WHY HAS ANTITRUST LAW FAILED WORKERS?

Ioana Marinescu & Eric A. Posnert

In the last several years, economists have learned about an antitrust problem of vast scope. Far from approximating the conditions of perfect competition as long assumed, most labor markets are characterized by monopsony—meaning that employers pay workers less than their productivity because workers lack a credible threat to quit and find a higher-paying job in the same market. Yet while antitrust law regulates labor monopsony in the same way as it regulates monopoly on the product market side, antitrust litigation against employers is rare. We document both the magnitude of labor monopsony and the paucity of cases and argue that this "litigation gap" exists because antitrust case law, which has developed through product-side litigation, is poorly tailored to labor-side problems. We conclude with four proposals for reform of antitrust law so it can better deter labor monopsony.

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[†] Marinescu is Assistant Professor, School of Social Policy & Practice, University of Pennsylvania, and a faculty research fellow at the National Bureau of Economic Research. Posner is Kirkland & Ellis Distinguished Service Professor, University of Chicago. Portions of this Article are drawn from a working paper. See Ioana Marinescu & Eric A. Posner, A Proposal to Enhance Antitrust Protection Against Labor Market Monopsony (Dec. 21, 2018) (Roosevelt Inst., Working Paper), https://rooseveltinstitute.org/wp-content/uploads/2019/01/RI_ProposalToEnhanceAntitrustProtection_workingpaper_11419-1.pdf [https://perma.cc/4DQZ-WAL2]. We thank participants at a University of Chicago Law School workshop, Hiba Hafiz and Randy Picker for valuable comments, and Carly Gibbons and Eugenia Lee for helpful research assistance.

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Events over the last several years have drawn public attention to employers who have used their power over labor markets to suppress wages and control workers. In 2010, a group of Silicon Valley tech companies, including Apple and Google, settled a case brought against them by the Justice Department alleging that they had agreed not to poach each other's employees in violation of section 1 of the Sherman Act.¹ Then, in 2014, news that Jimmy John's, the sandwich chain, imposed covenants not to compete on their low-wage sandwich makers provoked a public outcry.2 Two years later the company settled lawsuits brought by state attorneys general by agreeing to drop the noncompetes.3 Around the same time, academic scholarship revealed that noncompetes were ubiquitous, even in the contracts of low-skill workers like the sandwich workers of Jimmy John's, despite being subject to strict review in the common law and generally thought to be appropriate for high-skill workers in limited circumstances.⁴ A

¹ David Streitfeld, Engineers Allege Hiring Collusion in Silicon Valley, N.Y. Times (Feb. 28, 2014), https://www.nytimes.com/2014/03/01/technology/engineers-allege-hiring-collusion-in-silicon-valley.html [https://perma.cc/VGG7-526S].

² Neil Irwin, When the Guy Making Your Sandwich Has a Noncompete Clause, N.Y. Times (Oct. 14, 2014), https://www.nytimes.com/2014/10/15/upshot/when-the-guy-making-your-sandwich-has-a-noncompete-clause.html? auth=login-email&login=email [https://perma.cc/ESB3-X4NP].

³ E.g., Will Racke, Jimmy John's Settles Non-Compete Lawsuit, CHI. BUS. J. (Dec. 8, 2016, 12:04 PM), https://www.bizjournals.com/chicago/news/2016/12/08/jimmy-johns-settles-non-compete-lawsuit.html [https://perma.cc/MC6X-SB7U].

⁴ ALAN B. KRUEGER & ERIC A. POSNER, THE HAMILTON PROJECT, A PROPOSAL FOR PROTECTING LOW-INCOME WORKERS FROM MONOPSONY AND COLLUSION 7, 10 (2018), https://www.hamiltonproject.org/assets/files/protecting_low_income_workers_from_monopsony_collusion_krueger_posner_pp.pdf [https://perma.cc/T3JE-EM4U]; Evan Starr, J.J. Prescott & Norman Bishara, *Noncompetes in the U.S. Labor Force* 17–18 (U. Mich. L. & Econ., Research Paper No. 18-013, 2019), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2625714 [https://perma.cc/TV79-2DWF].

paper by two academics released in 2017 reported that numerous franchises imposed no-poaching clauses on franchisees:5 a vear later seven franchises, including McDonald's and Arby's, agreed to drop these clauses to settle a case brought by state attorneys general.6 Meanwhile, the Obama administration issued a report warning anticompetitive behavior by employers,7 and the Justice Department warned human resource departments to avoid nopoaching arrangements.8 The media kept up the drumbeat by reporting the ways that employers—using noncompetes, mergers, no-poaching agreements, and other anticompetitive devices—pushed down wages.9

These events coincided with the release of several academic papers that document statistically the pervasiveness of labor monopsony in the United States.¹⁰ A labor monopsony exists

Alan B. Krueger & Orley Ashenfelter, Theory and Evidence on Employer Collusion in the Franchise Sector 6 (Princeton Univ., Indus. Relations Section, Working Paper No. 614, 2017), https://dataspace.princeton.edu/jspui/bitstream /88435/dsp014f16c547g/3/614.pdf [https://perma.cc/6KKZ-R7B6].

Sean Higgins, Corporations Targeted for Directing Franchise Hiring, WASH. EXAMINER (July 24, 2018, 12:01 AM), https://www.washingtonexaminer.com/ policy/economy/corporations-targeted-for-directing-franchise-hiring [https:// perma.cc/D48D-JSNCl.

See Council of Econ. Advisers, Benefits of Competition and Indicators of MARKET POWER 2 (2016) https://obamawhitehouse.archives.gov/sites/default/ files/page/files/20160414_cea_competition_issue_brief.pdf [https://perma.cc/ 4LTZ-2ESB].

U.S. DEP'T OF JUSTICE ANTITRUST DIV. & FED. TRADE COMM'N, ANTITRUST GUIDANCE FOR HUMAN RESOURCE PROFESSIONALS 3-4 (2016), www.justice.gov/atr/file/903511/download [https://perma.cc/MM56-XLCE].

See Miguel Helft, Unwritten Code Rules Silicon Valley Hiring, N.Y. TIMES: DEALBOOK (June 3, 2009), https://www.nytimes.com/2009/06/04/technology/ companies/04trust.html [https://perma.cc/6CCA-MZ93]; Andrew Ross Sorkin, Tech Firms May Find No-Poaching Pacts Costly, N.Y. TIMES (Apr. 7, 2014, 8:54 PM), https://dealbook.nytimes.com/2014/04/07/tech-firms-may-find-no-poachingpacts-costly/ [https://perma.cc/K6UY-T9PV]; supra notes 1-4, 6.

José Azar, Ioana Marinescu, Marshall Steinbaum & Bledi Taska, Concentration in US Labor Markets: Evidence from Online Vacancy Data 2, 4-7 (Nat'l Bureau of Econ. Research, Working Paper No. 24395, 2018), https:// papers.ssrn.com/sol3/papers.cfm?abstract_id=3133344 [https://perma.cc/ 4LH7-DVFV]; Efraim Benmelech et al., Strong Employers and Weak Employees: How Does Employer Concentration Affect Wages? 1-2 (Nat'l Bureau of Econ. Research, Working Paper No. 24307, 2018), https://papers.ssrn.com/sol3/ papers.cfm?abstract_id=3146679 [https://perma.cc/DN2P-CMGJ]; Brad Hershbein, Claudia Macaluso & Chen Yeh, Concentration in U.S. Local Labor Markets: Evidence from Vacancy and Employment Data 2 (Mar. 15, 2018) (unpublished manuscript), https://site.stanford.edu/sites/g/files/sbiybj8706/ f/5166-concentration_in_u.s._local_labor_markets_evidence_from_vacancy_and_ employment_data.pdf [https://perma.cc/7JL7-PE3L]; Yue Qiu & Aaron Sojourner, Labor-Market Concentration and Labor Compensation 4 (Jan. 7, 2019) (unpublished manuscript), https://papers.ssrn.com/sol3/papers.cfm?abstract_ id=3312197 [https://perma.cc/QZ3J-FKCL].

when lack of competition in the labor market enables employers to suppress the wages of their workers.¹¹ At one time, economists assumed that labor markets were highly competitive. 12 If one imagines sandwich workers in a big city, for example, the immediate image that comes to mind is that of someone who could easily find another job if fired. That person could work at another restaurant, or a coffee shop, or in a warehouse, or as an Uber driver. Similarly, a lawyer can easily quit her law firm and join another. But the new research revealed that these assumptions were faulty. 13 In fact, most labor markets are not highly competitive. 14 Most labor markets are rural or semi-rural. Only a handful of employers cater to a thin population spread out over a large area. 15 Even in densely populated areas, various frictions, including noncompetition agreements, prevent workers from easily finding new jobs. 16 Taking advantage of these frictions, employers can pay below-competitive wages without worrying that they will lose employees to competitors. commentators argue that the high degree of labor monopsony may explain stagnant wages.¹⁷

Labor monopsony is regulated by the antitrust laws, just as the more familiar phenomenon of monopoly is. Indeed, from an economic standpoint, monopolization of product markets and monopsonization of labor markets pose exactly the same challenge to the economy—mispricing of resources (material or human), resulting in their underemployment, which both harms the economy and results in inequitable outcomes. Because nominally antitrust law applies to monopsony as well

Suresh Naidu, Eric A. Posner & Glen Weyl, Antitrust Remedies for Labor Market Power, 132 HARV. L. REV. 536, 537 (2018).

Id. at 541-42; see, e.g., Dennis W. Carlton & Jeffrey M. Perloff, Modern INDUSTRIAL ORGANIZATION 108 (4th ed. 2005) ("Most labor economists believe there are few monopsonized labor markets ").

Naidu, Posner & Weyl, supra note 11, at 542.

Id. at 537.

¹⁵ See Azar, Marinescu, Steinbaum & Taska, supra note 10, at 14.

See infra subpart I.A.

See Lydia DePillis, Big Companies Used to Pay the Best Wages. Not Anymore, CNN Bus. (Jan. 18, 2018, 12:51 PM), http://money.cnn.com/2018/ 01/18/news/economy/big-companies-wages/index.html [https://perma.cc/ M4K9-FBR2]; Noam Scheiber & Ben Casselman, Why Is Pay Lagging? Maybe Too Many Mergers in the Heartland, N.Y. TIMES (Jan. 25, 2018), https://www. nytimes.com/2018/01/25/business/economy/mergers-worker-pay.html [https://perma.cc/ZD7Z-N5LD]; Mark Whitehouse, U.S. Labor Markets Aren't Truly Free, BLOOMBERG OPINION (Oct. 21, 2018, 8:00 AM), https://www.bloom berg.com/view/articles/2018-10-21/free-markets-could-make-workers-betteroff [https://perma.cc/G3KR-4R7P].

as to monopoly, 18 one might think there would be as much litigation against employers for labor-market monopsonization as there has been against firms for violating antitrust law in the product market.

But the opposite is the case. The antitrust laws have rarely been used against employers by private litigants or the government.¹⁹ And when they have been used—whether by private litigants or by the government—they have been used mostly against the most obvious forms of anticompetitive conduct, like no-poaching agreements.20 Much under-theradar activity has been unaddressed.

Our major goal in this Article is to draw attention to, and explain, this "litigation gap," the gap between the largeness of the labor monopsony problem and the smallness of the legal response. Building on earlier work,²¹ we also offer four reform proposals. We propose more liberal standards for proving collusion under section 1 of the Sherman Act; stronger protections against monopsony under section 2; government review of the labor-market effects of mergers under section 7 of the Clayton Act; and a ban on arbitration clauses that prohibit class actions in employment contracts.

We write on a relatively clean slate. The law review literature contains some now-dated writing that was motivated by 1990s-era antitrust litigation against hospitals and sports But because of the widespread background leagues.²²

As the Supreme Court has observed, "[t]he kinship between monopoly and monopsony suggests that similar legal standards should apply to claims of monopolization and to claims of monopsonization." Weyerhaeuser Co. v. Ross-Simmons Hardwood Lumber Co., 549 U.S. 312, 322 (2007). Long before, in Anderson v. Shipowners Ass'n of the Pacific Coast, 272 U.S. 359, 362-63 (1926), the Court recognized a claim by workers based on a no-poaching agreement. In recent years, many lower courts have recognized that the antitrust laws apply to labor monopsony. See, e.g., O'Bannon v. Nat'l Collegiate Athletic Ass'n, 802 F.3d 1049, 1058, 1079 (9th Cir. 2015) (noting the district court's characterization of the market for college athletes as a monopsony and holding that NCAA regulations are subject to antitrust scrutiny under the rule of reason).

Naidu, Posner & Weyl, supra note 11, at 570.

Id. at 571.

Marinescu & Posner, supra note †, at 2; Ioana Marinescu & Herbert Hovenkamp, Anticompetitive Mergers in Labor Markets, 94 IND. L.J. 1031, 1031 (2019); Naidu, Posner & Weyl, supra note 11.

See, e.g., John A. Litwinski, Regulation of Labor Market Monopsony, 22 BERKELEY J. EMP. & LAB. L. 49, 52 (2001) (arguing that "antitrust law should be extended to outlaw or regulate firms' abilities to exercise labor market monopsony power" by prohibiting such firms "from using their market power to buy labor below the price which would otherwise exist in a competitive labor buying market"); Jeff Miles, The Nursing Shortage, Wage-Information Sharing Among Competing Hospitals, and the Antitrust Laws: The Nurse Wages Antitrust Litigation, 7 Hous, J. Health L. & Poly 305, 306-07 (2007) (finding that collusion

assumption that labor markets are competitive, this litigation did not spur a more general discussion of the effectiveness of antitrust law for addressing labor monopsony. In the last year or so, a few articles have begun to come to grips with the latest economic research but have focused on relatively narrow aspects of it, such as mergers.²³ In this Article, we broaden the focus.

Our Article is also related to a recent surge in academic writing among antitrust scholars who argue for more robust antitrust enforcement.²⁴ This writing has emerged in the wake of economic research that shows that U.S. product markets have become significantly more concentrated over the last several decades, in part because of weak merger review by the U.S. government.²⁵ Yet while authors writing in the newly reinvigorated antitrust literature have proposed a range of novel reforms for strengthening antitrust law, they have ignored the problem of labor monopsony. Our approach focuses on the major victims of economic stagnation and widening inequality—the workers, especially lower-skill workers.

We start in Part I with a review of the theory of labor monopsony and the recent economic literature that documents

among hospitals to prevent the wages they pay RNs from rising explains the RNshortage phenomenon in some cities); Laura Alexander, Note, Monopsony and the Consumer Harm Standard, 95 GEO. L.J. 1611, 1633 (2007) (arguing that courts should recognize the legislative judgments inherent in the Sherman Act to resolve the problems of applying antitrust law to monopsony).

In addition to the articles cited in supra note 9, see Suresh Naidu & Eric A. Posner, Labor Monopsony and the Limits of the Law 7-8 (Oct. 14, 2018) (unpublished manuscript), https://irs.princeton.edu/sites/irs/files/naidu%20 posner%20limits%20of%20law%20conference%20draft.pdf [https://perma.cc/ 93P9-WMYB]; cf. Clayton J. Masterman, Note, The Customer Is Not Always Right: Balancing Worker and Customer Welfare in Antitrust Law, 69 VAND. L. REV. 1387, 1389 (2016) (analyzing the court's forgiving tendency toward monopsonist conduct by focusing on "agreements between employers that restrict competition in labor markets").

