

Unions and Upward Mobility for Immigrant Workers

John Schmitt

March 2010

Contents

Executive Summary	1
Introduction	2
Immigrants in Unions and the Workforce	2
Immigrants in Unions Earn More, More Likely to Have Benefits	7
Conclusion	10
Appendix	11
Hourly wage	11
Health	11
Retirement plan	11
Union Status	12
Region	12
Low-Wage Occupations	12
Data	13

About the Author

John Schmitt is a Senior Economist at the Center for Economic and Policy Research.

Acknowledgements

The Center for Economic and Policy Research gratefully acknowledges financial support from the Public Welfare Foundation, the Arca Foundation, and the Ford Foundation. The author thanks Dean Baker and Nicole Woo for many helpful comments.

Executive Summary

This report reviews the characteristics of the immigrant workforce and analyzes the impact of unionization on the pay and benefits of immigrant workers.

According to the most recent available data, immigrant workers are now over 15 percent of the workforce and almost 13 percent of unionized workers.

Even after controlling for systematic differences between union and non-union workers, union representation substantially improves the pay and benefits received by immigrants.

On average, unionization raised immigrants' wages by 17 percent – about \$2.00 per hour – compared to non-union immigrant workers with similar characteristics.

Immigrant workers in unions were 50 percent more likely to have employer-provided health insurance than immigrant workers with similar characteristics but who were not in unions.

Unionized immigrant workers were almost twice as likely as non-union immigrants workers to have an employer-provided retirement plan.

Unionization has the biggest impact on the wages and benefits of workers in the 15 lowest-wage occupations, raising wages by almost 20 percent and more than doubling health and retirement-plan coverage rates.

Compared to the overall workforce, immigrant workers are more likely to be male, are younger, more likely to work full time, more likely to work in manufacturing and in the private sector, and are most concentrated in the Pacific states.

Immigrant workers tend to be both less-educated and more-educated than the overall workforce. Over one-fourth (26.0 percent) of immigrant workers have less than a high school degree, compared to just under one-tenth (9.9 percent) of the overall workforce. At the same time, immigrants are more likely to have an advanced degree (11.5 percent) than the average worker (10.3 percent).

California, New York, Texas, Florida, and New Jersey are the states with the five largest immigrant workforces, each with over one million. Georgia has the eighth largest immigrant workforce (489,000 in 2009) and North Carolina is thirteenth (337,000 in 2009).

Introduction

Immigrant workers are now over 15 percent of the workforce and almost 13 percent of unionized workers.¹ This paper uses recent data from the U.S. government's most important regular survey of the labor market to examine the impact of unionization on the pay and benefits of immigrant workers.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 received by immigrants.³ On average, unionization raised immigrants' wages by 17 percent – about \$2.00 per hour – compared to non-union immigrant workers with similar characteristics. The union impact on health insurance and retirement coverage was even larger. Among immigrants, union workers were 50 percent more likely to have employer-provided health insurance,⁴ and almost twice as likely to have an employer-provided retirement plan, as non-union immigrants.⁵

Immigrants in Unions and the Workforce

Table 1 provides a summary of some key characteristics of the overall and the immigrant workforce, based on data from the Current Population Survey (CPS), the government's most important source of nationally representative data on the labor market. In principle, the CPS data cover both documented and undocumented immigrants because the CPS sample is built from a complete list of U.S. addresses. In practice, however, undocumented immigrants are less likely than documented immigrants or the native-born to participate in the CPS.

According to the CPS data, in 2009, about 20 million of the 130 million workers⁶ in the United States – about 15 percent of all employees – were born outside of the country. Compared to the overall workforce, immigrant workers are more likely to be male, are younger, more likely to work full time, more likely to work in manufacturing and in the private sector, and are most concentrated in the Pacific states.⁷ Immigrant workers tend to be both less-educated and more-educated than the

1 Author's analysis of CEPR extract of the Current Population Survey (CPS) Outgoing Rotation Group (ORG). For an overview of the changes in the composition of organized labor over the last 25 years, see John Schmitt and Kris Warner, "The Changing Face of Labor, 1983-2008," CEPR Briefing Paper, November 2009, available at <http://www.cepr.net/documents/publications/changing-face-of-labor-2009-11.pdf>.

