Worker Welfare and Antitrust

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The field of antitrust and labor has gone through a profound change in orientation. For the great bulk of its history, labor was viewed by antitrust enforcers as a competitive threat. The debate over antitrust and labor was framed around whether there should be a labor "immunity" from the antitrust laws. In just the last decade, however, the orientation has flipped. Most new writing views labor as a target of anticompetitive restraints imposed by employers. Antitrust is increasingly concerned with protecting labor rather than challenging its conduct.

Antitrust interest in labor markets is properly focused on two things. The smaller concern is the impact of anticompetitive restraints in the labor market, such as anti-poaching agreements and noncompete covenants. While antitrust enforcement in this area is critically important, these restraints cover only a portion of the employment market. The bigger labor interest is in output-reducing restraints in product markets, and here antitrust policy has unfortunately had little to contribute. The demand for labor is derivative of product-market demand. If firms do not produce goods, workers do not work. Because most labor is a variable cost, the demand for employment varies with product output. As a result, when antitrust pursues a goal of higher output in product markets, it benefits labor and consumers alike.

Both antitrust's neoliberal Right and its progressive Left have advocated policies that are harmful to labor. The Right did so by developing a cynical vision of "consumer welfare" that incorporated producer profits into the definition and advocated for lower output in product markets. The Left has done the same thing with its hostility to large firms, even when firm size is dictated by scale economies or network effects, and its protection of small business.

INTRODUCTION

The history of antitrust law and labor has not been pretty. The Sherman Act[1] was passed at a time when the labor movement was feared as much as it was admired.[2] Oliver Wendell Holmes,

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1 Ch. 647, 26 Stat. 209 (1890).

2 *See, e.g.*, JOHN MITCHELL, ORGANIZED LABOR: ITS PROBLEMS, PURPOSES AND IDEALS AND THE PRESENT AND FUTURE OF AMERICAN WAGE EARNERS 186–94, 299–301 (1903); James A. Emery, *Labor Organizations and the Sherman Law*, 20 J. POL. ECON. 599, 601–02 (1912); Richard J. Hinton, *American Labor Organizations*, 140 N. AM. REV. 48, 56–59 (1885). For a somewhat more sympathetic retrospective, see generally SOLOMON BLUM, LABOR ECONOMICS (Roswell C. McCrea ed., 1925).

Jr., captured the sentiment in his 1897 address to the Boston University Law School, five years before he was appointed to the Supreme Court.[3] "When socialism first began to be talked about," he observed, "the comfortable classes of the community were a good deal frightened."[4] He suspected that this fear drove judicial attitudes about the working class in both England and the United States.[5] The public at the time was divided on the issue of how antitrust policy should address organized labor.

After lengthy debate, the Sherman Act passed in 1890, one vote short of unanimity but without an explicit labor immunity. Senator John Sherman favored immunity and actually drafted proposed language to that effect.[6] Some Progressives argued that Congress really intended to include an immunity, or that it was implied, but neither the text nor legislative history supports that view.[7] In any event, Senator Sherman's unsuccessful attempt at an amendment reveals his own belief that immunizing language would have been necessary.

The consensus among prominent antitrust scholars of the day was that the Act was intended to treat combinations of capital and combinations of labor in the same way.[8] Arthur J. Eddy, one

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3 *See generally* Oliver Wendell Holmes, Jr., *The Path of the Law*, 10 HARV. L. REV. 457 (1897).

4 *Id.* at 467.

5 *Id.*

6 Senator John Sherman proposed that "this act shall not be construed to apply to any arrangements, agreements, or combinations between laborers." 21 CONG. REC. S2612 (daily ed. Mar. 25, 1890) (text of proposed amendment). That language had been approved on a voice vote but did not survive the subsequent Senate markup. *Id.* One interesting account of the legislative history, including some consideration of the potential for laborers to be antitrust plaintiffs, is Peter R. Dickson & Philippa K. Wells, *The Dubious Origins of the Sherman Antitrust Act: The Mouse That Roared*, 20 J. PUB. POL'Y & MKTG. 3, 9 (2001) (describing Mississippi Democratic Senator James George's unsuccessful efforts to include farmer and laborer class actions against trusts).

7 Samuel Gompers, *The Hatters' Case. The Sherman Law—Amend It or End It*, 17 AM. FEDERATIONIST 197, 199, 202–03 (1910); *see also* EDWARD BERMAN, LABOR AND THE SHERMAN ACT 3–51 (1930). *See generally* Louis B. Boudin, *The Sherman Act and Labor Disputes: I*, 39 COLUM. L. REV. 1283 (1939). Professor Edward Berman also cited interviews with Senator Sherman in which he stated his personal belief that the statute was not intended to reach labor combinations. BERMAN, *supra* at 5. Professor Archibald Cox, the most influential antitrust and labor scholar of the mid-twentieth century, found the Sherman Act debate inconclusive. *See generally* Archibald Cox, *Labor and the Antitrust Laws—A Preliminary Analysis*, 104 U. PA. L. REV. 252 (1955).

8 *See* JOSEPH A. JOYCE, A TREATISE ON MONOPOLIES AND UNLAWFUL COMBINATIONS OR RESTRAINTS 175 (1911); W. W. THORNTON, A TREATISE ON THE SHERMAN ANTI-TRUST ACT 677–79 (1913); WILLIAM HOWARD TAFT, THE ANTI-TRUST ACT AND THE SUPREME COURT 98–99 (1914); 2 ARTHUR J. EDDY, THE LAW OF COMBINATIONS 1330–31 (1901); Emery, *supra* note 2, at 608.

of the most prominent early Sherman Act treatise writers, referred to any notion that labor combinations should be treated more gently than combinations of capital as a "manifest injustice, not to say absurdity," whose errors should appeal to "every fair-minded man."[9] A poll taken among the members of the Chicago Conference on Trusts in 1899 produced 459 responses and indicated that more than half believed that the Act had not been intended to immunize labor but rather to treat labor and capital in the same way.[10]

The Gilded Age Supreme Court could not have been clearer. It turned the powerful equity provisions of the Sherman Act, which gave the government broad authority to enjoin antitrust violations,[11] into an effective strikebreaking tool.[12] The Act thus weaponized and expanded upon a loose aggregation of common law tort theories that had previously been used to enjoin strikes.[13] Only in 1895, after the Sherman Act had been passed, did the Supreme Court authorize a federal anti-labor injunction directly under the Commerce Clause.[14]

With the passage of the Clayton Act in 1914,[15] Progressives attempted to right the balance in favor of labor. The language of § 6 of that Act—that "[t]he labor of a human being is not a commodity or article of commerce"[16]—should have taken labor out of antitrust law altogether, particularly with a Supreme Court that

9 EDDY, *supra* note 8, at 1331.

10 CHICAGO CONFERENCE ON TRUSTS: SPEECHES, DEBATES, RESOLUTIONS, LIST OF THE DELEGATES, COMMITTEES, ETC. 530–32 (1900); *see also* Herbert Hovenkamp, *The Invention of Antitrust*, S. CAL. L. REV. (forthcoming 2023), https://perma.cc/96RQ-J9AS.

11 Section 4 of the original Sherman Act authorized the federal courts "to prevent and restrain violations of this act" and commanded U.S. Attorneys "to institute proceedings in equity to prevent and restrain such violations." Sherman Antitrust Act, ch. 647, sec. 4, 26 Stat. 209 (1890).

12 *See* Loewe v. Lawlor, 208 U.S. 274, 293, 297–98 (1908) (relying on labor- and product-market cases interchangeably); *see, e.g.*, United States v. Cassidy, 67 F. 698, 705–09, 783 (N.D. Cal. 1895); Irving v. Neal, 209 F. 471, 476, 479–80 (S.D.N.Y. 1913); United States v. Workingmen's Amalgamated Council of New Orleans, 54 F. 994, 995, 1000 (C.C.E.D. La. 1893).

13 *E.g.*, Commonwealth v. Hunt, 45 Mass. (4 Met.) 111, 121–30 (1842) (applying tort theory and refusing to sustain an indictment charging bootmakers with conspiring to obtain higher wages).

14 *In re* Debs, 158 U.S. 564, 598–600 (1895) (sustaining injunction when much of the conduct was independently criminal, including the "forcible obstructions of the highways along which interstate commerce travels," but not deciding whether jurisdiction was appropriate under the Sherman Act).

15 15 U.S.C. § 17 (original version at ch. 323, § 6, 38 Stat. 731 (1914)).

16 15 U.S.C. § 17.

was construing the Commerce Clause very narrowly.[17] The statute was a severe disappointment, however.[18] An anguished Professor Alpheus Mason, Justice Louis Brandeis' eventual biographer,[19] concluded that the Court's interpretation of the Clayton Act had dashed any hope that labor union activities would come to be treated as legitimate.[20] University of Chicago economist Jay Finley Christ believed that the Clayton Act had, if anything, expanded the power of the courts to enjoin labor disputes.[21] University of California labor economist Solomon Blum lamented that "never . . . have higher hopes been wrecked by judicial interpretation."[22] In their book, then-Professor Felix Frankfurter and Nathan Greene argued for stricter statutory limits on judicial power to enjoin strikes.[23]

Labor fared much better under the Roosevelt Court and the more expansive efforts of the New Deal, particularly the anti-injunction provisions of the Norris-LaGuardia Act of 1932.[24] A little later came judicial creation of the so-called "nonstatutory immunity," which broadly exempts collective bargaining about wages, hours, and conditions of employment.[25] The expansion was termed "nonstatutory" because the Clayton Act did not expressly immunize nonlabor entities. Nevertheless, for an immunity to be effective, it would have to cover both sides of a collective bargaining agreement.[26] Under it, the immunity is extended to collective bargaining agreements between labor and employers, and also to

17 United States v. E.C. Knight Co., 156 U.S. 1, 12 (1895) ("Commerce succeeds to manufacture, and is not a part of it.").

18 Particularly in *Duplex Printing Press Co. v. Deering*, 254 U.S. 443, 470 (1921). *See* Herbert Hovenkamp, *Labor Conspiracies in American Law, 1880–1930*, 66 TEX. L. REV. 919, 964–65 (1988).

