

RESEARCH REPORT

Worker Power and Economic Mobility

A Landscape Report

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WorkRise



WorkRise is a research-to-action network on jobs, workers, and mobility based at the Urban Institute. WorkRise connects workers, employers, researchers, and advocates to build evidence to inform and shape policies and practices that bring economic security and upward mobility for all US workers—opening new opportunities for workers to thrive at work and in life.

About This Series

WorkRise is a research-to-action network on jobs, workers, and mobility based at the Urban Institute. This publication is one in a series of reports WorkRise has commissioned from the nation's preeminent social scientists and economic mobility researchers. These reports map out the current frontiers of knowledge across six channels that influence workers' economic mobility and advancement in the US labor market: macroeconomic and labor market contexts and policies; employer practices; worker power, voice, and representation; job search and matching; skills, training, and human capital; and the social determinants of work.

The purpose of these reports is twofold: to identify areas where existing empirical evidence can inform current policy and practice and to characterize knowledge gaps in order to inform a set of priorities for advancing research, building the evidence base, and motivating action in policy and practice. As part of the research process, WorkRise convened a cross-sector group of advocates, practitioners, and experts to assess the relevance and value of knowledge-building priorities proposed by study authors.

Each report examines root causes and potential solutions for reversing the decades-long decline in mobility and enduring racial and gender disparities in the labor market. These reports take a broad view of the market, institutional, political, and social forces that shape worker outcomes. By delineating questions with the most important implications for worker well-being, these reports will inform WorkRise's research agenda and broader debates on creating new pathways for mobility in the labor market.

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Introduction

The ability for a low-wage worker in the US to move up the economic ladder has declined in recent decades as the percentage of low-wage jobs has grown (Howell and Kalleberg 2019; Schultz 2019). This immobility is passed onto the next generation: the chances that a US worker does better economically than her parents remain low compared with our peer nations, especially among workers born into the bottom of the socioeconomic hierarchy (Corak 2013). Growing evidence of arrested mobility for low-wage workers and their children challenge a fundamental tenet of the American dream: that hard work and persistence translate to economic success, both within and between generations. The US labor market is no longer working for millions of Americans eager to improve their standing and ensure their children succeed.

Stalled mobility for low-wage workers is intimately tied to weakening worker power. Low-wage workers can advance economically in two primary ways: either they switch to higher-paying jobs or their current jobs pay better. Both options require an increase in worker power. But whether measured by wage levels for workers without a college degree, union membership rates, or nonmanagerial workers' total share of income, indicators of worker power reveal a steep decline from the late 1970s onward. This development has sparked a growing scholarly focus on how power has decreased for nonelite workers while growing for those at the top of the economy. Understanding the underpinnings of changing worker power is crucial to designing effective programs, policies, and practices that lawmakers, advocates, and employers can implement to rebalance the economic playing field. Success in empowering workers in the decades to come is crucial to facilitating mobility and ensuring the American dream remains relevant for future generations.

We define worker power as workers' ability to obtain better wages and working conditions. Working conditions include many aspects of the job, including the ability of workers to influence firms' decisions.¹ This flexible definition allows us to differentiate various dimensions of worker power. A firm can grant workers high pay but offer them no say in their working conditions, leading to high turnover. Programs, both proposed and existing, and other institutions influencing worker power likewise vary in the dimensions of power they provide workers. For example, minimum wage policies boost worker pay at the bottom, but they do not address other aspects of the job. Other worker institutions,

such as labor unions, can raise pay for workers and improve safety, as recent research has found among unionized nursing homes during the COVID-19 pandemic (Dean, Venkataramani, and Kimmel 2020).

In this overview, we survey the state of knowledge on emerging worker power scholarship, highlighting what we know, what needs to be addressed, and what avenues appear most promising to augment worker power for those who currently lack it, especially for those at the bottom of the economic ladder. Throughout, we connect research on worker power to mobility opportunities within and between generations. The ongoing pandemic has underscored that certain groups of workers bear the brunt of maintaining vital services and providing essential goods, yet they have limited decisionmaking authority over their working conditions and are often underpaid. Certain economic signs suggest an inflection point: tight labor markets have redounded to workers' benefit in the form of high quit and hire rates and rising compensation, although increasing inflation has eroded the real value of many workers' paychecks. Other signs indicate that the public health crisis has done little to arrest long-term trends in the economy. Surging corporate profits (Smialek 2022) in many industries have disproportionately benefited shareholders to the detriment of workers without significant stock holdings. Choices made now will influence the path of worker power and economic mobility long into the future.

In the next section we briefly outline a conceptual distinction between power gained through exit and power gained through voice, and we connect these aspects of power to worker mobility in the contemporary economy. The third section surveys the emerging research on market forces and policies that constrain workers' ability to exit their existing jobs in search of better alternatives. Exit options connect to economic mobility by increasing workers' ability to find better jobs. We detail what is known, what issues remain understudied, and what are the most promising avenues for empowering workers through exit options. Throughout, we note important trade-offs and unintended consequences of actual and potential policy choices, especially as they pertain to issues of equity for historically disadvantaged populations.

In the fourth section, we examine the major organizations and policies that influence worker voice within firms. Real voice grants workers a say in the conditions of their jobs and thus can facilitate long-term loyalty among workers satisfied that their voice counts at work. We conceive of voice as representation with actual power—that is, not only the

ability for workers to be heard, but for their voices to count in decisions over key aspects of their jobs.

Worker voice within firms can increase mobility either by improving existing jobs or by providing workers with opportunities to rise through their firms' ranks. Historically, labor unions have proved to be effective for achieving both aims by boosting the pay and working conditions of low-wage jobs and helping to cement long-term relationships between employers and employees that include internal promotion possibilities.²

Given the historical and cross-national importance of organized labor in raising worker power and increasing mobility, in the section on worker voice we survey the state of knowledge of organized labor in the US. We consider what is known about union decline and what the erosion of union power has meant economically and politically, including for racial and ethnic minorities. Researchers, advocates, and others have proposed a variety of solutions to organized labor's current woes, which our report documents, highlighting those solutions that seem particularly beneficial for worker power. We then broaden the scope to analyze the international picture, paying particular attention to those programs and institutions that bolster worker power and facilitate upward mobility that could be implemented in the US. We end this section with a focus on nonunion sources of worker power through voice and discuss their potential to foster mobility for low-wage workers.

A key aim of this overview is to reveal aspects of worker power and mobility for which further evidence is needed to understand the phenomenon, or further evidence is needed to understand possible solutions to the problem, or both. An example of the latter is pay secrecy policies—workplace rules, formal or informal, that ban employees from sharing salaries with one another. Emerging evidence suggests that such pay secrecy policies are widespread (Sun, Rosenfeld, and Denice 2021), but their impact on worker power and exit options remains largely unknown. An example of the former is the overwhelming evidence documenting ongoing racial discrimination in hiring, especially in low-wage labor markets and especially among men. Given racial skew in criminal conviction rates, a key antidiscrimination policy solution has been to ban the use of criminal records in hiring. Yet such bans appear to have backfired, causing more discrimination rather than less. A remedy for eradicating racial discrimination in hiring that achieves its desired aim remains elusive.

We emphasize equity issues throughout the report. The existing and emerging research we draw on disproportionately focuses on Black-white inequalities, which we highlight. Recent decades of dramatic demographic change have reconfigured the racial and ethnic landscape, and today Hispanic people constitute the largest minority population, and Asian-Americans are the fastest-growing ethnic group (Budiman and Ruiz 2021). We try to feature the relevant worker power research that focuses on these populations. There are important ways that worker power affects other racial and ethnic groups, workers of different genders, workers with different sexual orientations, and workers who have intersectional identities across these dimensions. We hope our project is part of an emerging, large movement to explore the effects of worker power and mobility on all groups.³

Our distinction between exit and voice options for worker power and mobility is meant to clarify important issues in the literature and to provide a conceptual map for readers to follow ongoing debates and research on this broad and growing topic. Of course, in the messy world of actual labor markets, factors affecting exit options interact with those affecting worker power within firms. For example, research suggests that tight labor markets can encourage union organizing (Ferguson 2008; Western 1993), as worker fear about reprisals for supporting unionization lessens when outside job options are plentiful, and employer opposition to unions falls when demand for goods and services is high. We end the report by exploring some of these interconnections and urge researchers to examine other linkages in future work.

A Framework to Understand Worker Power

In economics, search theory teaches us that employees' wages and working conditions are affected not only by their relative bargaining power within the firm (voice) but also by the outside options (exit) of workers and firms (Hirschman 1970). The surplus from the employment relationship is what the relationship is worth to the worker and firm above and beyond their next-best options. The worker's next-best option could be to take another job, become unemployed and look for another job, or drop out of the labor force. For firms, the next-best option could be to hire another worker, let the position sit vacant until they can find another worker, or eliminate the position.

The surplus of the employment relationship is then bargained over by the worker and the firm. Workers' bargaining power within the firm depends on factors such as the presence or absence of unions and other relevant institutions. Institutions such as unions or worker board representation (codetermination) may augment worker power by increasing workers' bargaining power, such as their ability to secure a higher share of the surplus in the form of wages or a greater say in working conditions.⁴ We can also think of these institutions as embodiments of workers' voice: they provide workers a say in the firm's decisionmaking process, a say that extends beyond just mere representation in that it carries with it the power to actually implement desired changes that can facilitate upward mobility within firms.

Outside options represent workers' ability to obtain higher wages and better working conditions because their outside options are better or the firm's outside options are worse. Market conditions and policies affect firms' and workers' outside options, which in turn affect the surplus from the employment relationship, and therefore wages. We can think of these factors as determining worker power through exit: What would happen if the worker exited the current employment relationship? Three key factors increase worker power through the exit mechanism: (1) the number and quality of jobs available to the worker; (2) workers' resources that allow them to survive without a job, such as personal wealth, and public programs, such as unemployment insurance; and (3) employers' limited ability to replace the worker or to close the job completely.

Market Forces and Policies Affecting Worker Power and Mobility through Exit

Market Forces Affecting Exit

More Jobs and Better Jobs Increase Worker Power

Low unemployment and higher labor market tightness increase workers' ability to find other jobs, thereby increasing wages. Labor market tightness is defined as the number of jobs relative to the number of unemployed people or to the number of job applications.⁵ High tightness therefore implies a labor market that is more favorable to workers. Although unemployment is a good measure of the state of the labor market, tightness is even more precise because it explicitly accounts for job availability. When there are more job openings relative to job applications (higher tightness), workers' outside options increase because they can find a job more easily. Conversely, firms' outside options deteriorate because finding job applicants is more difficult. Azar and colleagues (2020) show that higher labor market tightness is associated with higher wages posted by firms in their job advertisements.

Black workers tend to benefit more from lower unemployment. Black unemployment is roughly twice as high as white unemployment (Cajner et al. 2017). This gap tends to increase during recessions: the higher the overall unemployment rate, the wider the Black-white unemployment gap (Daly, Wascher, and Wilcox 2019; Mason, Konczal, and Melodia 2021). This larger increase in unemployment for Black workers can have lasting effects. Although Black workers' unemployment often decreases relatively more in low-unemployment labor markets, this benefit is not enough to offset the scarring effects of the high unemployment periods (Hotchkiss and Moore 2018). Because wages tend to be higher when unemployment is lower, it is likely that Black workers' wages also benefit more from low unemployment environments and suffer particularly large losses during

deep recessions. Overall, the evidence suggests that Black workers' power is disproportionately affected by the state of the labor market.

Higher **labor market concentration** means that jobs are concentrated among a small number of employers. That is, there are few employers or, even if there are many employers, a few employers post a large share of job vacancies. This situation reduces worker bargaining power for several reasons. First, workers have fewer other firms where they can seek employment, reducing their outside options (Jarosch, Nimczik, and Sorkin 2019). Second, employers in more concentrated markets decrease both employment and wages. Profit-maximizing employers would rather hire fewer workers at lower wages than hire more workers at higher wages but with lower “exploitation” per worker (Boal and Ransom 1997). A rich literature (Manning 2021; Sokolova and Sorensen 2021) shows that higher labor market concentration is associated with lower wages (Azar et al. 2020; Berger, Herkenhoff, and Mongey 2019; Jarosch, Nimczik, and Sorkin 2019_bookmark53). When two employers merge, concentration increases and opportunities for workers dwindle, resulting in lower wages when the **merger** greatly increases labor market concentration (Arnold 2019; Prager and Schmitt 2021). The negative effect of concentration on wages is attenuated in the presence of **unions** (Benmelech, Bergman, and Kim 2020; Marinescu, Ouss, and Pape 2021; Prager and Schmitt 2021). Taken altogether, when labor markets become less competitive, unions are able to protect workers and keep their wages high, even though outside options are dwindling.

Beyond mergers, there is also an indirect means through which labor markets have become more concentrated. Large **institutional investors** (e.g., BlackRock and Vanguard) own an increasingly large share of US stocks (Azar, Qiu, and Sojourner 2021). These institutional investors thus have **common ownership** of competitors, which reduces competition, leading to lower employment and wages (Azar, Qiu, and Sojourner 2021).