2 For a broader look at immigrants and unions, see: Hector L. Delgado, *New Immigrants, Old Unions: Organizing Undocumented Workers in Los Angeles*, Temple University Press, 1993; Ruth Milkman (ed.), *Organizing Immigrants: The Challenge for Unions in Contemporary California*, Cornell University Press, 2000; Ruth Milkman, *L.A. Story: immigrant workers and the future of the U.S. labor movement*, Russell Sage Foundation, 2006; Immanuel Ness, *Immigrants, Unions, and the New U.S. Labor Market*, Temple University Press, 2005

3 Earlier research finds substantial union effects on wages and benefits for workers overall. Among many others, see David Blanchflower and Alex Bryson, "What Effect Do Unions Have on Wages Now and Would Freeman and Medoff Be Surprised?," in James Bennett and Bruce Kaufman (eds.), *What Do Unions Do: A Twenty Year Perspective*, Edison, New Jersey: Transaction Publishers, 2007.

4 An employer- or union-sponsored plan for which the employer paid at least a portion of the insurance premium.

5 The employer- or union-provided retirement plan may or may not include an employer contribution to the plan.

6 The sample excludes the self-employed.

7 The Pacific states are: Alaska, California, Hawaii, Oregon, and Washington. For a complete list of states by region, see the appendix.

overall workforce. Over one-fourth (26.0 percent) of immigrant workers have less than a high school degree, compared to just under one-tenth (9.9 percent) of the overall workforce. At the same time, immigrants are also slightly more likely to have an advanced degree (11.5 percent) than the average worker (10.3 percent).

TABLE 1
Characteristics of Immigrant Workers, 2003-2009 (percent)

	Immigrant employees		All employees		Unionization rate	
	Union	All	Union	All	Immigrants	All
Male	56.8	59.6	55.5	52.6	10.4	14.6
Female	43.2	40.4	44.6	47.4	11.5	12.6
Age						
16-24	4.5	10.4	6.0	14.4	4.5	5.5
25-34	20.3	27.4	19.4	22.2	7.9	11.7
35-44	28.5	28.4	25.7	23.9	10.9	14.7
45-54	27.8	20.9	30.0	23.3	14.7	17.9
55-64	16.0	10.2	16.7	12.9	17.4	18.1
65+	2.9	2.6	2.2	3.3	12.8	9.8
Education						
Less than high school	17.6	26.0	5.3	9.9	7.2	7.1
High school	28.5	27.4	30.3	30.4	11.2	13.4
Some college	20.9	17.3	28.8	29.0	13.2	13.5
College	20.8	17.9	20.6	20.3	12.9	14
Advanced	12.2	11.5	15.1	10.3	11.9	20.7
Immigrant	100.0	100.0	12.1	15.1	--	10.9
Full-time	89.8	86.1	90.1	81.9	11.3	15
Part-time	10.2	13.9	9.9	18.1	7.9	7.4
Manufacturing	12.5	14.4	12.0	12.4	9.2	13.7
Non-manufacturing	87.6	85.6	88.0	87.6	11.2	12.9
Private sector	68.3	91.7	51.5	84.4	8.1	8.4
Public sector	31.7	8.3	48.5	15.6	39.8	40.6
Region						
Northeast	36.8	21.7	27.6	18.7	18.4	20.1
Midwest	11.9	11.4	26.8	23.1	11.3	15.8
South	11.2	31.3	19.3	35.7	3.9	7.4
West	4.4	6.2	5.0	7.0	7.6	9.8
Pacific	35.7	29.4	21.3	15.5	13.1	18.7
	(thousands; data for 2009 only)					
Total	2,105	20,019	16,904	130,077	10.9	13.1

Notes: Author's analysis of CEPR CPS ORG extract, version 1.5.