19 *See generally* ALPHEUS THOMAS MASON, BRANDEIS: A FREE MAN'S LIFE (1946).

20 Alpheus T. Mason, *The Labor Clauses of the Clayton Act*, 18 AM. POL. SCI. REV. 489, 490–91 (1924).

21 Jay Finley Christ, *The Federal Courts and Organized Labor*, 5 J. BUS. U. CHI. 103, 104, 111, 115–16 (1932).

22 BLUM, *supra* note 2, at 96.

23 FELIX FRANKFURTER & NATHAN GREENE, THE LABOR INJUNCTION 210 (1930).

24 29 U.S.C. §§ 101–115 (original version at ch. 90, 47 Stat. 70 (1932)); *see* United States v. Hutcheson, 312 U.S. 219, 233–34 (1941) (interpreting the Norris-LaGuardia Act to preclude most labor injunctions).

25 Connell Constr. Co. v. Plumbers & Steamfitters Local Union No. 100, 421 U.S. 616, 622 (1975).

26 The exemption was explicitly recognized for the first time in *Connell Constr. Co.*, 421 U.S. at 622, although it had been applied earlier in *Local 189, Amalgamated Meat Cutters v. Jewel Tea Co.*, 381 U.S. 676, 692–93 (1965). *See* Hiba Hafiz, *Structural Labor Rights*, 119 MICH. L. REV. 651, 674–75 (2021).

bargained-for restraints in output markets for products and services.

For example, in *Local 189, Amalgamated Meat Cutters v. Jewel Tea Co.*,[27] the Supreme Court immunized a collective bargaining agreement between a retailer and unionized butchers that limited the hours of operation of the stores' meat departments.[28] Justice Douglas dissented, objecting that the collective bargaining agreement in question was an "obvious restraint on the product market."[29] Furthermore, an agreement among two store owners to restrict their hours would have been per se unlawful under the antitrust laws, and the immunity did not apply to product sellers.[30]

Product-market restraints of the kind approved in *Jewel Tea* follow as a matter of course from the collective bargaining process. The nonstatutory immunity applies to collective bargaining agreements pertaining to "wages, hours and working conditions."[31] If a labor contract closes the shop to nonunion employees and also specifies that covered employees can work only from 9 a.m. to 5 p.m., the agreement effectively restrains output in the product market. The immunity has even been extended to collective bargaining agreements that involve multiple employers, as are common in sports leagues.[32]

During the neoliberal revolution of the 1970s and 1980s, the political and economic position of labor went into sharp decline.[33] Subsequent to that, the labor share of the returns to economic

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27 381 U.S. 676 (1965).

28 *Id.* at 694–97.

29 *Id.* at 736 (Douglas, J., dissenting); *see also* Archibald Cox, *Labor and the Antitrust Laws:* Pennington *and* Jewel Tea, 46 B.U. L. REV. 317, 321, 327 (1966) (noting the impact of collective bargaining on product output).

30 *Cf.* Thomas J. Campbell, *Labor Law and Economics*, 38 STAN. L. REV. 991, 997 (1986) ("[A] constraint in the labor market necessarily leads to a constraint in the product market.").

31 *Jewel Tea*, 381 U.S. at 689 ("Employers and unions are required to bargain about wages, hours and working conditions, and this fact weighs heavily in favor of antitrust exemption for agreements on these subjects.").

32 Brown v. Pro Football, Inc., 518 U.S. 231, 240–41, 250 (1996); *see also* Newspaper Drivers Local 372 v. NLRB, 404 F.2d 1159, 1163 (6th Cir. 1968), *cert. denied*, 395 U.S. 923 (1969) (finding that two newspapers collectively bargaining with a union could agree that if one was struck on certain issues the other would cease publication as well).

33 ERIC A. POSNER, HOW ANTITRUST FAILED WORKERS 14 (2021).

production declined significantly.[34] The rediscovery of labor interests in the 2010s represents a reversal once again.[35]

This revival of antitrust's interest in labor is noteworthy because it treats labor as a victim of anticompetitive restraints, unlike the earlier antitrust law, which treated labor as a perpetrator.[36] Even the large expansion of union rights that occurred after the New Deal was concerned primarily with defining a labor "immunity," which applies to potential defendants. Today, labor interests are on the antitrust offensive.

The problem of protecting labor from anticompetitive restraints imposed by employers is not lack of statutory coverage. The Sherman Act's more general coverage and Section 7 of the Clayton Act, which applies to mergers, already proscribe the relevant anticompetitive effects in all markets.[37] They apply equally to sellers and purchasers, including purchasers of labor.[38] Antipoaching agreements and other forms of collusion in wage markets are already unlawful,[39] and the Justice Department can and has used its criminal enforcement power against them.[40] Mergers that suppress wages are also covered.

To be sure, the history of applying these statutes to protect labor is much thinner than the history of antitrust intervention in product markets, but that is not because of any imbalance in the statutory language. As a result, proposals of statutory amendments that would make the merger laws apply to monopsony, or

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34 For good evaluations of a large literature, see generally Matthias Kehrig & Nicolas Vincent, *The Micro-Level Anatomy of the Labor Share Decline*, 136 Q. J. ECON. 1031 (2021), and Gene M. Grossman & Ezra Oberfield, The Elusive Explanation for the Declining Labor Share (Nat'l Bureau of Econ. Rsch., Working Paper No. 29165, 2021), https://perma.cc/HBB6-EXMW.

35 POSNER, *supra* note 33, at 33.

36 *Id.*

37 Sherman Antitrust Act ch. 647, 26 Stat. at 209; 15 U.S.C. § 18.

38 Then-Judge Sotomayor on the Second Circuit sustained a § 1 complaint alleging unlawful exchanges of salary information in *Todd v. Exxon Corp.*, 275 F.3d 191, 195 (2d Cir. 2001).

39 *See, e.g.*, United States v. Lucasfilm Ltd., 2011 WL 2636850, at *1 (D.D.C. June 3, 2011); United States v. Adobe Sys. Inc., 2011 WL 10883994, at *2 (D.D.C. Mar. 18, 2011).

40 DOJ Antitrust Div. & FTC, *Antitrust Guidance for Human Resource Professionals*, DEP'T OF JUST., 3–4, 8 (Oct. 2016), https://perma.cc/WUP2-4SMV; *see also* Superseding Indictment, United States v. Surgical Care Affiliates, LLC, 3:21-CR-011-L, at 3 (N.D. Tex. Jul. 8, 2021), https://perma.cc/NR2F-HV8C; *DOJ Gears Up for First-Ever Criminal Labor Antitrust Trials*, COMPETITION POL'Y INT'L (Apr. 4, 2022), https://perma.cc/M5J9-SAJN. Some states are also getting into the act. *See, e.g.*, State by Raoul v. Elite Staffing, Inc., No. 1-21-0840, 2022 WL 1819541, at *1 (Ill. App. Jun. 3, 2022) (applying an Illinois antitrust act to condemn a horizontal anti-poaching agreement under the per se rule).

buyer-side power as well as seller-side power,[41] do not add anything to substantive coverage. The coverage has always been there. Such amendments might serve to remind courts, however, that labor market restraints require more attention than they have received in the past.

I. WAGES AND THE VALUE OF LABOR

In the late nineteenth century, economists began to reject the premarginalist and severely anti-interventionist "wage-fund" doctrine that had dominated classical political economy until John Stuart Mill famously recanted it in 1869.[42] The doctrine, a British creation that was more popular in the United States than in the United Kingdom, was hostile to both minimum wages laws and labor unions.[43] It posited that surplus capital from previous business cycles provided a "fund" from which current wages must be paid.[44] Wages paid in excess of the fund would drive the firm to ruin.

The rise and dominance of marginalism in economics promised a theory much more favorable to the worker, although the Supreme Court clung to some version of the wage-fund into the 1920s.[45] The dispute over the theory of wages is central to the distinction between classical political economy, which developed theories of value mainly from past averages, and neoclassical economics, with its forward-looking concept of rational decision-making at the margin. Under this conception, the rate of wages depended on the laborer's expected contribution.

As early American marginalist John Bates Clark observed, in competitive equilibrium a worker should realize his or her

41 *See, e.g.*, Competition and Antitrust Law Enforcement Reform Act of 2021, S.225, 117th Cong. (2021).

42 John Stuart Mill, *Thornton on Labour and Its Claims (1869)*, *in* 5 ESSAYS ON ECONOMICS AND SOCIETY 631, 644 (J. M. Robson ed., 1967) (reviewing WILLIAM T. THORNTON, ON LABOUR: ITS WRONGFUL CLAIMS AND RIGHTFUL DUES, ITS ACTUAL PRESENT AND POSSIBLE FUTURE (1869)). On Mill's recantation, see A. C. Pigou, *Mill and the Wages Fund*, 59 ECON. J. 171, 178 (1949), and Robert B. Ekelund, Jr., *A Short-Run Classical Model of Capital and Wages: Mill's Recantation of the Wages Fund*, 28 OXFORD ECON. PAPERS 66, 66–67, 71 (1976).

43 On the wage-fund doctrine in U.S. wage policy, see Herbert Hovenkamp, *The Political Economy of Substantive Due Process*, 40 STAN. L. REV. 379, 431–38 (1988).

44 *Id.* at 431.

45 *Id.* at 403–04, 437 (discussing Adkins v. Child.'s Hosp. of D.C. (*Adkins II*), 261 U.S. 525, 557–58 (1923)). *See also generally* F. W. TAUSSIG, WAGES AND CAPITAL: AN EXAMINATION OF THE WAGES FUND DOCTRINE (1896) (attempting to adopt the wage-fund doctrine and make it consistent with marginalist economics).

expected marginal contribution to production as wages.[46] What counts is not previously paid-up capital but rather the expectation of future production. That number is the equivalent of marginal cost pricing for products: In equilibrium, a competitive firm increases output until the anticipated incremental revenue from each sale equals the increment in cost. In a competitive employment market, wages should rise to the point at which each employee receives the marginal value of his or her production.

