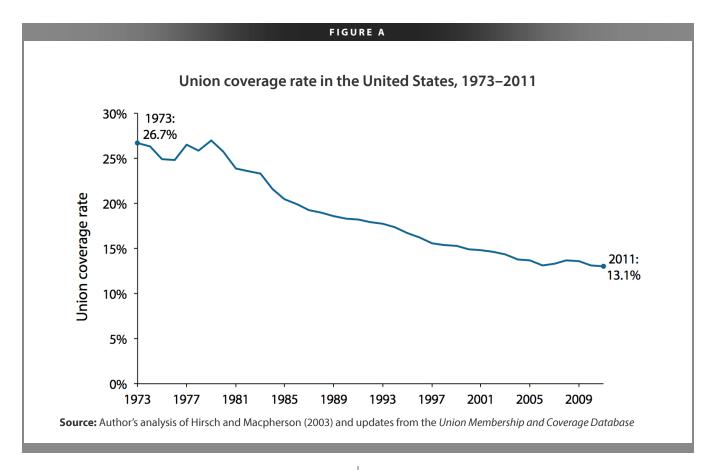# ISSUE BRIEF

UNIONS, INEQUALITY, AND FALTERING MIDDLE-CLASS WAGES

BY LAWRENCE MISHEL

Between 1973 and 2011, the median worker's real hourly compensation (which includes wages and benefits) rose just 10.7 percent. Most of this growth occurred in the late 1990s wage boom, and once the boom subsided by 2002 and 2003, real wages and compensation stagnated for most workers—college graduates and high school graduates alike. This has made the last decade a "lost decade" for wage growth. The last decade has also been characterized by increased wage inequality between workers at the top and those at the middle, and by the continued divergence between overall productivity and the wages or compensation of the typical worker.

A major factor driving these trends has been the ongoing erosion of unionization and the declining bargaining power of unions, along with the weakened ability of uni-ons to set norms or labor standards that raise the wages of comparable nonunion workers. This preview of the forthcoming *The State of Working America, 12th Edition* presents a detailed analysis of the impact of unionization on wages and benefits and on wage inequality. Key findings include:

■ The union wage premium—the percentage-higher wage earned by those covered by a collective bargaining contract—is 13.6 percent overall (17.3 percent for men and 9.1 percent for women).

■ Unionized workers are 28.2 percent more likely to be covered by employer-provided health insurance and 53.9 percent more likely to have employer-provided pensions.

Union coverage rate in the United States, 1973–2011

Source: Author's analysis of Hirsch and Macpherson (2003) and updates from the *Union Membership and Coverage Database*

- From 1973 to 2011, the share of the workforce represented by unions declined from 26.7 percent to 13.1 percent.

- The decline of unions has affected middle-wage men more than any other group and explains about three-fourths of the expanded wage gap between white- and blue-collar men and over a fifth of the expanded wage gap between high school– and college-educated men from 1978 to 2011.

- An expanded analysis that includes the direct and norm-setting impact of unions shows that deunionization can explain about a third of the entire growth of wage inequality among men and around a fifth of the growth among women from 1973 to 2007.

Declining unionization

The percentage of the workforce represented by unions was stable in the 1970s but fell rapidly in the 1980s and continued to fall in the 1990s and the early 2000s, as shown in **Figure A**. This falling rate of unionization has lowered wages, not only because some workers no longer receive the higher union wage but also because there is less pressure on nonunion employers to raise wages; the spillover or threat effect of unionism and the ability of unions to set labor standards have both declined. The possibility that union bargaining power has weakened adds a qualitative shift to the quantitative decline. This erosion of bargaining power is partially related to a harsher economic context for unions because of trade pressures, the shift to services, and ongoing technological change. However, analysts have also pointed to other factors, such as employers' militant stance against unions and changes in the application and administration of labor law, that have helped to weaken unions and their ability to raise wages.

Union wage and benefits premium

Table 1 presents estimates of the union wage premium computed to reflect differences in hourly wages between union and nonunion workers who are otherwise comparable in experience, education, region, industry, occupation, and marital status. The union premium is presented as the extra dollars per hour and the percentage-higher wage earned by those covered by a collective bargaining contract. This methodology yields a union premium of 13.6 percent overall—17.3 percent for men and 9.1 percent for women.