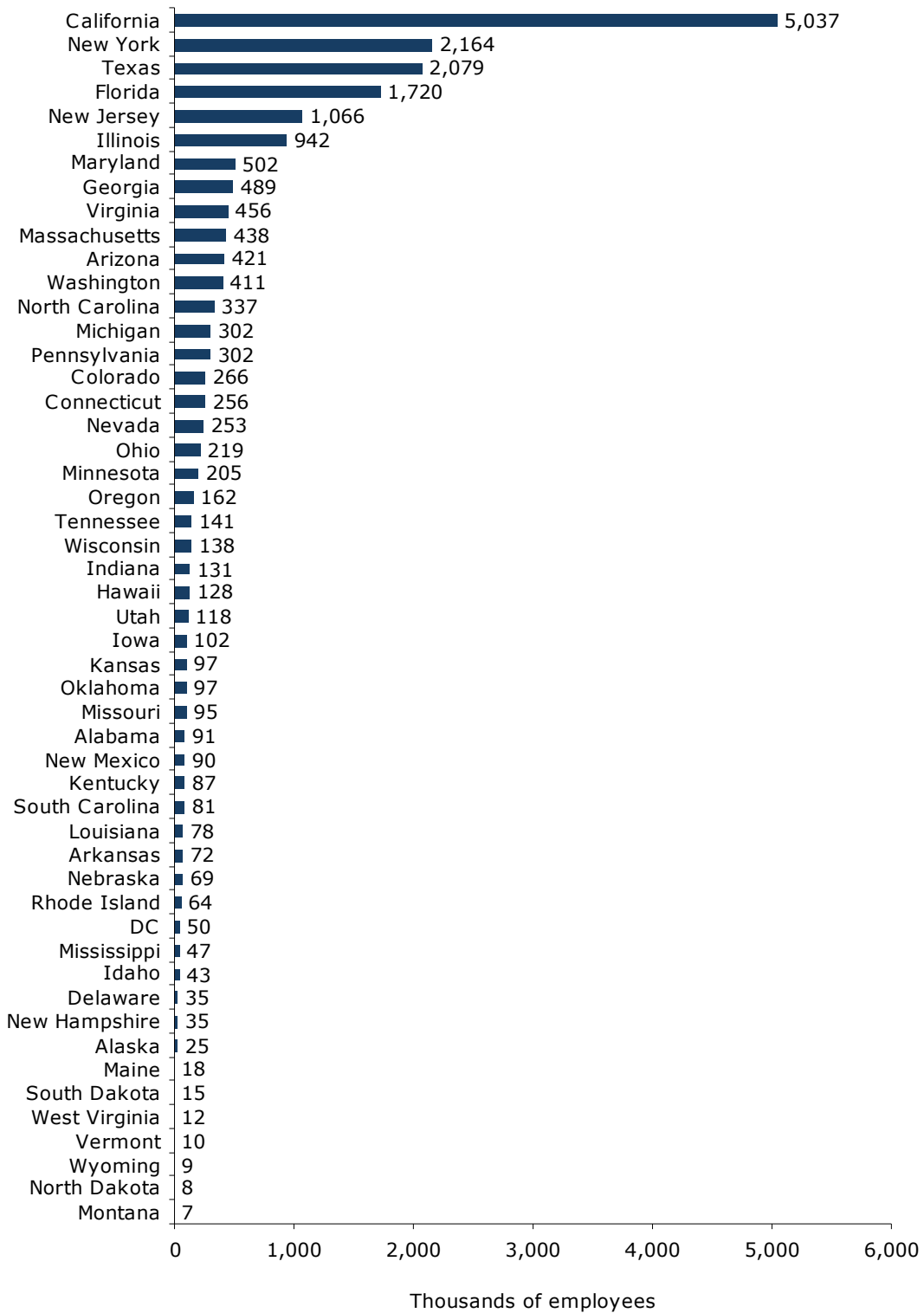
Figures 1 and 2 show the distribution of immigrant workers across the 50 states and the District of Columbia. **Figure 1** lists the states in order of the total number of immigrant workers. California, New York, Texas, Florida, and New Jersey are the states with the five largest immigrant workforces, each with over one million. Georgia has the eighth largest immigrant workforce (489,000 in 2009) and North Carolina is thirteenth (337,000 in 2009). **Figure 2** ranks states by the share of immigrants in the total workforce. The five states with the highest concentration of immigrant workers are: California (33.9 percent), New Jersey (27.0 percent), New York (25.8 percent), Hawaii (23.4 percent), and Florida (22.4 percent). (For additional, state-level information, see Appendix Table 1.)

Table 2 presents the top 20 countries of origin for immigrant workers⁸ in 2009. Mexico was, by far, the largest source of foreign-born workers, accounting for almost one-third (31.4 percent) of all immigrant workers. The Philippines (4.9 percent), India (4.9 percent), China (4.2 percent), and El Salvador (3.5 percent) were also major sending countries. Together, the top 20 countries in the table account for over three-fourths (75.7 percent) of all immigrant workers.

