

# Unions and Upward Mobility for **Asian American and Pacific Islander Workers**

John Schmitt, Hye Jin Rho, and Nicole Woo

January 2011

# Contents

Executive Summary	1
Introduction	
AAPIs in Unions and the Workforce	3
AAPI Workers in Unions Earn More, More Likely to Have Benefits	5
Conclusion	8
Appendix	10
Health	10
Retirement Plan	10
Union	10
Low-Wage Occupations	11
Data	11

### About the Author

John Schmitt is a Senior Economist, Hye Jin Rho is a Research Assistant, and Nicole Woo is Director of Domestic Policy at the Center for Economic and Policy Research in Washington, D.C.

## Acknowledgements

The Center for Economic and Policy Research gratefully acknowledges financial support from the Public Welfare Foundation, the Arca Foundation, and the Ford Foundation.

## **Executive Summary**

Asian Americans and Pacific Islanders (AAPIs) are, with Latinos, the fastest growing ethnic group in the U.S. workforce. In 2009, Asian American and Pacific Islanders were one of every twenty U.S. workers, up from one in forty only twenty years earlier.

AAPIs, again with Latinos, are also the fastest growing ethnic group in organized labor, accounting for just under one-in-twenty unionized workers in 2009.

Even after controlling for workers' characteristics including age, education level, industry, and state, unionized AAPI workers earn about 14.3 percent more than non-unionized AAPI workers with similar characteristics. This translates to about \$2.50 per hour more for unionized AAPI workers.

Unionized AAPI workers are also about 16 percentage points more likely to have health insurance and about 22 percentage points more likely to have a retirement plan than their non-union counterparts.

The advantages of unionization are greatest for AAPI workers in the 15 lowest-paying occupations. Unionized AAPI workers in these low-wage occupations earn about 20.1 percent more than AAPI workers with identical characteristics in the same generally low-wage occupations. Unionized AAPI workers in low-wage occupations are also about 23.2 percentage points more likely to have employer-provided health insurance and 26.3 percentage points more likely to have a retirement plan through their job.

## Introduction

Asian Americans and Pacific Islanders (AAPIs)<sup>1</sup> are, with Latinos, the fastest growing ethnic group in the U.S. workforce.<sup>2</sup> In 2009, Asian American and Pacific Islanders were one of every twenty U.S. workers, up from one in forty only twenty years earlier.<sup>3</sup> (See **Figure 1**.) AAPIs, with Latinos, are also the fastest growing ethnic group in organized labor, accounting for just under one-in-twenty unionized workers in 2009.

This paper updates an earlier analysis of AAPI workers in organized labor to incorporate data from the most recent years available.<sup>4</sup> We use 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 AAPI workers. 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 AAPI workers.<sup>5</sup> On average, unionization raised AAPI workers' wages by 14.3 percent – about \$2.50 per hour – compared to non-union AAPI workers with similar characteristics.<sup>6</sup> The union impact on health insurance and retirement coverage was even larger. Among AAPIs, union workers were about 16 percentage points more likely to have employer-provided health insurance,<sup>7</sup> and about 22 percentage points more likely to have an employer-provided retirement plan.<sup>8</sup>

These union effects are large by any measure. For example, between 1996 and 2000, a period of sustained low unemployment that helped to produce the best wage growth for workers in the last

<sup>1</sup> We use the term Asian Americans and Pacific Islanders to refer to workers who tell Current Population Survey (CPS) interviewers that their race is Asian or Pacific Islander. From 2003 forward, when the CPS instrument allowed respondents to identify themselves as having a mixed racial background, we classify any mixed response that includes Asian or Pacific Islander as AAPI, except responses that also include African American. The AAPI category also excludes workers that the CPS identifies as being of Hispanic origin. None of our major findings are sensitive to these exclusions. The CPS does not have consistent data on AAPIs before 1989.

