In this article, I offer a response to the criticisms that Eric Posner has directed at my initial article, which questions the importance that the Biden administration and many law and economics scholars attach to the perceived undue market power that employers enjoy in labor markets. This paper explains why the definition of relevant labor markets for both high-skilled and low-skill workers is, in most cases (certain hospital settings excepted), far broader than the relevant product markets. Thus, the concentration ratios in product
markets, which are relevant to antitrust merger policy, have little or no relevance for labor markets, especially today when labor turnover is high: firms are experiencing persistent shortages that are inconsistent with the standard effort of monopsonists to depress wages to create pools of excess labor. I also critique the empirical literature that purports to find widespread evidence of monopsony power and also argue that the current regime dealing with worker covenants not-to-compete is adequate for dealing with the supposed efforts of employers to restrict labor mobility. Accordingly, it is important to guard against both excessive regulation and litigation in an area that functions well under the current legal regime.

INTRODUCTION

I am very grateful to my Chicago colleague Eric Posner for his thoughtful reply\(^1\) to my recent paper, *The Application of Antitrust Law to Labor Markets – Then and Now*.\(^2\) In the article, I offered an insistent critique of modern antitrust enthusiasts who seek to radically expand the role of antitrust law generally, and to apply that renewed vigor to labor markets, where, to date, it is agreed by all commentators that it has received relatively little attention.

The skirmish between Posner and myself over antitrust in labor markets is, as he rightly points out, part of a larger struggle over the traditional Chicago version of antitrust law associated most prominently with Robert Bork and Eric’s father, Richard A. Posner. As young Posner notes, with evident skepticism, the Chicago school takes its cue from classical liberal thought whose central tenets are two-fold. First, there is a strong presumption in favor of individual liberty against government intervention. The control of force and

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fraud is the most common objective for any legal system, as cooperative behavior in family, firms, and various social groups could hardly go on if these twin vices were permitted to operate unabated. Hence, a serious legal investment in the control of these devices makes good sense, so long as we remain wary of the risk of government overreach, which distorts markets—as often happens in securities cases—by branding beneficial or neutral conduct as fraudulent.\(^3\)

Second, as Posner notes, there is a strong consensus that certain forms of monopoly behavior are also subject to government oversight because of their real potential to reduce overall social welfare by cartelization that either fixes prices or divides territories. Mergers are, as a key corollary of this fundamental proposition, a more difficult case to deal with because they have both efficiency benefits and restrictive potential. Most mergers are little concern because their small market-shares do not have or create sufficient market power to disrupt social relations. Instead, mergers tend to be self-regulating. The good ones will survive if the economic synergies work, but they will either fail or unravel if it does not. But, it is widely agreed that mergers between titans within a given market could produce monopoly losses that exceed any efficiency gains, so that it is a legitimate government function to conduct a pre-merger review, discharged today largely through the Hart-Scott-Rodino statute,\(^4\) to check to see that these transactions do not create undue social concentration, often measured by the Herfindahl-Hirschman index (HHI).\(^5\)

The agreement of this broad framework conceals, however, some serious differences. Posner thinks that I am decidedly old-school when I state that

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the real threat to competition comes not from businesses but from workers who organize unions, and politicians who meddle with labor markets. Epstein believes that unions push wages above the competitive level, disrupt commerce, squelch growth, and discourage innovation like charter schools.6

I confess that I am baffled that anyone could think otherwise.7 Why do workers organize unions if they do not hope to obtain some monopoly profits? They can obtain efficiencies by cooperating with employers through a variety of contractual devices, including the company union and the suggestion box. But, the former is banned under Section 8(a)(2) of the National Labor Relations Act,8 and the latter is strongly discouraged by the rule that once unions are put in place, there are no direct relationships between the employer and any employee, as all interactions are to be coordinated by the union. The decline of unions in the private sector is now well known,9 and one reason for that change is that free trade in the market for goods and services reduces the level of firm economic rents that are subject to union appropriation. And, the reason why public unions are both more powerful and more durable is that prison guards, police, and firefighters are not threatened by the free entry that has reduced the available rents to the old AT&T and to the Big Three automobile makers—General Motors, Ford, and Chrysler—before the entry of foreign car makers.

Yet, when unions are given the chance, they do more than raise wages. They squelch growth by making it difficult for firms to adapt to new circumstances by changing work rules, outsourcing, or

