



THE UNION ADVANTAGE

**How Oregon Unions Raise Wages,
Improve Benefits, and Contribute to
the State Economy**

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Mark Brenner and Lina Stepick
University of Oregon
Labor Education and Research Center

Executive Summary

This report from the University of Oregon Labor Education and Research Center provides the first empirical assessment of the impact of unions on living standards for workers in Oregon.

- Both national and state-level data show that unions raise wages, improve health and pension benefits, reduce overall income inequality, and significantly decrease racial and gender inequalities. Unions also make it much less likely that workers will need to rely on public benefits such as food stamps or welfare.
- Statistical analysis reveals that, all other things being equal, Oregon workers covered by a union contract earn 11% more than non-union workers, are 17.5% more likely to get health insurance through their job, and are 41% more likely to have an employer-provided retirement plan.
- Being covered by a union contract adds an average of \$4,701 per year to each worker's annual income. Overall, unions increased the income of working Oregonians by a total of \$1.4 billion in 2017.

National research has consistently shown that unions have a strong, positive impact on workers' wages and benefits. For the first time, this report examines this same question specifically for Oregon workers. Key findings from our analysis of Current Population Survey (CPS) data show that:

Impact on wages

- Oregon workers covered by a union contract earn 15.2% more, on average, than non-union workers.
- The impact of unions on wages is even stronger for women and workers of color:
 - ❑ Women working under a union contract earn an average of 23.4% more than women who don't have a union.
 - ❑ Average wages are 15.9% higher for workers of color covered by a union contract compared to workers of color in non-union workplaces.
- As a result, unionization reduces inequality between men and women and between workers of color and white workers:
 - ❑ The gap between average pay for men and women is 18.7% in non-union workplaces, but only 5.3% in unionized workplaces.
 - ❑ The gap between white workers and workers of color is 26.1% in non-unionized workplaces, but 23.1% in unionized workplaces.

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- Using statistical analysis to control for factors such as education, industry, and location, we estimate that, all other things being equal, Oregon workers with a union contract earn 11% more, on average, than workers without a union.
 - We estimate that having a union contract adds an average of \$4,701 per year to each worker's annual income.
 - Overall, unions increased the earnings of Oregon workers by \$1.4 billion dollars in 2017.

Impact on health and pension benefits

- Unions also significantly improve workers' health and pension benefits. Oregon workers with union contracts are 17.5% more likely to have employer-provided health benefits, all else equal, than non-union workers. Statewide, unions have increased the number of Oregonians with employer-provided health insurance by more than 30,000.
- Union workers in Oregon are also 41% more likely to have employer-provided pensions than their non-union counterparts, all else equal. In total, unions have boosted the number of Oregonians with employer-provided retirement plans by over 70,000.

Impact on poverty and on use of public assistance

- Having a union contract lowers the likelihood of Oregonians being low income by 33.8%, all other things being equal. Having a union contract also makes Oregon workers much less likely to need public assistance. Union families in Oregon are 35.3% less likely to rely on public safety net programs like the Earned Income Tax Credit or the Women, Infants, and Children program than non-union families, and union families are 14.4% less likely to rely on Medicaid or the Children's Health Insurance Program than non-union families, all else being equal.

| Introduction

Prior research has demonstrated that unions raise wages, reduce overall wage inequality, and increase the likelihood that employers will provide benefits such as health insurance and pensions. However, much of the existing research has been national in scope, with far less analysis conducted at the state or local level.

In this study we examine the various ways that unions affect the living standards of Oregon workers, as well as the overall impact unions have on the state's economy, building on the work of Sarah Thomason, Ken Jacobs, and Annette Bernhardt at the University of California.¹

Examining data from the Current Population Survey for 2011 to 2017, we provide detailed estimates of the impact unions have on the wages and benefits of Oregon workers. We also analyze the impact Oregon unions have on low-income status, and the likelihood that Oregon families make use of social safety net programs like EITC and WIC, or rely on Medicaid or the Children's Health Insurance Program.

Our findings for workers in Oregon confirm previous research demonstrating that unions and collective bargaining benefit workers by raising living standards, reducing inequality, and reducing reliance on public safety net programs.



Photo courtesy of Oregon AFL-CIO

What do Unions do?

