

# The enormous impact of eroded collective bargaining on wages

**Report** • By [Lawrence Mishel](#) • April 8, 2021

A major factor depressing wage growth for middle earners and driving the growth of wage inequality over the last four decades has been the erosion of collective bargaining.<sup>1</sup> Indeed, the only factor more responsible for weak wage growth for the typical worker is the excessive unemployment perpetrated by central bank policymakers' high interest rate policies and fiscal austerity.<sup>2</sup> The share of workers covered by a collective bargaining agreement fell from 27.0% in 1979 to just 11.6% in 2019 (Hirsch and Macpherson 2020). The erosion of collective bargaining has been especially harmful to men's wages because men were far more likely than women to be unionized in 1979 (when 31.5% of men were covered by collective bargaining versus 18.8% of women). Thus men had more to lose from the subsequent attack on unions and collective bargaining.<sup>3</sup> Rebuilding collective bargaining is a necessary component of any policy agenda to reestablish robust wage growth for the vast majority of workers in the United States, and broader unionization would lessen racial inequities and benefit women at least as much as men.

Recent research on trends in wages over the last four decades has demonstrated that:

- **For the “typical” or median worker, declining unionization translates to a loss of \$1.56 per hour worked, the equivalent of \$3,250 for a full-time, full-year worker.** The erosion of collective bargaining lowered the median hourly wage by \$1.56, a 7.9% decline (0.2% annually), from 1979 to 2017. Deunionization lowered the male median hourly wage by \$2.49, an 11.6% (0.29% annual) decline, over the 1979–2017 period. These losses from deunionization are the equivalent of annual losses for a full-time, full-year median worker and median male worker, respectively, of \$3,250 and \$5,171. This impact is due to both the direct effect on wages of union workers and the spillover effect on wages of nonunion workers.
- **Declining unionization widened inequality between high-wage earners and middle-wage earners.** Deunionization widened the 90/50 wage gap (the gap between earners at the 90th percentile of the wage distribution and the 50th percentile, measured in logs) by 7.7 points and therefore explains 33.1% of the 23.2 point growth of the wage gap between high- and middle-wage earners over the 1979–2017

period. Deunionization has this result because it depressed the wages of middle-wage earners but had little impact on high-wage earners at the 90th percentile.

- **Unions disproportionately benefit those with low and moderate wages, those with lower levels of education, and nonwhites**, and this has been the case since the birth of the modern labor movement in the New Deal. The erosion of collective bargaining, correspondingly, has therefore increased wage inequality.

## **Collective bargaining increases and equalizes wages for union workers and nonunion workers in unionized occupations and sectors**

Researchers have long demonstrated the connection between being represented by a union and earning higher wages. This advantage, called the “union wage premium,” measures the percent difference between the wages of unionized workers and those of nonunionized workers with the same characteristics. That collective bargaining also leads to more equal wage outcomes was firmly established by Richard Freeman and James Medoff in the late 1970s and popularized in their important 1984 book, *What Do Unions Do?* (Jake Rosenfeld’s 2014 book, *What Unions No Longer Do*, provides an update of the issues). Of primary importance are the ways in which collective bargaining leads to more equal wage outcomes among unionized workers and in unionized industries and occupations.<sup>4</sup> First, unions make wage differences between occupations more equal because they give a larger wage boost to low- and middle-wage occupations than to high-wage occupations. Second, unions make wages of workers with similar characteristics more equal because wages are “standardized” in union settings, meaning that wages are set for particular types of work and do not vary much across people doing the same work, at least not to the same degree as in nonunion settings. Third, unions have historically been more likely to organize middle-wage than high-wage workers, thereby lowering inequality by closing gaps between, say, blue-collar and white-collar workers.<sup>5</sup> Last, where unions are strong the wages of comparable nonunion workers are also increased. The bottom line result of these influences is that being represented by a union or being in a heavily unionized industry or occupation has boosted wages for low-wage workers in these settings the most, and these union wage boosts have been larger at the middle than at the highest wage levels, larger for Black and Hispanic workers than for white workers, and larger for those with lower levels of education. This pattern of wage increases narrows wage inequalities. That unions have disproportionately benefited Black workers and workers with low and moderate wage levels and lower levels of education has been true as far back as the 1940s (Farber et al. 2018). The union impact on inequality is even greater when measured with total compensation (wages plus benefits) than with wages alone (Pierce 1999).

