator encroachment on the ice industry); Lisa Mae Robinson, *Safe-guarded by Your Refrigerator: Mary Engle Pennington's Struggle with the National Association of Ice Industries*, in RETHINKING HOME ECONOMICS: WOMEN AND THE HISTORY OF A PROFESSION (Sarah Stage & Virginia B. Vincenti eds., 1997). Commercial cooling of building interiors exhibited a similar war between ice and condensation technology and electric air conditioning. See Bernard Nagengast, *A History of Comfort Cooling Using Ice*, 1999 ASHRAE J 49.

The ice industry pursued various strategies, including long term contracts on subsidized non-electric ice boxes, intended to lock customers into the older ice technology.¹¹⁷

Like the chain store, however, the electric refrigerator was simply too attractive to the typical consumer, who “wants the automatic refrigerator and will buy it as soon as the family budget will permit.”¹¹⁸

Two things about Brandeis’ dissents in *Ligget* and *Liebmann* stand out. First is the extent to which he aligned his interests with small firms, even those committed to obsolete distribution methods and technologies, and even at the expense of consumers and others who benefit from more robustly competitive and innovative markets. The second is that his concern about bigness was limited to large individual firms. He disregarded the much more substantial threat posed by trade associations.¹¹⁹ In both the chain store situation and the ice industry situation the real threat to competition came not from large individual firms, but from associations of small firms who had substantial political power to compensate for their lack of productive efficiency or technology. The FTC’s 1925 report on trade associations concluded that virtually all of the associations were involved in lobbying for legislation.¹²⁰

2. Brandeis’s *Efficiency Dilemma*

Brandeis’ hostility to chains and other large sellers reflected an antinomy in his own beliefs about business efficiency. In a 1914 address to the U.S. Chamber of Commerce, he acknowledged that firms could attain greater efficiency through growth. However, they reached maximum efficiency “at a fairly early stage.” From that point, “the disadvantages of size outweigh in many respects the advantage of size.”¹²¹ The one advantage that the large firm continued to hold, he argued, was in the “collection and getting of knowledge.”¹²² Within

117. See Rich Ling & Oscar Westlund, *Cold Comfort: Lessons for the Twenty-First Century Newspaper Industry from the Twentieth Century Industry*, 4 MEDIA INDUS. 2 (2017).

118. Breedlove, *supra* note 111, at 241.

119. On Brandeis’ protective views toward trade associations, see M. Browning Carrott, *The Supreme Court and American Trade Associations, 1921–1925*, 44 BUS. HIST. REV. 320 (1970).

120. See OPEN-PRICE TRADE ASSOCIATIONS REPORT, *supra* note 112, 243–44.

121. The address was published as “The Democracy of Business.” See LOUIS D. BRANDEIS, *The Democracy of Business*, in CURSE OF BIGNESS, *supra* note 106, at 137, 140.

122. *Id.*

this, he also included research laboratories, which “can be maintained only by great concerns.”¹²³

Brandeis believed that efficiency was a product of management, not firm size. He was an enthusiastic follower of “Taylorism,” or “scientific management,” which attempted to instruct firms in cost reducing or time saving processes.¹²⁴ In 1912 he argued to the short-lived United States Commission on Industrial Relations that organized labor should embrace scientific management. They could be induced to do so by what he termed a “fair distribution of the products of industry,” together with ongoing participation of labor in the development of efficient methods.¹²⁵ He observed that “[i]f labor is given such representation, I am unable to find anything in scientific management which is not strictly consistent” with their interests.¹²⁶

Efficiency expert Frederick Winslow Taylor’s ideas about cost savings were not rooted in economic industrial organization theory, but rather in the mechanical economics of business management, standardized cost accounting,¹²⁷ assembly line production, repetition, and labor specialization.¹²⁸ This emphasis led to an alternative “industrial organization” literature more aligned with schools of business management and systems engineering than with economics.¹²⁹

Brandeis was a lifelong supporter of labor. One irony, however, is that his preferred approach to efficiency almost certainly produced more alienation and disaffection among labor than did large firm size

123. *Id.*

124. See Louis D. Brandeis, *Organized Labor and Efficiency*, 41 *ADVOC.* 567 (1911). On Brandeis and Taylorism, see Bradley C. Bobertz, *The Brandeis Gambit: The Making of America’s “First Freedom,” 1909-1931*, 40 *WM. & MARY L. REV.* 557 (1999), and Richard P. Adelstein, “Islands of Conscious Power”: *Louis D. Brandeis and the Modern Corporation*, 63 *BUS. HIST. REV.* 614 (1989).

125. See Louis D. Brandeis, *Efficiency Systems and Labor*, Final Report and Testimony, Commission on Industrial Relations, Senate Document, 64th Cong., 1st Sess. 991-1011 (April 28, 1916). The testimony was extracted in, *CURSE OF BIGNESS*, *supra* note 106, at 48-49.

126. *Id.* at 992.

127. See Leslie S. Oakes & Paul J. Miranti, *Louis D. Brandeis and Standard Cost Accounting: A Study of the Construction of Historical Agency*, 21 *ACCT., ORG. AND SOC’Y* 569 (1996) (describing how Brandeis’ advocacy of scientific management to the railroads contributed to standardized cost accounting norms).

128. See FREDERICK WINSLOW TAYLOR, *THE PRINCIPLES OF SCIENTIFIC MANAGEMENT* (1911).

129. See, e.g., DEXTER KIMBALL, *PRINCIPLES OF INDUSTRIAL ORGANIZATION* (3d ed. 1925) (discussing the organization of industry in Taylorite terms). See also JOHN LEE, *INDUSTRIAL ORGANIZATION* (1923) (same, British). For a good contemporary assessment, see C. Bertrand Thompson, *The Literature of Scientific Management*, 28 *Q. J. ECON.* 506 (1914).

or vertical integration.¹³⁰ For example, Dexter Kimball's popular 1913 text on "industrial organization," written by an engineer rather than an economist, lamented the "degradation of labor" that resulted from Taylorite methods.¹³¹

Social activist and Brandeis's sister-in-law Josephine Goldmark took Brandeis's side in her 1912 book, *Fatigue and Efficiency*.¹³² She defended Taylor's efforts to improve efficiency through the use of timed, repetitive motions that she believed enabled workers to produce the same amount with less energy, and thus less fatigue.¹³³ She appeared to assume that employers would respond to this increased efficiency by giving labor more leisure rather than simply increasing output expectations.

A notable feature of the Taylorite theories of industrial organization was the de-emphasis of large firm size as an important factor in business growth. For example, the third edition of Kimball's *Industrial Organization* text concluded that management costs went up disproportionately as firms became larger. As a result, many large firms appeared to "have passed the point where any great gain in productive efficiency can be had through further division of labor and the use of labor-saving machinery."¹³⁴ On the other hand, he spoke favorably about vertical integration, which he saw as helping firms assure their supply and optimize their production methods to meet their needs.¹³⁵ At one point he talked about the cost of marketing as a "disgrace to our intelligence."¹³⁶ His few references to vertical control applied almost exclusively to labor management issues.¹³⁷

Labor would have none of Brandeis's views about efficiency. Taylorism was one area in which Brandeis and organized labor, which was righteously opposed to scientific management, were perpetually at odds.¹³⁸ Taylorism emphasized cost savings from duplication and rote repetitive motion, which could be accomplished by assigning workers

130. See, e.g., HARRY BRAVERMAN, *LABOR AND MONOPOLY CAPITAL: THE DEGRADATION OF WORK IN THE TWENTIETH CENTURY* (1998). On Taylorism in the digital economy, see Brishen Rogers, *The Law and Political Economy of Workplace Technological Change*, 55 HARV. C.R.-C.L. L. REV. 531 (2020).

131. KIMBALL, *supra* note 129, at 17–29.

132. JOSEPHINE GOLDMARK, *FATIGUE AND EFFICIENCY* (1912).

133. *Id.* at 195–200.

134. KIMBALL, *supra* note 129, at 54 (3d ed. 1925).

135. *Id.* at 35.

136. *Id.* at 425.

137. *Id.* at 94 (describing the relationship between workers, foremen, superintendents, and general managers).

138. See Oscar Kraines, *Brandeis' Philosophy of Scientific Management*, 13 W. POL. Q. 191 (1960).

a narrow range of tasks to perform over and over. Progressive labor economist John R. Commons described the object of Taylorism as:

not that of a substitute machine, but an analysis of the very motions that constitute the skill itself; the breaking up of these motions into their elementary parts; the elimination of waste motions and the selection of time-saving motions; the timing of each motion by a stop watch, and the recording of both time-saving motions and their standard times on instruction sheets, by which almost any unskilled laborer can learn quickly to do the work.¹³⁹

Testifying to the Industrial Commission in 1912, Joseph F. Valentine of the Molders Union described use of a stopwatch to assess workers' motions as a "slave driving proposition."¹⁴⁰ Valentine explained, that "man has not yet become a machine. He is human; he does not want his action gauged by a stop watch."¹⁴¹

Testifying in the same hearing, however, Brandeis argued that coming up with "time standards" for labor routines was essential.¹⁴² Further, "if it is done in the right way, the stop watch cannot, it seems to me, be objected to by labor, because it is the greatest possible protection to labor."¹⁴³ Brandeis explained that knowledge about the cost of labor would enable both employers and employees to set the correct set of expectations. Then in a prolonged conversation he advocated the use of efficiency experts to determine the course of action that would enable labor to operate most efficiently, and in the process earn higher wages.¹⁴⁴

A few years later the United States Commission on Industrial Relations published a study on scientific management and labor by Robert Hoxie, a political economist from the University of Chicago. Hoxie's study came to mixed conclusions, but generally more aligned with those of Commons.¹⁴⁵ One of his most important observations was that because of its emphasis on rote repetitive motion, scientific management tended to prefer unskilled work over that of the tradesmen, which led to lower wages. Ultimately, he concluded that scientific management was good for firms but bad for labor.¹⁴⁶ He did

139. John R. Commons, *Book Review*, 21 AM. J. SOC. 688, 688 (1916).

140. "Efficiency Systems and Labor" 507, Final Report and Testimony, Commission on Industrial Relations (April 28, 1916) (testimony of Joseph F. Valentine, President International Molders Union).

141. *Id.*

142. *Id.* at 992 ("Efficiency Systems and Labor," testimony of Justice Brandeis).

143. *Id.* at 993.

144. *Id.* at 993-95.

145. ROBERT F. HOXIE, SCIENTIFIC MANAGEMENT AND LABOR (1916).

146. *Id.* at 138.

believe, however, that many of the identified problems with scientific management were correctable through greater labor participation in workplace decisions.¹⁴⁷

One thing Taylorism did offer was at least a partial escape from size. By advocating repetitive and standardized processes rather than large scale production, Taylorism was able to present a mechanism for achieving efficiency without the need for large firms. Brandeis was swimming against the tide, however. For example, the chain stores Brandeis opposed were also followers of scientific management,¹⁴⁸ and they found substantial savings that accrued to multistore operations.¹⁴⁹ By changing management policies and merging wholesale and retail functions, the chain stores were able to distribute at lower costs than independent stores.¹⁵⁰ Advocates of scientific management could attribute the success of the chains to these managerial cost savings rather than firm size.¹⁵¹ For its part, the Robinson-Patman Act emerged as an opponent to both large firm size and some of the recommendations of scientific management, such as eliminating the use of third-party brokers. Section 2(c) of that provision placed severe limits on a firm's ability to obtain a lower price by eliminating independent brokers. The Supreme Court went even further, interpreting it to prevent a broker from accepting a reduced commission in order to complete a large sale.¹⁵²

Brandeis had a difficult time believing that large firms undersold smaller ones because they had lower costs. Rather, he argued in Taylorite fashion that firms actually grew too large to be economi-

147. *Id.*

148. *See, e.g.,* WALTER S. HAYWARD & PERCIVAL WHITE, *CHAIN STORES: THEIR MANAGEMENT AND OPERATION*, at vii, 94 (1925) (applying principles of scientific management to operation of retail chains).

149. *See, e.g.,* A.W. Zelomek, *The New Trend in Distribution*, 24 J. AM. STAT. ASS'N. 425 (1925); Malcolm D. Taylor, *Progressive Retail Management*, in 209 ANNALS AM. ACAD. POL. & SOC. SCI. 46 (1940).

150. Taylor, *supra* note 149, at 53.

151. *Id.* at 51. However, much of what Malcolm D. Taylor described actually referenced economies of scale. For example, "Expert buyers are employed at large salaries-salaries that in most cases the store under one roof could not afford to pay-yet the buying cost per store is small." *Id.*

152. 15 U.S.C. §13(c). *See* Fed. Trade Comm'n v. Henry Broch & Co., 363 U.S. 166 (1960) (discussing how the provision made it unlawful for broker to accept reduced commission from five percent to three percent in order to complete a large sale). Justice Douglas cited the statutory concern for "dummy brokerage," or fake discounts offered in lieu of non-existent brokerage; however, in this case, a real broker and a real commission reduction was involved. *Id.* at 168-169.

cal.¹⁵³ He professed no concern whatsoever about a firm's "natural" growth.¹⁵⁴ By contrast, growth to a very large size was "unnatural," in that it was achieved by antitrust violations, including anticompetitive mergers that enabled firms to grow to a size where they actually had higher costs.¹⁵⁵

3. *The Robinson-Patman Act*

Brandeis' view of the relationship between large enterprise and efficiency provides some insight into why the Robinson-Patman Act was such a dismal failure. It largely sidestepped the true reasons that chain stores were attractive to so many customers, particularly in lower income ranges. The imagined reasons for the Act's creation were related to discriminatory pricing, not economies of scale or vertical integration. That theory commanded much more political energy than economic validity.

The Robinson-Patman Act pictured the chain store problem almost exclusively in terms of pricing rather than scale or vertical structure. Further, the motivations for the Act deviated from earlier concerns with predatory pricing expressed during the Progressive Era and manifested in the original section 2 of the Clayton Act.¹⁵⁶ At that time, it was thought that selective predatory pricing was an important tool for excluding competitors. Because it was selective it was also discriminatory, in that the perpetrator was thought to finance predation in one area by charging higher prices in other areas.

During the 1930s, regulators shifted their focus to the idea that the large chains grew as they did because they were able to force suppliers to sell to them at lower prices than smaller stores obtained. Advocates described this as a "subsidy" favoring the larger retailers. Congressman John G. Utterback of Maine, Chair of the House Subcommittee on the Robinson-Patman Act, believed that the Act was

153. See BRANDEIS, *The Democracy of Business*, in CURSE OF BIGNESS, *supra* note 106, at 135. On this point, see Comment, *Mr. Justice Brandeis, Competition and Smallness: A Dilemma Re-Examined*, 66 YALE L.J. 69, 72 (1956).

154. See BRANDEIS, *The Democracy of Business*, in CURSE OF BIGNESS, *supra* note 106, at 114 ("[T]here is nothing in our industrial history to indicate that there is any need whatever to limit the natural growth of a business in order to preserve competition"); see also *id.* at 109 ("[C]ompetition is in no sense inconsistent with large scale production and distribution").

155. *Id.* at 105, 124–131.

156. As a result, the Act had been held not to reach price discrimination as between two different resellers. See, e.g., *Mennen Co. v. Fed. Trade Comm'n*, 288 F. 774 (2d Cir. 1923), *cert. denied*, 262 U.S. 759 (1923). However, a few years later, the Court changed its mind. See *George Van Camp & Sons v. Am. Can Co.*, 278 U.S. 245 (1929).

intended to permit one firm to receive a benefit that placed a burden on other firms. To illustrate this, Congressman Utterback presented the following situation where two purchasers were competing sellers:

If the two are competing in the resale of goods . . . [and] the price to one is so low as to involve a sacrifice of some part of the seller's necessary costs and profit as applied to that business, it leaves that deficit inevitably to be made up in higher prices to his other customers; and there, too, a relationship may exist upon which to base the charge of discrimination.¹⁵⁷

The FTC followed this pattern in early RPA decisions. For instance, in *Champion Spark Plug* (1939), the FTC alleged that as a result of differential prices, those paying the higher price were forced to support other buyers who paid less.¹⁵⁸

In 1934, the FTC's own study of chain stores (the "Chain Store Report") acknowledged that the ability to receive lower buying prices accounted for part of the difference between chain store and single store prices.¹⁵⁹ It also observed, however, that much of the savings resulted from vertical integration and large-scale purchasing. For example, regarding wholesale grocers, the Chain Store Report observed that single store operators who organized into cooperatives for purchasing could make up an "appreciable proportion" of these price differences.¹⁶⁰

Many of the suspicious practices were concessions given to larger operators who performed certain functions for themselves, including advertising,¹⁶¹ brokerage, and freight.¹⁶² While discriminatory pricing was a factor, the Chain Store Report concluded that the "inte-

157. 80 CONG. REC. 9416 (1936).