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6 Posner, Reply, supra note 1, at 390-91 (citations omitted).
7 For a longer, recent statement of my views, with replies, see Richard A. Epstein, American Workers Do Not Need Unions, LAW & LIBERTY (July 1, 2020) [https://perma.cc/W7LM-TLNM].
9 See Posner, Reply, supra note 1, at 394-97.
altering wage structures. They disrupt commerce by shutting down or slowing down public transportation, education, and athletics, where the inability to stockpile daily services leads to immense “incidental” damage. The visible antipathy of public teacher unions to charter schools is too conspicuous to be ignored. Posner starts, then, from a set of indefensible priors about labor markets, which should cause readers to be suspicious when he claims that employers obtain large unidentified sources of monopsony rents through labor markets. It is important to answer this in three ways. First, I shall explain why the current raft of shortages in multiple labor markets is inconsistent with any claim that employers possess sufficient market power to create a pool of idle workers. Second, I shall then look at the explicit restrictions on trade in connection with covenants not-to-compete in order to show that these do not create pools of monopoly power. Third, I shall examine the claim that a wealth of econometric evidence demonstrates that in a large number of industries, monopsony power is able to reduce overall worker welfare—hence, his expansive title How Antitrust Failed Workers, with no explicit limitations.11

I. THE BASIC THEORETICAL FRAMEWORK

The central proposition of the modern view on labor antitrust law is that substantial pockets of monopsony power allow employers to suppress wages below competitive levels. If that premise is correct, baleful consequences follow. The total amount of labor hired will be reduced. Employers will, therefore, cut back on total output so that the social losses are found in both labor and product (including service) markets. Put otherwise, labor monopsony power should be treated with the same hostility as monopoly power.

The central challenge here is to identify the places where such power exists. That cannot be done by tracing movements in the

quantities of goods and services sold or the prices charged for them. If demand increases, prices (and wages) and quantities will increase in both competitive and monopoly (or monopsony) markets. If costs increase, then prices (and wages) will go up, but the quantities of goods and services will go down, again in both competitive and monopoly (or monopsony) markets. Hence, it is critical to find some marker that applies to the monopsony but not the competitive market. Posner and his supporters posit that the difference lies in the excess capacity that exists only in monopsony markets, where employers bid down wages so that some workers who would be hired in competitive markets are forced to the sidelines.

At present, that looks to be a colossally incorrect description of the situation in current labor markets. The most common trope used today to describe the conditions of these markets is the “Great Resignation,” coined by organizational psychologist Anthony Klotz. The term refers to the situation where record numbers of individuals are quitting their jobs, often at large and powerful firms, so that we witness the odd situation in which the number of want ads for new employees has reached massive proportions, despite some persistent unemployment. The labor shortages for all sorts of professions, both skilled and unskilled, have reached major proportions across the board. Employers have responded with extensive recruitment strategies, signing bonus, and wage increases. They have shaped the way in which work takes place, so that time in the office is down and working from home becomes more accessible. It does not matter whether one looks for bus drivers, nurses, truck drivers, or lower-level employees. For example, Goldman Sachs has decided to cut back on its firing because it “faces an industrywide

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12 Juliana Kaplan, The Psychologist Who Coined the Phrase ‘Great Resignation’ Reveals How He Saw It Coming and Where He Sees It Going, ‘Who We Are as an Employee and as a Worker Is Very Central to Who We Are.,’ BUSINESS INSIDER (Oct. 2, 2021) [https://perma.cc/5GHH-83P4].
talent shortage.” The nursing profession also faces a shortage in markets where, tellingly, traveling nurses earn a substantial premium over workers at a single location. And, in the highly decentralized trucking industry, the search for drivers is described as hypercompetitive. And, labor shortages are acute for hospitality and restaurant workers with, by one count, 1.7 million job openings compared to 1.0 million quits, a ratio that is well out of whack with historical norms.

There are of course multiple nuances in each and every industry, but no one—anyone—speaks of that mysterious excess capacity that the Posner and his confederates posit as the long-term institutional norm. Instead, the entire movement is driven by personal and lifestyle changes after COVID, so that personal identity looms larger relative to traditional economic concerns, at least in the short-run. The situation is further muddied by rising inflation, which for the moment is outpacing wage increases. It is just not possible in the face of this massive reorganization of the labor market to give any

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13 Lydia Moynihan, Goldman Sachs to Ease Its Yearly Firings as Wall Street Faces Talent Shortage, N.Y. POST (Dec. 9, 2021) [https://perma.cc/VRP2-NTZG].
14 Jenni Fink, Hospitals Have Lost Fewer Employees in 2021 than 2020, Despite Nursing Shortage Crisis, NEWSWEEK (Dec. 13, 2021) [https://perma.cc/6CTN-8YTG] (noting the loss of 29,000 workers this year and also observing that “[t]ravel nurses, who move around the country on different assignments, can make significantly more money than those who work at a single hospital”).
15 David J. Lynch, Amid Huge Shortage, New Truck Drivers Train for Some of Supply Chain’s Toughest Jobs, WASH. POST (Dec. 16, 2021) [https://perma.cc/8SFR-5KLS]. The author notes both that the regulatory environment renders many drivers ineligible because they cannot meet standards set out in the drug/alcohol list, which compounds the high turnover rate in the industry. Note that for drivers, the potential market is probably more national or regional than local, reducing any probable effect of monopsony power.
17 Ryan McMaken, Inflation Surges Near to a 40-Year High. Wages Aren’t Keeping Up., Mises Wire (Dec. 11, 2021) [https://perma.cc/SJYD-TJML] (explaining that average hourly earnings are up 4.8 percent in contrast to inflation, which is up to 6.9 percent). Like everything else on this topic, the differential could be attributed, in part, to the shift from office to home work, which results in lower commuting costs in both time and money.
macroeconomic credit to the claim that pockets of excess labor are part of some grand scheme. Indeed, none of the many stories on this issue even mention the supposed monopsony problem, and instead point to the heroic efforts of firms to hire more workers in sector after sector.

