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The Antitrust Text

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The Antitrust Text

HERBERT HOVENKAMP*

The antitrust laws are fully stated in two statutes that seem absurdly brief in relation to the work they do. Their brevity in relation to coverage has led to three phenomena. First is the tendency of courts to use the statutory text as no more than a starting point, treating it as a general principle, or "Magna Carta," of free enterprise, and sometimes ignoring the statutory language altogether. Second, courts have responded to the statutory brevity with judicial development of numerous rules not mentioned in the statutory texts. The third phenomenon is a kind of expansionism, or belief that the antitrust laws can be used to control the entire world, or at least the entire economic world.

This article considers what antitrust policy would look like if an antitrust "textualist" actually relied on the antitrust statutes themselves to control all important issues of interpretation. The language of the antitrust laws, although brief, actually says a great deal more than is commonly acknowledged. Further, the Sherman and Clayton Acts are statutes after all. They should provide the first place to look to for guidance on enforcement policy. How much different would antitrust look if we centered policy on the statutory language, using only generally accepted forensic tools and recognized canons of statutory interpretation to understand it? Among the areas where the statutory language provides considerable direction are the goals of the antitrust laws; market power and market delineation requirements; the probabilistic effects requirement of the Clayton Act, standing and the indirect purchaser rule, conspiratorial capacity and antitrust personhood, and extraterritorial effects.

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INTRODUCTION

The antitrust laws are fully stated in two statutes that seem absurdly brief in relation to the work they do. The Sherman Act prohibits contracts "in restraint of trade"[1] and those who "monopolize" or "attempt to monopolize."[2] The basic provisions have had no substantive amendments since the Sherman Act was passed in 1890.[3] The Clayton Act's three substantive provisions condemn differential pricing,[4] exclusive contracts,[5] and mergers[6] whose effect may be to "substantially lessen competition," or "tend to create a monopoly."[7]

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1. 15 U.S.C. § 1 (2018).
2. 15 U.S.C. § 2 (2018).
3. There have been a few procedural amendments, most notably the limitations on extraterritorial application recognized in the Foreign Trade Antitrust Improvements Act. 15 U.S.C. § 6a (2018).
4. 15 U.S.C. § 13 (2018) (identified in the statute as "price discrimination," but reaching mere differences in price).
5. 15 U.S.C. § 14 (2018).
6. 15 U.S.C. § 18 (2018).
7. 15 U.S.C. §§ 13–14, 18 (2018).

In addition, both statutes contain provisions defining who is a "person" under the antitrust law.[8] These definitions are the entry point for many decisions determining when two or more entities are capable of forming a "conspiracy."[9] An antitrust "person" is treated as a single entity and generally cannot conspire with itself. The Clayton Act additionally contains an immunity for labor organizations,[10] as well as extremely general provisions allowing private treble damages,[11] and equitable relief in both public[12] and private[13] cases. None of the remedy provisions specify what injuries are covered, how damages are to be measured, or the range of equitable relief that the courts are empowered to grant. The public equity provision simply authorizes the government to "prevent and restrain" violations.[14] The private equity provision authorizes relief against "threatened loss or damage" from antitrust violations.[15] They do not address such very important questions as whether divestiture, or court-ordered "breakups" of firms, is a permissible remedy and, if so, when. Nor do they indicate whether structural relief is available to either public or private plaintiffs.

The Clayton Act has had two amendments that change substantive provisions and one that expands its jurisdictional reach. The Robinson-Patman Act, passed in 1936, expands the Clayton Act price "discrimination" provision so as to reach wholesale price differences made to two competing resellers and that injure the higher price reseller's ability to compete.[16] It also added a special provision to the original statute that prohibited harm to a specific competitor rather than to competition generally.[17] That effectively makes it a tort statute, although it continues to be treated as an antitrust law.

In addition, a 1950 amendment to § 7 of the Clayton Act expanded its reach so as to include nonhorizontal mergers and asset acquisitions, as well as stock acquisitions.[18] While it also added a much-debated legislative history concerning the goals of merger law, none of this appeared in changes to the statutory text.[19] Finally, a 1980 amendment expanded the merger provision, but not the price discrimination or tying provisions, to reach activities "in" or "affecting" commerce.[20] That

8. 15 U.S.C. § 7 (2018) ("person" under the Sherman Act); 15 U.S.C. § 12 (2018) ("person" under the Clayton Act). *See* Herbert Hovenkamp, *The Power of Antitrust Personhood*, 25 U. PA. J. BUS. L. 891, 893 (2023) [hereinafter *The Power of Antitrust*].

9. *See infra* text accompanying notes 381–414.

10. 15 U.S.C. § 17 (2018).

11. 15 U.S.C. § 15 (2018).

12. 15 U.S.C. § 25 (2018) (equitable relief in actions by the government).

13. 15 U.S.C. § 26 (2018) (private equitable relief).

14. 15 U.S.C. § 25 (2018).

15. 15 U.S.C. § 26 (2018).

16. 15 U.S.C. § 13 (2018).

17. *Id.* (expanding coverage to situations where a price discrimination serves to "injure, destroy, or prevent competition with any person who either grants or knowingly receives the benefit of such discrimination, or with customers of either of them").

18. 15 U.S.C. § 18 (2018).

19. *See infra* text accompanying note 275.

20. Antitrust Procedural Improvements Act of 1980, Pub. L. No. 96-349, 94 Stat. 1154 (codified as amended at 15 U.S.C. § 18 (2018)).

expansion was in line with Supreme Court holdings[21] that increased Congress's power to legislate under the Commerce Clause.[22]

The brevity of the antitrust laws seems all the more extreme when one considers that they cover virtually all aspects of "commerce" by default, with a few activities removed by explicit or implicit exemptions.[23] Nowhere else in the United States Code are so few words used to regulate so much. Sector-specific statutes such as those governing energy, aviation, banking, or communications are many times larger even though they regulate only discrete portions of the economy.

This statutory brevity in relation to coverage has encouraged three phenomena. *First* is the tendency of courts to ignore the statutory text altogether or else to use the language as stating no more than a general principle, or "Magna Carta," of free enterprise, rather than a set of rules governing distinct practices.[24]

Second, the courts have responded with judicial development of many rules and doctrines that are not mentioned in the brief statutory texts. For example, antitrust doctrines such as the per se rule, the rule of reason, the relevant market or market power requirement, barriers to entry, the horizontal/vertical distinction, or potential competition mergers are not mentioned in the statutes. Can their recognition realistically be construed as "interpretations" of the text? Or are they simply the creation of new doctrine that the statutes do not contemplate? As I show below, it depends on how the statutory terms are defined. For example, if the term "restraint of trade" is properly defined as a reduction in market-wide output, with its accompanying price increase, then the rule of reason and secondary inquiries into market power and entry barriers are essential forensic tools for determining the answer.[25]

Third is a kind of expansionism, or belief that the antitrust laws can be used to control the entire world, or at least the entire economic world. Numerous people have written about such things as whether antitrust should help improve democracy,[26] whether it can be brought to bear against environmental harm,[27] or whether we should use it to address wealth inequality, inflation, or even workplace

21. The most notable case being *Wickard v. Filburn*, 317 U.S. 111 (1942).

22. *See* § 6 of the Antitrust Procedural Improvements Act of 1980. The amendment occurred in reaction to earlier but post-*Wickard* decisions holding that the merger provision reached only firms that were engaged in the flow of interstate commerce. As a result, the statute did not extend to the full reach of congressional power under the Commerce Clause. *See, e.g.*, United States v. Am. Bldg. Maint. Indus. 422 U.S. 271 (1975).

23. The various exemptions are treated in 1B PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION (5th ed. 2020). For particular provisions, see *id.* at ¶ 249 (agriculture), ¶ 250 (health care), ¶ 251 (exports, shipping national defense, small business, newspapers, banks, energy, sports, communications, gift annuities, and medical resident matching).

24. United States v. Topco Assocs., 405 U.S. 596, 610 (1972) ("Antitrust laws in general, and the Sherman Act in particular, are the Magna Carta of free enterprise.").

25. *See infra* Section I.B.

26. *See, e.g.*, Daniel A. Crane, *Antitrust as an Instrument of Democracy*, 72 DUKE L.J. ONLINE 23 (2022).

27. *See, e.g.*, Dailey C. Koga, *Teamwork or Collusion? Changing Antitrust Law to Permit Corporate Action on Climate Change*, 95 WASH. L. REV. 1989 (2020).

discrimination and harassment or child labor.[28] So far, the courts have not very frequently taken this bait.

These expansions in domain cannot be justified by the text of the antitrust statutes *unless* the challenged practice falls within them. For example, an agreement among firms to stop competitive development of green technology is illegal[29]—not because the antitrust laws address environmental harm, but rather because it is an agreement in restraint of trade.

The antitrust statutes do provide a limited set of statutory definitions covering both statutes. The defined terms include "antitrust laws," "commerce," and "person."[30] Congress saw fit not to provide definitions for terms such as "competition" or "monopoly"—that is, those terms that go to the heart of what the antitrust laws are about, and that are the most difficult to interpret. Lack of these definitions has very likely contributed to disputes about antitrust law's reach to political or social issues outside of economics.

This article pushes back at the three phenomena noted above by considering what antitrust policy would look like if decision-makers actually read the antitrust laws as a statutory text. The language of the antitrust laws, although very brief, says more than is commonly acknowledged. Further, they are statutes and should provide the first place to look for declarations of enforcement policy. Too often, it seems, people do antitrust analysis and litigation without even looking at the statutes. So, the important question addressed here is, Would antitrust law look different if we centered policy on the statutory language, trying to determine the best contemporary understanding of the words that Congress chose by using generally accepted interpretative and forensic tools?

The discussion first considers the standards of legality that can be inferred directly from the texts of the Sherman and Clayton Acts, plus inferences from ordinary tools of statutory interpretation.[31] This includes the definitions of "restraint of trade" in § 1 of the Sherman Act as well as the meaning of "monopolize" in § 2. The distinctive features of the Clayton Act's text are its combination of an "effects" test for illegality plus its invitation to consider probabilities by using the phrase "where the effect may be."[32] Further, meaning must be given to the undefined phrases "substantially lessen

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28. *See, e.g.*, Ted Tatos & Hal Singer, *Antitrust Anachronism: The Interracial Wealth Transfer in Collegiate Athletics Under the Consumer Welfare Standard*, 66 ANTITRUST BULL. 396 (2021); Bennett Capers & Gregory Day, *Race-ing Antitrust*, 121 MICH. L. REV. 523 (2023); Laura Beltran, *How the Consumer Welfare Standard Propagates Gender and Racial Inequalities*, PROMARKET (Jan. 9, 2023), https://www.promarket.org/2023/01/09/how-the-consumer-welfare-standard-propagates-gender-and-racial-inequalities/[https://perma.cc/Z73D-LMNW].

29. *See* United States v. Auto. Mfrs. Ass'n, 307 F. Supp. 617 (C.D. Cal. 1969) (approving consent decree prohibiting automakers from agreeing to restrict development of air pollution control equipment, challenged under §1 of the Sherman Act).

30. 15 U.S.C. § 7 (2018) (defining "person" in the Sherman Act); 15 U.S.C. § 12 (2018) (defining "antitrust laws, "commerce," and "person" in the Clayton Act).

31. *See infra* Parts I–II.

32. *See infra* Section I.D.

competition" and "tend to create a monopoly," which all the substantive Clayton Act provisions use.[33]

Next, we examine the problem of monopsony, or buyer power, which is implicitly covered by some statutory provisions but excluded by others.[34] After that, we address the quite unique treatment of the statutory definition of "person" under the antitrust laws.[35] Even though the definition of "person" appears separately in both the Sherman and Clayton Acts, the courts rarely cite them. Finally, and briefly, we discuss antitrust's remedial provisions[36] and its extraterritorial effects.[37]

One area not discussed here is Sherman Act criminal liability. The question of scope is complicated by the fact that exactly the same words govern both civil and criminal liability. The Clayton Act's provisions are purely civil. By contrast, the Sherman Act declares that "every person" who violates its prohibitions "shall be deemed guilty of a felony."[38] Nevertheless, only a small percentage of antitrust violators are convicted of criminal offenses. This is one area where practice seems entirely inconsistent with the statutory language.

In fact, the generality of the statutory text makes selective criminal application or interpretative narrowing essential to preserving the statute's constitutionality.[39] Senator Sherman himself was sufficiently concerned about the statute's open-ended language that he opposed the inclusion of criminal penalties in the bill, observing that "it is impossible to describe in precise language the nature and limits of the offenses in terms specific enough for an indictment."[40]

Also not covered is the Federal Trade Commission Act ("FTC Act"), for the simple reason that it is not an "antitrust law" as the Clayton Act defines them.[41]

I. The Language of the Sherman Act

The two substantive sections of the Sherman Act prohibit agreements in restraint of trade (§ 1) and monopolizing as well as attempts and conspiracies to monopolize (§ 2). Neither provision mentions "consumer welfare," or for that matter "welfare" of any kind.[42] There is also no reference to "bigness," an antitrust target favored by

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33. *See infra* Section II.B.

34. *See infra* Part III.

35. *See infra* Part IV.

36. *See infra* Part V.

37. *See infra* Part VI.

38. 15 U.S.C. §§ 1–2 (2018) (speaking of "every person" who makes a contract in restraint of trade (§1), or "every person" who shall monopolize (§ 2)).

39. *See, e.g.*, United States v. U.S. Gypsum Co., 438 U.S. 422 (1978) (*mens rea* requirement precluded criminal liability where defendants had good faith belief they needed to exchange price information in order to limit Robinson-Patman liability). The Department of Justice maintains a website concerning criminal enforcement of the antitrust laws. *See Criminal Enforcement*, DEP'T OF JUST., https://www.justice.gov/atr/criminal-enforcement[https://perma.cc/8Z63-BF3E].

40. Ernst Freund, *The Enforcement Provisions of the Sherman Law*, 20 J. POL. ECON. 462, 463 (1912).

41. 15 U.S.C. § 12 (2018) (stating which statutes are included among the "antitrust laws," not including the FTC Act.).

42. On these various slogans and goals used to state antitrust's purpose, see Herbert

some antitrust populists.[43] Neither do they say anything about "protection of the competitive process,"[44] which is often stated as an antitrust goal.[45] The text also says nothing about what have become essential elements of proof, such as the per se rule, the rule of reason, or the relevant market or market power requirements. What it does encompass, however, is a powerful concern, stated in hundreds of decisions, about higher prices or reduced market output.[46]

A. Section 1 of the Sherman Act: "Restraint of Trade"

Section 1 of the Sherman Act is the only substantive antitrust provision whose test for legality was well understood when that statute was passed. It condemns contracts, combinations, and conspiracies "in restraint of trade."[47] That phrase had an established meaning prior to passage of the Sherman Act, and early antitrust cases understood it in the same way. To "restrain trade" meant to lessen or reduce the volume of trade or commerce and thus to increase prices.

Prior to the Sherman Act, the term "restraint of trade" referred to price fixing or output restriction agreements as well as noncompete clauses that might serve to reduce the volume of commerce, sales, or market opportunities. For example, a Pennsylvania Supreme Court decision in 1871 found an unlawful restraint of trade when coal producers formed a selling association by which its members "could limit the supply below the demand in order to enhance the price."48 In 1880 the Supreme Court of Ohio struck down an Ohio sales association that set the price for all its member producers.[49] The court found the agreement to be in restraint of trade and contrary to the state's policy, which was "opposed to monopolies" and to agreements "which tend to advance market prices, to the injury of the general public."[50] Numerous court decisions from many states expressed these concerns prior to passage of the Sherman Act. Sometimes they were interpreting the common law, and sometimes early state statutes that anticipated the Sherman Act.[51]

Hovenkamp, *The Slogans and Goals of Antitrust Law*, 25 N.Y.U. J. LEGIS. & PUB. POL'Y 705 (2023) [hereinafter *Slogans*].

43. *Id.* at 707–08.

44. *Id.*

45. *See* Warren Grimes, *A Post-Chicago Debate: Is Protecting the Competitive Process Antitrust's Overarching Goal?*, 35 ANTITRUST 72 (2021).

46. On the federal courts' many statements of these propositions, see Herbert Hovenkamp, *Antitrust's Goals in the Federal Courts* (Oct. 2023) (working paper), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4519993 [https://perma.cc/Y98V-4G6W].

47. 15 U.S.C. § 1 (2018).

48. Morris Run Coal Co. v. Barclay Coal Co., 68 Pa. 173, 183 (1871).

49. Cent. Ohio Salt Co. v. Guthrie, 35 Ohio St. 666, 671–72 (1880).

50. *Id. See also* Santa Clara Val. M. & L. Co. v. Hayes, 76 Cal. 387, 389–90 (1888) (agreement to "limit the supply" of lumber in four counties was in restraint of trade); *cf.* Nat'l Benefit Co. v. Union Hosp. Co., 45 N.W.2d 806, 807 (Minn. 1891) (challenged agreement was not in restraint of trade because it did not "limit the production or supply of an article so as to acquire a monopoly of it and then unreasonably enhance prices").

51. Richardson v. Buhl, 43 N.W. 1102, 1110 (Mich. 1889) (cartel controlling matches was in restraint of trade because it created power to fix prices); Craft v. McConoughy, 79 Ill.

Almost immediately federal judges read these common law interpretations into the new antitrust statute, as Congress anticipated they would.[52] Most prominent was Judge Taft's 1898 opinion in *United States v. Addyston Pipe & Steel Co.*,[53] which spoke of the cast iron pipe cartel as "restricting competition and maintaining prices"[54] and "restrict[ing] output."[55] Judge Taft concluded that if the sole object of an agreement was to "enhance or maintain prices, it would seem that there was nothing to justify or excuse the restraint."[56] A few years later Justice Holmes wrote the opinion awarding private plaintiff damages against two members of that very cartel, and held that the appropriate measure was the "overcharge"—or "the difference between the price paid and the market or fair price."[57] This "overcharge" has remained the principal measure of purchaser damages in antitrust cases ever since.

Sherman Act price fixing indictments from the turn of the century included allegations of conspiracies that "restrict[] the output of the mills, fix[] the prices of their products";[58] or of a conspiracy "to control and restrict the output."[59] The charge

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346, 349 (1875) (purported partnership of grain producers was actually a secret cartel, in restraint of trade); India Bagging Ass'n v. Kock, 14 La. Ann. 168, 169 (1859) (cotton bagging cartel via a common sales agent was "palpably and unequivocably a combination in restraint of trade . . . to enhance the price in the market of an article of primary necessity to cotton planters"); *see also* People v. Sheldon, 139 N.Y. 251, 265–66 (1893) (while a single firm acting alone may raise its price, a conspiracy to do so is unlawful, "whether the price . . . is reasonable or excessive"); Judd v. Harrington, 34 N.E. 790, 791 (1893) (agreements that "enhance the price" are forbidden); De Witt Wire-Cloth Co. v. N.J. Wire-Cloth Co., 14 N.Y.S. 277, 278 (Ct. Com. Pl. 1891) ("to restrict competition in trade, and to arbitrarily enhance the price"); Alger v. Thacher, 36 Mass. 51, 54 (1837) (contracts in restraint of trade are void because they "prevent competition and enhance prices").

52. *See* 21 CONG. REC. 3152 (1890) (Sen. George Hoar said the purpose of Sherman bill "is to extend the common-law principles, which protected fair competition in trade in old times in England, to international and interstate commerce in the United States"); Harriet Hubbard Ayer, Inc. v. FTC, 15 F.2d 274, 276 (2d Cir. 1926) ("The Sherman Anti-Trust Law was intended to make the common law applicable in federal cases . . . .") (citation omitted). For elaboration, see Edward A. Adler, *Monopolizing at Common Law and Under Section Two of the Sherman Act*, 31 HARV. L. REV. 246 (1917).

53. 85 F. 271 (6th Cir. 1898), *modified and aff'd*, 175 U.S. 211 (1899). In its affirmance the Supreme Court explained how the cartel members "by controlling two thirds of the output" in the covered territory were "practically able to fix prices." 175 U.S. 211, 236 (1899). *See also* W.W. Montague & Co. v. Lowry, 193 U.S. 38, 41 (1904) (condemning boycott directed at nonmembers of association who sold at less than list price); Hitchcock v. Anthony, 83 F. 779, 781 (6th Cir. 1897) ("restrict the output or enhance the prices"—interpreting Michigan antitrust law); Columbia Wire Co. v. Freeman Wire Co., 71 F. 302, 306 (E.D. Mo. 1895) ("restricted their sales or output"—not stating source of law); Donald Dewey, *The Common-Law Background of Antitrust Policy*, 41 VA. L. REV. 759, 778 (1955) ("restricting output").

54. *Addyston Pipe*, 85 F. at 274.

55. *Id.* at 277.

56. *Id.* at 282–83.

57. Chattanooga Foundry & Pipe Works v. City of Atlanta, 203 U.S. 390, 396 (1906). The Supreme Court elaborated on the methodology in *Story Parchment Co. v. Paterson Parchment Paper Co.*, 282 U.S. 555, 561–63 (1931).

58. Nelson v. United States, 201 U.S. 92, 100 (1906).

59. Alexander v. United States, 201 U.S. 117, 119 (1906).

in the government's Sherman Act case against Standard Oil was that the defendants "limited the production, output, and markets" for petroleum products.[60] The 1911 decision against the gunpowder trust concluded that the defendants limited competition by measures "to limit the output of the members of the association and to crush competition" by others.[61] The claim in United States v. United States Steel Corp. was of "restricting output in order to exact unfair prices."[62] Numerous Sherman Act decisions used phrases such as "restrict output," "limit output," or "restraining the output or quantity" of a product or service.[63] Other decisions relied on the same idea in jurisdictional challenges to the Sherman Act, where the Court considered whether output limitations impeded the "flow" of commerce.[64]

Some early state law antitrust provisions expressly referred to output restrictions or price restraints, making them verbally more explicit than the Sherman Act. For example, a Michigan statute from 1889 made it unlawful for firms with separate businesses to "join together to restrict the output or enhance the prices of goods."[65] A Texas statute made it unlawful "[t]o regulate, fix or limit the output of any article or commodity."[66] An Illinois antitrust provision condemned trusts "to limit or fix the price or lessen the production and sale of any article of commerce, use or consumption, or to prevent, restrict or diminish the manufacture or output of any

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60. United States v. Standard Oil Co., 173 F. 177, 190 (E.D. Mo. 1909), *aff'd*, 221 U.S. 1 (1911).

61. United States v. E.I. Du Pont De Nemours & Co., 188 F. 127, 140 (D. Del. 1911).

62. United States v. U.S. Steel Corp., 223 F. 55, 61 (D.N.J. 1915) (holding that the Sherman Act reaches actions "dividing territory, limiting output, or fixing prices"), *aff'd*, 251 U.S. 417 (1920).

63. Wheeler-Stenzel Co. v. Nat'l Window Glass Jobbers Ass'n, 152 F. 864, 870 (3d Cir. 1907) (applying both sections of Sherman Act; "restrict the output"); State v. Ark. Lumber Co., 169 S.W. 145, 174 (1913) (state antitrust law; "intent to fix the price and limit the output of lumber"); United States v. Am. Tobacco Co., 164 F. 700, 726–27 (S.D.N.Y. 1908) (dismissing the complaint because none of the challenged agreements appeared to limit output), *rev'd*, 221 U.S. 106 (1911); State v. Duluth Bd. of Trade, 121 N.W. 395, 406 (1909) ("agreeing upon prices to be adopted by all, and restraining the output or quantity of meat shipped"); Chi. Wall Paper Mills v. Gen. Paper Co., 147 F. 491, 492 (7th Cir. 1906) (applying Illinois's 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); Ellis v. Inman, Poulsen & Co., 131 F. 182, 183 (9th Cir. 1904) (both sections "controlling and restricting the output of lumber"). Numerous other decisions are listed in Hovenkamp*, supra* note 46.

64. *E.g.*, United States v. Employing Plasterers Ass'n, 347 U.S. 186, 188 (1954) (trade restraints that affected the "interstate flow" of materials adversely were within Sherman Act jurisdiction); Lorain J. Co. v. United States, 342 U.S. 143, 152–53 (§ 2 refusal to deal case; conduct interfered with the interstate flow of advertising); Mandeville Island Farms, Inc. v. Am. Crystal Sugar Co., 334 U.S. 219, 226 (1948) (sugar beet buying cartel interfered with the "free and natural flow" of interstate commerce); Associated Press v. United States, 326 U.S. 1 (1945) (restricted membership rules for sharing wire service interfered with the interstate flow of news). *See also* United States v. Women's Sportswear Mfr. Ass'n, 336 U.S. 460, 464 (1949) ("If it is interstate commerce that feels the pinch, it does not matter how local the operation which applies the squeeze.").

