

NATIVE-BORN FILIPINA/O AMERICANS AND LABOR MARKET DISCRIMINATION

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ABSTRACT

Filipina/o Americans face significant discrimination in the US labor market. Although Filipina/o Americans face both wage discrimination and occupational discrimination, the amount varies according to combinations of factors like gender, region of residence, and level of education.

KEYWORDS

Filipina, labor market discrimination, glass ceiling

INTRODUCTION

Although Filipinos have lived in North America since the 1700s, when Filipino sailors deserted the Spanish galleons that plied between their colonized country and New Spain, the first major wave of Filipino immigration occurred after the Spanish–American War in 1898, when the Philippines became a US territory. Predominantly male Filipino immigrants worked on sugar plantations in Hawaii, worked in the fisheries of the Northwest and Alaska, and were migrant farm laborers and domestic servants in California. After World War II there was a second wave of Filipino immigration, consisting primarily of men who had served in the military and largely those women who had married Filipino immigrant men or US soldiers. After 1965, when the US Congress abolished the national origins quotas of earlier immigration legislation, a third wave of immigrants arrived from the Philippines. This third wave was predominantly female and middle class, with professional and technical training.

Today, Filipino Americans are the second largest Asian-American ethnic group (Chinese Americans form the largest such group). Despite being such a large ethnic group, very little has been written about Filipino Americans. They are often called the “forgotten Filipinos.”¹ In 2000, 1.85 million Filipino Americans represented 18.1 percent of all Asian Americans. Almost half of them, or 49.6 percent, lived in California. Nearly a tenth, or 9.2 percent, were in Hawaii, 9 percent were in New York/New Jersey,

and 4.7 percent resided in Illinois. Washington, Texas, Florida, Virginia, and Nevada also had sizable Filipino-American populations. Filipino Americans represented a larger proportion of the populations of Hawaii, California, Nevada, Alaska, Washington, and New Jersey than they did of the US population as a whole.

Most Filipino Americans were born abroad in the Philippines. In 1990,² 64.4 percent were foreign born, with almost half of the foreign born having immigrated in the 1980s. Consequently, in 66 percent of their homes, Tagalog, rather than English, is the primary language spoken. As a result, Tagalog is the second most common Asian language spoken at home, after Chinese. Their families are also larger than the typical American family. The typical Filipino family had 4.0 persons in 1990 versus 3.2 persons for all US families.³

Filipino Americans are younger and better educated than the typical American. In 1990, they had a median age of 31.1, younger than the national median of 33.0 years. Filipino Americans were more likely both to have graduated from high school and to have earned a bachelor's degree than the typical American. The figures were 82.8 percent versus 75.3 percent for high school, and 38.8 percent versus 20.5 percent for college.

Filipino Americans had relatively high family incomes in 1990, though their incomes were not high in per capita terms. The median family income of \$46,698 is much higher than the average median family income of \$35,225. The median household income of Filipino-Americans is the highest of all the Asian ethnic groups except for Asian Indians, and is significantly higher than the household income of whites, Blacks, and Hispanics. This is because Filipino Americans are strongly attached to the labor force. Their labor force participation rate of 75.4 percent is significantly higher than the figure of 65 percent for all Americans. Their labor force participation rate is higher than that of whites, Blacks, Hispanics, or any other Asian ethnic group. Furthermore, 29.6 percent of Filipino-American families have three or more workers in the labor force. This percentage is also much higher than the national average of 13 percent, and the highest of all the Asian ethnic groups. The poverty rate for Filipinos is much lower than for all Americans. They have a poverty rate of 6.4 percent, much lower than the 13 percent national average. This is lower than the poverty rate for whites, Blacks, Hispanics, or any other Asian ethnic group. But since Filipino-American families are larger than average, they have a per capita income of \$13,616, which is lower than the national average of \$14,143. Their per capita income is below that of Japanese Americans, Asian Indian Americans, Chinese Americans, and whites, but higher than that of Blacks, Hispanics, and the other Asian ethnic groups.