158. See Complaint, *Champion Spark Plug Co.*, F.T.C. No. 3977 (Dec. 22, 1939), 4 Fed. Reg. 4929; John T. Haslett, *Price Discriminations and the Justifications Under the Robinson-Patman Act of 1936*, 46 MICH. L. REV. 450, 457-458 (1948) (quoting *Champion Spark Plug* and other complaints).

159. FED. TRADE COMM'N, FINAL REPORT ON THE CHAIN STORE INVESTIGATION 53-59 (1934), S. DOC. NO. 4, 74th Cong., 1st Sess. (1935) [hereinafter CHAIN STORE REPORT]. Based on the data from this report, the overall advantages in purchasing prices only accounted for nine to ten percent of the price differences between chains and independents; the balance came from other sources. *Id.* at 56; see also MORT A. ADELMAN, *Price Discrimination as Treated in the Attorney General's Report*, 104 U. PA. L. REV. 222, 233-234 (1955); Terry Calvani, *Government Enforcement of the Robinson-Patman Act*, 53 ANTITRUST L.J. 921 (1985).

160. CHAIN STORE REPORT, *supra* note 159, at 56-57.

161. See *id.* at 86 ("Chains in many lines possess an important advantage through their ability to use newspaper advertising where the independent retailer cannot afford to do so. Moreover, the newspaper advertising of the chains tends to be much more effective than that of the independents owing to the multiple outlets of the chains . . .").

162. *Id.* at 60.

gration of the functions of manufacturer, wholesaler, and retailer” was very important as well.¹⁶³ The Chain Store Report also observed that the chains operated at lower margins than independents did.¹⁶⁴

The FTC’s orientation toward protection of consumers frequently placed it into conflict with the Brandeis vision that was always on the lookout for small firms. For example, the Chain Store Report concluded that lower income people used the chains more than higher income patrons.¹⁶⁵ That difference later emerged as a significant variable in the question of why the poor and people of color paid more for food in both inner city and rural areas, reflecting chain store preferences to locate in the suburbs.¹⁶⁶ Inner city residents were largely relegated to small single store operators.

In contrast to the Brandeis view, the Chain Store Report also advocated strongly against the graduated state taxes on chains,¹⁶⁷ concluding that the “consuming public” would end up paying them.¹⁶⁸ It expressed particular opposition to taxation efforts intended to drive chains out of business:

To tax out of existence the advantages of chain stores over competitors is to tax out of existence the advantage which the consuming public have found in patronizing them, with a consequent addition to the cost of living for that section of the public.¹⁶⁹

Congress passed the Robinson-Patman Act (RPA) in 1936, ignoring much of the FTC’s Chain Store Report. The Act misfired badly. As mentioned, it focused exclusively on prices, although with low prices rather than high ones being the evil. It ignored both economies of scale and vertical integration, which accounted for a large portion of chain store growth.

Ironically, the statute’s myopic focus on pricing became a significant inducement to further vertical integration. The RPA applied only to “sales” to independent entities. Transfers between the divisions or subsidiaries of a single firm were not covered.¹⁷⁰ As a result, a firm that was already vertically integrated could avoid the Act for all trans-

163. *Id.* at 66.

164. *Id.* at 68.

165. *Id.* at 66.

166. *See, e.g.*, Judith Bell & Bonnie Maria Burlin, *In Urban Areas: Many of the Poor Still Pay More for Food*, 12 J. PUB. POL’Y MKTG 268 (Robert N. Mayer & Debra L. Scammon eds., 1993) (discussing how the biggest variable was lack of chain stores in inner city areas).

167. *See* CHAIN STORE REPORT, *supra* note 159.

168. *See* CHAIN STORE REPORT, *supra* note 159, at 1–82.

169. *Id.* at 91.

170. On this requirement, see 14 HERBERT HOVENKAMP, ANTITRUST LAW ¶ 2312 (4th ed. 2020).

fers within the integrated part of the firm. For example, if a chain owned its own dairies, farms, processing plants, or delivery trucks, transfers among these entities were not “sales” under the Act. Further, the threat of liability for sales induced firms to vertically integrate so they could avoid RPA liability—obviously not the result that the Act’s framers intended.¹⁷¹ To the extent that vertical ownership reduced a firm’s costs, it provided a double benefit: it was justifiable on its own terms and became a means of avoiding RPA liability. In other situations, firms avoided the Act by simply refusing to deal with smaller, higher-cost buyers.¹⁷² The courts found these refusals to be lawful.¹⁷³ In any event, the chain stores experienced rapid growth, not very much hindered by the RPA.¹⁷⁴

The RPA was a lamentable use of antitrust to target large firm size without understanding the economic issues. It represents little more than capture by small firms or those dedicated to the preservation of obsolete business methods or technology. In the process, such protections are disdainful of consumers and labor, the two largest interest groups that benefit from high output and low prices.

D. *Anti-Bigness Beyond Brandeis*

Justice William Douglas, who succeeded to Justice Brandeis’ seat on the Supreme Court in 1939, also cited concerns about bigness without regard to market power. Brandeis and Douglas are the two Justices who favored using the antitrust laws to pursue size for its own sake—but always in dissents. In his dissent in *United States v. Columbia Steel Co.*,¹⁷⁵ Justice Douglas protested against the Supreme Court’s refusal to condemn a merger of steel producers because of deficiencies in the government’s market definition.¹⁷⁶ Sidestepping the market definition issue, Justice Douglas concluded that “[w]e have here the prob-

171. See, e.g., Marius Schwartz, *The Perverse Effects of the Robinson-Patman Act*, 31 ANTITRUST BULL. 733, 754 (1986).

172. See Reinhold P. Wolff, *Monopolistic Competition in Distribution*, 8 L. & CONTEMP. PROBS. 303, 315 (1941).

173. See Comment, *Refusals to Sell and Public Control of Competition*, 58 YALE L.J. 1121, 1132–1133 (1949). However, one court did find that A&P’s practice of vertically integrating with suppliers in order to avoid the RPA was a restraint of trade in violation of the Sherman Act. See *United States v. N.Y. Great Atl. & Pac. Co.*, 67 F. Supp. 626 (E.D. Ill. 1946), *aff’d*, 173 F.2d 79 (7th Cir. 1949).

174. See Frederick M. Rose, *The Evolution of the Robinson-Patman Act: A Twenty-Year Perspective*, 57 COLUM. L. REV. 1059, 1061–1062 (1957) (noting rapid growth of chains following World War II).

175. *United States v. Columbia Steel Co.*, 334 U.S. 495, 535 (1948) (Douglas, J., dissenting).

176. See *id.* at 509–10, 527–28.

lem of bigness.”¹⁷⁷ However, he then analyzed the problem entirely in terms of the power of large firms to control market prices.¹⁷⁸ In the process, he acknowledged that control over prices is not a function of pure size, but rather of a firm’s abilities to control the market.¹⁷⁹

Concerns about bigness as such have sometimes made it into the legislative history of United States antitrust statutes. In his analysis of the 1950 amendments to the merger provision, Derek C. Bok observed that much of the debate over the revision of section 7 of the Clayton Act pertained to non-economic values. He lamented a “paucity” of statements concerned with high prices, innovation, or efficiency. Although the members of Congress spoke of competition, Bok concluded that the term appeared “to possess a strong socio-political connotation” emphasizing the virtues of small business.¹⁸⁰

Bok also noted the House report on the amendments, which called for intervention against mergers whose effect “may be a significant reduction in the vigor of competition,” although the effect “may not be so far-reaching as to amount to a combination in restraint of trade, create a monopoly, or constitute an attempt to monopolize.”¹⁸¹ This required concern about the elimination through merger of a firm that had been “a substantial factor in competition.”¹⁸² It also mandated a close look at acquisitions where the “increase in the relative size of the enterprise” gave a firm a decisive advantage over its rivals, thus depriving rivals of a “fair opportunity to compete.”¹⁸³

Bok concluded that there was little consensus about the extent to which the statute should incorporate values unrelated to economic competition, or whether it should incorporate such values at all. Nevertheless, the statements he quoted were all complaints about the fact that concentration had become too high, not about size as such.¹⁸⁴

177. *Id.* at 535 (citing *CURSE OF BIGNESS*, *supra* note 106).

178. *Id.* at 536.

179. *Id.* He later acknowledged that the merger led to control of about three percent of the market. *Id.* at 538.

180. See Derek C. Bok, *Section 7 of the Clayton Act and the Merging of Law and Economics*, 74 *HARV. L. REV.* 226, 236-37 (1960); see also *id.* at 324 (discussing *Milk Producers Ass’n v. United States*, 362 U.S. 458 (1960), which condemned acquisition of a firm known to be a cutter). Bok would later become Harvard’s President.

181. *Id.* at 237 (quoting H.R. REP. NO. 1191, at 8 (1949)).

182. *Id.*

183. *Id.*

184. See *id.* at 228-238.

E. Size or Concentration?

Notwithstanding the views of Justices Brandeis and Douglas, market concentration and market power, not size, have almost always been the principal targets of antitrust, even during the mid-twentieth century heyday of antitrust aggressiveness. To be sure, the interest group politics promulgated by trade associations also advocated against size as such, and the Robinson-Patman Act was passed without a market power requirement. Beyond that, the Court has never equated mere size with competitive harm. Even the Progressives (Brandeis and Douglas aside) were focused on market dominance and concentration rather than size.

The tools for measuring concentration were developed by Progressive economists at the beginning of the twentieth century and generally relied on census data to determine the number of firms in a market and their shares. That approach has always been fraught with problems, but it continues to be used.¹⁸⁵

U.S. antitrust policy has never condemned a merger without regard to market share or the ability to exercise market power.¹⁸⁶ To be sure, the market share numbers that triggered a challenge in the 1960s were very small in comparison to the numbers we use today.¹⁸⁷ In *Brown Shoe v. United States*, the Supreme Court actually went further than any serious reading of either the amended Clayton Act or its legislative history would authorize. The Court's condemnation of the merger followed only after a lengthy analysis of the relevant market¹⁸⁸ and its assumptions about concentration.¹⁸⁹ The Court ultimately approved the district court's conclusion that the merger was harmful because it enabled Brown Shoe to sell shoes at a lower price than its rivals or to offer higher quality at the same price.¹⁹⁰ That, of course,

185. On the Progressive development, see Hovenkamp, *supra* note 20.

186. The Hart-Scott-Rodino Act, 15 U.S.C. § 18a, defines its requirements for pre-merger notification of larger acquisitions in terms of large dollar size rather than market share, but these requirements are driven by concerns for administrative convenience and have nothing to do with the liability standard. As the 2010 Merger Guidelines make clear, the measurement of market power or market concentration remains dispositive. See U.S. DEP'T OF JUSTICE & FED. TRADE COMM'N, HORIZONTAL MERGER GUIDELINES (2010) [hereinafter HORIZONTAL MERGER GUIDELINES], <https://www.justice.gov/atr/horizontal-merger-guidelines-08192010>.

187. See, e.g., *Brown Shoe Co. v. United States*, 370 U.S. 294, 343 (1962); *United States v. Von's Grocery Co.*, 384 U.S. 270, 280–81 (1966).

188. *Brown Shoe*, 370 U.S. at 320–325.

189. *Id.* at 315, 316–17 (“rising tide of economic concentration”); see also *id.* at 331–33 (“trend toward concentration”).

190. *United States v. Brown Shoe Co.*, 179 F. Supp. 721, 738 (E.D. Mo. 1959), *aff'd*, 370 U.S. 294 (1962) (condemning the merger because it gave the post-merger

would be a threat posed by bigness without regard to market share. Depending on the extent of scale economies or the cost savings made available by vertical integration, even a larger firm with a small market share could undersell smaller rivals. Further, the natural consequence of lower costs and prices would be firm growth at the expense of higher cost firms.

Nevertheless, even the *Brown Shoe* Court concluded that “[t]he market share which companies may control by merging is one of the most important factors to be considered” when determining the effects on “competition in the relevant market.”¹⁹¹ In all events, the Supreme Court almost immediately backtracked from the consequences of *Brown Shoe*, eventually looking at increased prices or reduced quality as the measure of competitive harm from mergers.¹⁹²

Brown Shoe and *Columbia Steel*¹⁹³ together illustrate something important about the relationship between absolute size and control over prices. If large size leads to lower prices due to economies of scale or vertical integration, as *Brown Shoe* conceded, then a large firm can have a significant influence even though its market share is relatively small. That was also true of the chain stores, which drove many smaller firms out of business, even though the chain stores themselves never individually achieved dominant market positions.¹⁹⁴

The requirement that a firm must possess a high share of a relevant market is driven by the fact that the feared evil is high prices, not low ones. This difference strikes to the heart of antitrust policy. If the goal is to protect higher cost firms from a bigger firm’s lower prices, then market share may not matter; simple bigness is the problem. However, if the goal is to protect consumers and labor from market dominance and the resulting lower output and higher prices, then actual dominance of the market must be either present or realistically threatened.

Justice Douglas acknowledged as much in his dissent in *Standard Oil Co. v. United States*,¹⁹⁵ which was decided a year after *Columbia Steel*. In an odd flip from his strongly pro-interventionist antitrust views, he dissented from the Supreme Court’s condemnation of Standard Oil’s exclusive dealing agreements with retail gasoline sta-

firm decisive advantages, resulting in “lower prices or in higher quality for the same price,” with the effect that “the independent retailer can no longer compete”).

191. *Brown Shoe*, 370 U.S. at 343 (emphasis added).

192. See Herbert Hovenkamp, *Did the Supreme Court Fix Brown Shoe?*, STIGLER CTR., PROMARKET (May 12, 2023).

193. *United States v. Columbia Steel Co.*, 334 U.S. 495 (1948).

194. See *supra* notes 81–82 and accompanying text.

195. *Standard Oil Co. v. United States*, 337 U.S. 293 (1949).

tions.¹⁹⁶ Standard Oil's distribution agreements, which prohibited Standard Oil-branded gasoline stations from offering multiple brands of gasoline, covered sixteen percent of the gasoline retailers in the area.¹⁹⁷ If such contracts threatened higher prices, it is hard to see how a coverage of sixteen percent could be a sufficient market share; customers could find ample alternatives. But that was not the basis of Justice Douglas' dissent. He was concerned that the majority's disapproval of exclusive dealing contracts would force the oil companies to "build service-station empires of their own."¹⁹⁸ To the extent that single-branding enabled them to operate more efficiently, the oil companies would simply build their own gasoline stations. As a result, single-branding decisions would turn into unilateral conduct, untouchable by the antitrust laws.

Concerns about bigness as such are not based on any coherent theory relating size to prices, unless we really do want to follow Justices Brandeis and Douglas down the rabbit hole that antitrust should be concerned about protecting smaller firms or those dedicated to older technologies. That leaves noneconomic concerns. For example, the fear may be that large firms have more undesirable political power.

F. Bigness and Political Power: The Problem of Trade Associations

Business unquestionably wields considerable political power. However, over the history of antitrust, including Brandeis' own era, the political activities of trade associations have generated harsher consequences than the activities of large individual firms.¹⁹⁹ In fact, the trade association involvement in the Brandeisian disputes over chain stores and the licensing of ice production was only the tip of the iceberg. Legal historian Lawrence Friedman once observed that the vast majority of occupational licensing restrictions in the United States did not originate with governments, but rather with trade associations protecting their turf.²⁰⁰ To be sure, they also had legitimate public

196. *Id.* at 315 (Douglas, J., dissenting).