Prior research consistently demonstrates that unions increase wages for both union and non-union workers, directly through collective bargaining and indirectly by establishing industry and occupational standards. Research also shows that unions reduce overall income inequality, as well as reducing inequality between workers of color and white workers, and between women and men.²

The positive impact of union coverage is largest for lower wage workers. Unions produce larger wage gains for low-wage occupations compared to higher paying occupations.³

Unions also substantially reduce wage inequality between workers of color and white workers, as well as between men and women. Indeed, recent research finds that declining unionization increased the black-white wage gap by as much as 30 percent.⁴ Latina workers experience the largest relative wage gains from working in a unionized workplace, though women of all races and ethnicities have higher wages in union jobs as compared to working in a non-union workplace.⁵

Research also shows that unions have substantially reduced overall income inequality in the U.S. Declining union density explains 20 percent of the growth in income inequality for female workers and 30 percent of the growth in income inequality for male workers in recent years.⁶ These national trends are also reflected in rising regional inequality. For example, one recent study found that median hourly compensation grew by 23.1 percent in states where union density eroded the least in recent years, compared to just 5.2 percent in the states where union density eroded the most.⁷

The advantages of working under a union contract extend far beyond wages. Union workers are more likely to have employer-provided health insurance as well as paid time off, and their employers pay for a much bigger share of health insurance. Union workers are also more likely to have a defined benefit pension provided by their employer, and union workers have much higher participation rates in employer-provided retirement plans. Union workers are also more likely to have advance notice of their schedules and input into their hours.⁸

Better wages and benefits, and input into hours and scheduling, reduce the likelihood that union families will need to access social safety net programs. By setting industry-wide wage and benefit standards, unions also create spillover effects that benefit non-union workers as well.⁹

Unions also give workers a voice on the job, which has been shown to improve workplace safety. Unionized workplaces have fewer OSHA violations and lower injury and fatality rates. While the health and safety benefits of unionization are particularly significant in hazardous industries, union workers have greater protections on the job more generally, which has been linked to more accurate reporting of safety violations, injuries, and near injuries.¹⁰