This study examines the labor market status of native-born Filipino Americans, and focuses on the issue of labor market discrimination. Though Filipino Americans have relatively high family incomes, they are

low in per capita terms. Do Filipino Americans have earnings comparable to non-Hispanic white Americans with similar productivity characteristics? Do Filipino Americans have the same access to managerial positions, or do they face a glass ceiling climbing the corporate ladder? This study tests to see if there are differences in the degree of discrimination faced by Filipino Americans with different levels of education and in different parts of the country. Since recent immigrants may face language and cultural barriers in the mainstream economy, the study looks only at native-born Filipino Americans. Native-born non-Hispanic white Americans are used as the comparison group because they dominate the labor market and are assumed to face zero or insignificant racial discrimination.

DATA

This study examines the 1990 Census of Population and Housing Public Use Microdata Samples (PUMS) prepared by the Bureau of the Census. The PUMS contain records representing 5 percent of the housing units in the US and the persons in them. Selected group quarters persons are also included. The specific sample examined was native-born Filipino Americans and non-Hispanic white Americans from the ages of 25 to 64 who worked full-time, at least 35 hours per week, for at least half of 1989, were not self-employed, and earned at least \$3,000.⁴ Native-born Filipinas were compared to both native-born non-Hispanic white American men and women to measure the extent of gender and racial discrimination faced by Filipinas. Native-born Filipino-American men were compared to native-born non-Hispanic white men to measure the extent of racial discrimination faced by Filipino-American men.

GENERAL CHARACTERISTICS OF NATIVE-BORN FILIPINOS

This study examines native-born Filipino Americans as distinct from foreign-born Filipino Americans. There are significant differences between native-born and foreign-born Filipino Americans who work full-time. The native born are the children of earlier Filipino immigrants who worked on sugar plantations in Hawaii, in the fisheries of the Northwest and Alaska, and were migrant farm laborers and domestic servants in California. Thus they are more likely to live in Hawaii and on the West Coast. They are younger, more likely to be single, and more likely to live in rural areas than foreign-born Filipino Americans. The foreign-born Filipino Americans mostly arrived after 1965. They are predominantly female and middle class and work in professional and technical occupations. The foreign born are better educated than the native born, although their earnings are comparable.

The labor market experience of native-born Filipinas who work full-time

differs from the labor market experience of native-born non-Hispanic white women and men who work full-time. Compared to non-Hispanic white women, Filipinas are more likely to live in California and Hawaii. They are better educated on average than white women, and earn more. They are younger, more likely to be single, and significantly more likely to live in urban areas than non-Hispanic white women. See Tables 1 and 2.

Native-born Filipinas are disproportionately in occupations like administrative support (clerks),⁵ services (maids), sales (cashiers), and management (food serving and lodging establishments) relative to the proportions of non-Hispanic white women in these occupations. They are underrepresented in professional specialty occupations (elementary school teachers) and in skilled labor jobs such as machine operators, assemblers, and inspectors (assemblers). See Table 3.

Filipinas are also disproportionately employed in industries like personal services (hotels and motels), public administration (national security and international affairs), and retail trade (drug stores). They are underrepresented in professional and related services (elementary and secondary schools), nondurables manufacturing (textiles), and durables manufacturing (machinery, motor vehicles). See Table 4.

Table 1 Summary statistics by group (native born)

<i>1989</i>	<i>Filipino men</i>	<i>White men</i>	<i>Filipinas</i>	<i>White women</i>
Income	\$29,364 (16,234)	\$33,814 (24,547)	\$22,298 (11,486)	\$21,475 (13,631)
Education	13.63 (2.20)	13.61 (2.63)	13.73 (2.23)	13.67 (2.37)
High school %	91.1	87.8	91.7	90.9
Bachelor's degree %	22.3	27.9	26.4	26.2
Graduate degree %	5.1	9.9	5.4	9.2
Age	36.8 (9.88)	40.4 (10.32)	37.5 (10.29)	40.2 (10.26)
Experience	17.2 (10.39)	20.8 (10.81)	17.8 (11.15)	20.5 (10.85)
Married %	60.0	74.3	59.8	62.4
Manager %	13.70	15.72	17.20	15.60
Professional %	10.46	12.92	13.80	19.40
Hours	43.5 (8.34)	45.2 (8.71)	41.6 (6.91)	41.8 (6.69)
Weeks	50.10 (4.75)	50.09 (5.02)	49.80 (5.05)	49.20 (5.89)
Rural %	17.6	41.7	18.6	39.9
Kids	0.86 (1.16)	0.86 (1.10)	0.75 (1.05)	0.65 (0.95)
Public %	26.0	17.9	23.0	21.4
NOB	1,635	334,259	1,307	227,918

Notes: Standard deviation is in parentheses. NOB is number of observations.