197. *Id.* at 295.

198. *Id.* at 320.

199. For an excellent study covering this period, see PALAMOUNTAIN, *supra* note 82.

200. See Lawrence M. Friedman, *Freedom of Contract and Occupational Licensing 1890-1910: A Legal and Social Study*, 43 CALIF. L. REV. 487, 503 (1965) (describing regulation as "actively sought by the regulated"); see also Aaron Edlin & Rebecca H. Allensworth, *Cartels by Another Name: Should Licensed Occupations Face Antitrust Scrutiny*, 162 U. PA. L. REV. 1093, 1095 (2014) (noting extent to which licensing boards are dominated by active participants); accord Rebecca H. Allensworth, *Foxes*

interests in protecting the quality and integrity of their businesses. The activities of trade and professional associations reflect a mixture of these two interests,²⁰¹ and antitrust law has often been used to police that balance.

That exposes another problem with bigness tests: market-dominating trade associations are much more likely to harm competition than large individual firms, and they have been more successful in doing so. Trade associations can profit significantly from collusion. On the other side, they are less likely to yield the kind of integration and coordination that make larger firms more efficient. One thing that they are good at is lobbying. These conclusions are no different than the explanation of why we apply more aggressive antitrust rules to cartels than we do to single-firm conduct.

A significant portion of antitrust law's state action doctrine is concerned with the anticompetitive activities of trade and professional associations that lobbied governments and obtained anticompetitive restrictions.²⁰² Numerically, these decisions exceed the antitrust challenges to large firm conduct by a wide margin.

While Brandeis repeatedly expressed concerns about the power of very large firms, he was a lifelong supporter of "fair trade" and similar associations. But these were often little more than fronts for dealer cartels intended to keep lower-cost rivals out of the market. That was true of the *Dr. Miles* antitrust case that initially condemned resale price maintenance.²⁰³ There, the Court broke up a cartel that used resale price maintenance as an enforcement mechanism against a discounter.²⁰⁴ The history of trade associations repeatedly shows

at the Henhouse: *Occupational Licensing Boards Up Close*, 105 CALIF. L. REV. 1567, 1571 (2017). On the extent of legislative capture by the industry, see Paul J. Larkin, Jr., *Public Choice Theory & Occupational Licensing*, 39 HARV. J.L. & PUB. POL'Y 209, 210–16 (2016).

201. See generally GERALD BERK, LOUIS D. BRANDEIS AND THE MAKING OF REGULATED COMPETITION, 1900-1932 (2009); Marc T. Law & Sukkoo Kim, *Specialization and Regulation: The Rise of Professionals and the Emergence of Occupational Licensing Regulation*, 65 J. ECON. HIST. 723, 725 (2005).

202. See, e.g., N.C. State Bd. of Dental Exam'rs v. Fed. Trade Comm'n, 574 U.S. 494, 514 (2015) (striking down dental association rule preventing non-dentists from whitening teeth); Cal. Retail Liquor Dealers Ass'n v. Midcal Aluminum, 445 U.S. 97, 113–14 (1980) (striking down rule requiring vintners to impose resale price maintenance on retailers); Goldfarb v. Va. State Bar, 421 U.S. 773, 791–92 (1975) (striking down bar association rule fixing legal fees); see 1A PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶¶ 221-228 (5th ed. 2020) (discussing numerous decisions).

203. *Miles Med. Co. v. John D. Park & Sons Co.*, 220 U.S. 373 (1911).

204. *Id.* On the cartel of small druggists behind the scheme, see Hovenkamp, ENTERPRISE AND AMERICAN LAW, *supra* note 67, at 340–47.

members banding together to support resale price maintenance, oppose chain stores, block new market entry by aggressive sellers, and avoid potential market-shifting innovations.²⁰⁵

In a large study of “open price” trade associations in 1925,²⁰⁶ the FTC observed that many of the complaints against them involved resale price maintenance,²⁰⁷ much of which was facilitated by trade associations.²⁰⁸ In addition, trade associations promulgated numerous ethical codes that were little more than disguised attempts to either facilitate price fixing or prevent firms from integrating into new areas.²⁰⁹ In its 1919 decision in *Eastern States Lumber Association v. United States*,²¹⁰ the Court applied the Sherman Act to condemn a small lumber retailer association’s rule that forbade dealing with lumber suppliers who “unfairly” integrated into retailing.²¹¹

In 1955, FTC Chairman Edward F. Howrey lamented that a significant part of his agency’s workload consisted of investigating price fixing, price information exchanges, and related practices by trade as-

205. See, e.g., Daniel A. Crane, *Tesla, Dealer Franchise Laws, and the Politics of Crony Capitalism*, 101 IOWA L. REV. 573, 575 (2016) (discussing auto dealer organizations’ use of state law to resist Tesla’s innovations in retail car sales). This dispute remains ongoing. See DANIEL A. CRANE, REG., REFORMING MICHIGAN VEHICLE DIRECT SALES LAWS 34 (2021).

206. See OPEN-PRICE TRADE ASSOCIATIONS REPORT, *supra* note 112. So-called Open Price trade associations involved agreements among groups of competitors to disclose prices and terms to the public, often to limit discounting, but to avoid explicitly fixing prices. They were heavily studied in the 1910s and 1920s. See, e.g., H.R. Tosdal, *Open Price Associations*, 7 AM. ECON. REV. 331, 348–50 (1917). The principal treatise, which largely defended them, was ARTHUR JEROME EDDY, *THE NEW COMPETITION* (1912). See Gerald Berk, *Communities and Competitors: Open Price Associations and the America State, 1911-1929*, 30 SOC. SCI. HIST. 375, 381 (1996).

207. OPEN-PRICE TRADE ASSOCIATIONS REPORT, *supra* note 112, at 253.

208. *Id.* at 253. The FTC Report on Trade Associations contained a lengthy description of the various codes of ethics promulgated by many trade associations. See, e.g., *id.* at 275–80 (discussing such attempts by the National Association of Gummed Tape Manufacturers and the National Paper Trade Association); *id.* at 81–82 (tracing how the Sugar Institute, similarly, was ultimately condemned by *Sugar Institute, Inc. v. United States*, 297 U.S. 553 (1936)); OPEN-PRICE TRADE ASSOCIATIONS REPORT, *supra* note 112, at 253 (describing how various associations, including the Western Confectioners Association, promulgated ethical codes discouraging discounts or rebates); *id.* at 284 (describing how the code made it unethical to invade the territory of a competitor); *id.* at 288 (describing how the code made it unethical for a member of Wisconsin Cannery Association to sell directly to A&P rather than to independent canners); *id.* at 304 (describing how, for funeral directors, the code made it unethical to advertise prices).

209. See *id.* at 47 (describing how the Associated Office Furniture Manufacturers required publication of a price list and adherence to it).

210. *E. States Lumber Ass’n v. United States*, 234 U.S. 600 (1914).

211. *Id.* at 604–14.

sociations intended to limit price competition among members.²¹² That trend has continued. As many as one-third of cartel cases arise out of trade association activities.²¹³

G. *Conclusions on Bigness as an Antitrust Goal*

Should antitrust policy be concerned with single-firm bigness itself, without regard to market dominance? To be sure, some very large firms dominate their markets, and antitrust's stated concern with monopoly includes those. But markets consist of products, not firms, and many large firms are not dominant players in every product market that they sell in. Nevertheless, the idea that antitrust is about combating bigness has always had a place in populist rhetoric and preoccupied a significant portion of the generalist press. Ultimately, the arguments for using antitrust law to target size alone reduce to either protections for small businesses; preferences about pricing that favor smaller, higher-cost firms; or concerns that new technology may disfavor smaller, established firms. Consumers and labor are invariably injured.

The concerns about large absolute size show up in the hostility directed against large internet platforms. As a general proposition, the concerns with these platforms are rarely regarding high prices, and only occasionally monopoly. Overall, the large platforms sell their services and goods either at a very low price or else at a price of zero, although some third parties such as advertisers may pay high prices. Consumer satisfaction with these firms is generally high.²¹⁴

212. Edward F. Howrey, *The Federal Trade Commission Looks at Trade Associations*, 6 ABA ANTITRUST SECTION 20 (1955). For a good summary of antitrust activity against trade association cartels in the 1920s, see Robert T. Joseph, *Feature: Trust-busters John Lord O'Brian Hoover's Antitrust Chief, Gives the FTC an Antitrust Lesson*, 25 ANTITRUST ABA 88 (2010), and see Barak Orbach, *The Present New Antitrust Era*, 60 WM. & MARY L. REV. 1439, 1448–50 (2019).

213. Christopher R. Leslie, *Cartels, Agency Costs, and Finding Virtue in Faithless Agents*, 49 WM. & MARY L. REV. 1621, 1687–88 (2008) (citing numerous studies).

214. See *U.S. Customer Satisfaction with Google From 2002 to 2022* (illustration), STATISTICA (July, 2022), <https://www.statista.com/statistics/185966/us-customer-satisfaction-with-google/> [<https://perma.cc/R6EY-4HG3>] (discussing satisfaction with Google); *2021 Customer Loyalty Leaders* (illustration), in *2021's Top Brands Ranked by Customer Loyalty*, MARKETING CHARTS (Oct. 20, 2021), <https://www.marketingcharts.com/industries/retail-and-e-commerce-118573> [<https://perma.cc/5TK3-R597>] (ranking brand loyalty with Amazon #1 and Apple #2); Joshua Swingle, *Apple Tops Latest Customer Satisfaction Survey; Samsung Drops Two Places*, PHONEARENA, (Sep. 21, 2021), https://www.phonearena.com/news/apple-tops-customer-satisfaction-survey-samsung-drops-two-places_id135181 [<https://perma.cc/D9VS-27K9>] (ranking Apple #1 with computers).

Considering today's large digital platforms, they are generally not monopolies in most of the markets in which they operate. There are some exceptions. Google Search has a dominant share (exceeding ninety percent) of the consumer search market. Amazon has a dominant position in ebooks, assuming that ebooks are a distinct market from print books.²¹⁵ But neither Facebook nor Amazon has anything close to monopoly power in the vast number of individual products and services that they sell. Recently contemplated legislation addressing self-preferencing could change that. If enacted, it would redefine covered platforms in terms of gross size and may not have an effective market power screen.²¹⁶

II.

THE "COMPETITIVE PROCESS"

While consumer welfare may be the most commonly stated goal of antitrust law, "protection of the competitive process" is likely a close second.²¹⁷ Claims that antitrust law should seek to promote the competitive process are certainly less objectionable than alternatives that represent the views of particular interest groups, such as attacks on bigness. Nevertheless, the phrase rarely provides anything ap-

215. See *eBook Market Share: Amazon, Apple and Kobo*, BOOKSLICED, <https://book-sliced.com/books/the-exact-ebook-market-shares-of-the-major-players-in-the-industry-are-rather-difficult-to-come-by-but-here-are-some-estimates/> (last visited Nov. 29, 2022) (Apple's ebook market share is eighty-one percent).

216. See James Langenfeld, Christopher Ring & Lucia Castiblanco, *American Innovation and Choice Online Act (S. 2022): Insights from Economics Regarding Self-Preferencing and Non-Discrimination*, AM. BAR ASS'N ANTITRUST NEWSL. (Mar. 23, 2022) (criticizing the self-preferencing bill, among other things, for lack of a market power requirement). See also Herbert Hovenkamp, *Gatekeeper Competition Policy*, MICH. TECH. L. REV. (2023) (forthcoming), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4347768.

217. See A. Douglas Melamed, *Antitrust Law and Its Critics*, 83 ANTITRUST L.J. 269, 271–72 (2020) (advocating a "competitive process" goal); C. Scott Hemphill & Nancy L. Rose, *Mergers that Harm Sellers*, 127 YALE L.J. 2078, 2080 (2018) (identifying competitive process standard with merger enforcement and arguing that standard applies to both downstream and upstream harms and appearing to equate it with the welfare of trading partners); Christopher R. Leslie, *The DOJ's Defense of Deception: Antitrust Law's Role in Protecting the Standard-Setting Process*, 98 OR. L. REV. 379, 392 (2020) [hereinafter *DOJ's Defense*] (applying competitive process standard to anticompetitive standard setting); JONATHAN M. JACOBSON, ANTITRUST SOURCE, ANOTHER TAKE ON THE RELEVANT WELFARE STANDARD FOR ANTITRUST 1 (2015) (favoring a competitive process standard and equating it with increased output); Gregory J. Werden, *Antitrust's Rule of Reason: Only Competition Matters*, 79 ANTITRUST L.J. 713, 713 (2014) (favoring a competitive process standard and rejecting attempts to state a welfare standard); Einer Elhauge, *Making Sense of Antitrust Petitioning Immunity*, 80 CALIF. L. REV. 1177, 1180 (1992) (embracing competitive process goal and applying it to political petitioning).

proaching guidance in a particular decision; that is, it operates as a slogan rather than a goal.

The term “competitive process” may imply an important value that liberal democracy places on process. Within that framework, it may stand for a kind of minimalism that requires antitrust policy to umpire the competitive game, but little more. This is analogous to how a dedication to “free markets” operates as a highly generalized principle of economic freedom to trade, implying only as much enforcement as is needed to make the market work.²¹⁸ Consistent with that, “competitive process” rationales may refer to situations in which private actors set up rulemaking institutions, such as standard-setting organizations. Antitrust law then considers whether decision-making in these organizations is consistent with a competitive process but is reluctant to review the substantive decisions themselves.²¹⁹ The assumption in such cases must be that the market works well enough when left to itself, provided that people play by the rules. Antitrust law need only see to it that the rules are followed.

For example, in *Rambus, Inc. v. FTC*,²²⁰ the D.C. Circuit found that the defendant’s violations of rather poorly articulated standard-setting rules were not acts of monopolization under a stated “competitive process” test.²²¹ There was no exclusion as section 2 of the Sherman Act requires. More dubiously, in *FTC v. Qualcomm, Inc.*,²²² the Ninth Circuit found that violations of an obligation to engage in FRAND licensing²²³ did not violate the antitrust laws under a competitive process formulation, even though there was both exclusion and higher prices. Apparently “protection of the competitive process” did not even include the things we associate with competitive harm. That makes a “competitive process” rationale a toothless instrument for pursuing anticompetitive conduct.

Most antitrust litigation does not arise in markets governed by private institutional rules such as those involved in standard setting. In that case, what are the rules? Within our constitutional public law sys-

218. Cf. FRANCIS FUKUYAMA, *LIBERALISM AND ITS DISCONTENTS* 4 (Farrar, Straus and Giroux eds., 2022) (noting liberal democracy’s emphasis on process).

219. See *DOJ’s Defense*, *supra* note 217, at 392 (appearing to use “competitive process” this way); see also *Silver v. N.Y. Stock Exch.*, 373 U.S. 341, 341–42 (1963) (where stock brokerage was heavily governed by private rules, plaintiff was entitled to procedures similar to those in public adjudication of rights).

220. *Rambus, Inc. v. Fed. Trade Comm’n*, 522 F.3d 456 (D.C. Cir. 2008).

221. *Id.* at 463–67.

222. *Fed. Trade Comm’n v. Qualcomm, Inc.*, 969 F.3d 974, 990 (9th Cir. 2020).

223. FRAND is a system for cross-licensing patents that operate on a common technology on “fair, reasonable, and non-discriminatory” terms. See generally Herbert Hovenkamp, *FRAND and Antitrust*, 105 CORNELL L. REV. 1683 (2020).

tem, the process rationale for property and liberty rights falls back mainly on the Fifth and Fourteenth Amendments, with their guarantees of established liberty and property rights, notice, the opportunity to be heard, reasoned decision-making, and equal protection. Even the staunchest laissez-faire liberal is almost always a strong believer in the institutions of contract and property law, as well as procedural due process.²²⁴

If conduct is not covered by a valid contract or is unlawful on some other ground, we are largely at sea. As an antitrust goal, protection of the competitive process suffers from one substantial weakness: it does not say anything. The “competitive process” can basically mean whatever anyone thinks it means.²²⁵ As a result it embraces mutually inconsistent antitrust ideologies.