Employer monopsony power in the labor market drives returns below that level, however, and today those numbers seem grim.[47] In fact, workers in the United States receive, on average, sixty-five cents for every dollar of value that they create.[48] In many areas, workers are severely underpaid in relation to their production.

These effects of monopsony power in labor markets show up in some simple, although perhaps counterintuitive, ways. For example, if workers were being paid their marginal product, then a forced wage increase should lead to less production. However, if they are systematically paid less than their marginal product and a wage increase still places them below that level, then that wage increase will have a smaller effect on the amount of work that is demanded. To illustrate, if a worker contributes $20 to the employers' product and minimum wage laws increase her wage from $10 to $14, the worker is still valuable to the employer. In this simple case, there might be no reduction in employment at all because it is simply an inframarginal wealth transfer.[49] By contrast,

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46 JOHN BATES CLARK, THE DISTRIBUTION OF WEALTH: A THEORY OF WAGES, INTEREST AND PROFITS 346–48 (1908). More conservative economists resisted this approach. *See, e.g.*, Blum, *supra* note 2, at 436–38 (1925) (finding the marginal productivity theory of wages to be "logically unsound" and "lacking in practical applicability"). Blum also rejected marginalism as a useful economic tool. *See id.* at 440.

47 *See* José Azar, Ioana Marinescu, Marshall Steinbaum, & Bledi Taska, *Concentration in U.S. Labor Markets: Evidence from Online Vacancy Data*, 66 LAB. ECON. 101866 app. A (2020) [hereinafter Azar et al., *Concentration in U.S. Labor Markets*].

48 Chen Yeh, Claudia Macaluso, & Brad Hershbein, *Monopsony in the U.S. Labor Market*, 112 AM. ECON. REV. 2099, 2102 (2022); *see also* Orley C. Ashenfelter, David Card, Henry S. Farber, & Michael Ransom, Monopsony in the Labor Market: New Empirical Results and New Public Policies 1–4 (Nat'l Bureau of Econ. Rsch., Working Paper No. 29522, 2021), https://perma.cc/7N3K-BXSJ (summarizing numerous recent papers on the issue). *See generally* David Berger, Kyle Herkenhoff, & Simon Mongey, *Labor Market Power*, 112 AM. ECON. REV. 1147 (2022).

49 *See* José Azar, Emiliano Huet-Vaughn, Ioana Marinescu, Bledi Taska & Till von Wachter, Minimum Wage Employment Effects and Labor Market Concentration 4–6 (Nat'l Bureau of Econ. Rsch., Working Paper No. 26101, 2019), https://perma.cc/N66V-F48V.

if the increased minimum wage crosses the marginal productivity line, then both product and labor output will decrease. For example, if a worker's marginal productivity is $12 per hour and the wage increases from $10 to $14, employers will reduce the amount of labor that they purchase and, all else being equal, the amount of product that they produce. Thus, any serious debate about the impact of raising the minimum wage must consider where current wages lie in relation to the marginal productivity of the labor that is involved.

These numbers are averages, however, and those averages disguise the range of difference among workers, including the extent to which workers are employed at the margin. In fact, the marginalist rejection of the wage-fund doctrine was not quite as clean a victory for legislative intervention as some early Progressives believed. Instead, the question divided economists. For example, Chicago School economist George Stigler argued strongly in the 1940s that statutory minimum wage laws created more poverty than they corrected.[50]

As was well-known by the early twentieth century, more marginal workers or more marginal activities will be affected by a mandated wage increase.[51] This outcome can be consistent with the proposition that demand for labor falls off when the minimum wage is increased but that the overall effects might be small.[52] The size of the falloff depends on the relative number of marginal and inframarginal workers. More precisely, however, it depends on the number of marginal and inframarginal units of labor. For example, an employer might respond to a mandatory wage increase not by terminating employees but by reducing their hours or reassigning them.

Marginal labor is affected because a statutory wage increase would make it unprofitable to the employer. Inframarginal work, by contrast, will simply earn more. Willie Lyons, a

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50 George J. Stigler, *The Economics of Minimum Wage Legislation*, 36 AM. ECON. REV. 358, 363–65 (1946).

51 *See generally* F. W. Taussig, *Minimum Wages for Women*, 30 Q.J. ECON. 411 (1926) (considering whether lower wages for women were explained by lower marginal productivity); James E. Le Rossignol, *Some Phases of the Minimum Wage Question*, 7 AM. ECON. REV. 251 (1917); George Gorham Groat, *Economic Wage and Legal Wage*, 33 YALE L.J. 489 (1924); Paul H. Douglas, *The Effect of Wage Increases upon Employment*, 29 AM. ECON. REV. 138 (1939). On Progressive economists and the problem of gender discrimination in wages, see generally Robert E. Prasch, *Retrospectives: American Economists in the Progressive Era on the Minimum Wage*, 13 J. ECON. PERSP. 221 (1999).

52 *See* Richard A. Ippolito, *The Impact of the Minimum Wage if Workers Can Adjust Effort*, 46 J.L. & ECON. 207, 207 n.1 (2003) (collecting studies in support of the proposition).

twenty-one-year-old elevator operator at the Congress Hotel in Washington, D.C., was very likely becoming a marginal worker. Self-service elevators were just being introduced in the 1920s, making her job increasingly vulnerable. When the D.C. minimum wage law was imposed, the hotel dispensed with her services and switched to self-service. She lost her job and successfully challenged the law in the Supreme Court.[53]

II. THE RELATIONSHIP BETWEEN LABOR MARKETS AND PRODUCT MARKETS

Returns to labor are strongly linked to what is happening in the product market. Employers have traditionally treated wage laborers as a variable cost. Some Progressives and institutionalist labor economists such as John Commons objected to this treatment. Commons observed that plants and machinery actually received better treatment than labor did. When a factory reduced production, it continued to maintain idle buildings and machinery and make payments on purchase obligations for durable equipment. Employees at will, by contrast, were immediately let go.[54]

The demand for labor is almost entirely derivative of product output. Firms that do not produce anything on the output side do not require labor on the input side. Furthermore, labor is largely a variable cost, particularly at the lower end of the scale where it is compensated mainly by hourly wages. As a result, the demand for labor as an input is closely correlated with the amount of product or service output that the firm is generating. As product output goes up, all else being equal, the demand for labor goes up as well—and typically in rough proportion.

Assuming that labor is a variable cost proportioned equally over output, a 30% reduction in product output would be accompanied by a 30% reduction in labor. Incidentally, it would also lead to a 30% reduction in the supply of nonlabor components, but

[53] *Adkins II*, 261 U.S. at 542–43. Plaintiff Willie Lyons' situation was treated more fully by the lower court. *See* Child.'s Hosp. of D.C. v. Adkins (*Adkins I*), 284 F.613, 614–18 (D.C. Cir. 1922). For more on the litigation, see HERBERT HOVENKAMP, ENTERPRISE AND AMERICAN LAW, 1836–1937, at 77–78 (1991). *See generally* Joan G. Zimmerman, *The Jurisprudence of Equality: The Women's Minimum Wage, the First Equal Rights Amendment, and* Adkins v. Children's Hospital*, 1905–1923*, 78 J. AM. HIST. 188 (1991).

[54] *See, e.g.*, JOHN R. COMMONS, LEGAL FOUNDATIONS OF CAPITALISM 306 (1924). For further elaboration, see Herbert Hovenkamp, *The First Great Law & Economics Movement*, 42 STAN. L. REV. 993, 1010–11 (1990). Employers are also likely to exclude other social costs, which are more likely to be invariant to output, at least in the short run. *See* Robert E. Prasch, *The Social Cost of Labor*, 39 J. ECON. ISSUES 439, 442–43 (2005).

suppliers of these have their own need for labor, which would be reduced proportionately as well.

When product-market output is strong and demand is growing, the fortunes of labor rise as well. Here, consumers are largely in the driver's seat. They make purchase choices, which in turn determine demand and thus the need for labor. So, labor rides on consumer choice. Any evaluation of antitrust's role in the welfare of workers must also consider its role in product markets. A practice that reduces product-market production will injure workers just as it injures consumers.

Actions that result in reduced output in product markets can cause labor as much harm as restraints that are directed at labor markets. That can be true of both single-firm monopolists and cartels. Further, a product-market output reduction that results from an antitrust rule is likely to be more harmful than one that results from private conduct. When a firm or cartel exercises market power on either side, the result is suppression of output for that particular firm or cartel. By contrast, an antitrust rule that results in reduced output does so over the entire range of sellers subject to that rule. This increases the probability of price-affecting output reductions.

To the extent that harmful antitrust legislation such as the Robinson-Patman Act[55] or the per se rule against maximum resale price maintenance[56] resulted in lower output, the impact could be felt across all of U.S. retailing. The same thing would result from a return to aggressive per se rules against vertical integration by merger or contract—such proposals are largely based on a nostalgic belief that the country was better off when manufacturers sold FOB (free on board) to dealers, who then set their own pricing and distribution rules.[57] The same thing could result from overly aggressive rules against predatory pricing that foist higher prices and reduced output on both retail and wholesale markets. This is not to say that current predation rules should not be rewritten; there are good reasons why they should be. But overdeterrence here can be just as costly as underdeterrence and would harm consumers and labor equally.[58]

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55 15 U.S.C. § 13.

56 Albrecht v. Herald Co., 390 U.S. 145, 152–53 (1968), *overruled by* State Oil Co. v. Khan, 522 U.S. 3 (1997).

57 *See* Herbert Hovenkamp, *Is Antitrust's Consumer Welfare Principle Imperiled?*, 45 J. CORP. L. 65, 84 & nn.96–97 (2019).

58 *See* Herbert Hovenkamp, *The Areeda-Turner Test for Exclusionary Pricing: A Critical Journal*, 46 REV. INDUS. ORG. 209, 220–21 (2015).