The question remains, moreover, just where do these workers go once they quit?18 Here, most of the answer is that they reposition themselves in the labor force, rather than just dropping out. Thus, one recent story in the Wall Street Journal notes: “Burned out teachers are leaving the classroom for jobs in the private sector, where talent-hungry companies are hiring them—and often boosting their pay—to work in sales, software, healthcare and training, among other fields.”19 And why? Because they have “ability to absorb and transmit information quickly, manage stress and multitask.”20 And so, they work in areas unrelated to their former jobs. In other cases, the job shift is driven by COVID concerns, which in turn leads to higher demands for working from home, if only three days a week. It is also a time when applications to form new small business has skyrocketed, attaining record high levels this past year: reaching some 1.4 million through September 2021 over 1.14 million in 2020 and just under 1 million in 2019.21 These are small firms, and all of them hire employees. It is not conceivable that all of these firms could be part of some grand cartel scheme. Furthermore, it is common to hear stories of people who quit their full-time job, and then negotiate some alternative deal with their former employer that gives them the

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18 On this topic, see generally Derek Thompson, Three Myths of the Great Resignation, THE ATLANTIC (Dec. 8, 2021) [https://perma.cc/V6RE-Q4W2].
20 Id.
21 Thompson, supra note 18.
freedom of taking additional gigs elsewhere. But, moreover, it should be painfully apparent that exit options for current workers are far greater than the monopsony model either anticipates or predicts. Indeed, I have not been able to locate a single source that has focused on the short-term markets that even mentions this problem, largely because no matter what some of the econometric studies suggest, monopsony can be, at most, a localized phenomenon that does not impact the vast bulk of American workers who work in wide range of different occupations and firms, many of which are small.

II. Express Restraints

I turn, next, to one possible exception where some monopsony may be exerted; namely, those areas in which there are explicit covenants not-to-compete that strap low-income workers. Posner summarizes the case as follows:

Statistics showing that a vast number of low-skill workers are subject to noncompetes, which are almost certainly not enforceable, along with evidence that the wages of those workers are suppressed in states with high levels of noncompete enforcement, indicating that the noncompetes operate through an interrorem effect. Only highly compensated employees can afford lawyers to contest noncompetes in court, and so everyone else doesn’t.

The objections to this position start with the observation that most of these covenants not-to-compete are applicable only to efforts to switch jobs to another franchisee of the same franchisor. There are sensible efficiency reasons why firms might want to enforce these covenants to prevent internal rivalries that all would recognize as

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23 Posner, Reply, supra note 1, at 400.
unacceptable if the franchisor operated the franchisees directly.\footnote{See Epstein, Labor Antitrust, supra note 2, at 375-78.} The prohibitions do not deal with movements to other potential employers, whether an outright owner or the franchisor of another chain. It is, therefore, far from clear whether these restrictions are unenforceable against the employee. Nonetheless, the franchisor can take direct action against the other franchisee so as to reduce this particular risk. Moreover, there is surely no reason to suggest that a firm will necessarily impose these restrictions at all. For example, during his 2020 campaign, candidate Biden charged that McDonald’s had extensively used these covenants, but the record has revealed that the franchisor not only has never imposed covenants against moving to rival chains, but had also in fact ended any restrictions against movement from one of its franchisees to another in 2017.\footnote{Rem Rieder, Biden’s False Claim About McDonald’s, FACTCHECK.ORG (July 24, 2020) [https://perma.cc/3KSA-QPHR].} But even if the covenants are imposed, the so-called evidence of suppressed wages might in the alternative just reflect the greater job security associated with these positions.

It is also highly unlikely that these agreements operate through an \textit{in terrorem} effect on the individual. Posner misses the central point when he assumes that low-level employees are on their own when it comes to dealing with the enforcement of these covenants. There are two clear responses to that position. First, the prospective employer has a strong interest in determining whether or not the covenants are enforceable against him. If they are, then the key remedy is not against individual employees, but against the employer who poaches—usually more than one worker—for inducement of breach of contract. And, if that prospective employer knows that the covenants are illegal, he can inform the worker and offer to foot the costs of defense to the suit, which is likely to be directed more against him than the worker. The inability of the worker to hire a lawyer is thus of little consequence when a protector stands by. Second, the
state attorneys general can engage in enforcement actions as well. For example, even Posner and Ioana Marinescu noted that when the Jimmy John’s restaurant chain imposed two-year noncompete terms on employees switching to similar deli-style businesses within a three-mile radius of its outlets, it was forced to back down after then-Attorney General Lisa Madigan brought a direct enforcement action against it, which suggests that existing doctrine is sufficient to handle the occasional outlier cases, without further change.\(^{26}\)