Consider the simple example of tying arrangements, or a seller’s requirement that a buyer purchase two things together. A hospital might refuse to provide surgical services unless the patient uses the hospital’s own anesthesiologist.²²⁶ Assuming that this policy is not legally defective on other grounds, what does a “competitive process” rationale say about it in an antitrust challenge? The policy expressly excludes rival anesthesiologists, but many long-term supply agreements effectively exclude the suppliers not covered by that particular agreement. What else are they excluded from and with what effect? Under the now largely repudiated leverage theory, the tie between the hospital and its own anesthesiologist may be thought to generate higher prices, but the free market enables firms to set any price they wish.²²⁷ The tie may enable the hospital to price discriminate, but many sales policies subject to free market competition do exactly that.²²⁸ We might begin with a premise that looks to the welfare of strong, short-run purchasers: in a free market, all buyers should have the right to purchase things in whatever package they desire. However, that policy would lead to people insisting on shirts without but-

224. See, e.g., RICHARD A. EPSTEIN, *THE CLASSICAL LIBERAL CONSTITUTION: THE UNCERTAIN QUEST FOR LIMITED GOVERNMENT* (Harvard Univ. Press, 2017).

225. Cf. John M. Newman, *Procompetitive Justifications in Antitrust Law*, 94 *IND. L.J.* 501, 514 (2019) (arguing the content of the competitive process standard “remains mercurial, a cipher” and noting we “never seem to identify what, exactly, constitutes the ‘competitive process’”); Maurice E. Stucke, *Reconsidering Antitrust’s Goals*, 53 *B.C. L. REV.* 551, 568 (2012) (disputing all economic statements of antitrust goals, including competitive process and consumer welfare).

226. See *Jefferson Parish Hosp. Dist. No. 2 v. Hyde*, 466 U.S. 2, 2 (1984).

227. On ties and leverage, see 9 PHILLIP E. AREEDA & HERBERT HOVENKAMP, *ANTI-TRUST LAW* ¶ 1701b, 1710 (4th ed. 2019).

228. *Id.* ¶ 1711.

tons, bananas without peels, or automobiles without tires.²²⁹ Alternatively, we might attach a market power requirement, on the assumption that a competitive firm could not get away with imposing a tie unless it is harmless.²³⁰ But such a requirement only serves to make harm plausible, not necessary. Even a monopoly clothier should probably be able to insist that people purchase shirts with buttons.

In sum, an antitrust concern articulated as a “protection of the competitive process” does not give us much help unless we have some background substance to tell us what intelligent competition policy is. In tying law, economics provides most of that substance, with its concerns about exercises of market power, production or transaction cost savings, price discrimination, disputes over the existence of harmful leverage, foreclosure, and the like.²³¹ The term “competitive process” adds little.

This lack of specificity may explain why protection of the competitive process has been embraced by both liberals who want to expand antitrust enforcement and conservatives who want to shrink it. Justice Stephen Breyer cited it to complain that American Express’s policy of forbidding merchants from encouraging defections from its high fees harmed the competitive process.²³² He also invoked it to approve NYNEX’s exclusive arrangement for purchasing equipment removal services when the harm occurred only to a single competitor.²³³ Justice John Paul Stevens cited the term in a dissent to conclude that the competitive process required protection of the independence of individual traders, and this required continuation of a rule forbidding maximum resale price maintenance.²³⁴ By contrast, in Justice John Marshall Harlan II’s dissent in *Albrecht v. Herald Company*,²³⁵ which initially established the per se illegality of maximum resale price maintenance, he concluded the opposite. He believed that the competitive process required supplier freedom to enforce maximum resale prices.²³⁶ As far as consumer harm is concerned, Justice Harlan had the better of this argument—striking down maximum resale price

229. *Id.* ch. 17D–1.

230. *Id.* ch. 17C.

231. For a catalog of these harms, see 9 PHILLIP E. AREEDA & HERBERT HOVENKAMP, *ANTITRUST LAW* ¶¶ 1703–11 (4th ed. 2018).

232. *See* *Ohio v. Am. Express Co.*, 585 U.S. ___, 138 S. Ct. 2274, 2294 (2018) (Breyer, J., dissenting).

233. *See* *NYNEX Corp. v. Discon, Inc.*, 525 U.S. 128, 135 (1998).

234. *See* *Atlantic Richfield Co. v. USA Petroleum Co.*, 495 U.S. 328, 359 (1990) (Stevens, J., dissenting).

235. *Albrecht v. Herald Co.*, 390 U.S. 145 (1968).

236. *Id.* at 169–70 (Harlan, J., dissenting).

maintenance agreements under a per se rule usually benefits individual dealers with market power at the expense of consumers.²³⁷

Some lower court decisions have equated the competitive process with high output or low prices, essentially pilfering from the concerns of consumer welfare.²³⁸ When Justice Breyer was on the First Circuit, he identified harm to the “competitive process” as conduct that “obstructs the achievement of competition’s basic goals—lower prices, better products, and more efficient production methods.”²³⁹ Those are admirable goals, but a focus on consumer welfare and output addresses them more directly.²⁴⁰ A Ninth Circuit decision indicated that antitrust concerns for the “competitive process” foreclosed the condemnation of “economic behavior that benefits consumers.”²⁴¹ This effectively equates the competitive process with a consumer welfare test. Others, including the landmark D.C. Circuit case *United States v. Microsoft Corporation*,²⁴² used the term to distinguish conduct that harms competitors from conduct that harms consumers.²⁴³ Still, others use it to explain that conduct that harms the “competitive process” is different from conduct that merely harms competitors.²⁴⁴ In *FTC v. Qualcomm, Inc.*, the Ninth Circuit used it in this way to exonerate exclusive selling practices even though it also acknowledged that the

237. See Roger D. Blair & John E. Lopatka, *The Albrecht Rule after Khan: Death Becomes Her*, 74 NOTRE DAME L. REV. 123, 127–28 (1998).

238. See, e.g., *Fishman v. Estate of Wirtz*, 807 F.2d 520, 536, 566 (7th Cir. 1986); *Brunswick Corp. v. Riegel Textile Corp.*, 752 F.2d 261, 266 (7th Cir. 1984) (holding protection of competitive process should “discourage practices that make it hard for consumers to buy at competitive prices”).

239. *Town of Concord v. Boston Edison Co.*, 915 F.2d 17, 22 (1st Cir. 1990).

240. See *infra*, notes 300–40 and accompanying text.

241. *Cascade Health Sol. v. PeaceHealth*, 515 F.3d 883, 903 (9th Cir. 2008).

242. *United States v. Microsoft Corp.*, 253 F.3d 34, 58 (D.C. Cir. 2001) (“[I]t must harm the competitive process and thereby harm consumers. In contrast, harm to one or more competitors will not suffice.”); accord *Clamp-All Corp. v. Cast Iron Soil Pipe Inst.*, 851 F.2d 478, 486 (1st Cir. 1988).

243. See, e.g., *St. Luke’s Hosp. v. ProMedica Health Sys., Inc.*, 8 F.4th 479, 486 (6th Cir. 2021) (“The focus is on guarding the competitive process and on protecting the welfare of consumers, not on ensuring the economic fortunes of competitors.”); *Cohlma v. St. John Med. Ctr.*, 693 F.3d 1269, 1280 (10th Cir. 2012) (describing the primary concern of antitrust law as “corruption of the competitive process, not the success or failure of a particular firm”); *Viamedia, Inc. v. Comcast Corp.*, 951 F.3d 429, 453 (7th Cir. 2020) (describing need for the conduct to harm the competitive process).

244. See *Broadcom Corp. v. Qualcomm, Inc.*, 501 F.3d 297, 308 (3d Cir. 2007) (“Conduct that merely harms competitors, however, while not harming the competitive process itself, is not anticompetitive.”); *Euromodas, Inc. v. Zanella, Ltd.*, 368 F.3d 11, 21 (1st Cir. 2004) (same).

defendant's activities resulted in higher prices.²⁴⁵ That outcome seems to be inconsistent with either a defensible competitive process test or a consumer welfare test.

In May 2022, the head of the Department of Justice (DOJ) Antitrust Division, Assistant Attorney General (AAG) Jonathan Kanter, was the keynote speaker of the New York City Bar Association's Milton Handler Lecture ("Handler Lecture"). There, his remarks attempted to rescue a competitive process standard.²⁴⁶ After pointing out the many deficiencies in consumer welfare standards, he stated a preference for a wide-ranging competitive process standard that invoked, for example, a statement that the Sherman Act is a "comprehensive charter of economic liberty" that "promotes structures that are good for our democracy and our society."²⁴⁷ AAG Kanter also illustrated some possibilities. The standard would require "treating employees with respect" because they have the right to leave. That might suggest a stronger policy about enforcement of noncompete agreements. To the extent it simply requires employers to behave more respectfully toward employees, however, it has little to do with antitrust policy. AAG Kanter also suggested that under this approach, consumers, farmers, and everyone else "should have the free opportunity to select among alternative offers." That might indicate greater intervention against vertical restraints (although the Court's decision that AAG Kanter quoted for that proposition actually condemned a horizontal agreement that limited competitive bidding).²⁴⁸ In any event, free con-

245. Fed. Trade Comm'n v. Qualcomm, Inc., 969 F.3d 974, 990 (9th Cir. 2020) ("Allegations that conduct 'has the effect of reducing consumers' choices or increasing prices to consumers do [] not sufficiently allege an injury to competition . . . [because] both effects are fully consistent with a free, competitive market.") (quoting Brantley v. NBC Universal, Inc., 675 F.3d 1192, 1202 (9th Cir. 2012)).

246. Jonathan Kanter, Ass't Att'y Gen., Dep't of Just., Milton Handler Lecture (May 18, 2022) [hereinafter Kanter's Handler Lecture] (transcript available with the Columbia Business Law Review). For good commentary, see Einer Elhauge, *Should the Competitive Process Test Replace the Consumer Welfare Standard?*, PROMARKET (May 24, 2022), <https://www.promarket.org/2022/05/24/should-the-competitive-process-test-replace-the-consumer-welfare-standard/> [https://perma.cc/YFG7-J7MD].

247. Kanter's Handler Lecture, *supra* note 246 (quoting N. Pac. Ry. Co. v. United States, 356 U.S. 1, 4 (1958) (applying per se rule to condemning tying agreement in which railroads sold land subject to "preferential routing" clauses under which owners must use the railroad for shipping unless another carrier gave better rates)).

248. *Id.* (quoting Nat'l Soc'y of Pro. Eng'rs v. United States, 435 U.S. 679, 695 (1978)). The published speech also cited two additional horizontal decisions with parentheticals. See *id.* n.21 (citing Fed Trade Comm'n v. Ind. Fed'n of Dentists, 476 U.S. 447, 459 (1986), for the proposition that "[l]imiting consumer choice by impeding the ordinary give and take of the market place cannot be sustained under the Rule of Reason." (internal citation omitted); NCAA v. Bd. of Regents, 468 U.S. 85, 107 (1984) for the proposition that "[a] restraint that has the effect of reducing the impor-

sumer choice among competing alternatives reflects consumer welfare concerns.

How much of this that will be articulated in DOJ Antitrust Division enforcement policy is unclear. The devil, of course, is in the details, and this speech was not explicit about how it would apply antitrust law in situations where alternative non-economic interests should be considered.

In sum, “protection of the competitive process” is a slogan, not a goal. As an abstract proposition it may claim broad assent, but there is little room for optimism that it can ever be a useful device for making real decisions. Antitrust lawyers can assert protection of the competitive process as a goal, just as economists can proclaim a commitment to “free markets,” or lawyers may urge people to “do justice.” But these slogans do little to narrow the range of disputes.

III.

ANTITRUST “WELFARE” TESTS

Welfare tests promise something that neither concerns about size nor about the competitive process can deliver—namely, a measurable goal associated with the health of the economy and the well-being of its citizens. The meaning of “consumer welfare” has unfortunately become corrupted and controversial, and it has always been beset by problems of measurement. At the atmospheric level, it is hard to disagree with the proposition that antitrust law should have something to do with the welfare of consumers. Indeed, “Protecting America’s Consumers” is part of the FTC’s masthead.²⁴⁹ That explains its value as a slogan. But can it be more than that?

Two definitions of consumer welfare have dominated the antitrust debate, although people have not always appreciated the difference. Under the first definition, antitrust policy addresses practices that can have both monopoly-creating and cost-reducing effects. A practice should be unlawful if the monopoly loss exceeds the cost savings.²⁵⁰ This definition of consumer welfare is a misnomer that Robert Bork adopted from Nobel Prize economist Oliver Williamson and should more accurately be called a “welfare tradeoff” model. That was the name that Williamson himself gave it.²⁵¹

tance of consumer preference in setting price and output is not consistent with this fundamental goal of antitrust law.”).

249. Federal Trade Commission, <https://www.ftc.gov/> (last visited July 5, 2023).

250. See *infra*, notes 261–78 and accompanying text.

251. Oliver E. Williamson, *Economies as an Antitrust Defense: The Welfare Tradeoffs*, 58 AM. ECON. REV. 18 (1968).

The alternative definition of consumer welfare is that antitrust should seek to maximize the net welfare of consumers. This has been referred to as “true consumer welfare”²⁵² to distinguish it from the welfare-tradeoff definition. In order for the efficiency gains of a transaction to offset an increase in market power, the cost savings that the efficiencies generate must be so significant that consumers are left unharmed. A variation of this definition is incorporated into the 2010 edition of the Merger Guidelines.²⁵³ Whether it stays there in the next round of revisions is unclear, given that both the head of the DOJ Antitrust Division and the Chair of the FTC have challenged the consumer welfare standard generally, although not necessarily the specific application in the Merger Guidelines.²⁵⁴ Of course, given the malleability of a competitive process standard, a merger rule that requires consumers to be held harmless could also be consistent with that standard. Incidentally, a test that requires consumers be held harmless generally provides a dividing line between restraints that reduce market output and restraints that do not.

Both versions of the consumer welfare principle are wary of overenforcement; they seek to avoid bringing in concerns that, while certainly important, are not obviously related to the economic well-being of consumers. At the 2022 Handler Lecture, AAG Kanter spoke rather generally about using antitrust law to promote freedom. He also faulted the consumer welfare standard for the idea that “antitrust cases should be reduced to econometric quantification of the price or output effects” of challenged conduct.²⁵⁵ Whether that contemplates antitrust enforcement against practices that actually result in higher output and lower prices is unclear. Given that an important purpose of merger guidelines is to provide guidelines for specific cases, it is also somewhat unhelpful.

252. This term comes from Steven C. Salop, *What Is the Real and Proper Antitrust Welfare Standard? Answer: The True Consumer Welfare Standard*, 22 *LOY. CONSUMER L. REV.* 336, 338–48 (2010).

253. See *HORIZONTAL MERGER GUIDELINES*, *supra* note 186, § 10 (accepting an efficiencies defense to a merger only if the efficiencies are sufficient so as to prevent price increases). More generally, see *id.* § 1 (“The unifying theme of these Guidelines is that mergers should not be permitted to create, enhance, or entrench market power or to facilitate its exercise A merger enhances market power if it is likely to encourage one or more firms to raise price, reduce output, diminish innovation, or otherwise harm customers as a result of diminished competitive constraints or incentives.”).

254. See Kanter’s Handler Lecture, *supra* note 246; Lina M. Khan, Note, *Amazon’s Antitrust Paradox*, 126 *YALE L.J.* 710, 710 (2017).

255. See Kanter’s Handler Lecture, *supra* note 246.

In addition, he criticized the consumer welfare test for being blind to “workers, farmers, and the many other intended benefits and beneficiaries of a competitive economy.” This is a valid criticism of the Bork welfare-tradeoff model of consumer welfare, which was particularly harmful to workers.²⁵⁶ However, it is not an appropriate criticism of true consumer welfare, properly defined as the welfare of those who benefit from increased output. That standard benefits all suppliers, including workers, as well as purchasers.²⁵⁷ In general, all of them benefit as output in a market increases.²⁵⁸

Whether AAG Kanter’s remaining concerns acquire any traction in antitrust policy remains to be seen. A test case would be one in which consumers, labor, or other input suppliers are not injured or perhaps are benefitted under any of the criteria that we use to identify anticompetitive effects, but the conduct should be prosecuted under the antitrust laws anyway. That could easily take antitrust into other areas of legal policy best served by alternative statutory systems.