See, e.g., Carl Shapiro, Antitrust in a Time of Populism, 61 INT'L J. INDUS. ORG. 714, 716 (2018) (arguing that all three branches of government can improve and strengthen their application of antitrust law). For a symposium devoted to this topic, see Jonathan B. Baker et al., *Unlocking Antitrust Enforcement*, 127 YALE L.J. 1916, 1916–20 (2018), especially the introduction. For other writings in this vein, see Tim Wu, The Curse of Bigness: Antitrust in the New Gilded Age 127-39 (2018); Lina M. Khan, Amazon's Antitrust Paradox, 126 YALE L.J. 710, 790-802 (2017).

See, e.g., Gustavo Grullon, Yelena Larkin & Roni Michaely, Are US Industries Becoming More Concentrated?, 23 REV. FIN. 697, 700 (2019) (yes); Germán Gutiérrez & Thomas Philippon, Declining Competition and Investment in the U.S. 3-5 (Nat'l Bureau of Econ. Research, Working Paper No. 23583, 2017), https://www.nber.org/papers/w23583.pdf [https://perma.cc/39PG-RG3D] (documenting decline of competition).

its vast influence on labor conditions. In Part II, we discuss the law, specifically sections 1 and 2 of the Sherman Act and section 7 of the Clayton Act. We show how the law can be used against labor monopsony and discuss reasons why it has fallen short. In Part III, we propose four reforms to cure these failures.

I ECONOMIC BACKGROUND

A. Theory

When employers establish wages and working conditions, they seek to minimize their labor costs while attracting the workers they need in the production process. In a perfectly competitive labor market, where workers can at no cost quit and obtain comparable work at alternative employers, the employer pays a wage equal to the worker's marginal revenue product—the amount of value that the worker adds to the employer's bottom line. Such a wage "clears" the market, attracting all workers willing to work in return for it and thus can be taken as a baseline for evaluating actual labor market conditions.²⁶

Real-world wages deviate from the competitive ideal for many reasons, but our focus is the problem of employer monopsony—the ability to set wages below the marginal revenue product. There are three major sources of monopsony: concentration, search frictions, and job differentiation.

Concentration means that only one or a few employers hire a particular kind of worker in an area where workers reside and commute.²⁷ When few employers exist, workers who are underpaid by their existing employer are limited in their ability to quit and work for an alternative employer for a higher wage. This allows the incumbent employer to suppress the wage. Employer concentration also facilitates overt or tacit collusion, for example, where one firm acts as a "wage leader" by periodically announcing wage increases that other firms match.²⁸

Search frictions refer to the difficulty faced by workers of finding new jobs if they are unsatisfied with their existing em-

See, e.g., Ronald G. Ehrenberg & Robert S. Smith, Modern Labor Economics: Theory and Public Policy 130–45 (12th ed. 2015) (overviewing the basic economics of labor markets and monopsony).

²⁷ See Azar, Marinescu, Steinbaum & Taska, supra note 10, at 3-4.

²⁸ Cf. Kleen Prods. LLC v. Int'l Paper, 276 F. Supp. 3d 811, 824–25 (N.D. Ill. 2017) (explaining a similar phenomenon in price setting), aff d sub nom. Kleen Prods. LLC v. Ga.-Pac. LLC, 910 F.3d 927 (7th Cir. 2018).

ployer or are fired or laid off.²⁹ Search frictions exist because workers may be unaware of alternative employment opportunities in the area or elsewhere; or, while they may know that other employers are hiring, they have trouble comparing jobs because of various intangibles like the work environment. Even in the presence of good information and comparable jobs, a coordination problem leads to search frictions: workers do not know which firms other workers are applying to, so workers will end up overapplying to some jobs and underapplying to others. Workers who happen by chance to have applied to jobs that many other workers have also applied to have a low probability of getting hired, which increases the time it takes to find a job. If finding a job is hard and risky, then workers will settle for a low wage offer rather than keep searching.³⁰

Job differentiation refers to the way that different employers offer workers different packages of amenities—including, for example, shift flexibility, childcare, vacation and sick time, and the overall atmosphere at work, such as whether it is intense, relaxed, noisy, collegial, or competitive. Workers sort themselves across employers according to the amenities that are offered, but as a result they may become vulnerable to wage suppression because they cannot credibly threaten to leave one job for another where the amenities are quite different.³¹

Antitrust law has traditionally been concerned with the problem of concentration. In most antitrust cases, the plaintiff must start by proving that the defendant possesses market power—meaning that the defendant controls a large share of a market and that only a few other firms control large shares as well.³² For product markets, an example would be Coca-Cola, which controls about 43% of the nationwide nonalcoholic beverages market.³³ For labor markets, an example would be Home Depot, which controlled 100% of the market for cargo and freight agents in 142 commuting zones (out of the 709

²⁹ Alan Manning, *Imperfect Competition in the Labor Market*, in 4B HANDBOOK OF LABOR ECONOMICS 973, 976–78 (Orley Ashenfelter & David Card, eds., 2011) [hereinafter Manning, *Imperfect Competition*]; see also Alan Manning, Monopsony IN MOTION: IMPERFECT COMPETITION IN LABOR MARKETS 360–61 (2003) (providing an important stimulus for the modern literature).

³⁰ Manning, Imperfect Competition, supra note 29, at 976–78.

³¹ Id.

³² See Roy B. Taylor Sales, Inc. v. Hollymatic Corp., 28 F.3d 1379, 1386 (5th Cir. 1994); Spectrofuge Corp. v. Beckman Instruments, Inc., 575 F.2d 256, 275–76 (5th Cir. 1978), cert. denied, 440 U.S. 939 (1979).

³³ Coca-Cola Company's Market Share in the United States from 2004 to 2018, STATISTA (2019), https://www.statista.com/statistics/225388/us-market-share-of-the-coca-cola-company-since-2004/ [https://perma.cc/2AJY-DLCU].

commuting zones throughout the United States) in 2016.34 However, antitrust law is more broadly concerned with any friction that could allow a firm to charge prices above the competitive level for goods and services and to pay prices below the competitive level when it buys goods, services, or labor.

Employers with monopsony power, whatever its source, can suppress wages (and degrade working conditions) in order to save labor costs. While some workers will quit as a result, an employer with monopsony power gains more in reduced labor costs than it loses from lower production. Both types of workers-those who continue working and those who quit-suffer from this state of affairs, and there is also harm to the economy as a result of the lower level of production.

Still, the distinction between concentration and the other sources of labor monopsony-search frictions and job differentiation—is important. Some antitrust doctrines are directed only to the problem of concentration. Blocking a merger, for example, can prevent concentration, but it cannot lower search costs or counter job differentiation. But the other sources of labor monopsony can also play a role in antitrust analysis. Search frictions and job differentiation can be the source of entry barriers that preserve a firm's monopsony, and under antitrust law the actions of a monopsonist—for example, its efforts to extend the monopsony into other markets—are subject to special scrutiny.³⁵ We will abstract from these distinctions henceforth, but they should be kept in mind.³⁶

B. The Monopsony Landscape

Monopsony prevails in a large number of U.S. labor markets. Recent empirical work has documented this phenomenon by using the Herfindhal-Hirschman Index (HHI), which is widely used to assess monopoly power in the product market.³⁷ The HHI for a product market equals the sum of the squares of

³⁴ Based on the Burning Glass Technologies data and market definition used in Azar, Marinescu, Steinbaum & Taska, supra note 10, at 4-6.

See U.S. DEP'T OF JUSTICE & FED. TRADE COMM'N, HORIZONTAL MERGER GUIDE-LINES § 12 (2010), https://www.justice.gov/sites/default/files/atr/legacy/2010/ 08/19/hmg-2010.pdf [https://perma.cc/7ZNB-54B8] [hereinafter HORIZONTAL MERGER GUIDELINES] (discussing the scrutiny used when evaluating mergers of competing buyers).

Because antitrust law focuses mainly on concentration and can have only a limited impact on the other two sources of labor monopsony, even hypothetically perfect enforcement of antitrust law would leave a significant amount of labor monopsony intact. For a discussion, see Naidu & Posner, supra note 23, at 13-16.

See Azar, Marinescu, Steinbaum & Taska, supra note 10, at 6-7.

the market share of the firms that compete within that product market, multiplied by 10,000.38 For example, if two firms dimarket equally, the HHI equals vide the $(0.5^2 + 0.5^2 * 10,000)$. An HHI of zero represents the theoretical ideal of perfect competition, while an HHI of 10,000 represents a product market dominated by a single monopolist. The value of the index is higher when there are fewer firms selling a product or when one firm dominates the market (for example, for two firms the HHI is higher when one firm sells 90% of products and the other 10% than when each of the two firms sells 50% of products)—as these are the conditions in which the competitive harm caused by market concentration is greatest.39

The Department of Justice and the Federal Trade Commission's *Horizontal Merger Guidelines* use the HHI to establish the conditions under which mergers and acquisitions among competitors are lawful.⁴⁰ An HHI above 1,500 means that a market is "moderately concentrated," and an HHI above 2,500 means that a market is "highly concentrated." When firms seek to merge in a market with a high HHI and when the merger would significantly increase the HHI, the government presumes that the merger is anticompetitive and may block it.

The HHI for a labor market is calculated in the same way as the HHI for a product market, except that the market share is the firm's share of a labor market, rather than its share of a product market.⁴¹ To measure labor market concentration, we look at the number of vacancies in a particular labor market, and calculate the HHI based on each firm's share of those vacancies. A market where four firms post 25% of jobs each is highly concentrated with an HHI of 2,500. But before we go further, we should explain how labor markets are defined.

1. Labor Markets

The labor market definition has three elements: type of job (or skills); geographic scope; and time. First, we define a labor market by the type of job. The empirical literature relies on a list of "Standard Occupational Classifications" (SOC) main-

³⁸ See Marinescu & Hovenkamp, supra note 21, at 1039.

 $^{^{39}}$ See id. (noting that mergers in markets with high HHI indices warrant concerns regarding their impact on competitiveness).

⁴⁰ HORIZONTAL MERGER GUIDELINES, supra note 35, § 5.3.

⁴¹ Marinescu & Hovenkamp, supra note 21, at 1037, 1039.

tained by the Bureau of Labor Statistics, 42 and more specifically, an occupation at the six-digit SOC level, which represents a fairly specific definition of a job or occupation. Unfortunately, even the detailed six-digit SOC level is probably too broad for labor market definition. For example, "accountants and auditors" (13-2011) may be excessively broad because an experienced accountant may consider only a "senior accountant" job title position rather than the position of a junior or entry-level accountant.⁴³ Still, the SOC level is convenient for empirical work; because the SOC level is probably too broad, it also serves as a conservative assumption, with the result that the literature likely understates the degree of labor market concentration.

One may object that the SOC level is in fact also too narrow, at least for some workers. An accountant may tire of accounting and apply for a job as a manager of a business or go to medical school and start over as a doctor. However, the key question is: when faced with lower wages, how likely is a worker to apply to a different job or to quit a current job? The evidence shows that workers are not very sensitive to wages when choosing where to apply⁴⁴ or whether to quit a current job. 45 This limited sensitivity of workers to wages implies that employers have the latitude to lower wages below workers' marginal productivity without causing a large number of workers to quit.

Even though many occupations seem quite similar, the costs of switching occupations is high. Workers are more likely to switch between occupations that are similar in the kinds of tasks that are performed. However, the dissimilarity between tasks performed in different jobs is not the main barrier to transition across occupations;46 this task dissimilarity ac-

See Occupational Employment Statistics, U.S. DEP'T LAB., https:// www.bls.gov/oes/current/oes_stru.htm [https://perma.cc/Z2W2-ELUS] (last updated Mar. 31, 2020).

See Ioana Marinescu & Ronald Wolthoff, Opening the Black Box of the Matching Function: The Power of Words 15 (Nat'l Bureau of Econ. Research, Working Paper No. 22508, 2016), http://www.nber.org/papers/w22508 [https:// perma.cc/WQZ9-ASBK].

José Azar, Ioana Marinescu & Marshall Steinbaum, Measuring Labor Market Power Two Ways, 109 AEA PAPERS & PROC. 317-18 (2019); Marinescu & Wolthoff, supra note 43, at 11, 22 (finding that job titles act as a sufficient proxy for wages in most cases, and that a positive relationship between wages and number of applicants exists only when job titles are controlled for).

Manning, Imperfect Competition, supra note 29, at 1012.

Guido Matias Cortes & Giovanni Gallipoli, The Costs of Occupational Mobility: An Aggregate Analysis, 16 J. Eur. Econ. Ass'n 275, 312-13 (2018).

counts for only 14% of the cost of switching occupations.⁴⁷ Even between two very similar occupations, moves are hampered by other types of entry costs, including retraining and occupational licensing. Removing all barriers to mobility would increase occupational switches by about ten times.⁴⁸ The upshot is that, just because two occupations seem very similar, it does not mean that the cost of switching from one to the other is low.

Because of high occupational switching costs, workers do not react strongly to changes in wages across occupations. The costs of switching across occupations can be estimated by comparing actual occupational switches with the occupational switches that would happen if workers simply went to the highest paying occupation. Using this reasoning, studies estimate that switching occupations can entail a loss between half a year and three years of earnings. These losses are significant, and therefore it is plausible that an employer that monopsonizes an occupation can impose a substantial wage cut without driving away many workers.

Second, we define the geographic scope of the market as the area where most workers work and live, and more specifically a commuting zone (CZ). Commuting zones are geographic area definitions comprising clusters of counties that were developed by the United States Department of Agriculture (USDA),⁵⁰ based on patterns of commuting. As we will discuss below, CZs are only approximations because some workers may commute across CZs, while others may refuse to take a job at the far end of the CZ in which she currently works. A very few labor markets—like the market for CEOs—may be national or international in scope. But again the results of the studies analyzing the impact of labor market concentration on wages are robust to different definitions of the geographic scope of the labor market, which suggests that the precise definition does not matter.⁵¹

⁴⁷ Id. at 278.

⁴⁸ Id. at 302 tbl. 7.

⁴⁹ Erhan Artuç & John McLaren, *Trade Policy and Wage Inequality: A Structural Analysis with Occupational and Sectoral Mobility*, 97 J. INT'L ECON. 278, 284 (2015); Etienne Lalé, *Worker Reallocation Across Occupations: Confronting Data with Theory*, 44 LABOUR ECON. 51, 59 (2017) ("We find that [mobility] costs fluctuate between 54 and 67% of annual earnings").

⁵⁰ See Commuting Zones and Labor Market Areas, U.S. DEP'T AGRIC., https://www.ers.usda.gov/data-products/commuting-zones-and-labor-market-areas/[https://perma.cc/E2KR-2EZ2] (last updated Mar. 26, 2019).

