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Unions and Upward Mobility for Women Workers

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About the Author

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Acknowledgments

Executive Summary

In 2007, women made up 45 percent of union members. If the share of women in unions continues to grow at the same rate as it has over the last 25 years, women will be the majority of the unionized workforce by 2020.

This paper uses the most recent data available to examine the impact of unionization on the pay and benefits of women in the paid workforce. The data suggest that even after controlling for systematic differences between union and non-union workers, union representation substantially improves the pay and benefits that women receive.

On average, unionization raised women's wages by 11.2 percent – about $2.00 per hour – compared to non-union women with similar characteristics. Among women workers, those in unions were about 19 percentage points more likely to have employer-provided health insurance and about 25 percentage points more likely to have an employer-provided pension.

For the average woman, joining a union has a much larger effect on her probability of having health insurance (an 18.8 percentage-point increase) than finishing a four-year college degree would (an 8.4 percentage-point increase, compared to a woman with similar characteristics who has only a high school diploma). Similarly, unionization raises the probability of a woman having a pension by 24.7 percentage points, compared to only a 13.1 percent increase for completing a four-year college degree (relative to a high school degree).

For the average woman, a four-year college degree boosts wages by 52.6 percent, relative to a woman with similar characteristics who only a high school degree. The comparably estimated union wage premium is 11.2 percent – over 20 percent of the full four-year college effect.

Introduction

In 2007, women made up 45 percent of union members. If the share of women in unions continues to grow at the same rate as it has over the last 25 years, women will be the majority of the unionized workforce by 2020.[1]

This paper uses the most recent data available to examine the impact of unionization on the pay and benefits of women in the paid workforce.[2] The data suggest that even after controlling for systematic differences between union and non-union workers, union representation substantially improves the pay and benefits that women receive.[3] On average, unionization raised women's wages by 11.2 percent – about $2.00 per hour – compared to non-union women with similar characteristics.[4] The union impact on health-insurance and pension coverage was even larger. Among women workers, those in unions were about 19 percentage points more likely to have employer-provided health insurance,[5] and about 25 percentage points more likely to be in an employer-provided pension.[6]

These union effects are large by any measure. For the average woman, joining a union has a much larger effect on her probability of having health insurance (an 18.8 percentage-point increase) than finishing a four-year college degree (an 8.4 percentage-point increase, compared to a woman with similar characteristics who has only a high school diploma). The same is true for the average woman's chances of having a pension plan. Unionization raises the probability of having a pension by 24.7 percentage points, compared to only a 13.1 percent increase for completing a four-year college degree (relative to a high school degree). The union wage effect even compares well to a four-year college degree, once the cost of four years of public or private college tuition are factored in.[7] For the average woman, a four-year college degree boosts wages 52.6 percent, relative to a woman with similar characteristics (age, race, state of residence) who has only a high school degree. The comparably estimated union wage premium is 11.2 percent – over 20 percent of the full four-year college effect.[8]

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1 Author's analysis of CEPR extract of the Outgoing Rotation Group (ORG) of the Current Population Survey (CPS), 1983 to 2007.

2 For a recent discussion of the impact of the economic downturn on women, see Joint Economic Committee (2008). For recent data and a review of long-term trends in the gender wage gap, see Institute for Women's Policy Research (2008).

3 Earlier research finds substantial union effects on wages and benefits for workers overall; among many others see Blanchflower and Bryson (2007), and Schmitt (2008).

4 Over the period 2004-2007, the average wage of women workers, in constant 2007 dollars, was $17.32 per hour. The union wage premium at the mean wage estimated here is 11.2 percent, which translates to $1.94 per hour.

5 An employer- or union-sponsored plan for which the employer paid at least a portion of the insurance premium. To be clear, we believe that universal health care, where eligibility is not connected to an individual's employment status or particular employer, would be a substantial improvement over the current system, which leaves many workers and their children without health insurance.

