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Worker Collective Action in the 21st Century Labor Market

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Private sector union density in the United States has fallen below 7%, but new historical evidence shows high union density played an important role in compressing the US income distribution at mid-century and lowering intergenerational income persistence. Other recent evidence on pervasive labor market power suggests that unions may be able raise wages without severe dis-employment effects, and may alleviate inefficient contracting problems. Despite substantial survey evidence indicating latent demand for unions, employers have successfully fought unionization efforts in rising service sectors, and a combination of legal restrictions and economic transformations have impaired the ability of US unions to solve collective action problems at the appropriate scale – an issue that economics may be able to help ameliorate.

What do unions do? Recent economic evidence

Private sector union density in the United States is a terribly low 7%, and even in its last, institutionally idiosyncratic redoubt – among public sector workers – the labor movement has recently been greatly weakened by the *Janus*[1] decision. Despite these blows, organizing collective action via the labor market remains a political economy lever that can't be ignored. Unions both address pervasive labor market failures and increase the political voice of the bottom half of the income distribution. Historically, unions were an institution that accomplished three objectives: economic redistribution via higher wages for unskilled workers, better workplace amenities and allocations of control rights inside the firm, and political representation.

Farber et al. (2018) use Gallup data to examine patterns of unionization and inequality in the 20th century. They find that union density over the 20th century correlated with negative selection into unions even as the union income premium and the relatively more compressed within-union income distribution stayed relatively constant. Expanding union density lowers inequality by compressing wages among union members, as well as by increasing wages of lower-skilled workers. This mechanism explains correlations between union density and income inequality in both the time-series and state-year fixed effects specifications.[2] Figure 1 presents evidence that points to union membership virtually eliminating the correlation between father's income and own income, suggesting unions do a lot for intergenerational mobility as well.

But alongside this more descriptive evidence, more causal evidence paints a very different picture, one

that seems difficult to reconcile with the stable union premium. Beginning with Dinardo and Lee (2004), and continuing with Lee and Mas (2012) and Frandsen (2014), economists have looked at the differences between close wins and close losses in NLRB elections, and found surprising effects: little effect on firm survival and profits, but also little effect on wages. What effects there are seem to be partly about composition (high-skilled workers, including managers, leave and low-skilled workers come to union jobs).

But union elections only impose the "duty to bargain in good faith"; only 60% of union recognition wins turn into first contracts after 2 years. In reality the evidence from these NLRB studies highlights the other little-known fact about labor law: at least since the Supreme Court's 1930s decisions, and certainly since the 1947 Taft-Hartley bill, the formal NLRB architecture has been more about weakening worker collective action than strengthening it. The number of workers added to unions via NLRB elections is tiny (Figure 2), and most unionized workers are joining already-unionized firms, not unionizing the firms they are already in. Frandsen (2017) shows that there is bunching at close elections, and the asymmetry in the bunching varies depending on whether Republicans or Democrats are in control of the NLRB. When Republicans are in charge, there are a suspiciously high number of close union losses, suggesting employers can fight harder without being sanctioned. And fight they do, as the firing rate of pro-union workers shows in Figure 4. Among labor lawyers, playing by NLRB rules is widely acknowledged to be a losing strategy. The bottom line: The NLRB certification process does not regularly result in an increase in union power, and this is particularly true in close elections.

So if union certification by the federal government doesn't increase union power, what does?