FILIPINAS AND DISCRIMINATION

Table 2 Regional distribution (Percent of native-born population)

1989	Filipino men	White men	Filipinas	White women
Northeast	3.43	22.25	5.51	21.90
Midwest	3.55	27.21	3.90	26.16
South	8.01	32.46	7.19	34.52
West (except California and Hawaii)	7.52	9.21	6.73	8.68
California	42.45	8.67	42.69	8.58
Hawaii	35.05	0.20	33.97	0.16

When native-born Filipinas are compared to native-born non-Hispanic white men, Filipinas are again more likely to live in California and Hawaii. They are better educated on average than white men, though they are less likely to have a graduate degree, and earn significantly less. They are younger, more likely to be single, and significantly more urban. See Tables 1 and 2.

Native-born Filipinas work disproportionately in occupations like administrative support (general office clerks) and service (nursing aides, orderlies, and attendants) relative to non-Hispanic white men. They are underrepresented in precision production, craft, and repair (supervisors, precision occupations) and in transportation (truck drivers). See Table 3.

Filipinas are also disproportionately employed in industries like professional and related services (hospitals), finance, insurance, and real estate (banking, insurance), and retail trade (eating and drinking places). They are underrepresented in durables manufacturing (motor vehicles and motor vehicle equipment) and construction. See Table 4.

Table 3 Occupational distribution (percent of native-born population)

1989	Filipino men	White men	Filipinas	White women
Management	13.70	15.72	17.21	15.64
Professional	10.46	12.92	13.77	19.43
Technical support	5.57	4.33	4.59	4.21
Sales	6.97	10.19	10.94	8.93
Administrative support	11.19	6.42	34.20	30.20
Private service	0.06	0.01	0.23	0.24
Protective service	4.65	3.15	0.38	0.57
Service	8.20	3.71	9.79	8.39
Farm	2.08	1.64	0.77	0.40
Precision	20.55	21.29	3.06	2.65
Machine operator	5.14	8.19	3.21	6.94
Transportation	10.83	11.96	1.68	2.36
Military	0.61	0.46	0.15	0.04

The labor market experience of native-born Filipino-American men also differs from the labor market experience of native-born non-Hispanic white men. The native-born Filipino-American men are much more likely to live in California and Hawaii. Though they are more likely than native-born white men to have high school degrees, they are less likely to have bachelor's or graduate degrees. They are younger, more often single, more urban, and earn less than non-Hispanic white men. See Tables 1 and 2.

Native-born Filipino men are disproportionately employed in service occupations (cooks), administrative support (clerks), protective service (guards, firefighters), and technical support (health technicians, electronic technicians) relative to non-Hispanic white men. They are underrepresented in sales (supervisors and proprietors), in professional specialty occupations (elementary and secondary school teachers), among machine operators, assemblers, and inspectors (assemblers), and in management (managers and administrators). See Table 3.

Across industries, native-born Filipino men are disproportionately represented in public administration (national security, general government, justice, public order, and safety), personal services (hotels and motels), transportation (air transportation), retail trade (eating and drinking places), and the military. Filipino men are underrepresented in durables manufacturing (machinery, motor vehicles), nondurables manufacturing (petroleum, plastics, paper), and professional services (elementary and secondary schools). See Table 4.

Table 4 Industry distribution (percent of native-born population)

<i>1989</i>	<i>Filipino men</i>	<i>White men</i>	<i>Filipinas</i>	<i>White women</i>
Agriculture	2.51	1.83	1.22	0.82
Mining	0.43	1.54	0.00	0.32
Construction	8.62	9.96	1.38	1.48
Nondurables, man	5.57	8.84	4.36	7.99
Durables, man	10.52	18.29	6.58	9.25
Transport	9.05	6.54	3.98	2.64
Communication	2.32	1.80	2.30	1.82
Utilities	2.32	2.64	1.45	0.87
Wholesale	5.75	6.12	4.82	3.38
Retail	11.87	10.13	14.92	12.71
Finance, insurance, real estate	4.53	4.93	11.25	10.69
Business services	5.08	4.17	3.60	3.01
Personal services	4.95	1.04	5.51	2.32
Entertainment	1.22	1.01	1.61	0.89
Professional	10.34	12.79	27.08	35.87
Public administration	11.25	6.57	9.33	5.70
Military	3.67	1.80	0.61	0.24