III. THE CHANGING RELATIONSHIP BETWEEN LABOR AND ANTITRUST

The relationship between labor and antitrust policy has changed over time in two important ways. First, as noted above, labor moved from being a target of antitrust law to being a protected class. The field that we characterize as "labor and antitrust" was historically dominated by cases in which labor interests appeared in court as defendants. The relevant question was whether there should be an "immunity" for labor-organizing activities, which of course protects potential defendants. That field attracted such luminaries as Archibald Cox, who wrote extensively about the antitrust immunity for collective bargaining.[59] Initially, the protections were oriented toward simple strikes or concerted refusals to deal that could be addressed as combinations in restraint of trade under the Sherman Act. A little later, the immunity was extended to cover such things as collective bargaining over hours or limitations on contractors' power to hire nonunion subcontractors. What these cases had in common was that labor showed up as a defendant, and the question was whether the antitrust immunity would save it.[60]

Today, the orientation has flipped. Most of the recent literature focuses on the protection of labor from anticompetitive restraints imposed by employers.[61] The emerging antitrust question is not about antitrust immunity for antitrust violations committed by labor, but rather about labor protection from antitrust violations committed by employers. The anticompetitive behaviors include horizontal wage-fixing[62] and anti-poaching agreements, as well as vertical noncompete agreements that limit employee

59 *See generally* Archibald Cox, *Labor Law Preemption Revisited*, 85 HARV. L. REV. 1337 (1972); Cox, *Labor and the Antitrust Laws*, *supra* note 7; Archibald Cox, *Federalism in the Law of Labor Relations*, 67 HARV. L. REV. 1297 (1954).

60 The developments, including case law, are treated in 1B PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION ¶¶ 255–57 (5th ed. Supp. 2022).

61 *E.g.*, POSNER, *supra* note 33, at 33; Hiba Hafiz, *Labor Antitrust's Paradox*, 87 U. CHI. L. REV. 381, 388–91 (2020).

62 *E.g.*, Jien v. Perdue Farms, Inc., 2020 WL 5544183, at *7 (D. Md. Sep. 16, 2020) (involving a class action suit alleging a large, industry-wide wage-fixing conspiracy for low-wage chicken processors).

mobility[63] and mergers that have output limiting effects in both product and labor markets.[64]

A second feature of the labor-antitrust relationship is that this rising antitrust protection for labor has been largely limited to restraints that occur in labor markets themselves. That is, whether the challenged practice originated with employers or with labor, the principal purpose or effect of the practice was to restrict or control the output of labor and thus affect the competitiveness of the labor market. This is true notwithstanding the fact that limits on product output can have negative effects on labor that are just as strong.

While antitrust policy should certainly not lighten up its protection of employees from labor market restraints, it must be more attentive to competitive harms that befall labor from restraints that reduce output in product markets. Antitrust restraints in product markets can have important and harmful effects on labor, but under existing law they do not often raise actionable antitrust issues.[65]

One limited exception to this rule is mergers. Merger law does not make a distinction between product markets and labor markets, or even between seller restraints and buyer restraints. It simply prohibits acquisitions of the shares or assets of another firm where "the effect of such acquisition may be substantially to lessen competition, or to tend to create a monopoly."[66] Overwhelmingly, the law of mergers has focused on harms on the selling side of the market,[67] but the suppression of wages can be a motive for an anticompetitive merger just as much as the ability to lift product prices. Indeed, the very fact that anti-poaching agreements exist indicates that collaborative wage suppression is profitable. Furthermore, it can be just as effective when it is produced by a merger as when it results from a cartel.

63 *See, e.g.*, Herbert Hovenkamp, *Antitrust and the FTC: Franchise Restraints on Worker Mobility*, PROMARKET (Dec. 1, 2021), https://perma.cc/JC78-KYDJ.

64 Ioana Marinescu & Herbert Hovenkamp, *Anticompetitive Mergers in Labor Markets*, 94 IND. L.J. 1031, 1032 (2019).

65 *See infra* notes 9899–105 and accompanying text.

66 15 U.S.C. § 18.

67 On the small number of buyer-side merger challenges, see 4A PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION ¶¶ 980–82 (4th ed. 2016).

In some markets, the source of merger profits is more likely to be wage suppression rather than increases in product prices.[68] For example, on the output side, hospital rates are heavily influenced by health insurers or government purchasers who put downward pressure on them. Nurses do not receive equivalent protection. They can be particularly vulnerable when the number of effective employers in a community is reduced as a result of a merger.[69] Depending on the circumstances, the real private gains to hospitals from an anticompetitive merger may show up as reduced wages paid to nurses rather than patient price increases.[70]

In other situations, largely ignored by the case law, a merger of two firms may be harmless on the selling side but anticompetitive on the hiring side. For example, consider the Pacific Northwest logging industry that was the subject of a Supreme Court case, *Weyerhaeuser Co. v. Ross-Simmons Hardwood Lumber Co.*,[71] involving alleged predatory buying.[72] Sawmills procure hardwood logs in a local market because shipping costs are high in relation to value, but the finished hardwood is sold to furniture manufacturers in a national market. In that case, a merger between two sawmills that dominate the local market might harm wage competition in that market, even though the chance of competitive harm in the resale market would be small. The predatory buying claim that the *Weyerhaeuser* decision rejected is similar. The allegation was that the defendant engaged in predatory overbuying of logs intending to drive other log buyers out of the market.[73] If successful, it would have reduced the

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68 *See* Aryeh Mellman, *Measuring the Impact of Mergers on Labor Markets*, 53 COLUM. J.L. & SOC. PROBS. 1, 33 (2019). *See generally* Abhay Aneja & Prasad Krishnamurthy, Merger Deregulation, Wages, and Inequality: Evidence from the U.S. Banking Industry (July 2022) (available at https://perma.cc/38PV-L5H9) (finding that looser enforcement of bank merger laws led to lower wages in that market).

69 *Cf.* United States v. Anthem, Inc., 855 F.3d 345, 381 (D.C. Cir. 2017) (Kavanaugh, J., dissenting) (arguing that the court should have remanded for consideration of the effect of a merger on employees).

70 On employer monopsony power in markets for nursing, see generally Jordan D. Matsudaira, *Monopsony in the Low-Wage Labor Market? Evidence from Minimum Nurse Staffing Regulations*, 96 REV. ECON. & STAT. 92 (2014), and Daniel Sullivan, *Monopsony Power in the Market for Nurses*, 32 J.L. & ECON. S135 (1989).

71 549 U.S. 312 (2007).

72 *See generally* Roger G. Noll, *"Buyer Power" and Economic Policy*, 72 ANTITRUST L.J. 589 (2005) (examining the problem of manufacturers who purchase inputs, including labor, in local markets but sell outputs in regional or national markets).

73 *Weyerhaeuser*, 549 U.S. at 320–22 & 322 n.3. On such claims, see generally Roger D. Blair & John E. Lopatka, *Predatory Buying and the Antitrust Laws*, 2008 UTAH L. REV. 415 (2008).

amount of logs purchased in the region, and incidentally the amount of labor needed to produce them.

The same thing could be true of the sugar beet refiners in another Supreme Court decision.[74] They purchased sugar beets from farmers in a local market where they also fixed buying prices but resold refined sugar in a national market where they had little or no market power.[75] Here, the farmer victims of the cartel were independent contractors, not employees, but their injury was the same.[76]

In any antitrust case raising these issues, buyer-side and seller-side competitive effects must both be addressed. Further, the correlation between seller-side and buyer-side market concentration is not very strong.[77] In most cases, one cannot be inferred from the other. Over a wide range of employment activities, the extent of competition on the two sides differs.

For example, a town with two hospitals has a highly concentrated market in which they deliver medical services. It may also be highly concentrated in the market in which it hires nurses, who are specialized. However, janitors, maintenance staff, clerical employees, and other support employees very likely compete over a much broader range of employers. As a result, we might predict, for example, that a merger of the only two hospitals in a medium-sized town will have a significant negative effect on competition in the market for nurses, but not for secretaries, waitstaff, or janitors—they can work just as easily for nonhospital employers. Many manufacturers may be in an analogous position with respect to geographic markets. They may sell their product in a national market but hire unskilled and semiskilled workers in a local market. For example, a large Amazon warehouse might recruit most of its employees in a local market, even though the products are destined for national shipment.

Recent decisions have correctly noted that antitrust harm in labor markets is independently actionable. That is, proving an unlawful restraint in a labor market does not require

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[74] See generally Mandeville Island Farms, Inc. v. Am. Crystal Sugar Co., 334 U.S. 219 (1948).

[75] *Id.* at 223–25.

[76] *See id.* (observing that the refiners controlled the supply of seed and were sufficiently concentrated that they were able to make "take it or leave it" offers to farms to purchase their beets at low prices); *see also* Supplemental Brief of Petitioners, Mandeville Island Farms, Inc. v. American Crystal Sugar Co., 1947 WL 44290, Dkt. No. 75, at *9 (noting that many of the plaintiffs were farmers).

[77] Azar et al., *Concentration in U.S. Labor Markets*, *supra* note 47, at app. A.

independent proof of harm in the related product market.[78] Each can be harmed independently, and under most antitrust laws buyer and seller harms are covered equally, with two statutory exceptions. One exception is § 3 of the Clayton Act, which prohibits tying and exclusive dealing and explicitly applies only to sellers or lessors.[79] However, tying and exclusive dealing can also be condemned under both provisions of the Sherman Act, which apply to buyers and sellers alike.[80]

The other exception is the Robinson-Patman Act, whose principal liability provisions cover only someone who price discriminates among "different purchasers."[81] That is, that portion of the Act applies only to sellers. The Robinson-Patman Act does contain a separate buyers' liability provision, but it is entirely derivative; that is, it applies only when the seller violates the Act by giving the buyer a discriminatorily low price.[82] As a result, it has rarely resulted in liability.[83]

In any event, labor is a service, and both of these sections of the Clayton Act (although not the Clayton Act's merger provision) apply only to sales of "goods, wares, . . . or [ ] commodities."[84] In 1914, when the Clayton Act was passed, there appeared to be little awareness that practices such as exclusive dealing could harm labor as well as product sellers, and service markets as well as those for more tactile products. The issue of labor market harm arises occasionally, mainly with respect to limitations on

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78 *E.g.*, Nat'l Collegiate Athletic Ass'n v. Alston, 141 S. Ct. 2141, 2154 (2021) ("Nor does the NCAA suggest that, to prevail, the plaintiff student-athletes must show that its restraints harm competition in the seller-side (or consumer facing) market as well as in its buyer-side (or labor) market." (citing *Mandeville Island Farms*, 334 U.S. at 235 (condemning a buyer-side cartel without inquiring into harm on the output side of the market))).

