

ANTITRUST-PLUS:

Evaluating Additional Policies to
Tackle Labor Monopsony



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Executive Summary

Policymakers and academics increasingly recognize labor market power—that is, monopsony—as a potential drag on US wages. While recent literature has suggested that antitrust regulation is an appropriate response to labor market monopsony, considerable literature has also found significant monopsony even in markets characterized by low concentration and little use of anticompetitive practices.

This report qualifies the primacy of antitrust by arguing that a significant degree of labor market power is “frictional,” without artificial barriers to entry or excessive concentration of employment. If monopsony is pervasive under conditions of free entry, antitrust is likely to play only a partial role in remedying it, and other legal and policy instruments to intervene in the labor market will be required. We review a number of other policies, discuss whether they might mitigate labor market monopsony, and conclude by discussing enforcement.



Introduction

A growing body of empirical literature indicates that employers have considerable wage-setting power, or labor market monopsony, even in relatively thick labor markets (i.e., markets with many employers). Employers regularly trade off wages with turnover and retention, which means that employers are willing to tolerate high turnover in exchange for low wages and payroll. Labor market monopsony lowers wages, which has led to a number of policy suggestions. Since some of the literature attributes monopsony entirely to increased concentration or anticompetitive practices like noncompetes, a natural response is increased antitrust enforcement (which mainly focused on product-market violations in the past) in labor markets.

In this report, we argue that there are strong reasons for believing that antitrust enforcement will be insufficient. Antitrust enforcement can target mergers and anticompetitive behavior like no-poaching agreements, but a great deal of monopsony power is due to factors outside the reach of antitrust. Pervasive monopsony power is a result of institutional constraints on the exchange of labor, where jobs and workers are both heterogeneous, high-dimensional bundles of characteristics that are difficult to specify in legally enforceable contracts. The result is that people are generally less mobile than goods, and relevant labor markets are typically (though not always) thinner than product markets.

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These constraints are present even when explicitly anticompetitive behavior is absent, and so a significant degree of monopsony power is held even under conditions of free entry, no collusion, and many employers. That is, monopsony is present even when the typical actions associated with market power are absent. In our companion academic paper (Naidu and Posner 2019), we survey economic models of monopsonistic competition and present additional evidence that monopsony power is present even in putatively thick labor markets.



We argue that pervasive monopsony necessitates policies well beyond the orbit of what is understood as antitrust, and we categorize these into:

- policies that reduce wage-setting power (e.g., antitrust or other pro-competitive policies);
- policies that restrain firms' wage-setting power via wage or benefit mandates (e.g., the minimum wage, wage boards, mandated benefits, or unions); and
- policies that allow monopsony power to exist and be used by employers but alter the incentives facing workers or firms (e.g., earned income tax credit or wage subsidies) in order to blunt the effects.

However, our paper should not be taken to imply that antitrust enforcement of labor markets should continue to be neglected. Below, we argue that antitrust enforcement should be strengthened because it can do much good. But other policy instruments are needed to make significant progress on the problem of labor monopsony. Imperfect competition regularly appears in product markets, but, as a rough approximation, the institutional and social constraints on exchange of products are relatively limited, while the constraints on exchange of labor are significant and inherent in the way labor is traded. Besides paying a wage, jobs are bundles of idiosyncratic costs and amenities—for example, relationships with coworkers and managers, or commute times, which are valued differently by different workers. Most workers do not obtain much experience shopping for jobs, and so choosing among employers is not guaranteed to lead to the job desired by the worker. Further, the next best alternative of a worker often depends on the possibility of an outside offer, which in turn depends on social networks interacting with idiosyncratic labor requirements of other firms (Granovetter 1968; Caldwell and Harmon 2019). This creates monopsony power when these tastes and outside options are private information of the worker, as firms post a single wage and will rationally be willing to lose some workers in order to pay lower wages to the ones who remain. Further, perhaps due to custom, firms tend not to actively poach already employed workers outside of extremely high-skill industries. In contrast to ubiquitous advertisements and sales experienced in the product market, there is comparatively little in the way of active competition for workers.

What can be done? We explore the possibilities and limitations of greater antitrust enforcement against labor monopsonists and conclude that, while greater enforcement is advisable, it would be inadequate for addressing the problem. We then explore other legal approaches to problems of market power in labor markets, including wage regulation, “amenity regulation,” legal support for unions, and mandates and subsidies for desirable employment features. Our takeaway is that antitrust regulation, while required to combat egregious anticompetitive practices in the labor market, cannot substitute for traditional labor law; more extensive labor market intervention is required to combat the natural monopsonies in the labor market.



WHY JOBS ARE NOT LIKE CHAIRS

It is commonly claimed that “labor is not a commodity.” Indeed, this language is explicit in the text of the Clayton Act, a 1914 law that exempted unions from antitrust enforcement.¹ This claim is also *prima facie* false, in that most people sell their labor on a market in exchange for a wage. But the claim correctly expresses an intuition that the buying and selling of labor is *different* from the exchange of other commodities. It is unclear if labor is different from all other commodities, but it is certainly the case that various physical and institutional constraints (for example, the impossibility of committing to staying with an employer, which is reflected in the law) make the market for labor different from, say, the market for carrots.

Our argument begins with an empirical claim about deregulated and open labor markets: They are naturally monopsonistically competitive. The evidence shows that labor market power exists, and not only as a direct result of concentration or lack of competition. The general presence of labor market power was recognized by Joan Robinson, who wrote that:

“The supply of labour to an individual firm might be limited . . . there might be a certain number of workers in the neighborhood and to attract those from further afield it may be necessary to pay a wage equal to what they can earn near home plus their fares to and fro, or there may be workers attached to the firm by preference or custom and to attract others it may be necessary to pay a higher wage. Or ignorance may prevent workers from moving from one firm to another in response to differences in the wages offered by the different firms (Robinson 1933 (1969, ed., 296)).”