CURRENT LABOR MARKET DISCRIMINATION

Current labor market discrimination exists when workers who have identical productive characteristics are treated differently because of their race or gender. The two prominent forms of current labor market discrimination are wage discrimination and occupational discrimination. Wage discrimination occurs when two equally skilled groups of workers doing exactly the same job under the same working conditions are paid different wages. Occupational discrimination occurs when two equally skilled groups of workers are given different access to certain higher-paying occupations.

Using census data, one can estimate the degree to which Filipino Americans suffer from current labor market discrimination as narrowly defined above. No attempt is made here to estimate the effect of all the labor market discrimination faced by Filipino Americans. More specifically, by taking their productive characteristics as given, the effect of pre-market discrimination and past labor market discrimination is ignored. Pre-market discrimination refers to different treatment of young Filipino Americans before they enter the labor force. For example, they may have had unequal access to good education. Past labor market discrimination might refer to earlier wage discrimination faced by the parents of these Filipino Americans currently in the labor force. Thus both pre-market discrimination and past labor market discrimination are likely to have affected the nature, quality, and amount of education obtained by Filipino Americans currently in the labor force and consequently to affect their current earnings. This study does not try to measure the differences in earnings due to discrimination from these and other sources.

Wage discrimination

Filipinas earn slightly more on average than white women. See Table 5. Nevertheless, it is still possible that they are earning less than white women with comparable qualifications because Filipinas are, on average, better educated. Both white women and Filipinas earn significantly less than white men. To what extent do Filipinas experience gender discrimination and racial discrimination? Table 5 also shows that Filipino-American men earn less than non-Hispanic white men, both annually and by the hour. Filipino-American men may have lower average earnings than non-Hispanic white American men because of discrimination and/or because of differences in average levels of productive characteristics.

The methodology used in this study, the Oaxaca decomposition, is the standard tool of economists investigating race and gender discrimination. It begins by examining data on human capital and other characteristics that are theoretically relevant to the determination of wages. These include age, education, experience, hours worked, weeks worked, region of residence,

Table 5 Annual and hourly wage and salary of native born

1989	Filipino men	White men	Filipinas	White women
Annual wage and salary	\$29,364	\$33,814	\$22,298	\$21,475
Relative to white men	0.87	1.00	0.66	0.64
Relative to white women	1.37	1.57	1.04	1.00
Hourly wage	\$13.63	\$15.04	\$10.88	\$10.52
Relative to white men	0.91	1.00	0.72	0.70
Relative to white women	1.30	1.43	1.03	1.00

industry, occupation, and marital status for both Filipino Americans and non-Hispanic white Americans. Then empirical estimates are made of how each of these characteristics contributes to the earnings of non-Hispanic white Americans. Having measured the levels of the productive characteristics typically possessed by Filipino Americans, and having estimated how these characteristics contribute to the earnings of non-Hispanic white Americans, one can estimate how much Filipino Americans would be earning if they were treated in the labor market like non-Hispanic white Americans. The difference between their predicted earnings if treated like white Americans and their actual earnings as Filipino Americans is the measure of current labor market discrimination.⁶

More specifically, ordinary least squares regressions are estimated that relate the earnings of Filipino Americans and white Americans to a wide array of socio-economic and skill characteristics. In its simplest form, the earnings functions for each of the two groups could be written as a function of a variable X which might represent the years of education. See Jacob Mincer (1974). There would be a Filipino earnings equation,

$$w_F = \alpha_F + \beta_F X_F$$

and a non-Hispanic white earnings equation,

$$w_W = \alpha_W + \beta_W X_W$$

where the subscript F represents Filipino and the subscript W represents white.

One of the properties of least squares regression is that the regression line goes through the mean of all the variables so that

$$\bar{w}_F = \alpha_F + \beta_F \bar{X}_F$$

and

$$\bar{w}_W = \alpha_W + \beta_W \bar{X}_W$$

where the bar above the variable indicates the average value of the variable.