The situation here is reminiscent of that which arose over 100 years ago in connection with the so-called yellow-dog contract, whereby miners agreed with their employer that they would not join another union, or even agree to join another union, so long as they remained with their current employer. The union induced some of these workers to break their contracts and were promptly sued for inducement of breach of contract, because the action against the union was far more valuable than the hapless task of suing each individual worker for breach of contract. The actions were allowed in *Hitchman Coal & Coke Co. v. Mitchell*,\(^ {27}\) because all the requisites of the tort were satisfied and no public policy objections could be raised (at least at the time) for actions that were designed, correctly it turns out, to prevent strike actions from leading to disruption in the mines.\(^ {28}\) In these cases, the inducement of breach will fail if the covenants not-to-compete were illegal, but they will succeed if they were enforceable. The prospective employer should be able to deal with those issues, and the prospect that it will step in as either a joint tenant or as a protector of these workers should offer sufficient deterrence against abuse.

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\(^{27}\) 245 U.S. 229 (1917).

There could be some dislocations at the margins, but not as a first-order problem. Indeed, the situation in the market gives no sign of distress at all. Many of the workers who quit, stay quit, and thus are not caught by the restrictions. And, those who take jobs elsewhere do not seem to have provoked a rash of lawsuits, which would be necessary for Posner’s story to work. The key feature here is that, as noted earlier, there is a major shortage of workers in this industry, like everywhere else, which suggests that the image of the mad scramble for labor works well here, in what looks to be an intensely competitive market.

III. CIRCUMSTANTIAL EVIDENCE

We come at last to Posner’s response dealing with cases in which the allegation of labor monopoly must rest on circumstantial evidence, because, as Posner admits, direct evidence of cooperative behavior to support the claim of monopsony power is exceedingly difficult to come by, except, as noted, in connection with covenants not-to-compete. In dealing with this issue, Posner places a great weight on the exhaustive studies that purport to show these once undetected reservoirs of monopoly power. But, what is lacking here is any explanation as to how this practice of monopolization operates, which is necessary to provide the context for understanding the usefulness of this empirical evidence to Posner’s argument. Posner and I both agree that the same conceptual framework should apply to antitrust law in both product and labor markets, but he is at a loss to explain why the enforcement mechanisms have produced such paltry results for labor markets if the problem is as large as the studies on which he relies claim. None

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29 Posner, Reply, supra note 1, at 398 (“The frequency with which collusion takes place in labor markets is an open question. Conspirators do not announce their conspiracies; conspiracies must be uncovered through painstaking investigation.”).
30 See id. at 392 n.12 (citing several studies claiming to demonstrate monopoly power in labor markets).
of these studies, as far as I can determine, actually uncover any explicit or implicit agreement among these firms so that the sole evidence of such monopolization is thought to be conceptual.

An enormous amount of labor market differentiation is needed before any HHI number is coherent. Yet when it comes to particulars, Posner does not wade into these difficulties, but instead points to a case on which there is no reason to dispute: “a recent hospital merger in Abilene, Texas, involving a hospital with 70.1% of the market of registered nurses and a hospital with 22.4% of the market of registered nurses.”

But, note that this merger probably also runs aground under traditional antitrust law as applied to the medical and health care services as offered to the public at-large—one has to wonder exactly what is gained by blocking mergers on labor grounds when they are already barred on product grounds. Indeed, Posner does not and, with some evident glee, proclaims instead that since both the Trump and Biden administrations pushed after labor market activities, I should join the party. But again, the firms targeted by both administrations are conspicuous outliers, not—the many—routine mergers. Thus, the recent Department of Justice action against the effort of Penguin Random House—created by prior merger—to acquire Simon & Shuster on the ground that it could translate into lower author payments is yet another case of that sort.

There is only a single class of writers, easily identifiable, and the effort to block this merger could take place as well on the ground that the merger will not only drive down author payments, but drive up the price of books.