Note the absence of anything like “concentration” in Robinson’s formulation; she does not mention the lack of other employers in the area as a source of upward-sloping labor supply. Institutionalist American labor economists readily accepted the notion of upward-sloping labor supply, again without any reference to concentration. In a 1946 *Quarterly Journal of Economics* article entitled “The Supply of Labor to the Firm,” Lloyd Reynolds wrote:

“The assumption that workers are fully informed and completely responsive to wage differences may be altered in three main ways. It may be assumed that workers are ignorant of the wages paid by other employers, or that they are perfectly informed concerning wages but are deterred from changing jobs by considerations of security, or that they are perfectly informed concerning wages but differ in their evaluation of the non-base-rate components of the wage (Reynolds 1946, 393).”

¹ “The labor of a human being is not a commodity or article of commerce” (Clayton Act).



The problem of employers' intractable wage-setting power, even in large and thick labor markets, has thus been recognized for quite a long time, even if it has been ignored in recent decades.²

EVIDENCE FOR MONOPSONISTIC COMPETITION

What is the evidence for monopsonistic competition in the labor market? Direct estimates of monopsony power that are obtained in thick labor markets are the most compelling. The most credible evidence is provided by the few randomized controlled experiments where wages are randomized for identical jobs in markets with many wage-setters and little in the way of barriers to mobility. Sydnee Caldwell and Emily Oehlsen (2018) randomize wages for Uber drivers, including those who also drive for Lyft. They examine the rate at which drivers switch between ride-sharing platforms, and find a surprisingly low elasticity of between 4 and 5, given that workers literally just have to switch apps on their phone. Arin Dube and coauthors (Dube et al. 2018a) experimentally vary wages for an identical task and find substantial monopsony power even on (putatively thick) Amazon Mechanical Turk. A number of other papers—for example Dube et al. (2018b); Dube, Manning, and Naidu (2019); Bassier, Dube, and Naidu (2019); as well as the meta-analysis by Sokoleva and Sorenson (2018)—find US residual labor supply elasticities between 2.5 and 4. Bassier, Dube, and Naidu (2019) also find that this elasticity does not vary very much by employer concentration.

Other direct estimates include evidence on wage increases from small firms that exogenously receive shocks to the firm-specific marginal product of their labor. In the US, these shocks include patents in small firms (as in Kline et al. 2017), fiscal stimulus shocks from American Recovery and Reinvestment Act contracts (Cho 2019), and wins in procurement auctions (Kroft et al. 2019). Goolsbee and Syverson (2019) use shocks to admissions at universities to show monopsony power in the tenure-track academic labor market, which is generally national in scope.

A simple way to reconcile these estimates is to note that monopsony is not the only constraint facing firms. Firms must also use wages to provide incentives, mitigate adverse

² For example, a respected textbook on industrial organization noted that “Most labor economists believe there are few monopsonized labor markets,” and thus proceeded to devote only a few pages to the topic, providing a highly esoteric illustration (the labor market for priests) (Carlton and Perloff 2005, p. 108).



selection, and induce loyalty and reciprocity. Rent-sharing elasticities reflect all of these other constraints on firm wage-setting, not simply the labor supply constraint. For example, in efficiency wage models combined with monopsony, the wage is potentially much higher than the pure monopsony wage (although employment is potentially much lower, and involuntary). This is plausibly what is happening in Matsudaira's estimates (where wages are regressed on shocks to employment), and also cautions against taking the ratio of employment to wage responses to a shock as a clean estimate of the labor supply elasticity.

Where labor markets appear governed by “the law of one price,” we suspect it is due to the effect of social norms and convention rather than competition. Dube, Giuliano, and Leonard (2018) show that the appearance of high quit rates in response to wage changes is driven more by comparisons across workers than sensitivity to their own wage. That is, when all workers are given the same wage increase, the quit rate falls by only a little bit, but when some workers are granted raises while others at the same store are not, the latter are much more likely to quit. Breza, Kaur, and Krishnaswamy (2018), in a paper tellingly titled “Scabs,” also show that rural village markets exhibit substantial monopsony power. They randomize wages to workers in private and in public and find that workers are willing to take jobs at the same rate even at a 10 percent wage cut in private, but are unwilling to do so in public. The appearance of an extremely elastic labor supply facing the employer/experimenter is driven by social sanctions against accepting low wages in public. A possible explanation is that workers recognize that they are collectively harmed if they compete over wages and employ social sanctions to restrict competition, a practice that is of course formalized by unionization but can occur informally as well.

ANTITRUST LAW IS NOT ENOUGH

These models of monopsonistic competition suggest that considerable monopsony power can persist even in large, non-concentrated labor markets with many employers. This makes antitrust law an unwieldy device to handle labor market monopsony. While concentration can exacerbate the monopsony originating in either search or differentiation, it is by itself not a sufficient metric for market power. Antitrust is, by and large, set up to police anticompetitive behavior, including excessive concentration (the merger screening function) and egregious price-fixing behaviors (the anticompetitive practices). But if market power is generated by search frictions or heterogeneous, privately held preferences and outside options, then antitrust law can do little.



However, this does not mean that antitrust enforcement of labor markets should be abandoned as fruitless. Indeed, in this section we argue that antitrust enforcement should be strengthened because it can be beneficial. But as we will further show, stronger and more tailored policy instruments are needed to make significant progress on the problem of labor monopsony.