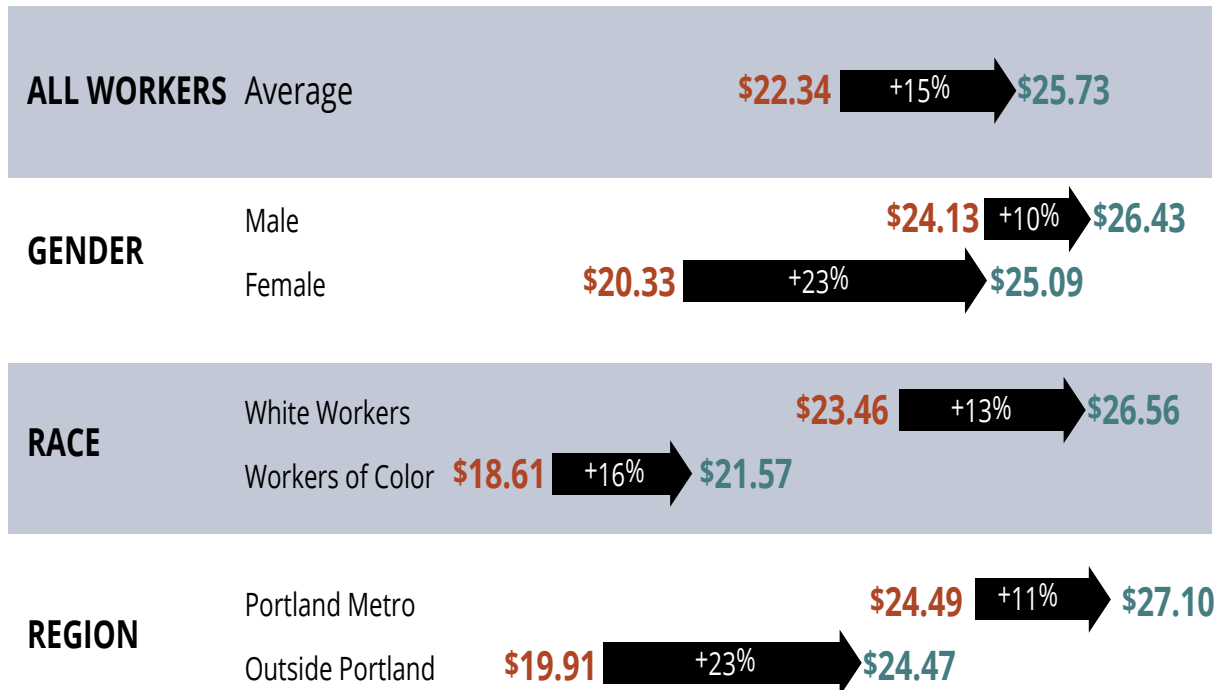
Analysis and Findings

The Impact of Oregon Unions on Wages and Annual Earnings

Examining the specific impact in Oregon, we find that unions exert a powerful effect on wages, as illustrated in Figure 1. Overall, Oregon workers covered by a union contract earn 15.2 percent more than non-union workers, on average, and the impact is even stronger for women and workers of color. The detailed data are also presented in Table 1.

In Oregon, women working under a union contract earn an average of 23.4 percent more than women who work in non-union workplaces. Unions also significantly reduce the wage gap between men and women. Women working in a unionized workplace earn, on average, 5.3 percent less than men working in union workplaces, while women working in a non-union workplace earn 18.7 percent less than men in non-union workplaces.

Figure 1: Average Hourly Wages (2017 Dollars), Union and Non-Union



Source: Authors' analysis of the 2011-2017 Merged Current Population Survey, Outgoing Rotation Groups

■ non-union ■ difference ■ union

**Table 1: Average Hourly Wages, Union and Non-Union
(2017 Dollars)**

	Union	Non-Union	% Difference
All workers	\$25.73	\$22.34	15.2%
Sex			
Male	\$26.43	\$24.13	9.5%
Female	\$25.09	\$20.33	23.4%
Race			
White Workers	\$26.56	\$23.46	13.2%
Workers of Color	\$21.57	\$18.61	15.9%
Region			
Portland Metro	\$27.10	\$24.49	10.7%
Rest of Oregon	\$24.47	\$19.91	22.9%

Source: Authors' analysis of the 2011-2017 Current Population Survey Merged Outgoing Rotation Groups

Wages are 15.9 percent higher, on average, for workers of color covered by a union contract compared to workers of color in non-union workplaces. While unions also reduce the wage gap between white workers and workers of color, the impact is not as large as it is for women workers. Workers of color working in a non-union workplace earn 26.1 percent less, on average, than white workers in non-union workplaces, while the gap is 23.1 percent for workers in unionized workplaces.

As we discuss in more detail in the Appendix, the wage differences between union and non-union workers, as well as between women and men and between workers of color and white workers, are also due to other factors, such as differences in experience, educational attainment, and the industry in which they work. Using regression analysis to control for these demographic and industrial characteristics, we estimate that workers in a unionized workplace earn 11 percent more, on average, than similarly situated non-union workers (see Table 3).

Table 2 illustrates the cumulative impact of Oregon unions. In 2017, there were close to 300,000 union members in the state. Based on our regression analysis, we estimate that working under a union contract adds an average of \$4,701 per year to each worker's annual income. This means that, cumulatively, unions increased the earnings of Oregon workers by approximately \$1.4 billion dollars in 2017.

Table 2 - Union Impact on Earnings in Oregon, 2017

Total Average Employment	1,883,407
Workers Covered by Union Contract	295,695
Average Additional Annual Earnings per Worker as a Result of Union Coverage	\$4,701
Total Additional Earnings as a Result of Union Coverage	\$1,390,208,231

Source: Quarterly Census of Employment and Wages and authors' analysis of 2011-2017 Merged Current Population Survey, Outgoing Rotation Groups.