Of the 20 million immigrant workers in 2009, about 2.1 million were unionized (see Table 1, column 1). Over the full 2003-2009 period, about 10.9 percent of immigrant workers were unionized, compared to about 13.1 percent of all workers. Compared to all immigrant workers, unionized immigrant workers are older, better educated, less likely to work in manufacturing, and more likely to be women, full-time, and to work in the public sector. Unionized immigrant workers are also even more likely than the average immigrant worker to live in the Northeast or the Pacific regions.

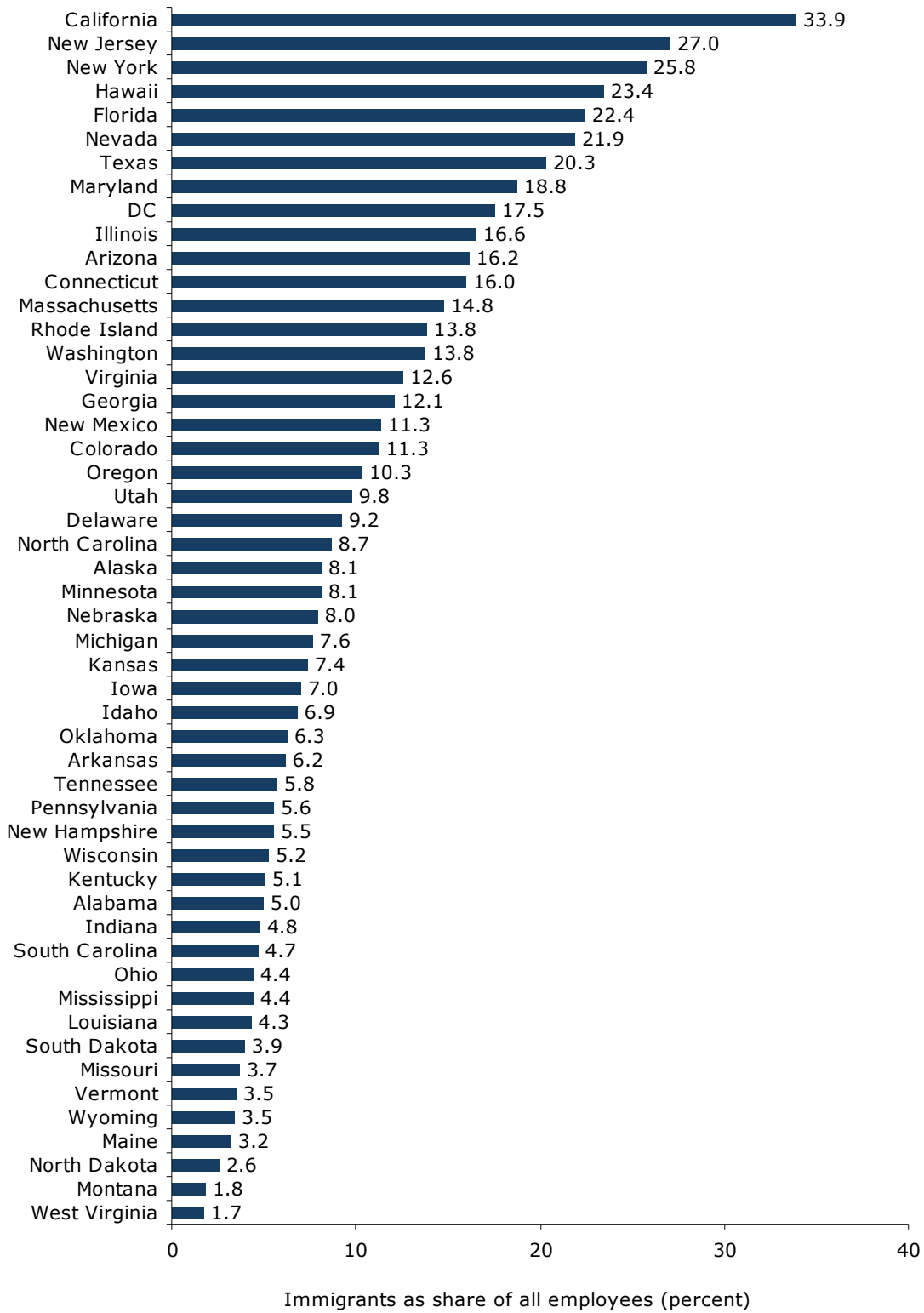
8 The table includes the self-employed.

FIGURE 1
Number of Immigrant Workers, by State, 2009
 (thousands)



Source: CEPR CPS ORG extract, version 1.5.

FIGURE 2
Immigrants as a Share of All Employees, by State, 2009
 (percent)



Source: CEPR CPS ORG extract, version 1.5.