The difference between the average wage of white Americans and the average wage of Filipino Americans can be written as:

$$\begin{aligned}
 \Delta \bar{w} &= \bar{w}_W - \bar{w}_F = (\alpha_W + \beta_W \bar{X}_W) - (\alpha_F + \beta_F \bar{X}_F) \\
 &= \alpha_W - \alpha_F + \beta_W \bar{X}_W - \beta_F \bar{X}_F \\
 &= \alpha_W - \alpha_F + \beta_W \bar{X}_W - \beta_F \bar{X}_F + \beta_W \bar{X}_F - \beta_W \bar{X}_F \\
 &= (\alpha_W - \alpha_F) - \beta_F \bar{X}_F + \beta_W \bar{X}_F + \beta_W \bar{X}_W - \beta_W \bar{X}_F \\
 &= (\alpha_W - \alpha_F) + (\beta_W - \beta_F) \bar{X}_F + \beta_W (\bar{X}_W - \bar{X}_F)
 \end{aligned}$$

The last term, $\beta_W(\bar{X}_W - \bar{X}_F)$, represents the portion of the wage differential that is due to differences in skills. The first two terms represent the portion of the wage differential due to discrimination. Let us call this d :

$$d = (\alpha_W - \alpha_F) + (\beta_W - \beta_F) \bar{X}_F$$

This measure tells us the difference between how much Filipino Americans are actually paid and how much Filipino Americans would be paid if they were treated like white Americans. Both of these terms can be positive or negative. The actual wage regressions included multiple variables to capture the effect of all the factors which might affect productivity. See Ronald Oaxaca (1973) for details.

In estimating the wage functions, the sample was restricted to people working full-time (35 hours or more) for more than half of the year. These samples contained about 70 percent of the men, but only 46 percent of the women, in the data set. If the decision to work full-time is not random with respect to the stochastic error in the wage equation, ordinary least squares regression will give us biased estimates of the wage function coefficients. Since this is likely to be a problem with the female wage equations, the James Heckman (1979) selectivity bias correction was used on the female wage equations. A probit equation was estimated to model whether or not the individual was in the sample, and the inverse Mills ratio was included in the wage equation. When controls for selectivity bias are included, the average wage differential can be decomposed into a portion due to differences in average selectivity bias, a portion due to differences in average skills, and a portion due to discrimination. The differences in average selectivity bias may be decomposed further, a part of which may be interpreted as due to discrimination. See Shoshana Neuman and Ronald Oaxaca (1998) for a discussion of various interpretations of the differences in average selectivity bias. Since the appropriate interpretation is unclear, this study does not try to interpret the selectivity bias.

One set of estimated earnings regressions appears in Table 6. The dependent variable in these regressions was the log of annual wages and

Table 6 Determinants of annual wage and salary

1989	Filipino men	White men	Filipinas	White women
Constant	7.917* (0.226)	7.892* (0.018)	8.323* (0.691)	7.991* (0.062)
Weeks	0.023* (0.002)	0.026* (0.0002)	0.025* (0.009)	0.025* (0.0007)
Hours	0.009* (0.001)	0.008* (0.0001)	0.0038 (0.0039)	0.008* (0.0005)
Education	-0.024 (0.022)	-0.028* (0.004)	-0.068 (0.046)	-0.039* (0.004)
Education 2	0.003* (0.001)	0.004* (0.0001)	0.005* (0.002)	0.004* (0.0001)
Experience	0.037* (0.004)	0.034* (0.0003)	0.026* (0.005)	0.018* (0.0005)
Experience 2	-0.001* (0.0001)	-0.0005* (0.00001)	-0.0004* (0.0001)	-0.0002* (0.00001)
Disability	-0.127* (0.077)	-0.143* (0.004)	-0.115 (0.133)	-0.076* (0.010)
Marital	0.119* (0.025)	0.154* (0.002)	0.030 (0.029)	0.021* (0.003)
Rural	-0.0046 (0.030)	-0.123* (0.002)	-0.055 (0.041)	-0.137* (0.002)
Kids	0.004 (0.010)	0.013* (0.008)	-0.029* (0.010)	-0.030* (0.001)
Public	0.044 (0.036)	-0.061* (0.003)	0.012 (0.042)	0.056* (0.004)
Mills			-0.051 (0.204)	-0.048* (0.011)
\bar{R}^2	0.37	0.41	0.34	0.42
NOB	1,635	334,259	1,307 (1,803)	227,918 (372,542)

Notes: Standard errors are in parentheses. * Indicates significance at the 5% level.