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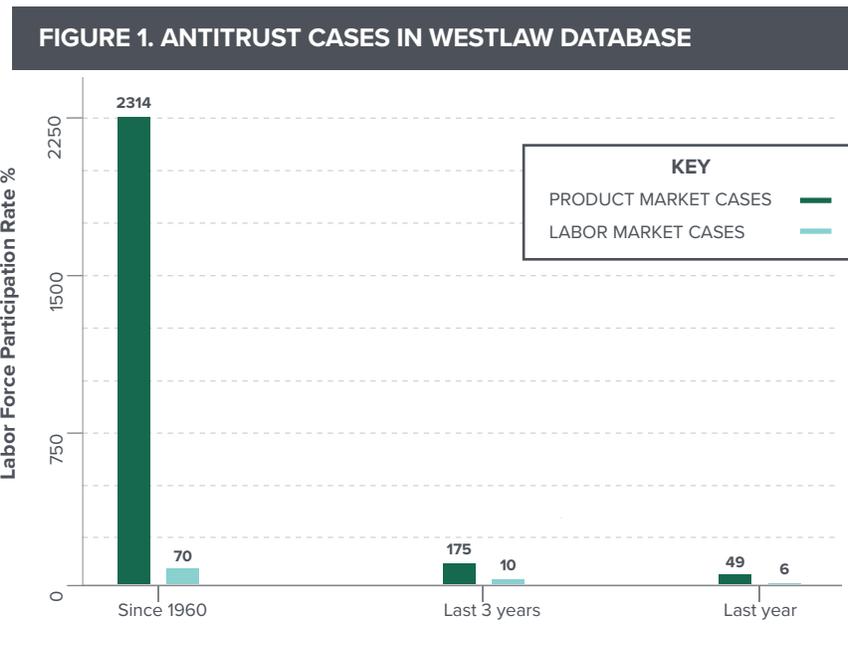
The evidence of neglect is substantial. Statistical and anecdotal evidence suggests that mergers and consolidation over the last several decades have led to greater labor market concentration and wage suppression in affected labor markets. Debates remain as to how to define labor markets; whether concentration has increased on average across labor markets over time varies depending on labor market definition. Across a variety of definitions, however, labor market concentration appears robustly negatively correlated with wages, and this result has been found in high-quality studies (Azar et al. 2017; Benmelech et al. 2018; Rinz 2018; Hershbein, Malacusa, and Yeh 2018). Firms have also been caught engaging in classic horizontal arrangements, such as no-poaching agreements, that suppress wages by reducing competition among employers for workers in a specific labor pool (Department of Justice 2010). It also turns out that no-poaching agreements are extremely common in franchises, and may further contribute to wage suppression in thin labor markets where a small number of franchises compete with each other while restraining competition for workers among their subordinate franchisees (Krueger & Ashenfelter 2017). Finally, concerns have been raised about the ubiquity of covenants not to compete (CNCs), which have been frequently applied even to low-income workers who receive little training (Starr et al. 2018, Krueger & Posner 2018).

A further development in recent years is the rise of labor market platforms, which match customers (e.g., households) with workers (e.g., domestic care workers or cleaners). These platforms, we argue, tend to be natural monopsonies with significant increasing returns in employment of workers. This is because of a type of network effect: The volume of workers on the platform increases the odds of a match with a customer, which attracts customers to the platform, and thus even more workers. This technological development may cause concentration to reappear as an important source of monopsony.

Many of these trends can be traced to lax antitrust enforcement. The government has



not screened mergers for labor market effects. Private antitrust lawsuits against labor monopsonists are uncommon, as Figure 1 shows. Such lawsuits are risky and expensive and face a range of legal restrictions (such as limits on class actions) and practical difficulties (such as relatively low payoffs). Employers have also realized that they can block class actions by adding arbitration clauses to employment contracts, thanks to favorable decisions by the US Supreme Court. Some older legal precedents suggest that no-poaching agreements within franchises may be permissible, while in most states, CNCs are subject to only weak review under the common law and are rarely subject to sophisticated antitrust analysis (Posner 2020).



Note: Based on a search of the antitrust database in Westlaw. Searches were: “product market’ /200 (monopoly anticompetitive exclusionary); and “labor market’ /200 (monopsony anticompetitive exclusionary).” Searches performed on October 24, 2018.

It is clear that more vigorous antitrust enforcement would be justified. The government should develop a procedure for reviewing mergers for their labor market effects (Naidu, Posner, and Weyl 2018; Marinescu and Hovenkamp 2018). Congress and state legislatures can and should pass laws that relax restrictions on class actions, subject CNCs to stricter review or ban them outright, restrict no-poaching agreements within franchises, and strengthen private rights of action against firms that monopsonize (Marinescu and Posner 2019).

But while antitrust has a role to play, antitrust alone cannot completely prevent labor market monopsony and related wage suppression.



AN INVENTORY OF LAW AND POLICY TOOLS FOR LABOR MARKET MONOPSONY

In this section, we address various types of labor market regulations and other laws that could (or do) address the problem of wage suppression caused by labor market monopsony. Solutions can either increase residual supply elasticities (competition), much as antitrust aims to do, or keep market power constant but impose either internal governance mechanisms or wage/benefit standards that prevent firms from exercising it. Finally, policies can allow firms to exercise monopsony power but ameliorate the resulting inefficiencies (e.g., employment subsidies).

Figure 2 provides a brief summary of the policies considered and how they address monopsony. In each case, we show how the regulation in question may address the various problems we identify; the limits of the regulation; and the costs that the regulation may impose on the economy. Below, we explore each policy more closely.