In addition to labor market concentration, another way to measure employer power is to estimate **workers' responsiveness to wages (the labor supply elasticity)**: How much more likely would workers be to quit if wages were lowered by 10 percent, and how much less likely would workers be to join⁶ a firm that lowers wages by 10 percent? This elasticity encompasses all of the relevant factors that determine outside options and thus can be seen as an overall indicator of how available or unavailable good outside options are for the worker. A high responsiveness to wages (i.e., a high elasticity of labor supply to the firm) demonstrates that workers have relatively strong outside options (i.e., other similar jobs)

that they would be willing to take if the wage were cut at their current job. In other words, if workers are very responsive to wages, they cannot be easily exploited, and they will quit if the wage is too low. However, in practice, workers are not very responsive to wages, leaving plenty of room for employers to underpay them (Bassier, Dube, and Naidu 2020; Dube et al. 2020). Using data on US manufacturing firms and the value of their production, Hershbein, Macaluso, and Yeh (2020) show that employers do in fact underpay workers, who capture only 65 cents of every additional dollar of value they bring to the firm (their marginal revenue product). Interestingly, this markdown effect—firms paying workers less than their marginal revenue product at the firm—seems to vary with firm productivity, with more productive firms underpaying workers more. Using data on large US firms, Seegmiller (2021) shows that the average firm pays workers 83 percent of the additional value they bring to the firm (their marginal product), while firms in the top and bottom quartiles of labor productivity, respectively, pay 62 and 94 percent of their workers' marginal product.

In sum, the evidence on labor market concentration and labor supply elasticity clearly demonstrates that employers have **monopsony power**. In other words, there is less than perfect competition in the labor market, which allows employers to pay workers less than the workers' marginal revenue product at the firm. Under perfect competition, workers are paid their marginal revenue product at the firm, which refers to the amount of value to the firm generated by the last worker hired—that is, the marginal worker. Monopsony in the labor market is analogous to monopoly in the product market and describes a labor market that is not perfectly competitive. Monopsony taken literally refers to a single employer, but, as we just saw, employers can have monopsony power even when they are not the only game in town.

Why are workers not very responsive to wages? Why don't workers all flock to the highest-paying jobs? What are the sources of monopsony power? First, **job differentiation** allows firms to pay less when the job is more uniquely desirable from the worker's perspective. For example, workers prefer jobs closer to home (Marinescu and Rathelot 2018). Azar, Berry, and Marinescu (2019) show that workers perceive jobs to be differentiated, which can allow employers to underpay workers. Azar, Berry, and Marinescu (2019) estimate how sensitive or insensitive workers are to wages: profit-maximizing employers can afford to pay workers only 85 cents for every additional dollar workers contribute to production. Similarly, Lamadon, Mogstad, and Setzler (2020) find

that workers would be willing to accept a pay cut of 13 percent to stay at their current job. Interestingly, German workers are willing to accept about the same pay cut to keep their jobs (Jäger et al. 2021). These results imply that the next-best job option is significantly worse in the eyes of the worker: workers do not have another job waiting for them that is just as good as their current job. Job differentiation therefore reduces workers' ability to bargain for higher wages.⁷

Second, even when other suitable jobs exist, workers may not know about them. This situation will generally reduce worker power by decreasing the value of *perceived* outside options. **Imperfect information** affects worker power, and higher job search costs reduce the information available to workers. In Germany, low-paid workers are disproportionately likely to think that other jobs also pay low wages, even when that is not the case (Jäger et al. 2021). Imperfect information can therefore strengthen firms' ability to keep wages low, adding to monopsony power due to concentration or job differentiation.

Another way imperfect information can undermine worker power is that many job applicants do not know if an employer is “good” or “bad.” Although some tools exist to provide workers with reviews of employers (e.g., Glassdoor), there is often an information supply problem in that the most useful insights for applicants (i.e., negative reviews of bad employers) are least likely to be provided (Sockin and Sojourner 2020). Most likely, workers do not provide many negative reviews because they are afraid of retaliation by their employers. Without this negative information, workers have an incomplete picture of an employer's quality. Importantly, research has shown that this lack of information is significant. Benson, Sojourner, and Umyarov (2020) show that providing online gig economy workers with more information about an employer's reputation can improve workers' labor market outcomes.

Third, even with perfect information, some jobs may not be accessible to workers because the **costs of commuting to a distant job or moving to be closer to the site of employment** are too high. These costs therefore reduce worker power by reducing the value of outside options. Marinescu and Rathelot (2018) show that 79 percent of job applications are within a state. Further, job seekers are 35 percent less likely to apply to a job 10 miles away from their zip code of residence than they are to apply in their zip code of residence. Even commutable distance induces job differentiation, so that employers who are closer to a worker's zip code of residence can afford to pay that worker less (Azar, Berry, and Marinescu 2019).

Workers' Wealth and Other Nonwork Income Increase Worker Power

Personal wealth that workers can depend on even when not working increases their wage demands and hence worker power. This phenomenon is called an “income effect” in the economics literature: workers’ willingness to work at a given wage is predicted to decrease with nonwork income such as that derived from personal wealth or from any other source of income that is not conditional on working. Because making money is a key motivation for working, being able to afford consumption without working diminishes the value of working. As a result, workers with higher nonwork income will generally demand more of a job before they accept it. In particular, they will have a higher reservation wage, that is, a higher wage floor for an acceptable job. Some workers may decide to work less or not at all when they have higher nonwork income, leading to lower worker availability, which increases worker power for those active in the labor market. Thus, personal wealth is expected to increase worker power.

The overall impact of wealth on the probability of employment is negative, but generally small. In particular, Bloemen and Stancanelli (2001) find that for the average household head, doubling the level of financial assets increases the reservation wage by only 1.2 percent. For spouses of the household head (usually women with children), it raises the reservation wage by 7.7 percent. Using US data on unemployed workers during the Great Recession, Krueger and Mueller (2016) show that people with at least \$100,000 in their checking or savings account have significantly higher reservation wages relative to previous pay, as do those with a credit card. Among older individuals, housing is a significant source of wealth, and it reduces people’s willingness to work at a given wage. Doubling of housing wealth is associated with a 3.3 percent decline in labor force participation (Zhao and Burge 2017).

Black workers’ lower average wealth can decrease their power relative to white workers. As shown by Bhutta and colleagues (2020), in 2019 the mean (median) net worth for a white family was \$983,400 (\$188,200), whereas the mean (median) net worth for a Black family was \$142,500 (\$24,100). Put another way, Black families have a median and mean level of wealth that is less than 15 percent that of white families. Given these stark differences, Black families’ lower levels of household wealth can lead to a lower reservation wage, undermining their worker power. However, Krueger and Mueller (2016) do not find that Black people have a significantly lower reservation wage conditional on their prior wage and other demographics. Although they find that Black people have a lower

reservation wage, the racial difference in reservation wages is not large enough to be statistically significant. More direct evidence on this topic is needed: Do Black people in fact have a lower reservation wage than white people, and if so, how does this affect Black workers' labor market outcomes?

Racial Discrimination in the Labor Market Further Reduces Black Workers' Power

Labor market discrimination reduces the number and quality of available jobs for Black workers. One of the most significant pieces of research on labor market discrimination was conducted by Bertrand and Mullainathan (2004), who sent identical resumes to employers, with the exception that some had traditionally white-sounding names while others had traditionally Black-sounding names. They found that the applications with white-sounding names (Emily and Greg) had a callback rate 50 percent higher than the applications with Black-sounding names (Lakisha and Jamal). Other papers confirm these findings (Kline, Rose, and Walters 2021; Pager, Western, and Bonikowski 2009). One potential reason behind the discrimination based on name⁸ is that employers do not even examine the qualifications on a resume once they see a Black name. Indeed, Bertrand and Mullainathan (2004) and Pager, Western, and Bonikowski (2009) find that better resumes (e.g., higher skills, no criminal background) do little to help Black applicants.

Under perfectly competitive markets, firms that prefer to hire less-qualified white applicants over more-qualified Black applicants will end up closing shop, as they are outcompeted by firms that do not discriminate and are therefore more productive thanks to better workers (Becker 1957). However, as discussed, labor markets are far from perfectly competitive, enabling racially discriminatory hiring practices to continue. Since monopsony power ensures that many firms do not have to worry much about competition, they do not have to fear being outcompeted by firms with less racially discriminatory hiring practices.

Further, there is reason for concern that even perfect competition might not be sufficient to fully stamp out labor market discrimination. For example, if discrimination is driven by customers, competitive forces will amplify rather than fix it. When white customers prefer to deal with white workers, firms that disproportionately hire white workers are rewarded. There is some evidence for **customer discrimination**, as businesses are more likely to hire workers of the same race as customers, especially for customer-

facing roles (Holzer and Ihlanfeldt 1998). However, these race-matching effects can be small (Leonard, Levine, and Giuliano 2010), and in practice they may speak more directly to employers' beliefs than to customers' preferences. Unfortunately, there is no direct evidence from the field about customers' racial preferences for workers in standard labor markets in the US.⁹ However, customer racial discrimination exists against Black sellers in online markets such as Airbnb (Laouenan and Rathelot 2020) and local classified advertisements (Doleac and Stein 2013).

Besides customer discrimination, another driver could be **racially biased coworkers** (Heckman and Payner 1989). Glover, Pallais, and Pariente (2017) show that marginalized workers are less productive when they are managed by discriminatory supervisors.

Racial discrimination by coworkers or customers provides a profit motive for discrimination. If Black workers are less productive when interacting with discriminatory coworkers or customers, even wages that fully reflect productivity are still lower for them. By lowering competition among employers, monopsony power likely further enhances racial inequality in labor market outcomes.

Public Policies Affecting Worker Power by Increasing Exit Options

Various policies can be used to affect each of the determinants of worker power discussed above, two of which stand out as having proven effects. First, strengthening labor antitrust enforcement and limiting noncompetition agreements increase workers' choice among employers, resulting in higher wages. Second, moderate minimum wages prevent employers from exploiting the lowest-paid workers and do not lead to employment losses. The minimum wage also helps address the racial gap in worker power.

This overview does not attempt a systematic analysis of the costs and benefits of policies aimed at increasing worker power. We provide elements about adverse employment effects resulting from some of the policies discussed below, but a thorough analysis of costs and benefits of each of the policies is beyond the scope of the current overview.

In what follows, we focus on the extent to which each policy is successful at increasing worker power.

Increasing the Number and Quality of Available Jobs Increases Worker Power

Traditionally, **antitrust** enforcement has focused on competition in the product market. Although the federal antitrust framework incorporates competition in the labor market, there has been a gap in litigation, with only a handful of cases focusing on the labor market (Marinescu and Posner 2019). The 2021 White House Executive Order on Promoting Competition in the American Economy recommends bolstering antitrust enforcement in labor markets. In particular, **mergers** should be scrutinized for their anticompetitive effects in the labor market (Marinescu and Hovenkamp 2019). Increased antitrust enforcement in labor markets would prevent mergers of employers that greatly increase labor market concentration, thus decreasing competition among employers and depressing wages (Arnold 2019; Prager and Schmitt 2021).

Beyond merger control, a series of additional antitrust reforms could foster worker power (Marinescu and Posner 2019). In particular, strictly limiting **noncompetition agreements** would raise wages. Noncompetition agreements (“noncompetes”) prevent workers from working for competitors when they leave their employer. This practice lowers workers’ options, reducing wages (Starr 2018) and worker mobility (Starr, Prescott, and Bishara 2020). Further, noncompetition agreements exacerbate gender and racial wage gaps (Johnson, Lavetti, and Lipsitz 2020). However, to date, only a few states (e.g., California, North Dakota, and Oklahoma) have taken steps toward completely banning noncompetition agreements. Several other states have implemented more modest measures regulating noncompetition agreements, such as banning them for certain industries or limiting their scope. Banning noncompetition agreements can help workers. Balasubramanian and colleagues (2019) show that a noncompete ban for technology workers in Hawaii led to 4 percent higher wages for new hires in that sector.¹⁰

Occupational licensing limits workers’ ability to switch between jobs and/or geographies to take advantage of better opportunities. In order to switch into a licensed occupation, workers must incur the cost of getting licensed; in some cases, they need to get licensed again if they move to another state. Therefore, occupational licensing decreases worker power to the extent that it decreases the availability of outside options. Recent estimates suggest that between 20 and 30 percent of the workforce requires an occupational license, up from around 5 percent in 1950 (Blair and Chung 2019; Gittleman, Klee, and Kleiner 2015; Kleiner and Krueger 2009). Johnson and Kleiner (2020) show that

individuals with state-specific occupational licensing are 7 percent less likely to move across states than individuals with quasi-national licenses.

At the same time, by restricting worker supply to the licensed occupation, occupational licensing can increase wages for those who are licensed. Blair and Chung (2019) estimate that occupational licenses reduce the labor supply in licensed occupations by between 17 and 27 percent. Gittleman, Klee, and Kleiner (2015) find that licensing boosts wages for licensed workers by 6.5 percent on average.¹¹ Occupational licensing has a smaller labor supply effect for Black workers than for white workers (Blair and Chung 2019). Further, Black men and women see about a 15 percent premium from occupational licensing (relative to not being licensed); white men only see a 4 percent premium (Blair and Chung 2018).¹² Occupational licensing may allow Black workers to signal that they are highly qualified, which can counteract discrimination by employers and customers. In conclusion, occupational licensing reform must carefully account for how these licenses interact with labor market discrimination, and proposals to reform occupational licensing should consider potential effects on workers of color.