Sizable differences exist in union wage premiums across demographic groups, with blacks and Hispanics having union premiums of 17.3 percent and 23.1 percent, respectively, far higher than the 10.9 percent union premium for whites. Consequently, unions raise the wages of minorities more than of whites (the wage effect of unionism on a group is calculated as the unionism rate times the union premium), helping to close racial/ethnic wage gaps. Hispanic and black men tend to reap the greatest wage advantage from unionism, though minority women have substantially higher union premiums than their white counterparts. Unionized Asians have a wage premium somewhat higher than that of whites.

Unionized immigrant male workers obtain a premium comparable to that of male workers overall, whether they have immigrated relatively recently (within 10 years) or further back in time. Women who have immigrated recently have a higher union premium than women overall, 16.2 percent versus 9.1 percent. Immigrant women who have been in the United States more than 10 years have a union premium comparable to that of women overall.

Table 2 provides information on the union premium for three nonwage dimensions of compensation: health insurance, pensions, and paid time off. The first two columns present the characteristics of compensation in union and nonunion settings. The difference between the union and nonunion compensation packages is presented in two ways, unadjusted (simply the difference between the first two columns) and adjusted (for differences in characteristics other than union status, such as industry, occupation, and establishment size). The last column presents the union premium, the percentage difference between union and nonunion compensation, calculated using the adjusted difference.

These data show that a union premium exists in every dimension of the compensation package. Unionized workers are 28.2 percent more likely to be covered by employer-provided health insurance, and their insurance is better: An 11.1 percent higher share of single-worker coverage is paid by the employer, and for family coverage the employer-paid share is 15.6 percent higher; deductibles are $54, or 18.0 percent, less for union workers; and union workers are 24.4 percent more likely to receive health insurance coverage in their retirement.

Similarly, 71.9 percent of union workers have employer-provided pensions, compared with only 43.8 percent of nonunion workers. When this difference is adjusted for characteristics other than union status, union workers are 53.9 percent more likely to have pension coverage. Union employers spend 36.1 percent more on defined-benefit plans but 17.7 percent less on defined-contribution plans. As defined-benefit plans are preferable, since they provide workers with more financial security, these data indicate that union workers are more likely to have the better form of pension plans.

Union workers also get more paid time off. Their nearly three weeks of vacation amount to about three days (0.63 weeks) more than nonunion workers receive. Including both vacations and holidays, union workers enjoy 14.3 percent more paid time off.

Table 3 provides a more refined analysis of the union wage premium by comparing the employer benefit costs in unionized settings with those in nonunion settings in

TABLE 1

Union wage premium by demographic group, 2011

Demographic group	Percent union*	UNION PREMIUM**	
		Dollars	Percent
Total	13.0%	$1.24	13.6%
Men	13.5	2.21	17.3
Women	12.5	0.67	9.1
White	13.3%	$0.76	10.9%
Men	14.1	1.79	14.9
Women	12.5	0.18	7.0
Black	15.0%	$2.60	17.3%
Men	15.8	3.05	20.3
Women	14.4	2.25	14.8
Hispanic	10.8%	$3.44	23.1%
Men	10.8	4.77	29.3
Women	10.7	2.06	15.7
Asian	11.1%	$1.54	14.7%
Men	9.9	1.53	16.6
Women	12.4	1.61	12.9
New immigrants (less than 10 years)			
Men	5.4%	$0.49	16.0%
Women	7.0	2.74	16.2
Other immigrants (more than 10 years)			
Men	10.4%	$2.13	16.7%
Women	12.7	0.57	8.8

* Union member or covered by a collective bargaining agreement

** Regression-adjusted hourly wage advantage of being in a union, controlling for experience, education, region, industry, occupation, race/ethnicity, and marital status

Source: Author's analysis of Current Population Survey Outgoing Rotation Group microdata

comparable occupations and establishments, i.e., factories or offices. (Data are based on a survey of firms, whereas Table 2 used a survey of workers.) Specifically, the estimated union premium controls for the sector (public or private) in which the establishment is located, the establishment's size, the full-time or part-time status of its employees, and its detailed industry and region. Unionized workers are 18.3 percent more likely to have health insurance, 22.5 percent more likely to have pension coverage, and 3.2 percent more likely to have paid leave.