Research from the early 1990s documented that the erosion of collective bargaining was responsible for around a fifth of the rise in wage inequality among men in the 1980s (Card 1991; DiNardo, Fortin, and Lemieux 1996; Freeman 1991) but had a more modest impact among women.

## **Widespread collective bargaining has a ‘spillover’ effect on nonunion wages—it increases and equalizes wages for all workers**

Recent research assessing the impact of unions on nonunion workers’ wages—sometimes referred to as “spillover effects”—finds an even larger impact of deunionization on wage inequality. When the share of workers who are union members is relatively high, as it was in 1979, wages of nonunion workers are higher. For example, had private-sector union density in 2013 remained at its 1979 level, weekly wages of nonunion men in the private sector would have been 5% higher, equivalent to an additional \$2,704 in earnings for year-round workers; among those same workers but without a college education wages would be 8% higher, or \$3,016 more per year (Rosenfeld, Denice, and Laird 2016; Denice and Rosenfeld 2018).<sup>6</sup> Consequently, estimates of the impact of eroded collective bargaining on wage inequality that incorporate union spillover effects find a larger role of the impact of unions on wage inequality than do studies that focus on unionized workers alone. For instance, Western and Rosenfeld (2011, Table 2 and analyzed in Mishel et al. 2012, Table 4.38) find that the weakening of collective bargaining explains a third of the increase in wage inequality among men and a fifth of the rise of wage inequality among women over the 1973–2007 period. This research demonstrates that the erosion of collective bargaining has been the largest single factor driving a wedge between middle- and high-wage male workers, the primary feature of rising wage inequality among men (other than the pulling away of the top 1%).<sup>7</sup>

## **About a third of the growth in the 90/50 wage gap and other key inequality measures can be explained by the decline of unions**

The most recent research on the effect of eroded collective bargaining on wage inequality, conducted by Fortin, Lemieux, and Lloyd (2021) and summarized in **Table 1**, incorporates a spillover effect and reports directly on the impact of eroded collective bargaining on the wage gap between high-wage (90th percentile) and middle-wage (50th percentile) workers by gender.

Table 1

**Role of erosion of unions on wage inequality, 1979–2017**

Inequality measure	Change in measure	Percent of change in measure explained by erosion of unions*
<i>Men</i>		
90/10 wage gap	0.32	27.3%
90/50 wage gap	0.33	37.3%
50/10 wage gap	-0.01	–
Standard deviation (log wages)	0.12	28.8%
Gini coefficient	0.08	36.7%
<i>Women</i>		
90/10 wage gap	0.49	4.3%
90/50 wage gap	0.28	13.0%
50/10 wage gap	0.21	-6.6%
Standard deviation (log wages)	0.16	6.7%
Gini coefficient	0.10	8.8%

\* Direct and spillover effect

**Note:** The wage gaps represent the difference between wages of workers at different percentiles in the wage distribution, where the 50th percentile worker is the median worker.