Increasing **information available to workers** about job options has the potential to increase worker power. More widely available information reduces the information asymmetry between workers and firms. Firms are likely to have a lot more information about the market wage than workers, because firms hire more often than workers switch jobs. Research supports the view that workers benefit from having more information about jobs. Bhuller, Kostol, and Vigtel (2019) find that increased **internet access** in Norway led to better employment matches, as evidenced by more online vacancy postings and lower average duration of a vacancy for firms, higher job-finding rates, higher starting wages, and more stable employment relationships for workers. Belot, Kircher, and Muller (2019) show that providing a different kind of information to job searchers—information on other relevant and available job postings—had the effect of expanding the set of jobs that workers considered and generated higher job interview rates. Sockin, Sojourner, and Starr (2021) look at three states that limited the use of **nondisclosure agreements**, employment contract clauses that limit prospective workers' information about job quality, particularly by censoring negative information that is already underprovided. They find that such legislation led to lower Glassdoor ratings for firms, suggesting prospective workers had more accurate information about firms.

Another solution to the information asymmetry problem could be to allow workers to keep information private from employers, which might empower them to negotiate better outcomes. Banning employers from soliciting workers' wage history may empower workers. However, the evidence here is mixed. Hall and Krueger (2012) find that about half of workers report that the firm they applied to knew their previous pay before extending the job offer. Using a field experiment in an online labor market, Barach and Horton (2020) find that when employers can't observe a worker's prior compensation history, they tend to evaluate more candidates (7 percent more than the control group); evaluate candidates more intensely; and hire workers with lower past wages (13 percent lower compared to the control group). When employers were not able to observe wage history and workers bargained on compensation, workers were able to strike a better deal than workers whose employer could see their wage history. More than a dozen cities and states enacted **salary history ban** laws between 2016 and 2020. These laws led to job-changing workers earning 4.1 percent more, with even larger increases in the pay of job-changing women (6.2 percent) and nonwhites (5.9 percent; Bessen, Meng, and Denk 2020). Salary history bans have been shown to decrease the gender pay gap in several other studies as well (Hansen and McNichols 2020; Sinha 2019; Sran, Vetter, and Walsh 2020). These results suggest that, over time, salary history bans can reduce gender and racial wage gaps.¹³

Like wage history, information about what a worker earns relative to her peers is also unevenly available to an employer and a worker. **Pay transparency** may increase worker power by reducing informational asymmetries. In 2017–18, about half of all workers reported that they were either banned or discouraged from discussing their pay, with 13 percent of workers subject to formal prohibitions against discussing pay (Sun, Rosenfeld, and Denice, 2021). Unionized workers and public-sector workers are less likely to work under pay secrecy policies (Rosenfeld 2017; Sun, Rosenfeld, and Denice 2021), which suggests that workers with more voice in the workplace are less likely to lack information about wages. Even though nonwhite workers may have worse exit options, as previously described, there is no difference between white workers and workers of color in their probability of being subjected to pay secrecy (Rosenfeld 2017).

Although a lack of information can hinder workers' ability to negotiate for better wages, preliminary evidence on **pay transparency laws** suggests that they do not seem to help: such laws decreased wages by 2 percent (Cullen and Pakzad-Hurson 2021). The negative effects on wages did not materialize in unionized workplaces, where transparency

was higher to begin with. With pay transparency, employers may reason that if they raise the wage of an individual worker, they would have to raise everyone else's wages because other workers would know about it. As a result, employers with monopsony power can more easily deny raises. Cullen and Pakzad-Hurson (2021) show that full transparency leads to shifting the bargaining power to the firm, which lowers wages.

Lastly, low investment costs can create jobs and therefore increase worker power by increasing the availability of jobs. **Monetary policy**, by setting low interest rates, can stimulate investments and raise employment. However, low interest rates also increase the risks of inflation, an issue that is particularly salient as of the writing of this paper in July 2022. The Federal Reserve has a dual mandate of controlling inflation and supporting full employment. Until recently, the consensus was that lower interest rates would stimulate the economy and help the poor but such a stimulus effect was temporary (Romer and Romer 1998). The Federal Reserve has recently changed its policymaking rules to allow for lower interest rates. Specifically, instead of always aiming for a 2 percent inflation target (the "Taylor rule"), the new Federal Reserve policy states that "following periods when inflation has been running persistently below 2 percent, appropriate monetary policy will likely aim to achieve inflation moderately above 2 percent for some time" (a "makeup" strategy) (FOMC 2021). With a makeup strategy as just described, the Federal Reserve can keep interest rates low for longer even as inflation is increasing, as was the case in the second half of 2021 and the beginning of 2022. Keeping interest rates low in this way allows for higher employment and higher labor market tightness, which increases worker power. Model simulations show that moving from the classic Taylor rule to makeup strategies such as the one newly adopted by the Federal Reserve can reduce the average unemployment rate by between 0.1 and 0.3 percentage points, with even larger reductions for Black men (Feiveson et al. 2020). Other studies have also shown that expansionary monetary policy in tight labor markets can generate employment gains, particularly for historically marginalized workers (e.g., Black workers, people who did not finish high school, and women) (Bergman, Matsa, and Weber 2022).

Floors on Wages and Working Conditions Can Counteract a Lack of Worker Power

The **minimum wage** increases wages at the bottom of the wage distribution and can directly address depressed wages that result from a lack of worker power. Traditional

economic theory argues that the labor market is perfectly competitive and thus wages are set at the market-clearing equilibrium. In such a scenario, any binding increases to the minimum wage (or any minimum wage at all) will have disemployment effects: as workers become more expensive, firms reduce the number of workers they want to employ. However, when workers are underpaid relative to their marginal productivity, a minimum wage can increase employment. Employers with market power (i.e., monopsonistic employers) keep employment low so that they can pay workers less. Higher minimum wages attract more workers to the minimum wage jobs. As long as the minimum wage is not too high, firms are willing to hire more workers, as the strategy of keeping employment low to keep wages low is no longer viable due to the higher minimum wage. Azar and colleagues (2019) focus on the retail sector and find that a higher local minimum wage reduces employment in the most competitive labor markets (those with low labor market concentration) and increases employment in the most monopsonistic labor markets (those with high labor market concentration). The average effect of the minimum wage on employment in retail is zero, consistent with the broader evidence from US minimum wage increases (Cengiz et al. 2019).

Minimum wage increases can be particularly beneficial for Black workers. As of 2020, the Black-white wage gap was about 25 percent, but in the early 1960s it was upward of 60 percent. Derenoncourt and Montialoux (2021) find that the 1967 extension of the minimum wage accounted for more than 20 percent of the decline in the racial earnings gap between 1965 and 1980. Moreover, the 1967 extension of the minimum wage did not decrease employment among Black or white workers. The minimum wage can thus be an important tool to reduce racial wage inequality. To the extent that discrimination reduces worker power for Black workers, the minimum wage can help counteract the adverse effects of a lack of worker power.

One major threat to the positive impacts of minimum wage increases is **wage theft**. Wage theft refers to employers failing to fully compensate a worker for time worked, in violation of the law. This theft can take the form of denying overtime pay, paid time off, tipped wages, or hourly wages in general. A 2017 study suggests that wage theft resulted in more than \$8 billion in lost earnings for workers in the 10 most populous states (Cooper and Kroeger 2017). A more recent study showed that wage theft is particularly common against immigrant H-1B visa holders (Hira and Costa 2021), who have higher costs of switching jobs as they must transfer their H1-B visa to the new employer. Because lower

competition for workers leads to lower wages, it is likely that lower competition for workers also leads to more wage theft, though this hypothesis has not been tested directly by research.

A key determinant of wage theft is employers' fear of punishment. Galvin (2016) suggests that stronger state-level wage enforcement regimes can be an effective deterrent to wage theft. Unfortunately, by and large, the chances of employers getting caught and the size of the punishments when they do are too small to prevent employers from committing wage theft (Stansbury 2021). Given its prevalence, the positive effects of minimum wage increases are likely to be blunted by wage theft.

Some large employers recently chose to increase their company-level minimum wages. These voluntary raises led to wage increases at competitors: for example, a 10 percent increase in Amazon's minimum wage increased wages of employers in the same commuting zone by 2.3 percent (Derenoncourt et al. 2021). These spillover effects suggest that wage increases in the public sector or among government contractors could similarly lead to wage increases among competing firms (Staiger, Spetz, and Phibbs 2010).

Much like the minimum wage raises the floor on wages, **health and safety regulations** raise the floor of workplace conditions, benefiting all workers, but especially those who are more likely to work in unsafe workplaces. The more reluctant workers are to complain, the more likely accidents are to happen. For example, after an increase in immigration enforcement reduced immigrant workers' likelihood of complaining about working conditions, injuries at workplaces with an entirely Hispanic workforce increased by roughly 24 percent relative to workplaces with no Hispanic workers (Johnson and Grittner 2020). To the extent that workplace safety is costly to firms, forcing firms to increase safety may reduce employment if the labor market is perfectly competitive. In practice, random inspections of firms by the Occupational Safety and Health Administration reduce injuries by 9 percent, but the inspections do not reduce employment or firm survival (Levine, Toffel, and Johnson 2012). These results are consistent with monopsony power: if employers were underpaying workers, they can afford to pay them a bit more in the form of better working conditions, and thus employment does not decline. Union certification tends to increase inspections (Sojourner and Yang 2020), suggesting a positive effect of unions on working conditions. The regulation of working conditions can thus counteract a lack of worker power, and enforcement is magnified in the presence of higher worker power.

Increasing Nonwork Income and In-Kind Assistance Can Increase Worker Power

Just as higher personal wealth is expected to increase reservation wages, an unconditional cash transfer such as a **universal basic income** is similarly predicted to increase reservation wages due to an income effect. However, there is no direct evidence on the reservation wage effects of unconditional cash transfers. Additionally, universal basic income increases consumer spending, which can increase employment and worker power through the labor market tightness channel. Jones and Marinescu (2018) show evidence consistent with such aggregate demand effects in Alaska. In Kenya, a large-scale randomized controlled trial of a universal basic income shows that it stimulates the local economy, increasing employment and wages (Egger et al. 2019). Therefore, a universal basic income can augment worker power both by increasing reservation wages and by increasing labor market tightness.

Unemployment insurance similarly increases the reservation wage, but the effects on accepted wages are more ambiguous (Marinescu and Skandalis 2021; Nekoei and Weber 2017). The ambiguous effects of unemployment insurance on accepted wages derive from the fact that unemployment insurance increases unemployment duration by lowering job search effort. As workers stay unemployed longer, they apply to lower-wage jobs. Thus, although unemployment insurance increases the reservation wage, it also delays reemployment to later periods when the reservation wage is lower (Marinescu and Skandalis 2021). These two effects could result in higher or lower wages, and most empirical research finds little net effect of unemployment insurance on reemployment wages (Nekoei and Weber 2017).

The **unemployment insurance system serves Black workers less well than white workers**. At its creation in 1935, the system excluded agricultural and domestic workers. As a result of this restricted coverage, 38 percent of Black men and 74 percent of Black women did not qualify for benefits (Lovell 2002). These sectoral restrictions were largely lifted in 1976, but unemployed Black workers are still less likely to receive unemployment insurance than unemployed white workers (Gould-Werth and Shaefer 2012; Nichols and Simms 2012). This discrepancy is partly because of Black workers' lower earnings, which means that they are less likely to make more than the earnings eligibility cutoff. Another reason is that Black people tend to live in states where unemployment insurance is less generous. Skandalis, Marinescu, and Massenkoff (2022) show that Black unemployment

insurance claimants receive an 18 percent lower replacement rate (unemployment benefits relative to prior earnings) than white claimants. About half of this racial gap is caused by less favorable labor market histories (including lower earnings) for Black people relative to white people; the other half is caused by differences in state rules that disadvantage Black workers relative to white workers with the same labor market history.

Similar to unemployment insurance, other income assistance programs could increase the reservation wage because they increase the income of people who are not working and hence workers' outside options. However, income support programs that require workers to take a job can reduce rather than increase workers' reservation wage.

The Supplemental Nutrition Assistance Program (SNAP; formerly known as food stamps) has work requirements that are most stringent for prime-age (18 to 49 years old), able-bodied adults without dependents. There is some evidence that SNAP reduces labor supply for single mothers (Hoynes and Schanzenbach 2012), who are subject to less stringent work requirements. SNAP benefits decrease as a worker's income increases, which could discourage work. However, there is no evidence that people work less when their SNAP benefits decrease in response to increased income (Bitler, Cook, and Rothbaum 2021). Further, strengthening work requirements does not seem to have substantial effects on work. Instead, with stricter work requirements, beneficiaries are 53 percent more likely to drop out of the program, and homeless adults are disproportionately screened out (Gray et al. 2021). Overall, the contribution of SNAP to worker power is unclear to the extent that it has work requirements and somewhat limited labor supply effects.