FIGURE 2. LABOR MARKET POLICIES AND MARGINS OF MONOPSONY TARGETED

POLICY	MARGIN OF MONOPSONY		
	Raising Residual Supply Elasticity	Directly Setting Wages/ Compensation	Offsetting Distortion
Wage Mandates	N	Y	N
Antitrust: Merger Screening	Y	N	N
Antitrust: Vertical Restraints	Y	N	N
EITC/Wage Subsidies	N	N	Y
Mandatory Benefits	?	Y	N
Job Protection	?	N	N
Licensing	Y?	N	N
Training	Y?	N	Y
Job Standardization	Y	N	N
Enterprise Collective Bargaining	N	Y	N
Sectoral Bargaining	Y	Y	N
Works Councils	N	Y	N
Macroeconomic Tightness	Y	N	Y



Wage Regulation

A much-discussed response to the problem of wage suppression is minimum wage or living wage law. A minimum wage prohibits the employer from paying workers a wage below a certain level. Mandatory minimums in this spirit can be, and often are, applied to other aspects of work. For example, maximum hours laws limit the number of hours that workers can be required to work or require extra pay for hours above that limit. Laws that require employers to meet minimum health and safety standards have a similar effect. They prevent an employer from underproviding what is effectively in-kind compensation in the form of relatively safe or pleasant working conditions.

The standard criticism of minimum wage laws is that they will result in unemployment as employers fire workers to whom they must pay a wage greater than the workers' marginal revenue product. But this criticism assumes that labor markets are competitive. The more serious problem with minimum wage laws is that they can only help a small class of relatively poor people—workers who would otherwise be paid slightly less than the minimum wage, and not more deeply impoverished people, or workers higher on the wage scale. When the monopsonistic wage level exceeds the minimum wage, minimum wage laws have no effect. If the wage is only a small part of the total compensation, or total compensation is fungible between wage and nonwage components, minimum wages alone will have a negligible effect. Moreover, the minimum wage must be carefully calibrated: If the wage level is set too high, then disemployment effects may be greater than the wage benefits. It may be difficult for governments to calibrate the minimum wage correctly, and it is possible that workers who benefit from the minimum wage end up paying higher prices charged by firms that pass some of the costs to consumers (MaCurdy 2015). On the whole, minimum wage laws can be only a small part of the response to wage suppression caused by monopsonistic competition.

A more thorough and flexible wage-mandate response to pervasive monopsony would be wage boards, as are prevalent in Australia and in some US states for some industries (e.g., New York and California). Wage boards periodically set wage floors by industry, occupation, and location, using nonpartisan expert appointees (in the Australian case) or tripartite employer-worker-government commissions (as in the US case) (Madland 2018).

EITC/Wage Subsidies

It is well understood that the fiscal system solution to market power involves subsidizing the price paid by the firm, which has some unattractive distributional consequences. However, if a corporate tax on pure profits were coupled with a precisely tuned (i.e., equal



to the optimal level of employment) subsidy on wages, the gains from alleviating the monopsony distortion via a subsidy could be redistributed.

Under this approach, the government should apply the subsidy only to employers with monopsony power, and the extent of the subsidy should be a function of the degree of monopsony power. But the existence, and especially degree, of labor market power is never self-evident. It is the domain of antitrust law in the first place to determine whether an employer has power in a labor market, and this fact-intensive inquiry seems to require lengthy hearings by courts. Further, firms will have an incentive to cherry-pick the best workers under the wage subsidy scheme. Taxes are not used to police product market power and are likely not a good instrument for labor market power.

A popular policy that has unanticipated consequences under monopsony is the earned income tax credit (EITC). The EITC subsidizes earnings of low-income households and is among the largest forms of redistribution in the US. However, because it is designed to encourage work (i.e., shift down the labor supply curve), it will also generate a windfall to monopsonist employers, in addition to lowering the wages for all workers. Unless coupled with a minimum wage, the EITC could have perverse distributional consequences.

But a subsidy that leverages private information could be implemented in labor markets where firms do not have discretion over hiring. Imagine the following employment regime. Employers are required to make a public list of all the jobs that they offer, along with requisite qualifications and compensation, and are further required to hire the first qualified person who applies for it. Then monopsony power can be eliminated by subsidizing wages paid by employers. This subsidy has a similar economic motivation as the common-ownership self-assessed tax proposed by Posner and Weyl (2018); a monopsonist employer has an incentive to quote too low a wage, and the subsidy blunts this incentive. The “take-all-comers” hiring policy is essential to make this work, but may not be such a stretch in the era of gig work where companies like Uber operate by offering a highly standardized form of work to workers who are hired based on their conformity to a rigid set of ex ante specified qualifications.

Recent literature on “robust monopoly regulation” (Guo and Shmaya 2019) may also be useful for adjudicating between wage mandates and subsidies. The idea in robust policy design is that policymakers do not even know the distributions of possible worker tastes, outside options, or firm valuations of workers. Can optimal (in some sense) policies even be formulated? The robust mechanism design literature suggests that such policies can be characterized and are often simpler and much more transparent than policies that presuppose policymaker knowledge. In the case of labor market power regulation, the “regret-minimizing” policy features either a minimum wage or a (capped) wage subsidy, depending on how much the profits of business are valued relative to workers’ wages.



Mandatory Benefits

Workers are protected by a range of laws that require employers to offer certain benefits to them. Federal mandates include workers' compensation, safety and health requirements, family and medical leave requirements, and special treatments for veterans (DOL n.d., "Summary"). States also impose mandates. Illinois, for example, requires employers to give workers time for a meal if they continuously work 7.5 hours or more, and prohibits employers from penalizing employees who miss work in order to vote or serve on a jury (ELH n.d.). Mandates can be loosely defined as legally required in-kind transfers from the employer to the workers where the workers attach or may attach an intrinsic value to the benefit. We abstract away from certain legal requirements that are designed to increase workers' bargaining power (for example, union organization rights).