**Source:** Analysis of Fortin, Lemieux, and Lloyd 2021.

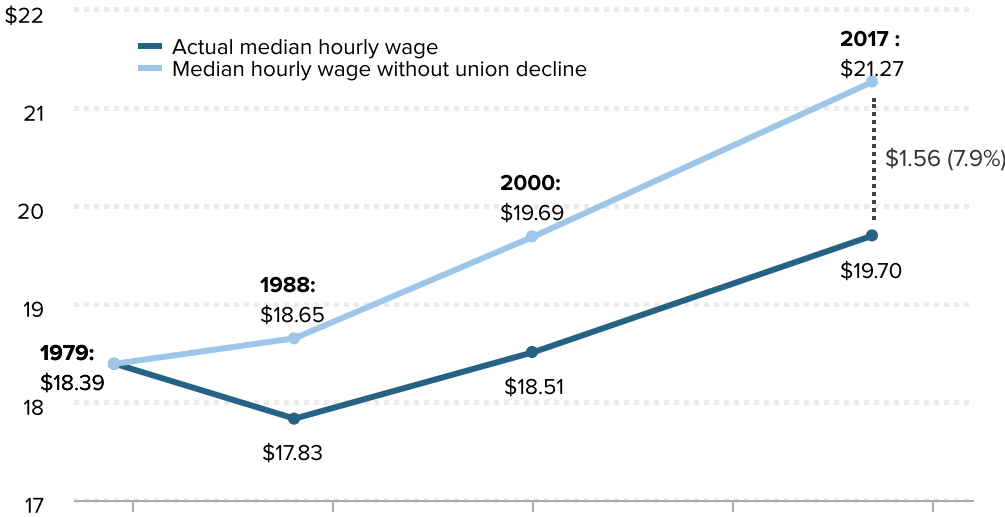
The erosion of unions (column 3) can explain from 28.8% to 36.7% of the growth of male wage inequality as commonly measured, respectively, by the standard deviation of log wages and the Gini coefficient. The most salient finding is that over the 1979–2017 period eroded unionization explains 37.3% of the growth of the 90/50 wage gap for men, which is the only source of growing wage inequality among men in the bottom 90% of earners. The authors found a smaller impact of eroded unions on women’s wage inequality; it explains 6.7% to 8.8% of the growth as measured by the standard deviation of log wages and the Gini coefficient and only 13.0% of the growth of the 90/50 wage gap. As noted earlier, the erosion of unions had a smaller impact on women’s than men’s wages because women were far less unionized in 1979 (which is unlikely to be true moving forward).

We can examine the impact of deunionization on the median and the 90th percentile wage levels for men and women combined from 1979 to 2017 using an (unpublished) analysis by Thomas Lemieux, who relied on the model in Fortin, Lemieux, and Lloyd (2021). Deunionization widened the log 90/50 wage gap (the inequality in the top half of the wage structure) by 7.7 log points from 1979 to 2017. This increase in the size of the gap came about almost entirely by reducing the median hourly wage by 7.6 log points, or, equivalently, by 7.9% (0.2% annually) over the 1979–2017 period. The impact on men alone is much larger, with deunionization lowering the male median wage by 10.9 log points, or 11.6% (0.29% annually). Because we know that the 90/50 wage gap grew 23.2 log points over the 1979–2017 period, we can compute that the 7.7 log point effect of deunionization explains 33.1% of the growth of the 90/50 wage gap.

This impact of eroded collective bargaining lowered the median hourly wage by \$1.56 over the 1979–2017 period (Figure A). Put another way, the median hourly wage was \$19.70 in 2017 but would have been \$21.27 had collective bargaining not declined (all in 2020 dollars). For men, the erosion of collective bargaining lowered the median hourly wage by \$2.49 over the 1979–2017 period. The median male hourly wage was \$21.49 in 2017 but would have been \$23.97 had collective bargaining not declined (all in 2020 dollars; see Figure B). These losses from deunionization are the equivalent of annual losses for a full-time, full-year median worker and comparable male worker, respectively, of \$3,250 and \$5,171.

Figure A

**Median hourly wage, actual and without eroded collective bargaining, 1979–2017 (2020\$)**

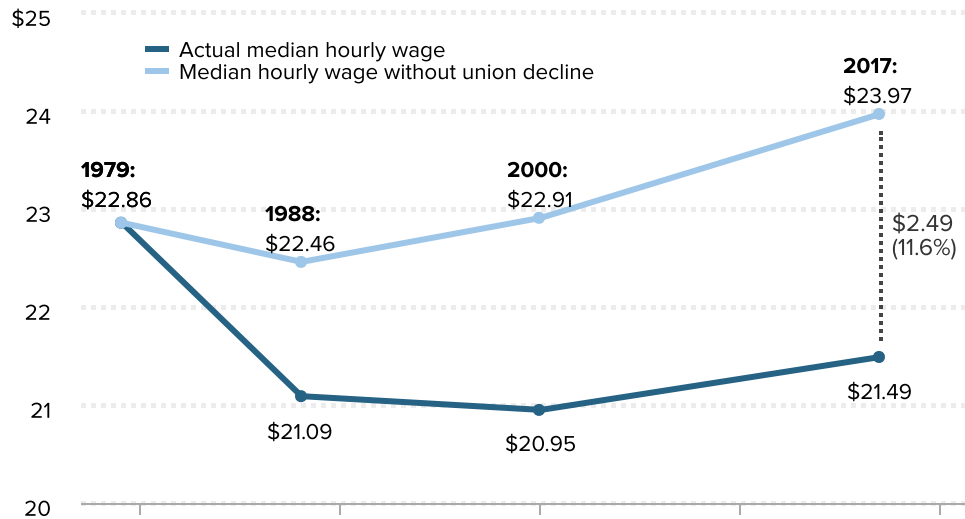


Note: Totals may not sum due to rounding.