The **earned income tax credit** (EITC) is conditional on work. Because the EITC increases labor supply (Schanzenbach and Strain 2020), it tends to decrease labor market tightness and therefore decrease wages. Because of this depressing effect on wages, a \$1 increase in EITC spending raises after-tax incomes by only \$0.73 (Rothstein 2010). The EITC has been effective at lifting millions of Americans out of poverty (Hoynes and Patel 2015), especially single mothers (Athreya, Reilly, and Simpson 2014) and Black women (Ajilore 2008). However, the program's work requirements limit its ability to generate worker power. The **child tax credit** is structured similarly to the EITC and depends on work, and it therefore has similar effects to the EITC (Hoynes and Rothstein 2016).

The negative effect of the EITC on wages can be limited in the presence of a higher **minimum wage**. For single mothers, the effect of the EITC on incomes is magnified by a

higher minimum wage (Neumark and Wascher 2011). More broadly, the lesson is that the minimum wage can promote worker power by limiting the pay-depressing effects of programs with work requirements.

In addition to cash assistance programs, in-kind assistance programs can also increase worker power. By severing the link between employment and health insurance, **public health insurance** programs (e.g., Medicare and Medicaid) can strengthen a worker's outside option of nonemployment. Empirically, some studies find support for state-level public health insurance reducing labor supply (Baicker et al. 2014; Garthwaite, Gross, and Notowidigdo 2014), while others do not (Dague, DeLeire, and Leininger 2017). The Affordable Care Act also had little to no effect on labor supply (Duggan, Goda, and Jackson 2017). The extent to which public health insurance increases worker power therefore remains unclear.

Public housing provides an in-kind benefit that is independent of work. It therefore has the potential to increase reservation wages through an income effect, but it could also have other labor supply effects because of the specifics of program design (Jacob and Ludwig 2012). In practice, housing vouchers reduce labor supply by 10 percent (Jacob and Ludwig 2012). If this reduction of labor supply were entirely due to an income effect, it would likely reflect an increase in worker power.

Reducing Firms' Outside Options through Employment Protections Could Increase Worker Power

Making it more costly to let a worker go should increase wages by reducing firms' outside options. Such **job protection** is much more widespread in Europe. Evidence from the United Kingdom shows that a rise in **firing costs** increases firms' efforts to hire the right person and increases job training, with no effect on unemployment and wages (Marinescu 2009). More generally, the evidence from Europe shows that firing costs tend to reduce worker flows (hiring and firing), with little effect on aggregate unemployment (Kugler 2007).

In the US, there is little protection against unfair dismissal and employment is mostly at will, meaning that firms may fire workers for any reason or no reason at all. Some states adopted **exceptions to employment at will**, making it more costly to fire workers. These exceptions led to a decrease in worker flows (Autor, Kerr, and Kugler 2007; Davis and Haltiwanger 2014), consistent with the evidence from Europe. There is no systematic

evidence that higher dismissal costs increase wages in the US, as one might have expected if firing costs increase worker power. However, job security increases with higher firing costs, and job security is positively valued by workers (Bonhomme and Jolivet 2009). Further, safety on the job increased in the US as a result of states adopting the public policy exception to at-will employment (Johnson, Schwab, and Koval 2020). This exception forbids employers from discharging workers for filing workers' compensation claims or whistleblowing about illegal conditions. Therefore, firing costs and job security legislation could be understood as increasing worker power to the extent that they improve job security and job safety without a loss in wages and employment.

Most Antidiscrimination Policies Do Not Increase Minority Worker Power

Given discrimination in labor markets, antidiscrimination policies might hold the promise to increase worker power for minority workers. One initiative is to “**ban the box**,” that is, to forbid employers from asking about criminal records in job applications. Since Black men are more likely to have a criminal record, they are less likely to get jobs when employers can access past convictions. Therefore, withholding such information could help Black people get a foot in the door. However, as Agan and Starr (2018) show, “ban the box” policies tend to actually do more harm than good for Black workers. Before the policy was instituted in New York state, applicants with white-sounding names received 7 percent more callbacks than similar applicants with Black-sounding names. After “ban the box,” this gap increased to 43 percent. Without the ability to screen for criminal backgrounds, employers overly rely on race as an indicator of potential criminal records. Bartik and Nelson (2016) find a similar dynamic playing out from policies that ban employers from conducting credit checks on job applicants.

Black people are also wrongly thought to use drugs more than white people (Wozniak 2015). Employers are therefore more worried about drug use among Black workers. Wozniak (2015) shows that allowing for **drug testing** increases black employment by 7 to 30 percent and relative wages by 1.4 to 13.0 percent, with the largest benefits for low-skilled Black men. As long as employers hold negative beliefs about Black workers—regardless of whether these beliefs are statistically accurate—preventing employers from accessing information about criminal background, credit history, or drug use can backfire by discouraging them from hiring Black applicants. Although these information-withholding policies may bring limited benefits to workers of color with criminal histories,

poor credit, or recent drug use, the current evidence indicates that such policies are not effective for promoting worker power and racial equity.

Another avenue for greater antidiscrimination is increased funding for enforcement. The US Equal Employment Opportunity Commission is the chief federal agency tasked with such enforcement. Wilhelm (2001) finds that Equal Employment Opportunity Commission enforcement is associated with higher wages for both white and Black women, with Black women benefiting the most. However, we lack solid causal evidence on the effects of enforcement on both wages and employment of people of color.

Summary of Research Gaps: Worker Power and Mobility through Exit

When studying market forces determining worker power, Black-white differences in worker power are least well understood. In particular, although we know that improving macroeconomic conditions tends to reduce Black unemployment more, there is no systematic evidence on the differential impact of labor market tightness on Black wages. Further, although Black people have lower wealth, there is scant evidence on how this may affect worker power, including through reservation wages. Finally, there is little to no direct evidence on customer and coworker discrimination against Black workers. Such evidence is important because these types of discrimination reduce Black wages even under perfect competition among employers.

On the policy side, those policies aimed at reducing the information asymmetry between workers and employers have seen mixed success. There is much more to learn in this area on policies like wage transparency and salary history bans. In particular, there are some positive wage effects of salary history bans, but such effects might unravel in the long term, and more research is needed. Wage theft and health and safety violations are probably more common under lower labor market competition, but this has not been systematically researched. Income support programs are rarely studied from the perspective of worker power: For example, how should we understand income and substitution effects as they relate to worker power? To focus on one particular program, we know too little about the wage and employment effects of SNAP. Finally, although job protections may help boost worker power, there is no recent evidence on this topic from the US.

Conclusions on Market Forces and Policies Affecting Worker Power and Mobility through Exit

Overall, increasing competition for workers by strengthening antitrust enforcement and limiting the use of noncompetition agreements are proven ways to increase worker power. The 2021 Executive Order on Promoting Competition in the American Economy advocates such an approach. Minimum wages and health and safety regulations are proven tools to limit the adverse effects of employer power by setting a floor on job quality. Used judiciously, these tools do not threaten employment.

Employers tend to have more information than workers, which decreases relative worker power. Lowering this information asymmetry can, in some cases, demonstrably increase worker power. In particular, workers can gain an informational advantage with laws that ban firms from requesting their salary history. These state-level laws have been shown to increase wages, with particularly positive effects on the wages of women and workers of color, though more research is needed to confirm long-term benefits.

Finally, worker power can be expanded by increasing workers' ability to say no to bad jobs and choose their best job match. Increasing workers' ability to find and keep better jobs involves expanding the social safety net with more cash transfers that do not depend on work. If workers can keep most of the benefits as their labor income increases, they are able to take higher-paying jobs without fear of losing income.

Organizations and Policies Affecting Worker Power and Mobility through Voice

Market forces that operate through the exit channel are not the only determinants of worker power. Institutions, such as unions or worker representation on company boards, provide workers with voice, which may increase their bargaining power, allowing them to influence wages and working conditions. We begin our section on worker voice by highlighting the causes and consequences of labor union decline in the US. Whether considered historically or cross-nationally, unions have served as the primary organizations that empower workers in firms, and, as we will demonstrate, boost economic mobility for low-wage employees.

Organized Labor

Union Decline in the US

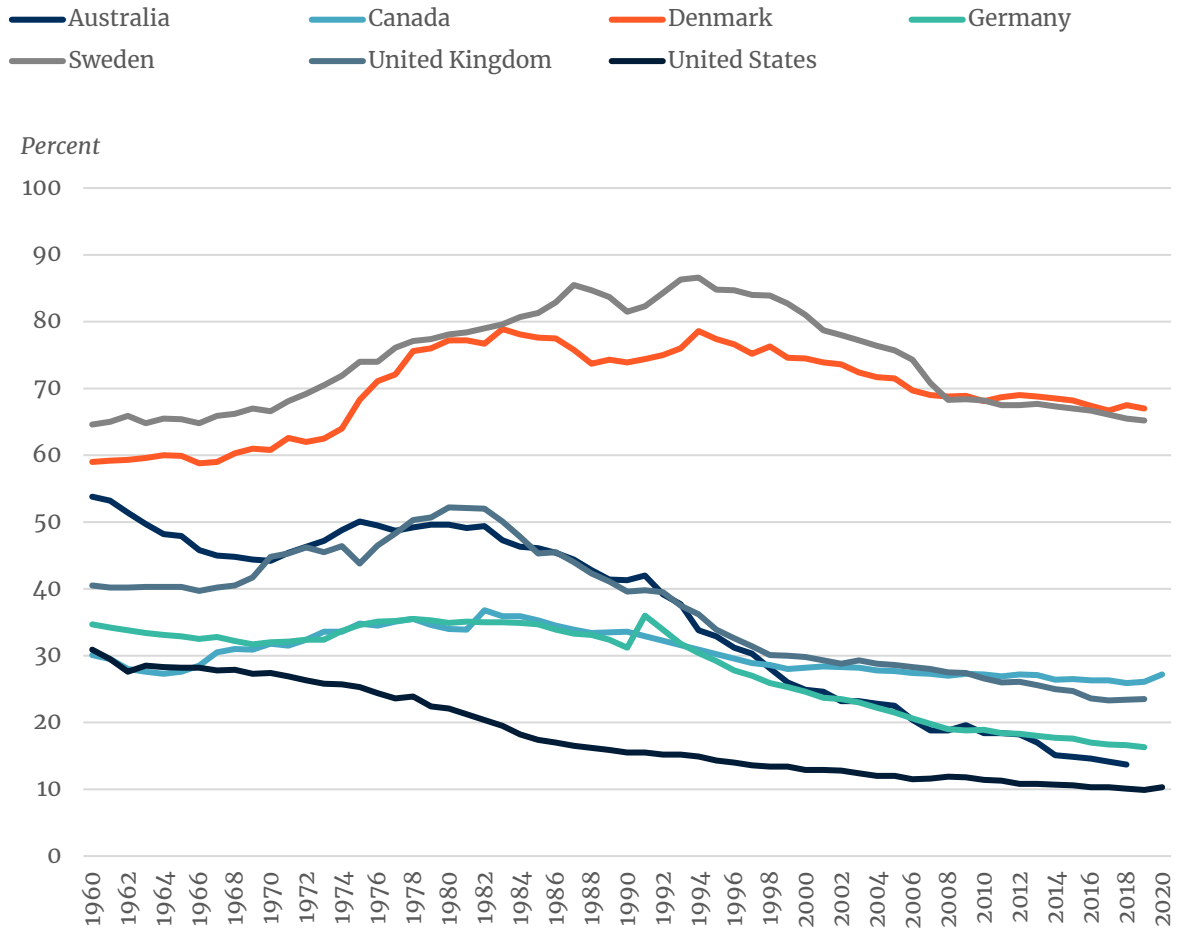
Figure 1 presents 60 years of trade union density data on seven Organisation for Economic Co-operation and Development nations, including the US. What is evident from the figure is that union decline is not limited to the US, but the US started at a lower base rate and has experienced a scale of decline exceeding that of many peer nations. Today, the US's official private-sector rate stands at 6 percent, approximately half that of the overall rate.¹⁴

As shown in figure 1, a clear majority of workers in Sweden and Denmark remain organized. Although density rates in these nations declined over the past two decades, they remain at levels similar to the 1970s and 1980s. The story is different for the economies of Australia, Great Britain, and the US. Decline was steepest in Australia, after peaking in the late 1970s. The US's starting rate trailed that of peer nations and fell by approximately half by 2020. As we discuss later, union density rates capture the percentage of workers who belong to unions, not the percentage covered by a collectively bargained agreement. Some countries, such as France, have experienced a steep drop-off in density while

maintaining a robust collective bargaining coverage rate. In the US, both rates have declined substantially.

Union decline in the US (and in many peer nations) is a private-sector phenomenon; public-sector organization rates have held steady in the US since the late 1970s.

FIGURE 1
Historical Trends in International Trade Union Density, 1960–2020



Source: Data come from OECD/AIAS ICTWSS database.

Notes: Missing years for Australia 2015 and 2017, Canada 1991–96, and United States 1981–82 are linearly interpolated using the average of the most recently available prior and post years. The 2019 data for Australia as well as 2020 data for Australia, Denmark, Germany, Sweden, and the United Kingdom are not shown because of a lack of data for interpolation.