<sup>2</sup> For more on the experience of Asian American and Pacific Islander workers in the United States, see the special issue of AAPI Nexus, Summer/Fall 2005; for more on AAPI workers in the labor movement, see Ruth Milkman (ed.). 2000. Organizing Immigrants: The Challenge for Unions in Contemporary California, Cornell University Press; Immanuel Ness. 2005. Immigrants, Unions, and the New U.S. Labor Market, Temple University Press; and Kent Wong. 2000. "Building an Asian Pacific Labor Movement," in F. Ho, C. Antonio, D. Fujino, and S. Yip (eds.), Legacy to Liberation: Politics and Culture of Revolutionary Asian Pacific America, San Francisco, California, and Edinburgh, Scotland: Big Red Media and AK Press, pp. 89–98.

<sup>3</sup> Authors' 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. 2009. "The Changing Face of Labor, 1983-2008." Washington, DC: Center for Economic and Policy Research. http://www.cepr.net/documents/publications/changing-face-of-labor-2009-11.pdf

<sup>4</sup> See Schmitt, John, Hye Jin Rho, and Nicole Woo. 2009. "Unions and Upward Mobility for Asian Pacific American Workers." Washington, DC: Center for Economic and Policy Research. http://www.cepr.net/documents/publications/changing-face-of-labor-2009-11.pdf

<sup>5</sup> Earlier research finds substantial union effects on wages and benefits for workers overall; among many others, see David Blanchflower and Alex Bryson. 2007. "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.

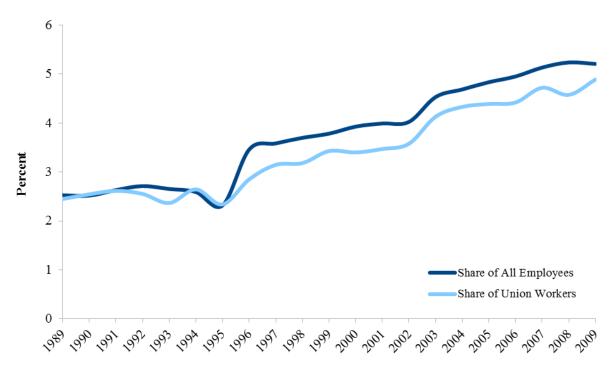
<sup>6</sup> Over the period 2003-2009, the average wage of AAPI workers in constant 2009 dollars was \$18.12 per hour. The union wage premium at the mean wage estimated here is about 14.3 percent, or \$2.59 per hour.

<sup>7</sup> An employer- or union-sponsored plan for which the employer paid at least a portion of the insurance premium.

<sup>8</sup> The employer- or union-provided retirement plan may or may not include an employer contribution to the plan.

three decades, the real wage of low-wage workers<sup>9</sup> increased, in total, about 12 percent.<sup>10</sup> The union wage effect estimated here is, therefore, greater than four years of wage growth at the historically rapid rate reached at the end of the 1990s. Over the same boom period in the 1990s, coverage among the bottom fifth of workers rose only about three percentage points for health insurance (3.2 percentage points) and retirement plans (2.7 percentage points), about one-fifth of the estimated impact of unionization on health insurance and one-eighth of the estimated impact on retirement coverage for Asian American and Pacific Islander workers.<sup>11</sup>

FIGURE 1 Unionization Rate of Asian Americans and Pacific Islanders, 1989-2009



Source: Authors' analysis of CEPR extract of Current Population Survey Outgoing Rotation Group.

## **AAPIs in Unions and the Workforce**

**Table 1** compares the characteristics of Asian American and Pacific Islander workers in unions, all AAPI workers, all union workers, and all workers in the overall labor force. Over the period 2003-2009, about 12.5 percent of Asian American and Pacific Islander workers were in a union or represented by a union at their workplace, just under the 13.6 percent unionization rate for all workers.

<sup>9</sup> The 10th percentile worker in the overall distribution, that is, the worker who makes more than 10 percent of all workers, but less than 90 percent of all workers.