⁵¹ Benmelech et al., *supra* note 10, at 13–14; Hershbein et al., *supra* note 10, at 12–13; Kevin Rinz, *Labor Market Concentration, Earnings Inequality, and Earn-*

Third, the labor market must be limited in time because job seekers can afford to be unemployed only for a limited period of time. The median duration of unemployment was about a quarter of a year in 2016.⁵² In sum, we define a labor market as the combination of a six-digit SOC occupation, a commuting zone, and a quarter, for example, accountants and auditors in Philadelphia in the first quarter of 2016.

2. Labor Market Monopsony

Labor market monopsony prevails when employers can pay workers wages below the competitive rate because of their high switch costs. As we noted above, monopsony has three sources: concentration, search frictions, and job differentiation. It is convenient to distinguish concentration because of the central role that it plays in antitrust, so henceforth we will refer to concentration and non-concentration (that is, search frictions or job differentiation) sources of monopsony.

Elasticity. The most direct measure of labor market monopsony is labor supply elasticity, which refers to workers' sensitivity to wages. Elasticity of infinity means that a worker will quit (or not take a job) if the wage is reduced even a tiny amount below the competitive wage, while elasticity of zero means that a worker will stay put (or still take a job) even if the wage is reduced significantly. As a rough rule of thumb, and drawing on the product-market literature, we say that a monopsony exists—that is, a problem that deserves legal attention of some sort—if a small but significant nontransitory reduction in wages (5% is a rule of thumb) will not result in a substantial reduction in employment, given quitting and hiring rates.⁵³ As a rough point of reference, consider an elasticity of two, which is common across labor markets.⁵⁴ An elasticity of two means that a 10% increase in wages entails a 20% increase in a firm's employment. If the elasticity is below two, then an employer that monopsonizes a labor market can profitably reduce wages by 5%.

HHI. The HHI for a labor market is calculated in the same way as the HHI for a product market, except that the market share is the firm's share of a labor market, rather than its share

ings Mobility 30 (Ctr. for Admin. Records Research & Applications, Working Paper 2018-10, 2018); Qiu & Sojourner, supra note 10, at 21-22.

Azar, Marinescu, Steinbaum & Taska, supra note 10, at 9.

 $^{^{53}}$ Cf. Horizontal Merger Guidelines, supra note 35, § 4.1 (describing the rule for product markets); Naidu, Posner & Weyl, supra note 11, at 574-75.

⁵⁴ Azar, Marinescu, Steinbaum & Taska, supra note 10, at 12.

of a product market. To measure labor market concentration, we look at the number of vacancies in a particular labor market and calculate the HHI based on each firm's share of those vacancies. A market where four firms post 25% of jobs each is highly concentrated with an HHI of 2,500.

Relationship between Elasticity and HHI. The elasticity measure reflects all three sources of monopsony power, while the HHI measures only concentration. Thus, for any market, the HHI necessarily understates employer power. Nonetheless, HHI and elasticity are correlated. Across all labor markets, a 10% increase in HHI is associated with a 2.2% decrease in a measure of the labor supply elasticity.⁵⁵ Across markets, wages decline with HHI, even after we control for the labor supply elasticity: this shows that concentration is an important determinant of wages, even after we account for labor market frictions captured by the labor supply elasticity.⁵⁶ Because of the traditional role of HHI in antitrust enforcement, we will focus on HHI in this Article.

Market power. Any labor market can be more or less monopsonistic, but there is another variable of interest: the power of any particular employer, which is usually measured in terms of market share. If a market is highly concentrated, there will typically be one, two, or three very large employers, and these employers will usually be the focus of antitrust law. It is also possible for a market to be less highly concentrated but still inelastic—for example, if there are high job search costs. These markets pose a challenge to antitrust enforcement because the various small employers probably do not take any actions that could be penalized, and hence deterred, in a practical way.

C. Empirical Findings

We can now turn to the results of the empirical literature. According to a leading study, in 2016, labor market concentration exceeded the high concentration threshold of 2,500 HHI in 60% of U.S. labor markets.⁵⁷ These highly concentrated markets account for 20% of U.S. employment. Larger cities generally have lower labor market concentration while labor markets

Azar, Marinescu & Steinbaum, supra note 44, at 320. In this paper, the labor supply elasticity is approximated by the application elasticity, i.e., the percent increase in applications that results from a percent increase in the advertised wage.

Azar, Marinescu, Steinbaum & Taska, supra note 10, at 2.

are more concentrated in rural areas: for example, the labor markets in the Chicago commuting zone have a low average concentration (HHI of 301), while the labor markets in Kankakee and Iroquois counties (which form a commuting zone immediately south of the Chicago commuting zone) have a very high average concentration (HHI of 5,184, see red area in the Figure 1 below⁵⁸). More broadly, the five least concentrated commuting zones have an average HHI below 400 and are: Los Angeles, New York, San Francisco, Philadelphia, and Chicago. The five most concentrated commuting zones are all in rural areas and have an average HHI above 8,800. This geographical variation reflects a well-understood fact about commuting: there is only so far that people are willing to commute. So in a densely populated area, there will be more employers, and hence more competition among employers for workers. Labor market concentration also varies across regions of the country, with higher concentration across a broad swath of the middle of the country.

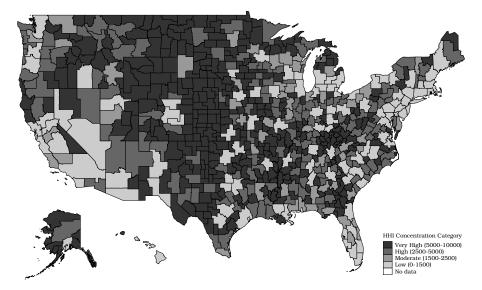


Figure 1. Average HHI by commuting zone, based on vacancy shares. This figure shows the average of the Herfindahl-Hirschman Index by commuting zone code for the top 200 SOC-6 occupations (ranked based on the number of vacancies) over the period 2016Q1-2016Q4 in the Burning Glass Technologies dataset. The categories we use for HHI concentration levels are: "Low": HHI between 0 and 1500; "Moderate": HHI between 1500 and 2500; "High": HHI between 2500 and 5000; "Very High": HHI between 5000 and 10000. These categories correspond to the DOJ/FTC guidelines, except that we add the additional distinction between high and very high concentration levels around the 5,000 HHI threshold. Market shares are defined as the sum of vacancies by a given firm in a given market (6-

digit SOC by commuting zone) and year-quarter divided by total vacancies posted in that market and year-quarter.

Among the thirty largest occupations, the least concentrated occupation is "registered nurses" while the most concentrated is "marketing managers." 59 Among these common occupations, the top seven most concentrated occupations marketing managers, management analysts, computer systems analysts, financial analysts, information security analysts, web developers, software developers who specialize in applications—are all highly skilled, but below there are a variety of high- and low-skilled occupations, including medical and health service managers, and customer service representatives. These findings accord with economic theory. Many different employers hire low-skill workers such as customer service representatives or secretaries and administrative assistants, while a high-skill worker invests in skills that may be suitable for only a small number of employers. But labor monopsony harms low-skill workers as well, especially in rural areas where few employers of any kind exist in any given commuting zone.

Higher concentration is associated with lower wages for workers. An increase in HHI by 10% in a given labor market is associated with a decrease in posted wages for job vacancies by 0.4% to $1.5\%.^{60}$ To illustrate, a legal secretary is looking for a job in Columbus, Ohio. The average pay there is about \$33,000 a year, and the HHI is 2,969, already above the high concentration threshold. Suppose that, following a merger of law firms, the HHI increases by 27% to 3,762. This means that the wage for a legal secretary would decrease by up to 1.5%*2.7*33,000=\$1,337. Thus, as a result of the merger, new legal secretary jobs in Columbus, Ohio would pay \$31,663 per year instead of \$33,000, all else equal.

To understand the effect of concentration on a worker's life, we can look to a farm equipment mechanic named Matt Gies, whose woes were chronicled in a New York Times article.⁶¹ Mr. Gies was raised on a farm and always wanted to repair farm equipment. As a young man, he was hired by a local farm equipment distributor. Later, Mr. Gies's employer was pur-

⁵⁹ *Id.* at fig. 4.

José Azar, Ioana Marinescu & Marshall Steinbaum, *Labor Market Concentration* (Nat'l Bureau of Econ. Research, Working Paper No. 24147, 2017), http://www.marinescu.eu/AzarMarinescuSteinbaum.pdf [https://perma.cc/VBZ6-B84Y].

⁶¹ Scheiber & Casselman, supra note 17.

chased by a bigger corporation, Riesterer & Schnell. His hours increased and his pay stayed almost flat, so he quit. However, he could not find another job as a farm equipment mechanic because most of these jobs were offered by Riesterer & Schnell, which owned several local distributors. This pattern is consistent with the very high level of labor market concentration for farm equipment mechanics in the whole U.S.⁶² While Mr. Gies was able to find other jobs, these jobs did not bring him the same satisfaction, and at the time that the New York Times published its article about him, he was still looking for a job as a farm equipment mechanic, while doing occasional freelance repair work for acquaintances.

It is sometimes assumed that labor market and product market concentration coincide, as a result of which antitrust enforcement aimed at product market concentration would take care of labor market concentration as well. However, the data shows that labor market concentration is distinct from product market concentration and that it is labor market concentration rather than product market concentration that tends to depress wages.⁶³ While labor market concentration is higher for more product-concentrated industries than for less product-concentrated industries, this pattern is not very strong.⁶⁴ For example, plastic product manufacturing and cement and concrete product manufacturing both have a product market HHI below the low concentration threshold. However, the top occupation in plastics, "Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic," has an HHI above 5,000.65 By contrast, the top occupation in cement and concrete is "Heavy and Tractor-Trailer Truck Drivers," which has a very low labor market HHI below 500.66 A more familiar example is mining. Mines are often the only significant employers in a commuting zone, and hence the labor market for skilled miners is typically concentrated; but mines sell their products into national or global markets that are usually competitive. This shows that antitrust enforcement cannot rely on product market concentration to capture the degree of competition in the labor market.

⁶² Azar, Marinescu & Steinbaum, supra note 60, at app. fig. A.3.

⁶³ See Azar, Marinescu, Steinbaum & Taska, supra note 10, at 19 ("Labor market concentration is different from product market concentration, and occupational wages are lower when labor market concentration is higher, not when product market concentration is higher.").

⁶⁴ *Id.* at 18.

⁶⁵ Id.

⁶⁶ Id. at 19.

The recent discovery that most labor markets are highly concentrated led some commentators to speculate that rising labor market concentration explains the stagnation of wages since the 1990s.⁶⁷ But the story is more complex. Labor market concentration decreased between 2000 and 2010 and has increased after 2010.68 If we define a labor market by an industry (and commuting zone) rather than an occupation (and commuting zone), the data allow us to go back further in time to 1970 and indicates that industry-based labor market concentration decreased between 1970 and 2010 before shifting direction in 2010.69 The decline in industry-based labor market concentration is partly driven by the increasing entry of large firms in commuting zones, for example, Walmart. Because concentration has decreased since 2000, rising concentration alone cannot explain wage stagnation. However, this is no reason for lax antitrust enforcement since labor market concentration has suppressed wages even in the recent period during which concentration has been lower than in the early 2000s.70

For another angle on the problem of monopsony, we can look at elasticity numbers rather than HHI. One way of measuring the labor supply elasticity is to estimate how the number of applications changes when posted wages increases. The average elasticity across markets is about 0.42, implying that a 10% increase in posted wages increases the number of applicants to a vacancy by 4.2%.⁷¹ For 80% of workers living in the less densely populated commuting zones, the elasticity is very small and close to zero. Even in the 1% most densely populated areas, the elasticity is no greater than five, a level well below ten, a figure that roughly approximates perfect competition.⁷² Thus, the common intuition that cities have perfectly competitive markets turns out to be false.

The negative relationship between labor market concentration and wages in the United States has been confirmed using different data sources, time periods, and definitions of the la-

⁶⁷ See Scheiber & Casselman, supra note 17 ("In the past few years, a growing chorus of economists has expressed concern that consolidation among companies . . . could help explain the wage stagnation that has become a vexing feature of the labor market since the late 1990s.").

⁶⁸ Qiu & Sojourner, supra note 10, at 40.

⁶⁹ Hershbein et al., supra note 10, at 16; Rinz, supra note 51, at 13.

⁷⁰ Rinz, *supra* note 51, at 26.

⁷¹ Azar, Marinescu & Steinbaum, supra note 44, at 317.

⁷² *Id.* at 320–21; Naidu, Posner & Weyl, *supra* note 11, at 565.

bor market.⁷³ Importantly, some of these studies used administrative data on employment, which shows that potential issues with job vacancies data are not driving the results. Studies have also specifically investigated the impact of mergers. One recent study looks at mergers from 1978 to 2016 between competing manufacturing firms that each owned at least one plant in a local labor market.⁷⁴ The study measured how the mergers increased HHI and then measured the wage impact of the HHI increase induced by mergers.⁷⁵ The study found that the mergers, through their effect on HHI, suppressed wages at an economically substantive and statistically significant level.⁷⁶ Another study focuses on hospital mergers and shows that when the merger significantly increases the labor market HHI, the wages of specialized personnel decrease.77 That study also found that the wages of skilled hospital personnel are about 5% lower in markets above 2,500 HHI compared to perfectly competitive markets, and these same wages are about 18% lower in monopsony labor markets with 10,000 HHI. These additional studies of monopsony also show that when unionization is higher, the negative wage impact of HHI⁷⁸ and HHI-increasing mergers⁷⁹ is lessened. While concentration could be associated with uncontrolled-for variables that reduce wages, the negative impact of mergers on wages confirm that market power is one of the reasons why we observe a negative association between wages and concentration.

Theory predicts that labor market concentration should decrease employment as well as wages. However, determining whether concentration reduces employment because of monopsony is tricky because concentration could also lower employment as a result of efficiencies: for example, two hospitals that merge no longer need two accounting departments and thus may be able to fire accountants and support staff without losing productivity. The study of hospital mergers found negative wage effects but no output or employment effects.80 This null effect on output and employment makes the anticompeti-

See Benmelech et al., supra note 10, at 4; Hershbein et al., supra note 10, at 3; Rinz, supra note 51, at 19.

Benmelech et al., supra note 10, at 2.

⁷⁵ Id. at 2-3.

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Elena Prager & Matt Schmitt, Employer Consolidation and Wages: Evidence from Hospitals 14 (Feb. 16, 2019) (on file with the Washington Center for Equitable Growth, unpublished manuscript).

⁷⁸ Benmelech et al., supra note 10, at 20.

⁷⁹ Prager & Schmitt, supra note 77, at 25.

⁸⁰ Id. at 43.

tive wage suppression effect more convincing since it is difficult to ascribe the wage reduction to a decline in labor demand for specialized hospital personnel. Wages plausibly decreased because workers' bargaining power declined in the face of higher labor market concentration. Even when employment does not decline as a result of an increase in concentration, there are other ways employers can use their better competitive position: for example, evidence from all U.S. labor markets shows that, when labor market concentration increases, employers require higher skill levels for the same type of job.⁸¹ To the extent that employers can hire more skilled workers for the same or a lower wage level, labor market concentration depresses the rewards to productive work even more than is apparent by just looking at the average wage in an occupation.