65. Hitchcock v. Anthony, 83 F. 779, 781 (6th Cir. 1897).

66. Empire Gas & Fuel Co. v. Lone Star Gas Co., 289 F. 826, 831 (N.D. Tex. 1923).

such article."[67] These judicial decisions and statutes make it abundantly clear that even non-economist judges and legislators understood early on the link between reduced output and higher prices, their principal target. Early secondary scholarship on the antitrust laws followed the same course.[68]

Similar usage has continued in federal judicial decisions to this day, involving a variety of practices. It includes Supreme Court decisions such as *Northwest Wholesale Stationers, Inc. v. Pacific Stationery & Printing Co.*[69] ("would always or almost always tend to restrict competition and decrease output"); *FTC v. Indiana Federation of Dentists*[70] (detrimental effects include "a reduction of output"); and *NCAA v. University of Oklahoma Board of Regents*[71] ("Horizontal price fixing and output limitation are ordinarily condemned as a matter of law . . . ."); *Ohio v. American Express Co.*[72] (proof of detrimental effects include "reduced output, increased prices, or decreased quality"); and most recently *NCAA v. Alston*,[73] which described the concern of § 1 of the Sherman Act as involving the "capacity to reduce output and increase price."[74] In *Brooke Group*, a predatory pricing case brought under the Robinson-Patman Act, the Court concluded that competitive injury could be inferred from "evidence that tends to prove that output was restricted or prices

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67. Chi. Wall Paper Mills v. Gen. Paper Co., 147 F. 491, 492 (7th Cir. 1906).

68. *E.g.*, Herbert Pope, *The Legal Aspect of Monopoly*, 20 HARV. L. REV. 167, 177 (1907) ("raise prices or limit output"); Book Note, 28 HARV. L. REV. 642, 644 (1915) (reviewing WILLIAM HOWARD TAFT, THE ANTI-TRUST ACT AND THE SUPREME COURT (1914)) ("restriction of output"); WILLIAM HOWARD TAFT, THE ANTI-TRUST ACT AND THE SUPREME COURT 60 (1914) ("restrict production"); W. M. Rapsher, *Dangerous "Trusts*," 146 N. AM. REV. 509, 510 (1888) (defining trusts as ability to "sustain the prices" and "to arbitrarily limit production"); D.M. Mickey, Note, *Trusts*, 22 AM. L. REV. 538, 538 (1888) ("limiting production"); William Letwin, *The First Decade of the Sherman Act: Judicial Interpretation*, 68 YALE L.J. 900, 903 (1959) ("limit output").

69. 472 U.S. 284, 289–90 (1985).

70. 476 U.S. 447, 460 (1986) (applying Sherman Act principles under FTC Act); *see also* FTC v. Superior Ct. Trial Laws. Ass'n, 493 U.S. 411, 423 (1990) ("This constriction of supply is the essence of 'price-fixing,' whether it be accomplished by agreeing upon a price . . . or by agreeing upon an output . . . .") (quoting Superior Ct. Trial Laws. Ass'n v. FTC, 856 F.2d 226, 234 (D.C. Cir. 1988)); United States v. Socony-Vacuum Oil Co., 310 U.S. 150, 209–10 (1940) (output reduction agreement that led to higher prices unlawful per se); N.C. State Bd. of Dental Exam'rs v. FTC, 574 U.S. 494, 505–06 (2015) (speaking of "risk that private regulation of market entry, prices, or output may be designed to confer monopoly profits") (quoting Hoover v. Ronwin, 466 U.S. 558, 584 (1984) (Stevens, J., dissenting)).

71. NCAA v. Bd. of Regents, 468 U.S. 85, 100 (1984); *cf.* Matsushita Elec. Indus. Co., v. Zenith Radio Corp., 475 U.S. 574, 584 (1986) (rejecting for lack of evidence theory that defendants would "cartelize the American CEP market, restricting output and raising prices above the level that fair competition would produce"); United States v. Container Corp. of Am., 393 U.S. 333, 337 (1969) ("The limitation or reduction of price competition brings the case within the ban . . . ."); Cont'l T.V., Inc. v. GTE Sylvania, Inc., 433 U.S. 36, 70 (1977) (White, J., concurring) (output-increasing effects of vertical restraints justifies applying rule of reason).

72. 138 S. Ct. 2274, 2284 (2018).

73. 141 S. Ct. 2141 (2021).

74. *Id.* at 2155.

were above a competitive level."[75] In *Ohio v. American Express Co.*, the Court repeated that statement.[76] In its decision in *Eastman Kodak Co. v. Image Technical Services, Inc.*, the Court defined the market power needed for a unilateral the power to "raise price and restrict output."[77] The formulations were applied to both multilateral conduct challenged under § 1 of the Sherman Act and unilateral monopolistic conduct usually challenged under § 2.

In its *California Dental* decision, the Court acknowledged that the relevant issue was whether the defendant's restraint on advertising reduced output, but it concluded that the relevant output was in the market for dental services, not for advertising:

> [T]he relevant output for antitrust purposes here is presumably not information or advertising, but dental services themselves. The question is not whether the universe of possible advertisements has been limited (as assuredly it has), but whether the limitation on advertisements obviously tends to limit the total delivery of dental services.[78]

Given the defendant's lack of concern about whether the advertising was false or misleading, that decision incorrectly concluded that reducing output of a single input into a finished product is not independently actionable. In fact, a great deal of price fixing law, including *Trans-Missouri* (freight rates),[79] *Addyston Pipe* (pipe designated for sewer line installations),[80] and *Alston* (student athlete compensation), has involved intermediate goods.[81] The Supreme Court had previously held that fixing of credit terms—another intermediate good—is unlawful.[82]

B. Brandeis, Marshall, and Output Restraints

Justice Brandeis fully appreciated the relationship between "restraint of trade" in the Sherman Act and effects on market output, even if the government did not. He made that clear soon after he went on the Court, in his important rule of reason opinion in *Chicago Board of Trade v. United States*.[83] The government had challenged the Board's "call rule," which froze the price of after-hours trades at the most recent closing price on the trading floor until open trading resumed the next business day. As Brandeis acknowledged, nominally the call rule did "fix" the prices of after-hours trades. However, the government:

> made no attempt to show that the rule was designed to or that it had the effect of limiting the amount of grain shipped to Chicago; or of retarding or accelerating shipment; or [o]f raising or depressing prices; or of

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75. Brooke Group, Ltd. v. Brown & Williamson Tobacco Corp., 509 U.S. 209, 237 (1993).
76. 138 S. Ct. 2274, 2288 (2018).
77. 504 U.S. 451, 464 (1992) (citing and quoting several earlier decisions).
78. Cal. Dental Ass'n v. FTC, 526 U.S. 756, 776–77 (1999).
79. United States v. Trans-Missouri Freight Ass'n, 166 U.S. 290 (1897).
80. United States v. Addyston Pipe & Steel Co., 85 F. 271 (6th Cir. 1898).
81. NCAA v. Alston, 141 S. Ct. 2141 (2021).
82. Catalano, Inc. v. Target Sales, Inc., 446 U.S. 643 (1980).
83. 246 U.S. 231 (1918).

> discriminating against any part of the public; or that it resulted in hardship to anyone . . . .[84]

In other words, while the challenged agreement technically "fixed" prices, it did not "restrain trade."[85]

Then, in 1931, Justice Brandeis authored a decision rejecting a Sherman Act challenge to a production and patent sharing joint venture formed by Standard Oil and several other large gasoline refiners. In dismissing the complaint, he observed that "[n]o monopoly, or restriction of competition, in the production . . . has been proved."[86] Notwithstanding all of the current debate about Brandeis' own views of antitrust policy, he clearly understood that § 1 of the Sherman Act was concerned with restraints limiting output or controlling price. That is, on the Sherman Act he was a consumer welfarist.

Justice Brandeis' protective impulses for small business are well known,[87] and the *Chicago Board* decision aligns with that concern. In that case, large brokers were taking advantage of farmers and small dealers by using secret trades and starting rumors when the trading floor was closed.[88] Indeed, in its Report on the Grain Trade two years later, the FTC noted that prior to the adoption of the call rule, trading during low volume night hours threatened to crash the entire market.[89] For that reason, the call rule was in fact an output-increasing rather than output-decreasing agreement.

But defense of small business cannot explain the Standard Oil refinery case. The government's action was against a joint venture to develop large-scale gasoline refineries using patented "cracking" technology. The venture members were large firms.[90] Justice Brandeis once again lectured the government that if a restraint did not restrict output, it was not governed by § 1 of the Sherman Act. After observing the new refinery's twenty-six percent market share, Justice Brandeis explained the evidentiary requirements for such challenges:

> Under these circumstances the primary defendants could not effectively control the supply or fix the price of cracked gasoline by virtue of their alleged monopoly of the cracking processes, unless they could control, through some means, the remainder of the total gasoline production from all sources. Proof of such control is lacking. . . . The record does not

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84. *Id.* at 238. *See also* Am. Column & Lumber Co. v. United States, 257 U.S. 377, 414 (1921) (Brandeis, J., dissenting from finding that information exchange was unlawful: "[T]he Plan is not inherently a restraint of trade, and the record is barren of evidence to support a finding that it has been used, or was intended to be used, as an instrument to restrain trade.").

85. *Cf.* Broad. Music, Inc. v. Columbia Broad. Sys., Inc., 441 U.S. 1 (1979) (acknowledging that challenged blanket licensing, which involved nonexclusive licenses by recorded music literally "fixed' a price, *id.* at 9, but was unlikely to reduce output. *Id.* at 32).

86. Standard Oil Co. v. United States, 283 U.S. 163, 176 (1931).

87. Hovenkamp, *Slogans*, *supra* note 42, at 720–21.

88. *See* JAMES E. BOYLE, SPECULATION AND THE CHICAGO BOARD OF TRADE 50–54 (1921).

89. 2 FTC REP. GRAIN TRADE 80–86 (1920).

90. *Standard Oil*, 283 U.S. at 165–66 (describing the cracking process and identifying participants, including several who had been parts of the original Standard Oil Company).

> accurately show even the total amount of cracked gasoline produced, or the production of each of the licensees, or competing refiners. . . . No monopoly, or restriction of competition, in the sale of gasoline has been proved.[91]

In sum, Justice Brandeis not only insisted on proof of a reduction in market output, he also identified market control as an essential feature in rule of reason analysis of joint ventures, as well as the role played by market share.

The Supreme Court has usually kept its eye on this ball, but a few times it has condemned harmless or even socially beneficial agreements. One example is *United States v. Topco Associates*, *Inc.*, which applied § 1 of the Sherman Act to condemn a joint venture of small grocers imposing territorial restrictions.[92] The venture's market shares averaged 6% and ranged from 1.5% to 16% in different territories.[93] Justice Marshall's opinion for the Court included these often-quoted words:

> Antitrust laws in general, and the Sherman Act in particular, are the Magna Carta of free enterprise. They are as important to the preservation of economic freedom and our free-enterprise system as the Bill of Rights is to the protection of our fundamental personal freedoms. And the freedom guaranteed each and every business, no matter how small, is the freedom to compete . . .[94]

What the opinion did not do, however, is make any attempt to find a link between the challenged rules and lower output or higher prices, as Brandeis had done. Justice Marshall did quote language from *Chicago Board* about the necessity to consider the "facts peculiar to the business in which the restraint is applied . . . ."[95] He also noted the complexity of inquiries that met that decision's requirements.[96] Nevertheless, he concluded, the restraint was horizontal and "therefore" a per se violation of § 1.[97] That conclusion, if taken seriously, would have overruled *Chicago Board of Trade.* That case also involved a horizontal restraint, but one in which Justice Brandeis had taken some care to examine its competitive effects and refused to condemn an agreement not shown to reduce the volume of trade.

Justice Marshall rejected without review the argument that the challenged venture made a group of small businesses more competitive with much larger chains with whom they competed—an output-increasing enterprise. In Justice Marshall's view, such an approach would have made it necessary to balance "destruction of competition in one sector of the economy against promotion of competition in another sector."[98] He concluded that "courts are of limited utility in examining difficult economic problems," making it inadvisable to "leave the courts free to ramble through the wilds of economic theory in order to maintain a flexible

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91. *Id.* at 176–78.
92. 405 U.S. 596 (1972).
93. *Id.* at 600.
94. *Id.* at 610.
95. *Id.* at 607.
96. *Id.* at 610–11.
97. *Id.* at 608.
98. *Id.* at 609–10.

approach."[99] That statement is a mystery. Given Topco's low market share, very little rambling would be involved.

Chief Justice Burger correctly complained in his *Topco* dissent that the majority was effectively holding that the Court had "no business examining [the] practices" in order "to determine whether Topco's practices did in fact restrain trade or commerce within the meaning of § 1 of the Sherman Act."[100] If there was no serious threat of a market output reduction or price increase, then no trade was being restrained.

The government's position at the time was not helpful. It made no attempt to show any output restriction that resulted from the restraint. Indeed, most of its brief was devoted to convincing the Court that it's previous decision in *United States v. Sealy, Inc.*,[101] which involved a production joint venture in which individual members fixed their prices, should be extended to a joint venture that did not fix prices.[102]

To summarize, of all the antitrust laws, Sherman Act § 1 had the clearest meaning, well understood prior to the Sherman Act's passage and continuing on in judicial interpretation of the Sherman Act. The "restraint of trade" standard then as now is whether a restraint realistically reduces market wide output or increases prices. Most Supreme Court decisions got the basic idea correct, using various terms such as "limit production" or "output restriction." A very few decisions such as *Topco* are outliers.

C. Forensic Tools for Assessing Restraint of Trade

Cases like *Chicago Board*, *Standard Oil* (1931), and *Topco* confronted the court with agreements alleged to restrain trade in settings that are more complex than a simple cartel. Antitrust doctrines such as the rule of reason and its attendant market power requirement resulted directly from the identification of restraint of trade with restriction of market output and higher prices. These are "forensic" tools, designed to determine when an anticompetitive restraint can be inferred from the simple face of the challenged agreement, or when a deeper dig is needed. *Topco* got the answer wrong by losing the connection between the statutory language and market output or price. Justice Brandeis got it right in *Standard Oil* by focusing on market share and the realistic possibility of an output reduction.[103]

"Naked" restraints such as price fixing are profitable only if the participants have the power to reduce market wide output. Their only source of profit is the higher margins that result from monopoly. If a restraint is properly defined as naked, the court need not engage in a detailed inquiry into power. The fact that they have

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99. *Id.* at 622 & n.10.

100. *Id.* at 614 (Burger, C.J., dissenting).

101. 388 U.S. 350 (1967). *See id.* at 356–57 ("It may be true, as appellee vigorously argues, that territorial exclusivity served many other purposes. But its connection with the unlawful price-fixing is enough to require that it be condemned.").

102. *See* Brief for the United States, United States v. Topco Assocs., 405 U.S. 596 (1972) No. 70-82, 1971 WL 133695 (July 30, 1971). By contrast, the appellee's brief argued that "Clearly, the Topco members do not remotely approach monopoly power to control the level of price or restrict output." Brief for Topco Associates, Inc. at 42–43, United States v. Topco Assocs., 405 U.S. 596 (1972) No. 70-82, 1971 WL 133694 (Sep. 29, 1971).

103. *See supra*, notes 90–91and accompanying text.

employed it means that they assumed they had power. To be sure, the cartel's participants may have been mistaken, but a properly defined naked restraint does not produce social benefits either. We need not worry much about false positives.

By contrast, a joint venture, merger, or related practice can be profitable even in the absence of power, provided it reduces costs, improves a product or service, or facilitates collaborative innovation. Then the question becomes more complex. Such a restraint might be profitable *either* because it reduces market output and raises price/cost margins, *or* because it produces a better product or service or reduces costs. That requires further inquiry. If the defendants lack the market power to reduce market output, no further investigation is necessary. If they have power, then we need to examine the restraint itself.

The emergent per se/rule of reason distinction, including its market power requirement, flowed naturally from the statutory requirement equating "restraint of trade" with a reduction in market output. In these situations, determining whether a challenged practice "restrains trade" actually requires a number of tools that are not laid out expressly in the language of the statute but are present there by implication. Justice Brandeis suggested them already in the 1931 *Standard Oil* decision: the government needs to show power to control the market and a purpose to do so.[104]

The use of forensic tools that are not specified in a statute is hardly unique to antitrust. In fact, it is virtually universal in statutes that require proof of causation, negligence, harm, or effects that might be uncertain. For example, a provision in New York's penal code states that "[a] person is guilty of murder in the first degree when . . . [w]ith intent to cause the death of another person, he causes the death of such person . . . ."[105] Determining whether someone has violated this statute may require ballistics, DNA or other blood testing, or fingerprints—none of which are mentioned in the statute itself. The antitrust laws are no different. Market power is simply an investigative tool for determining whether an anticompetitive output restriction is plausible, and the defendants caused it.

Assuming that antitrust harm is identified by a concern for reduced output and higher prices in output markets (or anticompetitively low prices in input markets), these requirements under the rule of reason are consistent with it. Further, § 1 of the Sherman Act does not condemn reductions in consumer welfare as such (or any other kind of welfare). None of the early case law referenced above spoke about welfare, but only about output and/or price. Mainly, the statute reached output restrictions that resulted in higher prices. As a result, the statute rarely requires any party or its expert to assess "welfare." Rather, the parties need to assess whether a particular practice decreased market wide output and raised prices, pure and simple.[106]

D. "Monopolize" and § 2 of the Sherman Act

While the language of § 1 of the Sherman Act had a clear statutory meaning at the time of enactment, the language of § 2 was a relative novelty. At the time the Act

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104. Standard Oil Co. v. United States, 283 U.S. 163, 176–77 (1931).
105. N.Y. Penal Law § 125.27 (McKinney 2019).
106. *See* Hovenkamp, *Slogans*, *supra* note 42.

was passed, no body of legal rules existed for determining § 2's principal offenses: namely, what it means to "monopolize" or "attempt to monopolize."

The most immediately relevant areas of law from prior to the Sherman Act were really not on point. *First* was the long-standing opposition to monopolies that appeared in corporate law as well as Constitutional jurisprudence, mainly under the Constitution's Contract Clause.[107] The source of this opposition, however, was to exclusive grants given by the sovereign—the historical meaning of monopoly.[108] Closely related was federal intellectual property law, particularly patents. These created exclusive rights that nineteenth century courts often characterized as "monopolies."[109]

In 1905, the Supreme Court observed in a case interpreting the Texas antitrust law that the idea of "monopoly" is "not now confined to a grant of privilege[]," but also includes situations "produced by the acts of mere individuals."[110] With that, the Court upheld application of the law to a trust whose purpose was the "control of prices."[111] It effectively severed the concept of "monopoly" from the requirement of a government grant, in the process aligning it with harm similar to that caused by a restraint of trade.

American dictionaries were beginning to recognize this distinction. The 1895 edition of Noah Webster's well-known American dictionary defined "monopoly" as "the sole power of vending any species of goods," but the verb "monopolizing," which is the only variant that § 2 employs, as "engrossing sole power or exclusive right; obtaining possession of the whole of any thing."[112] Under this definition, which prevailed in the nineteenth century, the owner of an exclusive right had 100% of it, and thus the legal power to exclude those who interfered with it.[113]

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107. HERBERT HOVENKAMP, ENTERPRISE AND AMERICAN LAW, 1836–1937 17–35 (1991) (application of Constitution's Contract Clause to corporate monopoly grants).

108. *E.g.*, Charles River Bridge v. Warren Bridge, 36 U.S. 420 (1837) (considering whether Contract Clause operated to imply a monopoly privilege in a corporate charter for a toll bridge); Slaughter-House Cases, 83 U.S. 36 (1872) (interpreting monopoly provision in corporate charter). *See* Herbert Hovenkamp, *Inventing the Classical Constitution*, 101 IOWA L. REV. 1, 19–20 (2015) (on role of classical opposition to monopoly in interpretation of exclusive grants under the Contract Clause).

109. *E.g.*, Wade v. Metcalf, 129 U.S. 202, 205 (1889) ("monopoly of the patent"); Adams v. Burke, 84 U.S. 453, 456 (1873) (same); Burr v. Duryee, 68 U.S. 531, 570 (1863) ("the patent act grants a monopoly"); Hotchkiss v. Greenwood, 52 U.S. 248, 262 (1850) ("use of [] ordinary known materials cannot be monopolized by patent"); Thompson v. Haight, 23 F. Cas. 1040, 1044 (S.D.N.Y. 1826) ("patent monopolies"). *See* Herbert Hovenkamp, *The Emergence of Classical American Patent Law*, 58 ARIZ. L. REV. 263 (2016) (use of patent law to define and delimit concept of state-granted monopoly).

110. National Cotton Oil Co. v. State of Texas, 197 U.S. 115, 129 (1905).

111. *Id.*

112. NOAH WEBSTER, AN AMERICAN DICTIONARY OF THE ENGLISH LANGUAGE 727 (revised and enlarged by Chauncey A. Goodrich, 1895). *See also* THE AMERICAN DICTIONARY AND CYCLOPEDIA (1900), defining "monopolist" as (1) One who monopolizes; one who has a monopoly or exclusive command over any branch of trade or article of production…; or (2) One who assumes or claims the right to anything to the exclusion of others.

113. State v. Milwaukee Gaslight Co., 29 Wis. 454 (1872) (state granted monopoly of right to produce gas entitled its owner to exclude other producers); Planters' Compress Ass'n v.

Black's Law Dictionary, which became a market dominating standard among legal dictionaries, was first published in 1891. It defined monopoly as "[a] privilege or peculiar advantage vested in one or more persons or companies. . . ." The second edition, which came out in 1910, included that definition but also added an alternative definition that came much closer to the modern antitrust formulation: "ownership or control of so large a part of the market-supply or output of a given commodity as to stifle competition, restrict the freedom of commerce, and give the monopolist control over prices."[114] This formulation acknowledged the possibility that someone with less than an "exclusive" right—that is, 100% of the market—could be counted as a monopolist. Rather, it was enough to have a sufficiently large part of the market to "stifle competition" or have "control over prices." The dictionary definitions were quite helpful in explaining the power component of the monopolization offense, although they said nothing about its conduct requirements.

The *second* source of § 2 law was a variety of tort actions that went under the general heading of "unfair competition," and included such things as fraud, palming off, and trademark infringement.[115] These violations were driven by the defendant's unilateral conduct and did not depend on an exclusive grant from the sovereign. However, they neither assumed nor required proof of market dominance or anything else about the defendant's market position. Indeed, it appears that most of the defendants were small firms attempting to free ride on the well-established names or products of better-established rivals. Another important line of British tort decisions, most prominently *Mogul v. McGregor*, addressed mainly conspiratorial acts to exclude rivals. The challenged practices included exclusive dealing, loyalty discounts and aggressive pricing.[116] Because § 2 also embraced conspiracies to

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Hanes, 52 Miss. 469 (1876) (defendant who weighed cotton commercially in violation of plaintiff's grant of an exclusive right to do so could be held liable in damages, although not for an injunction).

114. HENRY CAMPBELL BLACK, A LAW DICTIONARY (1891, 2d ed. 1910). For the second meaning of "monopoly," Black cited several state law decisions and two federal patent decisions, but no antitrust decisions.

115. Coats v. Merrick Thread Co., 149 U.S. 562, 566 (1893) ("beguiling" the public by using a mark intended to give customers the impression that they were purchasing the goods of the plaintiff's rival); Pierce v. Guittard, 68 Cal. 68 (1885) (similar; defendant made a "slight alteration" in its name in order to make purchasers believe they were buying a competitor's goods); Taylor v. Carpenter, 3 Story 458, 23 F. Cas. 742 (D. Mass. 1844) (defendant's thread misleadingly designed to resemble thread of prominent British manufacturer). For a survey of British and America law until its time, see Oliver R. Mitchell, *Unfair Competition*, 10 HARV. L. REV. 275 (1896).

116. Mogul Steamship Co. v. McGregor, Gow & Co., 1892 A.C. 25 (refusing to condemn discounting and exclusive dealing practices of steamship conference). *Mogul* received significant scholarly attention in the United States. *See, e.g.*, James Barr Ames, *How Far an Act May be a Tort Because of the Wrongful Motive of the Actor*, 18 HARV. L. REV. 411 (1905); Note, *Injunctions Against Interference with Business*, 10 HARV. L. REV. 447 (1897). It was also cited in early Sherman Act decisions, mainly involving conspiracy issues. *See, e.g.*, United States v. Patterson, 55 F. 605 (D. Mass. 1893) (citing *Mogul* with approval; partially dismissing complaint); *in re* Greene, 52 F. 104 (S.D. Ohio 1892) (dismissing allegations of conspiracy to monopolize; citing *Mogul* with approval). Judge Taft's opinion in United States v. Addyston Pipe & Steel Co., 85 F. 271, 286 (6th Cir. 1898), discussed *Mogul* only to

monopolize, they often intermingled collaborative and unilateral conduct. In sum, while dictionary definitions supplied a conception of "monopoly" or "monopolize," tort law provided much of the background for understanding the offense's conduct requirements. Early § 2 decisions relied most heavily on the latter. One notable feature of the early monopoly decisions is their tort-like character, with lengthy descriptions of bad conduct and relatively little attention paid to structural issues such as market definition.[117]

Among the most influential sources for interpreting § 2 was the conspiracy in "restraint of trade" language of § 1. As late as 1940, Justice Douglas concluded in a cartel case that "a monopoly under § 2 is a species of restraint of trade under § 1."[118] In its 1946 *American Tobacco* decision, the Supreme Court defined the term "monopolize" as "joint" conduct, and a *conspiracy* to dominate a market.[119] Indeed, the *individual* market shares of the defendant tobacco companies were too small to support the offense, and the Court reached the requisite minimum of sixty-eight percent only by combining the markets shares of American, Liggett, and Reynolds, the three largest firms.[120]

Many of the early cases against dominant firms complained about § 1 and § 2 together, applying "restraint of trade" principles to both. This is completely understandable, given the development of early dominant firms as "trusts," or coordinated but contractual arrangements among multiple firms that then existing corporate law did not permit to organize into a single corporation. The common law trust was neither a "person" under the Sherman Act's definition of personhood nor state corporate law's definition.[121] It was not authorized by state law, for states generally found the trust agreements unlawful under state corporate law as well.[122]

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conclude that British law did not have an equivalent of the Sherman Act, making agreements to monopolize unlawful; rather, at common law such agreements were merely unenforceable among the parties. *Accord* Wheeler-Stenzel Co. v. Nat'l Window Glass Jobbers' Ass'n., 152 F. 864, 873–74 (3d Cir. 1907) (distinguishing affirmatively unlawful from merely unenforceable combinations to exclude).