Source: Author’s analysis of unpublished tabulations from Thomas Lemieux (2021) using model in Fortin, Lemieux, and Lloyd (2021).

Figure B

### Median hourly wage, actual and without eroded collective bargaining, for men, 1979–2017 (2020\$)



**Note:** Totals may not sum due to rounding.

**Source:** Author's analysis of unpublished tabulations from Thomas Lemieux (2021) using model in Fortin, Lemieux, and Lloyd 2021.

The Fortin, Lemieux, and Lloyd (2021) results are very comparable to those of Stansbury and Summers (2020). In particular, we have benchmarked the Fortin, Lemieux, and Lloyd estimates of the impact of deunionization on the median wage with the estimate of Stansbury and Summers of the impact on the wages of workers without a college degree. Once one aligns the time periods, one finds that the Stansbury and Summers estimate is even larger.<sup>8</sup> The Fortin, Lemieux, and Lloyd results for how much deunionization explains the growth of wage inequality also align with those by Western and Rosenfeld (2011).<sup>9</sup>

## Midcentury unions were a powerful force for greater equality

Newly developed historical data from the early postwar period affirm that collective bargaining was a strong force for greater equality of wages. For instance, Callaway and Collins (2017), using data from a survey of men living in Philadelphia; New Haven, Conn.; Chicago; St. Paul, Minn.; San Francisco; and Los Angeles in 1951, found “the [union] wage premium was larger at the bottom of the income distribution than at the middle or higher, larger for African Americans than for whites, and larger for those with low levels of education,” findings that are “consistent with the view that unions substantially narrowed urban wage inequality at mid-century.” It follows, of course, that the consequent erosion of collective bargaining would increase wage inequality and have the most adverse impact on nonwhite workers, workers with the least education, and low- and moderate-wage workers.

Likewise, Farber et al. (2018, 33), who developed data on union households from Gallup surveys going back to 1936, found that “mid-century unions [were] a powerful force for equalizing the income distribution.” This happened because unions disproportionately represented “disadvantaged” workers (nonwhite or less educated), raised the wages of low- and moderate-wage workers the most, and had a large, stable impact of raising wages for union workers by roughly 15–20 log points over the last 80 years.<sup>10</sup>

## **Worker preferences and automation are not the cause of union decline**

Some pundits and analysts, skeptical about the impact of weaker unions on wages or wage inequality, claim that the decline of unions reflects a decline in worker interest in unions or is due to globalization and automation, i.e., union decline itself is caused by other factors (is endogenous) and therefore should not be considered the cause of wage decline. Neither contention—that workers no longer care for unions or that automation is what led to union decline—is well founded.

Kochan et al. (2018) examined the level of interest in joining a union among unorganized workers and found that the “demand for unions” has risen substantially since the late 1970s. Kochan and Kimball (2019) described these results as

differences in the percentage of non-union workers who indicated a preference for union representation in nationally representative surveys in 1977, 1995, and 2017. Note that the 1977 and 1995 results were nearly identical: approximately one third of the non-union workforce indicated they would vote to have union representation if given an opportunity to do so on their current job. In 2017 that number increased to 48 percent. This number translates into an under-representation of unions of approximately 58 million workers.

These findings indicate that there has continuously been a large unmet demand for collective bargaining over the last four decades.

As for the role of globalization and automation in union decline, Mishel, Rhinehart, and Windham (2020) found that the shrinkage of manufacturing from ongoing automation and globalization indeed contributed to the shrinkage of employment and the loss of union jobs, but the declines in that sector can account for only a small portion of deunionization, perhaps 15–20%. They also note that the share of workers covered by collective bargaining declined strongly across the private sector in industries not heavily affected by globalization, such as construction, transportation, communications, utilities, supermarkets, hotels, and mining. So, any focus solely on manufacturing will not capture the full picture of union decline. Moreover, the erosion of unions in manufacturing is not due only to automation and globalization.