Prominent Explanations for Private-Sector Union Decline

Globalization and technological change hurt unions in the US and the rest of the developed economies. Increasing pressure from foreign competitors spurred US employers to search for cheaper labor overseas and in areas of the country where unions had little foothold. Meanwhile, technological changes allowed employers to automate many processes, leading to layoffs and slower employment growth in sectors of the economy that were highly organized. Although many pundits and policymakers mistakenly believe that US firms “don’t make anything anymore,”¹⁵ as former President Trump claimed back on the campaign trail in 2015, the reality is far different. Since the mid 1980s, US manufacturing output has increased dramatically.¹⁶ Yet today the same number of US workers are employed in the goods-producing sector as in the mid 1960s, despite a labor force that has more than doubled in size.¹⁷

Aside from the general downward trend in private-sector organization rates across the developed world (with the exceptions of the Scandinavian nations), there is US-based evidence for an explanation that emphasizes the importance of outsourcing and especially automation (Farber and Western 2001; Kristal 2019).

Is globalization or automation more important in accounting for declining employment in once heavily unionized sectors? Debate continues, with some research pointing to the importance of Chinese imports and offshoring in causing employment losses among domestic manufacturers post 2000 (Autor et al. 2014). Harvard’s Lawrence Katz, however, argues that compared to these alternative explanations, “clearly automation’s been much more important – it’s not even close” (Cain Miller 2016). Lawrence (2017) reaches the same conclusion in his investigation into manufacturing employment trends over the past decades in the US and other advanced economies. Further buttressing Katz’s claim are research findings that net employment gains from increased global trade (including during the years of China’s ascent as a major exporter to the US) outweighed employment losses caused by rising Chinese imports (Feenstra and Sasahara 2018).¹⁸

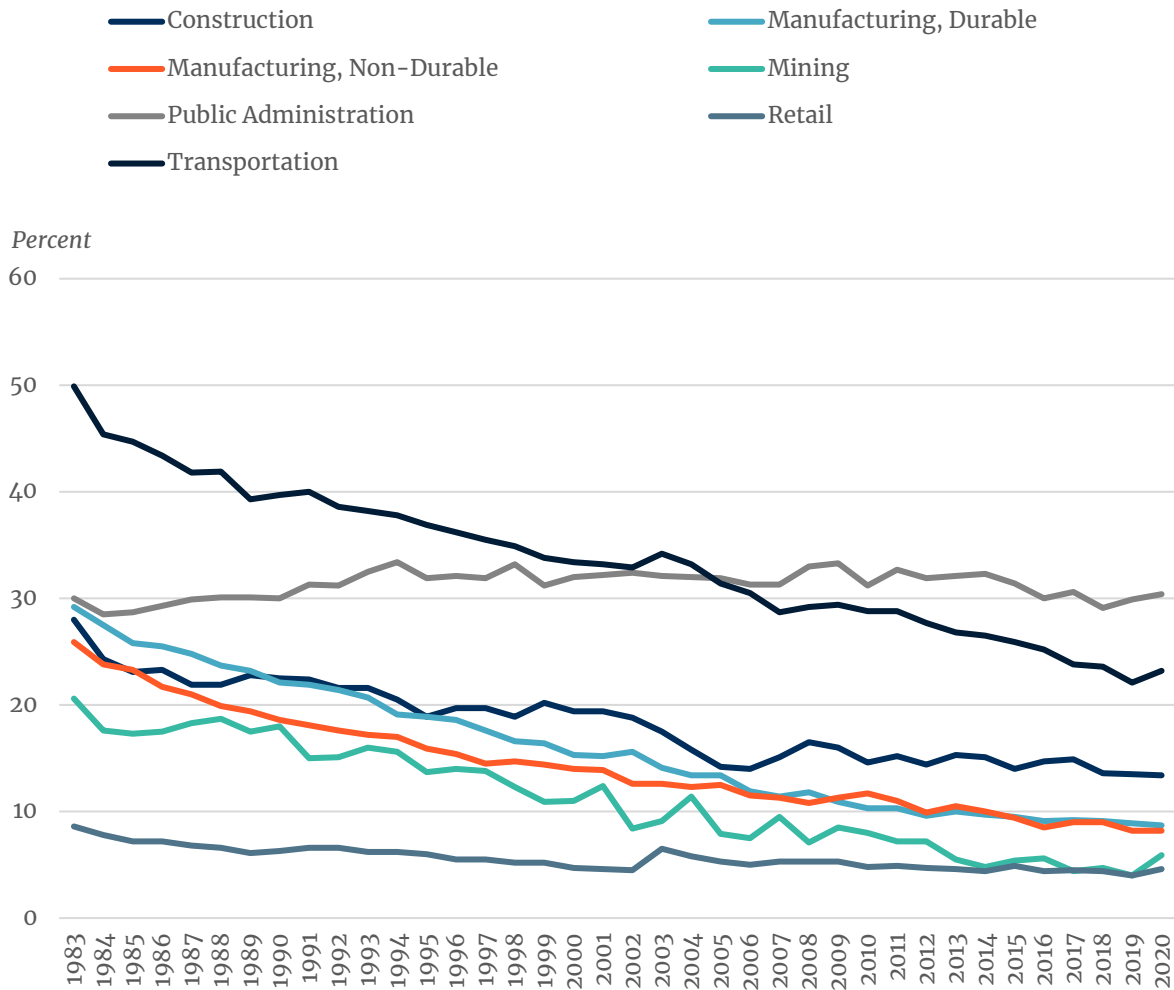
Yet other research challenges the notion that the story of union decline is simply one of inexorable market forces. They clearly mattered, and organizing at scale in the fast-growing service sector has proved more difficult than in manufacturing. However, these broad market dynamics were not confined to US shores, and yet many nations’ unionization rates remain far higher than the US’s, as figure 1 makes clear. Moreover,

union decline in the US was not limited to industries subject to automation and outsourcing. Figure 2, which updates Rosenfeld (2021, figure 6.1), shows private-sector union decline in the US between 1983 and 2020 disaggregated by major industry. Deunionization was steep in manufacturing, consistent with the deindustrialization story. But it was equally steep in other industries insulated (thus far) from these broader market shifts, including construction and transportation, pointing to additional factors contributing to the decline of private-sector unions (see also Stansbury and Summers 2020, figure C2).

Emerging evidence suggests that beginning in the 1960s and accelerating throughout the 1970s and especially the 1980s, employer resistance to organized labor grew in scale and effectiveness. Although increased employer opposition stemmed in part from forces that exposed previously protected industries to global markets, as figure 2 reveals, decline was widespread throughout the private sector.

What explains the widespread opposition? The prominent labor historian Nelson Lichtenstein (2002, 99) suggests that the “labor-management accord” that prevailed during the decades surrounding WWII is best described as a “limited and unstable truce” and never reflected broad management acquiescence to labor’s strength. Once employers realized the resources they had to oppose unions, they took full advantage of them. Deregulation, deindustrialization, and globalization placed many workers and the unions that represented them on the defensive in core industries. Employers pressed their advantage in these industries and used emerging lessons about how to oppose unions in other industries comparatively unaffected by these political and economic disruptions.

FIGURE 2
US Trade Union Density by Major Industry, 1983–2020



Source: Data come from Hirsch and Macpherson (2003), updated annually at unionstats.com.

Note: Data measure the percentage of workers in an industry who are members of a union. Industry classifications have changed over time because of technological change and industry growth. Therefore, time series comparisons should be caveated with the knowledge that the underlying components of the industrial classifications change periodically. This change is especially felt in the transportation sector. For example, only 67 percent of the underlying components of the transportation sector in 1990 remained in that sector when the Census Bureau recoded industrial classifications in 2002.

What resources did employers have at their disposal? Antiunion consultants and specialty law firms focused on fighting unionization receive approximately \$340 million annually from employers eager to thwart organizing efforts (Lafer and Loustaunau 2020). These expenditures take place within a legal landscape in which the small penalties for violating the law are well worth it if an employer is intent on remaining union free. New research (Stansbury 2021) reveals that it pays for employers to break labor laws if the

violation tilts the playing field away from organizers by even a trivial amount. Estimates suggest that employers face federal labor law violations in 40 percent of election drives; employers (illegally) terminate prounion workers in 20 percent of drives (McNicholas et al. 2019).

There is evidence these employer efforts succeeded, as there was a significant decline in union win rates in National Labor Relations Board-supervised elections over time (although win rates have improved in the past two decades), along with a sizable drop in the number of elections filed by unions (Farber 2015). Declining win rates scare off prospective drives as well, with unions preemptively avoiding elections given their lower likelihood of success (Farber 2015). Today, unions are so rare in the private sector that research finds firms are no longer worried about hiring union sympathizers; they assume such sympathies will not translate into an actual unionization attempt (Kreisberg and Wilmers forthcoming).

The effect of employer opposition might have been blunted had lawmakers responded to plummeting organization rates by updating labor laws. They failed to take action. Labor law reform efforts failed under Democratic Presidents Carter, Clinton, and Obama. Prospects for passage of the Protecting the Right to Organize (PRO) Act, the most substantive piece of prolabor legislation proposed since 1935, appear poor at the time of writing.

Falling election win rates might indicate that US workers no longer desire union representation. Available evidence suggests otherwise. Over two-thirds of respondents answered “approve” to a 2021 Gallup Poll question asking “Do you approve or disapprove of labor unions?”¹⁹ That is the highest approval rate in over half a century. Recent research by a team at Massachusetts Institute of Technology put the issue to a more specific test, asking thousands of workers who do not belong to unions whether they would be interested in joining one if given the opportunity (Kochan et al. 2019). Nearly half the respondents said yes, indicating that if the US unionization rate was simply a function of nonunion workers’ desire for representation, it would be over five times its current rate. A similar survey by researchers at American Compass (2021) finds that 35 percent of union-eligible unorganized workers would support a drive at their firm, with another third of those surveyed undecided. Combined, these recent surveys suggest employee demand is not the primary driver behind the nation’s decades-long decline in union representation rates.

Other related causes of union decline remain less established in the literature but potentially fruitful areas for future research. These causes include the following:

1. **The “disintegration of employers”** (Barenberg 2015; Weil 2014): Instead of the vertically integrated firms common in the mid 20th century, many companies have created intricate supply chains in which much of the value-added of the finished product is outsourced. Complicated supply chains may hinder unionization. At any given link in the chain, the central company can sever its ties to a supplier whose workers have unionized and welcome in a new nonunion supplier.

For example, organizing workers at a name-brand hotel such as a Holiday Inn in a particular locale now would likely require an organizing campaign for the staffing agency that provides the janitorial workers, a separate one for the (different) staffing firm providing the food preparation workers, and possibly one against a third-party management company that employs other workers at the facility (Weil 2014, figure 6.3). At any stage of the organizing campaign, the Holiday Inn can replace any one of its subsidiaries with a new one. Moreover, the newly created market of staffing firms provides a poorer target for union organizers. In markets in which labor constitutes a high share of total costs and firms compete for business largely on prices, there is little room for unions to extract rent and deliver wage benefits to workers. Employers who must hold labor costs down to compete are highly incentivized to fight any organizing campaign.

The (related) spread of the independent contractor model to transportation and other industries can also impede unionization. Not only are independent contractors not owed minimum wages or overtime pay, they cannot receive workers’ compensation and unemployment.²⁰ Critically, they are also ineligible to unionize. Estimates about the “gigification” of the workforce and with it the rise of the independent contractor model across industries vary. Some suggest significant growth during the past two decades, while others point to more modest growth (Katz and Krueger 2019). Gig-type jobs still constitute a very small share of total employment hours (Mishel 2018), although ongoing data problems have impeded a precise understanding of trends in independent contracting (Abraham, Hershbein, and Houseman 2020). But the spread of the independent contractor classification in occupations that were once heavily unionized—such as trucking, a development that largely predated the rise of platform work—may have contributed to falling

organization rates, and the classification erects barriers to current organization drives in platform work of all kinds.

Emerging legal research points to antitrust law as a contributor to a growing power imbalance between independent contractors and lead companies. Antitrust law allows for economic coordination between certain actors and bars them between others. The legal regime that emerged in recent decades prioritizes the coordination rights of lead firms while preventing cooperation among independent contractors (Paul 2019). Thus, independent contractors are formally barred from forming unions, but the firms to which they contract maintain extensive control over key aspects of the employment relationship (Steinbaum 2019).

Finally, many vertically integrated companies had extremely large workforces. For example, in the early 1940s, approximately 60,000 workers walked through Ford Motor Company's River Rouge Complex in Dearborn on a daily basis. These sites presented rich targets for organizers, given the tens of thousands of potential new dues-paying members. Today, Ford's total workforce at the River Rouge site has dwindled to about 5,500, and the entire state of Michigan employs fewer than 40,000 autoworkers.

And that is auto production, in which a typical plant still employs a large workforce. But just over 1 in 10 private-sector employees work in establishments with 1,000 or more workers.²¹ Going through the arduous process of organizing small establishments is expensive, especially when facing employer opposition. While average firm size has increased, average establishment size has declined, although better historical data are needed on establishment size (Choi and Spletzer 2012). Because labor organizing in the US is centered on bargaining units within establishments, smaller establishments lower the payoff to a successful drive.