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31 Id. at 393-94.
32 Id. at 405-06.
33 U.S. DEP’T OF JUSTICE, Justice Department Sues to Block Penguin Random House’s Acquisition of Rival Publisher Simon & Schuster (Nov. 2, 2021) [https://perma.cc/6ZSV-XUHL].
34 For an account of this lawsuit, see Christie D’Zurilla, Authors Guild Doubles Down on Support of Antitrust Suit Against Publisher Mega-Merger, L.A. TIMES (Nov. 5, 2021) [https://perma.cc/2HWW-44ET].
Posner states, incorrectly, that I do not deal with any of the empirical evidence. Yet I do discuss empirical evidence in some detail, including an important recent study by Elena Prager and Matt Schmitt, which reaches far more nuanced conclusions. The cardinal virtue of that study is that it disaggregates workers by type to see the extent to which they are subject to monopsony power and/or have monopoly power of their own. The results of that study comport with sensible theory. It finds substantial power in hospital cases but only in cases where mergers lead to very high concentrations: those which involve the top twenty-five percent of HHI increases. And, even here, the situation can be complicated by other institutional features. Thus, with regard to nurses, that monopsony power is offset in part by the strength of the nurses’ union. The situation here is one of a classical bilateral monopoly, where it is notoriously difficult to predict the distribution (or dissipation) of any economic surplus between the parties—or to draw any strong conclusions about the desirability of different splits. But, at the opposite end of the spectrum, labor markets for custodial and data entry services, for example, do not exhibit any form of monopoly power. Custodians can swab floors in banks and hospitals, large and small. Hospital entry clerks can work in banks or supermarkets, wherever accounts have to be managed. There are, of course, many gradations of professions in between where labor mobility is in issue, perhaps because of some licensing requirement or unique industry-specific skills. But, there is no theoretical reason to be confident that a lumbering firm can do better in negotiations than an individual worker who has a better sense of his or her needs and options. What is clear is that the relevant market is not defined

35 Posner, Reply, supra note 1, at 394-95.
36 Epstein, Labor Antitrust, supra note 2, at 353-69, 385-86.
by the business of the firm, but by the (quite different) markets for the highly variegated services.

That point becomes critical when we look at some of the other empirical studies that examine the extent of employer dominance in labor markets. Thus, the most recent version of the working paper by David Arnold goes beyond the hospital industry in an attempt to assess the effect of mergers on wages in other labor markets. The heterogeneity of industries in such a study necessarily weakens the result and, to his credit, Arnold fully recognizes that the definition of a product market never works as an accurate definition of a labor market. Accordingly, he makes heroic efforts to measure industry substitutability for the employees of a given firm. But, the success of these corrections is necessarily limited—it is high unlikely that any two workers in an industry will have identical options outside the narrow product market area, depending on their previous work experience, outside interests, relevant academic credentials, or other skills. Arnold’s basic bottom line is that in some cases there is a correlation between mergers and decreased wages. But, as with the Prager and Schmitt study, the effect is usually weak so that the antitrust scrutiny in labor markets makes sense “only for very large mergers that generate considerable shifts in local concentration, similar to how antitrust is enforced for product markets.” which tracks my position.

The studies that seek to extend the antitrust law outside this narrow compass are far less persuasive. Thus, Kevin Rinz attempts to estimate the effect of labor market concentration on worker

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38 My deep thanks to Jeremy Brown for guiding me through this econometric thicket.
40 Arnold, April 2021 Mergers & Acquisitions, supra note 39, at 3.
earnings more generally. Yet, his study founders on its inability to know which industries are in competition with each other in labor markets as well as for which portions of their workforce. More specifically, he relies on the North American Industry Classification System (NAICS), under which all workers are said to fall within the “labor market” for that industry. The study also limits itself to workers within the same commuting zone.

Both of these constraints have a built-in bias to overstate the level of industry concentration. On the former, it is palpably odd to assume that all workers for a large firm work within in the same labor sector, when any given firm of any size will hire workers in dozens, if not hundreds of different job categories, some with high mobility and others less so. Nor does the restriction on commuting zone provide valuable insight into market concentrations. Many people who change jobs also decide consciously to move far distances. The recent Census Bureau state population and migration estimates from between July 1, 2020 and July 1, 2021 bear witness to extensive labor switches across distinctive geographical markets for which a “commuting zone” statistic seems wholly irrelevant. Thus, the three big losers from negative migration were New York (net loss of 319,020 people), California (net loss of 261,902 people), and Illinois (net loss of 113,776 people), all of which are progressive states, and three big winners were Texas (net gain of 310,288 people), Florida (net gain of 211,196 people) and Arizona (net gain of 98,330 people).


which are far more conservative. Close to a million people entered the top-ten growth states and approximately 750,000 people left the ten largest losers. Many of these people were surely going to take new jobs, so that any computation based on a localized “commuting zone” underestimates the level of mobility. Moreover, many jobs are in no sense local. The trucking industry employs about 3.6 million drivers,\(^\text{43}\) for whom the notion of a commuting zone is fanciful, at best.

Notwithstanding these theoretical difficulties, Rinz relies chiefly on a regression relating average earnings per year in a market (where he defines a market as the intersection of an industry and a commuting zone) to concentration in the market (as measured by HHI). He finds a negative relationship between concentration and earnings, with the most dramatic conclusion that a worker moving from the median level of concentration to the 75th percentile would lead to a reduction in mean earnings of about 15 percent.\(^\text{44}\) On their face, the results seem incredible, because it is doubtful that in any real-world settings even a strong labor cartel could achieve that result. In addition, the study just has to be wrong because it defines labor markets in terms of product markets, while ignoring the enormous movement across industries found by first Prager and Schmitt, and then acknowledged by Arnold. Why then trust a study whose author notes that 75% of those in his dataset who change jobs go to a different NAICS industry?\(^\text{45}\) As Arnold noted, studies, like Rinz’s, have measurement problems due to “potentially arbitrary market definitions.”\(^\text{46}\) The study also uses an extraordinarily crude measure of earnings—average wage for all workers in a market for (it appears) an entire year\(^\text{47}\)—that will necessarily miss heterogeneity

\(^{43}\) Truck Drivers in the US: Employment and Haul Statistics, ALLTRUCKING.COM (last visited Dec. 29, 2021) [https://perma.cc/KV82-PXAC].