While the unemployment rate in the U.S. economy in January 2019 is very low at 4%, the share of working age Americans who participate in the labor market is still below the level prior to the 2008 recession.⁸² Low wages from the monopsony power exercised by employers may discourage workers from looking for jobs.

Overall, given the negative relationship between labor market concentration and wages, and the pervasiveness of labor market concentration in the United States, the time is ripe for labor-side antitrust litigation.

II THE ANTITRUST LITIGATION GAP

Antitrust law is embodied in statutes that prohibit anticompetitive practices in any kind of market. The most important of these statutes are section 1 of the Sherman Act, which prohibits "restraint of trade;" section 2 of the Sherman Act, which prohibits monopolization; and section 7 of the Clayton Act, which prohibits mergers that substantially lessen competition. The courts have acknowledged that the law applies to

⁸¹ Hershbein et al., supra note 10, at 3.

⁸² Compare Press Release, Bureau of Labor Statistics, The Employment Situation—January 2019 (Feb. 1, 2019), https://www.bls.gov/news.release/archives/empsit_02012019.htm [https://perma.cc/8SQV-CW89] (marking the labor force participation rate at 63.2% and the unemployment rate at 4% in January 2019), with Press Release, Bureau of Labor Statistics, The Employment Situation—November 2007 (Dec. 7, 2007), https://www.bls.gov/news.release/archives/empsit_12072007.pdf [https://perma.cc/E29N-3LT3] (marking the labor force participation rate at 66.1% and the unemployment rate at 4.7%).

^{83 15} U.S.C. § 1 (2018).

⁸⁴ Id. § 2.

⁸⁵ Id. § 18.

labor markets as well as to product and other markets, and on a number of occasions employers have been held liable for anticompetitive labor market practices or settled lawsuits that challenged such practices.86 But cases against labor monopsonists are extremely rare. In this Part, we provide the legal background and then turn to explanation.

A. The Law

The Sherman Act is a short, ambiguous statute that sought to tackle the problem of market concentration during the Gilded Age. Politicians and commentators at the time did not make a sharp distinction between product markets and labor markets. They worried that the immense trusts that monopolized sectors of the economy—oil, steel, sugar, railroads posed a broad economic and political threat.⁸⁷ The word "monopsony" would not be coined until decades later, but everyone understood that the trusts could suppress the wages of workers as well as raise the prices of goods.88 Thus, when section 1 declares in broad terms that "[e]very contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States, or with foreign nations, is declared to be illegal,"89 it refers to restraints of trade that suppress wages as well as restraints of trade that raise prices. Likewise, when section 2 imposes penalties on "[e]very person who shall monopolize, or attempt to monopolize, or combine or conspire with any other person or persons,

See, e.g., Eastman Kodak Co. v. Image Tech. Servs., Inc., 504 U.S. 451, 481 (1992) (applying the Sherman Act to a product market); United Mine Workers of Am. v. Pennington, 381 U.S. 657, 665-66 (1965) ("One group of employers may not conspire to eliminate competitors from the industry and the union is liable with the employers if it becomes a party to the conspiracy."); Brown v. Pro Football, Inc., 50 F.3d 1041, 1054 (D.C. Cir. 1995) ("[A]s a general matter, the antitrust laws may apply to restraints on competition in non-unionized labor markets.").

See Robert H. Jerry, II & Donald E. Knebel, Antitrust and Employer Restraints in Labor Markets, 6 INDUS. REL. L.J. 173, 184-85 (arguing that Senator Sherman likely did not intend for the Sherman Act to apply to labor markets, highlighting the limited view of Commerce Clause power then prevalent).

WILLIAM LETWIN, LAW AND ECONOMIC POLICY IN AMERICA: THE EVOLUTION OF THE SHERMAN ANTITRUST ACT 58-59, 70 (1965). At the same time, organized labor did not lobby for the Sherman Act or demand antitrust investigations. Unions realized that an employer may refuse to raise wages because it feared that higher labor costs would force it to raise prices and lose market share, and that therefore combinations of employers may be more willing to raise wages than individual employers. For a contemporary account, see 1 ARTHUR J. EDDY, THE LAW OF COMBI-NATIONS 247-49 (1901); and for a more recent history, see DAVID BRODY, WORKERS IN INDUSTRIAL AMERICA: ESSAYS ON THE TWENTIETH CENTURY STRUGGLE 21-32 (2 ed. 1980).

¹⁵ U.S.C. § 1.

to monopolize any part of the trade or commerce,"⁹⁰ it encompasses monopsonization as well as monopolization. Similarly, the Clayton Act of 1914, which strengthened antitrust law, made no distinction between product and labor markets.⁹¹ Section 7 prohibits stock acquisitions where "the effect of such acquisition . . . may be substantially to lessen competition, or to tend to create a monopoly."⁹² The Supreme Court has confirmed that antitrust law applies to labor markets in the same way that it applies to product markets.⁹³ Thus, one would expect similar patterns of litigation with respect to both markets.

1. Sherman Act, Section 1

Product markets. Under section 1, firms are prohibited from entering agreements that have an anticompetitive effect. Some agreements are presumptively ("per se") illegal because they are very likely to stifle competition.94 Most price-fixing agreements are per se illegal because they prevent price competition, though there are some unusual cases where pricefixing may be necessary for the goods to be produced.95 Agreements to divide a market geographically or to limit competition over customers are also typically per se illegal.96 However, most agreements are more complex and require a "rule of reason analysis," where the court must determine that the conspirators possess sufficient market power to be able to restrain competition, and that the agreement lacks a procompetitive justification.97 Vertical restraints of trade—agreements between parties at different locations on the distribution chain are subject to rule of reason analysis.98 Because the parties to

⁹⁰ Id. § 2.

⁹¹ See id. § 18 (simply referring to markets and making no distinction between product and labor markets).

⁹² Id. § 18.

⁹³ See supra note 18 and accompanying text.

⁹⁴ See Nat'l. Soc'y of Prof'l Eng'rs v. United States, 435 U.S. 679, 692 (1978) ("[There are] agreements whose nature and necessary effect are so plainly anticompetitive that no elaborate study of the industry is needed to establish their illegality . . . they are 'illegal per se.'").

⁹⁵ See, e.g., Broad. Music, Inc. v. Columbia Broad. Sys., Inc. 441 U.S. 1, 23 (1979) (holding that "[j]oint ventures and other cooperative arrangements are . . . not usually unlawful, at least not as price-fixing schemes, where the agreement on price is necessary to market the product at all" (emphasis added)).

⁹⁶ See Addyston Pipe & Steel Co. v. United States, 175 U.S. 211, 244–45 (1899).

⁹⁷ Herbert Hovenkamp, The Rule of Reason, 70 FLA. L. REV. 81, 83 (2018).

⁹⁸ Shubha Ghosh, *Vertical Restraints, Competition and the Rule of Reason, in* 4 Antitrust Law and Economics 213 (Keith Hylton ed., 2d ed. 2010).

the agreement do not compete, the agreement is not obviously anticompetitive, and so then the question becomes whether the agreement enables one party (or both parties) to block competition from its (or their) competitors.⁹⁹

Courts routinely adjudicate section 1 product market cases. A Westlaw search suggests about fifty cases per year. 100 The cases are far too diverse to summarize, but a few general points can be made. Defendants include many of the largest and most important corporations in the United States. Many of the cases involve blatant antitrust violations (some of which resulted in criminal prosecution), where top executives met secretly to set prices or carve out product or geographic markets. A huge number of cases involve more subtle settings, where, for example, competitors exchange pricing information, conduct joint ventures, participate in trade associations, and agree with upstream suppliers or downstream buyers to limit resale, control quality, refuse to deal with competitors, and so on.

Labor markets. Section 1 applies to agreements to restrain competition in labor markets in the same way as it applies to product markets. Plaintiffs benefit from the per se rule when the agreement involves simple wage-fixing agreements. Otherwise, with a few exceptions, they have been forced to contend with the rule of reason. They must thus show that the defendants enjoy market power sufficient for them to restrain labor market competition, and that the agreement actually hinders rather than advances competition.

Courts rarely adjudicate section 1 labor market cases. A Westlaw search suggests about six cases per year, about a tenth of the results for product market cases. 103 And about half of these cases involve the special setting of sports leagues. 104 In the sports league cases, a league—the National Football League, the National Collegiate Athletic Association—

⁹⁹ See Hovenkamp, supra note 97, at 136.

 $^{^{100}\,}$ Based on a Westlaw search for "section /3 1 /3 sherman +1 act & product +1 market" (January 18, 2019), which yielded 52 hits for the last year and 176 hits for the last three years.

¹⁰¹ See Fleischman v. Albany Med. Ctr., 728 F. Supp. 2d 130, 162 (N.D.N.Y. 2010) (denying motion to dismiss per se wage-fixing claim).

See *infra* section III.A.2, on franchise no-poaching cases.

 $^{^{103}}$ Based on a Westlaw search for "section /3 1 /3 sherman +1 act & labor +1 market" (January 18, 2019), which yielded 6 hits for the last year and 17 hits for the last three years.

 $^{^{104}}$ Based on a Westlaw search for "section /3 1 /3 sherman +1 act & labor +1 market & league" (January 18, 2019), which yielded 4 hits for the last year and 10 for the last three years.

coordinates various businesses that operate teams that compete against each other. The league agreement may restrict competition in multiple ways, for example, by regulating how much the teams pay players—in the NCAA case, the teams pay the players nothing. ¹⁰⁵ Courts use rule of reason analysis to distinguish restrictions that are necessary to ensure that league play is possible and those that merely suppress compensation for athletes.

The remaining cases are more straightforward lawsuits against competitors in a particular industry who are accused of holding down wages. In *Fleischman v. Albany Medical Center*, for example, a class of registered nurses accused hospitals in the Albany area of agreeing to suppress wages for these employees. ¹⁰⁶ There are a handful of other such cases, mainly in the hospital industry. ¹⁰⁷

An instructive case is *Todd v. Exxon Corp.*, ¹⁰⁸ which shows the barriers facing plaintiffs who seek relief from monopsony. Employees of fourteen oil and petrochemical companies alleged that the companies exchanged salary information for nonunion managerial, professional, and technical (MPT) employees in the industry as a part of a conspiracy to suppress wages. ¹⁰⁹ The plaintiffs argued that the companies, which jointly employed 80–90% of these employees, used the information to determine wages. ¹¹⁰ The plaintiff provided statistical evidence that one of the defendants, Exxon, reduced pay over the relevant time period while keeping it in line with its competitors. ¹¹¹

The district court dismissed the case for several reasons. First, it said that the plaintiff failed to plausibly define what it called the "product market"—it meant the labor market—because the employees are not "reasonably interchangeable." Second, it believed that the relevant labor market must encompass every industry in which the MPT employees could obtain jobs—not just the oil industry—and thus the actual market share of the defendants was much less than 80–90%. Third, the court held that the claim depended on the possibility of

¹⁰⁵ See O'Bannon v. Nat'l Collegiate Athletic Ass'n, 802 F.3d 1049, 1079 (9th Cir. 2015) (vacating the district court's judgment that required the NCAA to allow its member schools to pay student athletes up to \$5,000 per year).

^{106 728} F. Supp. 2d at 159.

For a discussion, see Miles, supra note 22.

^{108 126} F. Supp. 2d 321, 321 (S.D.N.Y. 2000).

¹⁰⁹ *Id.* at 322–23.

¹¹⁰ Id. at 323.

¹¹¹ *Id.* at 323–24.

¹¹² Id. at 325.

¹¹³ See id. at 325-26.

tacit coordination, but this was impossible because the market was not concentrated. It added that the plaintiffs had also failed to show that "demand for these 'products' is inelastic." ¹¹⁴ Fourth, it argued that Exxon's wage-setting behavior could have been unilateral rather than pursuant to agreement, and hence the plaintiff had failed to allege an agreement that could survive a motion to dismiss. ¹¹⁵

The court (or possibly the lawyers who represented the plaintiff class, or everyone) was seriously confused. While it is true that the plaintiff lumped together different types of employees—lawyers and engineers, for example—each occupation could certainly be a labor market, and there is no requirement that employees within each market be identical or fungible, whatever that might mean. Moreover, an MPT labor market (or group of labor markets) limited to the oil industry could exist if, as the plaintiffs alleged, there were special characteristics of that industry that required experience and training to master, as is likely the case. The court's reference to demand inelasticity was also inapposite: the question was whether the supply of labor was inelastic in the sense that if wages were reduced in the claimed labor market(s), employees would have refrained from finding work elsewhere. Finally, the claim did not depend on agreement to suppress wages but agreement to share information, which was clearly alleged. 116 The question whether the agreement to share information affected wages was a matter for trial. The Court of Appeals, in an opinion by then-Judge Sonia Sotomayor, reversed on roughly these grounds, though it too incorrectly referred to the labor market as a product market (probably because the plaintiffs did as well). 117

While the Court of Appeals rode to the rescue, the district court's opinion suggests some reasons why this type of case is so rare. The district judge clearly held a widespread—but incorrect—belief that labor markets are competitive, and that employees are not normally confined to a particular industry. Thus, he found reasonable allegations to be implausible. He also tripped over the product-side analogies and as a result made a hash of the economics of the plaintiff's claim.

Plaintiffs have enjoyed more success with lawsuits against employers who have entered no-poaching agreements—agreements not to try to hire away each other's employees. In 2010,

¹¹⁴ Id. at 327.

¹¹⁵ Id.

¹¹⁶ See id. at 323.

¹¹⁷ See Todd v. Exxon Corp., 275 F.3d 191, 200-04, 214 (2d Cir. 2001).

the government sued various tech firms for entering no-poaching agreement, which the firms settled. Piggyback litigation was also successful. Plaintiffs were helped by the egregiousness of the firms' behavior—express promises by the tech companies' CEOs not to recruit each other's employees.

Claims in more complex cases, in which agreements not to recruit are, for example, ancillary to settlements or other transactions, have been less successful. 121 In Eichorn v. AT&T Corp., AT&T sold one of its subsidiaries to another company, and as part of the transaction agreed not to hire or solicit any of the more highly compensated employees of that subsidiary for eight months. 122 The employees sued, arguing that the nopoaching agreement violated section 1. The court evaluated the transaction under the rule of reason standard because the agreement was ancillary to the sale of the company and held in favor of the defendants. 123 A crucial part of its analysis was its rejection of the plaintiffs' market definition, which was "potential employers within a 35 mile radius of Holmdel/Middletown with the capacity and capability of employing or utilizing large numbers of persons with specialized experience in high speed data communications equipment of the sort Paradyne [the subsidiary develops and makes."124 The court said that the mar-

¹¹⁸ Press Release, U.S. Dep't of Justice, Justice Department Requires Six High Tech Companies to Stop Entering into Anticompetitive Employee Solicitation Agreements (Sept. 24, 2010), https://www.justice.gov/opa/pr/justice-department-requires-six-high-tech-companies-stop-entering-anticompetitive-employee [https://perma.cc/NU35-7N25].