2. *Low density*: Low unionization rates may be another barrier to organization, especially given the tools available to employers to fight a union election. Lack of experience or knowledge with unions may render workers particularly receptive to antiunion rhetoric. Should an employer in an otherwise union-free industry accede to a successful organizing drive, it will bear the costs of unionization alone. Competition from nonunion firms will prevent it from passing on the costs in the form of higher prices, and it will have to find comparative advantages elsewhere.

3. *Immigration policy*: Recent decades of union decline coincided with a dramatic rise in immigrant populations, with the percentage foreign born more than doubling between 1980 and today. Research finds that union decline preceded immigrant growth in specific industries (Allen 1994; Milkman 2006), suggesting that the direct causes of deunionization lay elsewhere. However, other research reveals comparatively low organization rates among noncitizens (Rosenfeld and Kleykamp 2009), suggesting that policy choices about the incorporation of newcomers may contribute to low organization rates in certain industries and regions. In particular, workers who lack legal standing have fewer exit options and risk much more than a job should they join an organizing campaign that their employer opposes.

Consequences of Union Decline

Decades of research finds that the union wage premium—the extra pay a union member receives that a similar nonunion worker does not—averages between 15 and 25 percent (Card 1996; Farber et al. 2021; Hirsch and Schumacher 1998; Rosenfeld 2014, figure 2.4; but see Frandsen 2021). Strong unions were also able to secure generous benefit packages for members, including health insurance (Buchmueller, DiNardo, and Valletta 2002) and retirement benefits (Rosenfeld 2014, table 2.4) that for the first time granted millions of working-class Americans a middle-class living standard. High pay and robust benefit packages help explain the significantly better self-rated health of union members compared to their nonunion counterparts, and research reveals that among low-paid workers, the association between self-rated health and membership goes beyond the income boosts unions provide (Reynolds and Brady 2012).

As unionization rates in the private sector plummeted, economic inequality increased substantially as average workers, especially those lacking a college education, saw their living standards decline. A number of analyses have found a strong link between rising inequality in the US and the decline of labor's fortunes (Card 2001; Fortin, Lemieux, and Lloyd 2021; Western and Rosenfeld 2011). One study estimates that private-sector decline explains about one-third of the rise in inequality among private-sector men and one-fifth among women (Western and Rosenfeld 2011), as large an effect as the increasing economic returns of a college education. Recent estimates reveal that union decline within states and industries is associated with a fall in labor's share of total income (Stansbury and Summers 2020).

For the demise of the labor movement to have played such a prominent role in exacerbating inequality, its influence must have extended beyond unions' membership base. After all, even at the movement's peak, the majority of US workers did not belong to a union. Existing research suggests that when and where unions were powerful, their influence on wages and working conditions extended beyond union members (Denice and Rosenfeld 2018; Fortin, Lemieux, and Lloyd 2021; Western and Rosenfeld 2011). How so? Nonunion employers worried about an organizing drive or losing valuable workers to unionized competitors would match union scales to appease employees. In times and sectors where unions were strong, through various channels they were able to establish norms about wages and working conditions that nonunion firms adopted (Western and Rosenfeld 2011).

Research on the contribution of union decline to rising inequality is well established. What remains less studied is the connection between unions and mobility. An emerging body of research suggests strong linkages, with unions associated with greater mobility both within and across generations. For example, a new study reveals that union strength is negatively related to various measures of poverty (VanHeuvelen and Brady 2021). Adjusting for other factors that influence poverty, the authors find household-level unionization is associated with a lower likelihood of being poor and that states with higher union densities have lower poverty. Here, too, we see evidence of spillover effects. State-level union density is negatively related to poverty among both nonunion and union households.

What connects unions to reduced poverty? Rosenfeld and Laird (2016) outline various indirect and direct channels through which unions boost mobility for low-wage workers. Indirectly, unions have waged various policy battles to improve the wages and working conditions of workers earning below or near the federal poverty level. These include efforts to lift the minimum wage, establish living wages in particular localities, and expand access to the federal food stamp program (now SNAP), among others. Directly, unions have organized certain groups of low-wage workers, leading to upward mobility within firms. Many examples abound, such as California cannery workers, department store employees (Lichtenstein 2004, 719), and, more recently, casino workers in Las Vegas. The upshot of these efforts is that strong unions are associated with reduced poverty (variously measured) both in the US and among other advanced democracies (Rosenfeld and Laird 2016, figures 35.1 and 35.2).

Unionization is also associated with greater intergenerational mobility, as children of union members earn more than children of nonmembers as adults, and children who grow up in high-density locales end up earning more than children who grow up in areas with little union presence (Freeman et al. 2015). Freeman and colleagues analyze commuting zones across the US and find that net of parental income, workers who grew up in areas with high union density outearn those who grew up in areas with low density. Analyzing matched data on children and their parents, the report also suggests that growing up with a unionized parent is associated with higher earnings as an adult, especially for children whose parents lack a college education. As the authors conclude, “union density is one of the strongest predictors of an area’s mobility” (Freeman et al. 2015, 2). These broad economic effects, especially those found among low-income workers and their children, distinguish labor unions from other institutions, programs, and policies that increase worker voice. No other single intervention on behalf of workers has the direct and indirect influence on worker power and mobility within workplaces that labor unions have had.

Unions’ collapse has reshaped not only our economy but also our polity. A core finding from political science research is that the highly educated and highly remunerated participate in politics and are rewarded for that participation more than those lower down the education and income ladders. This political inequality is especially acute in periods of high economic inequality, such as the present period, when elites can translate their financial largesse into political power.

Unions once helped to counteract these tendencies toward increasing political inequality. Union membership is associated with a greater likelihood of voting (Leighley and Nagler 2007; Rosenfeld 2010). The positive effect of unions on voting is especially large for workers with no college education. Union strength is associated with a higher percentage of elected officials who previously held working- and middle-class jobs (Sojourner 2013) and, consequently, union decline has corresponded with a drop in working-class political candidates (Feigenbaum, Hertel-Fernandez, and Williamson 2018). The decline in blue-collar representatives has had an impact on our legislation: policymakers who held working-class jobs work harder to design and implement labor and employment policies than other legislators (Carnes 2013, 72–73). These policies disproportionately benefit low-wage workers. Recent research has also found that unions temper white racial resentment (Frymer and Grumbach 2021). The political socialization that often accompanies union membership lowers racist antipathy among white people

and increases their support for policies that benefit all workers, especially those at the bottom of the economic ladder.

Indeed, despite a long history of racial exclusion and often vicious xenophobia, by the mid-20th century, unions had begun to diversify their ranks in substantial numbers. When the movement was at its peak, union households were disproportionately households of color (Farber et al. 2021). Four in 10 Black men in the private sector belonged to unions in the early 1970s, and organization rates for Black women in the private sector were much higher than among white women (Rosenfeld and Kleykamp 2012). By the 1970s, Black people were more likely to belong to unions than were any other racial or ethnic group. As a result of Black overrepresentation among union members, union decline hit Black people's economic standing particularly hard (Baker and VanHeuvelen 2021). Research finds that if private-sector unions had remained as strong today as they were in the 1970s, the typical Black male worker would earn approximately \$50 more a week, or \$2,600 more a year. Among women, union decline from the 1970s onward explains between one-tenth and one-third of the rise in racial wage inequality (Rosenfeld and Kleykamp 2012).

Other research indicates that collective bargaining agreements compress gender pay disparities. For example, after the enactment of 2011 Wisconsin Act 10, which dismantled core components of collectively bargained contracts for many public-sector employees, gender pay gaps widened among teachers (Biasi and Sarsons 2020).²² Intersectional analyses find smaller gender pay disparities among unionized white, Black, and Hispanic women compared with their unorganized counterparts (Gould and McNicholas 2017, figure A).

Opportunities for Revitalization

The PRO Act, passed by the House of Representatives early in spring 2021, currently sits in the Senate. The reform would be the most significant piece of prolabor legislation enacted since passage of the National Labor Relations Act in 1935. Among other important provisions, the PRO Act would crack down on employer retaliation in union elections (thereby changing the incentive structure for firms facing organizing drives); ban common practices such as mandatory-attendance meetings, during which employers warn workers of the consequences of unionization; ban the hiring of permanent replacement workers during strikes; and widen the range of workers eligible to join unions. To the extent these

important provisions jump-start union organizing, passage could benefit low-wage workers through all the channels described above. More research is needed to identify which of the various provisions is most impactful on organizing and whether various combinations prove especially effective. Capitalizing on cross-national and subnational variation in labor law regimes could provide insights into the likely outcomes of passage.

Labor law reforms that extend beyond the major provisions in the PRO Act include automatic or regularly scheduled union elections. Current law stipulates that to trigger an official National Labor Relations Board election, workers must demonstrate sufficient interest in collective representation, namely, a petition or internal poll indicating at least 30 percent of eligible workers are in favor of representation. Once triggered, workers must attain at least 50 percent support in a National Labor Relations Board-supervised secret ballot election in which the employer can (and frequently does) lobby against the union. Proposed reforms that would ease the path to collective representation include instituting a range of intermediate steps that deliver tangible benefits to the workers involved, such as mandated works councils in which every organization designates a worker-led committee to meet with management so long as some small fraction of the workforce calls for one (Block and Sachs 2020). A more radical change to existing election procedures would borrow from the political sphere and institute regularly scheduled union elections at workplaces in which at least a small fraction of the workforce called for them (Oswalt 2014).

The PRO Act and other proposed legal reforms would not replace the enterprise-level bargaining structure with a new system. What some labor supporters refer to as the National Labor Relations Act's "original sin"²³ means that unions organizing private-sector workers in the US will always face an uphill battle given that each victory (with few exceptions) only results in the unionization of workers within a bargaining unit in a particular workplace, as opposed to all nonmanagerial workers in the same firm or industry. Below we detail possible alternatives to the current enterprise-level bargaining structure.

Sectoral bargaining has emerged as a possible alternative to the dominant enterprise-level bargaining regime prescribed by the National Labor Relations Act (Andrias 2016; Block and Sachs 2020). In sectoral systems, bargaining occurs between labor leaders, heads of employer associations, and often government representatives at industry or sector levels, establishing a baseline set of wages and working conditions for all employees within

the sector or industry. However, although such a system would greatly expand the percentage of workers covered by a collective bargaining agreement, it is unlikely to boost union membership numbers significantly. France, for example, has a collective bargaining coverage rate that is nearly universal, but an overall density rate lower than in the US. Yet sectoral systems hold great promise for establishing wage and benefit floors within particular industries, disproportionately helping low-wage workers.

Another possibility is to greatly expand unions' reach in worker benefit programs. For example, Block and Sachs (2020) propose allowing unions to contract to provide workforce training programs, with the goal of signing up trainees to those unions providing the benefits. Recent research emphasizes how these training programs should be sectoral, equipping workers with a generalized skill set that facilitates mobility across firms so as not to lock workers into any particular employer (Naidu and Sojourner 2020). Upskilling workers makes them more attractive to other employers, increasing their exit options and thereby boosting worker power. Pilot programs with amenable employers could explore how valuable these programs can be to workers and employers, who would benefit from a more highly trained workforce. These Ghent system reforms could extend beyond workforce training to include other programs, such as providing enforcement for worker protection laws and administering unemployment programs (Madland and Wall 2019).

A final option that would move the US beyond the National Labor Relations Act includes institutionalizing minority unions (i.e., worker organizations that represent less than 50 percent of the designated bargaining unit). See Block and Sachs (2020) for further discussion.

Although the story of union decline in the US is one of private-sector dynamics, it remains the case that the overall share of workers in the public sector is smaller, and the public-sector unionization rate lower than in many peer nations. Canada, for example, has a public-sector unionization rate of 74 percent, over twice as high as the US's.²⁴ Only Connecticut has a public-sector unionization rate as high as Canada's. Organizers in the public sector face fewer constraints than in the private sector, meaning that one way to raise the overall density rate is to increase the share of government employees who belong to a union. Some of the benefits of unionization are smaller in the public compared to the private sector, but preliminary evidence suggests these benefits spill over to nonunion women in the private sector (Rosenfeld and Denice 2019). Moreover, research reveals that unions have a wage-flattening effect in the public sector. They raise the pay of less-skilled

workers more than highly skilled workers, a dynamic historically found among private-sector unions (Card, Lemieux, and Riddell 2018). Indeed, given depressed private-sector unionization rates, in recent years unions' equalizing effect on pay is largely limited to the public sector, where unions continue to boost the pay of low-skilled workers significantly (Card, Lemieux, and Riddell 2018, figures 3a-3c). A proposed piece of legislation, the Public Service Freedom to Negotiate Act, would grant all public-sector workers the right to bargain collectively, a right that currently exists only in certain states for certain sets of employees.

Research on labor's rise in the US and abroad emphasizes its episodic nature, characterized by a few "spurts" (Freeman 1997). In the past, social movement pressures from below simultaneously pressured lawmakers into action and dramatically increased membership rolls (Uetrict and Eidlin 2019). Are lessons from labor's past relevant for the present? One conclusion from studies of labor's heyday is that the law is responsive to worker unrest, and lawmakers are unlikely to adopt a significant proworker agenda absent actions on the ground.