A. *Economic Welfare, Historically Considered*

“Welfare” tests in neoclassical economics date to the early part of the twentieth century and usually associate welfare with Pareto optimality or a little later with models that contemplated tradeoffs between winners and losers.²⁵⁹ Those latter tests considered whether winners from a policy change gained enough to compensate losers fully for their gains. They form an important foundation for modern cost-benefit analysis.²⁶⁰

The more particular term “consumer welfare” had scattered uses as early as the 1930s, often in association with practices such as commercial fraud and false advertising,²⁶¹ or sometimes with “home eco-

256. See Hovenkamp, *supra* note 43.

257. *Id.*

258. *Id.*

259. See generally ROGER A. MCCAIN, *WELFARE ECONOMICS: AN INTERPRETIVE HISTORY* (2019). For a thumbnail history, see *Welfare Economics*, 4 *NEW PALGRAVE DICTIONARY OF ECONOMICS* 889-95 (John Eatwall, Murray Milgate & Peter Newman eds. 1987); Antoinette Baujard, *Welfare Economics* (GATE Working Paper No. 1333, 2013).

260. See, e.g., John R. Hicks, *The Foundations of Welfare Economics*, 49 *ECON. J.* 696 (1939); Nicholas Kaldor, *Welfare Propositions of Economics and Interpersonal Comparisons of Utility*, 49 *ECON. J.* 549 (1939). On cost-benefit analysis, see Robin W. Broadway, *The Welfare Foundations of Cost-Benefit Analysis*, 84 *ECON. J.* 926 (1974).

261. This was particularly true in reference to the Wheeler-Lea Act of 1938, 15 U.S.C. § 52, *et seq.*, which extended coverage of the FTC Act to unfair or deceptive acts or practices. See, e.g., Saul Nelson, *Representation of the Consumer Interest in the Federal Government*, 6 *L. & CONTEMP. PROB.* 151, 152 (1939) (noting the “in-

nomics," which was the economics of managing a household.²⁶² It was not associated with antitrust law. In the United States, progressives and institutionalist economists called for increased attention to consumers in economic theory.²⁶³ In the 1950s, John Kenneth Galbraith, the most influential public economist of his time, used the term in reference to lower consumer prices and identified it with the microeconomic concept of welfare. He wrote:

In partial equilibrium situations, economics has long made the maximization of consumer welfare a nearly absolute goal. Any type of economic behavior which lowered the prices of products to the consumer, quality of course being given, is good. This standard weighs heavily on the conscience of the economist.²⁶⁴

Galbraith addressed the antitrust laws in order to evaluate the argument that the existence of countervailing buyer power would make antitrust law unnecessary, because imbalances would be righted in the market.²⁶⁵ While Galbraith rejected that conclusion, he did suggest that the concept of countervailing power spoke in favor of antitrust exemptions for labor unions and agricultural combinations—two interest groups that bargained across the table from large manufacturers.²⁶⁶

A more explicit focus on the relationship between consumer welfare and antitrust policy emerged in the work of Oliver Williamson in the 1960s. He hypothesized a welfare tradeoff that occurs when a practice results simultaneously in output-reducing monopoly and productive efficiency.²⁶⁷ A practice should be deemed a welfare improvement and thus lawful under antitrust law, he reasoned, if the

creased concern of government with the welfare of the consumer." For more information on the scope of the Wheeler-Lea Act, see Milton Handler, *The Control of False Advertising Under the Wheeler-Lea Act*, 6 L. & CONTEMP., PROB. 91 (1939).

262. See, e.g., Albert S. Keister, *The Consumer Is Stirring*, 3 S. ECON. J. 317, 327 (1937) (book review) ("How to coordinate, organize and encourage the various forces working for the consumer's welfare and bring the needed reforms is certainly worthy of the best efforts of new dealers. . . ."); CONSUMER PROBLEMS IN WARTIME (Kenneth Dameron ed., 1944).

263. See e.g., Robert S. Lynd, *The Consumer Becomes a "Problem,"* 173 ANNALS AM. ACAD. POL. & SOC. SCI. 1 (1934).

264. See John Kenneth Galbraith, *Countervailing Power*, 44 AM. ECON. REV. 1-2 (1954). The term "partial equilibrium" refers to the individual markets that are the focus of antitrust law; they are equivalent to the "relevant market" used in antitrust analysis. See also JOHN KENNETH GALBRAITH, *AMERICAN CAPITALISM: THE CONCEPT OF COUNTERVAILING POWER* (1956).

265. See GALBRAITH, *Countervailing Power*, *supra* note 264, at 5-6.

266. *Id.* at 6.

267. Oliver E. Williamson, *Economies as an Antitrust Defense: The Welfare Tradeoffs*, 58 AM. ECON. REV. 18 (1968).

production cost savings that it generated were greater than the economic loss occasioned by increased monopoly.

Williamson did not use the term “consumer welfare” in his original proposal, although he did speak of loss of consumers’ surplus from increased monopoly power.²⁶⁸ Aggregate consumers’ surplus, which is output multiplied by the surplus consumers obtain from each transaction, should be the same thing as consumer welfare. Surplus in this context refers to the difference between a consumer’s willingness to pay and the actual price. For example, if a consumer is willing to pay \$4 for a loaf of bread but is able to buy it for \$3, that transaction yields a \$1 surplus.

Williamson’s welfare-tradeoff model would condone higher consumer prices and the accompanying output reductions, provided that the welfare loss occasioned by this monopoly was at least offset by gains in productive efficiency. That also suggested the possibility that price-increasing conduct could increase welfare. Further, he concluded, in most instances, relatively modest efficiency gains would be enough to offset fairly significant price increases.²⁶⁹

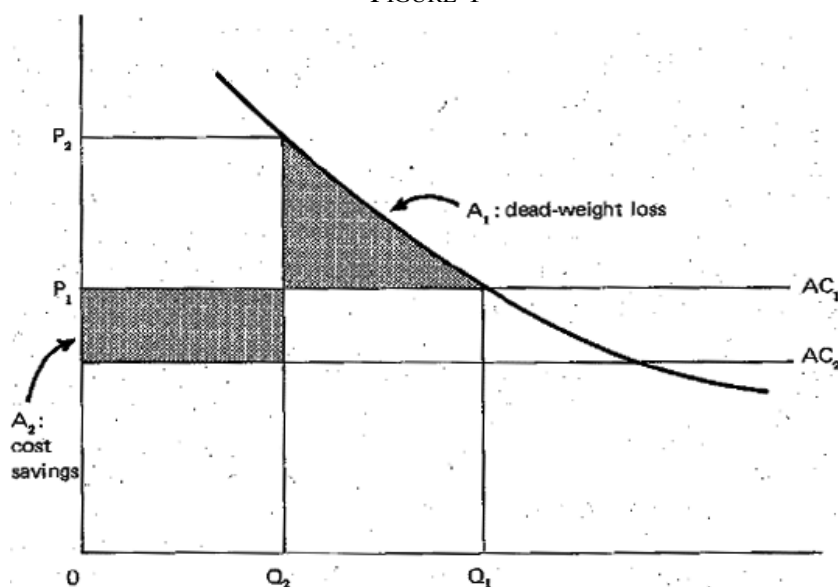
In 1978, Robert Bork borrowed the Williamson model and renamed it “consumer welfare.” That name stuck and became very influential, particularly in more conservative and neoliberal antitrust circles. This figure, taken from Bork’s book, illustrates the model²⁷⁰:

268. *Id.* at 22, 27; see also Oliver E. Williamson, *Economies as an Antitrust Defense Revisited*, 125 U. PA. L. REV. 699 (1977) (speaking repeatedly of “consumers’ surplus” but not using the term “consumer welfare”).

269. Williamson, *supra* note 267, at 22 (“A relatively modest cost reduction is usually sufficient to offset relatively large price increases.”).

270. ROBERT H. BORK, *THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF* 107 (1978).

FIGURE 1



The model hypothesizes a situation in which a market was initially competitive, operating at price P_1 and output O_1 . P_1 equaled AC_1 , or average cost, suggesting a competitive market in the long run. The figure, which Williamson described as “naïve,” did not include marginal costs and did not distinguish fixed from variable costs. The two vertical lines designated AC_1 and AC_2 simply refer to average total costs, with no description of their nature or source.²⁷¹ At that point, a merger, joint venture, or some other practice simultaneously gave that firm market power, enabling it to raise prices and producing the traditional monopoly “deadweight loss” designated by shaded area A_1 . This practice also produced productive efficiency gains, however, that reduced the firm’s average total costs from AC_1 to AC_2 . This led to cost savings, or efficiency gains, designated by shaded area A_2 . According to both Williamson and Bork, this practice should be regarded as welfare reducing, and thus unlawful, only if the deadweight loss area A_1 was larger than the cost saving rectangle designated A_2 .

A few things about the model are noteworthy. By identifying the deadweight loss triangle designated A_1 as the social cost of monopoly, Williamson and Bork adopted an estimate at the very lowest end of the range of commonly given estimates.²⁷² Notably, it did not include

271. Williamson’s article never mentioned fixed, variable, or marginal costs.

272. Made early on by George J. Stigler, *The Statistics of Monopoly and Merger*, 64 J. POL. ECON. 33, 35 (1956).

resources anticompetitively spent to acquire the monopoly or the value of the destroyed investments of rivals.²⁷³

In addition, Williamson's model began with an assumption of prior perfect competition, or at least of prices equal to cost, and then assumed a practice such as a merger that created the monopoly. However, if one begins with the far more realistic assumption of a market that is imperfect to begin with, a much greater productive efficiency gain is needed to offset the increased deadweight loss.²⁷⁴

The administrative costs and uncertainties that attach to applying the welfare-tradeoff model are frightful, at least in close cases. One would have to quantify the deadweight loss from the resulting monopoly and then offset that against the dollar amount of the efficiency gains. Quantifying the loss of consumers' surplus would require information about the shape of the demand curve over the reduced output. For this reason, the welfare-tradeoff test has never actually been applied in a case brought under U.S. antitrust law.²⁷⁵

The model also strictly illustrates the tradeoff between competition and the emergence of single-firm monopoly. However, both Williamson and Bork applied the model to mergers and joint ventures, where the more realistic threats were increased market concentration and collusion-like behavior. But in that case, the price increase and output reduction would be market-wide, while the productive effi-

273. Examples of those making this critique include Keith Cowling and Dennis C. Mueller, *The Social Costs of Monopoly Power*, 88 *ECON. J.* 727 (1978), Richard A. Posner, *The Social Costs of Monopoly and Regulation*, 83 *J. POL. ECON.* 807 (1975), and Herbert Hovenkamp, *Antitrust Policy and the Social Cost of Monopoly*, 78 *IOWA L. REV.* 371 (1993).

274. See Herbert Hovenkamp, *Appraising Merger Efficiencies*, 24 *GEO. MASON L. REV.* 703, 722 (2017).

275. As of this writing, Canadian antitrust purports to follow a version of it, although legislative proposals may change that. On existing law, see *Comm'r of Competition v. Superior Propane, Inc.*, [2003] 3 F.C. 529, 556 (Can.). For critiques, see Richard O. Zerbe, Jr. & Sunny Knott, *An Economic Justification for a Price Standard in Merger Policy: The Merger of Superior Propane and ICG Propane*, 21 *RSCH. L. & ECON.* 409, 415-19 (2004), and Darwin V. Neher, David M. Russo, & J. Douglas Zona, *Lessons from the Superior-ICG Merger*, 12 *GEO. MASON L. REV.* 289 (2003) (noting the complexities inherent in the total welfare test that the tribunal applied and concluding, "The complexity of the required economic analysis and its inherent inexactitude imply a relatively high level of uncertainty in the conclusion. This uncertainty arises because, among other things: (1) the total surplus standard requires balancing all the effects; (2) the complexity of measuring each effect means that various simplifying assumptions must be made to make the problem tractable, and this implies that the utilized models deviates from reality; (3) ultimately there is uncertainty in some of the underlying features of the market, for example, the industry demand elasticity; (4) the complexity of the required analysis to measure each effect provides an environment for technical errors; and (5) the need to balance all effects makes the uncertainties compound one another.").

ciency gains would apply only to the specific firms that merged. For example, if two firms in a market of five identical firms merged and caused a market-wide output reduction, the effect of the increased prices would apply across the entire market, but only the two merging firms, with an aggregate forty percent market share, would attain the productive efficiencies. In that case, the deadweight loss could be two and a half times larger than the Williamson-Bork estimate.²⁷⁶

Another deficiency of the model was that it simply assumed perfectly competitive costs that were not affected by the challenged practice. That is, firm supply costs (AC_1 and AC_2 in Figure 1) were a black box. They apparently purchased in a perfectly competitive market for inputs, including labor, both prior to and after the challenged practice. However, if the firms had any degree of monopsony power in input markets, including labor, then the model understated the deadweight loss, perhaps significantly.²⁷⁷

One of the most disabling features of the Williamson-Bork model was its completely unrealistic assumptions about efficiency and output. In Figure 1, the challenged practice resulted in significantly lower per-unit costs, even as it reduced output from Q_1 to Q_2 . The figure suggests an output reduction of roughly one half. In any real situation, the output decrease could be less than or more than that, depending on the amount of market power that the practice created, the magnitude of the efficiency gains, and the shape of the demand curve.

Neither Williamson nor Bork elaborated on the types of practices that could result simultaneously in cost savings and output reductions of such magnitude. Is this simply an example of what Ronald Coase called "blackboard economics"—something that can be drawn with chalk but has little application in the world?²⁷⁸ Economies of scale are the most prominent cost savings that accrue from practices that are challengeable under antitrust law, but these accrue at a higher rather than a lower output. There is also the problem of fixed costs. Per unit fixed costs go up as output goes down. The AC lines in Figure 1 refer to all costs, fixed and variable, without distinguishing them. The efficiency gains that accompany such a significant output reduction suggest that fixed costs in this industry must not be very high. But if that

276. In the case of "unilateral effects" mergers, where only the merging parties experience the price increase, the outcome would be closer to the one Williamson envisioned. See HORIZONTAL MERGER GUIDELINES, *supra* note 186, § 6.

277. See Hovenkamp, *supra* note 43. If the firm had monopsony power over an input, then a reduction in use of that input would reduce welfare as well. In this regard, monopsony is simply the obverse of monopoly.

278. See RONALD H. COASE, THE FIRM, THE MARKET, AND THE LAW 19, 28 (1989).

is the case, then what is the source of the monopoly? This is not necessarily to insist that the picture describes an empty set, but only that the circumstances are not very common and must be proven.

Bork himself had a very peculiar idea about the relationship between efficiency, output, and firm size. In describing his consumer welfare principle, he declared that “any efficiencies associated with a firm’s size are very likely to outweigh any restriction of output on the consumer welfare scale.”²⁷⁹ That baffling statement suggests that a firm could apparently attain efficiencies by having a bigger “size” while producing less than it had been before. But what is “size,” if not output?

When we think of a firm’s size for economic or antitrust purposes, we usually consider output to be the unit of measurement. A firm that produces one thousand automobiles per time period is larger than one that produces nine hundred. Could we use revenue as an alternative measure? For example, a firm that sells one thousand dollars of product is larger than one that sells nine hundred dollars. In that case, the difference might be that the firm with the larger “size” is earning monopoly profits. As a result, its revenue may be larger even as its unit production is smaller. Another possibility is capitalization, or market value. For example, a firm with a larger, more expensive plant is bigger than one with a smaller plant. One might even imagine that a firm’s “size” is measured by its number of employees.

But Bork was speaking about “efficiencies associated with a firm’s size.” That could not be revenue. Rather, it must be some economy associated with production. Perhaps “size” refers to structural economies of scale without regard to actual production. For example, a firm might develop a technology that had very low costs and was able to undersell rivals, but then operate that technology at a very low rate of output. Looking at the firm’s technology, we might compute its “size” in relation to the most efficient output level rather than the amount that the firm is actually producing.