117. Herbert Hovenkamp, *Monopolizing Digital Commerce*, 64 WM. & MARY L. REV. 1677, 1696–98 (2023) (observing lengthy recitations of tortious conduct in early monopolization cases).

118. United States v. Socony-Vacuum Oil Co., 310 U.S. 150, 225 n. 59 (1940).

119. American Tobacco Co. v. United States, 328 U.S. 781 ,784–85 (1946):

> Now, the term 'monopolize' as used in Section 2 of the Sherman Act, as well as in the last three counts of the Information, means the joint acquisition or maintenance by the members of a conspiracy formed for that purpose, of the power to control and dominate interstate trade and commerce in a commodity to such an extent that they are able, as a group, to exclude actual or potential competitors from the field, accompanied with the intention and purpose to exercise such power.

120. *Id.* at 794.

121. *E.g.*, State v. Standard Oil Co., 30 N.E. 279 (Ohio 1892) (declaring Standard Oil trust unlawful under Ohio corporate law).

122. *See, e.g.*, State v. Ark. Lumber Co., 260 Mo. 212 (1913) (permitting quo warranto action against trust); People v. N. River Sugar Refin. Co., 3 N.Y.S. 401 (N.Y. Cir. Ct. 1889)

As a result, trusts were treated as "combinations," explicitly covered by § 1 of the Sherman Act.[123]

While we often treat decisions such as *Standard Oil* (1911) and *American Tobacco* as if they involved single firms, the actual decisions tell a more complex story. For example, Standard Oil was initially organized as a common law trust, or combination of roughly forty corporations run by a single board of trustees.[124] In 1892, the Ohio Supreme Court dissolved the trust as unlawful under corporate law.[125] In 1899, Standard reorganized as a single corporation owning all of its various productive assets under a holding company, Standard Oil Co. of New Jersey.[126] Nevertheless, the Supreme Court's decision condemning Standard Oil spoke of it as both a "combination" and a "conspiracy," including a conspiracy between John D. Rockefeller and the companies in which he was a major shareholder.[127] Section 2 of the government's complaint accused the Company, together with its principal owners, of "conspir[ing] to monopolize."[128] The claim for relief requested acknowledgement that Standard Oil was a "combination in restraint of interstate trade."[129] The breakup that resulted simply divided Standard back into its constituent trust members. Since those were firms operating in different geographic areas, it resulted in several firms that remained dominant, but in smaller territories.[130]

Some of the allegations in *Standard Oil* dated back to the period when the firm had been organized as a trust, which the Court described as a "contract and trust" agreement, that supported the § 1 claims.[131] For its part, Standard Oil argued

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(similar, sugar trust); People *ex rel.* Peabody v. Chicago Gas Trust Co., 130 Ill. 268 (1889) (similar); State v. E. Coal Co., 29 R.I. 254 (1908) (similar).

123. *E.g.*, Int'l Harvester Co. of Am. v. Kentucky, 234 U.S. 216, 220 (1914) (treating firm as "combination"); United States v. Am. Tobacco Co., 221 U.S. 106, 148 (1911) (same, both "combination" and "conspiracy"); Standard Oil Co. of N.J. v. United States, 221 U.S. 1, 32–34 (1911) (treating Standard Oil as "illegal combination").

124. On the legal reasons for the trust form of organization and how it gave way to the single-entity holding company, see Herbert Hovenkamp, *Antitrust Policy, Federalism, and the Theory of the Firm: A Historical Perspective*, 59 ANTITRUST L.J. 75 (1990).

125. State *ex rel.* Attorney General v. Standard Oil Co., 30 N.E. 279 (Ohio 1892).

126. Standard Oil Co. of N.J. v. United States, 221 U.S. 1, 41, 43–44 (1911) (characterizing firm as a New Jersey "holding corporation"). *See also* BRUCE BRINGHURST, ANTITRUST AND THE OIL MONOPOLY 180 (1979).

127. *Standard Oil Co. of N.J.*, 221 U.S. at 31.

128. *Id.* at 71–72 n. 7 ("[d]efendants . . . have combined and conspired to monopolize . . . .").

129. *Id.* at 43.

130. *See* E. Thomas Sullivan, *The Jurisprudence of Antitrust Divestiture*: *The Path Less Traveled*, 86 MINN. L. REV. 565, 579–80 (2002).

131. *Standard Oil Co. of N.J.*, 221 U.S. at 33–34. As the Court described the combination:

> By its terms the stock of forty corporations, including the Standard Oil Company of Ohio, and a large quantity of various properties which had been previously acquired by the alleged combination, and which was held in diverse forms… was vested in the trustees and their successors, 'to the held for all parties in interest jointly.'

unsuccessfully that once it had reorganized as a single New Jersey Corporation its constituent parts could no longer be treated as a conspiracy.[132] The Court ignored that argument, relying on both § 1 and on the "conspiracy to monopolize" provision in § 2. The distinction between unilateral and conspiratorial conduct did not appear to be important.

A holding company is a corporation that owns the shares of other corporations. Contemporary writers were divided on the question whether holding companies were multiple persons who could "conspire," and thus violate § 1. Conservatives such as Arthur J. Eddy argued in his treatise on combinations that once the holding company was formed and acting lawfully under state corporate law, it could no longer be attacked as a combination or cartel.[133] More moderate writer Robert Raymond disagreed, distinguishing between "combinations by agreement" and "combinations by fusion." He concluded that § 1 of the Sherman Act applied to both.[134]

Justice Holmes appeared to take Eddy's side in his dissent in the *Northern Securities* case in 1904, observing that the term "combination in restraint of trade" referred to a particular type of contract, not to the fusion of two railroad lines into a single firm by means of transfer to a holding company.[135] Because the corporation itself was lawful, Holmes argued, so was the acquisition of the two lines. By contrast, the majority held that, while the simple existence of the New Jersey holding company may have been perfectly lawful, the act of acquiring two railroads so as to eliminate competition between them was not.[136]

In 1914, the Clayton Act confirmed both parts of the Supreme Court's decision. *First*, it declared that corporate stock acquisitions were unlawful if they met that statute's competitive effects requirements.[137] It also re-enacted the provision that a legal corporation under state law is a single "person."[138] *Second*, a controversial provision expressly permitted holding companies, notwithstanding the Democratic Party's express opposition, provided that "the effect of such formation" was not to substantially lessen competition.[139] That is, the creation of a holding company could be an unlawful merger, but its mere existence was not a violation.

That is largely where we have landed today. Corporate acquisitions, via holding company or otherwise, are addressed under § 7 of the Clayton Act. Once created, however, the parent + holding company constitute a single entity. Final resolution of

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132. *Id.* at 44.

133. ARTHUR J. EDDY, THE LAW OF COMBINATIONS 600-603 (1901).

134. Robert L. Raymond, *The Standard Oil and Tobacco Cases*, 25 HARV. L. REV. 31, 54 (1911).

135. N. Sec. Co. v. United States, 193 U.S. 197, 402 (1904).

136. Bigelow v. Calumet & Hecla Mining Co., 155 F. 869, 875 (W.D. Mich. 1907) (applying *Northern Securities* to one incorporated coal mine's purchase of another one).

137. *See* discussion *infra*, text at note 139.

138. 15 U.S.C. § 12 (2018).

139. 15 U.S.C. § 18 (1996) ("Nor shall anything contained in this section prevent a corporation . . . from causing the formation of subsidiary corporations . . . 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."). On the controversy attending this provision, see Benjamin J. Klebaner, *Potential Competition and the American Antitrust Legislation of 1914*, 38 BUS. HIST. REV. 163, 180 (1964).

this debate occurred in 1984, when the Supreme Court decided that a parent and a wholly owned subsidiary were to be treated as a single legal "person" under the antitrust laws.[140] The issue in that case was not an acquisition of a subsidiary but rather an allegedly unlawful agreement between a parent and a subsidiary that it already owned.

The monopolization offense developed into one of using harmful conduct to exclude competition and create or maintain a dominant firm, producing a situation approximating that of an exclusive government grant, but without an actual grant and with less-then-complete exclusivity. It also required that the conduct be exclusionary, and thus had a narrower range than the reach of § 1, which covered both exclusionary and purely collusive conduct. This requirement of "exclusionary" conduct is now firmly embedded in § 2 law.[141] That is, the term "monopolize" refers to exclusion, not to the simple charging of high prices even if they are a consequence of monopoly. Nevertheless, both provisions of the Sherman Act defined their targets in terms of lower output and higher prices.[142]

Referencing both §§ 1 and 2 of the Sherman Act, *Standard Oil* spoke of "aggregations of capital in the hands of a few individuals and corporations controlling, for their own profit and advantage exclusively, the entire business of the country . . . ."[143] The decision of the same year in *United States v. American Tobacco* spoke of the defendant as attempting "to monopolize the trade by driving competitors out of business" or "compelling them to become parties to a combination."[144] Just as *Standard Oil*, the *Tobacco* decision confusingly blended the two sections of the Sherman Act, speaking of the aggregation of the various interests as both a "restraint of trade and an attempt to monopolize and a monopolization within the 1st and 2d sections of the anti-trust act."[145]

In its 1948 decision in *United States v. Columbia Steel*,[146] the Court parsed out the separate meanings of § 1 and § 2 in a challenge to a merger by asset acquisition. While the Clayton Act's merger provision had been passed in 1914, prior to its amendment in 1950 it reached only stock acquisitions. The Court concluded that the merger could theoretically be addressed as either a restraint of trade under § 1 or as monopolization under § 2. Further, it could be an unlawful attempt to monopolize under § 2 even though it was lawful under § 1, provided that a specific intent to monopolize was proven.[147]

In explaining itself, the Court distinguished the single-instance restraint of trade, addressed under § 1, from a "long history of acquisitions" which could be considered

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140. Copperweld Corp. v. Indep. Tube Corp., 467 U.S. 752 (1984). *See* discussion *infra*, text at notes 387–388.

141. *E.g.*, Rambus, Inc. v. FTC, 522 F.3d 456 (D.C. Cir. 2008) (unfair or deceptive conduct that results in higher prices but does not exclude competition not condemned by § 2).

142. *See supra* text accompanying notes 143–167.

143. Standard Oil Co. of N.J. v. United States, 221 U.S. 1, 83 (1911).

144. *Id.* at 181–82 (1911).

145. *Id.* at 187.

146. 334 U.S. 495 (1948).

147. *Id.* at 531–32 ("[E]ven though the restraint effected may be reasonable under § 1, it may constitute an attempt to monopolize forbidden by § 2 if a specific intent to monopolize may be shown.").

as an attempt to monopolize. Even though each individual acquisition might have too small an impact on commerce for purposes of § 1, the aggregation could be a § 2 violation. It nevertheless concluded that the most recent acquisition—the one before the court—deserved the focus in this case, and it had been intended to create a new market by facilitating the erection of new production facilities, not to restrain competition.[148] That is, it was output expanding rather than output contracting.

Speaking largely in § 1 terms, the Court also concluded that legality would depend on the "relative effect of percentage command of a market, which varies with the setting in which that factor is placed."[149] As the Court explained,

> If such acquisition results in or is aimed at unreasonable restraint, then the purchase is forbidden by the Sherman Act. In determining what constitutes unreasonable restraint, we do not think the dollar volume is in itself of compelling significance; we look rather to the percentage of business controlled, the strength of the remaining competition, whether the action springs from business requirements or purpose to monopolize . . . .[150]

The Court's insight is that one thing that the two sections of the Sherman Act had in common was the concern for practices that reduced market-wide output. The difference between the two sections was that § 1 examined the effects of each individual transaction, while § 2 looked more broadly at the history and implied purpose of those transactions. These concerns were reflected in the government's complaint, which was that if the merger were carried out, competition "would be restrained" and that this "indicated an effort on the part of United States Steel to attempt to monopolize . . . ."[151]

Justice Douglas also sought to link the two statutory standards in *United States v. Griffith*,[152] indicating that a firm usually does not violate § 2 "unless he has acquired or maintained his strategic position, or sought to expand his monopoly, or expanded it *by means of those restraints of trade which are cognizable under [§] 1*."[153] He added this difference:

> [Section] 2 of the Act is aimed, inter alia, at the acquisition or retention of effective market control.[154] Hence the existence of power "to exclude competition when it is desired to do so" is itself a violation of [§] 2, provided it is coupled with the purpose or intent to exercise that power.[155]

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148. *Id.* at 532. *See also id.* at 526 ("No direction has appeared of a public policy that forbids, per se, an expansion of facilities of an existing companies to meet the needs of a new markets of a community . . . .").

149. *Id.* at 527–28.

150. *Id.* at 527.

151. *Id.* at 498–99.

152. 334 U.S. 100 (1948).

153. *Id.* at 104 (emphasis added).

154. *Id.* at 106 (citing United States v. Aluminum Co. of Am., 148 F.2d 416, 428–29 (2d Cir. 1945)).

155. *Id.* at 106.

With few exceptions, the decisions trying to give meaning to the word "monopolize" emphasized the exclusion of rivals in order to obtain market control, and the reduced output and higher prices that resulted. Some agreements in restraint of trade are not exclusionary. For example, a simple price fixing agreement would not be; nor would resale price maintenance, which was unlawful per se at the time.[156]

In his 1945 *Alcoa* decision, Judge Hand considered alternative, more aggressive definitions of the monopolization offense. One possible definition was that a monopolist exercises its monopoly power simply by selling at a monopoly price.[157] Hand's indeterminate discussion of that proposition blended § 1 and § 2 cases. He suggested that the mere acquisition of ninety percent of a relevant market was presumptively a § 2 offense unless the defendant could show that it was the "passive beneficiary" of monopoly.[158] Alcoa was not in that category. Rather, its pursuit of monopoly was intentional. Nothing compelled it:

> to keep doubling and redoubling its capacity before others entered the field. It insists that it never excluded competitors; but we can think of no more effective exclusion than progressively to embrace each new opportunity as it opened, and to face every newcomer with new capacity already geared into a great organization, having the advantage of experience, trade connections and the elite of personnel.[159]

This statement rested Judge Hand's monopolization test on the proposition that expansion of output, even if "honestly industrial," could be monopolization. On the one hand, expanding capacity and output to meet anticipated needs does seem to be "exclusionary" in the sense that it leaves less room for smaller and younger firms to enter and expand. On the other hand, expansion of output invites lower prices. If a firm can exclude rivals only by expanding output and charging lower (but nonpredatory) prices, then it is not the kind of "monopoly" that the courts had associated with reduced output and high prices. On that particular test, *Alcoa* has proven to be an outlier.

Lack of a definition in pre-existing law largely accounts for this meandering search for definitions of monopolization. Considering this, the courts did an admirable job working with the principles that exclusion leading to market control,[160] reduced output, and higher prices were § 2's central concerns.[161] With the rise of

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156. Dr. Miles Med. Co. v. John D. Park & Sons Co., 220 U.S. 373 (1911), *overruled by* Leegin Creative Leather Prods., Inc. v. PSKS, Inc., 551 U.S. 877 (2007).

157. United States v. Aluminum Co. of Am., 148 F.2d 416, 428 (2d Cir. 1945). The court also cited § 1 for the proposition that determining whether "a restriction of production" occurred likely required a market definition. *Id.* at 424–26. It later briefly distinguished the concept of "fixing" a price by a cartel as opposed to a monopolist. *Id.* at 427–28.

158. *Id.* at 430.

159. *Id.* at 431.

160. On market control, see United States v. Aluminum Co. of Am. 148 F.2d 416, 432 (2d Cir. 1945); United States v. General Motors, 121 F.2d 376 (7th Cir. 1941) (monopolization as market control of a commodity). *See also* United States v. Griffith, 334 U.S 100, 106 (1948) (Sherman Act § 2 aimed at "the acquisition or retention of effective market control"); United States v. Columbia Steel Co., 334 U.S. 495, 525 n.24 (1948) (same, citing *Alcoa*).

161. Decisions linking monopolization to higher prices include *Standard Oil Co. of N.J.*,

structuralism in the 1940s, industrial organization economists picked up the "market control" theme and started focusing on market structure and control over price and output as the central feature of monopoly.[162] The structuralist movement generally minimized any conduct requirement.

Stretching from the Sherman Act's passage through the present, antitrust law has stated and restated the association of monopoly with a reduction in output leading to increased prices.[163] Indeed, within antitrust economics today the concept of welfare loss is nearly always associated with monopoly or other deviations from perfect competition that results in output below the competitive level.[164] Nevertheless, those who passed the Sherman Act and its early enforcers never articulated a concept of "welfare."[165] Indeed, the term "consumer welfare" did not even make an appearance in any antitrust decisions prior to the late 1970s. When it did, it was in reference to both pro-enforcement actions[166] and to enforcement-reducing rules reflecting Chicago school priorities.[167]

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221 U.S. at 33 (1911) (monopolizing and controlling the price); United States v. E.C. Knight Co., 156 U.S. 1, 3–4 (1895) (monopolizing sugar and controlling its price; dismissed for lack of subject matter jurisdiction under the Commerce Clause); Story Parchment Co. v. Paterson Parchment Paper Co., 282 U.S. 555, 560 (1931) (§ 2 case involving claims of predatory pricing); United States v. Aluminum Co. of Am. 148 F.2d 416, 437 (2d Cir. 1945) (price squeeze claim involving setting high price to fabricators).

162. *E.g.*, Edward S. Mason, *Monopoly in Law and Economics*, 47 YALE L.J. 34, 37 (1937) (power to control price and output); DONALD DEWEY, MONOPOLY IN ECONOMICS AND LAW (1958). *See* HERBERT HOVENKAMP, THE OPENING OF AMERICAN LAW: NEOCLASSICAL LEGAL THOUGHT, 1870-1970, Ch. 11 (2015) (development of structuralism in competition policy) [hereinafter OPENING OF AMERICAN LAW].

163. *See* HOVENKAMP, OPENING OF AMERICAN LAW, *supra* note 162, ch. 11–12.

164. *See, e.g.*, W. KIP VISCUSI, JOSEPH E. HARRINGTON & DAVID E.M. SAPPINGTON, ECONOMICS OF REGULATION AND ANTITRUST ch. 4 (5th ed. 2018).

165. Some early decisions did use the word welfare, but usually in a nontechnical way that regarded combinations and monopolies to be opposed to public welfare. *E.g.*, Standard Oil Co. of N.J. v. United States, 221 U.S. 1, 84 (1911) (combinations and monopoly "advance their own selfish ends, regardless of the general interests and welfare"); Dr. Miles Med. Co. v. John D. Park & Sons Co., 220 U.S. 373, 406 (1911) (dicta opining that reasonable vertical restraints do not harm the public welfare); W.W. Montague & Co. v. Lowry, 193 U.S. 38, 40 (1904) (defendant trade association whose activities were found unlawful had been organized in order to "promote the mutual welfare of its members"); United States v. Trans-Missouri Freight Ass'n., 166 U.S. 290, 336 (1897) (railroad operates a business which "directly affects the public welfare").

166. Reiter v. Sonotone Corp., 442 U.S. 330, 343 (1979) (speaking of "consumer welfare" in case granting damages actions to end use consumers); United States v. Citizens and S. Nat. Bank, 422 U.S. 86, 131–32 (1975) (Brennan, J., dissenting from decision approving bank merger).

167. *E.g.*, GTE Sylvania, Inc. v. Continental T.V., Inc., 537 F.2d 980, 1003 (9th Cir. 1976) (speaking of "promotion of consumer welfare," and citing Bork); United States v. Am. Tel. & Tel. Co., 461 F. Supp. 1314, 1321 n.20 (D.D.C. 1978) (speaking of "consumer welfare" in reference to Bork). *See also* Moore v. James H. Matthews & Co., 550 F.2d 1207, 1213 (9th Cir. 1977) (speaking of "maximizing consumer welfare" and citing to Chicago school scholars, Richard A. Posner and Ward Bowman).

As far as statutory interpretation goes, the concern for "welfare" is vagrant. Section 2 of the Sherman Act, just as § 1, is invoked by practices that tend to reduce market-wide output and raise price. Welfare reductions are a likely consequence, but not one that the drafters of the Sherman Act or the courts prior to the 1970s ever articulated.

II. THE UNIQUE ENFORCEMENT ATTRIBUTES OF THE CLAYTON ACT

While the development of antitrust law from the passage of the Sherman Act up to the 1912 presidential election showed promise, it also led to widespread dissatisfaction by business groups, labor, and Progressives. They believed the Sherman Act had fallen short in certain respects. One was the lack of an immunity for labor, which the Clayton Act attempted to repair, although without much success.[168] Another was the benign treatment of patents, expressed in the Supreme Court's 1912 decision in *Henry v. A.B. Dick Co*.[169] The Court refused to condemn a firm's requirement that those purchasing its patented mimeograph machine also purchase its paper, stencils, and ink.[170] Congress responded with Clayton Act § 3, which prohibited anticompetitive tying of goods "whether patented or unpatented."[171] That launched a lengthy debate about the relationship between antitrust and patent law in cases that involved combinations of complementary goods.[172] The law of "patent ties" generally involved such situations as the owner of a patented mimeograph machine requiring users to purchase its own stencils, paper, and ink;[173] or the owner of a patented film projector that forbade users from showing any films other than those supplied by the patentee.[174]

More serious was the vague and indeterminate way that the Court had developed rules for distinguishing between "reasonable" and "unreasonable" business restraints on trade.[175] The business community in particular wanted more clarity.[176] The rambling, lengthy opinions in the *Standard Oil*[177] and *American Tobacco*[178] cases were not much help.

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168. *See* Herbert Hovenkamp, *Worker Welfare and Antitrust*, 90 U. CHI. L. REV. 511, 520 (2022).

169. 224 U.S. 1 (1912).

170. On the history, see William B. Lockhart & Howard R. Sacks, *The Relevance of Economic Factors in Determining Whether Exclusive Arrangements Violate Section 3 of the Clayton Act*, 65 HARV. L. REV. 913, 934 n.63 (1952).

171. 15 U.S.C. § 14 (2018).

172. *See* Herbert Hovenkamp, *Antitrust and the Design of Production*, 103 CORN. L. REV. 1155, 1157 (2018).

173. Henry v. A.B. Dick & Co., 224 U.S. 1 (1912).

174. Motion Picture Pats. Co. v. Universal Film Mfr., 243 U.S. 502 (1917).

175. *See, e.g.*, Jeremiah W. Jenks, *Economic Aspect of the Recent Decisions of the United States Supreme Court on Trusts*, 20 J. POL. ECON. 346 (1912); Henry R. Seager, *The Recent Trust Decisions*, 26 POL. SCI. Q. 581 (1911) (discussing mainly *Standard Oil*).

176. *See* Jenks, *supra* note 175; Seager, *supra* note 175.

177. *See* Standard Oil Co. of N. J. v. United States, 221 U.S. 1 (1911); *supra* text accompanying notes 79–84.

178. *See* United States v. Am. Tobacco Co., 221 U.S. 106 (1911). *See supra* text accompanying notes 110–115.

Responding to these concerns, the Senate's Interstate Commerce Committee called some one hundred witnesses to testify,[179] including business representatives; labor leaders; prominent attorneys, including corporate lawyers Victor Morawetz[180] and Louis D. Brandeis; and economists, including conservatives J. Lawrence Laughlin and Jeremiah Jenks and the progressive marginalist John Bates Clark.[181]

The Clayton Act, passed in 1914, used substantially identical language to condemn three different practices. The first was price "discrimination" in § 2 of that Act, which really involved selling at very low prices in one market in order to destroy competitors. These low prices were financed by higher prices elsewhere.[182] Much of the debate was concerned with whether the statute should prohibit all price differences or only those with the stated anticompetitive effect. The latter view prevailed.[183] The second was tying and exclusive dealing in § 3.[184] The third was anticompetitive mergers in § 7.[185] None of these was unlawful per se, but only "where the effect . . . may be substantially to lessen competition or tend to create a monopoly in any line of commerce."