TABLE 2
Top 20 Countries of Birth, Immigrant Workers, 2009

Rank	Country	Share of all immigrants (%)
1	Mexico	31.4
2	Philippines	4.9
3	India	4.9
4	China / Hong Kong	4.2
5	El Salvador	3.5
6	Vietnam	2.8
7	Cuba	2.5
8	Russia / Former Soviet Union	2.3
9	Korea	2.2
10	Dominican Republic	2.1
11	Guatemala	2.0
12	Jamaica	1.9
13	United Kingdom	1.7
14	Colombia	1.7
15	Canada	1.5
16	Poland	1.4
17	Honduras	1.3
18	Haiti	1.2
19	Peru	1.1
20	Brazil	1.0
	Rest of world	24.3

Source: CEPR CPS ORG extract, version 1.5.

Immigrants in Unions Earn More, More Likely to Have Benefits

Unionized immigrant workers typically earn substantially more than their non-union counterparts (see **Table 3**). In 2003-2009, the average unionized immigrant worker earned about \$18.61 per hour, compared to \$12.34 per hour for the average non-union immigrant worker. Unionized immigrant workers were also much more likely to have health insurance (73.4 percent) than immigrant workers who weren't unionized (43.6 percent), and much more likely than non-union immigrant workers to have a retirement plan (61.0 percent, compared to 28.7 percent).

Wages and benefit coverage vary substantially by gender and union status. In 2003-2009, immigrant women had a slightly higher unionization rate (11.5 percent) than immigrant men (10.4 percent). On average, unionized immigrant men earned more (\$19.89 per hour) than their non-union counterparts (\$12.75 per hour), and were much more likely to have health insurance (74.2 percent) and a retirement plan (59.7 percent) than if they were not in a union (42.9 percent for health insurance, 27.0 percent for retirement). Unionized immigrant women also earned substantially more (\$16.98) than non-union immigrant women (\$11.59), and were also much more likely to have health insurance (72.4 percent) and a retirement plan (62.7 percent) than immigrant women who were not in a union (44.6 percent for health insurance and 31.1 percent for retirement coverage).

TABLE 3
Wages, Health, and Retirement Coverage for Immigrant Workers, 2003-2009

	Unionization rate (percent)	Average hourly wage (2009\$)		Health-insurance (percent)		Retirement plan (percent)	
		Union	Non-union	Union	Non-union	Union	Non-union
All immigrants	10.9	18.61	12.34	73.4	43.6	61.0	28.7
Men	10.4	19.89	12.75	74.2	42.9	59.7	27.0
Women	11.5	16.98	11.59	72.4	44.6	62.7	31.1
In low-wage occupations	10.5	12.63	9.29	67.7	25.5	50.9	13.2

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. Retirement plan refers to participation in an employer-sponsored plan, with or without employer contribution. See text and appendix for further details on sample. Health and pension coverage refer to 2002-2008; wages refer to 2003-2009.

The data presented in the first three rows of Table 3 cover all immigrant workers, including those at the bottom, middle, and top of the wage distribution. The last row of the table looks only at immigrant workers in the 15 lowest-wage occupations.⁹ As was the case for the immigrant workforce as a whole, unionized immigrant workers in low-wage occupations earned substantially higher salaries and were much more likely to have health insurance and a retirement plan than were non-union immigrant workers in the same occupations. The average immigrant union worker in a low-wage occupation earned over three dollars per hour more (\$12.63) than the average non-union immigrant worker (\$9.29). Unionized immigrant workers in these same low-wage occupations also had large advantages over their non-union counterparts with respect to non-wage benefits. About two-thirds (67.7 percent) of unionized immigrant workers in low-wage occupations had health insurance, compared to only about one-fourth (25.5 percent) of the non-union immigrant workers in the same occupations. For retirement plans, the union gap was also substantial: 50.9 percent of unionized immigrant workers in low-wage occupations had some kind of retirement plan, compared to only 13.2 percent of their non-union counterparts.

The data in Table 3, however, may overstate the union effect because, as we saw in Table 1, union workers are more likely to have characteristics associated with higher wages, such as being older or having more formal education, or living in higher-wage states or working in higher-wage industries, where all workers, union and non-union, tend to receive higher wages. In **Table 4**, 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 factors does reduce the union wage and benefit effect, but the impact of unionization on the wages and benefits of immigrant workers remains large.