A common characteristic of such cost-reducing technologies is that the cost savings apply at a higher output level because that is the way fixed costs are amortized. That is to say, the larger, capital-intensive firm is more efficient, but only obtains efficiencies at a higher output rate. Could it produce at a lower rate than it did with the older technology and still have lower per unit average costs? Perhaps, but such a result would be sufficiently counterintuitive, and it would have to be proven.

279. ROBERT H. BORK, *THE ANTITRUST PARADOX* 179 (1978).

This is not to say that a firm could not build a large low-cost plant and then operate it at inefficiently low levels. The FTC once even alleged this.²⁸⁰ But the “welfare tradeoff” model clearly does not contemplate that because it requires trading actual efficiency gains against consumer losses. All that one gets by operating a large and efficient plant at inefficiently low levels is a great deal of wasted resources, high per unit costs, *and* higher prices if the firm has market power. Those hardly sound like a recipe for efficiency gains.

Another essential factor to the welfare-tradeoff model is a strict requirement that the productive efficiencies that produced the tradeoff are specific to the particular merger or other event that created the monopoly. The 2010 Horizontal Merger Guidelines reflect this requirement by insisting that a claimed efficiency be “merger specific.”²⁸¹ If the gains can be achieved in a way that threatens competition less, the merger will not be approved. The operational equivalent for joint ventures or other arrangements under the rule of reason is that there is no “less restrictive alternative” to the venture in question.²⁸²

280. See *In re E.I. Dupont de Nemours & Co.*, 96 F.T.C. 653 (1980) (regarding titanium dioxide); see also Oliver E. Williamson, *Predatory Pricing: A Strategic and Welfare Analysis*, 87 *YALE L.J.* 284 (1977), which the Dupont case relied on, as well as Michael Spence, *Entry, Capacity, Investment and Oligopolistic Pricing*, 8 *BELL J. ECON.* 534 (1977), and Paul Joskow & Alvin Klevorick, *A Framework for Analyzing Predatory Pricing Policy*, 89 *YALE L.J.* 213 (1979). The Commission ultimately dismissed the complaint, reading the record as fully consistent with the proposition that DuPont, having the most efficient known technology, simply built a very large plant in contemplation of future expansion, concluding: “When DuPont conceived its strategy in 1972, its estimates of demand growth and supply shortfall seemed reasonable, and there has been no suggestion to the contrary. In competing for this growth, DuPont realized that even expansion of its existing plants to their practical limits could not satisfy all of the additional demand expected through the early 1980s. A new plant would be required. To build such a plant at efficient scale, afforded by DuPont’s developed technology, meant that there would be little, if any, room left for expansion by competitors. Yet, to deny DuPont the opportunity to compete for all of the projected demand growth unduly penalizes its technological success. To require respondent to build a smaller, less efficient plant, or no plant, under these circumstances would be an unjustified restraint on competitive incentives and an unjustified denial of the benefits of competition to consumers.” *Dupont de Nemours*, 96 F.T.C. at 747–48.

281. See HORIZONTAL MERGER GUIDELINES, *supra* note 186, § 10 (“The Agencies credit only those efficiencies likely to be accomplished with the proposed merger and unlikely to be accomplished in the absence of either the proposed merger or another means having comparable anticompetitive effects. These are termed merger-specific efficiencies.”).

282. See 7 PHILLIP E. AREEDA & HERBERT HOVENKAMP, *ANTITRUST LAW* ¶ 1505 (5th ed. 2023) (forthcoming).

For example, an underappreciated alternative to mergers, particularly in tech, is non-exclusive licensing of technology.²⁸³ Among the many acquisitions that large digital platforms make of tiny firms, the principal assets of interest are often intellectual property rights. The acquisition of a non-exclusive license would give the acquiring firm everything it needs to improve its own technology, but the technology would remain available to other licensees.²⁸⁴ In a rule of reason challenge to a joint venture, the equivalent query would be whether a non-exclusive license would be a less restrictive alternative. In such situations, the proponents of the merger or joint venture should be required to show that a non-exclusive intellectual property license would not provide roughly equivalent operational results.

B. True Consumer Welfare, Efficiencies, and Competitive Harm

People have observed that the antitrust statutes never speak of efficiencies.²⁸⁵ Indeed, they never use that word or any other phrase with the same association, such as cost reduction or quality improvement. Of course, the statutes also fail to mention many other things that people have come to believe are important to antitrust analysis, such as industrial concentration, market power, bigness, the competitive process, or the per se rule.

While the statutes do not mention efficiencies, they do include a requirement of competitive harm. This requirement is articulated in different ways in different provisions, such as “restrain trade,” “monopolize,” or “substantially lessen competition.” Further, the importance of efficiencies arises in two different ways. First, it can refer to “offsets,” in the sense that a proven efficiency might defend against an actual price increase or output reduction. In that case, the absence of efficiency language might be important. Second, however, efficiencies can refer to cost savings that are so substantial that no harm ever occurs in the first place. In that case, we do not even need an efficiency defense, for there is no competitive harm to begin with.

One particular shortcoming of the welfare tradeoff model is that it condones actual competitive harm in the form of reduced output and

283. The Guidelines mention licensing as an alternative in a footnote but provide no detail. See HORIZONTAL MERGER GUIDELINES, *supra* note 186, § 10 n.13.

284. See Herbert Hovenkamp, *Antitrust and Platform Monopoly*, 130 YALE L.J. 1952, 2043 (2021). For elaboration, see Kevin A. Bryan & Erik Hovenkamp, *Antitrust Limits on Startup Acquisitions*, 56 REV. INDUS. ORG. 615, 623–29 (2020), and Kevin A. Bryan & Erik Hovenkamp, *Startup Acquisitions, Error Costs, and Antitrust Policy*, 87 U. CHI. L. REV. 331, 339–42 (2020).

285. See, e.g., Alan J. Meese, *Justice Scalia and Sherman Act Textualism*, 92 NOTRE DAME L. REV. 2013, 2026 (2017); Hovenkamp, *supra* note 274, at 706.

higher prices, provided that those losses are offset elsewhere by productive efficiency gains.²⁸⁶ An act can cause actual harm to consumers and labor as a result of higher prices and lower output, but still be justified by the model because it produces even greater gains to the defendant. This approach also involves controversial questions, such as whether benefits in one market can offset harms in a different market.²⁸⁷ Under the true consumer welfare test, however, there are no harms that require an offset.

The true consumer welfare model acknowledges only those efficiencies substantial enough to offset competitive harm completely. There is no output reduction, so the conduct under consideration does not satisfy the “restrain trade” test.²⁸⁸ The 2010 Horizontal Merger Guidelines start out by predicting the price and output effects of a merger. If that analysis predicts harm, offsetting efficiencies will be allowed, but only if they are sufficient to reverse the predicted price increase completely.²⁸⁹ That is, there is no net harm. In that case, the absence of efficiency language in the antitrust statutes is irrelevant. For example, if a merger threatens to raise price from eight dollars to ten dollars, it could be defended by evidence that efficiencies would drive the price back to eight dollars or less. In that case, the “substantially lessen competition” standard of merger law has not been met and we need not be concerned about an efficiency defense.

The 2010 Merger Guidelines approach suggests a template for assessing efficiency claims made for any restraint whose price or output effects can be estimated. Efficiencies are and must be relevant. Ignoring them would be a sure way to ruin the economy. On the other side, naïve acceptance can serve to exonerate harmful restraints. One important principle here is that the defendants are the creators of any efficiencies that they offer. As a result, they are in the best position to carry the burden of showing that other affected people—consumers and labor in particular—will be unharmed.²⁹⁰

The assessment problem for restraints other than mergers can be difficult, however. On the price-increase side, mergers of competitors are relatively simple: like cartels, they unify pricing and increase the post-merger firms’ effective market share. Horizontal contractual re-

286. See *supra*, notes 253–278, and accompanying text.

287. For a good critique in the context of anticompetitive harm to labor, see Laura Alexander & Steven C. Salop, *Antitrust Worker Protections: The Rule of Reason Does Not Allow Counting of Out-of-Market Benefits*, 90 U. CHI. L. REV. 273 (2023).

288. See Hovenkamp, *supra* note 6.

289. See HORIZONTAL MERGER GUIDELINES, *supra* note 186, § 10.

290. See HERBERT HOVENKAMP, *FEDERAL ANTITRUST POLICY: THE LAW OF COMPETITION AND ITS PRACTICE* § 6.1 (6th ed. 2020).

straints may sometimes do this, but they may not. In some, such as restraints on innovation, measuring price and output effects could be impossible.²⁹¹

C. Measuring “Welfare” in Antitrust Cases

For all of the attention that has been given to consumer welfare or alternative welfare measures as a guiding principle for antitrust, one thing that has largely escaped notice is that courts almost never measure “welfare.” Further, they are rarely able to do so. Rather, the things that courts measure are almost always changes in output or changes in price. Experts in antitrust cases are often candid about this. “Welfare” effects are merely an inference drawn from output effects.²⁹² Further, this limitation is not merely a measurement obstacle, it also reflects the fact that nothing in either the text of the antitrust laws or their legislative history gives any indication the framers of the antitrust laws were concerned about welfare or, for that matter, even understood its economic meaning. The identifiable concerns were

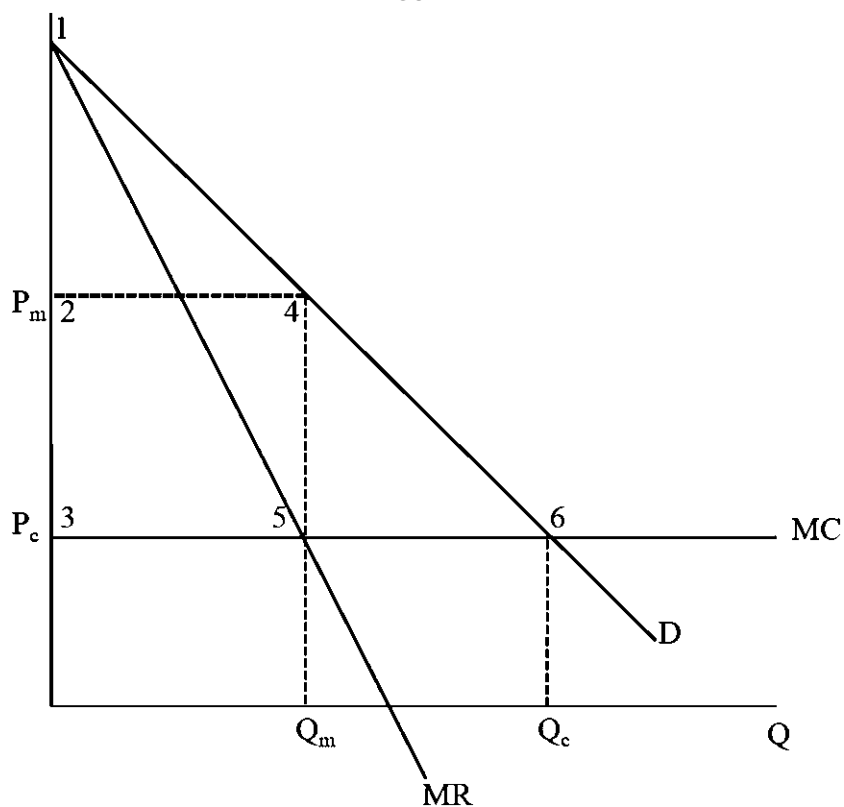
291. See Herbert Hovenkamp, *Restraints on Innovation*, 29 *CARDOZO L. REV.* 247 (2007).

292. See Declaration on Class Certification of Roger G. Noll at 20–21, *In re Lithium Batteries Antitrust Litig.*, MDL-2420, 2016 WL 4162883 (N.D. Cal. Jan. 23, 2016) (No. 13-MD-02420) (documenting expert testimony of Roger G. Noll, discussing: “Economists refer to the reduction in sales arising from a collusive price as the “dead-weight loss” (DWL), which is the loss of consumer welfare that would have been created had consumers been allowed to increase the quantity purchased at a lower price. The magnitude of the DWL is determined by the elasticity of demand, which cannot be estimated from the data that are available for Li-ion cells and packs and final products that contain Li-ion batteries. Nevertheless, as a qualitative matter, an increase in price arising from anticompetitive conduct is certain to create DWL in any real-world market.”). See also Report of William J. Lynk at 46, *Minn. Ass’n of Nurse Anesthetists v. Unity Hospital*, 5 F. Supp. 2d 694 (D. Minn. Feb. 24, 1997) (No. 4-96-804) (documenting expert testimony of William J. Lynk, discussing: “consumer welfare is measured roughly by its observed effect on market output”); Declaration of Hal J. Singer, Ph.D in support of Defendants’ Opposition to Plaintiffs’ Motion for Class Certification, *Dhillon v. Anheuser-Busch, L.L.C.*, No. 14CECG03039 MBS (Cal. Super. Ct. Oct. 6, 2016) (documenting expert testimony of Hal J. Singer, discussing: “consumer welfare tends to decrease with output restrictions and price hikes”); Declaration of Jerry A. Hausman, *Madison Square Garden, L.P. v. Nat’l Hockey League*, 270 Fed. Appx. 65 (LAP) (S.D.N.Y. July 17, 2008) (No. 07 Civ. 8455) (querying whether practice would increase “hockey ticket prices or reduce quality to the detriment of consumer welfare”); Expert Report of Kenneth G. Elzinga, *Wal-Mart Stores v. Texas Alcoholic Beverage Commission*, 1-15-CV-134 RP, 2016 WL 9227560 (W.D. Tex. Feb. 12, 2016) (explaining how a challenged restraint may give firms the “wherewithal to raise prices to a monopoly level. This harms consumer welfare.”).

with output and price, two variables that are certainly relevant to the assessment of welfare, but are not identical with it.²⁹³

Consider Figure 2 below. Some version of it is commonly used in elementary economics and antitrust classes to illustrate the effects of monopoly on consumer welfare, which is measured by consumers' surplus. The figure shows that when price is set at marginal cost, which is the competitive level (P_c), consumers' surplus (welfare) is equal to triangle 1-3-6. By contrast, when the price is set at the monopoly level (P_m), consumer surplus has been reduced to triangle 1-2-4.²⁹⁴

FIGURE 2



293. On the concerns of the framers, see Hovenkamp, *The Antitrust Text*, ___ Ind. L.J. (2023) (forthcoming), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4277914.

294. The deadweight loss is often referred to as the "Harberger Triangle," after the model was developed in Arthur C. Harberger, *Monopoly and Resource Allocation*, 44 AM. ECON. REV. PROCEEDINGS 77 (1954). It is widely believed to understate the social cost of monopoly, perhaps severely. See, e.g., Edgar K. Browning, *A Neglected Welfare Cost of Monopoly—and Most Other Product Market Distortions*, J. PUB. ECON. 127 (1997).

There are a few things to note about this figure. First, as output increases, all else held constant, consumer surplus also increases. Second, as price increases, consumer surplus goes down. Third, like all triangles, the consumer surplus triangle has three sides—in this case defined by price, output, and the demand curve. In the picture, the demand curve is a straight line, making a true triangle, which means that someone who knew both the output and the price could easily compute the consumer surplus as the area of the resulting triangle.²⁹⁵ Because welfare is the same as consumer surplus, measurement is easy.

But most common demand curves are not linear; they are very likely convex to the origin. If demand is lumpy, they can be quite irregular. This is true, for example, when purchasers are arrayed in several distinct groups. For example, bridge builders, kitchenware manufacturers, and orthodontists all purchase steel. Demand may be fairly constant within each group, but the slope changes as you move from one group to the next. As a result, computing actual consumers' surplus requires detailed information about the shape of the actual demand curve through the relevant range.²⁹⁶

Note also, however, that the first two propositions above continue to apply even if the demand curve is nonlinear. For any given demand curve, welfare goes up as output goes up, and welfare goes down as price goes up. Further, antitrust condemns specific practices but not monopoly as such. As a result, in most cases the best evidence that we use to estimate competitive consequences are either changes in market-wide output or changes in price. If we can show that a particular practice either increases market output or decreases price, we can at least presumptively infer an increase in consumer welfare.