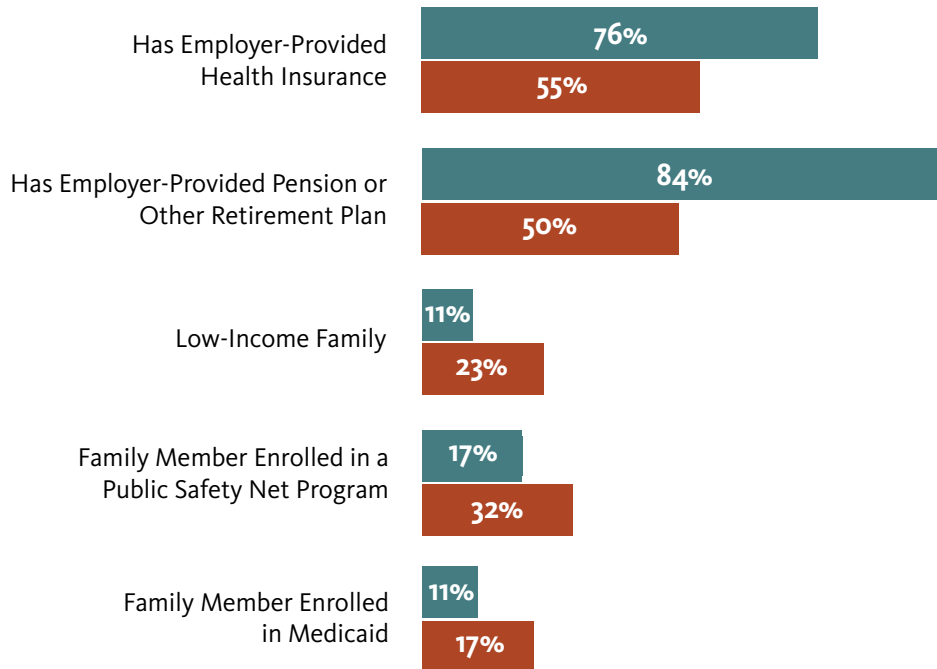
Photo courtesy of Oregon AFL-CIO

Of course, the union impact on earnings in Oregon is even greater, since research has demonstrated an important spillover effect, where unions also increase wages for non-union workers, most notably when unions establish industry-wide standards for both wages and benefits.¹¹ Unions have also been shown to improve enforcement of basic legal rights on the job, from overtime pay, to wage and hour regulations, to employee misclassification.¹²

The Impact of Oregon Unions on Benefits

Workers covered by a union contract are also much more likely to have employer-provided benefits. As seen in Figure 2, 75.7 percent of union workers have health insurance provided by their employer, as compared to 55.1 percent of non-union workers. When we use our regression analysis to control for demographic and industry characteristics, we estimate that workers in a unionized workplace are 17.5 percent more likely to have employer-provided health benefits, on average, than similarly situated non-union workers (see Table 3).

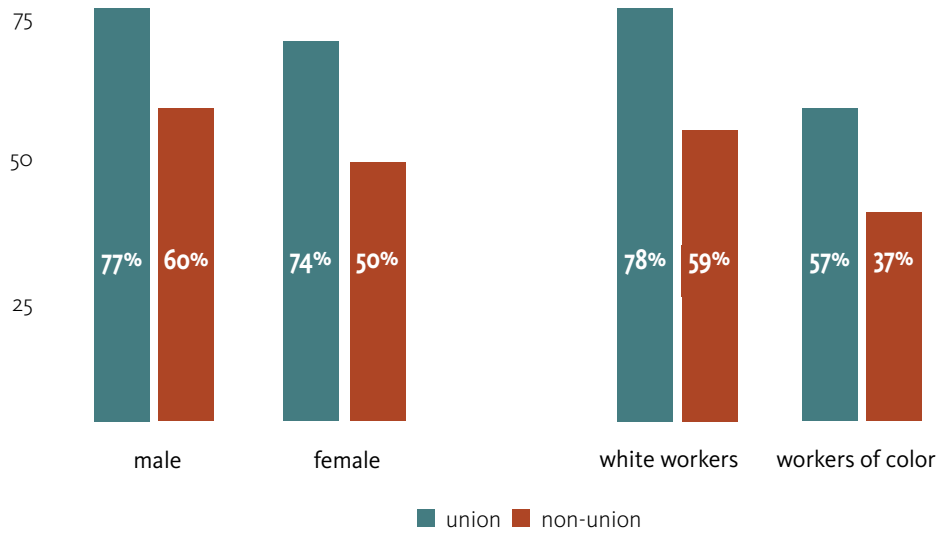
Figure 2: **Employer Provided Benefits, Low-Income Status, Public Safety Net Program Utilization, by Union Status**



Source: Authors' analysis of 2011-2017 Merged Current Population Survey, Annual Social and Economic Supplement