6 The employer- or union-provided pension may or may not include an employer contribution to the plan.

7 The National Center for Education Statistics estimates that for the 2006-2007 academic year, the average cost of a public four-year college was $5,685 per year; a public two-year college, $2,017; a private four-year college, $20,492; a private two-year college, $12,620. See http://nces.ed.gov/programs/coe/2008/analysis/sa_table.asp?tableID=1003.

8 Four-year and two-year college premiums from CEPR analysis of CPS ORG data using complementary econometric specifications to those in Table 2 below.

Women Workers in Unions Earn More, More Likely to Have Benefits

Over the period 2004-2007, in the workforce as a whole, about 13.5 percent of all workers were unionized. Over the same period, as Table 1 shows, about 12.5 percent of women workers were in a union or represented by a union at their workplace (see row 1). Union women typically earned substantially more than their non-union counterparts. In 2004-2007, the median unionized woman earned about $18.77 per hour, compared to $13.30 per hour for the median non-union woman worker. Unionized women were also much more likely to have health insurance (75.4 percent) and a pension (75.8 percent) than women workers who weren't in unions (50.9 percent for health insurance, 43.0 percent for pensions).

TABLE 1
Wages, Health, and Pension Coverage for Union and Non-Union Women Workers, 2004-2007

	Share of workers in union (percent)	Median hourly wage (2007$)		Health-insurance (percent)		Pension (percent)	
		Union	Non-union	Union	Non-union	Union	Non-union
All	12.5	18.77	13.30	75.4	50.9	75.8	43.0
Low-wage occupations	11.4	11.95	9.00	58.7	26.0	58.1	20.6

Notes: CEPR analysis of CEPR extract of the Current Population Survey Outgoing Rotation Group and UNICON extract of March Current Population Survey data. Union refers to union membership or union coverage. Health insurance refers to participation in an employer- or union-sponsored plan where the employer pays some or all of the premium. Pension refers to participation in an employer-sponsored plan, with or without employer contribution. See Appendix Table for further details on sample. Health and pension coverage refer to 2004-2006; wages refer to 2004-2007.

The data presented in the first row of Table 1 cover all women in the workforce, including those at the bottom, middle, and top of the wage distribution. The last row of the table looks only at women employed in the 15 lowest-wage occupations.[9] As was the case for the female workforce as a whole, unionized women in low-wage occupations earned substantially higher salaries and were much more likely to have health insurance and a pension plan than were their non-union counterparts in the same occupations. The median union woman in a low-wage occupation ($11.95) earned almost three dollars more per hour than the median non-union woman ($9.00).

Unionized women workers in these same low-wage occupations also had large advantages over non-union women with respect to non-wage benefits. Almost 60 percent of unionized women in low-wage occupations had health insurance, compared to just over 25 percent of non-union women in the same occupations. For pension plans, the union gap was also substantial: 58 percent of

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9 The 15 low-wage occupations are: food preparation workers, cashiers, cafeteria workers, child-care workers, cooks, housekeeping cleaners, home-care aides, packers and packagers, janitors, grounds maintenance workers, nursing and home-health aides, stock clerks, teachers' assistants, laborers and freight workers, and security guards. Together, these occupations represent about 15 percent of total U.S. employment. See the data appendix and Schmitt, Waller, Fremstad, and Zipperer (2008) for a complete description of the occupations.

unionized women in low-wage occupations had a pension, compared to only 21 percent of their non-union counterparts.

The data in Table 1, however, may overstate the union effect because union workers may be more likely to have characteristics associated with higher wages such as being older or having more formal education. In Table 2, therefore, we present a second set of results using standard regression techniques to control for these potential differences in the union and non-union workforces.[10] Controlling for these other effects does reduce the union wage and benefit effect, but the effect of unionization on the wages and benefits remains large.