Figure 1 Survey evidence on rank-rank coefficient (IGE) between father and son's household income and its interaction with son's union status. Data sources are American National Election Survey, the 1973 Occupational Changes in a Generation Survey, and the General Social Survey. From Jacome, Kuziemko, and Naidu (2018)

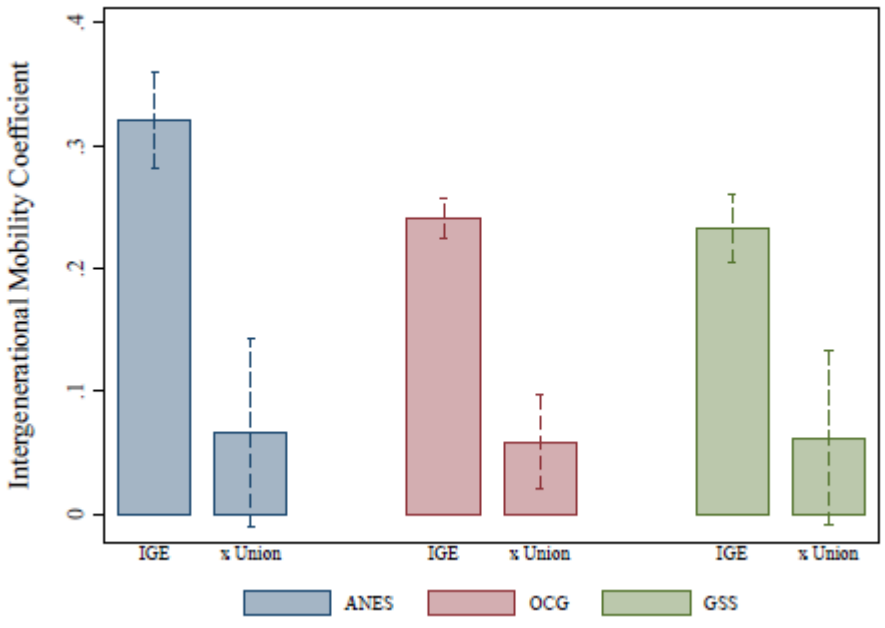


Figure 2 Number of employees in NLRB elections

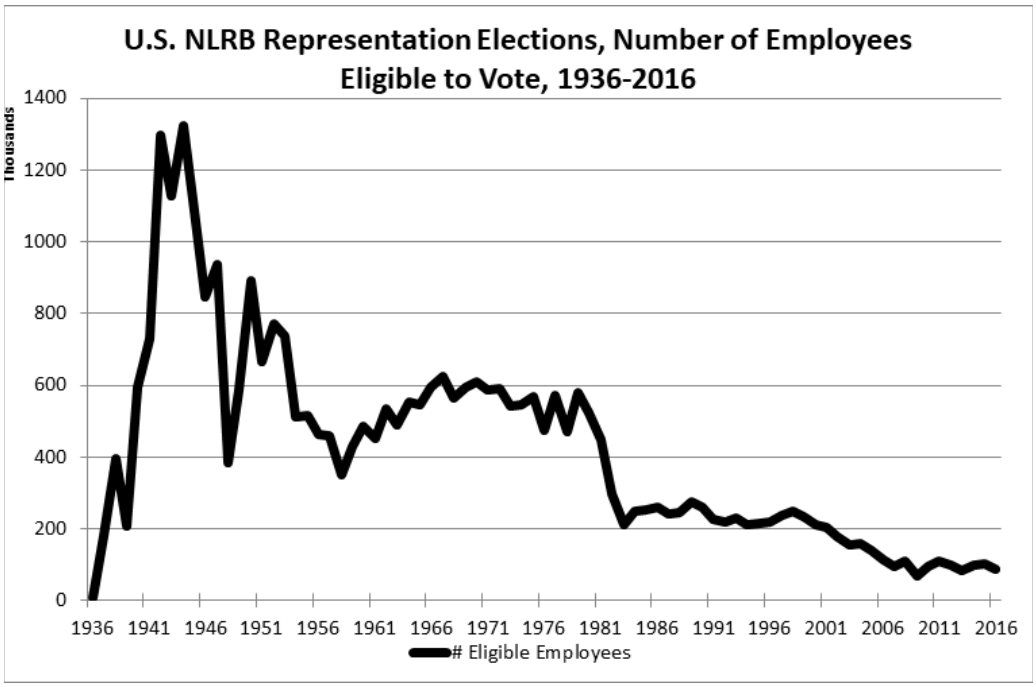


Figure 3 Asymmetrically close losses in NLRB elections when Republicans control the NLRB. From Frandsen 2017