TABLE 2

Union premiums for health, retirement, and paid leave benefits

Benefit	Union	Nonunion	DIFFERENCE		Union premium
			Unadjusted	Adjusted*	
Health insurance					
Percent covered	83.5%	62.0%	21.5	17.5	28.2%
Employee deductible	$200	$300	-$100	-$54	-18.0%
Employer share					
Single plan	88.3%	81.8%	6.5	9.1	11.1%
Family plan	76.3%	64.9%	11.4	10.1	15.6%
Retiree health coverage	76.6%	59.8%	16.7	14.6	24.4%
Pension					
Percent covered	71.9%	43.8%	28.1	23.6	53.9%
Employer costs (per hour)					
Defined benefit	-	-	-	$0.39	36.1%
Defined contribution	-	-	-	-0.11	-17.7%
Time off					
Vacation weeks	2.98	2.35	0.63	-	26.6%
Paid holiday/vacation (hours)	-	-	-	22.2	14.3%

* Adjusted for establishment size, occupation, industry, and other factors. Adjusted difference is used to calculate premium.

Source: Buchmueller, DiNardo, and Valletta (2001) and Mishel and Walters (2003, Table 4)

Unionized employers pay more for these benefits because the benefits they provide are better than those offered by nonunion employers and because unionized employers are more likely to provide these benefits. For instance, unionized employers pay 77.4 percent more in health insurance costs per hour, 24.7 percent more because of the greater incidence and 52.7 percent because of the better benefit.

This analysis also shows that unionized employers pay 56.0 percent more per hour for pension plans, 28.4 percent from a greater incidence of providing pensions and 27.7 percent from providing better pensions. Similarly, unionized employers have 11.4 percent greater costs for paid leave, mostly because of the more extensive paid leave (the 8.0 percent "better benefit" effect).

Declining unionization and increasing inequality

The effect of the erosion of unionization on the wages of a segment of the workforce depends on the degree to which deunionization has taken place and the degree to which the union wage premium among that segment of the workforce has declined. **Table 4** shows the degree to which unionization and the union wage premium have

Union impact on paid leave, pension, and health benefits

	Paid leave	Pension and retirement	Health insurance
Union impact on benefit incidence	3.2%	22.5%	18.3%
Union impact on benefit cost per hour			
Total impact	11.4%	56.0%	77.4%
Impact of greater incidence	3.4	28.4	24.7
Impact of better benefit	8.0	27.7	52.7

Source: Pierce (1999) and Mishel and Walters (2003, Table 3)

declined by occupation and education level over the 1978–2011 period (1979 data were not available). These data, which are for men only, are used to calculate the effect of weakened unions (less representation and a weaker wage effect) over the period on the wages of particular groups and the effect of deunionization on occupation and education wage differentials. The focus, in particular, is on the role of deunionization on the widening wage differentials between blue-collar and white-collar occupations and between high school and college graduates.

Union representation fell dramatically among blue-collar and high school–educated male workers from 1978 to 2011. Among the high school–graduate workforce, unionization fell from 37.9 percent in 1978 to 14.9 percent in 2011, or by more than half. This decline obviously weakened the effect of unions on the wages of high school–educated workers. Because unionized high school graduates earned about 22 percent more than equivalent nonunion workers in 1978 (a premium estimated for this analysis, but not shown in the table, that declined to 17 percent in 2011), unionization raised the wage of the average male high school graduate (the "union wage effect") by 8.2 percent in 1978. Unions had a 0.9 percent impact on male college graduate wages in 1978, meaning that unions had the net effect of narrowing the

college/high school wage gap by 7.3 percentage points in that year. The decline in union representation (and the lower union wage premium) from 1978 to 2011, however, reduced the union wage effect for male high school–educated workers to just 2.6 percent in 2011 while hardly affecting college graduates. Thus, unions closed the college/high school wage gap by only 2.0 percentage points in 2011. The lessened ability of unions to narrow this wage gap (represented by the drop from a 7.3 percent to a 2.0 percent narrowing effect) contributed 5.1 percentage points to the rise in the college/high school wage differential from 1978 to 2011 (shown in the "Change in union wage effect" portion of the table). This is equal to 21.2 percent of the total rise in this wage gap (shown in the "Deunionization contribution to change in wage differential" portion of the table). In other words, deunionization can explain about a fifth of the growth in the college/high school wage gap among men between 1978 and 2011.