The Clayton Act signaled a much more decisive departure from the common law than the Sherman Act had. Most of the practices it condemned had not been previously unlawful. The common law did not generally prohibit price differences, nor did it condemn very many instances of vertical contractual restraints. One distant analogy was exclusive dealing, treated under the common law of requirements contracts. The common law's concern, however, was not with competition, but rather with definiteness of contract terms.[186] The well-known 1892 British decision in *Mogul v. McGregor* declined to condemn exclusive dealing, even by a dominant firm.[187] The common law did have a merger policy effected through corporate law. It was more concerned with ultra vires activity, however, and typically allowed consolidations that simply reduced competition.[188]

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179. WILLIAM LETWIN, LAW AND ECONOMIC POLICY IN AMERICA: THE EVOLUTION OF THE SHERMAN ANTITRUST ACT 267–68 (1965).

180. Morawetz was the author of a prominent Gilded Age treatise on corporations. *See* 1 VICTOR MORAWETZ, A TREATISE ON THE LAW OF PRIVATE CORPORATIONS (2d ed. 1886).

181. *See* Luca Fiorito & John F. Henry, *John Bates Clark on Trusts: New Light from the Columbia Archives*, 29 J. HIST. ECON. THOUGHT 229 (2007); Luca Fiorito, *When Economics Faces the Economy: John Bates Clark and the 1914 Antitrust Legislation*, 25 REV. POL. ECON. 139 (2013).

182. 15 U.S.C. § 2 (2018).

183. The debate on this issue is summarized in E. Dana Durand, *The Trust Legislation of 1914*, 29 Q.J. ECON. 72, 78–80 (1914). Durand was a statistician and former Director of the Census, appointed by President Taft.

184. 15 U.S.C. § 14 (2018).

185. 15 U.S.C. § 18 (2018).

186. Oscar Schlegel Mfg. Co. v. Peter Cooper's Glue Factory, 132 N.E. 148, 150 (N.Y. 1921). *See generally* Herbert Hovenkamp, *The Invention of Antitrust*, 93 S. CAL. L. REV. 131, 195–96 (2023) [hereinafter *The Invention of Antitrust*].

187. Mogul Steamship Co. v. McGregor, Gow & Co. [1892] AC (HL) 25.

188. *See* WALTER CHADWICK NOYES, A TREATISE ON THE LAW OF INTERCORPORATE RELATIONS § 356, at 507 (1902); *e.g.*, Diamond Match Co. v. Roeber, 13 N.E. 419, 483 (N.Y. 1887) ("[W]e suppose a party may legally purchase the trade and business of another for the very purpose of preventing competition . . . .").

The brief Clayton Act language is also notable for its sophisticated, forward-looking legal standards. First of all, its explicit "effects"[189] test required an emphasis on predicted results rather than intent.[190] *Second*, the test for estimating these effects is probabilistic: where the effect "may be." Third, these effects attached to results that had economic meanings, at least if the words were to be used in their accepted sense at the time: "substantially lessen competition" or "tend to create a monopoly."[191]

None of the Clayton Act provisions required or even acknowledged an "efficiency defense."[192] Finally, while the Clayton Act provided a glossary that defined "antitrust laws," "commerce," and "person," it was of virtually no help in determining the statute's substantive meaning.[193]

A. The Clayton Act: Probabilistic Effects and Potential Competition

The "effects" test declared that practices addressed under the Clayton Act should be examined for their effects; that is, they were not to be per se rules. Nor is there any indication in the statutes that intent is important, as it is in some Sherman Act cases.[194] This entails that conduct be evaluated by an objective standard that sets out to measure the predicted impact of a particular practice. One likely rationale for the statutory effects test was that the Federal Trade Commission had been created at the same time, and one of its duties was to study the effects of certain practices. Since the FTC had direct enforcement authority over the Clayton Act, the statutory test became one mechanism for it to enforce its findings.[195]

The effects test is amplified by the phrase "may be." A few early writers suggested that under it "the acts enumerated are prohibited if there is a possibility that competition will thereby be substantially lessened."[196] No court went so far as to declare that mere possibilities violated the statute, however, and the legislative history was to the contrary. In its aggressive *Brown Shoe* decision, the Supreme Court concluded two things. First, "Congress used the words '*may be*' . . . to indicate that its concern was with probabilities, not certainties." Second however, "no statute was sought for dealing with ephemeral possibilities. Mergers with a probable

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189. 1 RICHARD S. MARKOVITS, ECONOMICS AND THE INTERPRETATION AND APPLICATION OF U.S. AND E.U. ANTITRUST LAW 88 (2014).

190. *See, e.g.*, Aluminum Co. of Am. v. FTC, 284 F. 401, 408 (3d Cir. 1922) (rejecting all of the defendant's claims about intent: "They have to do with the motive for the transaction. We have to do only with the 'effect'. . . .").

191. *Id.*

192. *See infra* text accompanying notes 217–219.

193. 15 U.S.C. § 12 (2018).

194. *E.g.*, Swift & Co. v. United States, 196 U.S. 375, 401–02 (1905) (Holmes, J.) (explaining role of intent requirement for common law attempts and under § 2 of the Sherman Act.).

195. *See*, *e.g.*, Henry R. Seager, *The New Anti-Trust Acts*, 30 POL. SCI. Q. 448, 458 (1915) (making this point).

196. W.H.S. Stevens, *The Clayton Act*, 5 AM. ECON. REV. 38, 43 n.12 (1915).

anticompetitive effect were to be proscribed . . . ."[197] The Court quoted from the Senate Report on the 1950 amendments:

> The use of these words ('may be') means that the bill, if enacted, *would not apply to the mere possibility but only to the reasonable probability* of the proscribed effect . . . . The words 'may be' have been in section 7 of the Clayton Act since 1914. The concept of reasonable probability conveyed by these words is a necessary element in any statute which seeks to arrest restraints of trade in their incipiency and before they develop into full-fledged restraints violative of the Sherman Act. A requirement of certainty and actuality of injury to competition is incompatible with any effort to supplement the Sherman Act by reaching incipient restraints.[198]

The probabilistic effects test was very likely influenced by Columbia economist John Bates Clark's views about potential competition.[199] On this issue, Clark was a moderate. At the right were those who believed that the trusts promised lower prices with no threat of monopoly because potential competition would discipline any attempt to charge high prices.[200] At the left were those who believed that only actual competitors could effectively limit monopoly pricing.[201] Writing with his son, John Maurice Clark, the Clarks discussed the potential competition problem at some length, concluding that "potential competition is a real force," but also "a force which can be easily obstructed."[202]

Clark's own view was that potential competition, or entry by new firms, was a promising way to maintain competition. Further, new entry would ordinarily occur in response to high prices. It could be thwarted, however, by practices that prevented new competition from emerging. Among these were predatory price discrimination, tying arrangements, excusive dealing, and mergers.[203] As a result, antitrust enforcers should address these practices early, before potential entrants were excluded entirely.

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197. Brown Shoe Co. v. United States, 370 U.S. 294, 323 (1962).

198. *Brown Shoe*, 370 U.S. at 323 n.39 (emphasis added) (quoting S. REP. NO. 81-1775, at 6 (1950), *as reprinted in* 1950 U.S.C.C.A.N.4293, 4298).

199. *See* Fiorito, *supra* note 181, at 141–42. Benjamin J. Klebaner, *Potential Competition and the American Antitrust Legislation of 1914*, 38 BUS. HIST. REV. 163, 169, 180 (1964) (on the debate over potential competition, as well as John Bates Clark's involvement).

200. *E.g.*, Robert Liefmann, *Monopoly or Competition as the Basis of a Government Trust Policy*, 29 Q.J. ECON. 308 (1915); *see also* Franklin D. Jones, *Historical Development of the Law of Business Competition*, 36 YALE L.J. 207 (1926) (summarizing the role of potential competition in several recent decisions).

201. *E.g.*, JEREMIAH WHIPPLE JENKS & WALTER E. CLARK, THE TRUST PROBLEM 68, 72 (1917); Oswald W. Knauth, *Capital and Monopoly*, 31 POL. SCI. Q. 244 (1916). The debate actually extended back to the formation of the Sherman Act. *See* Hovenkamp, *The Invention of Antitrust*, *supra* note 186 (on the debates over potential competition and entry barriers in early antitrust policy).

202. JOHN BATES CLARK & JOHN MAURICE CLARK, THE CONTROL OF TRUSTS 28 (2d ed. 1912). Clark's first edition had been published in 1901.

203. On Clark's contributions, see Benjamin J. Klebaner, *Potential Competition and the American Antitrust Legislation of 1914*, 38 BUS. HIST. REV. 163 (1964). *See also* DAVID DALE MARTIN, MERGERS AND THE CLAYTON ACT (1959).

The relevance of potential competition became clear soon after the Clayton Act was passed, when the government lost a challenge to the formation and subsequent practices of the United Shoe Machinery Company.[204] The case had been brought under the Sherman Act prior to the Clayton Act's enactment and involved the merger of several firms that produced machinery designed to perform complementary functions in the manufacture of leather shoes.[205] The Court rejected the challenge, concluding that the union of noncompeting machines could not restrain trade under the Sherman Act.[206] It rejected the government's contention that the companies had been potential competitors of one another prior to the merger but that the union prevented this from occurring.[207] Of course, as defenders of the Clayton Act observed, while the union did not actually reduce output, it did eliminate the threat of competition that had not yet materialized. For this reason, the probable substantial effects language reached beyond the Sherman Act.[208]

By contrast, in the FTC's Clayton Act § 7 challenge to a merger in 1922, the Third Circuit concluded that the evaluation must be based on "its effect upon actual competition as well as in destroying potential competition in a way later to make actual competition impossible."[209] In its 1922 *Annual Report*, the FTC credited the Clayton Act with this concern about potential competition.[210]

The Clayton Act effects test turned out to be genius, particularly for the law of mergers. It is doubtful that Congress in 1914, or even in 1950 when § 7 was amended, foresaw the extent of such practices as pre-acquisition evaluation of mergers under

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204. United States v. United Shoe Mach. Co. of N.J., 247 U.S. 32 (1918).

205. The history is recounted in United States v. United Shoe Machinery Co. of N.J., 222 F. 349 (D. Mass. 1915), and also in United States v. Winslow, 227 U.S. 202 (1913) (per J. Holmes, rejecting earlier challenge to the merger on the grounds that a union of complementary products did not restrain trade).

206. *United Shoe Mach. Co.*, 247 U.S. at 45–46.

207. *Id.* at 44, 39 n.3 (quoting the government's complaint referring to "[t]he suppression of the actual and of the potential competition" that existed between various pairs of machines). Justice Day dissented, citing concerns stated in the legislative history of the Clayton Act, which was not yet passed when this action was brought. *Id.* at 70–71 n.8.

208. Clifton C. Hildebrand, Comment, *Restraint of Trade: Clayton Act*, 10 CALIF. L. REV. 425, 426 (1922); *see also* W. T. Holliday, *The Federal Trade Commission*, 8 A.B.A. J. 293, 295–96 (1922) (observing that tying clauses that did not necessarily "restrain trade" under the Sherman Act could satisfy the Clayton Act lessen competition standard).

209. Alum. Co. of Am. v. FTC, 284 F. 401, 408 (3d Cir. 1922). Judge Buffington, dissenting, protested that the statute applied only to actual competitors. *Id.* at 409–10. *Cf.* Cal. Rice Indus. v. FTC, 102 F.2d 716 (9th Cir. 1939) (condemning distribution joint venture among noncompeting entities on the theory that each was a potential competitor of the others but that the promises made in the venture prevented them from actively competing). For further discussion of the early development of the potential competition doctrine, see Herbert Hovenkamp, *Potential Competition*, ANTITRUST L.J. (forthcoming 2024), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4540413 [https://perma.cc/2VJW-2UWP].

210. FTC, ANNUAL REPORT OF THE FEDERAL TRADE COMMISSION FOR THE FISCAL YEAR ENDED JUNE 30, 1922 30 (1922) (defending FTC's 1922 Clayton Act merger challenge against Alcoa, because of its "effect upon actual competition as well as in destroying potential competition m a way [sic] later to make actual competition impossible").

the 1976 HSR Act.[211] Nor did it likely foresee the extent to which merger analysis would involve empirical economic modeling. But the "effect may be" language turned out to be tailor-made for it. Under that test the fact finder must estimate the effects of a particular practice, such as an acquisition. It did not specify the tools or methods to be used, provided that they were designed to identify a reasonable probability of harm. As a result, probabilistic estimates of harm have become conventional in merger analyses.[212]

B. Substantial Lessening of Competition or Tendency to Create a Monopoly

The Clayton Act applies its probabilistic effects test to conduct that "substantially to lessen competition or tend to create a monopoly."[213] The Act very likely used the phrase "create a monopoly" in the same sense that § 2 of the Sherman Act used the phrase "monopolize"—that is, in reference to the creation of a dominant firm. Neither the legislative history nor subsequent case law suggest a different intention. Today, however, the reach of § 7 to mergers that create firms with market shares of 30% or even lower makes the "create a monopoly" language all but superfluous.

The phrase "lessen competition" was a statutory novelty in federal law. As Justice Holmes had protested in his dissent in *Northern Securities Co. v. United States*, which was a Sherman Act challenge to a merger, the lower court had written as if "maintaining competition were the expressed object of the act."[214] In fact, he noted, the statute "says nothing about. I stick to the exact words used."[215]

Holmes was correct. The Sherman Act never uses the word "competition." Nevertheless, early Supreme Court Sherman Act decisions prior to the passage of the Clayton Act used it, characterizing various practices as "unduly restricting competition" or "destroying competition," leading to "enhancement of prices."[216]

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211. *See* Hart-Scott-Rodino Antitrust Improvements Act, Pub. L. No. 94-435, 90 Stat. 1383 (1976) (codified as amended at 15 U.S.C. § 18a (2018)).

212. *E.g.*, FTC v. Penn State Hershey Med. Center, 838 F.3d 327, 337 (3d Cir. 2016) ("[A] certainty, even a high probability need not be shown" (quoting FTC v. Elders Grain, Inc., 868 F.2d 901, 906 (7th Cir. 1989))); FTC v. Staples, Inc., 190 F. Supp. 3d 100, 114 (D.D.C. 2016) ("[T]he government must show that 'there is a reasonable probability that the challenged transaction will substantially impair competition.'" (quoting FTC v. Staples, Inc., 970 F. Supp. 1066, 1072 (D.D.C. 1997))). *See also* Steves and Sons, Inc. v. JELD-WEN, Inc., 988 F.3d 690, 704 (4th Cir. 2021) (discussing the plaintiff's obligation to accurately "predict[] the merger's probable effect on competition"); FTC v. H.J. Heinz Co., 246 F.3d 708, 715 (D.C. Cir. 2001) (granting a preliminary injunction because merger would have "probable effects on competition").

213. The statute uses the same language in all three substantive provisions. 15 U.S.C. § 13 (2018) (price discrimination); *id.* § 14 (tying and exclusive dealing); *id.* § 18 (mergers).

214. 193 U.S. 197, 403 (1904) (Holmes, J., dissenting).

215. *Id.*

216. *See e.g.*, E. States Retail Lumber Dealers Ass'n v. United States, 234 U.S. 600, 610–11 (1914) (analyzing the Sherman Act with phrases like "unduly restricting competition," "suppress competition," and leading to an "enhancement of prices"); Straus v. Am. Publishers Ass'n, 231 U.S. 222, 229 (1913) ("restrained and prevented competition"); United States v. Pac. & Arctic Ry. & Navigation Co., 228 U.S. 87, 88 (1913) ("eliminate and destroy competition").

Numerous common law decisions also equated lessening or diminishment of competition with increased prices.[217] The Clayton Act's specific phrase "lessen competition" was also well known in state law antitrust cases prior to the Clayton Act.[218] In a 1909 decision interpreting a state antitrust provision, the U.S. Supreme Court equated the "lessen competition" standard with restraint of trade and "increase [of] the prices."[219] In 1922, the Third Circuit first examined the "substantially lessen competition" language in the Clayton Act and concluded that:

> the only standard of legality with which we are acquainted is the standard established by the Sherman Act in the words 'restraint of trade or commerce' and 'monopolize, or attempt to monopolize . . . .'[220]

Section 3 of the Clayton Act, which prohibits exclusive dealing and tying, uses the same language as § 7, but its legislative history is more informative. The provision was heavily incentivized by the Supreme Court's decision in *Henry v. A.B. Dick*,[221] a patent decision which incidentally held that the Sherman Act did not reach tying agreements.[222] That explains § 3's reference to goods "whether patented or unpatented," which facilitated the increased role of antitrust in patent law in subsequent decades.[223] As a result, while price fixing was unlawful under the Sherman Act, the only vertical practice it reached at the time the Clayton Act was passed was resale price maintenance.[224]

The House had passed a version of § 3 that applied what amounted to a per se rule for all exclusive dealing and tying contracts. Several senators objected, arguing that

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217. *E.g.*, Judd v. Harrington, 34 N.E. 790, 791 (1893) (equating "suppress competition" with "enhance the price"); De Witt Wire-Cloth Co. v. N.J. Wire-Cloth Co., 14 N.Y.S. 277, 278 (Ct. Comm. Pls. 1891) (holding an agreement aimed "to restrict competition in trade, and to arbitrarily enhance the price"); Craft v. McConoughy, 79 Ill. 346, 349 (1875) (equating "stifle all competition' with "control the price"); Alger v. Thacher, 36 Mass. (19 Pick.) 51, 54 (1837) (holding that contracts in restraint of trade are void because they "prevent competition and enhance prices").

218. State v. Polar Wave Ice & Fuel Co., 169 S.W. 126, 131 (Mo. 1914) ("lessen competition"); State v. Duluth Bd. of Trade, 121 N.W. 395, 408 (Minn. 1909) ("prevent or lessen competition"); Dunbar v. AT&T Co., 87 N.E. 521, 532 (Ill. 1909) ("lessen competition"); Standard Oil Co. v. State, 100 S.W. 705, 713 (Tenn. 1907) ("[U]nlawful contracts, arrangements, and combination intended to and which tend to lessen competition . . . ."); State v. Mo., Kan. & Tex. Ry. Co. of Tex., 91 S.W. 214, 218 (Tex. 1906) ("prevent or lessen competition").

219. Waters-Pierce Oil Co. v. Tex., 212 U.S. 86, 99, 107 (1909) ("prevent or lessen competition" and "restraint of trade").

220. Standard Oil Co. v. FTC, 282 F. 81, 87 (3d Cir. 1922). The Second Circuit quoted and adopted this formulation in V. Vivaudou, Inc. v. FTC, 54 F.2d 273, 275 (2d Cir. 1931).

221. 224 U.S. 1 (1912).

222. *Id.* at 30 (holding the Sherman Act did not reach legal conditions imposed by a patentee on the sale of a patented good).

223. *See* 9 PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION ¶ 1701 (4th ed. 2018) (early history); 10 *Id.* ¶ 1780–1781 (4th ed. (2018) (subsequent development).

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

some exclusive dealing contracts were economically valuable.[225] The Conference Committee responded by inserting the "substantially lessen competition . . . monopoly" clause, over House objections that it would "disembowel[]" § 3.[226] As a result, the test of probabilistic effects on competition applies to exclusive dealing and tying challenges under the Clayton Act just as it does to mergers.[227] One thing this legislative history indicates is that members of Congress were aware that tying or exclusive dealing could sometimes be efficient. Rather than enacting an efficiency "defense," however, they responded with the "may substantially lessen competition" language.

Early Clayton Act decisions made either monopoly or price decisive. For example, in *Standard Fashion v. Margrane-Houston Co.*, the Supreme Court held that a national dress pattern manufacturer's requirement that retailers sell its patterns exclusively was unlawful because it created effective monopolies in several towns.[228] In *IBM Corp.*, the Supreme Court condemned a firm's tie of computational equipment and single-use data cards, observing that the likely effect of the tie was to maintain high prices in the tied-up cards.[229] By contrast, General Motors' insistence

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225. *See* William B. Lockhart & Howard R. Sacks, *The Relevance of Economic Factors in Determining Whether Exclusive Arrangements Violate Section 3 of the Clayton Act*, 65 HARV. L. REV. 913, 934 (1952).

226. *Id.* at 934–35 (citing remarks of Sen. Reed in the 51st Congressional Record 15830–31, Sen. Nelson's remarks at 15937–38, Sen. Clapp's remarks at 16058, and Rep. Volsetead's remarks at 16280–82 (1914)). *See* S. DOC. NO. 63-585 (1914) (Conf. Rep.); H.R. DOC. NO. 63-1168 (1914) (Conf. Rep.). Defending the condemnation of exclusive contracts only if they were anticompetitive, E. Dana Durand wrote:

> It is common in many branches of business to make sales or leases subject to the condition of exclusive patronage. The practice is by no means necessarily objectionable. It is substantially akin to the practice of establishing agencies which handle goods on commission or on a salary basis, and which are not allowed to handle similar goods of other sellers. One seller has one dealer to handle his goods exclusively, another competing seller another dealer and so on. Competition instead of being restrained may be made the more effective thereby.

E. Dana Durand, *The Trust Legislation of 1914*, 29 Q.J. ECON. 72, 80 (1914). Durand was Chief Economist for the Department of Commerce.

227. *E.g.*, McWane, Inc. v. FTC, 783 F.3d 814, 836 (11th Cir. 2015) (citing an instruction to "weigh the 'probable effect of the [exclusive dealing] contract' (quoting Tampa Elec. Co. v. Nashville Coal Co., 365 U.S. 320, 329 (1961))); ZF Meritor, LLC v. Eaton Corp., 696 F.3d 254 (3d Cir. 2012) ("[A]n exclusive dealing arrangement is unlawful only if its 'probable effect' is to substantially lessen competition . . . ." (quoting Tampa Elec. Co. v. Nashville Coal Co., 365 U.S. 320, 329 (1961))).

228. 258 U.S. 346, 352–53 (1922).

229. IBM, Corp. v. United States, 298 U.S. 131, 135–36, 139–40 (1936) ("[S]uch restrictions suggest[] that in its absence a competing article of equal or better quality would be offered at the same or at a lower price . . . ." (quoting Carbice Corp. of Am. v. Am. Pats. Dev. Corp., 283 U.S. 27, 32 n.2 (1931))). *See also* United Shoe Mach. Corp. v. United States, 258 U.S. 451, 457–58 (1922) (condemning what were effectively exclusive dealing clauses imposed by a monopoly firm in the leasing of its machinery, citing the likelihood of monopoly in the covered machinery).

that its dealers use only its original equipment parts was lawful because that market was competitive.[230] So was Sinclair Refining's practice of permitting only its own gasoline to be used in pumps that it provided at no cost. The Court observed that gasoline stations were permitted to have other non-Sinclair pumps.[231] Further the practice "appears to have promoted the public convenience by inducing many small dealers to enter the business."[232]

Justice Brandeis wrote for the Court in its important *Cabice* decision that a patentee's requirement that the maker of a patented ice box require purchasers to use its ice was akin to price fixing in the tied ice where it created a "partial monopoly."[233] While the issue was decided under patent law, the Court suggested that it also violated the Clayton Act.[234] By contrast, in *International Shoe Co.*, one of the relatively few horizontal merger cases brought under the original Clayton Act, the Court refused to condemn the merger, holding that the two firms' shoes targeted different groups of customers and thus did not meet the "substantial" lessening of competition that the Act required.[235] The Court also cited rapidly falling shoe prices threatening the industry as a rationale for not condemning the merger because it did not meet the "lessen competition" standard.[236]

The so-called "leverage" theory of tying arrangements, derived from decisions such as *IBM* and *Carbice*, strongly influenced antitrust policy from the 1930s but was later severely attacked by the Chicago school.[237] Whether correct or not, the theory behind leverage was based entirely on price effects—namely, that a seller could tie a competitive product to a monopolized product and obtain a second set of monopoly profits in the tied product. Ward Bowman's influential critique was that a seller of complementary products could attribute the entire monopoly charge to either of the two products or across the two of them but could not enlarge its monopoly profits by tying.[238] He believed that the principal use of ties was as price discrimination devices.

Early decisions interpreted the Clayton Act's "substantially lessen competition or tend to create a monopoly" language to refer to conduct that they associated with higher prices. No decisions disagreed with that principle. The output reduction or price increase that restrained trade needed to be immediate under the Sherman Act but must be threatened with a certain level of probability under the Clayton Act.

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230. Pick Mfg. Co. v. Gen. Motors Corp., 80 F.2d 641, 643 (7th Cir. 1935), *aff'd per curiam*, 299 U.S. 3 (1936).

231. FTC v. Sinclair Refining Co., 261 U.S. 463, 474 (1923).

232. *Id.* at 475.

233. Carbice Corp. of Am. v. Am. Pats. Dev. Corp., 283 U.S. 27, 32 (1931).

234. *Id.* at 34 n.4. *See also* Motion Picture Pats. Co. v. Universal Film Mfg. Co., 243 U.S. 502, 517 (1917) (condemning tie of patented projector and films; applying patent law but observing that it was "confirmed in the conclusion" by the passage of the Clayton Act).

235. Int'l Shoe Co. v. FTC, 280 U.S. 291, 298–99 (1930).

236. *Id.* at 299–300.

237. *See* Ward S. Bowman, Jr., *Tying Arrangements and the Leverage Problem*, 67 YALE. L.J. 19 (1957). The course of the theory is evaluated in Richard A. Posner, *The Chicago School of Antitrust Analysis*, 127 U. PA. L. REV. 925, 929–35 (1979).