\(^{44}\) Rinz, supra note 41, at 21.

\(^{45}\) Id. at 7 n.9.

\(^{46}\) Arnold, April 2021 Mergers & Acquisitions, supra note 39, at 10.

\(^{47}\) See Rinz, supra note 41, at 9, 16 (discussing the study’s reliance on annual W-2 data to calculate average wages).
across workers and will not capture any difference in nonwage compensation, including health and retirement benefits, as well as differences in working conditions. Finally, using HHI rather than merger activity as a concentration measure risks misattributing lower wages to industry structure when such correlations may really be due to other factors that impact both wages and concentration.48

Finally, Azar et al. attempts to improve on previous studies by defining labor markets by occupational classifications rather than industries (product markets). 49 Posner notes that this study “estimate[s] that 60% of labor markets are characterized by HHIs higher than 2,500, and a quarter of labor markets have HHIs higher than an eye-watering 7,200.” 50 But, it is a mistake to assume this study reaches defensible conclusions on the larger question of monopsony power in labor markets outside a few limited circumstances.

The Azar study considers 26 occupational categories that, like the studies of Prager and Schmitt, cover the gamut from skilled professions like “Registered nurses” and “Industrial engineers” to unskilled professions like “Telemarketers” and “Driver/sales workers.” Their results, however, are reported in aggregate form when what is needed is an occupation by occupation break down, given that mobility often varies by occupation. Where Rinz used industries, Azar instead constructs a labor market model using the intersection of occupational classifications and a commuting zone.

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48 Arnold, April 2021 Mergers & Acquisitions, supra note 39, at 10 (“If increased import competition causes low productivity firms to exit the market, then the fall in labor demand will cause wages to fall. Therefore, wages will be negatively correlated with increases in concentration, but in this case the correlation has nothing to do with monopsony power.” (citations omitted)).


50 Posner, Reply, supra note 1, at 393 (explaining Azar, Marinescu & Steinbaum, supra note 49).
measured by looking at job postings from 2010 to 2013 from Careerbuilder.com. Wages for each of these “labor markets” were calculated by averaging the advertised wages, which may well be lower than negotiated wages for each quarter. They treat “posted vacancies as a proxy for local demand,” though there is nothing that states that the relationship between these two figures is fixed. Further, there is no reason to think that these classifications are even an accurate proxy for market concentration. Labor market concentration was again measured using the HHI, where a firm’s “market share” is approximated by the number of job postings in a quarter divided by the total number of job postings. In some cases, these could be high, but in many cases (as in their Figure 3, which shows a large number of HHIs at 10,000), the only interpretation can be that, in that quarter only, a single firm is active, which tells next to nothing about basic market concentration. The authors do exclude these firms from their alternative calculations in order to check the robustness of their analysis, but their very existence shows the perils of seeking to use postings as a proxy for labor market concentration, without offering any strong evidence of how wages vary with changes in the HHI.

Indeed, as a general matter, it is likely that highly narrow markets will exhibit high HHI because of the small number entries. As an illustrative example, a quarter in which one firm advertises three nursing jobs and a second firm advertises one nursing job would yield an HHI of 6,250 ($75^2 + 25^2$). It is important to be sensitive to how labor postings (which are a small fraction of total employment) can be a rather volatile measure of labor demand because they are driven by the small numbers of postings in any given case, so that a shift of one worker, or the addition of another, could radically alter the HHI ratio. The authors provide no explanation as to how they relate job openings to overall employment levels at given firms during the relevant time frame.

51 Azar, Marinescu & Steinbaum, supra note 49, at 18.
52 Id. at 38.
Nor is there any explanation for the exclusion from their calculations businesses that are not hiring within a given period, no matter how large or small their workforce. And most importantly, the numbers do not consider the full range of job opportunities to which workers apply, outside of any given occupational classification. By refusing to acknowledge how labor markets are more broadly defined, these stilted figures lead to an excessive estimate that “the average HHI is 3,157, which is . . . above the 2,500 threshold for high concentration according to the Department of Justice / Federal Trade Commission horizontal merger guidelines.”\textsuperscript{53} Notably, they find that going from the 25th percentile to the 75th percentile of HHI is associated with a wage decline of up to 17 percent,\textsuperscript{54} which is close to the Rinz (over)estimate of 15 percent.