<sup>10</sup> For a discussion of the economic and social benefits of sustained low unemployment, see Jared Bernstein and Dean Baker. 2003. "The Benefits of Full Employment: When Markets Work for People." Washington, DC: Economic Policy Institute.

<sup>11</sup> Authors' calculations based on the March Current Population Survey (CPS).

TABLE 1 Characteristics of Asian American and Pacific Islander Workers, 2003-2009 (percent)

	AAPI Employees		All Employees		Unionization Rate	
_	Unions	All	Unions	All	AAPIs	All
Male	51.2	53.0	55.5	52.6	12.2	14.6
Female	48.8	47.0	44.6	47.4	12.8	12.6
Age						
16-24	5.4	11.3	6.0	14.4	5.7	5.5
25-34	21.8	27.2	19.4	22.2	9.7	11.7
35-44	25.9	27.1	25.7	23.9	12.1	14.7
45-54	27.1	21.1	30.0	23.3	16.6	17.9
55-64	16.9	10.9	16.7	12.9	20.0	18.1
65+	2.9	2.5	2.2	3.3	14.8	9.8
Region						
Northeast	21.0	19.7	27.6	18.7	13.4	20.1
Midwest	8.7	12.2	26.8	23.1	8.9	15.8
South	7.1	20.6	19.3	35.7	4.4	7.4
West	3.3	4.4	5.0	7.0	9.5	9.8
Pacific	60.0	43.1	21.3	15.5	17.2	18.7
State						
CA	40.5	31.9	15.3	11.5	15.7	18.1
NY	12.6	9.2	12.3	6.4	17.1	26.4
HI	13.2	6.2	0.8	0.4	26.2	25.2
TX	1.2	5.9	3.4	7.5	2.6	6.1
NJ	4.9	4.9	4.6	3.1	12.8	20.8
WA	4.9	3.7	3.4	2.2	16.2	21.0
NV	1.9	1.4	1.0	0.9	16.4	16.5
Education						
Less than High School	4.7	6.9	5.3	9.9	8.4	7.1
High School	19.9	19.5	30.3	30.4	12.7	13.4
Some college	25.0	21.2	28.8	29.0	14.6	13.5
College	34.4	31.9	20.6	20.3	13.5	14.0
Advanced	16.1	20.5	15.1	10.3	9.9	20.7
Immigrants	67.0	71.1	12.1	15.1	11.9	10.9
Full-time	88.9	84.3	90.1	81.9	13.2	15.0
Part-time	11.1	15.7	9.9	18.1	8.7	7.4
Non-Manufacturing	91.8	86.4	88.0	87.6	13.4	12.9
Manufacturing	8.2	13.7	12.0	12.4	7.2	13.7
Private Sector	56.7	87.2	51.5	84.4	8.2	8.4
Public Sector	43.4	12.8	48.5	15.6	40.2	40.6
	(th	ousands; data f	for 2009 only)			
Total	827	6,776	16,904	130,077	12.5	13.6

Notes: CEPR analysis of CEPR extract of the Current Population Survey Outgoing Rotation Group, 2003-2009. States listed above had highest share of AAPI workers or highest share of AAPI in each state's workforce.

Several features of the AAPI union workforce stand out. First, a large share of unionized AAPI workers are immigrants. In 2003-2009, on average, two-thirds (67.0 percent) of unionized AAPI workers were immigrants. Immigrants were a slightly higher share (71.1 percent) of the overall AAPI workforce. The immigrant representation in the unionized and the overall AAPI workforce was substantially higher than the immigrant share in the overall unionized workforce (12.1 percent) and the overall workforce (15.1 percent).

Second, AAPI women are strongly represented. During the period studied here, almost half (48.8 percent) of AAPI workers in unions were women, which is higher than the share of women in the overall AAPI workforce (47.0 percent), and higher than the share of women in the overall union workforce (44.6 percent).