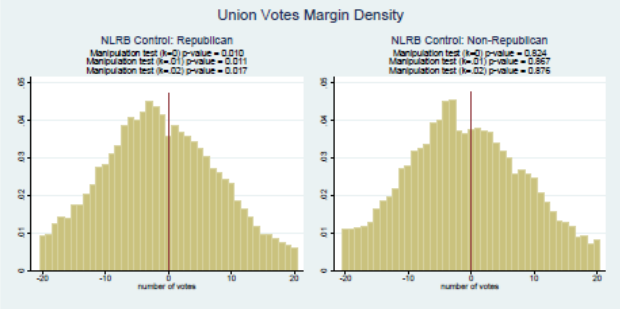
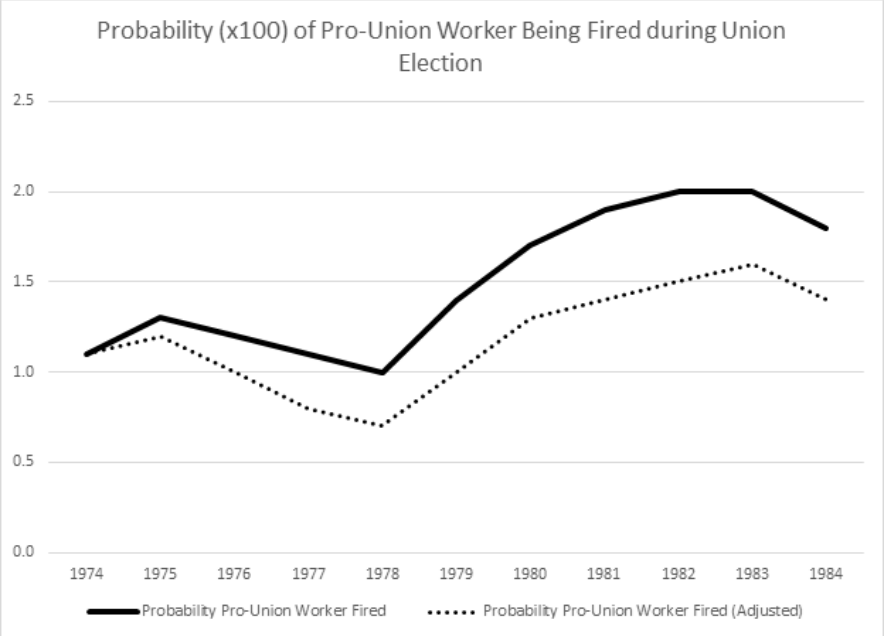


Figure 12: Density of the union margin of victory in terms of number of votes for elections with at least 20 voters. The left panel is for elections held during periods when Republicans controlled the NLRB. The right panel is for elections held during periods when Non-Republicans (i.e., Democrats and independents) controlled the NLRB. Data are from the NLRB. Histogram reproduced from Frandsen (2015).

Figure 4 Firing rate of pro-union workers. From Schmitt and Zipperer (2007)



Market power makes union power efficient

> *The inequality of bargaining power between employees who do not possess full freedom of association or actual liberty of contract and employers who are organized in the corporate or other forms of ownership association substantially burdens and affects the flow of commerce.*
> —National Labor Relations Act (1935)

Before tackling the question of union power, it is worth considering what "power" can mean in economics more broadly. "Power is important" is taken as axiomatic by many non-economists, but economists have a reflexive rebuttal: under conditions of perfect competition and information, there is no scope for power. Indeed, an old Samuelson-ism argued that it does not matter if labor hires capital or capital hires labor, and many economists think the term "power" is not rigorous nor a properly economic idea.