238. *See* Bowman, *supra* note 237.

C. The Metrics of Merger Challenges: Concentration and Performance

The *Brown Shoe* decision was clearly concerned with higher market concentration but never identified its feared effects in a useful way. In its selective reading of the Congressional debates, the Supreme Court noted ample concern about the evils of concentration but ignored the extent to which many participants linked the concern to higher prices.[239] Whenever Congress spoke about higher prices, they were regarded as harmful. The linkage of higher concentration to higher prices was strongly supported by the prevailing economic literature from both conservative and liberal economists.[240]

By contrast, the *Brown Shoe* opinion cast doubt on the proposition that merger law should be concerned about higher prices, observing that "occasional higher costs and prices" might result from a policy of maintaining fragmented industries.[241]

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239. *See, e.g.*, 95 CONG. REC. 11484, 11492 (statement of Rep. John A. Carroll, Democrat Colo., speaking in favor of the bill) ("We know that if there is free competition the public will be protected from unduly high prices . . . ."); *id.* at 11493 (statement of Rep. Sidney R. Yates, Democrat Ill., speaking in favor) ("When three or four producers take the places of 20 or 30, the chances are great the price competition will be crippled . . . ."); *id.* at 11495 (statement of Rep. Joseph R. Bryson, Democrat S.C., speaking in favor) (speaking of a "trend toward more and more mergers, which suppress competition, increase the outside control of local enterprise, and cause higher prices and instability of employment"); *id.* at 11506 (statement of Rep. William T. Dyrne, Democrat N.Y., speaking neither for nor against) (citing FTC report that "under competitive capitalism consumers are protected from high prices by the constant rivalry among numerous firms"); *see also* 96 CONG. REC. 16433, 16438 (1950) (statement of Sen. Forrest C. Donnell, Republican Mo.) (understanding bill to authorize injunctions against "any economic concentration, be it existing or incipient . . . which has power to raise prices or to exclude competition").

240. Among prominent economists of the day, *see, e.g.*, George J. Stigler, *Mergers and Preventive Antitrust Policy*, 104 UNIV. PA. L. REV. 176, 181–83 (1955) (querying the amount of concentration needed to produce anticompetitive results); George W. Stocking, *The Rule of Reason, Workable Competition, and Monopoly*, 64 YALE L.J. 1107 (1955) (advocating rule that linked concentration to performance, measured by price and output); Alfred E. Kahn, *Standards for Antitrust Policy*, 67 HARV. L. REV. 28 (1953) (similar); M. A. Adelman, *Effective Competition and the Antitrust Laws*, 61 HARV. L. REV. 1289 (1948) (noting irregular relationship between concentration and competitive performance). Later empirical studies often found the correlation between price-cost margins and concentration to be very robust. *E.g.*, Norman R. Collins & Lee E. Preston, *Price-Cost Margins and Industry Structure*, 51 REV. ECON. & STAT. 271 (1969).

241. Brown Shoe Co. v. United States, 370 U.S. 294, 344 (1962). In an ambiguous and somewhat self-contradictory passage referring to the vertical aspect of the merger, the Court concluded:

> The retail outlets of integrated companies, by eliminating wholesalers and by increasing the volume of purchases from the manufacturing division of the enterprise, can market their own brands at prices below those of competing independent retailers. Of course, some of the results of large integrated or chain operations are beneficial to consumers. Their expansion is not rendered unlawful by the mere fact that small independent stores may be adversely affected.

Beginning the very next year and through a series of subsequent decisions, the Court backtracked severely from that conclusion, finally rejecting it altogether.[242]

The output and price effects of mergers are difficult to predict. For exclusive dealing and tying under the Clayton Act, the Court had quite unambiguously located the threat in higher prices.[243] Only relatively recently have the econometric tools used in unilateral effects merger analysis addressed the linkage between a particular merger and higher market prices in an empirically useful way.[244] While the use of concentration metrics has been around since the late nineteenth century,[245] they were too crude to link a particular increase in an index metric to a particular price increase. Even the successive editions of the Merger Guidelines have never done so.

In *United States v. Philadelphia National Bank*,[246] a year after *Brown Shoe*, the Court already took a first step toward linking concentration and performance, observing that high concentration blunted the vigor of competition, particularly among smaller banks competing for the "marginal small business."[247] The Court concluded that high concentration in local banking made it difficult for small firms to obtain credit.[248] Significantly, these small businesses were the banks' customers, not their competitors.

When the price effects of a merger were clear, the Supreme Court immediately embraced them, as it did in *United States v. El Paso Natural Gas* two years after *Brown Shoe*.[249] El Paso was the dominant natural gas supplier to California, a rapidly

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Id.

242. *See* Herbert Hovenkamp, *Did the Supreme Court Fix "Brown Shoe"?*, PROMARKET (May 12, 2023), https://www.promarket.org/2023/05/12/did-the-supreme-court-fix-brown-shoe/ [https://perma.cc/JV2D-LWXB].

243. *See supra* text accompanying notes 228–232.

244. *E.g.*, John Asker & Volker Nocke, *Collusion, Mergers, and Related Antitrust Issues*, *in* 4 HANDBOOK OF INDUSTRIAL ORGANIZATION 177 (Kate Ho, Ali Hortascu & Alessandro Lizzeri eds., 2021); Nathan H. Miller, Marc Remer, Conor Ryan & Gloria Sheu, *Upward Pricing Pressure as a Predictor of Merger Price Effects*, 52 INT'L J. INDUS. ORG. 216 (2017) (finding both direct measurement and structural changes (HHI) to be good predictors); *see* PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION ¶ 914 (4th ed. 2016) (explaining the use of unilateral effects analysis in merger cases).

245. On the history of concentration indexes, which trace back to the late nineteenth century, see Hovenkamp, *The Invention of Antitrust*, *supra* note 186.

246. 374 U.S. 321 (1963).

247. *Id.* at 369:

> There is no reason to think that concentration is less inimical to the free play of competition in banking than in other service industries. On the contrary, it is in all probability more inimical. For example, banks compete to fill the credit needs of businessmen. Small businessmen especially are, as a practical matter, confined to their locality for the satisfaction of their credit needs. If the number of banks in the locality is reduced, the vigor of competition for filling the marginal small business borrower's needs is likely to diminish.

248. *See id.* at 370.

249. 376 U.S. 651 (1964). The opinion cited *Brown Shoe* only for the proposition that § 7

expanding market. Pacific Northwest, a competitively aggressive firm, had repeatedly bid against El Paso to be a provider to California. It had always failed, in large part, because El Paso always lowered its bid price when it faced a competing bid from Northwest.[250] The record thus indicated that the impact of Pacific Northwest in the market had been to force El Paso to keep its bid prices lower.

Because Pacific Northwest had never won a bid, the facts appeared to sit uneasily between either a merger of actual competitors or merely potential competitors. The Court correctly chose the latter: "Unsuccessful bidders are no less competitors than the successful one" because the "presence of two or more suppliers gives buyers a choice."[251] The Court concluded that "[w]e would have to wear blinders not to see that the mere efforts of Pacific Northwest to get into the California market, though unsuccessful, had a powerful influence on El Paso's business attitudes."[252]

While antitrust enforcers lacked the tools to use structural or econometric evidence to estimate the price effects of a merger, the *El Paso* case made use of such tools unnecessary. The bidding history made it easy to show the price difference between a situation in which El Paso was the only bidder and one in which it was competing against Pacific Northwest.[253]

El Paso was the Supreme Court's first embrace of what later came to be called the "hypothetical monopolist" test, which defines a market not merely by reference to those actually making sales there but also those who could make sales in response to a higher price.[254] Under that test, the merger was horizontal, and Justice Douglas treated it as such.[255] The 2010 Horizontal Merger Guidelines would also treat the El Paso/Pacific Northwest merger as horizontal by querying who would be making sales in response to a price increase. Pacific Northwest would be treated as a "rapid entrant" in the HMG terminology—someone who was prepared to enter the market and could do so without further commitment of significant resources.[256]

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deals with "probabilities, not certainties." *Id.* at 658 (quoting Brown Shoe Co. v. United States, 370 U.S. 294, 323 (1962)).

250. *See El Paso*, 376 U.S. at 655.

251. *Id.* at 661.

252. *Id.* at 659.

253. *See id.* at 655 (showing an example where El Paso had initially bid 40¢/Mcf for a contract but then adjusted the bid downward to 30¢/Mcf in response to Pacific Northwest's competition).

254. *See* HERBERT HOVENKAMP, FEDERAL ANTITRUST POLICY, THE LAW OF COMPETITION AND ITS PRACTICE § 3.2 (7th ed., forthcoming 2024) [hereinafter FEDERAL ANTITRUST POLICY]; *cf. El Paso*, 376 U.S. at 660 ("The effect on competition in a particular market through acquisition of another company is determined by the nature or extent of that market and by the nearness of the absorbed company to it, that company's eagerness to enter that market, its resourcefulness, and so on.").

255. Justice Douglas' other potential competition merger decision for the Court was *FTC v. Procter & Gamble Co.*, 386 U.S. 568 (1967), in which the parties stipulated that the relevant market ("line of commerce") was liquid bleach. *Id.* at 570–71.

256. *See* U.S. DEP'T JUST. & FED. TRADE COMM'N, MERGER GUIDELINES § 4.4.A (2023), https://www.justice.gov/atr/2023-merger-guidelines [https://perma.cc/4A8B-SL4R] (discussing the "rapid entrant"); *cf.* FTC v. Procter & Gamble Co., 386 U.S. 568, 578 (1967) (with Clorox bleach acquired by P&G, smaller bleach makers would have been fearful of retaliation: "It is probable that Procter would become the price leader and that oligopoly would

Until the Supreme Court largely abandoned the field, its subsequent merger decisions followed the logic of *El Paso* more than that of *Brown Shoe*. In *Continental Can*, also two years after *Brown Shoe*, the Court condemned a merger of a can manufacturer and a bottle manufacturer, noting that continued competition between the two products prevented firms from "raising prices above the competitive level."[257] Then, in 1974, the Supreme Court concluded in *United States v. General Dynamics* that a merger could not be condemned on the basis of current market shares when a merging partner's history of decline indicated that its "power to affect the price of coal was . . . severely limited and steadily diminishing."[258] *General Dynamics* was an abrupt change of direction from decisions such as *Brown Shoe*[259] and *Von's*,[260] only a decade earlier that had inferred illegality from market shares without considering any link between market concentration and the power to affect market prices.

General Dynamics also makes clear that the use of concentration data in merger cases is contingent, and that the contingency is the impact of the merger on higher prices. As a result, the government could not show illegality simply by providing "statistics showing" high and increasing concentration.[261] They had to be linked to performance.

As the Court observed, coal was facing increasing competition from oil, natural gas, nuclear energy, and geothermal power.[262] That is, concentration data are valuable only to the extent that they provide meaningful information about the ability of a group of sellers to control a market. To the extent those sellers face increasing competition from a different technology, the data provide little useful information. In the process, *General Dynamics* reified the operational link between market concentration and economic performance, as well as the one between concentration and market definition.[263]

In *United States v. Marine Bancorp*, the same year as *General Dynamics*, the Supreme Court restated its view of the logic of potential competition. First, it applied only to concentrated markets where the dominant participants have "the capacity effectively to determine price and total output of goods or services."[264] If such a market were performing competitively, the participants "will have no occasion to

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become more rigid.").

257. United States v. Cont'l Can Co., 378 U.S. 441, 465–66 (1964).

258. United States v. Gen. Dynamics Corp., 415 U.S. 486, 493 (1974).

259. Brown Shoe Co. v. United States, 370 U.S. 294 (1962).

260. United States v. Von's Grocery Co., 384 U.S. 270 (1966).

261. *General Dynamics*, 415 U.S. at 494, 498, 501. In the Court's words, the government could not rely on statistics showing "that within certain geographic markets the coal industry was concentrated among a small number of large producers; that this concentration was increasing; and that the acquisition of United Electric would materially enlarge the market share of the acquiring company and thereby contribute to the trend toward concentration." *Id.* at 494.

262. *See id.* at 491.

263. On this point, see Herbert Hovenkamp & Carl Shapiro, *Horizontal Mergers, Market Structure, and Burdens of Proof*, 127 YALE L.J. 1996 (2018).

264. 418 U.S. 602, 630 (1974).

fashion their behavior to take into account the presence of a potential entrant."[265] However, the merger precluded entry de novo, which would have assisted in "deconcentrating that market over the long run."[266] For purposes of fact-finding, that was too much speculation for the Court. Nevertheless, the fundamental concern that the government and the Supreme Court shared was with protecting potential competition that would have brought prices down.[267] It then observed that concentration ratios "can be unreliable indicators of actual market behavior," and that it was the government's burden to show the connection.[268] The Court chastised the parties because they never "undertook any significant study *of the performance, as compared to the structure*, of the commercial banking market."[269]

After *Marine Bancorp*, the Supreme Court largely left substantive merger analysis to the lower courts. It did return to the issue in two cases involving private plaintiff lawsuits.[270] Both were challenges to situations where the logic of the plaintiff's claim was that a merger either increased quality or reduced price, thus making it more difficult for the plaintiff-competitor to compete. The *Brunswick* decision involved a vertical merger resulting from the defendant's practice of acquiring and then rehabilitating bowling alleys, enabling them to compete more vigorously.[271] The plaintiff was a competing bowling alley injured because it would have been the beneficiary of a monopoly had the acquired alley been permitted to go out of business. Justice Thurgood Marshall's opinion for the Supreme Court cited *Brown Shoe's* conclusion that the goal of antitrust is the "protection of competition, not competitors." The Court held that it would be "inimical to the purposes" of antitrust to permit a private challenger to claim an injury that resulted from rehabilitation of an acquired asset, thus making it more competitive.[272]

A decade later in *Cargill, Inc. v. Monfort of Colorado, Inc.*, the Court turned away a plaintiff-competitor who claimed that, as a result of the merger, the defendant would have reduced its prices, although not to predatory levels.[273] The Court used

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265. *Id.*

266. *Id.* at 615.

267. As the Court observed:

> If the target market performs as a competitive market in traditional antitrust terms, the participants in the market will have no occasion to fashion their behavior to take into account the presence of a potential entrant. The present procompetitive effects that a perceived potential entrant may produce in an oligopolistic market will already have been accomplished if the target market is performing competitively. Likewise, there would be no need for concern about the prospects of long-term deconcentration of a market which is in fact genuinely competitive.

Id. at 630–31.

268. *Id.* at 631.

269. *Id.* (emphasis added).

270. On antitrust standing, see *infra* text accompanying notes 415–444.

271. Brunswick Corp. v. Pueblo Bowl-O-Mat, Inc., 429 U.S. 477 (1977).

272. *Id.* at 488 (quoting Brown Shoe Co. v. United States, 370 U.S. 294, 320 (1962)).

273. 479 U.S. 104, 119–120 (1986). The Court observed that while the plaintiff had made some deposition references to predatory pricing, nothing in the record indicated that predatory

the same "inimical" language to declare that condemning mergers because they resulted in lower prices was not a permissible goal of merger policy.

Brunswick and *Cargill* laid to rest any notion that merger law condemns mergers that promise lower prices, higher output, or better product quality. Taken together, *Brunswick* and *Cargill* brought an end to the troublesome Brown Shoe doctrine that merger law should target product improvement and lower prices as antitrust harms. Following this reasoning, merger cases today generally identify the harm as reduced output and its attendant effect on prices. Further, as the 2022 decision enjoining the merger between two large book publishers observed, that harm on the input and output sides of the market travel together:

> [I]f [author] advances are significantly decreased, some authors will not be able to write, resulting in fewer books being published, less variety in the marketplace of ideas, and an inevitable loss of intellectual and creative output.[274]

For a textualist, one notable thing about the 1950 amendments to § 7 is that, for all of the debate over Congressional concerns about concentration, Congress did not change one word in the substantive legal standard. Both the 1914 and the 1950 versions of § 7 continued to condemn mergers "where the effect . . . may be to substantially lessen competition . . . or tend to create a monopoly." If there was to be an increased emphasis on concentration or a change in the probabilistic standard, it never made it into the text of the statute. The main textual difference was to end the 1914 version's limitation to competition "between" the merging firms, making clear that the revised provision would apply to nonhorizontal mergers as well. But the standard for assessing any lessening of competition remained identical.[275]

D. The Clayton Act: Causation and Methodology

By 1900, the trust had become an important topic in economic and legal literature.[276] The rise of industrial organization as a distinct branch of economics was heavily driven by concerns about large firm dominance.[277] Subsequently, the Clayton

pricing was likely or even contemplated: "We conclude that Monfort neither raised nor proved any claim of predatory pricing . . . ." *Id.*

274. United States v. Bertelsmann SE & Co. KGaA, 646 F. Supp. 3d 1, 23 (D.D.C. 2022) (alteration in original).

275. *See* 15 U.S.C. § 18 (1950 version), amending Pub. L. No. 63-212, § 7, 38 Stat. 730 (1914).

276. *See, e.g.*, GEORGE GUNTON, TRUSTS AND THE PUBLIC (1899); RICHARD T. ELY, THE CITIZEN'S LIBR. ECON., POL. & SOCIO., MONOPOLIES AND TRUSTS (1900); 2 INDUS. COMM'N, PRELIMINARY REPORT ON TRUSTS AND INDUSTRIAL COMBINATIONS, TOGETHER WITH TESTIMONY, REVIEW OF EVIDENCE, CHARTS SHOWING EFFECTS ON PRICES, AND TOPICAL DIGEST (1900); JOHN BATES CLARK & JOHN MAURICE CLARK, THE CONTROL OF TRUSTS (1912); Francis Walker, *The Causes of Trusts and Some Remedies for Them*, 11 AM. ECON. ASS'N Q. 290 (1910). For analysis of several, see Herbert Hovenkamp, *United States Competition Policy in Crisis: 1890-1955,* MINN. L. REV. 311 (2009).

277. *See* Herbert Hovenkamp, *The Antitrust Movement and the Rise of Industrial Organization*, 68 TEX. L. REV. 105 (1989). For an evaluation of the increasing use of

Act "probable effects" test contemplated and guided such analysis. It was intended to identify emergent monopoly while it was still potential rather than actual, but nevertheless sufficiently probable to be a policy concern.

The Clayton Act's "where the effect may be" language is a reference to causation, a fact question that is often addressed by expert testimony. An important body of antitrust case law is concerned with expert opinion assessing the actual effects of completed practices or the probable effects of acts whose effects still lay largely in the future. Today the admissibility of such evidence is driven by the Supreme Court's decision in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*[278] *Daubert* itself was a causation case.[279] Under the Clayton Act's § 7 effects test, the question is whether a particular merger either actually or predictably caused the statutorily defined injury to competition.[280]

In litigation under the Clayton Act effects test, basic questions concerning the type and quality of admissible evidence are ones of fact. Limitations as a matter of law come principally in challenges to evidence on the grounds that it is unreliable under the *Daubert* standard, or that offers of proof are so flimsy or off point that no reasonable jury could base a finding on them. In such cases summary judgment is appropriate.[281]

One thing that *Daubert* standards are very fussy about is methodology: namely, whether it is scientifically valid, up to date, and relevant to the facts at issue. Further, the methodology must be capable of being tested.[282] In assessing this, the *Daubert* Court cited such factors as the presence of the methodology in peer reviewed journals with a knowable rate of error.[283] Further, the focus "must be solely on principles and methodology, not on the conclusions that they generate."[284]

The Clayton Act effects standard contemplates that methodologies will change over time. In other words, while the statutory legal test does not change, the

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marginalist economics in antitrust analysis during this period, including its focus on industrial concentration, see Herbert Hovenkamp, *The Invention of Antitrust*, *supra* note 186.

278. 509 U.S. 579 (1993); *see* 2 PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION ¶ 309 (4th ed. 2021) (expert testimony in antitrust cases).

279. *Daubert*, 509 U.S. at 584–85.

280. *E.g.*, *In re* Se. Milk Antitrust Litig., 739 F.3d 262 (6th Cir. 2014) (accepting expert's testimony in merger case; fact issues to be determined on summary judgment); Messner v. Northshore Univ. HealthSystem, 669 F.3d 802 (7th Cir. 2012) (plaintiff's expert in merger case met *Daubert* criteria); Park W. Radiology v. CareCore Nat. LLC, 675 F. Supp. 3d 314 (S.D.N.Y. 2009) (rejecting *Daubert* challenge to expert's testimony in merger case); Va. Vermiculite Ltd v. W.R. Grace & Co.-Conn, 98 F. Supp. 2d 729 (W.D. Va. 2000) (*Daubert* required exclusion of expert's testimony in merger case).

281. *See, e.g.*, Olean Wholesale Grocery Coop., Inc. v. Bumble Bee Foods LLC, 31 F.4th 651 (9th Cir. 2022), *cert. denied*, 143 S. Ct. 424 (2022) (detailed discussion of reliability standards for antitrust expert testimony); *In re* Wholesale Grocery Prods. Antitrust Litig., 946 F.3d 995 (8th Cir. 2019) (excluding expert testimony in antitrust case as unreliable).

282. *See Daubert*, 509 U.S. at 592–93.

283. *Id.* at 594.

284. *Id.* at 595.

methodology for applying the test does. Indeed, relying on obsolete science is grounds for *Daubert* exclusion.[285]

This approach is hardly unique to antitrust but is common to most areas of law. For example, in a homicide case the legal question may be whether the victim's death was caused by the defendant's conduct, and that question has undoubtedly been fairly stable for centuries. However, the methodology for answering it has changed very significantly with the development and subsequent refinement of such scientific tools as fingerprinting, ballistics, DNA analysis, and so on.

Consider the Supreme Court's 1966 decision in *United States v. Von's Grocery Co.* that the defendant's merger creating a 7.5% post-merger market share in an unconcentrated market was unlawful.[286] At the time there were no merger guidelines, and the Justice Department did not offer a methodology for measuring the effects of business concentration. Nor did it cite any economic literature on the relationship between concentration and prices.[287] The government recited theory to the effect that oligopolists generally have less incentive to cut prices and that the stores in the affected area had monitored and sought to match one another's prices.[288] It did not cite any evidence or theory suggesting that market shares such as those at issue triggered higher prices. It also relied on the testimony of an expert to the effect that more than 1,000,000 customers were within ten minutes driving time of stores from both chains, although in the aggregate they represented only 20% of the stores from whom such customers could choose.[289]

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285. *See* Eline v. Town of Ocean City, Md., 7 F.4th 214 (4th Cir. 2021) (considering admissibility of outdated science); *In re* Commitment of Johnson, 613 S.W.3d 613 (Tex. Ct. App. 2020). For good discussions of economic methodologies in merger cases, see Louis Kaplow, *Replacing the Structural Presumption*, 84 ANTITRUST L.J. 565 (2022) (economic evidence in merger challenges); Malcolm B. Coate & Jeffrey H. Fischer, Daubert*, Science, and Modern Game Theory: Implications for Merger Analysis*, 20 SUP. CT. ECON. REV. 125 (2012) (need for antitrust enforcers to engage in ongoing testing of merger outcomes); Andrew R. Dick, *Merger Policy Twenty-Five Years Later: Unilateral Effects Move to the Forefront*, 27 ANTITRUST 25 (2012) (economic modeling under unilateral effects theories).

286. U.S. 270, 272, 277–79 (1966). The largest grocer in the area had an 8% market share. *Id.* at 281 (Stewart, J., dissenting).

287. The emergent literature on the structure-conduct-performance paradigm provided some, although it has been heavily criticized. *See, e.g.*, EDWARD S. MASON, ECONOMIC CONCENTRATION AND THE MONOPOLY PROBLEM (1957); Paul R. Ferguson & Glenys J. Ferguson, *The Structure-Conduct-Performance Paradigm*, INDUSTRIAL ECONOMICS (1994); Leonard W. Weiss, *The Structure-Conduct-Performance Paradigm and Antitrust*, 127 UNIV. PA. L. REV. 1104 (1979); Abagail McWilliams & Dennis L. Smart, *Efficiency v. Structure-Conduct-Performance: Implications for Strategy Research and Practice*, 19 J. MGMT. 63 (1993); *see also* Matthew T. Panhans, *The Rise, Fall, and Legacy of the Structure-Conduct-Performance Paradigm* (2023), https://ipl.econ.duke.edu/seminars/system/files/seminars/3754_paper.pdf [https://perma.cc/B8SH-WBWV]; Ricard Schmalensee, *Inter-Industry Studies of Structure and Performance*, *in* 2 HANDBOOK OF INDUS. ORG. (1989).

288. Brief for the United States at 5–6, 22 United States v. Von's Grocery Co., 384 U.S. 270 (1966) (No. 303), 1966 WL 115393.

289. *Id.* at 7–9.