The weakening of unionism had an even larger effect on blue-collar workers and on the wage gap between blue-collar and white-collar workers. The 43.1 percent unionization rate among blue-collar workers in 1978 and their 26.6 percent union wage premium (not shown in the table) boosted average blue-collar wages by 11.5 percent, thereby closing the white-collar/blue-collar wage gap by

TABLE 4

Effect of union decline on male wage differentials, 1978–2011

		1978	1989	2000	2011
Percent of workers in union ("union coverage")					
By occupation	*White collar*	14.7%	12.1%	11.2%	10.3%
	Blue collar	43.1%	28.9%	23.1%	17.8%
	Difference	-28.4	-16.7	-11.9	-7.5
By education	*College*	14.3%	11.9%	13.1%	12.1%
	High school	37.9%	25.5%	20.4%	14.9%
	Difference	-23.6	-13.6	-7.4	-2.9
Union wage effect*					
By occupation	*White collar*	0.2%	0.0%	-0.2%	-0.2%
	Blue collar	11.5%	6.7%	4.3%	3.5%
	Difference (change in differential)	-11.3	-6.8	-4.5	-3.6
By education	*College*	0.9%	0.5%	0.9%	0.6%
	High school	8.2%	5.5%	3.1%	2.6%
	Difference (change in differential)	-7.3	-5.0	-2.3	-2.0

		1978–1989	1989–2000	2000–2011	1978–2011
*Change in wage differential***	*White-collar/blue-collar*	5.0	4.2	0.9	10.1
	College/high school	13.0	8.0	2.8	23.9
Change in union wage effect	*White-collar/blue-collar*	-4.6	-2.3	-0.9	-7.7
	College/high school	-2.3	-2.5	-0.3	-5.1
*Deunionization contribution to change in wage differential****	*White-collar/blue-collar*	-90.5%	-55.2%	-91.8%	-76.1%
	College/high school	-17.8	-30.7	-10.2	-21.2

* Union wage effect is "union wage premium" (estimated with simple human capital model plus industry and occupational controls) times union coverage; negative values in the difference row show how much unionization narrowed the wage gaps.

** Log wage gaps estimated with a simple human capital model

*** Change in union wage effect on wage differential divided by overall change in differential

Source: Author's update of Freeman (1991) using Current Population Survey Outgoing Rotation Group microdata

11.3 percentage points in that year. The union impact on this differential declined as unionization and the union wage premium decreased, such that unionism reduced the white-collar/blue-collar differential by 3.6 rather than 11.3 percentage points in 2011, a 7.7 percentage-point weakening. This lessened effect of unionism can account

TABLE 5

Union wage premium for subgroups

Subgroup	Percent union	Union wage premium*
Occupation		
White collar (1997)	11.6%	2.2%
Blue collar (1997)	20.8	23.3
Education		
College (1997)	10.4%	5.1%
High school (1997)	23.6	20.8
All (1992, 1993, 1996)	n.a.	24.5
High school or less	n.a.	35.5

		ESTIMATED UNION WAGE PREMIUM		
		Study 1	**Study 2**	**Study 3**
Wage distribution				
Bottom fifth	4.9%	17.2%	20.6%	24.2%
Second fifth	8.9	21.8	16.8	34.6
Middle fifth	14.0	20.6	13.7	30.8
Fourth fifth	20.3	15.5	10.7	24.5
Top fifth	19.1	12.4	6.1	6.1
Average effect		19.0%	11.9%	n.a.
Percent bottom 40% to top 40%	35%	140	223	193%

* Percent by which the wages of those covered by collective bargaining agreements exceed wages of comparable nonunion workers

Source: Mishel and Walters (2003, Table 2.3a); Gunderson (2003, Table 5.1 and Appendix C); and premium estimates by fifth from: 1) Gittleman and Pierce (2007), 2) Schmitt (2008), and 3) Card, Lemieux, and Riddle (2002). Union coverage by fifth from Schmitt (2008)

for 76.1 percent of the 10.1 percentage-point growth of the white-collar/blue-collar wage gap between 1978 and 2011; the lessened effect was primarily driven by the enormous decline of unionism among blue-collar men, from 43.1 percent in 1978 to just 17.8 percent in 2011. In that 33-year period unionism among blue-collar work-ers lost much of its ability to set wage patterns and standards. The impact of this decline in unionization is underestimated here because it does not take account of the union impact on nonunion workers' wages.