An Organisation for Economic Co-operation and Development (OECD 2019) analysis of the cross-country decline in collective bargaining across advanced nations found that, “Contrary to a commonly held belief, the combined contributions of demographic changes and structural shifts, such as the shrinking of the manufacturing sector, are small and leave most of this declining trend [in collective bargaining] unexplained.”

This conclusion confirmed an earlier finding by Schmitt and Mitukiewicz (2012) that “national politics are a more important determinant of recent trends in unionization than globalization or technological change.”

Then why has collective bargaining eroded? The primary reason was a concerted corporate attack on unions, starting in the 1970s, that exploited weaknesses in our labor laws to suppress the ability of workers to choose collective bargaining and organize (Windham 2017). The scale of union organizing collapsed dramatically in that decade as the share of nonagricultural workers in private-sector National Labor Relations Board elections fell from 1.0% to 1.2% each year in the 1950s and 1960s to just 0.3% each year in the 1980s and to 0.1% each year in the early 2000s (Mishel, Rhinehart, and Windham 2020). As Windham (2017) documents, this collapse of organizing was due to increased employer aggressiveness and use of both legal and illegal tactics, including captive audience meetings (meetings delivering anti-union messages that employees must attend or else be disciplined or fired), threats of shutdowns or relocation, firing of union organizers, use of a rapidly expanded group of anti-union consultants, and process delays.

McNicholas et al. (2019), analyzing union representation elections that took place in 2016–2017 and building on earlier work by Bronfenbrenner (2009), documented the current pervasive lawlessness prevailing in union organizing attempts:

Employers are charged with violating federal law in 41.5% of all union election campaigns. And one out of five union election campaigns involves a charge that a worker was illegally fired for union activity. Employers are charged with making threats, engaging in surveillance activities, or harassing workers in nearly a third of all union election campaigns.

Other developments, enabled by employer aggressiveness and changes in the rules governing collective bargaining, limited collective bargaining power by eroding coverage and weakening unions' ability to strike (Mishel, Rhinehart, and Windham 2020).

## **Conclusion: Widening wage inequality is a policy decision that can be reversed**

Between 1979 and 2017 the growth of productivity (net of depreciation) grew far faster than the inflation-adjusted growth of hourly compensation (wages and benefits) of the typical, or median, worker (Mishel and Bivens 2021). This divergence is the consequence of policy decisions made on behalf of wealthy interests and corporations, and they include acts of omission (failing to raise the minimum wage or improve labor law) and commission (the Federal Reserve targeting inflation goals and raising interest rates in a way that leads to excessive unemployment to restrain wage growth and policymakers pursuing corporate-driven globalization).

In other words, wage growth has been greatly directed by policy decisions and is a political variable. It responds—robustly—to big policy changes. Policymakers can deliver prosperity to the vast majority of U.S. workers based on faster wage growth. Whether workers obtain a fair share of the economy's gains in the future will depend not so much on abstract forces beyond their control but on demanding that their political representatives restore bargaining power to workers, individually and collectively. Legislation that expands collective bargaining by enabling workers to choose union representation and strengthens union rights is critically important to the enterprise of restoring robust wage growth.