These policies have often puzzled economists because they seem to substitute the government's judgment about the conditions of employment for the employee's own judgment as to what may be best for them. Consider, for example, a mandate that employers grant unpaid leave to workers who experience a family medical emergency. It would seem that if workers value unpaid leave of this type a sufficient amount, employers would grant it to them even in the absence of the mandate. The unpaid leave is simply an in-kind benefit—effectively, a kind of weak employer-supplied insurance policy. Suppose, for example, that a worker would be willing to pay \$100 for such a policy because it gives them peace of mind, while the cost to the employer is only, say, \$50 in lost productivity. By incorporating unpaid leave into the employment contract, the employer should be able to reduce the wage by between \$50 and \$100. As Summers observes (1989), mandates might be justified where externalities are present, or for paternalistic reasons, but otherwise they are a puzzle.

The logic is the same if the employer is a labor monopsonist. Indeed, it is possible that a labor monopsonist has stronger incentives than a non-monopsonist to offer benefits because the monopsonist will obtain a larger share of the surplus. Spence's (1975) model may apply to the labor market, so employers offer higher nonwage benefits to attract the marginal worker, but also depress wages more for the inframarginal workers.³ As Summers also notes (1989, 170 n.2), the story is more complex if, as will usually be the case, the monopsonist has limited information about employees and potential hires. Employers may use packages of wages and benefits that avoid adverse selection problems but that are unnecessarily costly from the social standpoint (for example, adding an in-house chef to attract workers who want to work late, or adding physical activity to a job to screen out-of-

³ Note that this implies that the usual practice in cost-benefit analysis of analyzing wage differentials across risky professions to assess the price of risks is suspect: Monopsony implies that this empirical relationship only traces out the valuation for the marginal worker, not the average worker.



shape workers). But a policy of mandating benefits in such circumstances does not have straightforward efficiency effects.

Further, to the extent that the cost of benefits is larger than the value workers have for those benefits, mandates will act as a tax, and thus magnify the monopsony distortion, resulting in even lower employment and wages than the competitive case. We suspect that mandates will not generally help address labor monopsony power except in the limited case where the minimum wage is binding, and so the addition of a mandate has the effect of increasing the effective compensation of a low-income worker. Even here, however, raising the minimum wage would be the better remedy to the problem of labor monopsony, unless the wage is a small share of total compensation. Mandates do not address wage suppression caused by monopsony power.

Job Protection

In the US, most jobs are at-will, meaning that the employer can fire the worker for any reason not specifically forbidden by law (such as racial discrimination). In one state, Montana, the law provides that employers may fire workers only “for cause.” Under the for-cause standard, employers may fire workers only if they can prove that the workers are unable or unwilling to perform the job up to standards. In other countries, many workers have relatively secure forms of tenure. Laws that put limits on termination of workers also typically prevent the employer from taking lesser forms of actions against workers—such as reducing wages, or even failing to make cost-of-living adjustments.

A crucial observation in this connection is that monopsonists are labor-constrained: They always want more labor at the given wage, and so it is unclear why monopsonists would fire workers without cause (other models, like efficiency wages, may be needed to rationalize these protections).

In the simplest variant of the Burdett-Mortensen model of search, however, job protections could be understood as lowering the rate at which workers leave their employer, and thus increasing the tightness of the labor market. This is because as the rate at which workers enter unemployment falls, employers have to compete more with each other for workers. So tightness—measured as the ratio of the recruitment to separation rates—increases, moving the labor market closer to efficiency. But if employers lose profits from protected jobs, and choose vacancies and recruitment effort, then the employer reduction in recruitment effort may outweigh the reduction in the separation rate.

Job protection rules may reduce the bargaining power of employers by depriving them of the ability to fire a worker who refuses to accept a low wage or insists on a higher wage. But



they do not help workers in concentrated labor markets: The initial wage will be set at the monopsony rate. At most, they help workers who obtain work at the market wage, or at a relatively high wage, and then lose bargaining power as the labor market consolidates or the workers' outside options diminish for other reasons. These workers will be unable to obtain raises that they would receive in a competitive labor market.

Job protection also has negative consequences. Many economists worry that the job tenure laws in some countries damage the macroeconomy by decreasing labor mobility and reducing employers' incentives to hire in the first place. Labor rigidity may also make it more difficult for economies to recover from recessions.

A weaker form of job protection comes in the form of notice requirements. The Worker Adjustment and Retraining Notification Act (1988) requires employers to give workers notice before laying them off. Notice benefits workers by enabling them to start their job searches while they are still being paid. Notice requirements may therefore enhance workers' bargaining power by reducing search costs, although perhaps only modestly.

Occupational Licensing

Many types of employment are subject to occupational licensing statutes. These statutes require people to undergo training and certification before offering services to the public. Traditional examples include lawyers and doctors, but in the last few decades, the list of occupations that are subject to these rules has lengthened considerably, and now includes (depending on the state) hairdressers, auto mechanics, financial advisers, civil engineers, electricians, and funeral directors, among many others. A survey reported in Kleiner and Krueger in 2013 found that 35 percent of workers were licensed or certified.

The traditional justification for occupational licensing is quality control. If the government can screen out incompetent service providers, consumers will benefit. Many economists are skeptical of this justification and have argued that the main effect of occupational licensing has been to erect entry barriers that raise prices for services, reduce supply, and benefit incumbents. The crucial observation here is that occupational licensing lowers the supply of labor to a given market, and thus raises wages of the licensed; lowers profits of firms (and raises prices for consumers); and lowers the wages of the unlicensed.