Despite a robust and growing body of research on strategies to revitalize the US labor movement, gaps remain. Some of the most significant omissions include the following:

1. **Understanding what workers want out of collective representation:** Existing survey research suggests many employees desire more power at work (American Compass 2021; Kochan et al. 2019). For example, workers seem to desire more democratic representation at work, whether in the form of codetermination or having a voice in management selection (Mazumder and Yan 2020). But further research is needed on workers' desires, given the importance of workers' wishes and needs for weighing strategies to revitalize labor. For example, Hertel-Fernandez and Porter (2021) find that teachers value the professional benefits their unions provide, such as training, support with licensing, and educational classes and workshops, over other traditional collective bargaining outcomes. Other survey research on a wider variety of occupations finds strong worker support for union provision of portable benefits, such as health insurance (Hertel-Fernandez, Kimball, and Kochan 2022). This emerging literature points to variations in what workers want out of unions, with lessons for unions attempting to win elections in different contexts. Future work employing mixed methods should build on these

emerging studies, sensitive to how workers differ in how they value the various benefits of collective representation.

2. **Realigning employer incentives:** Surveys, in-depth interviews, and other studies of employers and their attitudes toward and engagement with unions remain rare. This is a crucial oversight given what we know about employers' role in union decline. Future research could borrow from emerging surveys of workers to probe employers about strategies to reduce their incentive to combat organizing drives. For example, procurement policy could lower employer opposition to unions by raising the profitability of unionization. But that policy change assumes employer opposition is primarily profit driven and not significantly related to a fear of losing managerial prerogatives. Gauging the various aspects of collective representation employers are most opposed to, and how these vary across type of employer, could help in devising successful organizing drives.
3. **Supply chain bargaining:** The emergence of complicated supply chains can hinder labor organizing, as discussed, but it also opens up vulnerabilities that organizers can use to increase worker power (Bonacich and Wilson 2008). The ongoing pandemic has exposed pressure points in supply chains that organizers and existing unions could leverage to increase power, and researchers and worker advocates have highlighted models that unions and other worker organizations can adopt (Blasi and Bair 2019, table 3). The global nature of many firms' complicated supply chains may call for cross-national worker partnerships. Emerging research on international union partnerships in leveraging union financial power provides both blueprints for further cooperation and warnings about the pitfalls of one-sided relationships (Jacoby 2021, 184–86.)
4. **Equity trade-offs:** Any strategy to revitalize the labor movement must consider effects on historically underrepresented and disadvantaged workers. For example, although Germany has been successful at preserving its heavily unionized manufacturing core, the rise of “mini jobs,” disproportionately held by women, has led to growing inequality between the organized and unorganized (Thelen 2014, chapter 4). In the US in recent decades, the share of the manufacturing workforce supplied by staffing firms has increased substantially (Dey, Houseman, and Polivka 2012). This particular form of domestic outsourcing is part of a broader trend that has likely contributed to wage stagnation for particular segments of the workforce.

Yet much remains unknown about the phenomenon, and future research should investigate who benefits from domestic outsourcing in the US and who is hurt by the trend (Bernhardt et al. 2016).

Alternative Forms of Worker Representation

The International Picture

What might a future in which worker power and upward mobility are the norm rather than the exception actually look like? Promising institutions from abroad, if adapted in the US, could augment existing programs and policies to improve workers' economic standing and voice in the workplace.

Wage and standards boards applying to industries, occupations, and geographic regions stand out as a means to lift worker power and mobility absent a sharp increase in unionization rates. Australia provides a possible template. Between 1976 and 2016, unionization rates in Australia plummeted from 51 to 14 percent (Gilfillan and McGann 2018). Yet by many measures, inequality remains more muted in Australia than in the US. For example, Australia's 90:10 ratio of household income inequality is 47 percent lower than the US's. The establishment of the "modern awards" system likely contributed to lower inequality. This system is administered by a national wage and standards board that sets pay floors for industries and occupations, helping to compress pay within and between types of jobs and ensuring that those at the bottom of the pay distribution do not fall too far behind (Dube 2019). Importantly, these standards apply to workers not covered by collective bargaining agreements.

Whereas Australia's modern awards system applies to workers unprotected by union-negotiated agreements, in France and several other European nations sectoral bargaining occurs between union leaders, industry-appointed heads, and government representatives. The resulting agreements apply sector-wide, accounting for the low density yet high levels of collective bargaining coverage found in countries like France. Sectoral bargaining lowers employer opposition to unions because the negotiated agreements apply to firms regardless of whether the workers belong to a union or not.

Other systems of sectoral bargaining operate at lower levels of aggregation, such as at the industry level. In all versions, however, bargaining occurs at a higher level than the establishment (the dominant pattern in the US), and agreements extend to all workers in the sector or industry regardless of their unionization status. Yet such a system can struggle with democratic representation and accountability—in other words, with worker voice—as workers who are not union members are affected by unions without being directly involved in agenda setting. Moreover, free-riding could be a problem if membership confers no additional benefits. And the resulting low density rate could reduce union leaders' bargaining position, with employers interpreting low density as a sign of union weakness (Matthews 2017). Here more research is clearly needed about the trade-offs between collective bargaining coverage and union density.

Another idea that has captured policymakers' attention in recent years is mandating worker representation on corporate boards (codetermination). For example, the Reward Work Act, originally sponsored by Senator Tammy Baldwin (D-WI), would require that one-third of board seats on publicly traded companies be directly elected by the firm's employees. According to one poll, the idea has the support of a majority of Americans (Matthews 2018). It is an idea with a long precedent in other nations, including Germany, where mid-sized firms allocate one-third of board seats to worker representatives and larger firms allocate half (Holmberg 2017). Recent research finds that profit levels of firms with worker representation on their boards are similar to those without and that codetermination leads to more long-term decisionmaking (Jäger, Schofer, and Heining 2020), although the effects on indicators of worker power appear modest.

Other pathways to worker power that have proven successful outside of the US, but have yet to receive extensive attention here, include the following:

1. **Formalizing labor participation in policymaking:** In Ireland in the late 1980s, the government, unions, and employers formed a national council that studied economic conditions and agreed to the Programme for National Recovery, wherein modest wage increases and individual tax cuts were offset by strike prohibitions. This action would be akin to restructuring the National Economic Council to include labor and business interests (Tucker 2018).

In Austria, all private-sector workers are members of the Chamber of Labour, funded by a 0.5 percent tax on salaries. This organization would be the labor

alternative to the Chamber of Commerce, serving as a think tank, a policy advocate, and a labor litigation resource (Bischof and Karlhofer 2016, chapter 4).

2. **Using federal and state power to strengthen worker power:** Strategies to incentivize firms to obey labor laws using the power of procurement and contracts are varied. The European Union has the right to revoke contracts to contractors that violate minimum labor standards. In the Basque region of Spain, the local government requires firms with government contracts to obey the core tenets of the International Labour Organization. See Tucker (2018) for further details.
3. **Expanding apprenticeship programs:** Many European countries have a large apprenticeship system, often deeply integrated with trade unions. The expansion of apprenticeship systems in the US could help workforce development and assist workers in developing new skills while matching them with high-paying unionized jobs (Rolf 2018).

Promising Avenues for the US

Both wage and standards boards and codetermination have advocates and backing by particular policymakers in the US. Emerging research explores how such arrangements might be institutionalized here (Bahn 2020; Dube 2020), although Jäger, Noy, and Schoefer (2021) discuss the possible limited impact of codetermination. One concern for supporters of codetermination is that worker representation be substantial enough to ensure adequate say in corporate governance and that the worker selection process be fair and free from employer intimidation (Block and Sachs 2020).

Meanwhile, the idea of industry-specific wage and standards boards has a long pedigree in the US (Hafiz 2021; Kelley 1911), even if the practice has not been widespread in more recent years. Only a few states, including New York, retain industry-specific board systems. In 2015, then-governor Cuomo resurrected the system to establish a board for the fast food industry, eventually resulting in pay increases for fast food workers across the state (Andrias 2016).²⁵ Although wage and standards boards help increase worker power in terms of wages and benefit packages, they generally do not provide firm-specific channels for workers to exercise other aspects of voice.

Emerging research on the “new labor federalism” highlights how even a shrunken labor movement can have substantial policy impact at the subnational level (Galvin 2021). The subnational policies that unions have proven most effective at advocating for include minimum wage increases, family and medical leave, and bans on employment discrimination. Other research finds that union power at the state or local level is instrumental in establishing sectoral labor standards in those locations and industries in which they exist and that these standards have helped fuel further labor mobilization (Jacobs, Smith, and McBride 2021). State and federal preemption remain threats to labor-backed policies, however (Johnson 2021).

Drawing from US history as well as the international picture, various levels of government could increase their contracting and procurement standards to set labor standards and expand worker power. Davis-Bacon and Related Acts have long set minimum wage and benefit standards for federal contractors and subcontractors in the construction industry. The reach of contracting oversight goes well beyond construction. For example, in fall 2021, the Biden administration finalized Executive Order 14026, which set a minimum wage of \$15/hour that federal contractors must pay their workers.²⁶ Beyond setting minimum wages and benefit levels, governments could demand employer neutrality in organizing campaigns, prohibit mandatory arbitration, limit noncompetition clauses, and generally use their role as purchasers and providers of goods and services to empower workers.

What else do we need to know about alternative forms of worker representation? Here we outline a few areas worthy of further inquiry:

1. **Sectoral bargaining by another name:** Whether it be hospitality workers in Las Vegas or health care workers in Washington State, there currently exist examples in the US of sectoral bargaining frameworks that deliver high wages and robust benefits to workers industrywide (Rolf 2018). How did these frameworks arise? Are they replicable in other locations and industries? What can we learn from in-depth case studies of the key actors involved in their construction?
2. **What’s so alternative about alt-labor?** In an era of diminished union membership, increasing worker power may require strategies to buttress other worker-focused organizations (Rosenfeld 2019). Indeed, today some unions have begun to blur jurisdictional boundaries and seek strategic alliances with alt-labor organizations

(worker advocacy organizations that are not formal labor unions). Worker centers, for example, date back decades, growing from a handful in the early 1990s to more than 200 by 2010 (Fine 2011). These organizations, often rooted in disproportionately immigrant, low-income industries such as fast food and domestic service, provide legal aid to workers and lobby cities and states to end exploitative labor practices. They often engage classes of workers—such as independent contractors—legally barred from joining traditional unions under the existing National Labor Relations Act framework. Many lack dues-paying structures and rely on funding from a mix of foundations and individual donors. But like traditional unions, they seek to increase worker power and upward mobility. What percentage of workers today are engaged with alt-labor organizations? Has that percentage grown substantially? To what degree does alt-labor raise worker power and boost mobility across key industries, especially industries that historically have offered low pay and poor working conditions?

3. **“Laborism” without labor:** A notable characteristic of US politics in recent years has been the popularity of union-backed initiatives, such as Fight for \$15, at the same time that unions themselves struggle to survive (Rosenfeld 2019). How do we understand these victories? How have they increased mobility within and across generations for low-wage workers? What lessons do they carry for the near term in which union membership rates are likely to remain low? And, critically for their long-term durability, how can these political successes redound to union coffers? After all, unions’ financial backing has been instrumental in the movement’s victories (Devaney 2017).

Regardless of the pathway to regeneration, or the particular type of institution that empowers workers, it is worth wrestling with possible trade-offs between the revitalization of worker power and other desired outcomes. Unsurprisingly, research has found that unions in the US are associated with lower profits, as companies’ surplus revenue is redistributed to workers (Kochan and Kimball 2019). Recent reports of record profit levels suggest that for many firms, some redistribution could easily be absorbed. Raising productivity is key to generating economic growth and staying competitive in an increasingly interconnected world. What do we know about the relationship between unions and productivity? Barth, Bryson, and Dale-Olsen (2020) find positive effects of firm-level density on productivity in Norway. The post-World War II period of high density and rising productivity in the US suggests unions need not depress productivity,

and may indeed accelerate it (Kochan and Kimball 2019), although updated research from the US would be helpful in clarifying contemporary relationships (Hirsch 2008).

It is certainly conceivable that too much worker power, whether institutionalized through unions or other institutions, could have disemployment effects as workers bid up wages beyond competitive levels. New state-level analyses from 1976 to 2015 find that higher union density is associated with lower poverty rates, with no negative effect on employment (VanHeuvelen and Brady 2021). The lack of a disemployment effect is somewhat unsurprising given the comparatively low density rates since 1976. But what about in earlier periods? Or other places? More research remains to be done, not only on outcomes such as unemployment, but on the type of unemployment (e.g., short-term versus long-term unemployment or spells eventually leading to upward versus downward mobility). Past evidence reveals that greater centralization of bargaining tempers disemployment effects, as coordinating bodies can adjust demands to match economic conditions (Calmfors and Driffill 1988; Driffill 2006). More recent work suggests that the optimal mix of employment and other important worker outcomes is a combination of bargaining centralization combined with some level of firm-level flexibility to respond to changing economic conditions (OECD 2019, chapter 3). Taken together, these findings suggest that of the reforms discussed, those that increase bargaining centralization will less likely lead to disemployment.