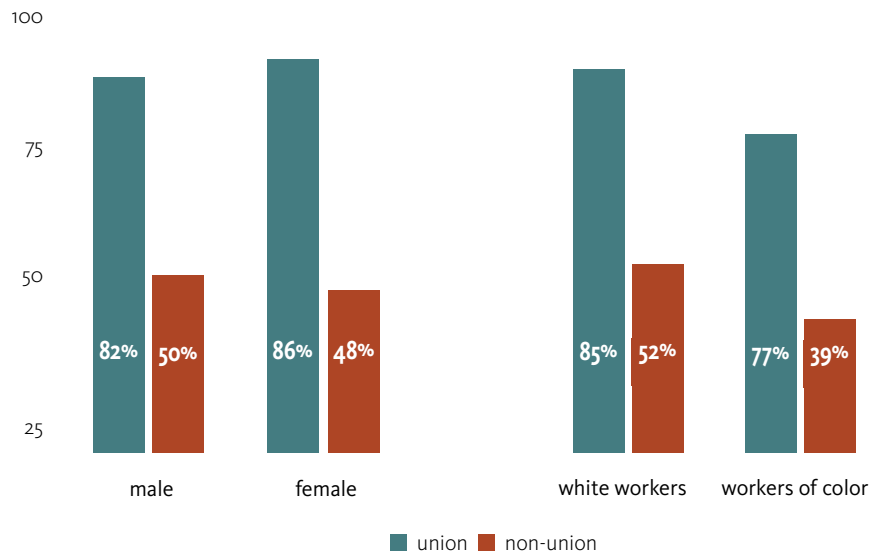
■ union ■ non-union

Figure 3: **Employer-Provided Health Insurance, by Race, Gender, and Union Status**



Source: Authors' analysis of 2011-2017 Merged Current Population Survey, Annual Social and Economic Supplement

Figure 4: **Employer-Provided Pension or Other Retirement Plan by Race, Gender and Union Status**



Source: Authors' analysis of 2011-2017 Merged Current Population Survey, Annual Social and Economic Supplement

As we see in Figure 3, the impact is even stronger for women and workers of color. We estimate that 74.1 percent of women covered by a union contract have employer-provided health insurance, compared with 50.1 percent of women working in a non-union workplace. And for workers of color, the differences are even sharper. We calculate that 57.4 percent of workers of color working in a unionized workplace have employer-provided health insurance, compared with 37 percent of non-union workers of color.

By our calculation, a total of 33,414 more workers have employer-provided health insurance as a result of Oregon unions (See Appendix for details on our estimation methods).

The differences are even greater for defined benefit pensions and other retirement programs, where 84.2 percent of union workers have access to such programs through their employer, compared to 49.5 percent of non-union workers. Controlling for individual and industry characteristics, workers covered by a union contract are 41 percent more likely to have employer-provided defined benefit pensions, along with other employer-provided retirement programs, than their non-union counterparts (see Table 3).



Photo courtesy of Oregon AFL-CIO

Table 3: Regression-Adjusted Union Effects

Wages (Percent change)	
Hourly Wage*	11.0%
Benefits (Percent change in likelihood)	
Has Employer-Provided Health Insurance**	17.5%
Has Employer-Provided Pension or Other Retirement Plan**	41.0%
Public Safety Net Programs (Percent change in likelihood)	
Family Member Enrolled in a Public Safety Net Program**	-35.3%
Family Member Enrolled in Medicaid**	-14.4%
Low-Income Status (Percent Change in Likelihood)	
Low-Income Family**	-33.8%

* Authors' analysis of 2011-2017 Merged Current Population Survey, Outgoing Rotation Groups.

** Authors' analysis of 2011-2017 Merged Current Population Survey, Annual Social and Economic Supplement. See Appendix for details on regression estimation methods.

When it comes to pensions, Figure 4 demonstrates that the benefits of working under a union contract are even stronger for women and workers of color. We estimate that 85.9 percent of women working in a union environment have access to a pension or other retirement plan, compared with 48.6 percent of women working non-union. For workers of color, 76.6 percent working under a union contract have access to a pension, compared to 38.7 percent who work in a non-union workplace.