But labor movements and the economists closest to them have always had compelling counter-narratives about why the boss had the whip hand in the labor transaction.[3] Institutionalist labor economists such as Sumner Slichter, John Dunlop, and Lloyd Reynolds all believed that frictions were pervasive in the labor market. One form of friction is imperfect mobility, which means that, from the perspective of workers, jobs are imperfect substitutes. This lack of mobility could be either due to few employers in a given skill-location segment, costly job search, or non-wage differentiation. Employers set wages to take advantage of this, losing a few workers in order to depress wages for the ones that remain.

What unions do makes a lot of sense in models with monopsony. Monopsony implies that unions can a) raise the wage within limits without necessarily costing jobs[4] and b) replace the individual labor-supply curve facing the firm with a much more efficient bilateral bargain. More broadly, monopsony means that the labor market interventions become the site of economic redistribution, in addition to (or instead of) the tax code, and so politically organized workers become an important constituency for redistribution via the labor market.

Beyond power over the wage, the default rule in the employment relationship is that employers have the right to command workers on the shop floor. This results in plenty of inefficiently allocated control rights, as there are many workplace decisions where workers have superior information about their cost of doing things. A union contract can reallocate these decision rights toward the efficient division, and evidence in Ash, Macleod, and Naidu (2018) suggests that this reduces

labor conflict (measured by strikes). Union contracts are efficiency-enhancing workplace constitutions.

Other canonical models of the labor market have a variety of notions of power explicitly built into them. Diamond-Mortensen-Pissarides search models use Nash bargaining between individual employers and workers, Stole-Zweibel has bargaining when workers can exit individually, Shapiro-Stiglitz has efficiency wages, where employed workers get rents so that the threat of unemployment secures effort provision. Sociologists and political scientists often discuss power; this idea has been integrated into a variety of economic models of the labor market, and recent evidence shows that outside options are generically important for wage determination (Caldwell and Harmon 2019, Caldwell and Danieli 2019). Monopsony is simply one particular variant of economic power, and one that empirically can explain many facts in the low-wage segment of the labor market.

Why have unions declined? Economic and political forces

There are of course the usual suspects; globalization, technological change, increased skills of workers/flexibility of firms. Union commitments push firms out of business (although even more onerous bondholder commitments are sacrosanct). But there are some anomalies: Canadian union density remains double the US level, despite superficially similar institutions and shocks[5]. Ghent system countries retain higher union density, due to unemployment benefits being administered by big cross-industry unions. The decline in unionization is not confined to tradable manufacturing; construction and transportation have seen similar declines.

Further, it is not clear exactly why services are so difficult to organize. They are not subject to international competition, and they are readily accessible to organizers (unlike isolated factories). One argument is that they have low barriers to entry, and so there are no rents to capture; but then these firms would also not be terribly profitable. Another possible story is that suppliers of other inputs or factors (e.g., landowners or financiers or upstream producers) extract most of the profit, and so low-skilled work is at the low-margin end of the value chain.

Another oft-heard agreement is that there was something unique about the kinds of industries that unions were strong in, with high fixed capital and strong complementarities of firm-specific skills across workers making strikes quite easy to win. I return to this below.

While these explanations can account for the almost universal decline in unions across the OECD, a leading candidate for the peculiarly rapid deunionization in the United States is employer and government opposition to unions, shown in Figure 3 above. Some of this can be overcome with policy alone. Survey evidence reveals that workers want to join unions and there is significant latent demand for unionization (particularly for the selective benefits such as health care that unions provide). But organizational capacity to take advantage of worker demand at the scale necessary to extract rents still needs to be built.

What can be done? And can economics help?