There were also controls for class of worker and region of residence. "Kids" is the number of children at home for the male regressions, the number of children ever born for female regressions. Mills is the inverse of the Mills ratio. NOB is the number of uncensored observations; total observations appear in parentheses.

salaries. All the coefficient estimates are of the expected sign. People who work more weeks and longer hours earn more. There are positive returns to education and experience. There are positive returns to being married, although the effect is much larger for men than for women. There is a wage penalty for being disabled, having poor English-language ability, and living in a rural area. While men earn more when they have children at home, women earn less. These regressions were run with controls for region of residence. These regressions were also run with, and without, controls for industry and occupation. All the coefficient estimates were of the expected sign, and most were statistically significant at the 5 percent level. Similar regressions were run with the log of hourly wages as the

dependent variable. Weeks worked and hours per week were used as explanatory variables in the annual wage regressions, but not in the hourly wage regressions.

Using the wage regression estimates, the amount of current labor market wage discrimination faced by Filipino Americans was calculated. These estimates appear in Table 7. Filipinas were found to earn a significantly higher hourly wage than white women when controls for industry and occupation were not included. But in all the other specifications, there was no statistically significant difference with respect to white women.⁷ The higher hourly wage could result if Filipinas are more likely to work overtime (at a higher hourly rate) than white women. However, Filipinas earn significantly less than comparable white men. They earn 9–26 percent less without controls for industry and occupation, and 20–24 percent less with controls for industry and occupation. All these estimates were statistically significant at the 5 percent level. Filipino-American men were found to earn 1–5 percent less than comparable non-Hispanic white men when controls for industry and occupation were not included. They were found to earn 1–4 percent less when controls for industry and occupation were included. Only the estimated gap for annual wage and salary were significant at the 5 percent level. The figures for Filipino men are smaller than those Harriet Duleep and Seth Sanders (1992) found using 1980 Census data.

Table 7 Expected earnings of Filipino Americans

1989	<i>Filipino men/White men</i>		<i>Filipinas/White women</i>		<i>Filipinas/White men</i>	
	A	B	A	B	A	B
Actual annual wage	\$25,794	\$25,794	\$19,933	\$19,674	\$19,933	\$19,674
Predicted annual wage	\$27,006	\$26,737	\$20,369	\$20,269	\$26,855	\$25,801
Relative wage	0.95*	0.96*	0.98	0.97	0.74*	0.76*
Actual hourly wage	\$12.14	\$12.14	\$11.29	\$9.77	\$11.29	\$9.77
Predicted hourly wage	\$12.26	\$12.23	\$9.82	\$9.78	\$12.45	\$12.15
Relative wage	0.99	0.99	1.15*	1.00	0.91*	0.80*

Notes: A: without industry and occupation controls; B: with industry and occupation controls; * indicates statistical significance at the 5% level; “actual” represents Filipino/a earnings if treated as Filipino/a; “predicted” represents Filipino/a earnings if treated as white; “relative” is the ratio of “actual” over “predicted”; region controls were included in the regressions; the dollar figures are anti-logs of the predicted values.

It is important to note that labor force participation rates for native-born Filipinas (68.2 percent) are lower than for native-born non-Hispanic white men (77.2 percent), though higher than for native-born non-Hispanic white women (56.0 percent).⁸ Thus the measures of the earnings gap between Filipinas and white men may be too large, and between Filipinas and white women may be too small. Experience is defined as age minus years of education minus 6. Thus the implicit assumption is that the people in our sample enter the labor force when they finish their education and stay there. But since Filipinas have labor force participation rates around 68 percent, and white men have labor force participation rates around 77 percent, the labor market experience of Filipinas may be overestimated relative to white men. Alternatively, we could assume that all men are in the labor force 77 percent of the time, and that all Filipinas are in the labor force 68 percent of the time. Then, in an average year, the typical working white man would get 13 percent⁹ more labor market experience than the typical Filipina working woman. To account for this possibility, all the experience measures for Filipinas were reduced by 13 percent, and the wage gaps were re-estimated. Doing so reduces all of the wage gap estimates by approximately 3 percentage points. Thus, rather than earning 20–24 percent less with industry and occupation controls, Filipinas earn 17–21 percent less than comparable white men with the experience adjustments. These differences are still statistically significant at the 5 percent level. Relative to white women, the earnings gaps increase by approximately 5 percentage points with these adjustments.