TABLE 2
Regression-Adjusted Union Wage, Health, and Pension Premiums for Women Workers, 2004-2007

	Share union (percent)	Union premium		
		Hourly wage (percent)	Health-insurance coverage (p.p.)	Pension coverage (p.p.)
All	12.5	11.2	18.8	24.7
In low-wage occupations	11.4	14.3	26.0	23.4

Notes: All regressions include controls for age, education, gender (where appropriate), state, and two-digit industry. Union wage premiums in percent are converted from log points; all are statistically significant at at least the one-percent level. Union-health insurance and pension coverage figures are the percentage-point (p.p.) increases associated with union coverage or membership; all estimates are significant at the one-percent level. See Appendix Table for further details about sample. Health and pension coverage refer to 2004-2006; wages refer to 2004-2007.

After controlling for workers' characteristics, the union wage premium for all women workers is 11.2 percent or about $2.00 per hour.[11] For women, the union advantage with respect to health insurance and pension coverage also remains large even after controlling for differences in workers' characteristics. Unionized women were 18.8 percentage points more likely to have health insurance and 24.7 percentage points more likely to have a pension than their non-union counterparts.

The benefits of unionization are also large for women in low-wage occupations. For women in the 15 lowest-paying occupations, unionization raised wages 14.3 percent. Unionization was also associated with a 26.0 percentage point greater likelihood of having health insurance and a 23.4 percentage point greater likelihood of pension coverage.

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10 The regressions control for age (and age squared), education (five levels of educational attainment), gender (wherever observations for men and women appear in the same regression), state of residence, and two-digit industry. The wage regressions use ordinary least squares; the health-insurance and pension regressions are probits.

11 These estimates of the union wage premium are likely to be underestimates of the true union effect on workers' wages. Hirsch and Schumacher (2004) have documented that the procedure that the Census Bureau uses to impute wages for workers who fail to report wages in the CPS imparts a substantial downward bias in standard union wage-premium regressions such as the ones reported here.

Conclusion

Women are on course to become the majority of unionized workers. The most recent data suggest that even after controlling for differences between union and non-union women, unionization substantially improves the pay and benefits received by women workers. After controlling for relevant workers' characteristics, the union wage premium for women is 11.2 percent or about $2.00 per hour. The union advantage for women is even larger with respect to health insurance and pension coverage. Union women were about 19 percentage points more likely to have health insurance and about 25 percentage points more likely to have a pension than their non-union counterparts.

The substantial wage and benefit advantages of unionization also apply to women in otherwise low-wage occupations. Among women in the 15 lowest wage occupations, after controlling for a host of differences in worker characteristics, unionization raised wages about 14 percent, the likelihood of having health insurance about 26 percentage points, and the likelihood of having a pension about 23 percentage points.

These benefits are large in economic terms, even when compared to extensive public and private investments in education.

These findings demonstrate that women who are able to bargain collectively earn more and are more likely to have benefits associated with good jobs. The data strongly suggest that better protection of workers' right to unionize would have a substantial positive impact on the pay and benefits of women in the workforce.[12]

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12 For recent discussions of the benefits for workers and for overall economic inequality of unionization, see: Blanchflower and Bryson (2007); Freeman (2007); Levy and Temin (2007); Mishel, Bernstein, and Allegretto (2007); and Schmitt (2008).

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Appendix

In order to have a sample that is sufficiently large to analyze the unionized work force, our analysis combines data from consecutive years of the Current Population Survey (CPS), a nationally representative monthly survey of about 60,000 households. For wage-related data, we use the 2004 to 2007 merged Outgoing Rotation Group (ORG) from the CPS. The ORG includes a series of questions about the respondent's current job, asked of one-quarter of the monthly participants in the CPS. For health- and pension-related data, we use the March supplement to the CPS for the years 2005 to 2007. The March CPS survey asks respondents about their health- and pension-coverage in the preceding calendar year, so the health and pension data in the report refers to coverage during the calendar years 2004, 2005, and 2006. (The wage data refer to calendar years, 2004, 2005, 2006, and 2007; in both cases, we use the most recent data available as we write this report.)