In total, our calculations indicate that 72,445 more Oregon workers have pensions or other retirement programs as a result of union contracts in the state (See Appendix for details on our estimation methods).

These retirement benefits are even more significant, given that they are most likely traditional pensions. While the CPS data do not distinguish between a traditional defined benefit pension and other retirement programs, such as 401(k)-style defined contribution plans, we know from the National Compensation Survey that 80 percent of union workers have access to such defined benefit plans, compared to only 14 percent of non-union workers.¹³

Not only are defined benefit pensions advantageous to workers, providing a lifelong guaranteed income throughout their retirement, research has shown that a 401(k) typically yields less than half as much as a traditional pension.¹⁴ This is in part due to the fact that the average 401(k) participant between the ages of 55 and 64 only had \$135,000 in their plan.¹⁵ Moreover, as the 2008 financial crisis painfully illustrated, another problem associated with 401(k)-style defined contribution plans is that individual workers bear all the investment risk associated with the retirement plan.

The Impact of Oregon Unions on Social Safety Net Utilization and Low-Income Status

Next, we examine how unions impact the likelihood that a worker's family income is less than 200 percent of the federal poverty line, as well as the impact of union coverage on the use of social safety net programs, including the Earned Income Tax Credit (EITC), the Supplemental Nutrition Assistance Program (SNAP), the National School Lunch Program (NSLP), and the Low-Income Energy Assistance Program (LIHEAP). We also estimate the impact of union coverage on accessing the Children's Health Insurance Program (CHIP), and Medicaid. (See the Appendix for the full list of social safety programs we examined and details of our estimation methods).

As Figure 2 illustrates, working in a unionized setting dramatically lowers the likelihood that a worker's family income falls below 200 percent of the federal poverty line. We estimate that only 10.6 percent of union members are low income, compared to 22.5 percent of non-union workers. Controlling for individual and industry characteristics, we estimate that working under a union contract lowers the likelihood of being low income by 33.8 percent, which we report in Table 3.

What we can see from Figure 2 is that working under a union contract also dramatically lowers the likelihood that a family member will participate in any social safety net programs. We estimate that only 17.4 percent of union workers have a family member utilizing a social safety net program, compared to 32 percent of non-union workers. As the results in Table 3 illustrate, controlling for individual and industry characteristics, working in a unionized workplace lowers the likelihood of a family member utilizing any social safety net program by 35.3 percent.

We also find that working in a unionized workplace lowers the likelihood that a family member will participate in the Children's Health Insurance Program (CHIP) or Medicaid. As seen in Figure 2, only 10.7 percent of union workers have a family member utilizing either of these programs, compared to 17.1 percent of non-union workers. And, as the figures in Table 3 illustrate, once we control for individual and industry characteristics, working in a unionized workplace lowers the likelihood that a family member will utilize either of these programs by 14.4 percent.

| Conclusion

Research has consistently demonstrated the positive effect unions have on workers' wages, benefits, and working conditions. This study details the important impact unions have had on Oregon workers and the state economy more broadly. We find that, on average, unions raise wages and reduce both gender and racial wage inequality. Controlling for a variety of individual and industry characteristics, unions also substantially increase the likelihood that employers provide health insurance and retirement benefits such as pensions.

Oregon unions also have a significant impact on the state economy, providing an additional \$1.4 billion in wages for Oregon workers. Unions also reduce poverty and reliance on social safety net programs.

Considering the positive impact unions have on Oregon living standards and the overall state economy, our findings suggest that removing barriers to unionization and collective bargaining is sound public policy and will benefit the Oregon economy. These findings also indicate that current efforts to strengthen labor standards enforcement will benefit all workers, union and non-union alike. Indeed, bringing union-style protections, and giving a voice to non-union workers, can help reduce the prevalence of wage theft or other wage and hour violations. We know from prior research, for example, that union workers are half as likely to experience minimum wage violations as non-union workers.¹⁶ Early experiments in co-enforcement from New York to Seattle are promising models that Oregon can follow.

Appendix

This report builds on the work of Sarah Thomason, Ken Jacobs, and Annette Bernhardt at the UC Berkeley Center for Labor Research and Education (Jacobs and Thomason 2018; Thomason and Bernhardt 2018). We thank them for their guidance on this project and for sharing details on their methodology.