The market concentration data in *Von's* showed concentration far lower than any Merger Guidelines, including 2023 draft Guidelines,[290] have ever suggested for illegality. To the best of my knowledge, they have never been supported by any economic evidence coordinating concentration and price, including the highly aggressive Merger Guidelines issued in 1968.[291] In *Von's* itself, only Justice Potter's dissent analyzed prices and found the competition to be vigorous among both small and larger chains.[292]

As noted earlier, in *Marine Bancorporation,* eight years after *Von's*, the Court required the government to offer evidence linking concentration data to actual market performance.[293] Today, up-to-date economic techniques would almost certainly dictate a different result in *Von's*, perhaps because the physical attributes of the grocery industry or the parties have changed, but more importantly because the economic methodologies have been vastly improved. Our ability to test the relationship between changes in market concentration resulting from a merger and price increases is much better.[294] The empirical literature suggests a significant likelihood of a price increase as post-merger concentration hits the 1000–1800 range on the HHI, and increases are in the 100+ range,[295] but not at lower levels.[296] The post-merger HHI in *Von's Grocery* was in the range of 300 and the increase in the range of 25-30—far below the level where any set of merger guidelines or any empirical methodology would have predicted a lessening of competition.[297]

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290. *See* U.S. DEP'T OF JUST. & FTC, MERGER GUIDELINES (2023), *supra* note 256.

291. *See* U.S. DEP'T. OF JUST., 1968 MERGER GUIDELINES § I.5–6 (1968), https://www.justice.gov/archives/atr/1968-merger-guidelines [https://perma.cc/Q4AQ-WTV2].

292. United States v. Von's Grocery Co., 384 U.S. 270, 300–01 (1966) (Stewart, J., dissenting).

293. United States v. Marine Bancorporation, Inc., 418 U.S. 602, 630–32 (1974)*; see* discussion *supra* text accompanying notes 264–268.

294. *See, e.g.*, John Kwoka, *The Structural Presumption and the Safe Harbor in Merger Review: False Positives or Unwarranted Concerns*, 81 ANTITRUST L.J. 837, 871–72 (2017) (finding strong empirical support for concentration standards articulated in 2010 Merger Guidelines but noting that actual enforcement has actually been more lenient). For a more general summary of the data, see Herbert Hovenkamp & Carl Shapiro, *Horizontal Mergers, Market Structure, and Burdens of Proof*, 127 YALE L.J. 1996 (2018). On the improvement in concentration standards effected by the 2023 Merger Guidelines, see Herbert Hovenkamp, *The 2023 Merger Guidelines: Law, Fact, and Method*, REV. INDUS. ORG. (forthcoming 2024).

295. The HHI is computed by taking the sum of the squares of the market shares of every firm in the market. On its use, see HERBERT HOVENKAMP, FEDERAL ANTITRUST POLICY, THE LAW OF COMPETITION AND ITS PRACTICE § 12.4a (7th ed. 2024).

296. *See, e.g.*, Volker Nocke & Michael D. Whinston, *Concentration Thresholds for Horizontal Mergers*, 112 AM. ECON. REV. 1915 (2022) (finding significant correlation between prices and increases in the HHI, but not the absolute HHI); Matthew Weinberg, *The Price Effects of Horizontal Mergers*, 4 J. COMPETITION L. & ECON. 433 (2007) (finding significant price increases when the post-merger HHI exceeds 1800, but much less when it is below 1000). *But see* Yue Qiu & Aaron Sojourner, *Labor-Market Concentration and Labor Compensation*, 76 ILR REV. 475 (2023) (higher labor concentration correlated with lower wages).

297. *See* Donald I. Baker & William Blumenthal, *The 1982 Guidelines and Preexisting Law*, 71 CAL. L. REV. 311, 334–35 (1983) (table presenting post-merger HHIs in numerous decisions).

Issues about the effect of a merger on market performance must be determined with the best available tools of the day. They should not be decided as a matter of law by asking what level of concentration may have been sufficient in a determination made sixty years ago to challenge a merger before such tools were in use. *Daubert* and the Clayton Act's effects test preclude such an approach. They also support direct evidence of markups such as occur in "unilateral effects" merger analysis today.[298] Additionally, the latest methodology strongly supports focusing on the *change* in HHI as the best indicator of post-merger price changes.[299] Indeed, Nocke and Whinston conclude that "for a given demand elasticity, the required efficiencies [to prevent a price increase] are perfectly related to and increasing in the change in the HHI, and completely independent of the level of the HHI."[300]

E. Statutory Interpretation Issues Unique to § 7

The text of § 7 of the Clayton Act provokes some additional questions about mergers. One is whether § 7 requires a market definition as a matter of law. Another is whether the competitive harm envisioned by the merger provision includes exclusion as well as collusion. Third, how should we consider the fact that the merger statute makes no reference to efficiencies? Finally, given the general statutory presumption against exterritoriality, how does § 7 apply to mergers with a significant extraterritorial component?[301]

1. Market Definition in Merger Cases

While the merger provision uses "effects" language similar to the other Clayton Act substantive provisions, it adds some other important language. Under it, a merger is unlawful "where in any line of commerce or in any activity affecting commerce in any section of the country, the effect of such acquisition may be substantially to lessen competition, or to tend to create a monopoly."[302]

The 1950 Celler-Kefauver amendments to the Act are sometimes regarded as expanding the reach of § 7. As noted previously, however, that cannot be gleaned from the text.[303] Further the statute actually narrowed it in one critical sense. The original prohibition condemned stock acquisitions "whose effect may be to substantially lessen competition" or "create a monopoly" *between* the acquired and acquiring firms.[304] That is, the requisite lessening of competition was not in the market but rather between the merging pair. Since every horizontal merger eliminates competition between the parties to the merger, the literal result was a per se rule against horizontal mergers.

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298. On unilateral effects merger analysis, see PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION ¶ 914 (4th ed. 2016).

299. Nocke et al., *supra* note 296, at 1941, 1946.

300. *Id.* at 1924 (alteration in original).

301. The latter is discussed *infra*, text accompanying notes 442–60.

302. 15 U.S.C. § 18 (2018)

303. See discussion supra, text at note 275.

304. Clayton Act of 1914, ch. 323, § 3, 38 Stat. 730, 731.

The aggressiveness of this provision likely explains why so many firms chose the alternative route of asset acquisitions, which were not covered by the original § 7. In fact, the courts were not enthusiastic about applying the provision as written. In one of the relatively few decisions that applied the old Clayton Act, a divided Supreme Court held that a merger of a firm that made high quality shoes and another that made cheaper shoes did not meet the test. The Court concluded that the two firms had actually been serving different customers, and used noncompeting distribution networks, so little competition was eliminated.[305] The 1950 amendments eliminated this per se prohibition by referring only to a lessening of competition in the affected market.

The original § 7 of the Clayton Act condemned a merger that injured competition or restrained commerce "in any section or community," or tended to create a monopoly "of any line of commerce."[306] When the original Clayton Act was passed in 1914, the antitrust idea of a "relevant market" had not yet been developed. That was largely a 1940s phenomenon. The modern concept of market definition was well on its way to development by the time of the 1950 amendments to § 7.[307] The 1948 decision in *United States v. Columbia Steel Co.* was the first time that the Supreme Court used the term "relevant market" in a merger case, dismissing the complaint after finding that the market was larger than the government alleged, and the extent of the parties' competition more limited.[308] That case was decided under the Sherman Act because it involved an asset acquisition.

In its 1957 vertical merger decision in *United States v. E.I. du Pont de Nemours & Co.*, the Supreme Court concluded that the phrase "line of commerce" referred to a relevant product market for antitrust purposes.[309] The *Brown Shoe* decision

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305. Int'l Shoe Co. v. FTC, 280 U.S. 291, 296–99, 304–05 (1930); *see id.* at 299 (crediting testimony "that there was in fact no substantial competition between the companies in respect of these shoes, but that at most competition was incidental and so imperceptible that it could not be located"). But see Justice Stone's sharp and quite correct dissent, joined by Justices Homes and Brandeis, *id.* at 303–06.

306. *Id*. at 291.

307. *See* Hovenkamp, *The Invention of Antitrust*, *supra* note 186.

308. 334 U.S. 495, 508–509 (1948)*; see supra* notes 146–151 and accompanying text.

309. 353 U.S. 586 (1957)*; see id.* at 593–95:

> Determination of the relevant market is a necessary predicate to a finding of a violation of the Clayton Act because the threatened monopoly must be one which will substantially lessen competition "within the area of effective competition." . . . The record shows that automotive finishes and fabrics have sufficient peculiar characteristics and uses to constitute them products sufficiently distinct from all other finishes and fabrics to make them a "line of commerce" within the meaning of the Clayton Act. . . . Thus, the bounds of the relevant market for the purposes of this case are not coextensive with the total market for finishes and fabrics, but are coextensive with the automobile industry, the relevant market for automotive finishes and fabrics.

subsequently agreed,[310] and added that the statutory phrase "section of the country" referred to a relevant geographic market.[311]

The equation of "line of commerce" and "section of the country" with relevant product and geographic markets was not the best interpretation of the statutory language. In 1914, the phrase "line of commerce" referred to a particular "line" of products or activities in which a business might engage.[312] These were more likely to be complements rather than substitutes. The most likely meaning of the phrase "section of the country" was to limit actionable mergers to those that had domestic anticompetitive effects.[313]

Brown Shoe's language about markets has become a problem more recently for an entirely different reason, which is that mergers are increasingly evaluated by econometric methods that do not depend on a market definition at all.[314] For so-called "unilateral effects" mergers, this typically entails an econometric methodology that can predict a price increase among the two merging firms, but having little effect on other competitors.[315] In other words, the range of firms that experience the feared price increase might be smaller than the range that defines a relevant market under ordinary market definition principles. However, these approaches are also likely to be more accurate than traditional market definition approaches. Today a likely majority of merger evaluations by government agencies use these methodologies.[316]

The history of merger enforcement has exposed other deficiencies in market delineation methodologies. Many if not most challengeable mergers occur in product-differentiated markets, where traditional market definition is always wrong. For example, if a traditional market definition for automobiles places Toyotas and BMWs into the same market it effectively concludes that the two are perfect competitors, which is incorrect. As a result, the definition understates power. By contrast, if the market definition excludes BMW by placing it into a separate market for "luxury" cars it is also wrong because that indicates that the BMWs and Toyotas do not compete at all. That conclusion exaggerates the degree of power in the market. When the data are available, direct measurement avoids these problems by looking

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310. Brown Shoe Co. v. United States, 370 U.S. 294, 324–27 (1962).

311. *Id.* at 336–37.

312. *See, e.g.*, Meyer v. Arthur, 91 U.S. 570, 573 (1875) (speaking of various ingredients used in manufacturing of paint as "staples of trade in that line of commerce"); Gilbert v. Citizens' Nat'l Bank of Chickasha, 160 P. 635, 641 (Okla. 1916) (holding that contract interpretation depends upon the customs or usage of trade of "those engaged in that line of commerce").

313. *See infra* text accompanying note 458.

314. For strong advocacy of the proposition that merger law should abandon market definition analysis and measure anticipated price effects econometrically, see Kaplow, *supra* note 285, at 623–27.

315. *See* HOVENKAMP, FEDERAL ANTITRUST POLICY, *supra* note 254, § 12.3d (describing unilateral effects methodology).

316. Joshua H. Soven & Justin Epner, *After the Obama Administration: What Comes Next in Antitrust Merger Enforcement Policy*, 32 ANTITRUST 88, 88 (2017) (alteration in original) (internal citation omitted) ("large majority" of challenges are unilateral effects); Darren S. Tucker, *A Survey of Evidence Leading to Second Requests at the FTC*, 78 ANTITRUST L.J. 591, 598 (2013) (noting predominance of unilateral effects concerns in second requests).

directly at the price effects of a merger among two reasonably proximate firms in a product-differentiated market.

Evaluation of a merger under the unilateral effects methodology seems to satisfy the requirements of the statutory text. It identifies a grouping of sales in which a price increase, or substantial lessening of competition, might occur. However, that methodology might not satisfy *Brown Shoe's* insistence on a market definition. As one district court stated the problem:

> "As a matter of applied economics, evaluation of unilateral effects does not require a market definition in the traditional sense at all." This is so because unilateral effects analysis focuses on measuring a firm's market power directly. . . . If market power itself can be directly measured or estimated reliably, then in theory market definition is superfluous, at least as a matter of economics, because "[i]dentifying a market and computing market shares provide an indirect means for measuring market power." . . . As a legal matter, however, a market definition may be required by Section 7 of the Clayton Act.[317]

There are ways to get around this problem. The most workable economic definition of a relevant market is a grouping of sales over which a non-cost-justified price increase, or SSNIP, can be sustained.[318] If we have concluded that a merger between two proximate firms will yield a price increase, that should be sufficient to support the verbal conclusion that this pair of firms constitutes a relevant market unto itself. Indeed, that is what we look for when we define markets under the prevailing economic tests.[319] If a merger between A and B permits firm AB to increase its price by a significant amount, then AB should constitute a relevant market, even if other firms are making visually similar products. That is, the test for a relevant market should be based on observed substitution behavior, not on intuitions drawn from physical characteristics or appearance. This approach satisfies both the Clayton Act text and *Brown Shoe*.

In any event, specification as a matter of law would be inconsistent with the statute's effects test, which requires a factual determination of probable causality. Market definition is a tool for determining a range of products or services over which a sustained price increase is likely. There is no reason to think that ordinary evidentiary standards governing expert fact finding should not apply.

2. Exclusionary and Potential Competition Mergers

Section 7 of the Clayton Act condemns mergers where the requisite threat of probable competitive harm is shown. It says nothing about the pre-merger alignment

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317. United States v. H & R Block, Inc., 833 F.Supp.2d 36, 84–85 n.35 (D.D.C. 2011) (citing and quoting 4 PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION ¶ 913a, at 66, ¶ 532a, at 242–43 (3d ed. 2007)).

318. "Small but Significant and Nontransitory Increase in Price." On how the concept is used in market definition, see HOVENKAMP, FEDERAL ANTITRUST POLICY *supra* note 254, § 3.2.

319. *Id.*

of the parties. They could be competitors (horizontal), in a buyer-seller relationship (vertical), or neither. Further, the "where the effect may be" language invites reasonable prediction of future effects.

The successive editions of the Merger Guidelines came to identify the harm as predicted price increases caused by the merger. The 2023 Merger Guidelines push back from that position.[320] While higher prices were not the harm that *Brown Shoe* itself identified, it was compelled by the post-*Brown Shoe* Supreme Court case law.[321] The feared threat is that the merger will either facilitate collusion-like behavior (although not necessarily explicit collusion itself) among the firms in the post-merger market, or under the "unilateral effects" theory, the merger will enable the merging pair to increase its prices.

Identical language in both the original § 2 of the Clayton Act on price discrimination and § 3 on exclusive dealing and tying was aimed almost entirely at exclusionary practices. Differential pricing was treated as a form of predatory pricing that excluded rivals.[322] Tying and exclusive dealing were expressly directed at sales on the condition that the purchaser not "use or deal in the goods . . . of a competitor."[323]

Given the same language, there is no warrant in the merger statute for ignoring exclusion as a mechanism by which a merger might harm competition. Potential competition mergers can be characterized as furthering either collusion or exclusion. No matter how we characterize them, they eliminate the competitive threat by eliminating the potential competitor as an independent actor.

During the 1960s and 1970s mergers involving firms who were not current competitors but might become so were a small but important part of the merger enforcement landscape.[324] Enforcement gradually evaporated as the Supreme Court came to believe that they involved undue speculation and tended to ignore significant efficiencies that can result from mergers of firms making complementary products.[325]

The critiques of potential competition doctrine were largely valid for the kind of merger analysis that was being performed at the time. An interesting question is whether the tools that are available today are sufficiently improved to justify a new

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320. *See* U.S. DEP'T OF JUST. & FTC, MERGER GUIDELINES (2023), supra note 256.

321. *See* Hovenkamp, *supra* note 242.

322. 3A PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION ¶ 745 (5th ed. 2022), ¶ 745 (on original § 2 of the Clayton Act to pursue predatory pricing).

323. 15 U.S.C. § 14 (2018).

324. For an excellent contemporary survey of the legal and economic questions, see Joseph F. Brodley, *Potential Competition Mergers: A Structural Synthesis*, 87 YALE L.J. 1 (1977). The *Antitrust Law* treatise has devoted an entire chapter to them since its inception. *See* 5 PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION Ch. 11 (4th ed. 2016). The original edition was 5 PHILLIP AREEDA & DONALD TURNER, ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION ch. 11 (1st ed. 1980).

325. Mainly in *United States v. Marine Bancorp.*, 418 U.S. 602, 641–42 (1974) (dismissing complaint after concluding that Government's potential competition theory was "little more than speculation"); *see also* FTC v. Procter & Gamble Co., 386 U.S. 568, 580 (1967) (acknowledging that efficiencies could result from a potential competition merger but rejecting efficiency defense).

attempt. Without addressing that question in any detail, I note only that the techniques for assessing the potential of both losses and public gains are better now than they were in the 1970s.[326] The best approach for the agencies is to develop reliable criteria for assessing them. As is the case with vertical mergers, there may not be all that many potential competition challenges, but there will be some.[327]

Also significant is that more dynamic conceptions of market definition can substantially address the potential competition problem. One is the previously referenced "hypothetical monopolist" test that Justice Douglas suggested in the *El Paso* case.[328] Under that approach market definition considers not only which firms are competitors in the present instant, but who would become competitors in response to a small but significant increase in prices.[329] To the extent that a potential competitor is someone who would likely be in the market in response to a non-cost-justified price increase, a little fine tuning of our concept of market definition may be sufficient to include many mergers that were placed in the "potential competition" category previously. The *El Paso* case took that approach, treating the acquired firm as an actual competitor even though it had made no sales in the target market.[330]

In any event, excessive focus on short run price effects ignores the contribution made by the Clayton Act. An actual, present output reduction or price increase would violate the Sherman Act's prohibitions on combinations that restrain trade. But the real bite of the Clayton Act's probabilistic effects test occurs when the merger's effects reach beyond that. That is, the Clayton Act inquiry into probable effects must consider the longer run where the price changes, cost changes, or elimination of potential competition is likely to be relevant. The hard part is keeping such queries in the realm of the probable, rather than the merely speculative.

This is a place where the Agencies can do some heavy lifting. *First*, they should use Merger Guidelines and related policy statements to marshal the best available economic theory that is both administrable and capable of making sensible predictions. There should be no arbitrary limits on the types of merger partner relationships (horizontal, vertical, nonhorizontal), nor on the nature of the feared competitive harm. The latter includes exclusion as well as collusion.

Second, the Agencies have the advantage because of different statutory causation requirements.[331] Coupled with the Clayton Act's "may be" standard is the government's authorization to "prevent and restrain"[332] antitrust violations, with no

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326. *See* C. Scott Hemphill & Tim Wu, *Nascent Competitors*, 168 UNIV. PA. L. REV. 1879 (2020); Nancy L. Rose & Carl Shapiro, *What Next for the Horizontal Merger Guidelines?*, ANTITRUST, Spring 2022, at 4, 5–11.

327. *See* HERBERT HOVENKAMP, POTENTIAL COMPETITION, ANTITRUST L.J. (forthcoming 2024), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4540413 [https://perma.cc/SG63-KTQ9].

328. *See supra* notes 244–247 and accompanying text.

329. *See* 2B PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION ¶¶ 530a, 561d (5th ed. 2021).

330. *See supra* text accompanying notes 241–249.

331. Herbert Hovenkamp, *Antitrust Harm and Causation*, 99 WASH. UNIV. L. Rev. 787, 836–51 (2021).

332. 15 U.S.C. § 25 (2018).

separate requirement of causation. By contrast, private actions require either actual damage[333] or "threatened loss or damage" caused by an antitrust violation for an injunction.[334]

Third, a sensible policy for assessing anticompetitive effects requires testing and retesting of methodologies and outcomes, which the Agencies are already doing.[335]

Finally, enforcement policy should embrace reasonable probabilities and longer-term effects, even when the immediate harm seems small. Nevertheless, the *type* of harm that the statute embraces is still measured by lower output, higher prices, or less innovation. The probabilistic effects standard is *not* an invitation to open merger enforcement to considerations that have no place in antitrust law, such as mere size, political influence, or other business practices that are best addressed through a different body of law. The probabilistic effects language in the statute changes the causation requirement, but not the definition of harm.

3. The Merger Law's Treatment of Efficiencies and the Single-Market Rule

Mergers often enable post-merger firms to reduce their costs or improve the quality of their product or service offerings. Indeed, many mergers occur in highly competitive markets where the exercise of market power is unlikely. They are profitable, if at all, only because they reduce the firms' costs or enable them to perform some functions better than they did previously. If creation of post-merger efficiencies was not a serious possibility, we could condemn mergers under a per se rule, just as we do for cartels.

There are good reasons why merger policy should take proven efficiencies into account. One difficulty, however, is that recognition of efficiencies is not acknowledged in the text of § 7 of the Clayton Act. The so-called Williamson-Bork "welfare tradeoff" model addressed this issue by assuming a particular merger that in fact led to lower output and higher prices, but that also provided offsetting productive efficiency gains that needed to be balanced.[336]

Fidelity to the statutory text precludes use of the Williamson-Bork model in merger analysis. It assumes an actual injury to competition, measured by lower

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333. 15 U.S.C. § 15 (2018).

334. 15 U.S.C. § 26 (2018).

335. *See* JOHN KWOKA, MERGERS, MERGER CONTROL, AND REMEDIES: A RETROSPECTIVE ANALYSIS OF U.S. POLICY (2015) (explaining and justifying use of merger retrospective studies); Dennis W. Carlton & Mark A. Israel, *Effects of the 2010 Horizontal Merger Guidelines on Merger Review: Based on Ten Years of Practical Experience*, 58 REV. INDUS. ORG. 213 (2021) (less critical of the record than Kwoka but agreeing on importance of retrospective studies). *See also* Samuel N. Weinstein, *Anticompetitive Merger Review*, 56 GA. L. REV. 1057 (2022) (supporting merger retrospective studies).

336. Oliver E. Williamson, *Economies as an Antitrust Defense: The Welfare Tradeoffs*, 58 AM. ECON. REV. 18 (1968); ROBERT H. BORK, THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF 107–15 (1978). For analysis, see Hovenkamp, *Slogans, supra* note 42 and Herbert Hovenkamp & Fiona Scott-Morton, *The Life of Antitrust's Consumer Welfare Model*, U. CHI. STIGLER CTR.: PROMARKET (Apr. 10, 2023), https://www.promarket.org/2023/04/10/the-life-of-antitrusts-consumer-welfare-model/ [https://perma.cc/HUY6-G599].

output and higher prices to consumers, but then it supplies an offsetting efficiency gain whose benefits accrue mainly to the merging firms' owners. The text of § 7 condemns the competitive harm to consumers "in any line of commerce," but says nothing about permitting gains to the merging firms as an offset.

But that is not the only way to look at efficiencies. The Antitrust Agencies' Merger Guidelines ask a second question, which is How much of these efficiency gains are passed on to consumers? An efficiency that lowers a firm's variable costs will usually result in a lower price. As a result, a merger that suggests a price increase when efficiencies are not considered may in fact result in a price that is no higher or even lower after they are considered. Such a merger would also expand output. As a result, it does not "substantially lessen competition" as the statute requires if the lessening is measured by output or price. The 2010 Horizontal Merger Guidelines had been fairly clear on the point. They provided:

> The Agencies will not challenge a merger if cognizable efficiencies are of a character and magnitude such that the merger is not likely to be anticompetitive in any relevant market. To make the requisite determination, the Agencies consider whether cognizable efficiencies likely would be sufficient to reverse the merger's potential to harm customers in the relevant market, e.g., by preventing price increases in that market.[337]

The 2023 Merger Guidelines simply provide that "To successfully rebut evidence that a merger may substantially lessen competition, cognizable efficiencies must be of a nature, magnitude, and likelihood that no substantial lessening of competition is threatened by the merger in any relevant market."[338]

This interpretation of the statute both acknowledges the possibility of offsetting efficiencies but preserves the statute's literal meaning. It is not so much an efficiency "defense" as a showing that the merger does not injure competition in the first place. Econometric tools are available that can aid us in addressing this question.[339] This view is also consistent with the "restraint of trade" standard of § 1 of the Sherman Act. If a joint venture or merger results in prices that are no higher and output that is no lower than prior to the merger, then the merger does not restrain trade either. As noted earlier, Justice Brandeis made that point already in 1931 in *Standard Oil*: not every agreement, even among competitors, results in higher prices or lower output.[340]

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337. UNITED STATES DEPT. OF JUSTICE & FED. TRADE COMM'N, HORIZONTAL MERGER GUIDELINES § 10 (2010) (internal footnote omitted), https://www.justice.gov/atr/horizontal-merger-guidelines-08192010 [https://perma.cc/B3AG-EHZS]. The Guidelines add:

> The greater the potential adverse competitive effect of a merger, the greater must be the cognizable efficiencies, and the more they must be passed through to customers, for the Agencies to conclude that the merger will not have an anticompetitive effect in the relevant market.

338. 2023 Merger Guidelines, *supra* note 256, §3.3.

339. *See* Nocke et al., *supra* note 296, at 1924–25.

340. *See supra* text accompanying notes 90–91 (discussing Standard Oil Co. v. United States 283 U.S. 163, 176 (1931)).