Third, unionized AAPI workers have about the same level of formal education as the overall AAPI workforce, but are better educated than the overall union workforce and the overall workforce. In the period covered here, about half (50.5 percent) of unionized AAPI workers had a four year college degree or more, compared to 52.4 percent of all AAPI workers, and 35.7 percent of all union workers. Among workers with advanced degrees, AAPI workers were less than half as likely to be unionized (9.9 percent are unionized) as were overall workers (20.7 percent).

Fourth, a high concentration of unionized AAPI workers is in the public sector. Over 2003-2009, more than four-in-ten (43.4 percent) unionized AAPI workers were in the public sector, a much higher share than the overall AAPI workforce (12.8 percent), but slightly lower than the overall union workforce (48.5 percent). In fact, in 2009, there were on average more AAPI workers in the public sector (about 835,100) and in unions (774,000) than were self-employed (472,000).<sup>12</sup>

Finally, unionized AAPI workers are heavily concentrated in several states. For 2003-2009, about six-in-ten (60.0 percent) unionized AAPI workers were in the Pacific states, with about four-in-ten (40.5 percent) in California alone. The Northeast states accounted for over one-in-five (21.0 percent) AAPI union workers, with a particularly large presence in New York (12.6 percent). The rest of the country had a much smaller proportion of unionized AAPI workers: the Midwest (8.7 percent), the South (7.1 percent), and the West (3.3 percent). In part, the distribution of unionized AAPI workers reflects the distribution of the overall AAPI workforce, which is concentrated in the Pacific (43.1 percent) and the Northeast (19.7 percent).

# AAPI Workers in Unions Earn More, More Likely to Have Benefits

Unionized Asian American and Pacific Islander workers typically earn substantially more than their non-union counterparts (see **Table 2**). In 2003-2009, the median unionized AAPI worker earned about \$22.67 per hour, compared to \$18.12 per hour for the median non-union AAPI worker. Unionized AAPI workers were also much more likely to have health insurance (77.5 percent) than

<sup>12</sup> Authors' calculations based on the Current Population Survey (CPS) Outgoing Rotation Group (ORG). See also Don Mar. 2005. "Asian Americans in the Labor Market: Public Policy Issues." *AAPI Nexus*, vol. 3, no. 2 (Summer/Fall), pp. 39-58.

AAPI workers who weren't unionized (56.0 percent), and also much more likely than non-union AAPI workers to have a retirement plan (68.5 percent, compared to 40.3 percent).

TABLE 2 Wages, Health, and Retirement Coverage for Union and Non-Union Asian American and Pacific Islander Workers, 2003-2009

		Average hourly wage		Health-insurance		Retirement Plan	
	Union share	(2009\$)		(percent)		(percent)	
	(percent)	Union	Non-union	Union	Non-union	Union	Non-union
All	12.5	22.67	18.12	77.5	56.0	68.5	40.3
Men	12.2	22.99	20.69	79.2	61.2	67.0	41.2
Women	12.8	22.13	15.69	75.8	50.6	70.1	39.5
In low-wage							
occupations	14.1	13.48	9.74	64.5	31.9	51.8	17.9

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 Appendix Table for further details on sample.

Wages and benefit coverage vary by gender and union status. In 2003-2009, AAPI men and women had similar unionization rates (12.8 percent for women, 12.2 percent for men). On average, unionized AAPI men earned more (\$22.99 per hour) than their non-union counterparts (\$20.69 per hour), and were much more likely to have health insurance (79.2 percent) and a retirement plan (67.0 percent) than if they were not in a union (61.2 percent for health insurance, 41.2 percent for retirement coverage). Unionized AAPI women earned substantially more (\$22.13) than non-union AAPI women (\$15.69), and were also much more likely to have health insurance (75.8 percent) and a retirement plan (70.1 percent) than AAPI women who were not in a union (50.6 percent for health insurance and 39.5 percent for retirement coverage).