79 15 U.S.C. § 14 ("It shall be unlawful for any person . . . to lease or make a sale . . . .").

80 Sherman Antitrust Act ch. 647, 26 Stat. at 209.

81 15 U.S.C. § 13.

82 15 U.S.C. § 13(f).

83 *See* 14 PHILIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶ 2361 (4th ed. 2019).

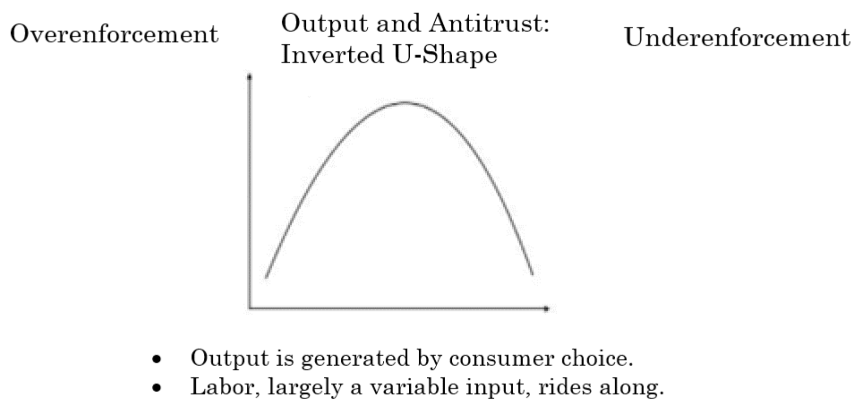
84 *See* 15 U.S.C. § 14 (specifying that the Clayton Act applies only to "goods, wares, merchandise, machinery, supplies, or other commodities"); 15 U.S.C. § 13(a) (specifying that the Robinson-Patman Act applies only to "commodities of like grade and quality"). The Robinson-Patman Act also has a provision, 15 U.S.C. § 13(d), that covers the discriminatory provision of services in connection with the processing or handling of products. For example, a seller might violate the provision by offering to stock, shelf, or advertise its products for free for some buyers but not others. *See* FTC v. Fred Meyer, Inc., 390 U.S. 341, 346, 358 (1968) (condemning the discriminatory provision of promotional coupon initiative given to some supermarkets but not others).

nonunion labor contained in collective bargaining agreements. These cases arise entirely under the Sherman Act.[85]

IV. ANTITRUST OUTPUT EFFECTS IN PRODUCT AND LABOR MARKETS: AN INVERTED "U"

The relationship between antitrust enforcement policy and output in both product and labor markets is an inverted U-shape like this:

FIGURE 1



Neoliberal antitrust policy, such as that advocated by Professor Robert Bork, tended to support antitrust policies favoring lower output because of its energetic protection of producer profits to the extent of including them in its definition of "consumer welfare."[86] The result was higher markups and lower output. On the other side, overenforcement as is sometimes associated with antitrust populism tends to favor lower output because of its opposition to "bigness" and its small business protectionism. For example, calls to break up large digital platforms are almost certainly calculated to result in lower product output, perhaps significantly. Such breakups interfere with both economies of scale and scope as well as the attainment of beneficial network effects.[87]

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85 *E.g.*, Conn. Ironworkers Emps.' Ass'n v. New England Reg'l Council of Carpenters, 324 F. Supp. 3d 293, 305–07, 313 (D. Conn. 2018) (finding a collective bargaining agreement that limited hiring to unionized subcontractors to be a form of exclusive dealing and dismissing on the merits, not under labor immunity).

86 *See infra* note 104 and accompanying text.

87 On the manifold sources of economies that accrue to large digital platforms—namely, economies of scale, economies of scope, and network effects—see generally

The market for employment tracks these outcomes consistently: moving antitrust policy either to the neoliberal Right or the progressive Left is bad for workers as well as consumers. Inverted U-shape situations like this one impose burdens on the policymaker to get it right—errors in either direction can be costly.

While the number of units of labor is roughly proportional to the number of units of product, welfare effects can differ. That depends on the amount of market power that the affected firm has on each side. For example, if the product market is concentrated or completely covered by a restraint, the welfare effects of an output reduction on the product side will be relatively high. Overall market output will decline, and prices will rise. By contrast, if the labor market is highly competitive, the welfare effects on that side will be smaller or even minimal. In the economy as a whole, labor market concentration is, if anything, greater than product-market concentration, particularly at the lower end of the wage scale.[88] In highly concentrated labor markets, a substantial output reduction in the product market can harm labor significantly.

Welfare tests based on the welfare tradeoff model for antitrust have systematically underestimated welfare harm insofar as they have ignored the impact on labor. As developed below, the influential Williamson-Bork welfare tradeoff model, which Bork appropriated but misnamed "consumer welfare," took no account of welfare effects in labor markets or, for that matter, any other input markets. Bork estimated the welfare effects of an output-reducing restraint by looking at the traditional deadweight loss that applies to product-market monopoly. By contrast, the "true" consumer welfare model, which looks only at consumer welfare, is consistent with labor interests to the extent that high output benefits both consumers and labor.[89]

Alternative antitrust models that prefer values other than product output, such as protection of small business, also

Geoffrey Parker, Georgios Petropoulos & Marshall Van Alstyne, *Digital Platforms and Antitrust*, *in* OXFORD HANDBOOK OF TRANSNATIONAL ECONOMIC GOVERNANCE (Eric Brousseau & Jean-Michel Glachant eds., forthcoming 2020), https://perma.cc/5DB4-QDGX; Aneesh Zutshi & Antonio Grilo, *The Emergence of Digital Platforms: A Conceptual Platform Architecture and Impact on Industrial Engineering*, 136 COMPUT. & INDUS. ENG'G 546 (2019).

88 *See* Azar et al., *Concentration in U.S. Labor Markets*, *supra* note 47, at app. A.

89 Steven C. Salop, *Question: What is the Real and Proper Antitrust Welfare Standard? Answer: The* True *Consumer Welfare Standard*, 22 LOYOLA CONSUMER L. REV. 336, 342 (2010).

understate welfare harm. While lack of attentiveness to the labor effects of product-market restraints is an important deficiency in the Williamson-Bork tradeoff model, it is also one of populist antitrust's biggest blind spots. This is particularly true of aggressive structural or behavioral remedies engineered for the protection of small business. To the extent that such actions lead to higher prices or reduced product output, labor as well as consumers suffer.

V. PRODUCT OUTPUT AND WORKER RESTRAINTS

While labor's interest in high product output is strong, it is not without qualifications. As the *Jewel Tea* decision illustrates, some reductions in product output may be the consequence of organized labor activity directed toward higher worker compensation or better working conditions.[90] When labor organizes in order to obtain higher returns, it tends to reduce output in product markets as well as labor markets. The effect is to increase the compensation of benefitted workers even though it may reduce the overall number of jobs. For example, the reduction in meat distribution hours approved in *Jewel Tea* decreased the total amount of employment in that department, although it benefitted covered workers by increasing their own surplus. In the more common product-restraint case, worker and consumer interests are more closely aligned. A simple product price fix harms both consumers and workers. Workers are better off, all else being equal, when the size of the product market increases.

Nevertheless, agreements among labor suppliers that tend to reduce product-market output require more individualized examination. Some such arrangements are not covered by any labor immunity because the affected participants are independent contractors, such as licensed professionals. For example, in *North Carolina State Board of Dental Examiners v. Federal Trade Commission*,[91] the Court struck down a dental association's rule that forbade nondentists from whitening teeth.[92] Removal of the

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90 *Jewel Tea*, 381 U.S. at 692–93; *see also supra* note 27 and accompanying text.

91 574 U.S. 494 (2015).

92 *Id.* at 514–16; *cf.* Hoover v. Ronwin, 466 U.S. 558, 574, 581–82 (1984) (finding that "state action" antitrust immunity precluded a claim that Arizona used the state bar exam to cartelize the lawyer market by limiting the number of students who passed). *Contra* Confederacíon Hípica de Puerto Rico, Inc. v. Confederacíon de Jinetes Puertorriqueños, Inc., 30 F.4th 306, 314–16 (1st Cir. 2022) (finding that jockeys fell on the labor side of the line and were lawfully entitled to strike even though they were selling their services as independent contractors).

ban would decrease compensation for the dentist defendants, but it would increase the compensation of dental hygienists, cosmetologists, and other nondentists who would now be allowed into the market. Overall output would increase.

The *North Carolina Dental* case illustrates a common problem with professional licensing restraints: they do in fact increase the compensation of benefitted suppliers, but they typically do so by excluding alternative suppliers who are paid less, such as the various nondentists who had been willing to whiten teeth at a lower price. As a result, it is hardly clear that these decisions striking down the occupational restrictions were bad for suppliers overall. Rather, they were bad for the particular participating members who benefitted from these restraints. To this extent, they resemble boycotts, tying, or exclusive dealing in antitrust product markets: The offense tends to increase the defendants' own sales by excluding others from the market. At the same time, however, it reduces overall market output.

The supplier interest in *North Carolina Dental* was in protecting the individual compensation of the organized dentists, not in limiting the number of patients who purchased teeth-whitening services. If overall patient demand increased, the dentists would have profited even under the ban on nondentist whitening. By contrast, in a simple product-cartel case—such as *Federal Trade Commission v. Actavis*,[93] which involved a market-division agreement among pharmaceutical manufacturers—no accommodation is required.[94] With the pay-for-delay settlement removed, drug prices would drop, and product output would rise. Both consumers and workers would benefit.

VI. MEASURING WELFARE EFFECTS: CONSUMERS AND WORKERS

Antitrust policy should create incentives that enable markets to achieve their highest realistically sustainable output. The word "sustainable" is important because predatory pricing and related strategies can include limited periods of even higher output, but these strategies are not sustainable in the long run. Eventually the firm will have to raise its prices and output will go down. Competitive markets, by contrast, offer high and sustainable output.