Unions reduce wage inequalities because they raise wages more at the bottom and in the middle of the wage scale than at the top. Lower-wage, middle-wage, blue-collar, and high school–educated workers are also more likely than high-wage, white-collar, and college-educated workers to be represented by unions. These two factors—the greater union representation and the larger union wage impact for low- and mid-wage workers—are key to unionization's role in reducing wage inequalities.

The larger union wage premium for those with low wages, in lower-paid occupations, and with less education is shown in **Table 5**. For instance, the union wage premium for blue-collar workers in 1997, 23.3 percent, was far larger than the 2.2 percent union wage premium for white-collar workers. Likewise, the 1997 union wage premium for high school graduates, 20.8 percent, was much higher than the 5.1 percent premium for college graduates. The union wage premium for those with a high school degree or less, at 35.5 percent, was significantly greater than the 24.5 percent premium for all workers.

Table 5 presents a comprehensive picture of the impact of unions on wage inequality by drawing on the estimated union wage premiums for the different fifths of the wage distribution. The table presents the results of three different studies, and each demonstrates that the union premium is higher among lower-wage workers than among the highest-wage workers. This is illustrated in the last row, which shows the premium of the bottom two-fifths of earners as a percent of the premium of the top two-fifths; the results range from 140 percent to 223 percent. These numbers illustrate that unions generate a less unequal distribution of wages in the unionized sector by raising the wages of low- and middle-wage workers more than those of higher-wage workers. That is, lower-wage workers benefit more than higher-wage workers from coverage by a collective bargaining agreement. The countervailing factor, however, is that unionization rates are lower for low-wage workers than other workers.

Union norms and labor standards

There are several ways that unionization's impact on wages goes beyond the workers covered by collective bargaining agreements and extends to nonunion wages and labor practices. For example, in industries, occupations, and regions in which a strong core of workplaces are unionized, nonunion employers will frequently meet union standards or at least improve their compensation and labor practices beyond what they would have provided in the absence of a union presence. This dynamic—the degree to which nonunion workers are paid more because their employers are trying to forestall unionization—is sometimes called the union threat effect.

A more general mechanism (without any specific "threat") through which unions affect nonunion pay and practices is the institution of norms and practices that have become more widespread throughout the economy, thereby improving pay and working conditions for the entire workforce. These norms and practices have particularly benefited the roughly 70 percent of workers who are not college educated. Many fringe benefits, such as pensions and health insurance, were first provided in the union sector and then became more commonplace. Union grievance procedures, which provide due process in the workplace, have been adapted to many nonunion workplaces. Union wage setting, which has gained exposure through media coverage, has frequently established standards for what workers expect from their employers. Until the mid-1980s, in fact, many sectors of the economy followed the patterns set in collective bargaining agreements. As unions have weakened, especially in the manufacturing sector, their ability to set broader patterns has diminished. However, unions remain a source of innovation in work practices (e.g., training and worker participation) and in benefits (e.g., child care, work-time flexibility, and sick leave).