## Endnotes

1. This report draws heavily from a longer, forthcoming EPI report, *Identifying the Policy Levers Generating Wage Suppression and Wage Inequality*, written with Josh Bivens. Both reports are part of the Economic Policy Institute's Unequal Bargaining Power project funded by the Nick and Leslie Hanauer Foundation, the William and Flora Hewlett Foundation, and the Bernard and Anne Spitzer Charitable Trust. For this report, I am indebted to Thomas Lemieux, who provided estimates of the impact of deunionization on specific percentiles, such as the median, using the model and data in Fortin, Lemieux, and Lloyd 2021.
2. Time and again, the Federal Reserve has prematurely slowed economic recoveries by raising interest rates in the name of fighting prospective inflation. Policymakers as well have too quickly withdrawn fiscal stimulus early in economic recoveries. As a result, the economy has rarely run "hot" enough (at a low enough unemployment rate) for long enough to make employers compete for workers by raising wages. See the forthcoming EPI report, *Identifying the Policy Levers Generating Wage Suppression and Wage Inequality* (Mishel and Bivens 2021).
3. These data are the share with collective bargaining coverage for "1979," calculated as a pooled average of 1977–1980 shares from the Current Population Survey May CPS data.
4. This discussion draws heavily from Bivens et al. 2017 and McNicholas et al. 2020.
5. Evidence for these effects can be found in Mishel et al. 2012: union impact and coverage by demographic groups (Table 4.33) and by education, occupation, and wage fifth (Table 4.37).
6. These estimates look at what wages would have been in 2013 had union density remained at its 1979 levels.
7. Keep in mind that the wage gap between middle- and low-wage men has not grown over the last four decades.
8. Fortin, Lemieux, and Lloyd (2021) find a 7.6 log point impact of deunionization on the median. This amount includes both direct and spillover impacts. Their estimate of the direct union impact on the 90/50 wage gap is 52.8% of the total union impact. Applying that share to 7.6 points yields a 4.0 log point estimate of a direct union effect on the median wage. Anna Stansbury provided a benchmark for comparisons to the Fortin, Lemieux, and Lloyd results based on her work with Summers (2020): "We estimate for the nonfinancial corporate sector a direct effect of union decline on labor rents for noncollege workers of 2.9 percent of compensation over 1984 to 2016." The Fortin, Lemieux, and Lloyd estimates line up close to, even below, the Stansbury-Summers estimate if one adjusts the Stansbury-Summers results for the longer time period used by Fortin, Lemieux, and Lloyd, 1979–2017. There was a very steep decline in union membership from 1979 to 1984, accounting for 40% of the total decline from 1979 to 2016. If one scales the Stansbury-Summers estimate to the total decline since 1979, their estimated impact would be 4.8% (2.9% times  $(1/60.4\%)$ ), an even larger impact than Fortin, Lemieux, and Lloyd.
9. Western and Rosenfeld find that deunionization's impact (direct and spillover) on wage inequality explained 33.9% of male wage inequality and 20.4% of women's wage inequality. The comparable estimate for Fortin, Lemieux, and Lloyd (2021) is deunionization explaining 28.8% and 6.7%, respectively, of men's and women's wage inequality.
10. Farber et al. (2018, 33) note: "We show that a combination of low-skill composition, compression, and a large union income premium made mid-century unions a powerful force for equalizing the income distribution." Specifically (p. 24): "During our long sample period, the union premium has remained between ten and twenty log points, with the less-educated receiving an especially large premium. Moreover, the negative effect of unions on residual income variance is large and also relatively stable over time. By contrast, selection into unions is not constant across time. In the Great Compression period, when unions were at their peak and inequality at its nadir, disadvantaged households were much more likely to be union members than either before or since."