It is possible that occupational licensing could help workers counter labor monopsony power of employers. To see why, imagine that in a particular area, there is a single hospital that hires nurses from the local labor market. To minimize its labor costs, the hospital hires only a portion of the workers who are willing and able to serve as nurses. The continued existence of unemployed nurses in the labor market enables the hospital to credibly



threaten the nurses that it employs with termination if they demand higher wages, as the hospital can easily replace them. However, if occupational licensing reduces the supply of nurses, this threat may be incrementally weakened. The important assumption here is that licensing makes the supply to the firm more elastic as well as lower, which may or may not be the case, and has not been a consideration in the empirical literature on licensing.

Unfortunately, occupational licensing also imposes a cost on people who want to enter the workforce in the first place—since they must pay for training that may otherwise be unnecessary, in addition to fees for certifications. For this reason, occupational licensing may not on balance be a useful way to counter employer monopsony power.

Training and Employment

Numerous government programs offer various forms of skills training for people. The US government subsidizes student loans and offers tuition grants. State and local governments provide subsidized schooling, vocational training, and university training. Many programs help workers who have lost jobs. For example, the Department of Labor runs the Employment and Training Administration, which offers retraining programs to dislocated workers, among others. The Workforce and Innovation Opportunity Act, passed in 2014, provided additional resources for supporting and retraining people who have lost their jobs (DOL n.d., “Training”). State and local governments also offer numerous services to unemployed workers, including training and matching (City of Chicago n.d.).

These programs offer benefits to ordinary people, but most of them do not address the problem of labor market power. Consider, for example, federal grants and loan subsidies for students who seek to attend college. In the absence of such benefits, people will either borrow in the private market or refrain from going to college. In the first case, the benefit is equal to the difference between the cost of borrowing in the private market and cost of subsidized borrowing along with any grants. In the second case, the benefit is equal to the difference between future income that is obtained as a result of the college education (net of costs) and future income otherwise obtained. In both cases, the benefit is a transfer from taxpayers to the generally lower-income people who qualify for these programs. Employers may benefit from the larger pool of qualified labor. Monopsonistic employers remain free to use their market power to suppress the wages of the people they hire. It is even possible that as the pool of trained workers increases, the workers lose bargaining power, which further enhances the bargaining power of monopsonistic employers, who thus obtain a larger share of the surplus generated by the government programs.

Insofar as worker underinvestment in training is a symptom of excessive labor market



power, policies to encourage training can mitigate the distortion. But without reducing the degree of monopsony power, the bulk of the returns from training will likely be captured by employers. Indeed, some of the hunger for government training programs emanating from the private sector may be due to labor market power: Monopsonists are always labor-constrained, and demand more and more skilled labor *without wanting to raise the wage*.

Further, subsidizing employer-provided training and credentialing programs may exacerbate monopsony by making a worker stay with an employer in order to complete a credential (for example, an employer-sponsored college degree). Similar to employer-specific health care, workers who have taken up an employer-provided credentialing program may find job-shopping more difficult in the short-term.

Some educational programs may, however, help counter labor market power. We have in mind job-retraining programs, particularly those that give relatively general skills that facilitate occupational mobility. To see why, imagine that a single meat-processing plant dominates the local labor market for meat-processing workers. Because the workers have few outside options if they are fired, the employer can suppress wages. Now imagine that the government offers job retraining for anyone who has been fired from a job. The program improves the value of the workers' outside options by enabling them to earn a higher income once they undergo the program after they have been fired. This should increase their bargaining power vis-à-vis the employer, who in turn should refrain from suppressing wages as much as it otherwise would. Note that this pathway for countering labor market power works by reducing search frictions for workers rather than by reducing market concentration or directly regulating the terms of employment. A meta-analysis conducted by Card et al. in 2010 finds that job assistance programs, particularly those that encourage search, have positive impacts in the medium term.

Retraining programs, and other programs that help laid-off workers find new, well-paying jobs, could thus be a useful way to counter labor market power. But these programs also have many limitations. They are costly and will only be justified when the benefits for workers exceed those costs. It may also be difficult for the government to offer appropriate retraining programs. The government needs to be able to forecast the demand for the jobs for which training is needed, and the willingness of workers to take those jobs and undergo training for them. This type of forecast may be challenging.

Job Standardization

None of the proposals we have discussed address the problem of job differentiation—where labor market power arises because apparently similar jobs are actually quite different for



workers because of variation in amenities across workplaces. The simplest amenity to think about is commute time: Employers that are dispersed across residential locations have more market power than employers that all occupy a dense central business district. But jobs being far away from each other could be true in a much higher-dimensional space of job characteristics than simply distance. This problem seems intractable because the variation of amenities may reflect the different preferences of workers, and employers would normally be justified in catering to different preferences. But the result is that employers can underpay workers who cannot find valued amenities in other workplaces.

At least as a theoretical matter, however, workers (and the economy) could benefit if labor market differentiation were deterred at the margin.⁴ Unions have sometimes performed this function by standardizing jobs across firms within industries (Freeman and Medoff 1984). Nonwage characteristics of unionized jobs are very important to workers' preferences for unionization (Farber and Saks 1980). The law also plays a role in standardizing work. Minimum wage and maximum hours laws push employers to offer standard eight-hour workdays. This puts a limit on the duration of shifts, which in turn should reduce the variation across employers of this dimension of work. Government-mandated health and safety regulations should also reduce job differentiation by putting a floor on the health and safety conditions of any workplace. However, as far as we know, no study documents the job-differentiation effects of union practices and legal regulations on employer market power, likely because many of these regulations also come along with mandated changes in wages, limiting the value of the exercise.