A new study has focused attention on the impact on wages and wage inequality of declining unionization of industries in particular regions. **Table 6** presents the res-

TABLE 6

Impact of deunionization on wage inequality, 1973–2007

	CHANGE IN WAGE INEQUALITY		
	Between-group	Within-group	Total growth
A. Male wage inequality trends*			
Change in wage inequality	0.055	0.046	0.102
Direct deunionization effect	0.002	0.018	0.021
Union impact on nonunion wages and standards	-0.017	0.031	0.014
Share of inequality growth explained**			
Direct deunionization effect	3.2%	40.3%	20.2%
Union impact on nonunion wages and standards	-30.1	66.0	13.7
Total union effect	-26.9	106.3	33.9
B. Female wage inequality trends*			
Change in wage inequality	0.051	0.047	0.098
Direct deunionization effect	-0.003	0.004	0.001
Union impact on nonunion wages and standards	0.036	0.024	0.019
Share of inequality growth explained**			
Direct deunionization effect	-5.2%	9.2%	1.7%
Union impact on nonunion wages and standards	-10.9	50.6	18.7
Total union effect	-16.1	59.8	20.4

* Percentage-point change in variance of log wages

** From original source, which used nonrounded data

Source: Author's analysis of Western and Rosenfeld (2011, Table 2)

ults of this study, which examined the direct impact of lower unionization, and also the impact of falling unionization, in industries within particular regions (using 18 industries and four regions) on the wages of similarly located nonunion workers. It assesses the impact of these factors on both between-group wage inequality (the wage difference between workers with different characteristics, such as education levels and experience) and within-group wage inequality (inequality of wages among workers with similar education and experience, for instance). Among men, wage inequality (measured by the variance of log wages) grew 0.102 between 1973 and 2007, 0.055 from higher between-group wage inequality and 0.046 from higher within-group wage inequality. The biggest impact of direct deunionization was on within-group inequality because of the increasing inequality among nonunion

workers (as unions declined, similar workers started having more dissimilar wages). The direct impact of declining unionization accounted for 20.2 percent of the growth of overall male wage inequality, and the impact of declining unionization within particular industry/region groups (i.e., the weakening union impact on nonunion wages and standards) explained another 13.7 percent of the growth of overall male wage inequality. Overall, deunionization can explain about a third (33.9 percent) of the growth of male wage inequality from 1973 to 2007.

Among women the decline in unions had little direct impact on within-group inequality (9.2 percent), but the diminished ability of unions to set labor standards (as women experienced the decline in industry/region unionization) had a large impact, explaining more than half the rise of within-group wage inequality. Altogether, deunionization generated about a fifth (20.4 percent) of the growth of overall wage inequality among women.

The decline of union coverage and influence adversely affects men more than women and middle-wage men more than lower-wage men. Consequently, deunionization has its greatest impact among men on the growth of the wage gap between workers at the 90th percentile of wages and the 50th percentile—the 90/50 wage gap. In this light, it is not surprising that the period of rapid decline of union coverage from 1979 to 1984 (during a deep recession, and at a time when the manufacturing sector was battered by the trade deficit) was also one in which the male 90/50 wage gap grew the most. Recall from Table 4 that male blue-collar unionization fell from 43.1 percent in 1978 to just 28.9 percent in 1989, a drop that contributed to the rapid growth of male wage inequality in the 1980s. The decline of unionization in the 1990s and 2000s put continued downward pressure on middle-wage men and contributed to the continued growth of the 90/50 wage gap between high- and middle-wage men. The erosion of unions, however, has also affected nonunion wages, and the consequence has been a sizable increase in wage inequality among women as well as men.

Conclusion

The last decade has produced no improvement in real wages of a broad range of workers, including those with either a high school or college degree. It has also produced a widening divergence between overall productivity and the wages or compensation of the typical worker. In addition, wage inequality has continued to grow between those at the top and those in the middle.

Declining unionization has played a key role in these trends. Today, about 13 percent of workers are in unions—roughly half the share of the early 1970s. This reduction has limited the number of jobs with union wage and benefit premiums; weakened workers' power to bargain for higher wages, more comprehensive benefits, and better working conditions; and limited the "spillover effect" wherein non-unionized firms raise wages and benefits to compete with unionized firms for workers. Together with other laissez-faire policies such as globalization, deregulation, and lower labor standards such as a weaker minimum wage, deunionization has strengthened the hands of employers and undercut the ability of low- and middle-wage workers to have good jobs and economic security.

If we want the fruits of economic growth to benefit the vast majority, we will have to adopt a different set of guideposts for setting economic policy, as the ones in place over the last several decades have served those with the most income, wealth, and political power. Given unions' important role in setting standards for both union and nonunion workers, we must ensure that every worker has access to collective bargaining.

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