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 John Schmitt, Margy Waller, Shawn Fremstad, and Ben Zipperer "Unions and Upward Mobility for Low-wage Workers," *WorkingUSA: The Journal of Labor and Society*, vol. 11 (2008), no. 3 (September), pp. 337-348, available at <http://www3.interscience.wiley.com/journal/121398549/abstract>.

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 retirement-plan regressions are probits.

TABLE 4
Regression-Adjusted Union Wage, Health, and Retirement Premiums for Immigrant Workers, 2003-2009

	Unionization rate (percent)	Hourly wage	Health-insurance coverage		Retirement plan	
		union premium (percent)	Union premium (p.p.)	Coverage increase (percent)	Union premium (p.p.)	Coverage increase (percent)
All immigrants	10.9	17.4	22.4	50.1	27.9	93.0
Men	10.4	18.3	23.0	50.9	30.0	104.5
Women	11.5	15.4	20.3	46.1	25.5	80.2
In low-wage occupations	10.5	19.5	31.4	114.2	29.2	192.1

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. Increases in coverage are from the current coverage rates for non-union workers. See appendix for further details. Health and pension coverage refer to 2002-2008; wages refer to 2003-2009.

After controlling for workers' characteristics, the union wage premium for immigrant workers is 17.4 percent or just over \$2.00 per hour.¹¹ For immigrant workers, the union advantage with respect to health insurance and retirement coverage also remains large even after factoring in differences in workers' characteristics. Unionized immigrant workers were 22.4 percentage points more likely to have health insurance, which suggests unionization is responsible for about a 50 percent increase in health coverage, from about 44 percent for non-union workers (see Table 3) to about 66 percent after unionization.¹² For retirement plans, unionized immigrant workers were 27.9 percentage points more likely to have coverage, suggesting that unionization would raise retirement coverage by about 93 percent, from about 29 percent for non-union workers (see Table 3) to about 57 percent after unionization.

The union wage, health insurance, and retirement plan advantages are large for both men and women. The regression-controlled union wage premium for immigrants is about 18 percent for men and about 15 percent for women. The union effect on health insurance coverage is 23.0 percentage points for immigrant men and 20.3 percentage points for immigrant women. Given that only about 43 percent of non-union immigrant men had health insurance (see Table 3), the 23 percentage-point increase in health coverage associated with unionization would raise non-union immigrant men's health insurance coverage by about 50 percent (to about 66 percent). The 20 percentage-point union health insurance advantage for women would raise the non-union coverage rate by almost as much, from about 45 percent for non-union workers to about 65 percent for unionized workers.

The union retirement advantage for immigrant workers is also large: about 30.0 percentage points for men and about 25.5 percentage points for women. Using the retirement plan rates from Table 3,

11 Over the period 2003-2009, the average wage of non-union immigrant workers in constant 2009 dollars was \$12.34 per hour (see Table 3). The union wage premium at the overall mean wage estimated here is 17.4 percent (see Table 4), or about \$2.10 per hour.

12 The percentage-point effects in Table 3 are the estimated effects at the sample mean, not at the mean for non-union workers, so this and subsequent estimates of the post-unionization health and retirement coverage rates (labeled "coverage increase (percent)" in Table 4) are only approximations. The coverage increases in percent terms in Table 4 may also differ slightly from those implied by applying the percentage-point increases in Table 4 to the non-union coverage rates in Table 3 because the sample in Table 3 includes the full sample, while the estimation in Table 4 uses a slightly smaller sample that excludes observations that have missing values for the worker's industry.

these estimates suggest that unionization would more than double retirement coverage for immigrant men (from about 27 percent for non-union, to about 57 percent for union) and by about 80 percent for immigrant women (from about 31 percent, to about 57 percent).

The benefits of unionization remain particularly large for immigrant workers in low-wage occupations. For immigrant workers in the 15 lowest-paying occupations, unionization raises wages by almost 20 percent. For the same group of workers, unionization is also associated with a 31.4 percentage-point greater likelihood of having health insurance and a 29.2 percentage-point greater likelihood of retirement coverage. Since only about 26 percent of non-unionized immigrant workers in low-wage occupations had health coverage, a 31 percentage-point increase would more than double their likelihood of having health insurance. Similarly, the estimated union effect on retirement coverage would approximately triple the share of immigrant workers with retirement plans, from about 13 percent for non-union immigrants to about 42 percent for those in unions.