Summary of Research Gaps: Worker Power and Mobility through Voice

As described, there is plenty we still do not know about various programs and policies meant to empower workers in firms and increase their chances of upward mobility. Here we summarize some of the most significant research gaps:

1. **Which pathways to labor revitalization are most promising?** The PRO Act contains many provisions meant to empower workers. But the likelihood of passage appears dim in the near term. Are certain provisions more impactful than others? How can subnational and cross-national variation in labor law inform policymakers and other interested parties about the most effective ways to strengthen unions? Outside of the PRO Act, pilot programs that examine the effectiveness at granting unions oversight over job training would be helpful if such a strategy could deliver tangible benefits for unions, workers, and employers. As with all proposed reforms,

sensitivities to the equity issues involved in efforts to improve labor’s standing must guide analyses of the reforms’ effectiveness.

2. **What do workers want?** Workers desire more voice at work (American Compass 2021; Kochan et al. 2019). But further research is needed to unpack how exactly workers conceive of voice, how existing employers and unions are falling short, and areas in which programs and policies can have the largest impact.
3. **What do employers want?** The lack of employer engagement remains a glaring oversight in the literature of worker voice. What strategies for worker empowerment do employers support? Which ones are likely to generate the most opposition?
4. **Is nonunion worker voice possible?** What can we learn about the rise and spread of alt-labor organizations? What about other efforts to empower low-wage workers and boost mobility in which unions do not benefit directly? Given a likely near future in which large portions of workers will remain outside of traditional collective bargaining structures, what programs or policies are most likely to augment their voice at work?

Conclusions on Organizations and Policies Affecting Worker Power and Mobility through Voice

The discussion above outlines what we know about the causes and consequence of declining employee voice and charts promising solutions from the US and abroad to increase worker power. Revitalizing labor unions—the core set of organizations representing workers’ interests, and the primary means to augment worker power and generate mobility—is an important pathway. Several strategies suggest ways to embolden the labor movement, some requiring a wholesale reimagining of the current labor law regime and others working within the existing legal framework to lower employers’ incentives to fight organizing drives. We review what we know about the effectiveness of worker representation on corporate boards, mandatory extension of collective bargaining agreements, bolstering job training and apprenticeship programs, and greater usage of government contracting stipulations to lift worker pay and protections. Despite the growing body of scholarship, we still need to know more about what workers want and what their employers need to ensure a 21st century economy in which everyone has a voice at work and opportunities to advance economically.

Conclusion

This landscape report provides a conceptual overview of various channels to empower workers and bolster upward mobility. We outline those market forces and policies that influence worker power through exit, including labor market tightness, labor market concentration, monopsony power, and related frictions associated with job mobility that impede workers' ability to climb the economic ladder. We detail the role of workers' wealth, ongoing evidence of discrimination, and other ways that existing labor markets hamper the economic prospects of many workers, especially those toward the bottom of the economic ladder. A growing body of research examines policies meant to alleviate many of these problems. Some of these policies show promise; others have unintended consequences that, if anything, exacerbate economic disparities and disempower workers.

In particular, we demonstrate how minimum wages and health and safety regulations increase job quality by raising the floor, thereby assisting low-wage workers. Preventing employers from accessing criminal history, on the other hand, may end up disproportionately harming workers with low incomes and workers of color, the exact populations the policies are meant to help (Agan and Starr 2018).

We assess the state of knowledge about the key forces affecting worker power and upward mobility through voice. Here we detail explanations for the dramatic decline in organized labor in the US and the consequences for workers' wages and working conditions. Unlike most prior treatments of the issue, we emphasize the role that deunionization has played in stalling mobility for low-wage workers both within and across generations (Freeman et al. 2015; VanHeuvelen and Brady 2021). Recent research finds that high levels of unionization are associated with reduced inequality, lower poverty, and greater intergenerational mobility.

Not only has deunionization exacerbated economic inequality and hampered mobility, it is associated with less political voice for workers without a college education (Rosenfeld 2010) and has increased racial resentment (Frymer and Grumbach 2021). Decades of union decline in the US have reduced the political voice of workers without a college degree while sharpening existing political cleavages along racial and ethnic lines.

Solutions to the labor movement's current woes vary, with some advocates suggesting a wholesale replacement of the nation's labor laws and others suggesting ways to restructure existing laws to empower unions. We document the state of knowledge about these pathways, highlighting in particular how the nation's labor laws that govern labor-management relations currently operate to hamper worker power and labor organizing.

Labor unions are but one avenue, albeit an important one, to increase worker voice and thereby foster upward mobility in firms. We detail other possible pathways, including mandating worker representation on corporate boards, a common feature of other political economies. The research on codetermination points to very modest results (Jäger, Noy, and Schoefer 2021), but other proposals, including a version of the modern awards system in Australia, appear more promising, especially absent a sustained effort to revitalize unions (Dube 2019).

The division between forces affecting worker power through exit and voice is a heuristic meant to clarify ongoing debates and key issues relating to the operation of today's economy. But in actual labor markets, these forces overlap and interact in many ways. Here we highlight three, but we encourage researchers to examine other interconnections in their ongoing and future projects. First, the current regime of antitrust law influences workers' exit and voice options, often to the detriment of their economic well-being. For decades, antitrust cases have focused on product markets, with almost no enforcement in labor markets (Marinescu and Posner 2019). As we point out, growing evidence reveals how concentrated labor markets hinder workers' exit options, leading to lower pay (Prager and Schmitt 2021). Further, noncompetition agreements contribute to lowering worker pay (Starr 2018). Noncompetition agreements have proliferated throughout the occupational spectrum and are now common in many low-paying jobs (Colvin and Shierholz 2019), likely contributing to stalled upward mobility.

The shape and scope of antitrust law also influences worker voice. A lack of outside options reduces workers' power when negotiating for higher pay and improved working conditions at their existing jobs. Reenvisioning our antitrust regime to better address issues of labor market competition could strengthen workers' exit and voice options.

Second, labor market tightness is related to labor's strength inside and outside of firms. Not only do tight labor markets provide workers with better outside job opportunities, they can empower employees inside the workplace. Workers unafraid of

losing a job are more likely to risk a unionization campaign, and employers eager to maintain production are less likely to fight an organizing drive (Western 1993).

Third, the structure of collective bargaining systems influences the broader employment picture. Coordinated structures that grant firms flexibility in wage-setting and employment adjustments are associated with less unemployment than systems in which firms have little leeway to adjust to market pressures. These systems of “organized decentralization” also have lower levels of youth and female unemployment compared to highly coordinated systems or those, such as in the contemporary US, which feature very little coordination (OECD 2019).

Midway through 2022, unemployment is low, with a record number of quits and new hires. Whether the tight labor market lasts remains to be seen. Thus far, workers’ increased power through exit has not translated into voice: although high-profile unionization successes have energized organizers and labor supporters, there is no indication yet of a fundamental turnaround in labor’s fortunes. But we may be at a crucial inflection point, when old ideas and past policies are increasingly cast aside in search of solutions that will change the economy for the 21st century. This landscape report provides researchers, policymakers, and other interested parties with a blueprint to assess these solutions and highlight those that merit further scrutiny so that the American dream remains within reach for all workers.

Notes

- ¹ The social science literature on how to conceptualize power is extensive, with classic treatments from economics (Hirschman 1970), political science (Lukes 1974), and sociology (Weber 1968); see Roscigno (2011) for an updated discussion. Our conceptualization draws from these and other writings, with the goal behind our definition being clarity and flexibility rather than serving as a final word on the topic.
- ² For a classic statement on unions and wages and working conditions, see Freeman and Medoff (1984); for an overview of unions and long-term employee-employer relationships, see Rosenfeld (2021, 257–8).
- ³ For just a few examples of the burgeoning literature on worker power and intersectionality, see Moore and Ghilarducci (2018) and Tapia, Lee, and Filipovitch (2017). For a theoretical treatment aligning intersectionality and industrial relations theory, see Lee and Tapia (2021).
- ⁴ The best evidence suggests the economic effects of codetermination are modest. The effects on noneconomic outcomes, such as worker satisfaction with democratic accountability in the workplace, remain understudied. See Jäger, Noy, and Schoefer (2021) for more.
- ⁵ Tightness aims to compare the supply and demand for labor. Therefore, labor supply can be measured by unemployment or the number of job applications. When we use job applications instead of unemployment, we take into account job search by employed workers and how many applications each worker is sending (Marinescu 2017; Marinescu, Skandalis, and Zhao 2021).
- ⁶ The responsiveness of current versus prospective employees to wages could be different. Current employees might be less sensitive to wages either because they developed a unique relationship with their employer (firm-specific human capital) or because of the costs of changing firms. In practice, current and prospective employees seem to be similarly responsive to wages (Dube et al. 2020).
- ⁷ Although job differentiation allows employers to pay workers less than their productivity, this does not mean that workers would be better off if all jobs were exactly the same (i.e., if there was no differentiation at all). For example, workers would not necessarily be better off if all jobs were exactly in the center of the city, because many workers would have to commute farther.
- ⁸ The name might convey socioeconomic status as well as race. Higher-socioeconomic status Black people are less likely to give their children distinctively Black names (Fryer and Levitt 2004; Gaddis 2017). However, Kline, Rose, and Walters (2021) show that employers are not sensitive to differences in socioeconomic status by name within race, suggesting that employers mostly react to race.
- ⁹ The most relevant evidence on customer discrimination is from Israel. Jewish customers are less likely to use a service firm that employs Arab workers, and they are willing to pay a 46 percent premium to get Jewish workers (Bar and Zussman 2017). Most of the premium is explained by beliefs about safety, with a much smaller role played by beliefs about the quality of the job done by Arab workers. Firms are aware of customer preferences and charge lower prices when employing Arab workers, so customer discrimination likely influences their wages.
- ¹⁰ Note that just because a state has barred noncompetition agreements does not mean that employers eliminate them. In California, for example, nearly half of workplaces maintain a noncompetition agreement of some kind (Colvin and Shierholz 2019).

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- ¹¹ Redbird (2017) finds no positive wage or negative employment outcomes from occupational licensing.
 - ¹² The occupational licensing premium for white women is 12 percent.
 - ¹³ Although salary history bans do seem to work in some cases, further research is needed to confirm their benefits. Indeed, the bans could lower men’s wages without increasing women’s wages, and they could be undone by workers volunteering the information about their salary history (Agan, Cowgill, and Gee 2021). Workers who do not volunteer their salary history may signal that they have low past wages.
 - ¹⁴ The actual rate is likely slightly lower than the official rate due to misclassification of a fraction of nonmembers. See Card (1996) and Western and Rosenfeld (2011) for details.
 - ¹⁵ Chris Wallace interview with Donald J. Trump, *Fox News Sunday*, November 18, 2015.
 - ¹⁶ See Federal Reserve Bank of St. Louis, Economic Research, “Manufacturing Sector: Output for All Employed Persons” (<https://fred.stlouisfed.org/series/OUTMS>).
 - ¹⁷ For goods-producing employment numbers, see Federal Reserve Bank of St. Louis, Economic Research, “Manufacturing Sector: Output for All Employed Persons, “All Employees, Goods-Producing” (<https://fred.stlouisfed.org/series/USGOOD/10>). For total nonfarm employment numbers, see Federal Reserve Bank of St. Louis, Economic Research, “All Employees, Total Nonfarm” (<https://fred.stlouisfed.org/series/PAYEMS>).
 - ¹⁸ For a summary discussion of the trade versus increased productivity debate, see Fort, Pierce, and Schott (2018).
 - ¹⁹ For complete poll results, see Megan Brennan, “Approval of Labor Unions at Highest Point since 1965,” Gallup, September 2, 2021 (<https://news.gallup.com/poll/354455/approval-labor-unions-highest-point-1965.aspx>).
 - ²⁰ The Coronavirus Aid, Relief, and Economic Security Act, passed in early spring 2020, expanded eligibility for unemployment insurance to independent contractors. This provision expired in fall 2021.
 - ²¹ See Bureau of Labor Statistics, Quarterly Census of Employment and Wages (https://data.bls.gov/cew/apps/table_maker/v4/table_maker.htm#type=12&year=2020&size=9&agg=21&supp=0).
 - ²² However, given male overrepresentation in organized labor at the movement’s peak, subsequent decline likely narrowed gender pay gaps, as working-class men lost ground economically. See Rosenfeld, Denice, and Laird (2016, figure A).
 - ²³ See “Would Sectoral Bargaining Provide a Better Framework for American Labor Law?,” a debate between David Rolf and Oren Cass (<https://americancompass.org/discussions/the-wagner-acts-original-sin/>).
 - ²⁴ For more on Canadian unions, see “Union Status by Industry,” Statistics Canada (<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410013201&pickMembers%5B0%5D=2.5&pickMembers%5B1%5D=4.1&cubeTimeFrame.startYear=2016&cubeTimeFrame.endYear=2020&referencePeriods=20160101%2C20200101>).
 - ²⁵ For a comprehensive blueprint about how to institute boards that ensure strong worker input and representation, see Andrias, Madland, and Wall (2019).
 - ²⁶ For the text of the final rule, see “Final Rule: Increasing the Minimum Wage for Federal Contractors (Executive Order 14026)” (<https://www.dol.gov/agencies/whd/government-contracts/eo14026>).

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