93 570 U.S. 136 (2013).

94 *Id.* at 148–49.

A focus on output generally maximizes both consumer and labor welfare and minimizes product-market prices.[95]

Output effects are almost always easier to estimate than economic welfare effects.[96] Consumer welfare is a function of output multiplied by the surplus that customers receive on each transaction. Worker welfare is generally measured by the difference between a worker's marginal contribution, which is the competitive rate of wages, and the worker's actual wage. By contrast, output is simply a count of transactions or events themselves—such as units or pounds of production or hours or labor. To be sure, coming up with and applying a particular unit of output may impose difficulties. Quantity, quality, and innovation must all be counted as a form of output. Further, the relevant output is that of the market, not that of any particular firm or association. But welfare measurement would include all of these and then require *additional* information about any changes in the amount of surplus. So, output effects are almost always easier to measure than welfare effects.

Also important is the fact that an antitrust tribunal need not determine competitive market output but only the likely output effects of a particular challenged practice. Antitrust uses market-power requirements or per se rules to draw inferences about effects on market-wide output. The existence of market power makes an anticompetitive output reduction plausible. At that point, we must identify qualifying anticompetitive practices that enable us to establish an inference of a market output reduction. Here, direct measures from econometric data are usually superior, although they have produced some judicial resistance and the data needed to apply them are not always available.[97]

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95 *See* Herbert Hovenkamp, *Antitrust Harm and Causation*, 99 WASH. U. L. REV. 787, 799–801 (2021).

96 *See* Herbert Hovenkamp, *The Slogans and Goals of Antitrust Law*, 25 N.Y.U. J. LEGIS. & PUB. POL'Y (forthcoming 2023) (available at https://perma.cc/TGN8-CMTH) (discussing the fact that antitrust experts almost never measure welfare but instead measure changes in output or changes in price).

97 *See, e.g.*, Louis Kaplow, *Why (Ever) Define Markets?*, 124 HARV. L. REV. 437, 477 n.80 (2010). S*ee generally* Daniel A. Crane, *Market Power Without Market Definition*, 90 NOTRE DAME L. REV. 31, 47 (2014); Jonathan B. Baker & Timothy F. Bresnahan, *Estimating the Residual Demand Curve Facing a Single Firm*, 6 INT'L J. INDUS. ORG. 283, 284 (1988) (developing a new econometric approach as an alternative to market power inferences). On litigation applications, see 2B PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶ 521 (5th ed. 2021).

In a few situations, welfare can go down even as market output increases, or vice versa.[98] It is doubtful that these phenomena are sufficiently robust to affect antitrust factfinding. To the best of my knowledge, no court has ever even attempted to consider this. Here, the perfect can be the enemy of the good.

While welfare losses are much more difficult to assess than changes in output, sometimes we can at least place a lower bound on them. For example, if a cartel reduces output from 140 units to 100 units and exacts a $3-per-unit overcharge, the injury to consumer welfare is at least $300, or the 100 units of actual purchases multiplied by the $3 price increase. Assuming there are no offsets, the welfare losses must be at least that large. That number clearly understates the welfare effects of this cartel, because it completely ignores the deadweight loss. To measure that, we need to know the amount of the output reduction caused by the cartel and then something about the shape of the demand curve in the area over the lost output. Those numbers would be extraordinarily difficult to measure, and in any event, they are not relevant to antitrust litigation. For example, in cartel damages actions the important numbers are the size of the overcharge and the amount that the injured plaintiffs purchased. The size of the deadweight loss is irrelevant.

In other cases, we can estimate lost investment, which is a pure deadweight loss. For example, suppose dominant firm *A* drives competitor *B* out of the market by filing a patent infringement suit on a fraudulently obtained patent.[99] *B*'s destroyed investment (less salvage value) is a deadweight loss, and this would be a lower limit on the welfare loss as well. That information rarely gives us anything useful about the social cost of the resulting monopoly. *B*'s losses could be the same whether or not *A*'s infringement suit ever succeeds in creating a monopoly.

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98 *See, e.g.*, William S. Comanor, *The Two Economics of Vertical Restraints*, 5 REV. INDUS. ORG. 99, 107 (1990); William S. Comanor & John B. Kirkwood, *Resale Price Maintenance and Antitrust Policy*, 3 CONTEMP. POL'Y ISSUES 9, 12 (1985) (noting situations where a vertical restraint such as resale price maintenance might increase output but reduce welfare because it reaches more low-value customers). *See also generally* John M. Newman, *The Output-Welfare Fallacy: A Modern Antitrust Paradox*, 107 IOWA L. REV. 563 (2022) (identifying situations in which output and welfare may move in opposite directions).

99 *E.g.*, Walker Process Equip., Inc. v. Food Mach. & Chem. Corp., 382 U.S. 172, 176–77 (1965); *see* 3 PHILLIP AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶¶ 704–06 (5th ed. 2022) (in press).

The same thing is true in reverse about cost-reducing practices such as those that give rise to an efficiency defense in merger cases. In some cases, we may be able to put a number on both the magnitude of the cost savings and the number of units to which they apply. But measuring the net welfare gain or loss from the merger would be heroic in most cases, and the government's Merger Guidelines do not require that. Rather, they impose what amounts to a price-output test: any efficiencies must be at least large enough to offset any predicted price increase. A qualifying efficiency is one that would not result in reduced output or higher prices in any market.[100] Significantly, the Merger Guidelines never once speak of welfare, but only of price and output.

Measurement of worker welfare is even less tractable because we do not have a good equivalent to marginal cost. For most product production, the measurement of marginal cost is an engineering problem and can be inferred from the firm's variable costs. In a perfectly competitive labor market in equilibrium, wages are thought to gravitate toward the worker's marginal product, or the amount of value that the worker produces.[101] Recent empirical work suggests that labor on the whole is receiving significantly less than its marginal product, implying that employers overall have some monopsony power.[102]

VII. LABOR'S INTEREST IN HIGH PRODUCT OUTPUT

Bork corrupted the term "consumer welfare" by giving it a definition that included producer profits. As a result, even some Justices on the Supreme Court have been able to proclaim that antitrust's goal is "consumer welfare" while still approving of anticompetitive practices that clearly harmed consumers.[103]

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100 *See* DOJ & FTC, HORIZONTAL MERGER GUIDELINES § 10 (2010).

101 *E.g.*, Janet L. Yellen, *Efficiency Wage Models of Unemployment*, 74 AM. ECON. REV. 200, 201–02 (1984); Stigler, *supra* note 50, at 358, 360–61. For some of the constraints on measurement, see generally Robert H. Frank, *Are Workers Paid Their Marginal Products?*, 74 AM. ECON. REV. 549 (1984). For a review of the literature, see generally Alan Manning, *Monopsony in Labor Markets: A Review*, 74 INDUS. & LAB. RELS. REV. 3 (2020).

102 *See, e.g.*, Wyatt J. Brooks, Joseph P. Kaboski, Yao Amber Li, & Wei Qian, *Exploitation of Labor? Classical Monopsony Power and Labor's Share*, 150 J. DEV. ECON. 1, 2 (2021); Azar et al., *Concentration in U.S. Labor Markets, supra* note 47, at 19–20, https://perma.cc/G9ME-SQLC (inferring monopsony from concentration data).

103 *See Actavis*, 570 U.S. at 160–61 (2013) (Roberts, C.J., dissenting) (stating the consumer welfare principle but also noting that he would have approved a pay-for-delay pharmaceutical settlement that raised consumer prices significantly); Ohio v. Am. Express, 138 S. Ct. 2274, 2289–90 (2018) (declaring the consumer welfare principle while approving

Underlying Bork's approach was his belief that, eventually, excess profits would be competed away and accrue to consumers. There is little evidence that this regularly happens, however, even when one looks over the entire period stretching back to the 1970s and 1980s, when Bork was writing.[104] Over time, price-cost margins have not fallen. Rather, they have increased significantly.[105] Of course, individual firms might eventually see high markups being competed away, but that can take a long time and the overall trend of price-cost margins gives us little reason to be optimistic.

One of the most damaging features of the welfare-tradeoff model, which Bork misnamed consumer welfare, was its toleration of significant output reductions in the name of efficiency. He illustrated an antitrust practice that both increased market power and reduced costs, such as a merger or joint venture. This "naïve" model, which he borrowed from economist Oliver Williamson,[106] accepted the traditional deadweight loss triangle as the social cost of monopoly and also illustrated the offsetting cost reductions. Under this model, the practice was harmless on balance if the size of the per unit cost savings exceeded the size of the deadweight loss.

In Bork's illustration, the practice in question reduced output by roughly one-half.[107] The actual size of the output reduction

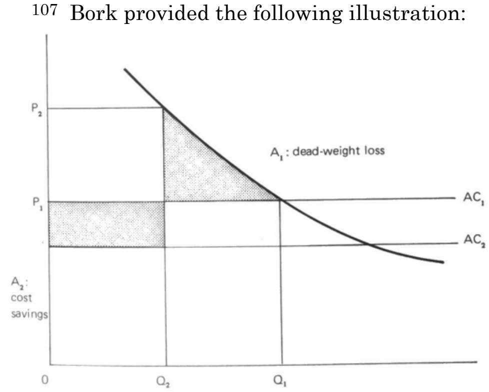
an anti-steering rule that raised consumer prices in every situation where it applied). *See generally* Erik Hovenkamp, *Platform Antitrust*, 44 J. CORP. L. 713 (2018).

104 *See generally* ROBERT H. BORK, THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF (1978).

105 *See generally* Herbert Hovenkamp, *Antitrust Error Costs*, 24 U. PA. J. BUS. L. 293 (2022).

106 Oliver E. Williamson, *Economies as an Antitrust Defense: The Welfare Tradeoffs*, 58 AM. ECON. REV. 18, 20–21 (1968) (characterizing the model as "naïve").