At the end of the day, what unions do is organize collective action on the basis of work. From strikes to pickets to phone banks to grievances, unions are powerful because they leverage the common interests that workers in a firm, occupation, or industry have into bargaining power and political power. It may very well be that firm-specific unions are artifacts of a particular technological period, or only feasible when big firms are also employers of low-wage labor, or in economies relatively insulated from trade with large, developing countries. But to the extent that unions are the outcome of a conflict between employers (or employers' employers) and collectively organized workers, measures that raise the capacity of unions to solve their collective action problems will, in theory, raise union efficacy, and likely density and coverage.[6]

Before going too far down this path, it is worth being realistic: Unions will not return to their midcentury density without truly radical policy and organizational changes. In the 1930s and 1940s the mobilizations of the CIO followed by the National War Labor Board essentially made union membership the "default option" in the key sectors of American industry. Any comparable change today would have to move 70 million workers into unions within a decade and a half. Despite this formidable outlook, it is still worth

considering what types of organizations can leverage work in the 21st century as a locus of shared identity and collective action.

Further, two economic trends might push in the direction of easing worker collective action. The first of these is the rise of platforms and large employers for low-skilled work, which are natural monopsonies but also make it easier to coordinate activities of workers in a sector. As the 19th century factory brought craftsmen together under one roof to reap productivity gains, it also allowed once-dispersed suppliers of labor to organize themselves collectively.

An example of this is the portable benefits platform for low-wage high-turnover workers being piloted by some labor organizations. By organizing workers to use a platform for a concrete service with increasing returns, it also gives the capacity for collective action, and regulation can demand that platforms must contract with *some* portable benefits platform. Further, the organization can use the platform to directly compete with the other platforms, forming a combination "strike-and-worker-cooperative" that can amplify collective bargaining power. Worker ownership of a potential competitor platform makes the threat of withdrawing labor from other platforms much more credible and costly.

A second force is the rise of personalized service work, where workers and customers meet in spaces not policed by managers (e.g., home health care workers, various retail workers, delivery workers, etc.). The traditional organizing "salt" strategy of having to get a few dedicated organizers employed as workers in highly monitored, private spaces might give way to a more "swarm" based strategy, as workers are organized via their many interactions with pro-union customers. On the flip side, however, customers may be more likely to blame the workers and the union for poor service, making it harder to build customer-worker alliances (Naidu and Reich 2018).

There are of course a variety of policy options that could encourage unionization on the margin, from exempting unionized firms from other labor regulation, facilitating union recognition (e.g., card check and Taft-Hartley repeal) and minority unionism, and institutionalizing large-scale worker organizations as distributors of benefits such as unemployment insurance (as in the Ghent system) or health care (some US unions run extremely efficient nonprofit health care insurance, and may provide a scaffolding for broader health coverage).

But what I find most interesting is thinking about unions as organizations that can be made to work more effectively by deploying economics. It is surely a much smaller lift to use the tools of economics to restore collective power to workers in the advanced countries than to alleviate problems of international development! Indeed, unions are increasingly sophisticated, data-intensive organizations. My first glimpse of the potential of union data for collective action came after the 2012 election, where I noticed the Obama campaign's sophisticated use of data and field experiments, and knew that the AFL-CIO's electoral arm had been pivotal in building this operation, but that it had not been deployed for labor organizing. Since then I have worked with a number of labor organizations of varying sophistication and size, and the key thread unifying the problems was facilitating a variety of types of collective action, from meeting attendance to political contributions. Unions understand that their success depends on getting their members (or potential members) to operate in concert.

Lowering the costs of collective action

The canonical Olsonian analysis of unions argues that unions can't survive without compulsion, because the public good of the collective bargaining agreement is vulnerable to the free-rider problem. However, economists have learned a lot about how humans cooperate in the wild, which suggests that the free-rider problem (dues or political contributions, picketing and strike compliance, or simple participation in union activities) is not insurmountable.