In recent years, some employers have evaded the work restrictions imposed by employment regulations by classifying their workers as independent contractors. Independent contractors are not subject to minimum wage and maximum hours laws, nor to other standardizing employment laws relating to pensions, insurance, workplace safety, and related matters. Consider, for example, the rise of ride-sharing companies, which compete with taxi and limo companies. When taxi and limo companies organize as employers, their drivers are treated similarly, and this means that a driver will not see much difference between working for employer A and for employer B. In contrast, an independent contractor could be given insurance by company A and not by company B. This means that the independent contractor, while legally treated as independent of the ride-sharing companies, may actually be more constrained in their ability to move from one to another.

Thus, companies might be able to gain market power over workers if the independent contractor rules are not enforced with sufficient strictness, but at the same time, relaxation

⁴ This is analogous to the problem of “too many varieties” vs. “too few varieties,” both of which are possible in monopolistically competitive markets as in, for example, Dixit and Stiglitz 1977.



of the independent contractor rules might also give workers flexibility that they value. How these factors balance out is a complex empirical question. Nonetheless, recent efforts to restrict abuse of the independent contract rule, in California and elsewhere, seem appropriate.

Enterprise Unions and Sectoral Bargaining

Workers have historically turned to union organization to counter the labor market power of employers. In the US, unions have historically taken the form of enterprise unions, where a bargaining unit within a plant or establishment is the unit of collective bargaining. Unionization deprives the employer of its main source of market power: the ability to make a credible threat to fire a worker without losing significant production. Indeed, unionized firms can't set the wage lower than the union's strike reservation wage. If the employer does so, the union strikes, and the threat of the strike should deter wage suppression in the first place. However, unions are fragile organizations. They must maintain discipline among members, and employers can bust unions by countering those disciplinary efforts. In the 19th century, both sides resorted to violence.

Note that if unionized firms' only objective is to maximize the wage of the workers at that firm, the unionized firm will stay at the monopsonistic level of employment. These unions will simply raise the wage so that the same level of employment is maintained, but the firm is now on the labor demand curve instead of the labor supply curve. These monopoly unions will not alleviate the inefficiency caused by market power but will simply redistribute the surplus from firms to workers.

Governments can counter wage suppression by providing legal protections for and subsidies to unions. This strategy has been pursued in many countries. In the US, the law prohibits employers from engaging in various types of union-busting activities, including bribery of workers, intimidation, the creation of company unions, and much else. The law also regulates union elections, collective bargaining, and work stoppages. These regulations limit fraud and coercion, enhance transparency, and encourage peaceful negotiation and collective actions.

Unions operating in monopsonistic labor markets also generate spillovers to other nonunion workers, without any threat effects. This is because union density raises wages for unionized employers, and nonunion employers must raise their wages to compete for workers.

Collective bargaining by unions may allow contracting to overcome a lack of competition. In an extreme example, where the marginal product of labor is constant, transferring



monopoly power to workers can be efficient: Rather than wages being distorted downward by monopsony, resulting in too few workers, the union will set the wage equal to marginal product (having no reason to set it higher than that, as then the firm exits). In a more realistic case with diminishing marginal product of labor, the choice between laissez-faire monopsony and union monopoly will depend on the elasticity of labor demand versus labor supply. Crucially, however, whether or not efficiency is enhanced by firm-level unions depends on whether employment increases under the union (and evidence is mixed, suggesting employment increases for low-skill workers and decreases for high-skill workers, as in Frandsen 2013).

When the source of monopsony is job differentiation, either due to specific skills or idiosyncratic tastes, unions may have a further role in reducing monopsony power by facilitating contracting via “voice” (Freeman and Medoff 1986). Unions can tailor a contract to facilitate wage discrimination and then split the resulting surplus.

Despite the legal protections they have been given, unions have lost ground in the US over the last 50 years. There are many reasons, including technological change and globalization. Employers have developed more sophisticated union-busting strategies (Schmitt and Zipperer 2009); workers have become increasingly isolated from each other as a result of broad economic trends, and this isolation interferes with organization; and right-to-work laws at the state level have further weakened union discipline by allowing workers to free-ride on the collective bargaining efforts of the union leadership. General economic changes have also apparently created more highly differentiated jobs, which further interferes with organization, as well as supplying employers with an independent source of market power.

Enterprise bargaining is a distinctively Anglophone variant of collective bargaining. In many other OECD countries, union contracts cover considerably more than union members. In these countries, wage floors and wage guidelines are negotiated between large unions and employer organizations (with government mediation), and these are extended throughout the economy. There are proposals for wage boards to be instituted in the US as well (Andrias 2017). From the perspective of labor market power, these sectoral wages have the same characteristic as the minimum wage, in that they mandate a wage to be paid by all employers in a sector, taking wage-setting power out of the ambit of the firm and reducing the scope for the exercise of monopsony power.

Works Councils/Shareholder Activism/Codetermination

Monopsony implies that a component of firm profit is rents from underpriced labor. This profit then accrues to shareholders. But what if at least some of these shareholders are



workers themselves?

A prominent example of employee-ownership is employee-stock ownership plans (ESOPs), which are the subject of an extensive economics literature, much of it using the NBER Shared Capitalism database. Roughly 20 percent of private sector American workers own some stock of their company. Kruse (2016) surveys this literature and finds that employee ownership is linked to better company performance. Part of the mechanism (besides higher compensation and effort and less conflict) is lower turnover and absenteeism, which suggests that employee-owned firms are moving up the labor-supply curve facing the firm. However, cleanly identified causal effects of employee ownership are still missing from the literature.