¹¹⁹ In re Animation Workers Antitrust Litig., 123 F. Supp. 3d 1175, 1178 (N.D. Cal. 2015); United States v. eBay, Inc., 968 F. Supp. 2d 1030, 1032 (N.D. Cal. 2013); In re High–Tech Emp. Antitrust Litig., 856 F. Supp. 2d 1103, 1107–08 (N.D. Cal. 2012).

¹²⁰ See eBay, Inc., 968 F. Supp. 2d at 1035–36; In re High–Tech Emp. Antitrust Litig., 856 F. Supp. 2d at 1110.

¹²¹ See, e.g., Hanger v. Berkley Grp., Inc., No. 5:13–cv–113, 2015 WL 3439255, at *12 (W.D. Va. May 28, 2015) (holding that in failing to define the proper labor market, plaintiffs failed to allege a plausible claim under section 1 of the Sherman Act); Cesnik v. Chrysler Corp., 490 F. Supp. 859, 868 (M.D. Tenn. 1980) (holding that an agreement by a corporation selling one of its divisions to not rehire any managerial employee who refused employment with the buying corporation was not a violation of the Sherman Act). But see Roman v. Cessna Aircraft Co., 55 F.3d 542, 543, 545 (10th Cir. 1995) (reversing district court's dismissal of antitrust complaint and holding that alleging (i) that illegal agreement was only reason the plaintiff was not hired by competitor, (ii) that market for the plaintiff's engineer services was impeded, and (iii) that illegal agreement prevented the plaintiff from selling services to highest bidder, was sufficient for antitrust standing).

^{122 248} F.3d 131, 136-37 (3d Cir. 2001).

¹²³ *Id.* at 144, 150-51.

¹²⁴ Id. at 147.

ket definition should "include[] all those technology companies and network services providers who actively compete for employees with the skills and training possessed by plaintiffs." ¹²⁵ It added that "there are over twenty companies that compete for employees with plaintiffs' technical skills. Additionally[,] there are a 'vast number of jobs' nationwide for plaintiffs with more generalized work and educational experience." ¹²⁶ With such a broad market definition, AT&T lacked market power. But this market definition is too broad. Most workers do not move far away to find new jobs, ¹²⁷ and when specialized skills are not transferable, the employer exercises market power.

Courts have also stumbled in cases involving no-poaching agreements within franchises. Some old doctrine suggests that franchises should be treated as a "single entity"; no-poaching agreements imposed by the franchisor on franchisees cannot be a violation of section 1 as there cannot be a one-party "agreement." More recently, the Supreme Court has recognized that the single entity doctrine honors a legal fiction, 129 one that allows firms to collude to suppress wages, and has been taken advantage of by many franchises. 130 In the wake of the state actions against franchise no-poaching agreements, lawyers have filed class actions against numerous franchises. 131 These cases are at a very early stage, but they do suggest that the barrier to section 1 litigation has begun to erode. 132

¹²⁵ *Id.* at 147-48.

¹²⁶ Id. at 148 n.5.

¹²⁷ See Alan Manning and Barbara Petrongolo, How Local Are Labor Markets? Evidence from a Spatial Job Search Model, 107 Am. Econ. Rev. 2877, 2905 (2017); Ioana Marinescu & Roland Rathelot, Mismatch Unemployment and the Geography of Job Search, 10 Am. Econ. J.: MACROECONOMICS 42, 46–51 (2018).

 $^{^{128}}$ See, e.g., Williams v. I.B. Fischer Nevada, 794 F. Supp. 1026, 1032–34 (D. Nev. 1992), 999 F.2d 445 (9th Cir. 1993) (granting motion to dismiss on section 2 claim where the plaintiff, who complained that he was terminated without good cause by an employer who allegedly had labor market power, failed to allege an anticompetitive act).

¹²⁹ See Am. Needle, Inc. v. Nat'l Football League, 560 U.S. 183, 191 (2010).

¹³⁰ Krueger & Ashenfelter, supra note 5, at 21–22.

¹³¹ See Erin Mulvaney, Thinking About a 'No-Poach' Agreement? What Employers Should Know, LAW.COM: NAT'L L.J. (Oct. 26, 2018, 1:13 PM), https://www.law.com/nationallawjournal/2018/10/26/thinking-about-a-no-poach-agreement-what-employers-should-know/ [https://perma.cc/3NFK-LFMA].

¹³² For further discussion of the franchise no-poach cases, see Eric A. Posner, The Antitrust Challenge to Covenants Not to Compete in Employment Contracts 26-27 (Sept. 13, 2019) (unpublished manuscript), https://papers.csm.com/sol3/papers.cfm?abstract_id=3453433 [https://perma.cc/VUT3-CFZS].

2. Sherman Act, Section 2

Product Markets. Section 2 prohibits firms from obtaining or maintaining monopolies through anticompetitive means—rather than "naturally" or in pro-competitive ways, for example, through innovation. A typical section 2 case involves a defendant who already monopolizes a product market and is accused of using its monopoly power to block other firms from entering the market or to extend its monopoly power into new markets. The plaintiff must normally define a product market, establish that the defendant controls a large share of that market, and prove that the defendant obtained or maintained that monopoly in an illegitimate way. 135

Section 2 product-market cases are adjudicated almost as frequently as section 1 product-market cases—about forty to fifty per year. 136 But they can be hard to prove because allegedly anticompetitive behavior can frequently be given a business justification. For example, a monopolist that gives discounts to buyers who commit to a large volume of its products could be accused of trying to maintain its monopoly by depriving market entrants of demand. But it might also be cheaper to sell to large-volume buyers than to small-volume buyers. Monopolists who are accused of extending their monopolies to new markets can argue that they are simply offering buyers in one market the convenience of transacting with the same seller in another market. Still, there have been many notable section 2 cases—including the government's case against Microsoft, which monopolized the market for operating systems for IBM-clone personal computers. 137

Labor Markets. Plaintiffs should similarly be able to bring section 2 cases against employers who monopsonize labor markets by defining a labor market, establishing that the employer controls a large share of the labor market, and proving that the

¹³³ See 15 U.S.C. § 2 (2018).

¹³⁴ See, e.g., United States v. Microsoft Corp., 253 F.3d 34, 45, 64 (D.C. Cir. 2001) (explaining that the section 2 claims made against Microsoft were on the basis that they had an existing monopoly in the area of PC operating systems and further used that monopoly to gain a new monopoly in the market for internet browsers).

¹³⁵ See, e.g., id. at 51–56, 58–59 (breaking down the court's legal analysis of whether Microsoft might have violated section 2 by first analyzing the "[m]arket definition," followed by an analysis of "[m]arket power," ended by an analysis of "[a]nticompetitive [c]onduct").

 $^{^{136}}$ Based on a Westlaw search of "section /3 2 /3 sherman & product +1 market" (January 24, 2019), which yielded 50 hits for the last year and 174 hits for the last three years.

¹³⁷ *Microsoft Corp.*, 253 F.3d at 46.

employer has obtained or maintained that monopsony by engaging in anticompetitive acts. However, section 2 labor monopsony cases are extremely rare. A Westlaw search yielded only two cases in the last year and five cases over the last three years.138

The results of the Westlaw search probably understate the problem. We have not found a single section 2 labor monopsony case, ever, in which the claim survived a summary judgment motion. And nearly all the cases we have found are ones in which the section 2 claim is tacked on to a more substantive claim, like a section 1 collusion claim or a nonantitrust claim relating to a garden-variety employment-law dispute. In most of these cases, the plaintiff failed to define a labor market or to defend his or her definition or failed to identify an anticompetitive act. In other cases, the plaintiff lacked standing.

A few examples illuminate the dismal landscape. In Thomsen v. Western Electric Co., employees of Western Electric sued that company, its parent, AT&T, and another subsidiary, Pacific Telephone, for violating the antitrust laws by agreeing not to hire each other's employees. 139 The court rejected a section 1 claim because the three companies were a single entity, and a single entity cannot conspire with itself. 140 On the section 2 issue, the employees lacked antitrust injury because they accused the defendants of monopolizing the product market (telephone service) rather than the labor market, which they should have identified and defined as craft telephone workers in the relevant geographic market.¹⁴¹ The court's view is reasonable: a firm that monopolizes the product market harms consumers but does not necessarily harm workers; indeed, the workers might benefit if managers decide to share the monopoly profits with them and, in any event, will not be harmed if the labor market is competitive. Thus, there is no antitrust injury. 142 The section 2 claim also failed because a company's internal policy not to allow employees to move among its divisions did not reduce competition as understood in antitrust policy, which encourages independent employers to compete with

Based on a Westlaw search of "section /3 2 /3 sherman & labor +1 market" (January 24, 2019). This search, like the earlier ones, should be taken with many grains of salt because of variations in how judges write opinions and the types of issues that arise in these cases, but they give one a rough sense of litigation patterns.

¹³⁹ 680 F.2d 1263,1265 (9th Cir. 1982).

¹⁴⁰ Id. at 1266.

¹⁴¹ Id. at 1267.

¹⁴² Brunswick Corp. v. Pueblo Bowl-O-Mat, Inc., 429 U.S. 477, 487–88 (1977).

each other for workers but does not require intrafirm competition. Thus, even if the employees had properly defined a labor market, they might still have lost.

In Minnesota Ass'n of Nurse Anesthetists v. Unity Hospital, a group of anesthesia nurses sued hospitals that had "outsourced" them-fired them and then rehired them through various intermediaries that directly employed them. 144 The nurses alleged that their terminations were the result of a conspiracy between anesthesia doctors—who sought to eliminate competition from the lower-paid nurses—and the hospitals, who passed on the increased cost to Medicare. The court wrongly held that to show antitrust injury the nurses must show that anesthesia prices would increase, which they could not—but in any event, the nurses apparently did not try to show that their compensation declined. 145 Nor could they prove section 2 conspiracy because neither hospital controlled a substantial portion of the anesthesia market—though again the court should have looked at the market for anesthesia nurses, not the product market.146

In re NCAA I-A Walk-On Football Players Litigation involved a challenge to the NCAA's rules limiting the award of scholarships to players. 147 The court incorrectly referred to the labor market at issue as a "product market." 148 However, it recognized that a market for "skilled amateur football players" was properly alleged and thus denied the defendants' motion to dismiss. 149 However, the case later collapsed when the court denied a motion for class certification, as we will discuss below. 150

3. Clayton Act, Section 7

Product markets. Section 7 of the Clayton Act prohibits stock and asset acquisitions where "the effect of such acquisition may be substantially to lessen competition, or to tend to create a monopoly." While those injured by such mergers may sue for relief, private litigation has been crowded out by

¹⁴³ See Thomsen, 680 F.2d at 1267.

¹⁴⁴ 5 F. Supp. 2d 694, 698 (D. Minn. 1998), aff d, 208 F.3d 655 (8th Cir. 2000).

¹⁴⁵ See id. at 701-03.

¹⁴⁶ *Id.* at 710-11.

¹⁴⁷ 398 F. Supp. 2d 1144, 1146-47 (W.D. Wash. 2005).

¹⁴⁸ *Id.* at 1150.

¹⁴⁹ Id.

 $^{^{150}}$ $\,$ In re NCAA I-A Walk-On Football Players Litig., No. C04-1254C, 2006 WL 1207915, at *15 (W.D. Wash. May 3, 2006).

^{151 15} U.S.C. § 18 (2018).

government involvement. Under the Hart-Scott-Rodino Act, ¹⁵² large firms that plan to merge must first give notification to the Justice Department and Federal Trade Commission. DOJ/FTC approval typically forecloses private litigation.

For horizontal mergers, the government asks whether the merger will take place in a concentrated product market and will significantly increase the concentration of that product market. ¹⁵³ If so, the merger is illegal unless the merging companies can show that the merger will produce offsetting efficiencies that lower prices for consumers. ¹⁵⁴ In 2017, a typical year, the FTC and DOJ investigated fifty-one mergers; the FTC challenged twenty-three of them and generated fifteen final orders, six of which resulted in the abandonment or restructuring of the merger, and two of which resulted in administrative or federal court litigation. ¹⁵⁵ The DOJ challenged eighteen of the mergers, resulting in six abandonments and one restructuring. ¹⁵⁶

Labor markets. In stark contrast, the government has never—not in 2017, not ever—blocked a merger or even evaluated a merger based on its labor market effects. The Horizontal Merger Guidelines do not explicitly contemplate evaluation of mergers based on labor market effects or even mention the problem of labor market monopsony. However, the Guidelines do apply to input markets and therefore in principle to labor markets.) The legal approach would mirror the product-market analysis that the Guidelines describe: ask first whether the firms operate in concentrated labor markets and, if so, whether their merger would significantly increase concentration in those labor markets. There is significant empirical evidence that mergers have done just that.

¹⁵² Id. § 18a.

¹⁵³ HORIZONTAL MERGER GUIDELINES, supra note 35, § 7.1.

¹⁵⁴ See id. § 10.

¹⁵⁵ U.S. DEP'T OF JUSTICE & FED. TRADE COMM'N, HART-SCOTT-RODINO ANNUAL REPORT: FISCAL YEAR 2017 at 2, 5 (2017), https://www.ftc.gov/system/files/documents/reports/federal-trade-commission-bureau-competition-department-justice-antitrust-division-hart-scott-rodino/p110014_fy_2017_hsr_report_final_april_2018.pdf [https://perma.cc/76YV-TZ4V].

¹⁵⁶ Id. at 2.

 $^{^{157}\,}$ In *United States v. Anthem, Inc.*, 855 F.3d 345, 377 (D.C. Cir. 2017) (Kavanaugh, J. dissenting), the government did oppose a merger in part based on labor-market effects, but the government's argument focused on the product market, as did the court's decision.

HORIZONTAL MERGER GUIDELINES, supra note 35.

 $^{^{159}}$ Benmelech et al., supra note 10, at 15–18; Prager & Schmitt, supra note 77, at 15–24.

Because of the government's failure to review mergers for their labor market effects and the high visibility of mergers, one might expect to see substantial private litigation brought by workers to challenge mergers that would cause layoffs and wage reductions. But the Supreme Court imposed a major barrier on such cases in 1975 when it held, in *United States v. American Building Maintenance Industries*, that the Clayton Act does not apply to mergers where one of the merging firms operates entirely within a state rather than across state lines. ¹⁶⁰ The decision was based on language in the Clayton Act ("engaged in commerce") that does not exist in the Sherman Act. ¹⁶¹ Thus, only mergers between national firms can be challenged.

We have found a single section 7 case based on labor market monopsony. In International Ass'n of Machinists and Aerospace Workers, AFL-CIO, Local Lodge No. 1821 v. Verso Paper Corp., a group of former employees who had been laid off from a paper mill in advance of its sale sued to enjoin the buyer from consummating the merger. 162 The court held that the employees lacked antitrust standing even though normally a merger that reduces labor costs by eliminating competition for workers would harm employees in just the way that antitrust laws are meant to prevent. 163 But the court's error was understandable. The plaintiffs had argued that the merger would simultaneously concentrate the product market (coated printing paper) and "the market for the specialized labor provided by plaintiffs that have been trained to work in paper production."164 But, as far as the opinion suggests, the plaintiffs focused on the product market side and said little about the labor market. As a result, the court seemed to think the employees sought standing to challenge the product market harm.¹⁶⁵ But courts do not give employees standing to sue firms for wrongdoing that is directed at others, here, consumers. The court did give the employees standing in their capacity as purchasers of paper but never addressed the merits of the labor market argument. 166

¹⁶⁰ United States v. Am. Bldg. Maint. Indus., 422 U.S. 271, 285–86 (1975).