The first place to look is selective benefits. What do workers get by being in the union that they do not get otherwise? In right-to-work states, where workers can opt out of union dues, the answer is often – perhaps surprisingly – training programs. In focus groups I observed with a large NYC local, training programs were the union benefit workers were most enthusiastic about. This is backed up by a recent experiment by Hertel-Fernandez (2018), who randomizes messages sent to the members of an Iowa teachers' union: Members who were reminded of the training programs

were the only treatment arm who differentially were likely to vote against a decertification.

Another idea is to use what we know from behavioral economics to make pro-sociality salient for (potential) union members. A large literature has documented pro-social preferences in a variety of public goods environments, as well as mediators that make pro-sociality more or less expressed. One important insight from behavioral economics is that a sizeable fraction of agents exhibit strong reciprocity: They punish free-riders even at a cost to themselves. The get-out-the-vote literature (see Gerber and Green 2017 for a survey) has leveraged numerous insights from social psychology and behavioral economics to move voter turnout, and these tools might be even more effective in the workplace, where the competition among information sources is less severe.[7]

Recent research has also shown the importance of networks and information diffusion in facilitating collective action, including strategic complements (attending membership meetings) or strategic substitutes (e.g., pickets and political contributions). Gonzalez (2018) shows that protest attendance increases among high school students when their peer groups of friends from junior high are more likely to go, with the critical threshold being around 40%, suggesting strategic complementarities. In contrast, Cantoni et al. (2018) have experimental evidence showing that Hong Kong student protest attendance looks much more like strategic substitutes, where students protest less the more they think other students are going to attend. This result was replicated among German party activists by Hensel et al. (2018), with activists less likely to knock on doors when told that a greater-than-expected number of activists were going to knock on doors. A way to reconcile these findings is to take the network model of Ballester, Calvo-Armengol, and Zenou (BCZ 2006) and note that collective action is likely complementary in network ties (e.g., actions are strategic complements in friendship networks) but substitutes globally (i.e., in the whole population). Encouraging collective action would take the form of solving coordination games within cliques of associates and friends, but providing incentives to overcome the free rider problem in the whole population. The BCZ paper tells us how to find the worker(s) that have the largest impact on collective action (those with highest intercentrality in the network), and this corresponds to the informal wisdom among organizers: Find the most prestigious worker on a shop floor and convince them first. Mapping intrafirm networks across workers may allow this insight to be used as a predictive heuristic for prioritizing organizer efforts.

Finally, and most economist-friendly, is the possibility of applying ideas from mechanism design to the solution of labor's various collective action problems. Depending on the relative strength of strategic complements versus substitutes, assurance contracts or relative contribution incentives could be mechanisms that help solve collective action problems. Assurance contracts (à la Kickstarter) solve coordination problems, and only require payment should greater than some threshold X of agents commit to payment.[8] Relative contribution incentives (Falkinger et al. 2002) reward agents based on how much more they contribute than the average within their income bracket. Butarin, Hitzig, and Weyl (2018) propose a quadratic contribution scheme that implements the efficient level of public goods in an incentive-compatible way. What auction theory did for online pricing, public goods mechanisms could do for the future of collective action. Unions or other organizations could take advantage of existing payments infrastructure (e.g., the union benefits debit card or points incentives) to implement these incentives. Union leaders with incentives to mobilize existing members around contract negotiation time could be partnered with to experiment with some of these mechanisms.

Increasing the returns to collective action

The other side of the equation is making the collective action that unions can generate more effective. Ultimately, this will require the restoration of an effective threat of raising employers' costs to intolerable levels and forcing bargaining over profits. Workers in a few key sectors still have this power, as in the public, health, and transportation sectors. But in an economy where the immediate employer's profit is passed up the value chain to other input suppliers like land, intellectual property, or capital, it means that organizations of workers might not have as their primary target the direct employer, but rather entities further upstream (as in the Justice for Janitors campaign, which went after the building that the janitors' employers serviced rather than the employers themselves). This would require

a large change in the legal architecture of collective bargaining, moving the level of bargaining away from employer-employee and encapsulating the whole value chain, including the financial entities at the top of it.