To be sure, the inference might be subject to some exceptions. Perhaps a decline in nominal output corresponds to a quality improvement, or a particular practice may increase output but also increase price. Perhaps a practice such as resale price maintenance changes the shape or slope of the demand curve in some way. We turn to those later.²⁹⁷

295. With a linear demand curve, consumer surplus would equal half the product of the output leg and the price leg.

296. Declaration on Class Certification of Roger G. Noll at 20–21, *In re Lithium Batteries Antitrust Litig.*, MDL-2420, 2016 WL 4162883 (N.D. Cal. Jan. 23, 2016) (No. 13-MD-02420) (noting that shape of demand curve could not be determined but that output changes are a good surrogate).

297. See *infra*, notes 330–334 and accompanying text.

It is also important not to confuse firm output with market output. For example, a practice such as a boycott, exclusive vertical contract, or tying arrangement might increase the output of the firms employing that restraint, but it does so by excluding rivals. If the restraint is anticompetitive, market-wide output will go down. Although dealing with this is not conceptually difficult, it can pose measurement difficulties.

Courts deciding antitrust cases rarely attempt to measure actual consumer welfare changes, which would require knowledge about the shape of the demand curve.²⁹⁸ What they measure are changes in price or in output, and they infer conclusions about consumer welfare from that.²⁹⁹ This is not necessarily a problem however. Courts do not need to know the *amount* of welfare gains or losses that result from a practice; they only need know whether market output or price have increased or decreased. In any event, this approach is consistent with language of the antitrust statutes, which look to changes in output.³⁰⁰ For example, the government can condemn price fixing without proving the amount of the output reduction or price increase.

This analysis is complicated when a practice results in efficiencies. Models for assessing mergers often draw conclusions about welfare, largely in order to account for efficiency offsets. But the fundamental question under the 2010 Horizontal Merger Guidelines is still whether the merger will yield a higher *price*, not whether it will increase consumer welfare.³⁰¹ Indeed, the Merger Guidelines, never speak of consumer welfare at all but only about price effects.³⁰²

Under the Merger Guidelines approach, competitive harm is largely inferred from the absence of a price increase, with one exception: the Merger Guidelines contemplate efficiencies defined in terms

298. See *supra*, note 292 and accompanying text (discussing the expert reports).

299. See, e.g., Carl Shapiro, *The 2010 Horizontal Merger Guidelines: From Hedgehog to Fox in Forty Years*, 77 ANTITRUST L.J. 49 (2010) (noting how antitrust enforcement agencies decline to write and enforce guidelines that require knowledge about actual demand curves); Matthew C. Weinberg, *More Evidence on the Performance of Merger Simulations*, 101 AM. ECON. REV. 51, 51 (2011) (inferring welfare effects from price changes); cf. Roger D. Blair & D. Daniel Sokol, *Quality-Enhancing Merger Efficiencies*, 100 IOWA L. REV. 1969, 1970–71 (2015) (noting the problem that some mergers may increase efficiency by increasing quality rather than by reducing price). The Merger Guidelines contemplate efficiencies that result in “lower prices, improved quality, enhanced services, or new products.” HORIZONTAL MERGER GUIDELINES, *supra* note 187, § 10.

300. See Hovenkamp, *supra* note 6.

301. See HORIZONTAL MERGER GUIDELINES, *supra* note 186, § 1 (speaking of mergers that enhance market power, defined as mergers that “raise price, reduce output, diminish innovation, or otherwise harm customers . . .”).

302. They also never speak of the “competitive process.”

of “lower prices, improved quality, enhanced services, or new products.”³⁰³ As a result, a merger that yields a higher quality product might qualify even though the nominal price of the product goes up. By contrast, under a total welfare standard—which the Merger Guidelines reject—one can have mergers that increase both welfare and the price of an unchanged product.³⁰⁴

Efficiencies, at least in the simple case, equal the amount of cost savings on each unit of production multiplied by the number of units.³⁰⁵ Measurement of efficiencies is more complex if the efficiencies occur with respect to both fixed and variable costs.³⁰⁶ Nevertheless, the principle is the same: in order to quantify historical cost savings over a defined period, one needs to know the size of the per unit cost reduction and the number of units produced.

D. Welfare and Output

1. Introduction

As noted above, while antitrust tests of legality are often phrased in terms of “welfare,” the evidence that courts rely on is almost always based on either output effects or price effects.³⁰⁷ A useful and practical way of stating a test is that antitrust law should condemn conduct when it is covered by an antitrust statute and has the effect of reducing market-wide output. Price increases will work too, provided that they result from market-wide output reductions. One qualification is that low prices are the goal on the output side of the market. On the input side, where the concern is output suppression, the goal is higher prices. For example, restraints in labor markets tend to reduce wages

303. See HORIZONTAL MERGER GUIDELINES, *supra* note 186, § 10.

304. See, e.g., Louis Kaplow, *On the Choice of Welfare Standards in Competition Law*, in THE GOALS OF COMPETITION LAW 3, 24 (Daniel Zimmer ed., 2012) (noting when price is near competitive level in horizontal merger, dead weight loss is low and efficiencies may be lost if merger is blocked); Roger D. Blair & Jessica S. Haynes, *The Efficiencies Defense in the 2010 Horizontal Merger Guidelines*, 39 REV. INDUS. ORG. 57, 61–62 (2011).

305. See the rectangle “cost savings” in *supra* Figure 1; see generally HAROLD O. FRIED ET AL., THE MEASUREMENT OF PRODUCTIVE EFFICIENCY: TECHNIQUES AND APPLICATIONS (Harold O. Fried, A. Knox Lovell, S. Schmidt Shelton, eds. 2008). Specifically for mergers, see Joseph Farrell & Carl Shapiro, *Antitrust Evaluation of Horizontal Mergers: An Economic Alternative to Market Definition*, 10 B.E. J. THEORETICAL ECON., Article 9, 9–10 (2010) (speaking mainly of “marginal cost” efficiencies).

306. One problem is that an efficiency that reduces only a fixed cost will not immediately be reflected in a lower market price. By contrast, a variable cost efficiency typically is.

307. See *supra*, notes 286–291 and accompanying text.

anticompetitively. By contrast, welfare on both the output and input sides of the market is lessened by an output reduction.

This output-focused definition of harm is hardly a novelty. It is well-established in antitrust case law dating all the way back to when the Sherman Act was passed.³⁰⁸ Cases brought under section 1 of the Sherman Act, which condemned contracts, combinations, or conspiracies “in restraint of trade,”³⁰⁹ interpreted that phrase as a restriction of output or enhancement of prices. By contrast, section 2 of the Sherman Act did not have the same common law history because the historical definition of “monopoly” was usually limited to exclusive grants by the government.³¹⁰ Nevertheless, the vast majority of decisions that confronted the issue incorporated the output reduction standard in section 2 cases without distinguishing it from section 1 cases.³¹¹

The idea that market-wide output reductions are a principal indicator of antitrust harm has dominated antitrust law ever since its inception.³¹² That same historical development guided courts, as well as others, to conclude that the standard of harm—reduced output and higher prices—is the same for both Sherman Act provisions. Indeed, discussions of the welfare goals of antitrust generally treat all antitrust provisions, except for the Robinson-Patman Act, as incorporating the same goal.

An output definition of competitive harm also benefits all those whose welfare is associated with that of consumers. Consumers and input suppliers, including labor, are better off as market output increases. As a result, output or price-driven approaches resemble the true consumer welfare test, but they are more precise about what is being measured.

Considering effects in labor markets is critical because, first of all, labor is mainly a variable cost. To that extent, demand for labor is driven by product output. Second, when it comes to output responses, consumers are in the driver seat: consumers decide their purchasing behavior. Labor largely follows along as do other input suppliers.

This output-focused formulation has several conceptual and practical advantages over the various articulations of the “consumer wel-

308. For a review of the case law all the way back to the common law and through the early years of the Sherman Act, see Hovenkamp, *supra* note 6.

309. 15 U.S.C. § 1.

310. Hovenkamp, *supra* note 6.

311. *E.g.*, *United States v. Standard Oil Co.*, 173 F. 177 (E.D. Mo. 1909); *United States v. U.S. Steel Corp.*, 223 F. 55, 61 (D.N.J. 1915), *aff'd*, 25 U.S. 417 (1920).

312. Hovenkamp, *supra* note 6.

fare” principle for antitrust law. First, it addresses the fact that labor, which benefits from greater job opportunities and more competitive wages, stands in a position analogous to that of consumers. Workers almost always benefit from higher production.³¹³ Second, as an operational standard, output is easier to measure than welfare and almost always produces the correct result. So, the welfare goal of antitrust law is best stated as encouraging markets to produce the highest sustainable output. The word “sustainable” distinguishes a few situations, such as predatory pricing, in which output can be anticompetitive because it is too high. This results from the fact that legally accepted definitions of predatory pricing require prices below cost which are not sustainable in the long run.³¹⁴

The disadvantages of an output-based standard are, first, that output can be difficult to measure, although it is never as hard to measure as welfare is. Second, there may be cases when output and economic welfare do not pull in the same direction—that is, where higher output results in lower welfare, or vice-versa. The value of an output standard depends on how frequently these situations occur, how often they yield unacceptable results, and whether such situations can be identified and controlled. The discussion below suggests that divergences between output and welfare are either sufficiently minor that they can be ignored, or clearly detectable. In decades of antitrust litigation under the rule of reason, they have never determined an antitrust outcome. Further, when output and welfare deviate, the statutes indicate that output should trump welfare.³¹⁵

2. *Is Output a Better Test than Welfare?*

There are two reasons for preferring output over welfare as a criterion of antitrust harm. First, case law has mandated it since the 1890s. The framers of antitrust law and their early history indicate no awareness of the concept of economic welfare. Rather, the term “restraint of trade” in section 1 of the Sherman Act was consistently defined by reductions in output, or corresponding price increases.³¹⁶ Second, and in any event, output is always easier to measure than welfare and even antitrust experts simply infer changes in welfare from observed changes in output or, less frequently, price.³¹⁷

313. See Hovenkamp, *supra* note 43.

314. See 3A PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶¶ 739–40 (5th ed. 2022).

315. See *infra*, notes 328–343 and accompanying text.

316. See Hovenkamp, *supra* note 6.

317. See *supra* note 285 and accompanying text.

The issue of comparative superiority arises only when there is a conflict between the two. Welfare generally increases as output increases. There may be situations where welfare declines as output increases, or vice-versa. For example, the sale of one hundred loaves that each generate a consumers' surplus of one dollar will create more welfare than the sale of one hundred and fifty loaves that generate a surplus of fifty cents per loaf. How often this occurs and whether it is an antitrust problem of consequence is considered below.³¹⁸

Measuring output can be easy or difficult, depending on the situation. If firms produce a standardized product, such as identical bolts, measuring output may simply entail counting the number of units. In addition to the cardinal units, however, output also includes quality, which is more difficult to measure, and innovation, which is the most difficult.

Offsetting this is the fact that output does not generally need to be quantified in order to establish an antitrust violation, although lost sales may occasionally have to be estimated to compute damages. Further, an output reduction can often be inferred from circumstances even when it cannot be precisely measured.

For example, we can easily infer that a naked cartel on either the buying or the selling side of the market reduces output. That is enough for condemnation and all that the *per se* rule demands. If a private plaintiff wants to obtain damages, then quantification of some kind will be in order. However, this typically involves quantification of the over- or undercharge, not of the change in output, and certainly not of any change in welfare.³¹⁹ Cartel damages are based on sales that are actually made. By contrast, welfare losses are based on unmade sales.

A case like *Ohio v. American Express, Inc.*, is only a little tougher.³²⁰ In that case, the government challenged an anti-steering rule that prevented merchants from offering customers discounts for using a less costly card. Had those transactions been permitted, they would have resulted in lower prices to both merchants and consumers in every situation where a customer would have accepted the offer. As a result, it was at least *prima facie* an output-reducing restraint. Then, under the rule of reason, the only remaining question was whether there was a justification for the restraint. The justification that the defendant offered, which was that customers could use non-American

318. See *infra*, notes 328–343 and accompanying text.

319. See *supra*, notes 286–295 and accompanying text; 2A PHILLIP E. AREEDA, HERBERT HOVENKAMP, ROGER D. BLAIR, & CHRISTINE PIETTE DURRANCE, *ANTITRUST LAW* ¶¶ 395–96 (5th ed. 2021).

320. See *Ohio v. Am. Express Co.*, 585 U.S. ___, 138 S. Ct. 2274 (2018).

Express cards and claim American Express' extra benefits, made no sense because American Express' perks attached specifically to card use. As a result, a customer who switched to a different card would be giving up these perks, and no free riding was involved.³²¹ The majority stated a consumer welfare principle for antitrust but ignored or misunderstood too many important facts. Once we know that the anti-steering rule caused higher consumer prices and higher net merchant fees in every case that applied it, there should be enough for the government to obtain an injunction.³²²

A damages action by either merchants or card users would require them to quantify their losses. The merchants would have to estimate the dollar value of the transactions that would have been steered to a cheaper card absent the rule, as well as the difference in merchant acceptance fees between the two groups of transactions. The customers would have to make similar estimates of the losses that accrued to them. These could involve both data and complex calculations, but there is no obvious reason that an expert would be unable to perform them. The important principle driving these calculations is that the Clayton Act does not require an estimate of welfare losses to establish damages. The relevant language, "threefold the damages by him sustained,"³²³ refers strictly to the private losses suffered by each individual plaintiff. These are typically less than the welfare losses caused by the offense, but in any event computation of welfare losses is unnecessary.

FTC v. Actavis, Inc.,³²⁴ which found an avenue to liability, was easy as well. The Court correctly disapproved a pay-for-delay pharmaceutical patent settlement that would have considerably increased the price of affected pharmaceuticals, perhaps for several years. That should have been enough to condemn it, possibly with some lingering to consider whether the Patent Act prevented that result. In this case, it did not.³²⁵

As the private antitrust actions following *Actavis* reveal, the problem can become much more complex when we need to show cau-

321. See Herbert Hovenkamp, *Platforms and the Rule of Reason: The American Express Case*, 2019 COLUM. BUS. L. REV. 35, 65-66.

322. See Herbert Hovenkamp, *Antitrust Harm and Causation*, 99 WASH. U. L. REV. 787, 805 (2021) (providing example of how anti-steering prevents discounts which benefits both merchants and consumers).

323. 15 U.S.C. § 15.

324. *Trade Comm'n v. Actavis, Inc.*, 570 U.S. 136, 160 (2013).

325. See AARON EDLIN, SCOTT HEMPHILL, HERBERT HOVENKAMP, & CARL SHAPIRO, *Activating Actavis*, Antitrust 16 (2013).

sation and private harm,³²⁶ and particularly if we have to compute damages. The FTC easily succeeded in creating an inference of higher consumer prices, but that was all it needed to do. For a plaintiff seeking damages in a pay-for-delay case, the hard questions involve determining how much higher prices would be and how long the delay was. Putting a number on these can be much more difficult, and those requirements have frustrated many private plaintiffs.³²⁷

Exclusionary practice damages are conceptually a little closer to the monopoly output reduction. For example, in the *American Express* case, discussed above, the anti-steering rule also injured lower price competitors such as Visa and Mastercard.³²⁸ They lost transactions that customers would otherwise have placed on their cards. By the same token, a firm that is boycotted from a market loses its sales in that market, and this output reduction enables the anticompetitive price increase. Damages in such cases are based on lost sales or lost profits. This means that each wrongfully excluded firm can obtain damages based on its own provable losses.³²⁹

3. *Product Output and Harm to Labor*

Output is what a firm produces and sells and creates consumer surplus when consumers purchase. In the ordinary course, consumers are better off as output is larger. This is also true of intermediaries, or those who resell or deal between the selling firm and the consumers.

The input side of the market is where firms purchase labor and other materials and services that they require. Given that the demand for labor is mainly a variable cost, demand for it is strongly correlated with product output.³³⁰ A firm may have differing amounts of market power in the markets it sells into (output side) and those it buys from (input side). In general, however, as a firm's product output goes up or

326. See Kevin B. Soter, Note, *Causation in Reverse Payment Antitrust Claims*, 70 STAN. L. REV. 1295, 1310–11 (2018).

327. *Id.* at 1313, 1337.