A related issue is what are sometimes called "out of market" efficiencies. Many firms operate in multiple markets, and a merger can have different effects on them. In *United States v. Philadelphia Bank*, the Government had sought to show that the merger harmed competition in a local banking market limited to a four-county area around Philadelphia.[341] The defendants offered in rebuttal that the merger would make the defendant more competitive for the business of larger firms for whom the relevant banking community was much larger.[342] The Supreme Court rejected that argument, noting that the statute condemns mergers where the competitive effects are felt "in any line of commerce," and "in any section of the country."

The Court's statement has come to be called the "single-market" rule, which the statutory text seems to compel: if a merger is anticompetitive "in any line of commerce," or "in any section of the country" that is the end of the matter, and the merger cannot be defended on the basis that it would make the defendant more competitive in a different market.

Quite aside from the statute's clarity on this issue, there are good administrative reasons for adhering to a single-market rule. First, multi-market analysis would require a full assessment of effects in two different markets. Not only that, but the effects would have to be traded against each other in a tractable way. That is, the fact finder would have to quantify harms in the targeted market as well as benefits in the second market in order to determine net harms. This could be very difficult in any case where the imbalance is not immediately clear. For example, in *Philadelphia Bank* it would have required the Court to measure the losses to local businesses from diminished local competition, against gains that might accrue to larger participants in a national market.[343] Further, the tradeoff would not be limited to price effects. In order to do it right we would have to make full comparison of welfare increases in one market as opposed to decreases in a second market. That is to say, we would have to gather information about the size of price increases or decreases in each market, the volume of sales subject to those differences, and the amount of surplus lost or gained on each transaction. That requirement would move enforcement from realistic to fanciful.

By contrast, under the single market rule price/output effects must be predicted ordinally, but they need not be quantified. As a result, the most sensible merger policy is to apply the statute as it is written: net effects in a single market ("any line") must be estimated, taking both increased power and offsetting efficiencies into account in order to determine whether final output will be lower and prices higher in that particular market. That query is difficult enough. If the merger threatens competition in two or more markets, then each one needs to be analyzed separately. If the requisite harm is shown in one, however, the merger should be condemned on that basis. The remedy, of course, may have to be adjusted in accordance with the

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341. 374 U.S. 321, 356–62 (1963).

342. *Id.*; *see also* Brief for Appellees at 21, United States v. Phila. Nat'l Bank, 374 U.S. 321 (1963) (No. 62-83). For a good analysis, see Gregory J. Werden, *Cross-Market Balancing of Competitive Effects: What is the Law, and What Should it Be?*, 43 J. CORP. L. 119, 121–26 (2017). *See also* 4A PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION ¶ 972 (4th ed. 2016) (discussing general problem of offsetting benefits in a second market).

343. *See supra* text accompanying notes 238–240.

scope of the offense. For example, if a merger is found to lessen competition in some geographic areas but not others, divestitures limited to the problem areas might be appropriate. The Clayton Act's remedial provisions are sufficiently flexible to permit such relief.

III. MONOPSONY AND OTHER BUYER-INFLICTED HARMS

Suppliers, including workers, have an equal economic stake in the antitrust laws. The problem of "monopsony," or buy-side competitive harm, mirrors that of monopoly. Nevertheless, in the case law monopsony and related problems of anticompetitive purchasing practices have always been the weaker sibling, generating far fewer decisions, less analysis, and mistaken conclusions. This largely tracks the development in industrial economics. The term "monopsony" was not even invented until 1932, when Joan Robinson introduced it in her *Economics of Imperfect Competition*.[344]

The Supreme Court has decided several antitrust cases involving buyers, but not nearly as many as the ones that implicate sellers. When thinking of monopoly problems, judges and lawyers seem instinctively to address sellers. One example is Justice Gorsuch's opinion for the Court in *NCAA v. Alston*,[345] which involved a buyers' cartel. Justice Gorsuch described the harm as the price fixers' "capacity to reduce output and increase price."[346] A second time he discussed the per se rule as condemning agreements that "so obviously threaten to reduce output and raise price[]" that lengthy analysis is unnecessary.[347] In both cases the "reduce output" portion of his statement was correct. He was dealing with monopsony, however, and the fear was of lower prices (athlete compensation), not higher ones.

A revival of interest in labor markets has provoked a renewed interest in buy-side restraints and monopsony.[348] Further, labor's legal position in antitrust law has shifted dramatically. The great majority of antitrust cases prior to 2010 or so were challenges to restraints imposed by labor organizations such as unions, who are sellers of their labor. The perceived victims were predominantly employers or excluded nonunion groups.[349] For example, antitrust's labor "immunity" applies to

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344. JOAN ROBINSON, THE ECONOMICS OF IMPERFECT COMPETITION 215 (1932) ("It is necessary to find a name for the individual buyer which will correspond to the name *monopolist* for the individual seller. In the following pages an individual buyer is referred to as a *monopsonist*.") (emphasis in original). On the interesting origin of the term in a discussion of classical Greek usage, see Robert J. Thornton, *How Joan Robinson and B.L. Hallward Named Monopsony*, J. ECON. PERSP., Summer 2004, at 257.

345. 141 S. Ct. 2141 (2021).

346. *Id.* at 2155.

347. *Id.* at 2156.

348. *E.g.*, ERIC A. POSNER, HOW ANTITRUST FAILED WORKERS (2021); Brianna L. Alderman & Roger D. Blair, *The Antitrust Victims of Monopsony*, J. ANTITRUST ENF'T (forthcoming April 2023), https://academic.oup.com/antitrust/advance-article-abstract/doi/10.1093/jaenfo/jnad008/7114876#no-access-message [https://perma.cc/2TPH-68WW].

349. The decisions are treated in 1B PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION ¶¶ 255–57 (5th ed. 2021).

workers as potential antitrust defendants.[350] Today, however, the dominant concerns involve labor as victims rather than perpetrators.

The two sections of the Sherman Act are indifferent between monopoly and monopsony. To be sure, the only explicit reference in the Sherman Act is to "monopoly." As noted above, however, the term "monopsony" was not yet invented when the Sherman Act was passed. Both output and input agreements can "restrain trade" under § 1.

In interpreting the Sherman Act's prohibition of contracts "in restraint of trade" the courts looked to the common law.[351] That law treated buyers and sellers more or less identically, and buyers could clearly act in unlawful restraint of trade. For example, in *Goodman v. Henderson*, a pre-Sherman Act decision, the Georgia Supreme Court found an unlawful contract in restraint of trade when the seller of a business agreed to cease buying animal hides and skins in the local area.[352] The restraint in that case was in the agreement not to purchase. Many contracts in restraint of trade at common law were vertical and applied to buyers and sellers alike. For example, the history of resale price maintenance indicates that it was frequently instigated by cartels of retailers who agreed to *purchase* from a supplier only on the condition that the supplier insert resale price maintenance clauses into the contracts with other retailers.[353] Prior to the *Dr. Miles* decision in 1911, these were addressed under the common law of trade restraints, not under the antitrust laws.[354]

The early history of Sherman Act enforcement against buyers is surprisingly robust. The government lost several early decisions, mainly on Commerce Clause grounds, but never because the courts held that the Sherman Act did not apply to buyers. Already in 1898, the Supreme Court considered a government challenge to an association of cattle dealers who acquired cattle on commission and resold them. The challenged agreement forced cattle dealers to accept cattle on consignment exclusively from members.[355] The Court refused to apply the Sherman Act to transactions that did not actually cross a state line.[356] Later that same year, the Supreme Court reached the same result when the defendants were actual buyers rather than commission merchants.[357] While denying relief on jurisdictional grounds, the Court never expressed any doubt that § 1 applies to buyers. In addition, one of the earliest "market share" cartels to be prosecuted was against buyers, where the Supreme Court affirmed the use of the Kansas Antitrust Act. The defendants, four

350. *See* Hovenkamp, *supra* note 168.

351. *See supra* text accompanying notes 47–51.

352. 58 Ga. 567 (1877); *see also* Kellogg v. Larkin, 3 Chand. 133, 1851 WL 1651 (Wis. 1851) (defendant agreed not to purchase wheat in competition with the plaintiff; not in restraint of trade).

353. *E.g.*, John D. Park & Sons Co. v. Nat'l Wholesale Druggists' Ass'n, 50 N.Y.S. 1064 (N.Y. Sup. Ct. 1896) (combination of druggists acting though an association bought goods on condition that supplier not permit them to be sold elsewhere at a lower price); *accord* John D. Park & Sons Co. v. Hartman, 153 F. 24 (6th Cir. 1907).

354. *See* Dr. Miles Medical Co. v. John D. Park & Sons Co., 220 U.S. 373, 406–07 (1911) (discussing common law treatment of RPM).

355. Hopkins v. United States, 171 U.S. 578 (1898).

356. United States v. E.C. Knight, 156 U.S. 1 (1895).

357. Anderson v. United States, 171 U.S. 604 (1898).

wholesale wheat purchasers, agreed that each would purchase an equal share of the available wheat.[358]

The Supreme Court also applied § 1 of the Sherman Act to a boycott orchestrated by buyers in *Eastern States Retail Lumber Dealers' Association v. United States*.[359] The defendants, lumber purchaser-retailers, agreed not to purchase from wholesale suppliers who had also vertically integrated into retailing themselves. Lower federal courts also applied the Sherman Act to condemn exclusive "buying agencies," or arrangements under which purchasers of certain products agreed to let one firm represent them as exclusive agent for their purchases.[360]

Section 1 of the Sherman Act was also the country's first merger statute. Section 7 of the Clayton Act later applied specifically to buyers, making it unlawful to "acquire" the stock or assets of another firm if competition was injured. Early Sherman Act cases did the same thing, making it unlawful for one person to acquire anticompetitively the shares of another person.[361]

Monopolization claims also involved buyers as well as sellers. For example, among the claims against Standard Oil was that Standard as purchaser of railroad freight services obtained "large preferential rates and rebates in many and devious ways over their competitors."[362] Without distinguishing selling and buying activities, the Court condemned a large potpourri of anticompetitive practices, some of which involved Standard acting as purchaser.

Prior to its 1948 decision in *Mandeville Island Farms, Inc. v. American Crystal Sugar Co.*,[363] which condemned a buy-side cartel, the Supreme Court never doubted that buyers and sellers were covered equally by the Sherman Act.[364] While plaintiffs did not win every Sherman Act case involving buyers, the courts never once doubted the proposition that the Sherman Act applied to buyers as well as sellers.

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358. Smiley v. Kansas, 196 U.S. 447 (1905).

359. 234 U.S. 600 (1914); *see also* W. W. Montague & Co. v. Lowry, 193 U.S. 38, 45 (1904) (agreement among tile buyers not to purchase from manufacturers who were not members of a trade association, and who sold at less than list price); United States v. Patten, 226 U.S. 525, 526 (1913) (condemning conspiracy among large cotton buyers to "corner" the market by buying up everything); *cf.* Grenada Lumber Co. v. State of Mississippi, 217 U.S. 433 (1910) (affirming application of state antitrust law to agreement among lumber purchasers not to deal with wholesalers who had vertically integrated into retailing).

360. Wheeler-Stenzel Co. v. Nat'l Window Glass Jobbers' Ass'n., 152 F. 864 (3d Cir. 1907) (condemning agreement by window glass purchasers for use in construction projects that they would purchase exclusively from one supplier); Cont'l Wall Paper Co. v. Lewis Voight & Sons Co., 148 F. 939 (6th Cir. 1906) (wholesale buyers of wallpaper agreed with each other to purchase their entire needs for wallpaper from a particular combination; unlawful under §1).

361. N. Sec. Co. v. United States, 193 U.S. 197, 321–22 (1904) (purchase of the stock of railroads so as to create a combination violated § 1); *see also* Bigelow v. Calumet & Hecla Mining Co., 167 F. 721 (6th Cir. 1909) (one mining company's purchase of the stock of another not an unlawful combination under § 1 when the two firms together accounted for 1/9 of production in the area).

362. Standard Oil of N.J. v. United States, 221 U.S. 1, 33 (1911); *see also* United States v. Am. Tobacco Co., 221 U.S. 106, 156–57 (1911) (anticompetitive purchases of leaf tobacco).

363. 334 U.S. 219 (1948).

364. *Id.*

The Clayton Act is more specific than the Sherman Act about its application to buyers and sellers. Clayton Act § 2's original price "discrimination" provision applied only to sellers. It forbade covered price differences "between different purchasers."[365] The Robinson-Patman Act Amendments to § 2 followed the same general structure but added a § 2(f) on buyer's liability, making it unlawful for someone "knowingly to induce or receive a discrimination in price which is prohibited by this section."[366] Under that section, buyer's liability is derivative of liability for the seller.[367] While rarely used, it is a small piece of the Clayton Act that applies to buyers.

Section 3 of the Clayton Act, which prohibits anticompetitive tying and exclusive dealing, explicitly applies only to sellers. As a result, things like "output contracts"—a kind of exclusive dealing imposed on suppliers—must be considered under the Sherman Act.[368] This problem has been addressed mainly by using both sections of the Sherman Act to reach exclusive dealing and tying, and under standards that are not consistently different from those applied under the Clayton Act.[369]

Section 4 of the Clayton Act, which recognizes treble damages for prevailing plaintiffs, applies to all actionable Sherman and Clayton Act violations, and is indifferent to whether the plaintiff is a buyer, seller, competitor, or someone else.[370] The same thing is true of the private equity provision.[371]

Finally, § 7 of the Clayton Act makes it unlawful for one person to "acquire" the stock or assets of another person where the requisite anticompetitive effects are shown.[372] So the acquisition transaction itself clearly applies to buyers. Of course, the bigger concern with § 7 is the business in which the merger participants are engaged. Historically, the vast majority of merger challenges have been to mergers by sellers in the product market. Nevertheless, the provision itself applies equally to sellers and buyers. Coverage of buy-side mergers is exhibited most recently at this writing in condemnation of a merger of two large publishers on the ground that they suppressed competition for authors.[373] As that decision observed, anticompetitive restriction of competition for authors also led to reduced output in the book market.[374] But the Clayton Act itself requires injury to only one side of the market.

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365. Clayton Act, Pub. L. No. 63-212, § 2, 38 Stat. 730 (1914), later incorporated into 15 U.S.C. § 13 (2018).

366. 15 U.S.C. § 13(f) (2018).

367. Great Atl. & Pac. Tea Co. v. FTC, 440 U.S. 69 (1979); *see also* 13 HERBERT HOVENKAMP, ANTITRUST LAW ¶ 2361 (4th ed. 2020).

368. *See* 11 HERBERT HOVENKAMP, ANTITRUST LAW ¶ 1803 (4th ed. 2019).

369. *E.g.*, United States v. Dentsply Int'l, Inc., 399 F.3d 181 (3d Cir. 2005) (condemning exclusive dealing under § 2 of the Sherman Act).

370. 15 U.S.C. § 15 (2018).

371. 15 U.S.C. § 26 (2018).

372. 15 U.S.C. § 18 (2018).

373. United States v. Bertelsmann SE & Co. KGaA, No. 21-2886-FYP, 2022 WL 16748157 (D.D.C. Nov. 7, 2022). On buy-side mergers generally, see 4A PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION ¶¶ 980–82 (4th ed. 2017).

374. *See supra* text accompanying note 274.

What is the cause of the imbalance in antitrust enforcement of monopsony as opposed to monopoly? First, as noted above, it is not all that different from the imbalance that exists in the field of economics, where most of the attention by far is to monopoly on the selling side. Second, in antitrust enforcement, it is very likely a consequence of myopia or inattentiveness—something that the new focus on labor harms may remedy.[375]

Another probable reason for the imbalance is the "consumer" welfare principle, which has dominated articulations of antitrust policy for at least forty years. Consumers are buyers, and the principle stated in this way suggests that antitrust policy is concerned with anticompetitive practices aimed at buyers, not at sellers. This fact has frequently generated confusion, with questions such as, How can a policy of protecting consumers protect workers as well? Some have suggested renaming the "consumer welfare" model to something like "trading partner" welfare[376] in order to make clear that the protected class is both buyers and sellers.

A related confusion is the fact that the "consumer welfare" model is strongly associated with low prices. By contrast, when the problem involves suppliers, including labor, the concern is with price or wage *suppression*, and the remedy typically results in higher prices or wages paid to them.[377] This invites some people to think that concerns that input prices are anticompetitively low are inconsistent with the consumer welfare model. The key, however, is to focus on output rather than price. Both anticompetitive seller and buyer practices lead to reduced output. In the *Alston* case, Justice Gorsuch articulated a "consumer" welfare principle even as he deployed the Sherman Act against wage suppression that injured players but caused no consumer harm.[378]

An equally erroneous conclusion is that paying higher wages or more money for inputs will result in higher output prices on the consumer side of the market. Here, the answer is more complex. If the low prices paid to workers and other suppliers are a result of anticompetitive suppression, output will go up when this source of monopsony power is removed. Consumer prices will accordingly come down.[379] Nevertheless, not every practice that reduces supply costs is an exercise in monopsony power. Some can simply be competitive cost reductions. For example, if two small retailers with no market power should merge the result may be that they need fewer management personnel—not because they are suppressing management jobs but because there are economies of scale in management. In that case, the cost reduction should yield an increase in output and lower consumer prices.[380] These are fact questions.

The solution to these tangles is to focus on output rather than price. What

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375. Ioana Marinescu & Herbert Hovenkamp, *Anticompetitive Mergers in Labor Markets*, 94 IND. L.J. 1031 (2019); HOVENKAMP, OPENING OF AMERICAN LAW *supra* note 162.

376. *E.g.*, C. Scott Hemphill & Nancy L. Rose, *Mergers that Harm Sellers*, 127 YALE L.J. 2078, 2080 (2018).

377. On the economic details of monopsony, see ROGER D. BLAIR & JEFFREY L. HARRISON, MONOPSONY IN LAW AND ECONOMICS (2d ed. 2010).

378. NCAA v. Alston, 594 U.S. 69, 106 (2021).

379. For a graphic illustration, *see* HOVENKAMP, FEDERAL ANTITRUST POLICY, *supra* note 254, at § 1.2b.

380. *See* Marinescu et al., *supra* note 375, at 1059–60.

anticompetitive suppression of consumer welfare and suppression of wages or other inputs have in common is that they must reduce output below the competitive level. As a result, a clue to distinguishing an anticompetitive buyers' cartel from efficient procurement is the attitude toward output. A buyers' cartel, just as a sellers' cartel, needs to suppress output in order to succeed. By contrast, to the extent a practice reduces costs, it will enable the firm to purchase more rather than less.

IV. The Meaning and Limits of Antitrust Personhood

All violators and victims named in the antitrust statutes are "persons." This includes "every person who shall make a contract" in § 1 of the Sherman Act, and "every person who shall monopolize" in § 2. It is also true of all three substantive sections of the Clayton Act. Section 7 of the Clayton Act makes it unlawful for one "person" to acquire another "person."[381] Section 4 of the Clayton Act provides a damages lawsuit to any "person who shall be injured . . . ."[382]

Following after corporate law since the early nineteenth century,[383] the word "person" is defined by the antitrust laws' glossary provisions to include "corporations and associations existing under or authorized by the . . . laws of any state." That language initially appeared in § 8 of the Sherman Act,[384] and was repeated verbatim in § 1 of the Clayton Act.[385] The statutes do not name biological individuals as "persons" under the antitrust laws, although they are clearly there by implication. For example, both § 1 and § 2 of the Sherman Act make imprisonment possible for criminal antitrust violations, and only natural persons can be imprisoned.

While the issue has not yet arisen in litigation, this definition indicates that artificial intelligence algorithms such as large language models (LLMs) cannot themselves violate the antitrust laws, although the people who wield them can.[386] These products do not satisfy the statutory definition of "person," and only persons can violate the antitrust laws. That could be problematic in situations where AI models can emulate conspiracy on their own, without human conduct or even awareness. For example, suppose that four firms in a concentrated market each use an AI program to set prices so as to maximize their own profits; each may be completely unaware of what the others are doing. However, the four programs readily discover on their own that collusion is the profit-maximizing strategy. In fact, they may even discern that they are not "persons" and thus are not covered by the antitrust laws. The result is that each sets a collusive price, with their individual operators perhaps even unaware that collusion is occurring.

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381. 15 U.S.C. § 18 (2018).

382. 15 U.S.C. § 15. Inexplicably, the private equity provision grants the right to seek an injunction to any "person, firm, corporation, or association," even though the extra words are unnecessary. 15 U.S.C. § 26.

383. Herbert Hovenkamp, *The Classical Corporation in American Legal Thought*, 76 GEO. L.J. 1593, 1597–1601 (1988).

384. Now at 15 U.S.C. § 7 (2018), (July 2, 1890, ch. 647, § 8, 26 Stat. 210).

385. 15 U.S.C. § 12 (2018).

386. *See* Mariateresa Maggiolino, *Antitrust, Pricing Algorithms and the Liable Humans Behind Them*, 71 GRUR INT'L 1121 (Dec. 2022), https://academic.oup.com/grurint/article-abstract/71/12/1121/6782945 [https://perma.cc/3KYN-V44C].

Although the antitrust personhood provision has been enacted twice, the courts rarely cite it, even to address the one question where it is most relevant: namely, when do two entities within the same organization have "conspiratorial capacity." For example, Chevrolet, Inc. and Buick, Inc. are both wholly owned subsidiaries of General Motors. If the two should agree on a price for comparable models of their cars, is that a price fixing agreement under § 1 of the Sherman Act, which could be a criminal offense? Or is it simply unilateral price setting by a single firm, which is virtually always per se legal? Today, the answer to that question is clear: they are a single actor. The Supreme Court's decision in *Copperweld Corp. v. Independence Tube Corp.*,[387] nearly a century after the Sherman Act was passed, reached the correct conclusion, but with no more than a footnote mention of the statutory personhood definition, and that was in dicta.[388]

Why the courts cite the personhood provisions so rarely, even though most decisions are consistent with it, is a mystery. Is it because the statutes are titled "Definitions," and thus people presume that they do not really enact anything? That seems doubtful, particularly since liability can turn on the question of whether or not an actor is a statutory "person."

The definitional provisions, which define "person" to include "corporations and associations existing under or authorized by the laws . . . of any State" permit each state to decide on the range of interests or assets that can count as a person. The term "association" means that unincorporated businesses, such as partnerships or unincorporated trade associations, can also be treated as a single person, provided that they are "authorized" by state law. Beyond that, the statute does not say very much about who counts as an association. Presumably, if it wished, a state could authorize an association of Uber drivers and permit them to operate as a single "person" under the antitrust laws.[389] That might give them something equivalent to labor immunity[390] but for the fact that each is conducting its own separate business.

Holding companies, or corporations that own the shares of other corporations, provoked some controversy prior to the Supreme Court's *Copperweld* decision. The Court held that an alleged "agreement" between a parent corporation and a wholly owned subsidiary was not covered by § 1 of the Sherman Act because the two entities were a single legal "person." The first holding companies were created after New Jersey amended its corporate statute in 1888 to permit them.[391] Other states followed soon thereafter. For example, the New York statute of 1892 provided that:

> Any stock corporation, domestic or foreign, now existing or hereafter organized, except monied corporations, may purchase, acquire, hold and

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387. 467 U.S. 752 (1984).

388. In a footnote the Court acknowledged the existence of the statute, but only as dicta noting that a corporation cannot conspire with its own officers. *Id.* at 769 n.15.

389. *See* Herbert Hovenkamp, *The Power of Antitrust Personhood*, 25 UNIV. PA. BUS. L. 891 (2023).

390. 15 U.S.C. § 17 (2018) (antitrust labor immunity).

391. 1888 N.J. Laws 385.

> dispose of the stocks, bonds and other evidences of indebtedness of any corporation, domestic or foreign . . . .[392]

Within a few decades nearly every state amended its corporate law so as to authorize holding companies.[393]

In *Northern Securities Co. v. United States*,[394] the Supreme Court condemned a merger that was formed by the creation of a holding company under New Jersey law.[395] The Court did not dispute the defendants' argument that the holding company was lawful under state law.[396] But that did not relieve it of an obligation to comply with federal law, and Congress "may protect the freedom of interstate commerce by any means that are appropriate . . . ."[397]

Both parts of the Court's position were effectively enacted into § 7 of the Clayton Act ten years later. *First*, the statute made it unlawful for one corporation to acquire another corporation when the requisite anticompetitive effects were shown.[398] *Second*, however, it expressly provided that nothing shall prevent a corporation "from owning and holding all or a part of the stock of . . . subsidiary corporations" as long as doing so did not substantially lessen competition.[399]

Prior to *Copperweld*, the Supreme Court had found conspiratorial capacity in other situations involving parent corporations and subsidiaries. In *United States v. Yellow Cab Co.*,[400] the Court not only ignored the antitrust corporate personhood statute but directly contradicted it. Checker, an automobile manufacturer specializing in taxicabs, acquired several taxicab operating companies in various cities around the country. The government alleged that these acquisitions amounted to a restraint of trade in violation of the Sherman Act. Section 7 of the Clayton Act had not yet been amended so as to cover vertical mergers, but the Supreme Court had long since held in *Northern Securities* that a merger between two corporations could violate § 1 of the Sherman Act. Why the government did not go that route is unclear. The Court in any event agreed with the government that a restraint of trade "may result as readily from a conspiracy among those who are affiliated or integrated under common ownership as from a conspiracy among those who are otherwise independent."[401]

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392. 1892 N.Y. Laws 1834.