Health

The March CPS asks whether an individual was covered by an employer-provided health-insurance plan and, if so, whether the employer paid all, part, or none of the premiums for that plan. We treat workers as having health-insurance coverage if their employer (or union) offered a plan and the employer paid at least part of the premiums associated with the plan. Respondents answer the health-coverage question in March of each year, but their response refers to their coverage status in the preceding calendar year.

Pension

The March CPS asks whether an individual's employer participated in an employer-sponsored pension plan. Unfortunately, the survey does not distinguish between defined-contribution and defined-benefit plans and does not ask if the employer makes a contribution to the plan. We treat workers as having pension coverage if their employer offered a retirement plan, whether or not the employer made a contribution to that plan. As with health-insurance coverage, respondents answer the pension question in March of each year, but their response refers to their coverage status in the preceding calendar year.

Union

The CPS ORG asks workers if they are a member of, or represented by, a union at their current job. We define a union worker as any worker who says that he or she is a member of or represented by a union. Unfortunately, the March CPS does not ask workers about their union status during the preceding calendar year. We use workers' union status in their current job in March of each year as a proxy for their union status in the preceding calendar year. Using workers' status in March has two drawbacks for our analysis. First, since we must rely on union status in March, which comes from the ORG for the same month, we are limited to only one-fourth of the full March CPS sample – the fourth of the full monthly sample that also participated in the ORG. The smaller sample reduces the precision of our estimates of the union effect on health and pension, making it more difficult for us to find a statistically significant union effect if one exists. Second, using union status in March as a proxy for union status in the preceding year introduces measurement error into the union variable in the health and pension regressions. Measurement error will bias the coefficient of the variable

measured with error toward zero, making it less likely that we will find a statistically significant union effect if there is one.

Low-Wage Occupations

Following Schmitt, Waller, Fremstad, and Zipperer (2008), Tables 1 and 2 present analysis of 15 low-wage occupations as defined by the "Standard Occupational Classification 2000" system used in the Current Population Surveys for 2004-2007. The specific occupations selected were the 15 occupations with the lowest non-union median wage meeting the following two criteria: first, the occupation had to be at least 0.25 percent of the total workforce over the combined period 2004-2007; and, second, the unionization rate had to be at least five percent over the same period.

The selected occupations include only one deviation from the above formula: the two lowest-wage occupations "combined food preparation and serving workers, including fast food" and "food preparation workers," which are conceptually closely related and both of which, separately, met the selection criteria, were combined into a single occupation.

The final list of low-wage occupations were: food preparation workers, cashiers, cafeteria workers, child-care workers, cooks, housekeeping cleaners, home-care aides, packers and packagers, janitors, grounds maintenance workers, nursing and home-health aides, stock clerks, teachers' assistants, laborers and freight workers, and security guards. See Schmitt, Waller, Fremstad, and Zipperer (2008) for more details.

Data

All data and programs used to produce this analysis are available upon request. The underlying CEPR extracts of the CPS ORG analyzed in this paper are available to download from http://www.ceprdata.org.

APPENDIX TABLE
Working Women Sample Sizes for Regressions in Table 2

Full occupation title	CPS ORG Wages	March CPS Health	Pension
All	350,165	21,085	21,085
In low-wage occupations	62,072	2,409	2,409

Notes: The March CPS sample is smaller than the ORG sample because: (1) the CPS ORG is one-fourth of the full CPS for 12 months of the year, while the March CPS is the full CPS for only one month of the year; and (2) the March CPS has union affiliation in the current month for only one fourth of the participants in the survey that month. Union affiliation data from the March CPS refer to the respondent's job in March of each year, while health and pension benefits refer to the respondent's main job in the preceding calendar year, as a result the, union, health, and pension variables in Tables 1 and 2 are measured with error; the measurement error in the dependent variable in Table 2 will increase the standard errors of the coefficient estimates, but will not bias the estimates; the measurement error in the union variable will bias the estimated union effect toward zero. See text for further discussion.