Union pension funds have been used successfully to alter corporate governance practices, particularly around labor relations. By organizing shareholders around worker interests and mobilizing proxy votes, union pension funds are able to influence a variety of firm decisions.

But most pension funds, wanting diversification of risk, would likely invest only a small share of their savings in the firms that employ their members. However, workers' holdings may be small relative to holdings of other investors, and firm managers might still be required, by the fiduciary duty to maximize profits, to exploit monopsony power even against some of their owners.

By asking its managers to raise wages in monopsony, the pension fund would a) lose some value in profits, but b) increase contributions and members. Depending on the degree of monopsony, exposure to the firm, and the extent of contributions of workers, the value to the pension fund of b) could offset the costs from a).

One interesting case is public sector union pension funds (for example, institutions like CALPERS). If we take literally the idea that these funds should maximize the returns to their members, then it may sometimes be appropriate for these funds to demand that monopsonistic firms raise wages. Higher wages benefit the workers more than their lost capital gains. Tax revenues should also increase because the tax rate on wages is higher than the tax rate on capital gains—although the problem is complicated because the public goods funded by these tax gains will benefit people other than members, and the taxes paid on capital gains will mostly be paid by nonmembers as well. But to the extent that the tax bill increases, and to the extent that public sector union members get higher wages from additional tax revenue, public sector pension funds may have a pecuniary interest in requiring their holdings to raise wages.

Another way to increase workers' take-home pay and decrease monopsony power is via worker codetermination, which would not require ownership of firm shares. Instead



workers would get votes on firm policies, including wage-setting policies. To the extent that workers' votes count, this will influence firm wage-setting and mitigate the exercise of monopsony power.

Macroeconomic Considerations

A considerable amount of theoretical and quantitative research has gone into the cyclical implications of job search models with bargaining, but much less has gone into variants of search models that feature monopsonistic wage-setting.

The job search model implies that the wage-setting power of employers will fall during economic downturns because workers have more trouble finding new jobs. Depew and Sorensen (2013) and Webber (2015) both find evidence for this hypothesis. Tight labor markets are also more competitive. Thus, countercyclical macroeconomic policy that successfully minimizes job loss during downturns will have broadly positive effects on labor market efficiency and wage levels.

While more research is necessary, it is intriguing to consider monopsony as the proximate mechanism behind the famous “wage curve” widely used in macroeconomics, where wages and unemployment exhibit a negative relationship. Models like the Mortensen-Pissarides model or the Shapiro-Stiglitz model deliver wage curves because of how unemployment lowers the outside option of workers. A monopsonistic variant would suggest that a low residual elasticity is the mechanism that transmits high unemployment into low wages, not outside options.

WHO WOULD ENFORCE THESE POLICIES

All of these proposals raise a cross-cutting question of agency costs. Many employment regulations are enforced by federal agencies, including the Occupational Safety and Health Administration (OSHA) and the Equal Opportunity Employment Commission (EEOC). Others, like minimum wage laws, are enforced by state and local government as well as by the federal government. In all of these cases, the government serves as an agent of the workers. Union leadership, too, serves as an agent for the members of the union. And in our pension example, one might think of the pension as serving as an agent for workers, though indirectly. Many employment laws are enforced by private litigation, and because of the high



cost of litigation, these efforts usually take the form of class actions, where private lawyers serve as agents for classes of workers. Those class actions can be thought of as contingent unions that spring into existence to enforce the law. All of these approaches raise questions about whether the agent actually has the interest of the workers at heart.

Worries about agency costs have led in many cases to a round of meta-regulation. The law requires unions to act in the interest of workers, and the same is true for class action lawyers. But we might also wonder whether the government agents charged with enforcing the law will act in the interest of workers who often have little political power. The old union movement was based in part on suspicion about government responsiveness to the interests of workers, and such concerns continue to be aired today.

Given both limited enforcement resources as well as forbearance toward infractions that occur in workplaces on the employer's private property, a significant degree of labor regulation must rely on workers being willing to tell authorities about labor and employment law infractions. Monopsony also raises concerns about whistleblower-type mechanisms for enforcement. If inframarginal workers are quite attached to their jobs, they might not be willing to report (e.g., calling OSHA in response to workplace hazards).



Conclusion

Economic models encourage one to find the common features of apparently different things, but the differences between goods and human beings are significant. Humans often like to disperse themselves across large areas, resulting in thin populations that are vulnerable to monopsony. Goods don't care where they are located and are happy to reside in warehouses until shipped across a national market. Humans spend a lot of time at work and develop complex preferences for workplace amenities, colleagues, location, and much else. Goods are remarkably standardized and (within classes) similar to each other, easy to compare and evaluate. Humans are unable to commit themselves to doing predefined tasks for a long period of time. Goods, when they aren't defective, perform and depreciate in a predictable fashion. If perhaps for most goods in national markets, the ideal of perfect competition is a reasonable approximation, the non-ideal of monopsonistic competition seems to be the norm for labor markets.

For this reason, the relatively hands-off approach of the law to consumer products is not appropriate for labor markets. In the hands-off approach, some modest disclosure and safety rules supplement an antitrust regime that treats abusive market practices as exceptional. For labor markets, even a far more robust antitrust presence would be insufficient in squeezing out the inefficiencies of monopsony.

We have surveyed a range of other laws, real and imaginary, that may be helpful at the margin. Some of the laws we have looked at reduce the wage-setting power of firms—by, for example, allowing poaching and promoting unionization. Others, like the minimum wage law, act as more direct constraints on the choices that employers can make. And a third group affects the incentives of employers by giving workers voting power or a share of the capital. But the problem of labor market monopsony is stubborn and will require both antitrust and some combination of these additional policies.



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