What collective action can accomplish also varies with economic fundamentals. The traditional view is that union leverage came via the strike; depriving the employer of labor was the costliest thing the organization of workers could do. Almost since the beginning of the modern labor movement, the strike has been hemmed in by the courts (Pope 2004). The 1937 *Fansteel* decision eliminated the sit-down strike as a tactic, asserting employer property rights over workers' right to strike. Since the 1938 *Mackaye* Supreme Court decision, employers can legally hire permanent replacement workers during a strike. These judicial decisions have been an effective check on the right to strike effectively, albeit with a lag (the use of permanent replacements accelerated greatly in the 1980s). Modern unions have adapted to this weakening of the strike as well as the other changes in the economy, and use both consumer pressure as well as capital market pressure (Webber 2018) in order to force employers to concede in contracts. A 21st century source of leverage might be control over data generated in the workplace; unions might find a role as stewards of data (e.g., value-added scores) generated by their members, and withhold access as a tool to secure higher pay. If automation is on the horizon, collective bargaining agreements can ensure that the productivity gains are shared with incumbent workers, blunting incentives for excess automation.

At the end of the day, reasonable people, facing the choice of whether to join a new union, will look down the decision tree and see if it passes a cost-benefit test. If the union cannot effectively pressure a company, they cannot win a good first contract; if no first contract, no wage premium; if no wage premium, no reason to risk signing an NLRB petition or voting against your employer. The ultimate determinant of union power is the capacity to use collective action to threaten firm profits; even density is subordinate to this basic capacity.

And here policy can potentially do a lot. One legal change is banning (i.e., making criminal) hiring replacement workers during strikes (which was rare prior to the 1980s); plenty of evidence finds that the ability to hire replacement workers during strikes is one of the largest contributors to strikes losing. Another way around this is to eliminate exclusive representation and allow minority unionism, where a subset of workers can get legal recognition and strike protection without needing the whole firm. One implication of monopsony is that a good share of profits comes from the rents extracted from inframarginal workers; protected minority strikes would cut those profits and be even costlier than under competitive labor markets. A third way is to allow secondary strikes and boycotts; the complexity of the value chain makes solidarity across industries more valuable than before.

We might be surprised by a wave of militancy that sweeps American private sector workers back into union-like organizations. More likely, however, is that mass unionization can only come back alongside other large, difficult-to-anticipate political/economic transformations. In the interim, a need and demand for organizations that leverage the shared experiences of work and curb employer power remains, and policymakers and social scientists can help worker organizations meet that demand.

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Endnotes

1 Janus v. AFSCME is the 2018 Supreme Court case that eliminated mandatory union dues in public sector unions.

2 Jaumotte and Osorio-Buitron (2016) provide cross-country panel evidence from the OECD that union density is negatively correlated with inequality, despite widely varying industrial relations systems across the various countries. They instrument union density with the presence of the Ghent system of administering unemployment benefits via unions and lagged unemployment.

3 See Gourevitch (2014) for an exploration of the 19th century labor movement's criticisms of the labor market.

4 Farber et al. (2018) find a remarkably stable household union premium of 15%–20%, which is consistent with constant returns and non-unionized firms facing a residual labor supply elasticity of roughly 4, which is the upper bound estimated in the literature (Sokoleva and Sorensen 2018). Unlike the labor demand elasticity, there is no reason to think the supply elasticity facing the firm depends on union density or composition.

5 See Eidlin (2018) for an exploration of the differences between Canadian and US labor movements and political institutions.

6 In the US union membership closely tracks coverage, but this is different in other OECD countries (e.g., France) where density is low but coverage is high. As right-to-work laws expand in the US, the gap between coverage and membership may increase.

7

8 Dominant assurance contracts do even better, and make a transfer to agents in the event that fewer than X sign up to contribute, and can guarantee implementation of the efficient outcome in Nash strategies.

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