Conclusion

Immigrant workers are a large and growing share of both the overall and the unionized workforce. Recent data suggest that even after factoring in differences between union and non-union workers – including such factors as age and education level – unionization substantially improves the pay and benefits received by immigrant workers. After controlling for workers’ characteristics, the union wage premium for all immigrant workers is about 17 percent or just over \$2.00 per hour. The union advantage for immigrant workers is even larger with respect to health insurance and retirement coverage. Unionized immigrant workers were about 50 percent more likely to have health insurance and about twice as likely to have a retirement plan than their non-union counterparts.

The substantial wage and benefit advantages of unionization also apply to immigrant workers in otherwise low-wage occupations. Among immigrant workers in the 15 lowest wage occupations, after controlling for a host of differences in worker characteristics, unionization raised wages almost 20 percent and more than doubled the likelihood of having health insurance and a retirement plan.

These findings demonstrate that immigrant workers who are able to bargain collectively earn more and are more likely to have benefits associated with good jobs. By extension, the data also strongly suggest that better protection of workers’ right to unionize would have a substantial positive impact on the pay and benefits of immigrant workers.¹³

13 For recent discussions of the benefits for workers and for overall economic inequality of unionization, see: Blanchflower and Bryson (2007, cited above); Richard Freeman, “What Do Unions Do? The 2004 M-Brane Stringtwin Edition,” in James Bennett and Bruce Kaufman (2007, cited above); Frank Levy and Peter Temin, “Inequality and Institutions in Twentieth Century America,” NBER Working Paper 07-17, 2007; Lawrence Mishel, Jared Bernstein, and Heidi Shierholz, *The State of Working America 2008-2009*. Ithaca, New York: Cornell University Press, 2009; and John Schmitt, “The Union Wage Advantage for Low-Wage Workers,” CEPR Research Briefing Paper, 2008.

Appendix

In order to have a sample that is sufficiently large to analyze immigrant workers, this report combines data from multiple years of the Current Population Survey (CPS), a nationally representative monthly survey of about 60,000 households. For wage-related data, we use the 2003 to 2009 merged CPS Outgoing Rotation Group (ORG) files, which are comprised of one-fourth of the respondents to each month's full CPS. The ORG includes a series of questions about respondents' current job, including their earnings and their union status. For health- and retirement-plan-related data, we use the March supplement to the CPS for the years 2003 to 2009. The March CPS survey asks respondents about their health- and retirement-coverage in the preceding calendar year, so the health and retirement-plan data in the report refer to coverage during the calendar years 2002 through 2008. Changes to industry, occupation, and race variables before 2003 make it impossible to perform the regression controls in Table 4 on a consistent basis if we include earlier data.

Hourly wage

The earnings data are hourly wages taken directly from reported hourly earnings or are estimated based on reported weekly earnings (including overtime, tips, commissions, and bonuses) and usual weekly hours. Following Hirsch and Schumacher (2004), for the wage analysis only, we exclude all observations where the Census Bureau has imputed wages; this eliminates 25-30 percent of the CPS ORG sample in each year, but removes a significant source of downward bias in the raw and regression-based estimates of the union wage premium.¹⁴

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.

Retirement plan

The March CPS also asks whether an individual's employer participated in an employer-sponsored retirement plan. 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 a retirement plan if their employer offered a plan of any kind, whether or not the employer made a contribution to that plan. As with health-insurance coverage, respondents answer the retirement-plan question in March of each year, but their response refers to their coverage status in the preceding calendar year.

14 Barry Hirsch and Edward Schumacher, "Match Bias in Wage Gap Estimates Due to Earnings Imputation," *Journal of Labor Economics*, vol. 22 (2004), no. 3 (July), pp. 689-722.

Union Status

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. 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 retirement plans, 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 retirement-plan 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.

Region

The Northeast is Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont; the Midwest is Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin; the South is Alabama, Arkansas, Delaware, the District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia; the West is Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming; and the Pacific is Alaska, California, Hawaii, Oregon, and Washington.

Low-Wage Occupations

Following Schmitt, Waller, Fremstad, and Zipperer (2007),¹⁵ Tables 3 and 4 present analysis of 15 low-wage occupations as defined by the “Standard Occupational Classification 2000” system used in the Current Population Surveys for 2003-2009. 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 (2007) for more details.