The “up to” is a bit of a fudge because it does not rule out lower estimates. But even if we put that aside, I see no reason to think that job-posting activity is an accurate proxy for any meaningful economic data. It is not a direct measure of industry concentration, nor serves as a robust proxy. It is not a measure of merger activity. It is not a measure of the relevant labor market. It is not even a good measure of labor turnover, because it fails to take into account positions that are filled from within the firm or positions filled by word-of-mouth or some other connection. Nor is it surprising that advertised wages tend to increase as more firms are looking for given types of workers. As we know from the recent spate of job activity, that behavior works both in competitive and monopsonistic markets.

The large wage declines postulated by Rinz and Azar cannot in my view be explained by assuming that employers act individually, but must be understood by viewing the actions in parallel. At this point, it then becomes critical to note that there is good reason to think that the transactional obstacles to the formation of employer

\textsuperscript{53} Id. at 2.
\textsuperscript{54} Id. at 3.
labor cartels are formidable to say the least. In dealing with various price fixing arrangements in product markets, there is always some effort to infer cooperation from publicly observed price movements. The leading case that allows for this possibility to go forward is *In re Coordinated Pretrial Proceedings in Petroleum Products Antitrust Litigation*, in which Judge Dorothy Nelson overturned a summary judgment for the defendants by allowing the four plaintiff states—Arizona, California, Oregon, and Washington—to reach the jury on the question of whether the various price movements in the retail market presaged that similar activities took place in the wholesale market between the defendants and their service stations. The argument rested on a signaling theory espoused by the plaintiff’s expert, Professor Keith Leffler, who observed that in a number of key markets retail prices in the market followed a “sawtooth” pattern with both sharp decreases and even sharper increases over periods of roughly one to several weeks.

Ironically, these “sawtooth” pattern price cycles have in fact been observed in various retail gasoline markets, most notably in Australia’s major cities. But, the common view is that these cycles are indicative of competitive gasoline markets, which in the theoretical economic literature are commonly referred to as “Edgeworth Cycles.” Nonetheless, they were used in this instance to establish the exact opposite, a price-fixing conspiracy. Judge Nelson was correct to observe that the key case of *Matsushita Electric Industry v. Zenith Radio Corp.* did not preclude the use of circumstantial evidence to establish such a price-fixing violation and instead

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55 906 F.2d 432 (9th Cir. 1990).
56 Id. at 442.
58 475 U.S. 574 (1986).
tethered Matsushita’s successful motion for summary judgment to
the underlying weakness of the antitrust theories of predatory
pricing. 59 Predatory pricing theories generally fail because the
alleged predator who prices at below cost will find it impossible to
recoup those losses down the road if their opponents follow the
correct strategies of holding back inventory and production until the
predator chokes on the excessive demand that its below-cost pricing
generates. But, in Petroleum Products, that difficulty did not arise
because cartelization takes effect immediately and lasts so long as the
parties are able to coordinate their activities and keep out new
entrants. Hence, it became a question of fact for the jury to see
whether the interpretation that the plaintiffs put on the sawtooth
pricing could persuade the jury, even after the defendants offered
evidence that these patterns were illusory.

I think that the odds of plaintiff winning on the sawtooth theory
were small at the time, and remain small today. But for these
purposes, the key point is that the entire case rests upon the
availability of public pricing information of sufficient quality and
quantity to make out that prospect, even though it leaves open the
question of proper damage calculations—this clearly leaky theory
does not lend itself to determining damages. But, when collusion is
charged in other markets without these price signals, the road to
success is much steeper. That weakness has become evident in the
Biden administration’s effort to reinvigorate the antitrust laws. On
November 17, 2021, President Biden asked Lina Khan, the all-too
energetic chairwoman of the FTC, to investigate “big oil” for price
fixing, relying solely on a recent spurt in oil prices to establish price
fixing by insisting: “Usually, prices at the pump correspond to

59 For my own view, see Richard A. Epstein, Bell Atlantic v. Twombly: How Motions
movements in the price of unfinished gasoline.”

But, there is many a slip between cup and lip. For starters, energy prices are generally volatile, and for that reason are generally excluded from the “core” inflation figures. In addition, the coordination effort has to take into account the behavior of at least 10 major producers, of which the three largest are state-owned companies (PetroChina, Sinopec, and Saudi Aramco), generating total revenues of $781.5 billion, as against $528.4 billion in revenues for the three largest private producers (BP, Exxon Mobil, and Royal Dutch Shell). Furthermore, price fixing is made ever more difficult by the many grades of oil and the variety of local requirements for additives and the like that vary across jurisdictions. All of these factors are compounded by the consistent effort of the Biden administration to slow down domestic fracking, while vainly pleading to OPEC+ nations to increase their output. Thus, Biden’s oil case lies, at best, in shambles and could not get to a jury, even under the standards set out in *Petroleum Products*.