328. A less plausible alternative theory is that American Express's higher merchant fees gave alternative cards an opportunity to collude, raising their own fees. That may have been true previously when Visa and MasterCard also imposed anti-steering rules. In that case, the rules may have facilitated price comparison and evasion of collusion. In 2011, prior to the American Express litigation, Visa and MasterCard agreed in a consent decree not to impose anti-steering rules. See *United States v. Am. Express Co.*, No. 10-CV-4496 NGG RER, 2011 WL 2974094, at *2, *4 (E.D.N.Y. July 20, 2011) (approving proposed consent judgment that required Visa and Mastercard but not AmEx to abandon their anti-steering rules).

329. See 2A ANTITRUST LAW, *supra* note 319, ¶ 397.

330. For elaboration, see generally Hovenkamp, *supra* note 43.

down, its need for labor follows in the same direction and in rough proportion.

Depending on whether the power is on the output side or the input side, a firm exercises market power by reducing either its output or its purchases. The general result of an exercise of market power on the selling side is that the firm sells less but charges higher prices. A firm exercising market power on the input side procures less, but also pays less. For example, if a cartel of sugar beet purchasers exercised buying market power, it would purchase fewer beets and pay less for them.³³¹ The output of sugar beet refiners is sugar, and it would produce less in proportion. Whether the price of the sugar would rise depends on whether the buying cartel had market power in the market where it sells. It should be clear, however, that the fundamental concern of competition law is to produce sustainable and competitive levels of output on the buying side and the selling side independently. Harms may occur on both the buying and selling side of the market, but antitrust law does not require an injury on both sides.

One important consequence is that restraints that reduce product output can cause labor harm just as much as consumer harm. Antitrust law does not often give employees standing to sue for harms in the product market,³³² but that does not change the fact that the private and social costs of monopoly in the product market should also include the cost of any anticompetitive loss in the labor market.

4. *Possible Conflicts Between Output and Welfare*

Output does not necessarily correspond to welfare, or even to consumer welfare. They usually, but not invariably, move in the same direction. In a few situations, output may increase or remain unchanged as consumer welfare decreases.³³³ How often this occurs is hard to say. How often it makes a difference in antitrust policy is impossible to say with very much precision either, although in this case “never” is far closer to the truth than any significantly higher number. Finally, in those rare cases where output and welfare diverge, which one should antitrust law follow? Historically, antitrust restraints target reduced output.

331. *Mandeville Island Farms, Inc. v. Am. Crystal Sugar Co.*, 334 U.S. 219, 219 (1948).

332. See 2A PHILLIP E AREEDA & HERBERT HOVENKAMP, *ANTITRUST LAW* ¶ 352 (5th ed. 2021); see also Hovenkamp, *supra* note 43.

333. For other possibilities, see John M. Newman, *The Output-Welfare Fallacy: A Modern Antitrust Paradox*, 107 IOWA L. REV. 563, 582 (2022).

One example of anticompetitively higher prices that are not accompanied by an output reduction is the successful single-customer, single-project cartel. Suppose a market contains three competing contractors who bid against each other for a single customer's project. The colluding contractors would estimate the buyer's reservation price³³⁴ and bid close to that amount. The result is that the buyer pays more for the project, but it buys anyway, so output does not go down, at least for this particular iteration of the price fix. In that case, the cartel produces a pure wealth transfer, and measurement of output effects alone would show no harm. Welfare losses are also easy to compute; they equal the difference between the competitive price and the cartel price. We would condemn the conduct because it causes a price increase.

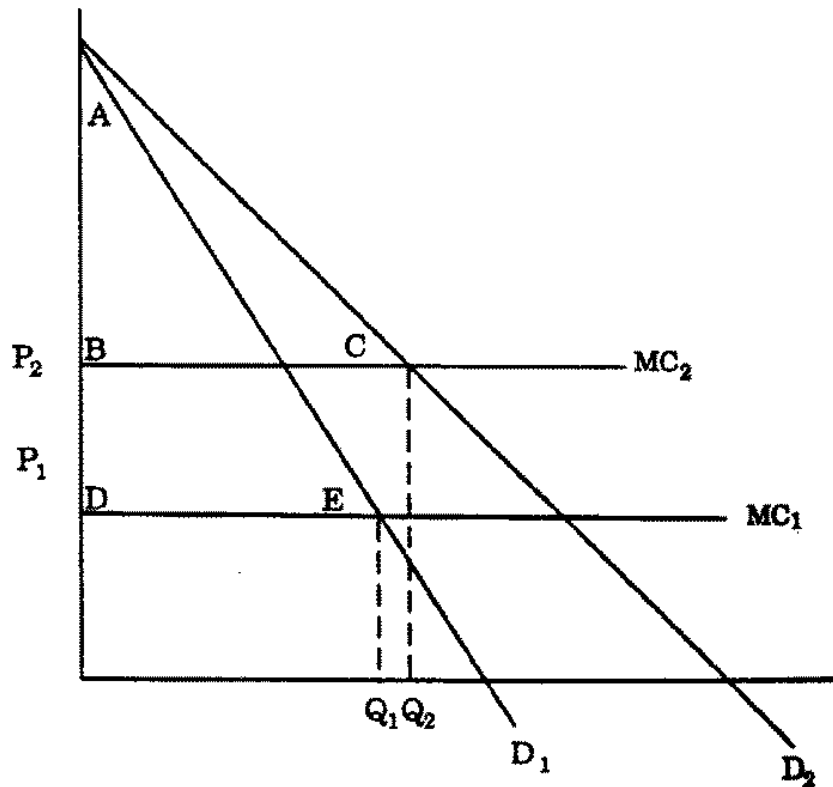
As soon as the quantity is anything other than binary, however, there would be output effects. For example, suppose that the three sellers were bidding to supply the buyer with paper clips for one year. The cartel would still make the sale, and there is still only a single buyer. But the buyer's need for paper clips would decrease in response to the higher price. In cases with multiple buyers, the effect of the cartel price increase would also be to reduce the number of sales. In sum, output and welfare move together with the idiosyncratic exception of the one-off cartel to a single buyer.

An argument has also been made that vertical restraints can sometimes reduce welfare even as they increase output.³³⁵ Figure 3 below illustrates this problem. A vertical restraint such as resale price maintenance forces dealers to engage in greater nonprice competition, typically by adding in services that they would not offer at a lower price point. The impact of this practice, however, could be to increase the reach to marginal customers who are on the edge of the market and agree to purchase only because of the added service. By contrast, inframarginal customers, who would have purchased anyway, are injured: they pay a higher price for services that they do not value.

334. A reservation price is the most the buyer is willing to pay.

335. See, e.g., William S. Comanor, *Vertical Price-Fixing, Vertical Market Restrictions, and the New Antitrust Policy*, 98 HARV. L. REV. 983, 999 (1985); William S. Comanor & John B. Kirkwood, *Resale Price Maintenance and Antitrust Policy*, 3 CONTEMP. ECON. POL'Y 9, 9 (1985); see also William S. Comanor, *The Two Economics of Vertical Restraints*, 21 SW. U. L. REV. 1265, 1280-81 (1992); Lawrence J. White, *Resale Price Maintenance and the Problem of Marginal and Inframarginal Customers*, 3 CONTEMP. ECON. POL'Y 17, 17 (1985).

FIGURE 3



In the figure, the added services shift the demand curve from D_1 to D_2 by bringing in the more marginal customers. But at the same time, consumer prices rise from P_1 to P_2 and output rises from Q_1 to Q_2 . Welfare, however, decreases. Prior to the resale price maintenance, consumer welfare was triangle A-D-E, but afterward it is A-B-C, which is likely smaller. That is, output and consumer welfare can move in opposite directions.

One question about this story is whether it describes a real thing or is just another example of blackboard economics. Here, it seems at least conceivable that the gains to the marginal customers would be more than offset by losses suffered by the inframarginal customers. Measuring it empirically would be extraordinarily difficult. Indeed, as of this writing, vertical nonprice restraints have been assessed under the rule of reason for almost fifty years,³³⁶ and RPM has been under the rule of reason for fifteen years.³³⁷ There does not appear to be a

336. *Cont'l Television, Inc. v. GTE Sylvania, Inc.*, 433 U.S. 36, 37 (1977).

337. *Leegin Creative Leather Prods., Inc. v. PSKS, Inc.*, 551 U.S. 877, 882 (2007).

single case in which this rationale was given to support condemnation of a vertical restraint.

Another problem, which is more fundamental for antitrust policy, is that this practice has nothing to do with vertical restraints and, indeed, not even very much to do with monopoly. It results from the fact that while products are packages of individual features, not all customers value each feature by the same amount. They buy because the price of the package is lower than the value they place on it. Further, selecting the appropriate package does not require a vertical restraint, it can result from entirely unilateral conduct.

For example, suppose that the publisher of a daily newspaper decides to add a sports section, increasing the paper's price by five cents. The sports section increases the paper's circulation to the "marginal" customers, who are those that now purchase only because of the added sports section. It might injure others who are asked to pay the additional five cents but do not read the sports section. Whether welfare goes up or down is an empirical question. It is certainly possible that the addition of the sports section produces greater circulation but less welfare.

In this case, adding the sports section is a unilateral act. Further, it has nothing to do with either vertical restraints or, very likely, monopoly.³³⁸ It simply reflects the fact that a newspaper is a product whose value to consumers is "lumpy," in the sense that some customers value one section more than others, but the most cost-effective way to distribute the paper is to put all of them together at a common price.

Retailers frequently make decisions similar to those of the newspaper publisher when deciding how to package their offerings. For example, Costco offering customers free bits of breakfast sausage on a toothpick provides no benefit to vegetarians, but the additional product and labor costs will be passed on to everyone. The local gasoline station's provision of free air for tires benefits only those people who don't have their own tire pumps. The pizza joint's offer of free delivery benefits only those who want their pizza delivered; those who visit the restaurant to eat simply pay a little more. One could go on with this list, but the point should be clear. Even if we wanted to condemn this kind of behavior, the administrative costs of doing so would be astonishing. Further, even firms with virtually no market power do it

338. One possibility is that the newspaper added the sports section in order to compete with a rival publication that reported on sports. Even here, however, we would not ordinarily consider new entry, an output increasing practice, as unlawfully exclusionary.

all the time. Most importantly, in the vast majority of cases it reduces the costs of producing or selling. For example, the least costly way of making and selling newspapers is very likely to sell a single product with all the sections included, and let customers pick and choose what they want to read.

Another potential disconnect between output and welfare involves price discrimination. While price discrimination has been heavily modelled in the economic literature, it has never played a decisive role in antitrust enforcement.³³⁹ As a general matter, its welfare effects are loosely, but not invariably, coordinated with output effects. Price discrimination that reduces output reduces welfare. This proposition was established for third-degree price discrimination in the 1920s,³⁴⁰ and for second-degree price discrimination more recently.³⁴¹ It does not occur in first-degree price discrimination where output is at the competitive level. The more relevant question for our purposes is whether there are instances of price discrimination that increase output and reduce welfare.

Some instances of price discrimination can simply be predatory pricing. This was the theory of original section 2 of the Clayton Act and was applied by the Supreme Court in *Brooke Group, Limited v. Brown & Williamson Tobacco Corporation*.³⁴² The answer there was that cutting price below cost in one area of geographic or product space while not in another can be unlawful, but only if the prices are below a relevant measure of cost. Further, under current law, the predation must be followed by a period of recoupment, as *Brooke Group* required. This situation is governed by the requirement that the relevant output be “sustainable.” Predatory pricing under this definition is not sustainable.

Second-degree price discrimination effected by tying arrangements has been heavily modeled and seems to be well understood. In most cases, it results in higher output and may or may not increase

339. On its relevance for antitrust policy, see 3A PHILLIP E. AREEDA & HERBERT HOVENKAMP, *ANTITRUST LAW* ¶ 721 (5th ed. 2022).

340. Originally by ARTHUR C. PIGOU, *THE ECONOMICS OF WELFARE* 275–89 (1920). See Hal R. Varian, *Price Discrimination*, in 1 *HANDBOOK OF INDUS. ORG.* 597, 600 (Richard Schmalensee & Robert D. Willig eds., 1989). Third degree price discrimination occurs when the seller makes an ex ante determination of different customers’ willingness-to-pay and prices accordingly.

341. See Einer Elhauge & Barry Nalebuff, *The Welfare Effects of Metering Ties*, 33 *J.L. ECON. & ORG.* 68, 70 (2017) (extending welfare proof to second-degree price discrimination accomplished by variable proportion ties).

342. *Brooke Grp., Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209, 209 (1993).

welfare, depending on the circumstances.³⁴³ To illustrate, suppose the seller of a digital printer sells the printer at a very low price or even gives it away, but ties toner cartridges and puts an overcharge into the cartridge price. In that case, customers benefit from the lower printer price but are harmed by the higher cartridge price. Because different customers use the cartridges in differing amounts, higher-volume users will tend to be harmed more as the aggregate of cartridge overcharges becomes larger, and at least some of them could be harmed. On the other side, the firm sells more printers.

Once again, we would have to consider whether this practice “restrains trade.” Further, we need to consider that it benefits some customers while harming others. As a litigation reality check, the use of tying to effect price discrimination has been known since the 1950s,³⁴⁴ but has never determined the legality of a tie.³⁴⁵ Finally, it is noteworthy that the practice does not require monopoly but only relatively modest amounts of product differentiation.³⁴⁶ For example, even when razors are sold in a competitive market, they may be subject to tying if they are differentiated.³⁴⁷

Even if situations involving an inconsistency between output and welfare were to be discovered, how should antitrust respond? Here, the answer is that in the rare case where conduct increases output but reduces welfare, antitrust law under the “restrain trade” standard is driven by the change in output, not the change in welfare. That is the only faithful construction of the Sherman Act’s restraint of trade test and the case law interpreting it.³⁴⁸

CONCLUSION

Antitrust is properly focused on competition. Those concerns are explicit in the original Sherman Act and in the Clayton Act passed

343. See Erik Hovenkamp & Herbert Hovenkamp, *Tying Arrangements and Anti-trust Harm*, 52 ARIZ. L. REV. 925, 925 (2010). For some counterexamples, limited to situations where the tying firm is an absolute monopolist and the tied product market is perfectly competitive, see Elhauge & Nalebuff, *supra* note 341.

344. Ward S. Bowman, Jr., *Tying Arrangements and the Leverage Problem*, 67 YALE L.J. 19, 33 (1957).

345. The Supreme Court once suggested in dicta that a tie “can increase the social costs of market power by facilitating price discrimination.” *Jefferson Parish Hosp. Dist. No. 2 v. Hyde*, 466 U.S. 2, 14–15 (1984). But price discrimination was not involved in that case and, in any event, the Court exonerated the tie.

346. See, e.g., *Siegel v. Chicken Delight, Inc.*, 448 F.2d 43, 52 (9th Cir. 1971) (condemning variable proportion franchise tie imposed by struggling franchisor).

347. See Richard Schmalensee, *Pricing the Razor: A Note on Two-Part Tariffs*, 42 INT’L J. INDUS. ORG. 19 (2015).

348. See Hovenkamp, *supra* note 6.

during the height of the Progressive Era. Although Supreme Court Justices Brandeis and his successor Justice Douglas articulated antitrust's goals as targeting mere size, no courts have taken the bait, not even in decisions authored by those Justices. Nor should they. Among antitrust's slogans and goals, the pursuit of "bigness" is a useless and damaging alternative, calculated to injure both consumers and labor.

While concerns expressed as protection for the competitive process have acquired some traction, the term lacks sufficient definition and does not create a meaningful target for measurement. It readily claims assent largely because it is consistent with just about any goal that one happens to choose. "Protection of the competitive process" operates as a slogan, not as a goal.

Welfare standards are the ones that everyone loves to hate. First, they have the capacity to operate as actual goals. They provide a mechanism for measurement, which is not to say that measurement is easy. They also align best with defensible overall goals for the economy, which emphasize productivity, economic growth and innovation, wide accessibility of products and services, and broad opportunities for labor. The antitrust law's historical focus on output and price is largely if not perfectly consistent with those goals. Difficulties in implementation should not be an excuse for replacing them with something much worse.