15 John Schmitt, Margy Waller, Shawn Fremstad, and Ben Zipperer (2007, cited above).

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 1
Unionization Rate for Immigrant and All Employees, by State

State	Total employees, 2009			Unionization rate, 2003-2009	
	Immigrants (thousands)	All (thousands)	Immigrants/All (%)	Immigrants (%)	All (%)
Alabama	91,330	1,816,957	5.0	3.5	10.9
Alaska	24,791	304,948	8.1	19.7	24.0
Arizona	420,523	2,602,904	16.2	4.0	8.5
Arkansas	71,636	1,160,356	6.2	3.2	6.1
California	5,037,198	14,859,649	33.9	13.0	18.1
Colorado	266,392	2,354,236	11.3	7.8	9.0
Connecticut	255,871	1,603,850	16.0	11.0	17.1
DC	50,219	286,178	17.5	10.5	13.9
Delaware	35,263	381,247	9.2	7.6	12.9
Florida	1,719,746	7,667,008	22.4	4.2	7.4
Georgia	488,873	4,051,125	12.1	3.0	6.1
Hawaii	127,611	544,834	23.4	21.3	25.2
Idaho	42,573	619,668	6.9	3.6	7.4
Illinois	942,046	5,683,166	16.6	12.3	17.5
Indiana	130,696	2,729,719	4.8	8.7	12.9
Iowa	102,108	1,454,341	7.0	12.2	13.4
Kansas	96,870	1,305,557	7.4	5.5	9.4
Kentucky	86,712	1,712,995	5.1	6.5	11.1
Louisiana	77,621	1,797,793	4.3	5.3	7.2
Maine	18,480	570,435	3.2	10.9	13.8
Maryland	501,539	2,667,981	18.8	9.0	14.6
Massachusetts	437,712	2,955,146	14.8	10.4	15.6
Michigan	302,317	3,962,551	7.6	14.8	21.1
Minnesota	205,001	2,522,037	8.1	11.2	17.0
Mississippi	47,265	1,070,058	4.4	4.1	7.5
Missouri	94,763	2,565,670	3.7	8.0	12.6
Montana	7,295	404,781	1.8	5.6	14.6
Nebraska	68,613	858,872	8.0	10.2	10.2
Nevada	252,699	1,156,092	21.9	16.6	16.5
New Hampshire	35,192	639,690	5.5	6.6	11.6
New Jersey	1,065,636	3,940,553	27.0	14.8	20.8
New Mexico	89,602	789,999	11.3	5.9	10.6
New York	2,163,660	8,400,088	25.8	24.5	26.4
North Carolina	336,596	3,860,312	8.7	2.2	4.1
North Dakota	7,987	313,143	2.6	6.0	8.7
Ohio	219,408	4,960,148	4.4	8.9	16.2
Oklahoma	96,753	1,534,340	6.3	4.1	7.6
Oregon	161,911	1,569,859	10.3	7.9	16.4

APPENDIX TABLE 1, CONTINUED
Unionization Rate for Immigrant and All Employees, by State

State	Total employees, 2009			Unionization rate, 2003-2009	
	Immigrants (thousands)	All (thousands)	Immigrants/All (%)	Immigrants (%)	All (%)
Pennsylvania	301,748	5,406,365	5.6	10.3	15.8
Rhode Island	64,156	464,036	13.8	11.0	17.0
South Carolina	81,277	1,728,438	4.7	3.1	4.9
South Dakota	14,798	375,976	3.9	12.3	7.2
Tennessee	141,459	2,453,233	5.8	2.0	7.1
Texas	2,079,015	10,225,979	20.3	3.0	6.1
Utah	118,288	1,204,027	9.8	3.9	6.8
Vermont	10,463	300,327	3.5	13.1	12.6
Virginia	456,410	3,636,318	12.6	3.5	5.8
Washington	411,416	2,988,803	13.8	13.8	21.0
West Virginia	12,495	721,500	1.7	7.5	15.2
Wisconsin	138,243	2,639,531	5.2	10.4	16.3
Wyoming	8,780	253,951	3.5	8.0	9.4
United States	20,019,056	130,076,770	15.4	10.9	13.1

Notes: CEPR analysis of CEPR CPS ORG extract, version 1.5.

APPENDIX TABLE 2
Immigrant Sample Sizes for Regressions in Table 2

	CPS ORG Wages	March CPS	
		Health	Pension
All immigrants	99,512	12,776	12,776
Men	56,829	7,269	7,269
Women	42,683	5,507	5,507
In low-wage occupations	23,899	2,916	2,916

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.