## References

- Bivens, Josh, Lora Engdahl, Elise Gould, Teresa Kroeger, Celine McNicholas, Lawrence Mishel, Zane Mokhiber, Heidi Shierholz, Marni von Wilpert, Valerie Wilson, and Ben Zipperer. 2017. *How Today's Unions Help Working People: Giving Workers the Power to Improve Their Jobs and Unrig the Economy*. Economic Policy Institute, August 2017.
- Bronfenbrenner, Kate. 2009. *No Holds Barred: The Intensification of Employer Opposition to Organizing*. Economic Policy Institute and the American Rights at Work Education Fund, May 2009.
- Callaway, Brantly, and William J. Collins. 2017. "Unions, Workers, and Wages at the Peak of the American Labor Movement." National Bureau of Economic Research Working Paper 23516. <https://doi.org/10.3386/w23516>.
- Card, David. 1991. "The Effect of Unions on the Distribution of Wages: Redistribution or Relabelling?" National Bureau of Economic Research Working Paper 287. <https://doi.org/10.3386/w4195>.
- Denice, Patrick, and Jake Rosenfeld. 2018. "Unions and Nonunion Pay in the United States, 1977–2015." *Sociological Science* 5: 541–561.
- DiNardo, John, Nicole M. Fortin, and Thomas Lemieux. 1996. "Labor Market Institutions and the Distribution of Wages 1973–1992: A Semiparametric Approach." *Econometrica* 64, no. 5: 1001–1044.
- Farber, Henry S., Daniel Herbst, Ilyana Kuziemko, and Suresh Naidu. 2018. "Unions and Inequality over the Twentieth Century: New Evidence from Survey Data." National Bureau of Economic Research Working Paper 24587. <https://doi.org/10.3386/w24587>.
- Fortin, Nicole M., Thomas Lemieux, and Neil Lloyd. 2021. "Labor Market Institutions and the Distribution of Wages: The Role of Spillover Effects." National Bureau of Economic Research Working Paper 28375.
- Freeman, Richard B. 1991. "How Much Has De-Unionization Contributed to the Rise in Male Wage Inequality?" National Bureau of Economic Research Working Paper 3826. <https://doi.org/10.3386/w3826>.
- Freeman, Richard B., and James I. Medoff. 1984. *What Do Unions Do?* New York: Basic Books.
- Hirsch, Barry T., and David A. Macpherson. 2020. *Union Membership and Coverage Database from the CPS*. unionstats.com, data compiled from the Current Population Survey February 24, 2020.
- Kochan, Thomas A., and William T. Kimball. 2019. "Unions, Worker Voice, and Management Practices: Implications for a High-Productivity, High-Wage Economy." *Russell Sage Foundation Journal of the Social Sciences* 5, no. 5.
- Kochan, Thomas A., William T. Kimball, Duanyi Yang, and Erin L. Kelly. 2018. "Worker Voice in America: Is There a Gap Between What Workers Expect and What They Experience?" *ILR Review* 72, no. 1: 3–38. <https://doi.org/10.1177/0019793918806250>.
- Lemieux, Thomas. 2021. Unpublished Excel files provided by Thomas Lemieux, using the model and data in Fortin, Lemieux, and Lloyd (2021).
- McNicholas, Celine, Margaret Poydock, Julia Wolfe, Ben Zipperer, Gordon Lafer, and Lola Loustaunau. 2019. *Unlawful: U.S. Employers Are Charged with Violating Federal Law in 41.5% of All Union Election Campaigns*. Economic Policy Institute, December 2019.
- McNicholas, Celine, Lynn Rhinehart, Margaret Poydock, Heidi Shierholz, and Daniel Perez. 2020. *Why Unions Are Good for Workers—Especially in a Crisis Like COVID-19*, Economic Policy Institute, August 2020.
- Mishel, Lawrence, and Josh Bivens. 2021. *Identifying the Policy Levers Generating Wage Suppression and Wage Inequality*, Economic Policy Institute's Unequal Power project, forthcoming.

Mishel, Lawrence, Josh Bivens, Elise Gould, and Heidi Shierholz. 2012. *The State of Working America*, 12th Edition. An Economic Policy Institute book. Ithaca, N.Y.: Cornell Univ. Press.

Mishel, Lawrence, Lynn Rhinehart, and Lane Windham. 2020. "Explaining the Erosion of Private-Sector Unions: How Corporate Practices and Legal Changes Have Undercut the Ability of Workers to Organize and Bargain." Economic Policy Institute, November 2020.

Organisation for Economic Co-operation and Development (OECD). 2019. *Negotiating Our Way Up: Collective Bargaining in a Changing World of Work*.

Pierce, Brooks. 1999. "Compensation Inequality." Department of Labor, Bureau of Labor Statistics Working Paper 323.

Rosenfeld, Jake. 2014. *What Unions No Longer Do*. Cambridge, Mass.: Harvard Univ. Press.

Rosenfeld, Jake, Patrick Denice, and Jennifer Laird. 2016. *Union Decline Lowers Wages of Nonunion Workers: The Overlooked Reason Why Wages Are Stuck and Inequality Is Growing*. Economic Policy Institute.

Schmitt, John, and Alexandra Mitukiewicz. 2012. "Politics Matter: Changes in Unionization Rates in Rich Countries, 1960–2010." *Industrial Relations Journal* 43, no. 3: 260–280.

Stansbury, Anna, and Lawrence Summers. 2020. "Declining Worker Power and American Economic Performance." *Brooking Papers on Economic Activity: BPEA Conference Drafts*.

Western, Bruce, and Jake Rosenfeld. 2011. "Unions, Norms, and the Rise in U.S. Wage Inequality." *American Sociological Review* 76, no. 4: 513–537.

Windham, Lane. 2017. *Knocking on Labor's Door: Union Organizing in the 1970s and the Roots of a New Economic Divide*. Chapel Hill: Univ. of North Carolina Press.