107 Bork provided the following illustration:



BORK, *supra* note 104, at 107.

could be either smaller or larger, depending on the shape of the demand curve and the magnitude of the efficiencies. Neither Williamson nor Bork addressed the important policy question of whether the real world contains any mergers or other practices that actually reduce costs so much even as they also reduce output significantly.[108]

This welfare-tradeoff argument was an important milestone in the development of neoliberal antitrust in the U.S. academy, particularly in the 1970s and 1980s. It also dovetailed perfectly with the general neoliberal economic position that favored capital over labor and lower output over consumer and labor interests.

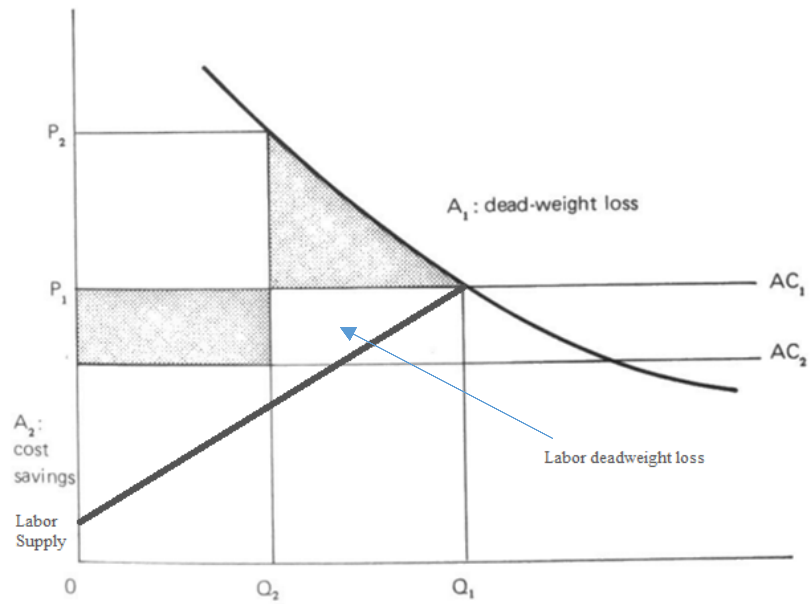
Bork also ignored the fact that the very output reduction that harmed consumers harmed labor as well. If an anticompetitive practice such as the one illustrated in Bork's figure reduced product output by half, it very likely reduced the firm's demand for labor in proportion. The size of any deadweight loss in the labor market would depend on the amount of market power that the firm or firms held in their purchase of labor. The deadweight loss in the labor market must then be added to the deadweight loss in the product market. Even on Bork's very restrictive assumptions, the cost savings would have to be balanced against the *sum* of these two sources of deadweight loss.

Below, and superimposed on Bork's figure, is a very crude upward sloping supply (marginal outlay) curve indicating monopsony power over labor,[109] and assuming that labor outlay is a variable cost. Suppression of labor output and price creates a second deadweight loss triangle. The social cost of Bork's monopoly should be calculated as the sum of these two:

[108] On this point, see Hovenkamp, *Antitrust Harm and Causation*, *supra* note 95, at 791.

[109] Literally, the supply curve in the figure covers the marginal outlay for *all* inputs, thus suggesting that labor is the only input this firm requires. That fact does not affect the point being made here, which is that a reduction of output in the product market suppresses labor supply. The welfare consequences for labor are a function of the amount of monopsony power that the firm holds in the labor market.

FIGURE 2



One prominent feature of the Williamson-Bork model is that costs are a black box—a simple horizontal line designated AC_1 (premerger) or AC_2 (postmerger) in the figure with no additional explanation. This is very odd for a model whose central claims were about efficiencies. It made no attempt to define or classify costs, to segregate fixed from variable costs, to identify the source of efficiencies, or to say anything about the relationship between output and costs. The model does not even contain a marginal cost curve. These omissions are the only way to explain how the figure could get to an action that reduced output so significantly while still producing substantial efficiencies. They also make the model largely useless as an evaluation tool.

But one thing that seems clear is that any restraint that reduces output in the product market injures not only consumers via higher prices but also labor via fewer jobs or lower wages. Which injury is greater depends on the amount of market power held on each side. But injury on both sides always exists unless either the firm's product output or its labor input is perfectly competitive.

VIII. LIMITING COGNIZABLE LABOR HARM TO LABOR MARKETS

Today, when antitrust courts speak about antitrust harm to labor, they are nearly always referring to labor markets.

Antitrust largely refuses to recognize harms to labor that result from restraints in product markets. Even merger law rarely mentions them, although then-Judge Brett Kavanaugh once suggested that a court consider more fully whether a hospital merger challenged mainly for output-market effects also caused harm in supplier markets.[110] He did not expressly mention suppliers of labor, such as nurses, but they should clearly be included.

The law of antitrust standing generally denies standing to employees who claim labor injuries caused by product-market restraints.[111] This is so even though no one really doubts that output reductions from product-market restraints also harm labor. The courts sometimes cite excessive speculation about causation and damages as the problem. To be sure, proof problems can be difficult, although not obviously more difficult than for other elements of injury.[112] For example, a firm driven out of business by an exclusionary practice can recover the value of its lost business and in some cases even anticipated lost profits. Why shouldn't it follow that its terminated employees can recover for lost employment?[113]

In fact, employees sometimes suffer more significant individual injuries from product-market restraints than consumers do. To the extent that job mobility is stickier than consumer mobility, labor is less able to avoid the harm. Workers also have some informational advantages over consumers. They often have inside knowledge about their employers and may be in a better position to detect antitrust violations than consumers are, or to detect them earlier.[114] Purchasers typically learn of price-fixing only

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110 United States v. Anthem, Inc., 855 F.3d 345, 379–81 (D.C. Cir. 2017). For a good analysis, see generally Hiba Hafiz, *Interagency Merger Review in Labor Markets*, 95 CHI.-KENT L. REV. 37 (2020).

111 *See* 2A PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶ 352 (5th ed. 2021); *see also* Feldman v. Am. Dawn, Inc., 849 F.3d 1333, 1340–42 (11th Cir. 2017) (holding that a terminated employee lacked standing to complain about restraint in the product market); Int'l Ass'n of Machinists & Aerospace Workers Local 1821 v. Verso Paper Corp., 80 F. Supp. 3d 247, 271–76 (D. Me. 2015) (finding that employees terminated as a result of merger lacked standing as former employees to obtain an antitrust injunction).

112 *E.g.*, Adams v. Pan Am. World Airways, Inc., 828 F.2d 24, 27–30 (D.C. Cir. 1987) (holding that proof of injury and damage would be too speculative for employees of a defunct airline that was allegedly ruined by defendants).

113 *E.g.*, *id.*

114 *See* Ostrofe v. H.S. Crocker Co., 740 F.2d 739, 746–47 (9th Cir. 1984) (granting standing to an employee who alleged that his employer had fixed prices with other manufacturers of paper lithograph labels). For a discussion of *Ostrofe* and subsequent cases, see 2A PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶ 352d5 n.31 (5th ed. 2021).

after they have made purchases, and often they never learn at all. On the other hand, some employees know even when price-fixing is in the planning stage.

Courts are currently divided on the question of antitrust standing for "whistleblower" employees who were terminated because they publicized their employers' product price-fixing conspiracy. A whistleblower employer may often be in a unique position as an early detector of a cartel, earlier not only than consumers but even than government enforcers.

Plaintiff Frank Ostrofe, for example, was a middle manager who was fired because he refused to participate in his employer's prospective agreement with rivals to fix the price of labels that his employer manufactured.[115] Ostrofe was in a better position than any enforcer, public or private, to reach this conspiracy at an early stage or before it was even underway. To be sure, Ostrofe did not suffer reduced wages resulting from a labor market restraint or higher prices in the product market, but the antitrust laws never assess these limitations. Section 4 of the Clayton Act, under which Ostrofe sued, provides damages to "any person who shall be injured in his business or property by reason of anything forbidden in the antitrust laws."[116] His injuries clearly fell within the statute.

Employee challenges to product-market restraints often face other problems, particularly with assessing damages. One is the directness and the nature of the injury. If a cartel of manufacturers fixes prices, consumers are injured by both the price increase and the output reduction, although antitrust damages are largely limited to the overcharge. The more immediate impact that accrues to employees is loss of jobs or perhaps reduced wages, but

[115] The facts are stated in a previous opinion. Ostrofe v. H.S. Crocker, 670 F.2d 1378, 1380 (9th Cir. 1982), *vacated*, 460 U.S. 1007 (1983):

> The conspiracy was effectuated in part by coercing Ostrofe, as Crocker's sales manager, to rig bids, fix prices, and allocate markets. When Ostrofe refused to cooperate Crocker's co-conspirators complained to Crocker's executive officers who warned Ostrofe that if he did not participate in the illegal scheme he would be discharged and prevented from participating in the label industry in the future. Ostrofe was repeatedly told he would not receive promised financial compensation or a greater future share in Crocker's management or income unless he stopped interfering with the unlawful scheme. He was forced by these threats to resign his position with Crocker, and was boycotted from further employment in the labels industry.

[116] 15 U.S.C. § 15.

neither one is an actionable harm. Employees simply do not have standing to sue for antitrust violations in product markets.

In *Associated General Contractors v. California State Council of Carpenters*,[117] the leading Supreme Court decision discussing the issue, the Court defined the scope of private-plaintiff antitrust standing narrowly. The plaintiff, a labor union, alleged that the members of a trade association of building contractors conspired not to hire unionized subcontractors and also to pressure non-member contractors to do the same thing.[118] The Court cited numerous difficulties with the case's theory of action, including the fact that the unionized subcontractors who were the direct targets of the boycott were preferable plaintiffs.[119] In his dissent, Justice Thurgood Marshall found this argument hollow, noting that excluding unionized contractors from the right to bid in the product market was simply a way of excluding their employees.[120]

The Court also noted a problem roughly akin to the one that indirect purchasers face in damages actions.[121] In order to adjudicate damages, the court would have to determine the extent to which the coerced firms "diverted business away from union subcontractors."[122] On top of that, it would have to determine "to what extent those subcontractors absorbed the damage to their business or passed it on to employees by reducing the work force or cutting hours or wages."[123]

While these concerns are not trivial, they do seem overstated. In order to recover damages, an excluded subcontractor would very likely need to point to projects that it lost as a result of the anticompetitive exclusion. Each of these would have required a bid that included a labor component so that the loss to labor could be estimated with tolerable accuracy. The very fact that contractors routinely provide detailed bids for jobs indicates that the labor that goes into them can be estimated. If it can be estimated with sufficient accuracy to make a bid under competition, there should be adequate support for a litigation-damages study.[124]

117 (*AGC*), 459 U.S. 519 (1983).