¹⁶¹ Id. at 283.

^{162 80} F. Supp. 3d 247, 251 (D. Me. 2015).

¹⁶³ Id. at 269, 276.

¹⁶⁴ Id. at 259.

¹⁶⁵ *Id.* at 275.

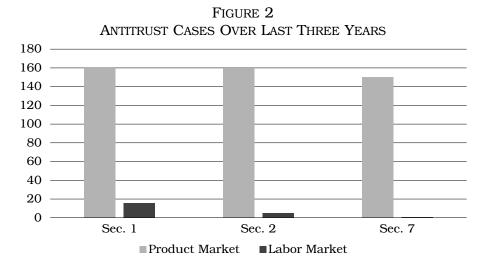
¹⁶⁶ Id. at 277.

In 2018, the FTC's chairman announced that it would begin reviewing mergers for their effects on labor markets. Thus, the long drought may come to an end.

B. What Accounts for the Scarcity of Labor Monopsony Cases?

1. The Baseline

We say that labor monopsony cases are rare, but a natural response is compared to what? If we had made this claim several years ago, the response would have been that labor monopsony cases are rare because labor markets are normally competitive. Such a response is no longer possible, but the question remains. A natural starting point for thinking about labor market litigation is product market litigation. Labor market litigation is certainly rare compared to product market litigation, as Figure 2 shows.



Note: Section 1 and 2 counts are based on searches of the Antitrust database in Westlaw. See supra notes ??? for search terms. Section 7 counts (for labor markets, the number is zero) are taken from the DOJ and FTC, see supra note ???.

Our question, then, is what accounts for this litigation gap? A number of possibilities suggest themselves.

Theory. One possible argument is that as a matter of economic theory, firms have a stronger incentive to seek control

¹⁶⁷ Oversight of the Enforcement of the Antitrust Laws: Hearing Before the Subcomm. on Antitrust, Competition Policy and Consumer Rights of the S. Comm. on the Judiciary, 115th Cong. (2018) (statement of Joseph Simmons, Chairman, Federal Trade Commission).

over product markets, which allows them to raise prices, than labor markets. However, the two types of incentives are symmetrical. A firm that controls labor markets increases profits by reducing labor costs, while a firm that controls product markets increases profits by raising prices. The effect on the bottom line is the same.

The empirical prevalence of monopolized markets. Another theory is that product markets are more numerous than labor markets, or that product markets are more concentrated than labor markets are. However, there is no reason to think that product markets are more numerous than labor markets. There are many nationwide product markets, involving commodities like oil, goods like cars, and so on, and very few nationwide labor markets. 168 That said, there are also many local product markets, and we have not found anyone who has bothered to count them up. For labor markets, the CZ * SOC definition suggests as many as 267,546 labor markets; if we count only labor markets with at least 100 employed workers, then this number falls to a still-high 173,653. Sixty percent of the labor markets in the top 200 occupations (representing 90% of all vacancies)—more than 70,000—are highly concentrated and more than eight million people work in those markets. 169 Even if product markets outnumber labor markets, we would surely expect more than a handful of labor market cases.

With respect to comparative market concentration, labor markets are probably more concentrated than product markets are because they tend to be more local. As just noted, 60% of U.S. labor markets have an HHI above 2,500; 25% of labor markets have an HHI above 7,200.170 We do not have comparable figures for all product markets, but if we focus on manufacturing in 2012, product market HHI is 411 on average, compared to 3,955 for the labor market HHI weighted by local employment.171

Conventional (but dated) wisdom in economics, and data limitations. A third theory is that lawyers have brought relatively few labor market cases because economists have told them that labor markets are usually competitive, and until recently, the statistical evidence of labor market monopsony has been limited. Indeed, much of the evidence has become available only in the last several years. In contrast, evidence of

¹⁶⁸ See Manning & Petrongolo, supra note 127.

See Azar, Marinescu, Steinbaum & Taska, supra note 10, tbl. 1.

¹⁷⁰ Id. at 13.

¹⁷¹ See id. at 3, 18.

concentration in product markets has been available for quite some time. We suspect, in addition, that the economic advances in understanding product markets have been driven forward by product market litigation, which has financed it, in a self-reinforcing cycle. Because so little labor side litigation has taken place, research on labor monopsony has lagged.

Legal hostility/uncertainty. The scarcity of labor monopsony litigation has left behind a thin trail of case law. Another self-reinforcing cycle may be at work. Because there is more product-side litigation than labor-side litigation, there is more product-side case law, and thus product-side outcomes are easier to predict. Because lawyers understand product-side law better than labor-side law, they are more likely to bring product-side cases, which further develops product-side law.

The evidence for this theory is strong. We have already seen the courts' struggles with labor monopsony cases. In some cases, they make basic errors, not even realizing that labor markets are different from product markets. 172 In others, misled by the mirror-image analogy of product-market analysis, they conduct the labor analysis backward. 173 In nearly all the cases we have found, the labor market definition is superficial, even when the courts accept it. Plaintiffs fail to describe the geographic limits of the labor market; 174 do not distinguish different labor markets within a class;175 fail to defend their labor market definitions;176 and so on. In other cases, the courts have rejected reasonable market definitions because they assume that labor markets are broader than they in fact

¹⁷² E.g., In re NCAA I-A Walk-On Football Players Litig., 398 F. Supp. 2d 1144, 1150 (W.D. Wash. 2005) (referring incorrectly to the labor market as a product market).

¹⁷³ Todd v. Exxon Corp., 126 F. Supp. 2d 321, 325 (S.D.N.Y. 2000).

E.g., Helmerich & Payne Int'l Drilling Co. v. Schlumberger Tech. Corp., No. 17-CV-358-GKF-FHM, 2017 WL 6597512, at *5 (N.D. Okla. Dec. 26, 2017) ("Complaint is silent as to the geographic market, and includes no facts upon which an inference of the relevant geographic market may be based.").

Todd v. Exxon Corp., 275 F.3d 191, 199, 202 (2d Cir. 2001).

See, e.g., Helmerich & Payne Int'l Drilling Co., 2017 WL 6597512, at *5-7 (dismissing the claim because the plaintiff's labor market definition—"specialized engineers"—was insufficiently specific, failed to refer to the interchangeability of the engineers working for each firm, and lacked a geographic market); Hanger v. Berkley Grp., Inc., No. 5:13-cv-113, 2015 WL 3439255, at *10-(W.D. Va. May 28, 2015) (dismissing case because plaintiffs failed to defend geographic scope of market); Mooney v. AXA Advisors, LLC, 19 F. Supp. 3d 486, 499 (S.D.N.Y. 2014) (rejecting labor market definition because of lack of "discussion about the insurance agent labor supply, the existence of other insurance agents that are not affiliated with AXA, potential barriers to entry into the insurance agent market, or systemic barriers that might prevent an agent from changing insurance employers").

are. 177 Finally, a few of the cases are difficult to explain as anything other than judicial skepticism, or at least uncertainty about how to address arguments in the absence of well-developed case law. 178

A striking example is *Llacua v. Western Range Ass'n*, ¹⁷⁹ a case that was decided by the Tenth Circuit shortly before this Article went to press. The plaintiffs were foreigner workers who had entered the United States with agricultural work visas to work as sheepherders on ranches throughout the United States. The ranchers used two organizations that they controlled to recruit workers, which was permitted by U.S. law. However, according to the complaint, the ranchers also authorized the organizations to offer wages, which the organizations fixed at the minimum allowable by law. While this behavior would be a straightforward wage-fixing agreement in violation of section 1 of the Sherman Act, the Tenth Circuit panel affirmed the lower court's dismissal of the antitrust claims. ¹⁸⁰

The Court's main argument was that the complaint failed to allege facts "from which it can be inferred ranches needed to offer more [than the legal minimum wage] to attract a sufficient number of qualified workers." ¹⁸¹ Moreover, the conspiracy made no "economic sense" because the ranchers "had no ra-

¹⁷⁷ Eichorn v. AT&T Corp., 248 F.3d 131, 147–48 (3d Cir. 2001). *But see* Rock v. Nat'l Collegiate Athletic Ass'n, No. 1:12–cv–1019–JMS–DKL, 2013 WL 4479815, at *14 (S.D. Ind. 2013) (accepting labor market definition despite problems); Cason-Merenda v. Detroit Med. Ctr., 862 F. Supp. 2d 603, 647 (E.D. Mich. 2012) (recognizing that a labor market could be composed of nurses who work for hospitals and not, as the defendant argued, nurses who work for non-hospitals as well).

¹⁷⁸ An egregious example is Maderazo v. VHS San Antonio Partners, LP, where a court denied a motion for class certification because it believed that the experts failed to establish causation—that the alleged wage-fixing conspiracy caused harm to the class members. No. SA-06-CA-535-OG, 2019 WL 4254633, at *9 (W.D. Tex. Jan. 22, 2019). The real grounds for the court's decision was not class certification—obviously, causation is a common issue—but failure of proof of causation. The problem was that while the experts could show that the wages were lower than the competitive level, they could not tie the wage reduction to a specific act-since the allegation was that the defendants had held numerous meetings over a period of time during which they negotiated wage commitments. But it is hard to see how any wage-fixing case (or even price-fixing case) could survive this judge's skepticism. For a more mundane example of judicial caution in light of uncertainty, see Paul Gift, UFC Hearing: Judge Calls for Expert Witness and Joe Silva Questioning, FORBES (Dec. 20, 2018, 10:00 AM), https:// www.forbes.com/sites/paulgift/2018/12/20/ufc-hearing-judge-calls-for-expertwitness-joe-silva-questioning-mma-news/#4dca24119024 [https://perma.cc/ 4MRJ-XYQE].

^{179 930} F.3d 1161, 1168 (10th Cir. 2019).

¹⁸⁰ Id. at 1169.

¹⁸¹ Id. at 1181.

tional economic motive" to "depress wages paid by their competitors in other states." 182 But it is simply an economic error to claim that competitors are allowed to fix prices as long as those prices attract "sufficient" customers. Competitors are supposed to bid against each other, so that they end up charging customers less than those customers are willing to pay and workers more than they are willing to work for. The uniform wage—at the legal minimum, to boot—was overwhelming evidence of conspiracy. The conspiracy made economic sense because all competitors saved money on labor costs; this, again, is exactly what happens in any antitrust conspiracy. 183

Government neglect. A large portion of private product-side litigation piggybacks on government investigations and litigation, which both uncover otherwise unknown antitrust violations and establish useful precedents. 184 The near absence of government enforcement of antitrust law in labor markets until very recently thus helps explain the scarcity of private litigation. Even today, the government's attitude toward labor monopsony claims reflects a degree of skepticism. Early in 2019, the Department of Justice filed notices in several class actions in which it argued that the franchise no-poaching agreements being challenged should be evaluated under the rule of reason rather than the per se rule. 185 While the Justice Department's argument is not absurd from a legal perspective, the application of the rule of reason makes private litigation harder in practice, thereby cementing monopsony power. The government's interventions in private litigation signal skepticism toward these claims.

Class actions: incentives and law. Private litigation against monopolists takes two forms: class actions and litigation brought by corporate rivals or victims. Class actions are financed by lawyers and so are risky and expensive. In the case

¹⁸² Id.

The opinion can be contrasted to Beltran v. InterExchange, Inc., where the court denied the motion to dismiss under a similar set of facts, except involving nannies rather than sheepherders. 176 F. Supp. 3d 1066, 1088 (D. Colo. 2016). But the case was distinguished by a rare "smoking gun"—the plaintiff's investigator was told by the director of one of the defendants that the defendants agreed to fix wages. Id. at 1074. Such "direct" evidence is extremely rare in antitrust cases. One study found, based on a sample of forty large cases that led to a recovery, that twenty-six of those cases were initiated by the government. See Robert H. Lande & Joshua P. Davis, Benefits from Private Antitrust Enforcement: An Analysis of Forty Cases, 42 U.S.F. L. REV. 879, 897-98 (2008).

Bryan Koenig, DOJ Gives Fast-Food Chains Ammo Against No-Poach Suits, Law360 (Jan. 29, 2019, 9:11 PM), https://www.law360.com/articles/1123203/ doj-gives-fast-food-chains-ammo-against-no-poach-suits [https://perma.cc/ 3HPZ-MKVW1.

of product markets, however, class actions are often nation-wide—because product markets are often nationwide—and thus offer potentially enormous damages. In contrast, the classes in labor market cases are usually small—involving a geographically limited group, often just a town or city, and hence a lower level of damages. Thus, lawyers will naturally be oriented toward product-side class actions.

Moreover, employees may have more trouble with class certification than consumers and other product-side victims do. In a consumer-side class action, plaintiffs usually allege that the defendant has charged a supracompetitive price. 188 Class members are thus similarly situated—they bought the same goods, and all paid a price higher than they should have. Subtle variations—for example, volume discounts, or price changes—can be handled algorithmically. In contrast, employees who bring labor-side cases typically differ from each other along numerous dimensions. One court, in denying a motion for class certification, noted that:

The types of injury Plaintiff alleges are (1) decreased salaries and (2) deprivation of new job opportunities. In order to prove these types of injury, a number of individual determinations would have to be made. Defendants point out that resolution of each claim would depend on the consideration of several factors; for example, whether the employee's contract was the result of arms length negotiation, whether a covenant not to compete was included in a particular employee's contract; the employee's salary history, educational and other qualifications; the employer's place of business; the employee's willingness to relocate to a distant competitor, and their ability to seek employment in other industries in which their skills could be utilized (e.g., pharmaceuticals, cosmetics). ¹⁸⁹

See HORIZONTAL MERGER GUIDELINES, supra note 35, § 4.2.2.

¹⁸⁷ See Minn. Ass'n of Nurse Anesthetists v. Unity Hosp., 208 F.3d 655, 658–59 (8th Cir. 2000) ("[P]laintiffs assert that the sole-source contracts were part of a 'grand conspiracy' by Minnesota anesthesiologists" to eliminate competition in the Twin Cities.).

 $^{^{188}}$ See e.g., White v. R.M. Packer Co., 635 F.3d 571, 574 (1st Cir. 2011) ("[P]laintiffs in this case complain that the prices for gasoline on Martha's Vineyard have been artificially high due . . . to an illegal price-fixing conspiracy"); In re Dig. Music Antitrust Litig., 812 F. Supp. 2d 390, 397 (S.D.N.Y. 2011) ("Plaintiffs allege that Defendants' motive to conspire was to support their ability to charge supracompetitive prices").