The data presented in the first three rows of Table 2 cover all AAPI workers, including those at the bottom, middle, and top of the wage distribution. The last row of the table looks only at AAPI workers in the 15 lowest-wage occupations. As was the case for the AAPI workforce as a whole, unionized AAPI 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 AAPI workers in the same occupations. The average AAPI union worker in a low-wage occupation earned about three dollars per hour more (\$13.48) than the average AAPI non-union worker (\$9.74). Unionized AAPI workers in these same low-wage occupations also had large advantages over their non-union counterparts with respect to non-wage benefits. Almost two-thirds of unionized AAPI workers (64.5 percent) in low-wage occupations had health insurance, compared to less than one-third of the non-union AAPI workers (31.9 percent) in the same occupations. For retirement plans,

<sup>13</sup> 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 2008. "Unions and Upward Mobility for Low-Wage Workers." *WorkingUSA*, vol. 11, no. 3, pp. 337-348, September.

the union gap was also substantial: 51.8 percent of unionized AAPI workers in low-wage occupations had a retirement plan, compared to only 17.9 percent of their non-union counterparts.

The data in Table 2, 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 3**, 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. <sup>14</sup> Controlling for these other effects does reduce the union wage and benefit effect, but the effect of unionization on the wages and benefits of Asian American and Pacific Islander workers remains large.

TABLE 3
Regression-Adjusted Union Wage, Health, and Retirement Plan Premiums for Asian American and Pacific Islander Worker, 2003-2009

		Hourly wage	Health-insurance coverage		Retirement plan	
	Unionization	Union	Union	Coverage	Union	Coverage
	rate	premium	premium	increase	premium	increase
	(percent)	(percent)	(p.p.)	(percent)	(p.p.)	(percent)
All	12.5	14.3	16.0	27.5	22.0	51.6
Men	12.2	13.5	14.4	22.8	22.5	52.2
Women	12.8	14.5	16.8	31.5	21.4	50.8
In low-wage occupations	14.1	20.1	23.2	61.1	26.3	109.1

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 retirement 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 for further details.

After controlling for workers' characteristics, the union wage premium for all AAPI workers is about 14.3 percent or about \$2.50 per hour. For AAPI workers, the union advantage with respect to health insurance and retirement coverage also remains large even after controlling for differences in workers' characteristics. Unionized AAPI workers were about 16 percentage points more likely to have health insurance, which suggests unionization is responsible for a 28 percent increase in health coverage, from about 56 percent for non-union workers (see Table 2) to about 72 percent after unionization. For retirement plans, unionized AAPI workers were about 22 percentage points

<sup>14</sup> 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 regressions are probits.

<sup>15</sup> These estimates of the union wage premium correct for imputation bias by excluding observations where the Bureau of Labor Statistics imputed wages (See Barry Hirsch and Edward Schumacher. 2004. "Match Bias in Wage Gap Estimates Due to Earnings Imputation." *Journal of Labor Economics*, vol. 22, no. 3 (July), pp. 689-722.) Eliminating this downward bias raises our estimates here relative to the earlier version of this paper.

<sup>16</sup> The percentage-point effects in Table 2 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 3) are only approximations. The coverage increases in percent terms in Table 3 may also differ slightly from those implied by applying the percentage-point increases in Table 3 to the non-union

more likely to have coverage, suggesting that unionization would raise retirement coverage by about 52 percent, from about 40 percent for non-union workers to about 62 percent after unionization.

The union wage premium and health insurance and retirement plan advantages are large for both men and women. The regression-controlled union wage premium is about 13.5 percent for men and about 14.5 percent for women. The union effect on health insurance coverage for AAPI workers is about 14 percentage points for men and about 17 percentage points for women. Given that 61 percent of non-union AAPI men had health insurance (see Table 2), the 14 percentage-point increase in health coverage associated with unionization would raise non-union AAPI men's health insurance coverage by about one-quarter to about 76 percent. The 17 percentage-point union health insurance advantage for women would raise the non-union coverage rate from 51 percent to about 68 percent.

The union retirement plan advantage for AAPI workers is about 23 percentage points for men and 21 percentage points for women. Using the retirement coverage rates from Table 2, these estimates suggest that unionization would increase retirement coverage rates from 41 percent to 64 percent for AAPI men and from 40 percent to roughly 61 percent for AAPI women.