393. JAMES C. BONBRIGHT & GARDINER C. MEANS, THE HOLDING COMPANY: ITS PUBLIC SIGNIFICANCE AND ITS REGULATION 57 (1932) (concluding that nearly every state had a holding company provision). *See generally* Herbert Hovenkamp, *The Classical Corporation in American Legal Thought*, 76 GEO. L.J. 1593, 1669–72 (1988).

394. 193 U.S. 197 (1904).

395. *Id.*

396. *Id.* at 332–33.

397. *Id.* at 334; *see also* Bigelow v. Calumet & Hecla Min. Co., 155 F. 869, 875 (W.D. Mich. 1907) (combination of mining companies through a holding company could be an attempt to monopolize under state law).

398. 15 U.S.C. § 18 (2018).

399. *Id.*

400. 332 U.S. 218 (1947); *see also* Kiefer-Stewart Co. v. Joseph E. Seagram & Sons, Inc., 340 U.S. 211, 215 (1951) (parent and two subsidiaries could conspire if they "hold themselves out as competitors").

401. Yellow Cab Co., 332 U.S. at 227.

Those dicta make no sense as a matter of either corporate or antitrust law and are in direct conflict with Congress's definition of a person. The Court subsequently explained that Yellow Cab's acquisitions of the various local operating companies alleged to be co-conspirators may have been unlawful as an attempt to exclude rival taxicab companies from the municipal markets.[402]

The decision that exposed the limits of the antitrust definition of "person" was *Timken Roller Bearing Co. v. United States*.[403] The Court held that conspiratorial capacity existed when a parent firm owned only one-third of its subsidiary. The statutory definition of an antitrust "person" simply did not address the problem of partial ownership by multiple and potentially competing entities. *Timken* and the partially owned subsidiary are one situation, but there are others in which corporate status links entities that are not fully owned in common but who have separate businesses.

Prominent among these is the "incorporated cartel." Supreme Court decisions include *Terminal Railroad*,[404] *Chicago Board of Trade*,[405] *Associated Press*,[406] *Fashion Originators' Guild*,[407] *Sealy*,[408] and *Topco*,[409] to name a few.[410] While the facts differ, each of these cases involves incorporated organizations whose shareholders or other beneficial owners were separate businesses organized into a joint venture, trade, or professional association for the benefit of individual members. In most cases, the plaintiffs were not challenging the existence of the incorporated association, whose legality under state law was presumably unquestioned. Rather, the problem was that the shareholders were engaged in collusive activity for the benefit of their own separate businesses.

For example, the defendant in the oldest of these was the Terminal Railroad Association, a Missouri holding company whose shareholders were themselves corporations or persons owning railroads, terminal and storages facilities, and bridges. The government suit was a challenge to their attempt to exclude rival railroads and other shippers from access to railroad and terminal services at an essential point of passage across the Mississippi River.[411] Without ever mentioning the question of conspiratorial capacity, the Court applied § 1 of the Sherman Act. From that point, the Supreme Court has held consistently, and without discussion of

402. *Id.* at 226–27. The Court remanded on that issue. The lower court declined to find the requisite intent and entered judgment for the defendants, which the Court affirmed. United States v. Yellow Cab Co., 338 U.S. 338 (1949).

403. 341 U.S. 593 (1951).

404. United States v. Terminal R.R. Ass'n of St. Louis, 224 U.S. 383 (1912).

405. Bd. of Trade of Chi. v. United States, 246 U.S. 231 (1918).

406. Associated Press v. United States, 326 U.S. 1 (1945).

407. Fashion Originators' Guild of Am., Inc. v. FTC, 312 U.S. 457 (1941).

408. United States v. Sealy Inc., 388 U.S. 350 (1967).

409. United States v. Topco Associates, Inc., 405 U.S. 596 (1972).

410. *Cf.* United States v. Trans-Missouri Freight Ass'n., 166 U.S. 290 (1897); United States v. Joint Traffic Ass'n., 171 U.S. 505 (1898). Both associations were condemned as cartels, but the facts do not indicate whether they were incorporated or had some other form that was authorized by state law. For further discussion, see Hovenkamp, *The Power of Antitrust*, *supra* note 8.

411. United States v. Terminal R.R. Ass'n of St. Louis, 224 U.S. 383, 391 (noting that the association was a Missouri corporation).

the issue, that a cartel of firms with distinct businesses do not insulate themselves from § 1 by incorporating. As a matter of state corporate law, the cartel activities could have been carried out entirely within shareholder meetings and considered unilateral, but the shareholders' separate business interests rendered them conspiratorial.

A related issue involves durable contractual relationships. Entities bound together by no more than a contract are not a single "person" under the statutory definitions. That was the Supreme Court's holding in *American Needle, Inc. v. NFL*,[412] as well as lower court decisions concluding that structures such as business franchises are not single persons. A franchisor and franchisee, unlike a parent and wholly owned subsidiary, are not part of a single person because their relationship is expressed in a contract.[413] This outcome should also be plain from the statute governing antitrust personhood. Two business entities linked only by a contract are not a single person. If they were, we would have obliterated § 1 of the Sherman Act. This is true even though for most purposes a franchise system can replicate the functions of a wholly owned system of manufacturer and retail stores.[414]

In sum, while the courts do not cite the statutory definition of a single person and its relationship to corporate status all that often, case outcomes are almost always consistent with it.

V. ANTITRUST REMEDIES: STANDING, CAUSATION, AND ANTITRUST INJURY

Antitrust remedies are addressed in the Clayton Act in three different provisions, which superseded previous provisions in the Sherman Act.[415] First is the damages statute, § 4 of the Clayton Act.[416] Two provisions authorize equity relief: one in actions by the Justice Department[417] and another in private plaintiff lawsuits.[418] The principal substantive differences between these two provisions is that the one governing private suits requires proof of causation and threatened harm, while the public provision does not.[419] When the United States sues for damages for injuries to itself, however, it must prove causation and the amount of damages.[420]

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412. 560 U.S. 183 (2015).

413. *E.g.*, Arrington v. Burger King Worldwide, Inc., 47 F.4th 1247, 1256 (11th Cir. 2022) (franchisor and its franchisees are distinct entities with conspiratorial capacity). The courts are not completely in agreement. *See* Williams v. I.B. Fischer Nevada, 999 F.2d 445 (9th Cir. 1993) (franchisor and franchisee were a common enterprise and thus a single entity under *Copperweld*).

414. *E.g.*, Paul H. Rubin, *The Theory of the Firm and the Structure of the Franchise Contract*, 21 J.L. & ECON. 223 (1978).

415. Section 4 of the original Sherman Act controlled government equity relief and was drafted in such a way that it could be applied to private plaintiffs as well. *See* Straus v. Am. Publishers' Assn., 231 U.S. 222 (1913) (private right to obtain an injunction existed under Sherman Act). In addition, the original Sherman Act also permitted private parties to seek injunctions against striking labor unions. *E.g.*, Loewe v. Lawlor, 208 U.S. 274 (1908) (granting private firm damages and an injunction under Sherman Act in labor dispute).

416. 15 U.S.C. § 15 (2018).

417. 15 U.S.C. § 25 (2018).

418. 15 U.S.C. § 26 (2018).

419. *See* Hovenkamp, *supra* note 331 (analyzing these provisions).

420. 15 U.S.C. § 15(a) (2018).

One set of decisional rules that strains the plain language of the antitrust statutes is the various doctrines of antitrust standing that have served to limit private plaintiff suits. The antitrust damages provision is very broad:

> [A]ny person who shall be injured in his business or property by reason of anything forbidden in the antitrust laws may sue . . . and shall recover threefold the damages by him sustained . . . .[421]

Nevertheless, the Supreme Court has denied antitrust standing to numerous plaintiffs who seem to be verbally covered by it. Some of these exclusions are justified by the Act's own definition of "person."[422] For example, shareholders and corporate officers are properly denied standing to sue their corporations because they are part of the corporation they are suing.[423] Others, whether properly or not, are denied standing because their injuries are thought to be "duplicative" of someone else's injuries.[424] These have included creditors, taxing authorities, landlords of victims,[425] and associations suing on behalf of their members.[426]

Another class of private plaintiffs are denied standing under § 4 because of difficulties in proving causation or damages. Such denials are also justified by the statute, which creates damages actions only for persons whose injury is "by reason of" the antitrust violation and require proof of damages "by him sustained" by that violation. That is, the private action provision requires proof of causation, and not every plaintiff is able to provide it.

A problematic question here is whether denial of standing on grounds of causation should be applied to an entire class of plaintiffs simply by generic assumption, or is more case-specific treatment required? For example, the rule is more or less categorical that terminated employees cannot sue for antitrust violations that occur in product markets.[427] Granted, causation may be harder to trace in such situations, but as a basic principle a restraint that reduces output in a product market also has harmful consequences in the labor market.[428] For example, a product market cartel that reduces product market output by, say, twenty-five percent ordinarily leads to a roughly comparable loss of jobs in the manufacture or supply of that product. Isn't an employee who loses her job to such cutbacks someone "injured in [her] business or property by reason of anything forbidden in the antitrust laws"?[429] To be sure,

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421. 15 U.S.C. § 15 (2018).

422. *See supra* text accompanying notes 381–414.

423. *See* 2A PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION ¶ 353(d)–(e) (5th ed. 2021) (distinguishing shareholder suits and shareholder derivative actions).

424. *E.g.*, Blue Shield of Virginia v. McCready, 457 U.S. 465, 474 (1982) (granting standing but citing risk of duplicative recovery as a reason for denying it); Illinois Brick v. Illinois, 431 U.S. 720, 730 (1977) (citing risk of duplicative recovery).

425. *See* 2A PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION ¶¶ 352–53 (5th ed. 2021).

426. *Id.* ¶ 354.

427. *Id.* ¶ 352.

428. *See* Hovenkamp, *supra* note 168 (arguing that rules denying standing to employees for lawsuits in labor markets are overbroad).

429. 15 U.S.C. § 15 (2018).

causation might be hard to show, but that is true for any number of cases, and we ordinarily give the plaintiff a chance to do so rather than eliminating her claim categorically.[430]

The area of federal antitrust law that has deviated most significantly from the statutory text is the "indirect purchaser" rule, which the Court created in 1977[431] and affirmed in *Apple Inc. v. Pepper* in 2019.[432] Under that rule, plaintiffs who purchased directly from an unlawful cartel or monopolist are entitled to collect the entire amount of overcharge as damages, even if they "passed on" a significant portion by charging higher prices to their own customers.[433] Accordingly, the second and all subsequent purchasers in line are denied damages altogether, even if in fact they ended up absorbing most of them. One serious statutory problem with the indirect purchaser rule is that it bars damages claims even by plaintiffs who can prove causation and damages.

The indirect purchaser rule has provoked resistance. Roughly one-half of state antitrust regimes reject it, either statutorily or by judicial decision.[434] The rule itself is verbally inconsistent with the Clayton Act's provision that "any person" who can prove damages ought to be permitted to receive them. Two general classes of justifications have been offered for the *Illinois Brick* rule. The first is that allowing passed-on damages can break the cause of action into many tiny pieces, and as a result we get more efficient enforcement if we give damages only to direct purchasers. Whether that is factually true is highly uncertain, but in any event, it conflicts with the statutory language.[435]

The second rationale rests on the difficulty of computing pass-on. Here, the answer is that most of the time expert testimony in indirect purchaser actions can avoid the problem. Within economics, computation of pass-on is governed by the theory of shifting and incidence, which is an important component in tax policy.[436] The question is simply: Who ends up paying a particular tax, the person upon whom it is nominally imposed, or someone down the line? For example, if we want to tax

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430. *See* 2A PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION ¶¶ 338–39 (5th ed. 2021).

431. Illinois Brick Co. v. Illinois, 431 U.S. 720 (1977).

432. 139 S. Ct. 1514 (2019).

433. Developed originally in Hanover Shoe, Inc. v. United Shoe Mach. Corp., 392 U.S. 481 (1968). On the logic, see *id.* at 488 n.6.

434. *See* 14 PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION ¶ 2412(d) (4th ed. 2020) (examining state antitrust cases that reject indirect purchaser rule).

435. The literature on the question of whether the indirect rule provides greater deterrence is divided. *See, e.g.*, Barak D. Richman & Christopher R. Murray, *Rebuilding* Illinois Brick*: A Functionalist Approach to the Indirect Purchaser Rule*, 81 S. CAL. L. REV. 69 (2007) (indirect purchaser rule is formalistic and leads to underdeterrence); Thomas A. Lambert, *Tweaking Antitrust's Business Model*, 85 TEX. L. REV. 153, 187 (2006) (indirect purchaser rule optimizes deterrence); *see also* Mark A. Lemley & Christopher R. Leslie, *Antitrust Arbitration and* Illinois Brick, 100 IOWA L. REV. 2115 (2015) (indirect purchaser rule underdeterrence exacerbated by harsh class action rules).

436. The theory was developed in works such as EDWIN R.A. SELIGMAN, THE SHIFTING AND INCIDENCE OF TAXATION (5th ed. Columbia Univ. Press rev. ed. 1927) (1899) and Edwin R.A. Seligman, *The Taxation of Corporations. III.*, 5 POL. SCI. Q. 636, 671–75 (1890).

oil refiners as discipline for high gasoline markups, we might do little more than raise the price of gasoline at the retail level. The refiners will pass the high cost down to their own distributors, and from there to retail gasoline stations, and from there to consumers. Assuming the tax is on a variable cost, pass-on can be computed if one knows the elasticities of supply and demand facing each player. The calculations are technical but at least arguably within the reach of an expert economist.[437]

In any event, today, methodologies exist for computing indirect purchaser damages that do not require the technical computation of passing on. For example, the "yardstick" method enables estimates of indirect purchaser damages by comparing prices in the violation market against prices in another market where the violation is not occurring. To give a very simple example: Suppose that two markets include a similar good and we can observe a price of $10 in one, but $14 in another one that is subject of collusion. Suppose that we also observe that the second purchasers down the line are paying $13 in the competitive market and $16 in the cartelized market. That tells us that direct purchasers in the cartelized market absorbed $1 of the monopoly overcharge and passed $3 on to their customers. So, in this simple case, direct purchasers would be entitled to $1 in net damages, while the indirect purchasers would get the remaining $3.

The Court and economists sometimes describe the two methodologies as "top down," which seeks to measure the pass on directly,[438] and "bottom across," which uses the yardstick methodology.[439] To be sure, not every application of such a methodology may hold up, but expert methodologies for computing damages are frequently complicated. They are individually testable under *Daubert* standards for assessing expert testimony.[440]

Given the statutory language, a better way to assess indirect purchaser claims is to test expert methodologies under *Daubert*, one case at a time, rather than dismiss them categorically under *Illinois Brick*. Because *Daubert* is procedural, it applies to damages testimony in federal courts even when the substantive cause of action is under a state antitrust statute that permits indirect purchaser lawsuits. As a result, we already have a database of case law and litigation experience with these methodologies. They have become invaluable in damages actions in the pharmaceutical industry, where the injured plaintiffs are often indirect purchasers.[441]

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437. On the relevant mathematics, see William M. Landes & Richard A. Posner, *Should Indirect Purchasers Have Standing to Sue Under the Antitrust Laws? An Economic Analysis of the Rule of* Illinois Brick, 46 U. CHI. L. REV. 602, 615–21 (1979).

438. *E.g.,* Landes et al., *supra* note 437.

439. *In re* Cardizem CD Antitrust Litig., 200 F.R.D. 326, 344 (E.D. Mich. 2001) (describing the two methods); *In re* Asacol Antitrust Litig., No. 15-12730-DJC, 2017 WL 53695, at *3 (D. Mass. Jan. 4, 2017) (same); *see In re* Relafen Antitrust Litig., 221 F.R.D. 260, 282 (D. Mass. 2004) (discussing the method for purposes of class action indirect purchaser claims).

440. *See* Daubert v. Merrell Dow Pharm., Inc., 509 U.S. 579 (1993).

441. *See, e.g.*, *In re* Namenda Indirect Purchaser Antitrust Litig., 338 F.R.D. 527 (S.D.N.Y. 2021); *In re* Flonase Antitrust Litig., 284 F.R.D. 207, 232–33 (E.D. Pa. 2012) (common proof requirement met for indirect purchaser class action); *In re* Lestrin 24 FE Antitrust Litig., 410 F.Supp.3d 352 (D.R.I. 2019); *In re* Niaspan Antitrust Litig., 464 F.Supp.3d 678 (E.D. Pa. 2020) (expert's report sufficient to show injury in indirect purchaser case but failed to show

They are also much more consistent with the language of the statute, which requires causation, a question of fact, and contemplates reasonable mechanisms for proving it.

Another doctrine of standing that is easier to justify is "antitrust injury," which requires that the nature of the plaintiff's injury be related to the purpose of antitrust. The antitrust injury rule operates much as the law of proximate cause in tort law—more aptly named "legal cause" in the Restatement of Torts.[442] The doctrine was invented and named by liberal, pro-enforcement Justice Thurgood Marshall in *Brunswick Corp. v. Pueblo Bowl-O-Mat Inc*.[443] The plaintiff, owner of an independent bowling alley, sued Brunswick for acquiring the plaintiff's principal competitor. The theory of the complaint was that the plaintiff could have been a dominant firm if its rival had languished, but after the acquisition, Brunswick planned to pour substantial funds into the rival to rehabilitate it. The plaintiff's damages were "designed to provide them with the profits they would have realized had competition been reduced."[444]

The plaintiff's harm was clearly "caused" by the merger, but § 4 of the Clayton Act requires more than that. It grants damages to a person injured "by reason of anything forbidden in the antitrust laws." Here, the point of merger policy is not to prohibit firms from rejuvenating acquired assets, which makes a market more rather than less competitive.

VI. Extraterritorial Effects

Section 1 of the Sherman Act reaches agreements that restrain "trade or commerce *among* the several States or *with* foreign nations . . . ."[445] Section 2 reaches those who shall monopolize "any part of the trade or commerce among the several States, or with foreign nations . . . ."[446] As a result, some extraterritorial effects are explicitly included in statutory coverage, provided that the trade that is restrained or monopolized is "with foreign nations." The word "with" in the statute means that at least one side of the transaction must be domestic. It is not equivalent to "among" the several states, which applies to domestic conduct. For example, the Sherman Act would not reach a purely foreign transaction—say, a sale by a German cartel to a French buyer—unless there was an impact in the United States.

This interpretation is not consistent with the earliest Sherman Act cases on extraterritorial reach. In the Supreme Court's 1909 decision in *American Banana Co. v. United Fruit Co.*,[447] Justice Holmes adopted the traditional *lex loci* choice of law rule that "the character of an act as lawful or unlawful must be determined wholly by

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non-individualized methodology for ascertaining damages across the class, or that variations in state law did not defeat class action predominance requirement).

442. Restatement (Second) Torts § 9 (1965); Restatement (Third) Torts § 6 (Tentative Draft, 2022).

443. 429 U.S. 477 (1977).

444. *Id.* at 488.

445. 15 U.S.C. § 1 (2018) (emphasis added).

446. 15 U.S.C. § 18 (2018).

447. 213 U.S. 347 (1909).

the law of the country where the act is done."[448] The Supreme Court soon pushed back on that conclusion. First, it held in 1911 that a worldwide market division scheme that included agreements with British producers was reachable.[449] Then, in 1913, it held that the Sherman Act reached a railroad and shipping cartel operating in United States and Canadian ports, provided that some of the harm accrued in the United States.[450] The Court concluded that if the "control" would be exercised over transportation in the United States, it was within the reach of the antitrust laws.[451]

Judge Hand decisively rejected the *American Banana* approach in *United States v. Aluminum Co.*, (*Alcoa*),[452] which read an "effects" test into the extraterritorial reach of the Sherman Act. The Supreme Court subsequently adopted it,[453] concluding that the defendant's activities were within jurisdictional reach because they "had an impact within the United States and upon its foreign trade."[454]

One important feature of the foreign commerce clauses in the Sherman Act is that commerce is a two-way street. Literally, commerce "with foreign nations" could include trade moving both into and out of the United States. That raised the possibility that foreign plaintiffs might invoke United States antitrust law for harms that originated in the United States but had an impact elsewhere. For example, that might occur if a domestic cartel in the United States sold at higher prices into Europe and European purchasers sued.[455]

Congress responded with the Foreign Trade Antitrust Improvements Act,[456] whose cumbersome language mainly ensures that the federal antitrust laws do not protect foreign plaintiffs who are suing for harms that occur abroad. Under it, the Court denied a Sherman Act claim by Australian pig farmers who purchased vitamins from a worldwide cartel that had some American members.[457]

In sharp contrast to the Sherman Act, the jurisdictional terms in the Clayton Act do not embrace foreign trade at all. Sections 2 (price discrimination) and 3 (tying/exclusive dealing) have no stated foreign application and are further limited to goods sold "for use, consumption, or resale" within the United States or its territories.[458] Section 7 reaches mergers that cause harm to commerce "in any section

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448. *Id.* at 356.

449. United States v. American Tobacco Co., 221 U.S. 106, 170–72, 182, 184 (1911).

450. United States v. Pacific & Arctic Ry. & Navigation Co., 228 U.S. 87 (1913).

451. *Id.* at 105–06.

452. 148 F.2d 416 (2d Cir. 1945).

453. Continental Ore Co. v. Union Carbide & Carbon Corp., 370 U.S. 690 (1962).

454. *Id.* at 705.

455. *E.g.*, F. Hoffman-La Roche, Ltd. v. Empagran S.A., 542 U.S. 155 (2004) (rejecting claim of foreign plaintiffs with foreign injuries).

456. Foreign Trade Antitrust Improvements Act of 1982, Pub. L. No. 97–290, § 401, 96 Stat. 1233, 1246–47 (1982) (codified as amended at various sections of 12, 15, and 30 U.S.C.). The Act recognizes Sherman Act liability for conduct having an effect within the United States but limits liability for conduct whose effects are felt abroad. For comprehensive coverage of these limitations, see 1B PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION (5th ed. 2020); PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION ¶ 272 (5th ed. 2021).

457. *E.g.*, F. Hoffman-La Roche, Ltd., 542 U.S. 155.

458. 15 U.S.C. §§ 13–14 (2018).

of the country,"[459] with no mention of foreign commerce. One important consequence of these words is that coverage of the statute is limited to mergers that cause harm in some part of the United States. In and of itself, that does not necessarily limit coverage to mergers that occur in the United States. That is, § 7 might imply an "effects" test similar to the one that Judge Hand created for the Sherman Act. For example, if two German firms who sell a great deal of product into the United States should merge, that acquisition might be thought unlawful if it caused higher prices inside the United States.[460]

The Clayton Act must also confront an important canon of statutory construction, however. "Absent clearly expressed congressional intent to the contrary, federal laws will be construed to have only domestic application."[461] The only language in § 7 governing geographic reach is the "section of the country" language, which indicates an intent to govern domestic harms. The statute says nothing about the location of the transaction or the location of the injury. It has no equivalent of the Sherman Act's declaration covering "commerce . . . with foreign nations."[462] To be sure, one can envision exceptions where a firm with extensive domestic operations engaged in an unlawful acquisition abroad, and that acquisition led to higher prices domestically.[463] Short of that, however, a plain reading of the Clayton Act indicates no "clearly expressed congressional intent" to give the merger statute an extraterritorial reach. That is equally true of the other Clayton Act provisions. Of course, mergers remain reachable under § 1 of the Sherman Act, which does apply to conduct abroad that causes domestic harm.

CONCLUSION

Much of antitrust today begins with an interpretive bias that the antitrust statutes are little more than a slogan, or "Magna Carta of free enterprise." Given their brevity and breadth, that reaction is understandable. In fact, however, an antitrust "textualist" could develop a coherent and reasonably comprehensive antitrust policy simply by using the natural meaning of the statutory text, the forensic tools whose use they imply, and established rules of statutory interpretation.

Relying on the statutes themselves could help us coalesce around a goal for antitrust of seeking out restraints that reduce market output and raise price (or suppress input prices) anticompetitively. It should also help to clear up any confusion about the techniques we use to evaluate mergers under a probabilistic effects test, and also to determine where certain antitrust doctrines, such as the indirect purchaser rule, have gone wrong. In cases involving intra-enterprise conspiracy, it could have

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459. 15 U.S.C. § 18 (2018).

460. *See, e.g.*, Institut Merieux S.A., 5 Trade Reg. Rep. (CCH) ¶ 22,779 (Jan. 17, 1990) (consent decree).

461. RJR Nabisco, Inc. v. European Community, 579 U.S. 325, 335 (2016); *see also* Morrison v. National Australia Bank, Ltd., 561 U.S. 247 (2010) (securities statutes); Microsoft Corp. v. AT & T Corp., 550 U.S. 437 (2007) (Patent Act).

462. 15 U.S.C. § 1.

463. *See* RJR Nabisco, Inc., 579 U.S. at 340–44 (offering analogous examples in the context of the Racketeer Influenced and Corrupt Organizations Act (RICO)).

aided the courts in much quicker resolution had they only bothered to look. Go first to the statute.