The situation is far worse here. Starting with the assumption that the same standards of proof apply in labor and product markets, one big fact stands out. There is no comprehensive published list of wages (let alone fringe benefits, statutory entitlements, currency conversion rates, etc.) for any of the countless trades and occupational categories found in the oil and gas industry, which, as

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62 Will Kenton, *Core Inflation*, INVESTOPEDIA (Nov. 27, 2020) [https://perma.cc/6BP6-WMKG] (“Core inflation is the change in the costs of goods and services but does not include those from the food and energy sectors. This measure of inflation excludes these items because their prices are much more volatile.”)
64 Epstein, supra note 61 (citing Ariel Cohen, *OPEC Says to Biden: If You Want More Oil, Pump It Yourself*, FORBES (Nov. 9, 2021) [https://perma.cc/2AX5-38Z7]).
I noted in my original article, exist in different firms in different proportions. In addition, there is no information on how large firms make their wage divisions across countries, firms, and departments. It cannot be all done at the center, so that coordination has to take place within multiple centers of the firm, which makes communication, even within businesses difficult. To compound the difficulty, many firms keep secret much wage information for employees—secret because the release of that information to other competitors could provide them with hints on how they organize production or on which types of workers to hire. But even if they did not, it is utterly impossible to think that firms could coordinate wages by some implicit signaling device remotely similar to that used in Petroleum Products, when they do not even know the identity or numerosity of these firms outside their product markets that compete in the same or similar labor markets.

It just boggles the mind to think that there is only a difference in degree between most labor markets and the situations found in both the hospital and book-merger cases, where the target population could be identified with particularity. And, efforts by Rinz and Azar to posit gains up to 17 percent (whatever “up to” means) presuppose that the wage suppression devices in these chaotic markets rival the power that the strongest of individual unions could exert against any firm. What is needed to support this outlandish theory is a close examination of the pricing patterns in some relevant market to see if any investigation could go beyond the abstract evidence that these so-called empirical studies generate.

None of the litigation to date remotely attempts to take on that broader evidentiary and conceptual challenge. In order to close that litigation gap, Posner points to a justly famous passage of Adam Smith who rejects as “ignorant of the world” anyone who thinks that masters do not collude in order to keep down the wages of their

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employees. 66 "To violate this combination is everywhere a most unpopular action, and a sort of reproach to a master among his neighbours and equals." 67 Note that Smith speaks of a world far removed from our own. He posits that the master, who may be colluding to suppress wages, has to answer to his "neighbours and equals" in a single line of work. It takes no exotic signaling theory to see how these Smith-like cases are plausible, as are what was equally apparent in explicit efforts by workers to organize against their employers, largely free of legal intervention, when historically, antitrust law never subjected labor unions to the same scrutiny as cartels—a fact set in stone in 1914 in the United States when they were officially exempted from antitrust scrutiny. 68 But, what set of informal social sanctions could possibly apply to a firm that is said to be in league with hundreds of different collaborators in a thousand remote geographical and occupational markets which he cannot find on a map? The supposed social sanctions, thus, disappear from view and we are left with a set of random data points that look less like

66 Posner, Reply, supra note 1, at 404-05 (quoting ADAM SMITH, WEALTH OF NATIONS 35 (4th ed. 1786)). For those who want to see the full passage, it reads:

We rarely hear, it has been said, of the combinations of masters [employers], 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 everywhere 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 everywhere 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 severely felt by them, they are never heard of by other people.

SMITH, supra, at 35.

67 SMITH, supra note 66, at 35.

68 See Epstein, Labor Antitrust, supra note 2, at 347-349.
Posner’s supposed “mountains” of evidence and more like a set of disjointed mole hills.

**Conclusion**

The major theme of my original article and this brief response is to stress the dangers of treating Posner’s form of counterintuitive speculation about monopsony power as the basis of sound policy. A limited use of antitrust law in targeted cases is what works. Thereafter, there is a huge risk that the progressive antitrust theorist will dismiss their inability to prove their cases in court by either direct or circumstantial evidence, and instead insist that direct administrative action, under some concocted econometric theory, should be used to close what Posner and his supporters call the “litigation gap.” 69 There is, moreover, no particular reason why anyone armed with such theory would stop with the attack on mergers, if the supposed monopsony power (like the ether) is invisible but ever present. Why not go through each labor category and try to estimate the supposed monopsony gap, after which government officials steeped in the progressive tradition could undertake to reset prices for the Fortune 500 companies and beyond? The current system may result in some modest underenforcement, but the alternative has endless possibilities for the mischief that comes from overenforcement even though the standard economic propositions still hold. There is no global evidence, given the chronic fluctuations and frequent shortages, to believe that labor markets are rife with hidden pockets of monopsony power that function as economic black holes. Instead, the current rules with respect to both covenants not-to-compete and merger guidelines get it about right. The progressive revolution in antitrust will turn out to be a failure wherever and whenever it is raised. So, I urge Posner to return to the Chicago-fold before the mischievous and excessive antitrust

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enforcement follies in labor markets cause greater harm to social welfare.