We utilize data from the Current Population Survey (CPS), a monthly survey of 60,000 households conducted by the U.S. Census Bureau for the Bureau of Labor Statistics. The CPS provides a wide range of information about labor force conditions and is used to estimate national unemployment statistics.

Specifically, we merge data from the CPS Outgoing Rotation Group, which provides additional data on wages, hours, and union status for a quarter of the total sample. We also analyze data from the Annual Social and Economic Supplement (ASEC), a supplemental survey conducted in March of each year, which provides additional details on annual household income, poverty status, and the utilization of various social safety net programs. We downloaded the merged Outgoing Rotation Group data from the National Bureau of Economic Research, and the ASEC data from the Integrated Public Use Microdata Series (IPUMS) at the University of Minnesota.

We pool data from 2011 to 2017 in order to ensure a sample size large enough for statistical analysis. We restrict our sample to wage and salary workers ages 18-64 who live in the state of Oregon, and we adjust wages and family incomes for inflation using the Consumer Price Index for wage and salary workers in the Portland-Salem region. We also exclude observations with imputed wages.

We estimate the impact of unions by examining the wages, hours, and benefits of workers who are members of a union or covered by a union contract, *vis-a-vis* those who are not. In our sample, approximately 16.5 percent of workers are union members or covered by a union contract.

To calculate the impact of unions on the earnings of Oregon workers, we regress the natural logarithm of wages against union status and a number of other control variables, including age, age squared, educational attainment, marital status, race/ethnicity, sex, nativity, industry, year, management status, and a binary region variable controlling for whether workers live in the Portland Metro area or not. All our estimates use ordinary least-squares regression.

Appendix Table 1: Sample Distribution and Percentage of Workers Covered by Union Contract, by Subgroup

		Overall Sample (%)	Workers Covered by a Union Contract (%)
All workers		100	16.5
Sex			
	Male	52.2	15.2
	Female	47.8	17.9
Age			
	18-24	13.0	7.7
	25-34	25.3	13.2
	35-44	23.7	17.4
	45-54	21.3	20.7
	55-64	16.8	21.6
Race/ethnicity*			
	White	78.5	17.7
	Black	1.6	22.1
	Asian, Pacific Islander	5.2	13.1
	Latino/a	11.1	9.0
	Other	3.7	15.2
Nativity			
	U.S.-Born	87.1	17.4
	Foreign-Born	12.9	10.2
Education			
	Less than High School	7.0	7.8
	High School Diploma	24.2	14.0
	Some College or AA Degree	33.4	16.1
	Bachelor's Degree	23.0	17.0
	Postgraduate Degree	12.4	26.3
Region			
	Portland Metro	52.3	15.2
	Rest of Oregon	47.7	17.9

Source: Authors' analysis of the 2011-2017 Current Population Survey Merged Outgoing Rotation Groups
**Latinos/as of all races are included in the Latino category*

To calculate the impact that union coverage has on low-income status, the utilization of social safety net programs, and the utilization of Children's Health Insurance Program (CHIP) or Medicaid, we performed a logistic regression on CPS data pooled from 2011 to 2017, for workers in the state of Oregon in the March Outgoing Rotation Group. We included controls for age, age squared, educational attainment, marital status, race/ethnicity, sex, nativity, industry, year, management status, and a binary region variable controlling for whether workers live in the Portland Metro area or not.

We define low-income status as below 200 percent of the federal poverty line. The public safety net programs we consider include the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), the Supplemental Nutrition Assistance Program (SNAP), the Earned Income Tax Credit (EITC), the National School Lunch Program (NSLP), and the Low-Income Energy Assistance Program (LIHEAP).

Since Oregon is a much smaller state, we could not replicate the detailed racial and regional analysis that Jacobs and Thomason (2018) and Thomason and Bernhardt (2018) were able to conduct for California. For example, the authors were able to look at union effects by five detailed racial and ethnic categories, whereas we were only able to analyze the impact of unions for workers of color as a group because the number of observations in each detailed racial and ethnic category were too small to allow for robust analysis. However, in our regression analysis we were able to include five detailed racial and ethnic controls: White, Black, Asian or Pacific Islander, Latino/a, or other. The authors were also able to examine the impact of unions in six regions of California, whereas we were only able to examine Oregon as a whole. However, our regression analysis we also included a binary region variable, controlling for whether workers live in the Portland Metro area or not.