Weisfeld v. Sun Chem. Corp., 210 F.R.D. 136, 144 (D.N.J. 2002), aff d, 84 F. App'x 257, 257 (3d Cir. 2004); see, e.g., In re High-Tech Emp. Antitrust Litig., 985 F. Supp. 2d 1167, 1186 n.8 (N.D. Cal. 2013) (noting that class certification does not require proving that each element of the claim is susceptible to classwide proof); see also Todd v. Exxon Corp., 275 F.3d 191, 202 n.5 (2d Cir. 2001)

Other antitrust classes have had more luck. 190 And outside of antitrust law, courts have been more willing to certify classes.¹⁹¹ But the broader point stands. Because products are simpler and more homogenous than workers, product-side class actions will be more common than labor-side class actions.

Lack of information. Class action lawyers face another incentive to focus on product markets. Consumer prices are public information, and price increases frequently receive public attention. 192 Sellers may try to disguise price increases by reducing quality—for example, selling cereal in smaller boxes, offering more limited warranties for consumer electronics, increasing waiting times for consumer support, or breaking promises to protect data. But these quality variations also attract public attention, as consumers complain and the media catch on. In contrast, most employers keep aggregate wage information confidential, and while individual workers may report their wages to the media or to lawyers, the variations across an entire work force can more easily be kept secret. Yet without this information, lawyers may be reluctant to launch a class action. 193

(noting the difficulties that plaintiffs will face in obtaining class certification because of differences among class members); Maderazo v. VHS San Antonio Partners, LP, No. SA-06-CA-535-OG, 2019 WL 4254633, at *9 (W.D. Tex. Jan. 22, 2019) (denying class certification because experts could not prove causal impact of alleged conspiracy); Reed v. Advocate Health Care, 268 F.R.D. 573, 592, 594 (N.D. III. 2009) (denying class certification because of variation in wages paid to class members); Fleischman v. Albany Med. Ctr., No. 1:06-CV-765, 2008 WL 2945993, at *6 (N.D.N.Y. July 28, 2008) ("Interchangeability and job mobility in the nursing profession, and the reasons affecting the wage of a particular nurse or class of nurses, though contested, involve too many variables and provide too much ambiguity to carry a motion for class certification on the issue of injury-infact."); In re Comp. of Managerial, Prof1, & Tech. Emps. Antitrust Litig., No. 02-2924 (AET), 2003 WL 26115698, at *4 (D.N.J. May 27, 2003) (similar). However, other courts disagree.

190 Nitsch v. Dreamworks Animation SKG Inc., 315 F.R.D. 270, 317 (N.D. Cal. 2016) (animation workers); Cason-Merenda v. VHS of Mich., Inc., No. 06-15601, 2014 U.S. Dist. LEXIS 29447, at *2 (E.D. Mich. Mar. 7, 2014) (reinstating class certification order on remand following Sixth Circuit post-Comcast reversal); In re High-Tech Emp. Antitrust Litig., 985 F. Supp. 2d at 1229 (high-tech employees); Cason-Merenda v. VHS of Mich., Inc., 296 F.R.D. 528, 549 (E.D. Mich. 2013) (nurse wages-Detroit); Fleischman, 2008 WL 2945993 at *7 (nurse wages-Albany).

See Michael Selmi & Sylvia Tsakos, Employment Discrimination Class Actions After Wal-Mart v. Dukes, 48 AKRON L. REV. 803, 830 (2015) (noting that lower courts who remain sympathetic to class action claims for employment discrimination find ways around Wal-Mart).

¹⁹² See Council of Econ. Advisers, supra note 7, at 13.

We have heard this explanation in conversations with private litigators who have been involved in labor monopsony cases.

Arbitration clauses and the absence of natural corporate plaintiffs. A further problem for both consumer and employee class actions is that firms frequently use arbitration clauses to block class action litigation. The Supreme Court has validated this practice for antitrust claims. 194 However, these clauses cannot be used to block litigation brought by well-funded corporations that are not in privity with the firm in question, and hence antitrust cases brought by corporate plaintiffs can continue. These cases compose a large fraction of product-side litigation. But there are few such cases on the labor side. 195 A possible explanation is related to the small size of most labor markets. If a firm tries to raise entry barriers by tying up the local labor supply with noncompetes and other arrangements, then the plaintiff who sues that firm is likely to be itself a small firm. A large firm, such as a manufacturer, can locate factories elsewhere and thus is not constrained to compete in the local market. A firm that needs a local labor force to serve a local market will often be relatively small.

* * *

Antitrust law has failed workers. The problem is less the statutory law, which is broadly worded, than the doctrine developed by courts, which has been oriented toward product-market litigation, and the inexperience of judges and litigators with labor monopsony cases. The weakness of the law raises the suspicion that the wave of mergers that has taken place over the last several decades, as well as other anticompetitive practices, might have been partly driven by a corporate strategy of obtaining anticompetitive returns in labor markets. After all, if the government and private litigators are focused on product-market behavior, a rational profit-maximizing corporation would search out rents in labor markets. We now turn to some proposals for correcting this state of affairs.

III Proposals

We make four proposals. First, employees should be permitted to bring section 1 claims against employers based on parallelism. Second, employees should be given more latitude to bring section 2 claims against labor monopsonists. Third,

¹⁹⁴ Am. Express Co. v. Italian Colors Rest., 570 U.S. 228, 234 (2013).

¹⁹⁵ For a rare example, see Aya Healthcare Serices, Inc. v. AMN Healthcare, Inc., No. 17cv205-MMA (MDD), 2018 WL 3032552, at *3 (S.D. Cal. June 19, 2018).

the FTC and Justice Department should incorporate labormarket analysis into their review of mergers, and private claims by employees against merging firms should also be strengthened. Fourth, employers should not be permitted to foreclose antitrust class actions by including arbitration clauses in employment contracts.

A. Section 1

1. Parallelism

Black letter law says that plaintiffs cannot advance a claim against antitrust defendants based on mere "parallelism" or "conscious parallelism." 196 Parallelism occurs when two or more competitors maintain above-competitive prices by (for example) adopting pricing strategies of matching the other party's price. They keep prices high through unilateral behavior rather than through agreement. Many commentators have criticized this legal rule because it allows firms to engage in anticompetitive conduct that hurts buyers. 197 The Supreme Court has, however, adamantly resisted calls for reform. The problem, first identified by Donald Turner, is that there is no clear judicially manageable remedy for parallelism. 198 A court could issue an injunction requiring the defendants not to engage in parallel pricing, but it would be hard to determine whether they are or not. It is in the nature of pricing that the seller must pay attention to the prices of other sellers, and a court would normally be unable to determine what the competitive price is. By contrast, if an agreement exists, the court can enjoin it and punish the parties for entering the agreement.

A similar point could be made about parallel wage setting. Imagine that one firm announces the wages that it pays its workers, and other firms match the wage. Workers at one or all the firms sue, arguing that the firms coordinate to keep wages low. A court might have difficulty fashioning a remedy for the same reason as in the case of parallel pricing: it may be impossible for the court to determine whether a firm ignores or pays attention to the wages of other firms and to issue an enforceable order directing the defendants to ignore them. But the logic does not apply in all settings. Consider, for example, another

¹⁹⁶ See Horizontal Merger Guidelines, supra note 35, § 7; William H. Page, Tacit Agreement Under Section 1 of the Sherman Act, 81 Antitrust L.J. 593, 594–(2017).

¹⁹⁷ LOUIS KAPLOW, COMPETITION POLICY AND PRICE FIXING 443-53 (2013).

¹⁹⁸ Donald F. Turner, The Definition of Agreement Under the Sherman Act: Conscious Parallelism and Refusals to Deal, 75 HARV. L. REV. 655, 669–71 (1962).

common form of parallel behavior—nonpoaching. Firm A does not hire from Firm B, and Firm B does not hire from Firm A. It is likely that if Firm A and Firm B both employ large workforces and frequently hire people, a plaintiff could establish with statistical methods that Firm A turns down qualified applicants from Firm B—that is, applicants who are as qualified as the applicants from outside Firm B that Firm A hires. An antitrust violation thus could be established, and an appropriate remedy—based on the but-for world in which Firm A uses the same standards for all applicants—could be formulated. Indeed, the same tools that are used to show invidious discrimination in a disparate impact employment discrimination case could be used in the antitrust context. 199

For an example, consider Kelsey K. v. NFL Enterprises LLC, where the court rejected both a no-poaching and wage-setting allegation based on parallel conduct.200 The plaintiffs, a class of cheerleaders, tried to establish the no-poaching allegation by pointing out that no club had ever hired a cheerleader away from another club even though the skills employed by cheerleaders are easily transferred from one team to another.²⁰¹ The court held that the refusal to hire could have been merely parallel conduct—an agreement was not necessary.202 The court should have taken the no-poaching allegation more seriously. The problem of proof and remedy in the price-setting and possibly wage-setting context was not present in this case. If cheerleaders routinely applied for positions at other clubs and were routinely refused, this should be a prima facie case of a section 1 violation. The teams could defend themselves by showing that they had applied the same employment criteria to applicants who belonged to other clubs and applicants who did not.

An employer can rebut a disparate impact claim by showing, using statistical methods, that the low representation of a group in its labor force reflects demographic constraints, for example, the low representation of that group in the labor market from which the employer draws.²⁰³ When a plaintiff claims parallel or reciprocal no-poaching, the employer would similarly be able to rebut the claim by showing that its labor force has the same proportion of former employees from the plain-

¹⁹⁹ See Griggs v. Duke Power Co., 401 U.S. 424, 431-32 (1971).

²⁰⁰ No. C 17-00496 WHA, 2017 WL 3115169, at *6 (N.D. Cal. July 21, 2017), aff'd, 757 F. App'x 524, 526 (9th Cir. 2018).

²⁰¹ See id. at *4.

²⁰² Id. at *6.

²⁰³ *Griggs*, 401 U.S. at 430 n.6 (pointing out that between whites and blacks, many fewer blacks had the high school education required by the employer).

tiff's employer as from other employers, controlling for other variables.

A flat ban on labor-side antitrust cases brought on the basis of parallel practices is unwise. Courts should recognize section 1 cases based on parallelism when statistical analysis shows that the parallel behavior harms labor competition.

No-Poaching Agreements in Franchises

In the last year, plaintiffs have brought class actions on behalf of workers at franchises like McDonald's and Jimmy John's, arguing that these franchises have used no-poaching agreements in order to suppress competition.²⁰⁴ The McDonald's no-poaching agreement reads:

Interference With Employment Relations of Others. During the term of this Franchise, Franchisee shall not employ or seek to employ any person who is at the time employed by McDonald's, any of its subsidiaries, or by any person who is at the time operating a McDonald's restaurant or otherwise induce, directly or indirectly, such person to leave such employment. This paragraph [] shall not be violated if such person has left the employ of any of the foregoing parties for a period in excess of six (6) months. 205

A franchise that violates this provision is subject to a range of sanctions from McDonald's, including termination if repeated violations occur.²⁰⁶ In the McDonald's case, the class representative, Leinani Deslandes, alleged that she was employed by a McDonald's franchise in a managerial position for \$12 per hour.²⁰⁷ After her original employer frustrated her efforts to obtain training for a higher-level position, she applied for a managerial job at a nearby McDonald's restaurant that offered \$13.75 per hour, rising to \$14.75 after three months. The store manager expressed interest in Deslandes' application, but she was later told by a McDonald's official that the store could not hire her without the consent of her original employer, who refused it because she was "too valuable." 208 She eventually quit and went to work for Hobby Lobby for \$10.25 per hour, the lower wage reflecting the fact that "some of the skills [Deslandes] developed as a manager of a McDonald's outlet

See, e.g., Butler v. Jimmy John's Franchise, LLC, 331 F. Supp. 3d 786, 790 (S.D. Ill. 2018); Deslandes v. McDonald's USA, LLC, No. 17 C 4857, 2018 WL 3105955, at *6 (N.D. Ill. June 25, 2018).

Deslandes, 2018 WL 3105955, at *2 (brackets in original).

²⁰⁶ Id.

²⁰⁷ Id. at *3.

²⁰⁸ Id.

were not transferable to management positions at employers outside of the McDonald's brand, so she had to start over at the bottom elsewhere."²⁰⁹

The franchise cases raise several novel issues for antitrust law. First, when the franchisor imposes within-franchise nohire obligations on the franchisees, do these obligations count as vertical agreements or horizontal agreements? If they are vertical agreements, then they are subject to the rule of reason standard, which favors the franchise. 210 If they are horizontal agreements, they are presumptively subject to the per se standard, which favors the employees.²¹¹ Antitrust policy reflects deep skepticism of agreements between competitors, while agreements among firms in different positions on a distribution chain may produce efficiencies.²¹² In the *Jimmy John's* case, the court seized on the contractual right of franchisees to sue each other for violating the no-poaching obligation, which has a horizontal feel.²¹³ Unfortunately, the distinction between horizontal agreements and vertical agreements is hopelessly tangled. The type of formalism employed by the Jimmy John's court will simply cause firms to rewrite the franchise contractor so that the franchisor alone enforces the obligations.

Second, does it matter that these agreements are "intrabrand," that is, between firms that are contractually bound by the franchise agreement rather than between independent firms? In product market cases, agreements that restrict trade within a brand are not subject to per se analysis because they can facilitate competition across brands.²¹⁴ If McDonald's owned all its restaurants rather than contracted with franchisees, then it would be impossible to argue that restrictions on employee mobility would violate the antitrust laws, which do not apply internally to the operation of a firm.²¹⁵ Why should matters change if McDonald's operates through franchises? One possibility is that unions can more easily organize against a single large firm than multiple independent franchises; thus, it might seem fair that if McDonald's can counter unionization

²⁰⁹ Id.

See, e.g., Butler v. Jimmy John's Franchise, LLC, 331 F. Supp. 3d 786, 793 (S.D. Ill. 2018) ("Vertical agreements, however—those made up and down the supply chain—are generally subject to a more lenient 'rule of reason' analysis").

See id. at 792 ("Horizontal agreements . . . are typically per se violations of Section $1 \dots$ ").

²¹² See Hovenkamp, supra note 97, at 156-59.

²¹³ Butler, 331 F. Supp. 3d at 796.

²¹⁴ Cont'l T. V., Inc. v. GTE Sylvania Inc., 433 U.S. 36, 54–55 (1977).

²¹⁵ See Copperweld Corp. v. Indep. Tube Corp., 467 U.S. 752, 776 (1984).

by organizing itself as a franchise, it should be subject to antitrust law. But it seems to us that one cannot answer this question without examining the market conditions in which McDonald's operates.

Third, and getting closer to these economic realities, one needs to ask whether these no-poaching obligations are likely to be pro- or anticompetitive. The McDonald's court made several pertinent observations. McDonald's' no-poaching agreement applied to low-skill workers as well as managerial workers, and it applied to workers whose training took place in the distant past as well as workers whose training was recent.²¹⁶ Thus, it was not tailored to the presumed business justification—to protect each restaurant's investment in its employees' training. Moreover, "[g]iven that most individuals in the low-skill employment market do not have the luxury of being unemployed by choice for six months, the no-hire provision effectively prevented competing McDonald's franchises (as well as the company-owned stores) from competing for experienced, low-skill employees."217

This type of analysis begins to look like a rule of reason analysis. McDonald's could insist that Deslandes show that the labor market was concentrated because if it were not, Deslandes could have found an equally good job. The low Hobby Lobby wage might simply have shown that she did not look hard enough, or that she valued other amenities at Hobby Lobby more than the lost income. As a first step in refuting this argument, Deslandes would need to show that the labor market was concentrated. While this would not necessarily be difficult, the court noted that "allegations of a large number of geographically-small relevant markets might cut against class certification."²¹⁸ And if a class cannot be certified, we can be sure that Deslandes' claim, however meritorious, will never be vindicated. Even trebled, \$2.75 per hour in damages will not finance a single expert report on market conditions.