118 *Id.* at 521–26.

119 *Id.* at 541–42.

120 *Id.* at 550–51 (Marshall, J., dissenting).

121 *Id.* at 543–44 (citing Ill. Brick Co. v. Illinois, 431 U.S. 720, 730–31 (1977)).

122 *AGC*, 459 U.S. at 545.

123 *Id.*

124 *E.g.*, Indus. Burner Sys., Inc. v. Maxon Corp., 275 F. Supp. 2d 878, 891–92 (E.D. Mich. 2003) (permitting an excluded contractor to submit evidence from lost bids in support of an antitrust damages claim).

The secondary issue that the majority cited concerned how the subcontractor would address this lost labor. It might lay off workers or refuse to hire them. Conceivably it would pay lower wages to other workers on jobs that it retained. These all fall into the general run of difficulties encountered when estimating damages in distribution markets, and the courts generally respond by permitting reasonable estimates to go to the fact finder. A nonliability rule, by contrast, rewards the wrongdoer at the expense of an innocent victim.

In any event, we do not require product purchasers to jump through the same hoops. We simply permit them to recover based on the overcharge, typically without inquiry into what avoidance techniques they might have developed in order to minimize their harm from the cartel. For example, under the indirect purchaser rule, defendants are not even entitled to object that the purchaser from a cartel evaded the damage by passing the overcharge on to its own customers.[125] Neither can a defendant complain that the customer was able to substitute to a product that was almost as good.

The Court also expressed a concern with avoiding duplicative recoveries.[126] However, the excluded subcontractors and the plaintiff unions suffered distinct injuries. The excluded union subcontractors lost bidding opportunities in the product market for buildings or other projects. By contrast, the employees represented by the plaintiff unions lost job opportunities in the labor market. A product cartel injures not only consumers but also laborers who produce the cartelized product. Their injuries are not duplicative, however, and a consumer award for overcharge damages does not include compensation for the workers.[127] Indeed, it does not even include compensation for unmade sales that result from the cartel's product-output reduction. As a result, no injury from lost employment duplicated that of overcharged consumers.

The Court also cited a common bromide in antitrust standing cases: that the plaintiff union "was neither a consumer nor a competitor in the market in which trade was restrained."[128] But that conclusion is based on a myopic definition of the "market." The business of the allegedly excluded subcontractors was the

[125] Hanover Shoe, Inc. v. United Shoe Mach. Corp., 392 U.S. 481, 487–88 (1968).
[126] *AGC*, 459 U.S. at 543–44.
[127] Bork's figure above illustrates the point. *See* BORK, *supra* note 107.
[128] *AGC*, 459 U.S. at 539.

erection of structures and the business of the plaintiff was employment in the same industry.

In some ways, the injury that accrues to employees is more significant than that which accrues to consumers. First of all, consumers are most often the primary decision makers whose choices determine output. They are in the best position to evade the consequences of a cartel by making a substitution. By contrast, workers merely produce what consumers demand.

For example, consumers may respond to a cartel among video game makers by purchasing more traditional board games, and the rate of substitution will be entirely their choice. They can either pay more for the cartelized product or switch. Further, the typical consumer at retail is not bound by either a contract or previous investment to stick with the monopolized product. By contrast, labor must follow where the consumers lead, and employee movement from video game makers to makers of board games could be much stickier.[129]

Many employee standing issues for antitrust violations in product markets boil down to the difficulty of proving causation and damages. When the video game makers fix prices, the inference of customer harm in that market is relatively straightforward. Proof problems, particularly of the amount, are typically manageable, even for indirect purchasers.[130] More importantly, we give these purchasers the benefit of the doubt, not asking whether they passed on the overcharge or purchased a substitute product. The antitrust damages rule is that the plaintiff is entitled to a trebled overcharge for its purchases on the markup between the innocent price and the unlawful price. The inference of employee loss from the same product-market cartel is strong as well, subject to one additional inference: employees are injured by the employment consequences that result from the cartel's output reduction and do not receive a wage reduction that is equal to the monopoly overcharge.

This suggests either that the rules for assessing labor damages need to be loosened up, or else there is a need for greater public enforcement. The U.S. Department of Justice and the Federal Trade Commission, unlike private plaintiffs, need not

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[129] *See* Suresh Naidu, Eric A. Posner & Glen Weyl, *Antitrust Remedies for Labor Market Power*, 132 HARV. L. REV. 536, 555–56 (2018).

[130] On indirect purchaser damages, see 2A PHILLIP A. AREEDA, HERBERT HOVENKAMP, ROGER D. BLAIR & CHRISTINE PIETTE DURRANCE, ANTITRUST LAW ¶ 396 (5th ed. 2021).

prove causation and do not need to quantify damages.[131] That gives them a distinct procedural advantage over private plaintiffs.

CONCLUSION

The inverted U-shape relationship between antitrust under- and over-enforcement places a premium on correct outcomes.[132] Erring in either direction harms both consumers and workers. But getting it right requires good and useable theory, testing and retesting of outcomes, and an ability to limit one's focus.

The original Progressives were supportive of labor and were critical to the development of the field of labor economics,[133] as well as the antitrust law governing labor disputes.[134] Today's new Progressives, or neo-Brandeisians, are also quite solicitous of labor, and they certainly support things such as ramped-up antitrust enforcement against overly aggressive noncompete agreements, as well as more traditional areas of wage-fixing. While those concerns are welcome, they also have a blind spot, which is their lack of attentiveness to the impact of product restraints on labor.

The effect of employment-market restraints, while surely important, is less substantial than the effect of reduced output in product markets. Roughly 18% of U.S. workers are covered by some sort of noncompete agreement.[135] That number includes both noncompetes that are justified by traditional employer-

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131 *See* Hovenkamp, *Antitrust Harm and Causation*, *supra* note 95, at 837.

132 *See supra* note 85 and accompanying text.

133 *See generally* CLARENCE E. WUNDERLIN, JR., VISIONS OF A NEW INDUSTRIAL ORDER: SOCIAL SCIENCE AND LABOR THEORY IN AMERICA'S PROGRESSIVE ERA (1992); Robert E. Prasch, *American Economists and Minimum Wage Legislation During the Progressive Era, 1912–1923*, 20 J. HIST. ECON. THOUGHT 161 (1998). *See also generally* BLUM, *supra* note 2; COMMONS, LEGAL FOUNDATIONS OF CAPITALISM, *supra* note 54; JOHN R. COMMONS, LABOR AND ADMINISTRATION (1913); F. W. TAUSSIG, WAGES AND CAPITAL, *supra* note 45; RICHARD T. ELY, THE LABOR MOVEMENT IN AMERICA (1886).

134 This largely includes Justice Brandeis himself. *See, e.g.*, Duplex Printing Press Co. v. Deering, 254 U.S. 443, 479 (1921) (Brandeis, J., dissenting) (dissenting from the majority's approval of a labor injunction against strikers); Truax v. Corrigan, 257 U.S. 312, 354 (1921) (Brandeis, J., dissenting) (dissenting from the majority's decision striking down an Arizona statute that prohibited labor injunctions). *See generally* Felix Frankfurter & Nathan Greene, *Legislation Affecting Labor Injunctions*, 38 YALE L.J. 879 (1929). On the Progressives' contributions to antitrust policy generally, see Herbert Hovenkamp, The Invention of Antitrust (U. Pa. Inst. L. & Econ., Working Paper No. 22-05, 2022), https://perma.cc/3CV6-VASN.

135 Evan P. Starr, J.J. Prescott & Norman D. Bishara, *Noncompete Agreements in the U.S. Labor Force*, 64 J.L. & ECON. 53, 60 (2021).

investment and free-rider concerns as well as those that are not. What part of the employment market is subject to anti-poaching or other horizontal wage-fixing agreements is hard to say.[136] However, *all* of labor has a stake in the size of the product market. A practice that results in reduced product output harms labor just as certainly as it harms consumers—and perhaps more to the extent that substitution and monopoly-avoidance techniques often work less well in labor markets than in consumer markets. Finally, as noted earlier, antitrust rules that result in reduced product output can apply to the entire domain of commerce—much broader than an instance of market power exercised by a firm or even a cartel.[137]

Today "consumer welfare" as an antitrust goal is under attack.[138] How much is based on Bork's distorted conception of that term or how much on disregard of consumer interests is unclear.[139] To the extent it is the latter, however, it favors small business over consumers. It also favors small business over labor.

Consumer welfare—when it is properly defined—and worker welfare travel in tandem. When a practice harms consumers by raising prices and reducing output, it harms labor as well. There is no a priori reason for thinking that worker harm is less severe than consumer harm.[140] A properly designed antitrust policy must focus on both sets of interests.

136 For some good speculation, see generally Jonathan Masur & Eric A. Posner, *Horizontal Collusion and Parallel Wage-Setting in Labor Markets*, 90 U. CHI. L. REV 545 (2023), and Eric A. Posner, *Antitrust and Labor Markets: A Reply to Richard Epstein*, 15 N.Y.U. J.L. & LIBERTY 389 (2022) (replying to Richard A. Epstein, *The Application of Antitrust Law to Labor Markets—Then and Now*, 15 N.Y.U. J.L. & LIBERTY 327 (2022)).

137 *See supra* text accompanying notes 54–55.

138 *E.g.*, Sandeep Vaheesan, *The Profound Nonsense of Consumer Welfare Antitrust*, 64 ANTITRUST BULL. 479 (2019); Barry C. Lynn, *Killing the Competition: How the New Monopolies Are Destroying Open Markets*, HARPER'S MAG. (Feb. 2012), https://perma.cc/H7ZX-5N26.

139 *See* Salop, *supra* note 89, at 342.

140 Naidu et al., *supra* note 129, at 555–61.