Finally, we estimate the average additional income generated for workers covered by a union contract in Oregon in 2017. To arrive at this figure, we compare the actual hourly wages of union workers to the hourly wages predicted from our regression estimates under the counterfactual scenario of working in a non-union setting. We multiply these hourly estimates by usual hours worked per week and an estimate of average weeks worked calculated from the ASEC data.

Once we have an annual average, we can estimate the overall impact of unions on the Oregon economy. We arrive at this figure by multiplying the average wage increase for an individual union worker by the number of union workers in Oregon in 2017. We estimate the total number of union workers in Oregon by multiplying the total number of wage and salary workers reported in the Quarterly Census of Employment and Wages (QCEW) by the percentage of the labor force covered by a union contract in 2017, as reported in Hirsch and Macpherson (2018).¹⁷

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Notes

1. See Jacobs and Thomason (2018) and Thomason and Bernhardt (2018) for more details.
2. For example, see the findings presented in Bivens et al. (2017), Farber et al. (2018), and Western and Rosenfeld (2011).
3. See Freeman and Medoff (1984), Shierholz et al. (2012), and Schmitt (2008), for example.
4. For details, see Rosenfeld and Kleykamp (2012).
5. For example, see Bivens et al. (2017), Bucknor (2016), Jones and Schmitt (2014), and Shaw and Anderson (2018).
6. For details, see Western and Rosenfeld (2011).
7. See Cooper and Mishel (2015) for more details.
8. For details of the union impact on employer-provided benefits, see Bivens et al. (2017). For estimates of the availability of defined benefit pension plans by union status, see Bureau of Labor Statistics (2018).
9. For one estimate of the likelihood that union families will need to access social safety net programs, see Jacobs and Thomason (2018). For examples of the various ways unions benefit non-union workers, see Mishel and Walters (2003).
10. For estimates of the impact of unions on workplace safety, see Miller et al. (2013) and Morantz (2013). For details on the way unions improve safety reporting, see Amick et al. (2015).
11. For one recent example, see Western and Rosenfeld (2011).
12. See Cooper and Kroeger (2017), for example.
13. Estimates from the National Compensation Survey can be found in Bureau of Labor Statistics (2018).
14. See Morrissey (2016) for estimates of median defined benefit pension versus defined contribution earnings for recent retirees.
15. Munnell and Chen (2017) present recent estimates of defined contribution account balances for individuals nearing retirement.
16. See, for example, Cooper and Kroeger (2017).
17. See Hirsch and Macpherson (2003) for details on their methodology for data available on www.unionstats.com.

ABOUT THE AUTHORS

Mark Brenner is a Career Instructor at the Labor Education and Research Center. He has a Ph.D. in Economics from the University of California, Riverside. Brenner's research examines the economics of minimum wage and living wage legislation, the health and safety impact of high-performance work systems, and the dynamics of defined benefit pension plans. He is co-author of several books, including *A Measure of Fairness: The Economics of Living Wages and Minimum Wages in the United States* and *Secrets of a Successful Organizer*.

Lina Stepick is a Labor Policy Researcher at the Labor Education and Research Center. She is currently completing her Ph.D. in Sociology at the University of California, Los Angeles. Stepick's research focus includes housing and transportation policy, work schedules, wage theft, apprenticeship and training programs, as well as participatory policy development. She has worked as a researcher at the UCLA Labor Center, a labor educator with the Dolores Huerta Labor Institute, and an organizer with the East LA Community Corporation.

ABOUT LERC

Since its inception in 1977, the Labor Education and Research Center at the University of Oregon has been dedicated to supporting a strong, inclusive union movement in Oregon. By integrating education, research, and public service, the Labor Education and Research Center helps ensure that workers have the skills and support that they need to participate meaningfully in their workplaces and communities. We work with labor unions, policy makers, university academics, community, and civic organizations throughout the Pacific Northwest to ensure that workers have a strong voice in shaping the programs and policies that affect their lives.



Labor Education and Research Center
1289 University of Oregon, Eugene, OR 97403-1289



541-346-5054 • 503-412-3721
lerc.uoregon.edu • lerc@uoregon.edu

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