The benefits of unionization also remain large for AAPI workers in low-wage occupations. For AAPI workers in the 15 lowest-paying occupations, unionization raises wages by about 20.1 percent. For the same group of workers, unionization is also associated with a 23 percentage-point greater likelihood of having health insurance and a 26.3 percentage-point greater likelihood of retirement coverage. Since only 18 percent of non-unionized AAPI workers in low-wage occupations had retirement plans, a 26 percentage-point increase would more than double their likelihood of having retirement coverage.

## Conclusion

Asian American and Pacific Islander workers are, with Latinos, the fastest growing group in the U.S. workforce and in organized labor. Since the late 1980s, AAPI workers have seen their representation in the ranks of U.S. unions almost double, from about 2.5 percent of all union workers in 1989 to about 4.9 percent in 2009.

An analysis of recent data suggests that even after controlling for differences between union and non-union workers – including such factors as age and education level – unionization substantially improves the pay and benefits received by AAPI workers. After controlling for workers' characteristics, the union wage premium for all AAPI workers is about 14.3 percent or about \$2.50 per hour. The union advantage for AAPI workers is even larger with respect to health insurance and retirement coverage. Unionized AAPI workers were about 16 percentage points more likely to have health insurance and about 22 percentage points more likely to have a retirement plan than their non-union counterparts.

The substantial wage and benefit advantages of unionization also apply to AAPI workers in otherwise low-wage occupations. Among AAPI workers in the 15 lowest wage occupations, after controlling for a host of differences in worker characteristics, unionization raised wages about 20 percent, the likelihood of having health insurance about 23 percentage points, and the likelihood of having a retirement plan about 26 percentage points.

These findings demonstrate that Asian American and Pacific Islander workers 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 AAPI workers.<sup>17</sup>

<sup>17</sup> For recent discussions of the benefits for workers and for overall economic inequality of unionization, see: Blanchflower and Bryson (2007, cited above); Richard Freeman. 2007. "What Do Unions Do? The 2004 M-Brane Stringtwister Edition," in James Bennett and Bruce Kaufman (cited above); Frank Levy and Peter Temin. 2007. "Inequality and Institutions in Twentieth Century America." NBER Working Paper 07-17; Lawrence Mishel, Jared Bernstein, and Heidi Shierholz. 2009. *The State of Working America 2008-2009*. Ithaca, New York: Cornell University Press; and John Schmitt. 2008. "The Union Wage Advantage for Low-Wage Workers." Washington, DC: Center for Economic and Policy Research. http://www.cepr.net/documents/publications/quantile\_2008\_05.pdf

## **Appendix**

In order to have a sample that is sufficiently large to analyze the unionized Asian American and Pacific Islander workforce, 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 2003 to 2009 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 retirement-plan-related data, we use the March supplement to the CPS for the years 2004 to 2010. The March CPS survey asks respondents about their health- and retirement-plan-coverage in the preceding calendar year, so the health and retirement plan data in the report refers to coverage during the calendar years 2003 through 2009.

#### 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 asks whether an individual's employer participated in an employer-sponsored retirement 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 retirement coverage if their employer offered a plan, 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.

#### 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 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.

### **Low-Wage Occupations**

Following Schmitt, Waller, Fremstad, and Zipperer (2007), Tables 2 and 3 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 (2007) 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 and March CPS analyzed in this paper are available to download from http://www.ceprdata.org.

APPENDIX TABLE
Asian American and Pacific Islander sample sizes for regressions in Table 2

	CPS ORG	March CPS		
Full occupation title	Wages	Health	Retirement Plan	
All	35,390	5,041	5,041	
Men	17,938	2,485	2,485	
Women	17,452	2,556	2,556	
In low-wage occupations	5,510	761	761	

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 retirement plan benefits refer to the respondent's main job in the preceding calendar year, as a result the, union, health, and retirement plan 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.