Thus, the law may be inadequate to the job of policing labor market conditions. We suggest a few strategies for addressing this problem. First, courts should accept commuting zones for the purpose of labor market definition in section 1 cases. This would address the class certification problem noted by the McDonald's court. Second, courts should keep an

Deslandes v. McDonald's USA, LLC, No. 17 C 4857, 2018 WL 3105955, at *8 (N.D. Ill. June 25, 2018).

²¹⁷ Id. at *1.

²¹⁸ Id. at *8.

eye out, as the McDonald's court did, for no-poaching obligations in franchise contracts that are untailored to the skill-level and responsibility of employees or that apply to low-skill employees. Within-franchise no-poaching obligations may be justified in narrow cases, for example, involving managerial employees who are given access to proprietary information about the franchise's method of business or who have received intensive training at the franchise level; when they are broad, they should trigger the per se rule. This approach seems to us more fruitful than the tangle over vertical versus horizontal restrictions.²¹⁹

3. Why Section 1 Standards Should Be Relaxed for Labor Markets

Our two section 1 proposals imply that section 1 standards should be relaxed when workers challenge a labor monopsony. But why exactly? One might believe that section 1 should be applied to labor markets in the same way as it is applied to product markets.

The answer is that collusion appears to be easier in labor markets than in product markets, because labor markets are often more concentrated than product markets are. The idea that collusion is easier in more concentrated markets is one of the main justifications for hostility toward mergers in already concentrated markets, which is embodied in the *Horizontal Merger Guidelines*.²²⁰

Consider a product-side duopoly in which two firms maintain prices through parallel behavior. Each firm must still worry that the other firm will compete on quality or service or by offering secret discounts. In contrast, the two firms in a labor-side duopoly know that each firm's labor force is unlikely to switch firms—because of search frictions and job differentiation as well as the lack of competition by other employers. Firms cannot compete much on quality because working conditions are fairly uniform—they are not constantly changing as a result of new technology the way that products are. And while firms can compete for workers by offering signing bonuses, they take the risk that they will offend pay equity norms

²¹⁹ It also brings the analysis of no-poaching agreements in line with the treatment of covenants-not-to-compete, which are usually unenforceable when they are untailored and almost always unenforceable when imposed on low-skill workers. *See* RESTATEMENT (SECOND) OF CONTRACTS § 188 (AM. LAW. INST. 1981); *id.* cmts. c, d.

²²⁰ See Horizontal Merger Guidelines, supra note 35, § 7 (discussing coordinated effects in concentrated markets).

if the bonuses become widely known²²¹—as they must if serious competition is going to take place. Thus, the more reliable form of competition is through the wage, and parallel behavior can stop it.

The greater risk of collusion in labor markets because of their high level of concentration justifies relaxed standards for section 1 in labor market cases because the risk of false positives-wrongfully imposed antitrust liability-is correspondingly lower than in section 1 product market cases.

B. Monopsony

Section 2 also needs to be reformed. The problem is not the statutory language but the paucity of cases that provide guidance for employees who are the victims of anticompetitive behavior by monopsonists. To remedy this problem, we suggest that Congress pass a more detailed version of section 2 as applied to labor monopsonists.²²² The law should include the following reforms.

Labor market definition. Plaintiffs would be permitted to allege labor markets based on the six-digit SOC and a commuting zone. If plaintiffs allege such a labor market, the burden would switch to the defendant to show that the labor market definition is inappropriate.

By standardizing the labor market definition, the proposal would make it easier for plaintiffs to survive motions to dismiss and certify class actions. By creating a presumption that is rebuttable, the proposal would enable defendants to prevail when labor markets are idiosyncratic. In rare cases when labor markets are national in scope, for example, the labor market for CEOs of large firms, an employer would be able to refute a labor market definition based on a commuting zone by providing evidence that workers send significantly more than 20% of their applications outside the commuting zone. (Research shows that workers who seek jobs on average send 20% of their applications outside the commuting zone.)223 So we would require evidence that the job search in this occupation is significantly broader than average.

David Card, Alexandre Mas, Enrico Moretti & Emmanuel Saez, Inequality at Work: The Effect of Peer Salaries on Job Satisfaction, 102 Am. Econ. Rev. 2981, 3001-02 (2012) (finding that workers dislike pay inequality within firms when paid below the median for their unit and occupation).

For details of the proposal and a discussion, see Marinescu & Posner, supra note †, at 8-18.

²²³ See Marinescu & Rathelot, supra note 127, at 47 fig. 1.

Labor market power. Plaintiffs would satisfy the market power requirement that is typically imposed in section 2 cases by proving that the employer has a "large" share of the labor market. How large is "large"? On the product market side, courts nearly always accept 90%, usually accept above 70%, and occasionally accept shares around 50% or higher.²²⁴ We think that similar figures could be used for the labor market side. Plaintiffs could satisfy these requirements in either of two ways: based on the employer's percentage of employment or based on the employer's percentage of job postings.

This reform would again simplify and render more predictable labor monopsony cases.

Anticompetitive behavior. Plaintiffs would be able to base their case on any of the following anticompetitive acts: mergers in highly concentrated markets; use of noncompete and related clauses; restrictions on employees' freedom to disclose wage and benefit information; unfair labor practices under the National Labor Relations Act;²²⁵ misclassification of employees as independent contractors; no-poaching, wage-fixing, and related agreements that are also presumptively illegal under section 1; and prohibitions on class actions. Of course, current law gives employees the theoretical right to allege these types of anticompetitive behavior, but the cases show a pattern of judicial skepticism, as noted earlier.²²⁶ Codification would help employees by compelling courts to take these claims seriously. Employers would be allowed to rebut a prima facie case of anticompetitive behavior by showing that the act in question would likely lead to an increase in wages.

This reform would strengthen and extend section 2 actions against labor monopsonists by standardizing a list of anticompetitive acts. While not all of these acts are invariably anticompetitive, the employer would be able to defend itself by citing a

See, e.g., Colo. Interstate Gas Co. v. Nat. Gas Pipeline Co. of Am., 885 F.2d 683, 694 n.18 (10th Cir. 1989) ("[L]ower courts generally require a minimum market share of between 70% and 80%.").

²⁹ U.S.C. §§ 151-169 (2018). The Supreme Court expressed skepticism when a union brought an antitrust case against an employer who had tried to divert business to entities it controlled that were not unionized, allegedly to weaken the bargaining power of the union. The Court commented that this behavior "might constitute . . . an unfair labor practice . . . but in the context of the bargaining relationship between the parties to this litigation, such activities are plainly not subject to review under the federal antitrust laws." Associated Gen. Contractors of Cal., Inc. v. Cal. State Council of Carpenters, 459 U.S. 519, 526-27 (1983). While the relationship between labor law and antitrust law is complex, we do not think antitrust claims should be ruled out when the alleged anticompetitive act is also an unfair labor practice.

See supra note 178 and accompanying text.

business justification. For example, a noncompete could be justified because it protects an employer's investment in training. If so, an employer could avoid antitrust liability by showing that its use of noncompetes benefits workers, who obtain higher wages as a result of their training.²²⁷

Statutory damages. To increase incentives to bring laborside antitrust actions, employees would be entitled to the greater of damages of \$10,000 per employee or the harm imposed on each employee.

These reforms would strengthen section 2 claims against labor monopsonies but would also preserve the doctrinal structure of section 2. Thus, they would not generate significant legal uncertainty or require a revision in the way that we think about antitrust law.

C. Merger Review

As we have argued elsewhere, the DOJ and FTC should review mergers for their labor-market effects as well as for their product-market effects.²²⁸ Under the current approach, the agencies focus exclusively on the product market. 229 They first determine the HHI of the product market.²³⁰ Then they calculate the HHI of the post-merger product market. If the initial HHI and the increase in the HHI are high, the merger is deemed presumptively illegal. The merging firms may nonetheless obtain approval if they can show that the merger will produce significant efficiency benefits (typically, through the exploitation of economies of scale) so that consumer prices will decline.

Roughly the same analysis can be used on the labor market side. The agencies should calculate the HHI of the labor market in which the firms operate and the increase in HHI post-merger. If HHI and the HHI increase are sufficiently high, then the merger should be presumptively blocked. The merger would nonetheless be approved if the firms can show that the merger would allow them to obtain efficiencies that would result in a wage increase.

For evidence that noncompetes harm workers in monopsonistic labor markets and not in more competitive labor markets, see Starr et al., supra note 4, at

Marinescu & Hovenkamp, supra note 21, at 1042; Naidu, Posner & Weyl, supra note 11, at 547-49. Both papers go into significantly more detail about how merger review should be conducted, and readers interested in those details should consult them.

See Horizontal Merger Guidelines, supra note 35, § 4.

²³⁰ See id. § 5.3.

Note that the labor-market effects would need to be determined for every market in which the firm employs workers. A large national firm that employs workers in many different commuting zones would need to show that concentration is not significant, or would not significantly increase, in all of those zones—or otherwise spin off separate employers in the zones in which concentration would be unacceptable. This would parallel the practice for product market mergers—for example, when nationwide retail chains merge, and the implications for concentration are examined in every geographic product market in which stores are located.

Finally, Congress should abrogate *United States v. American Building Maintenance Industries*, the case that interpreted the Clayton Act not to apply to within-state mergers.²³¹ Plaintiffs should be allowed to challenge such mergers.

While analysis of labor market effects is complex and many mergers are justified, 232 our proposal simply extends the current product-market approach to labor markets. This reform is long overdue.

D. Arbitration Clauses

In American Express Co. v. Italian Colors Restaurant, the Supreme Court held that firms could use arbitration clauses to block class actions in antitrust cases.²³³ That case involved a product-side market. Merchants who claimed that American Express had violated antitrust law were required to honor the arbitration clauses in the contracts they had signed with American Express. The Court recognized that these clauses might prevent victims of corporate wrongdoing from vindicating claims involving small sums but considered itself bound by the policy of the Federal Arbitration Act.²³⁴ The logic of the case suggests that it applies to labor settings as well, as the Court later acknowledged.²³⁵ Employers can (and do) easily insert arbitration clauses in employment contracts for the purpose of

²³¹ See United States v. Am. Bldg. Maint. Indus., 422 U.S. 271, 285–86 (1975).

²³² See David P. Wales et al., The Unlikely Role of Labor Markets in Merger Antitrust Review, Bloomberg L., (Nov. 23, 2018, 9:00 AM), https://news.bloomberglaw.com/mergers-and-antitrust/insight-the-unlikely-role-of-labor-markets-in-merger-antitrust-review?context=search&index=0 [https://perma.cc/9JZ4-RVPD].

²³³ 570 U.S. 228, 233, 235–36 (2013).

²³⁴ Id. at 235-38.

²³⁵ See Epic Sys. Corp. v. Lewis, 138 S. Ct. 1612, 1627 (2018).

defeating class action litigation based on antitrust claims—and they have done so with increasing frequency in recent years.²³⁶

Italian Colors was an enormous setback to antitrust litigation. It allows a monopolist (or monopsonist) to immunize itself from antitrust challenges by contractual partners by demanding that they sign an arbitration agreement. The problem which is familiar from many different antitrust settings—is that it may be individually rational for a single buyer or seller to agree to an arbitration clause that forecloses antitrust liability because part of the harm is borne by third parties—including potential rivals of the monopolist and their future customers.

The problem is even more serious for labor-side antitrust because nearly all such cases are brought by workers who have contractual relationships with employers. In contrast, a great deal of product-side litigation is brought by corporate plaintiffs—including contractual parties who are large enough to reject arbitration clauses and competitors and other companies that do not have contractual relationships with the antitrust violator. Thus, we propose that Congress pass a law abrogating Italian Colors for labor monopsony cases.

CONCLUSION

Adam Smith, the patron saint of free-market economics, could have been writing today when he set down these words about labor monopsony more than two centuries ago:

We rarely hear, it has been said, of the combinations of masters; though frequently of those of workmen. But whoever imagines, upon this account, that masters rarely combine, is as ignorant of the world as of the subject. Masters are always and every where [sic] in a sort of tacit, but constant and uniform combination, not to raise the wages of labour above their actual rate. To violate this combination is every where [sic] a most unpopular action, and a sort of reproach to a master among his neighbours and equals. We seldom, indeed, hear of this combination, because it is the usual, and one may say, the natural state of things which nobody ever hears of. Masters too sometimes enter into particular combinations to sink the wages of labour even below this rate. These are always conducted with the utmost silence and secrecy, till the moment of execution, and when the workmen yield, as they sometimes do, without resistance, though se-

ALEXANDER J.S. COLVIN. ECON. POLICY INST., THE GROWING USE OF MANDATORY ARBITRATION 5-6 (2018), https://www.epi.org/publication/the-growing-use-ofmandatory-arbitration-access-to-the-courts-is-now-barred-for-more-than-60million-american-workers/[https://perma.cc/QFR9-TK83].

verely felt by them, they are never heard of by other people.237

While employment markets have changed greatly since the eighteenth century, the employer combinations identified by Adam Smith were aided by an essential condition—the concentration of labor markets—that has not changed. These hidden employer combinations occasionally rise to public attention because of a scandal like the high-tech no-poaching agreements but are largely invisible, or were—until statistical research brought them to light.

In light of the statistical evidence, we know that a litigation gap exists: antitrust law neglects labor monopsony—a severe problem that calls out for public resources—and it should not. Using product-market litigation as a baseline, we show that the amount of labor-market litigation falls far short of what one could reasonably expect.

The explanation for this state of affairs is not simple. Many factors play a role—the state of economic wisdom until recently, the development of new datasets and modes of statistical analysis, the incentives of class action lawyers, the limits of antitrust law, among other things. As economic understanding of labor monopsony advances, the law needs to catch up.

Courts should recognize certain types of conscious parallelism as unlawful under section 1 despite their normal insistence on an agreement on the product side. They should also block firms from avoiding section 1 liability by exploiting the vertical nature of the franchise form. Congress should tighten up section 2—courts and lawyers can do their part as well by using the latest economic wisdom to evaluate labor monopsony cases. The FTC and the Justice Department should review mergers for labor market effects. And Congress should block employers from using arbitration clauses to protect themselves from antitrust class actions.

Legal academics also need to catch up. The imbalance between product-market litigation and labor-market litigation is matched by an imbalance in legal research on product-market antitrust (which is voluminous) and legal research on labor-market antitrust (which is puny).²³⁸ We have scratched the surface of a vast topic that would benefit greatly from additional research by legal scholars.

²³⁷ ADAM SMITH, AN INQUIRY INTO THE NATURE AND CAUSES OF THE WEALTH OF NATIONS 70-71 (1776).

We have thumbed through numerous antitrust treatises and student guides and found virtually no mention of labor monopsony.