Unfortunately, using this methodology, one is unable to distinguish between racial discrimination and gender discrimination. As an illustration, suppose that after controlling for productivity, white men earn \$100, Filipino men earn \$95, white women earn \$75, and Filipinas earn \$75. One possibility is that there is a uniform race effect of \$5 for being Filipino, a gender effect of \$25 for white women, and a gender effect of \$20 for Filipinas. Another possibility is that there is a uniform gender effect of \$25 for being a woman, a race effect of \$5 for Filipino men, and a race effect of \$0 for Filipinas. A third possibility is that there is a uniform race effect of \$10 for being Filipino, a uniform gender effect of \$25 for being a woman, and an interaction effect of $-\$10$ for being a Filipina. It is impossible to distinguish between these, and an infinite number of other possible scenarios, with our methodology. See Barbara Reskin and Camille Charles (1999).

Furthermore, the validity of these measures of discrimination depends largely on whether one is able to control for all the dimensions in which the skills of the two groups differ. If there are some skill characteristics that affect earnings but are left out of the regression model, we would have an incorrect measure of current labor market discrimination. The actual amount of current labor market discrimination could be higher or lower.

Wage discrimination by region

Do Filipino-Americans face more discrimination in certain parts of the country than in others? The relative size of the Filipino-American population varies significantly as you travel east from Hawaii to New England. One might expect the amount of discrimination Filipinos face to be related to the size of their population in each locale. A larger Filipino presence might possibly increase, or decrease the amount of discrimination. Thus, separate wage regressions were estimated for non-Hispanic white Americans in each of six different regions. Then estimates were made of how much the average Filipino in each region should be expected to earn, given their average characteristics if they were treated like white Americans. The difference between these predicted earnings and their actual earnings is the measure of wage discrimination.

The results of this analysis are presented on Table 8. From the point estimates, Filipinas do the best in the West (not California or Hawaii) where they enjoy a wage premium, but appear to do the worst in the South where they suffer a significant wage penalty. Filipino men also seem to do the best in the West but do the worst in the Northeast, California, and Hawaii. Thus, there does not appear to be a strong relationship between the amount of discrimination faced by Filipinas in a region and the amount of discrimination faced by Filipino-American men in the same region. Furthermore,

Table 8 Expected earnings by region of residence

	<i>Northeast</i>	<i>South</i>	<i>Midwest</i>	<i>West</i>	<i>California</i>	<i>Hawaii</i>
Filipino men/ White men						
Annual wage	0.93	0.99	0.98	1.01	0.93*	0.93*
Hourly wage	0.93	0.98	1.00	1.02	0.95*	0.96
NOB	56	58	131	123	694	573
Filipinas/White women						
Annual wage	1.17	0.87*	0.87	1.33*	1.14*	1.25*
Hourly wage	1.12	0.88*	0.85	1.31*	1.10*	1.20
NOB	72	51	94	88	558	444
	(101)	(76)	(133)	(130)	(750)	(613)
Filipinas/White men						
Annual wage	0.94	0.67*	0.66*	1.01	0.89*	0.76*
Hourly wage	1.01	0.68*	0.69*	1.16*	0.95*	0.82*
NOB	72	51	94	88	558	444
	(101)	(76)	(133)	(130)	(750)	(613)

Notes. * indicates statistical significance at the 5% level. Industry and occupation controls were included. NOB is the number of censored observations. The total number of observations appears in parentheses.

since the native-born Filipino-American population is most significant in Hawaii, then California, then the West, then the South, then the Northeast, and then the Midwest, there does not appear to be any clear relationship between discrimination and population size.

Wage discrimination by educational level

The effect of labor market discrimination on the earnings of Filipinos may vary according to levels of education. If Filipinos are denied advancement into high-level positions, educated Filipinos may suffer more, in that their earnings are not commensurate with their education and experience, than persons with less schooling. On the other hand, if anti-Filipino discrimination is present in unions and in blue-collar settings, then the earnings of less educated Filipinos may be more adversely affected by labor market discrimination than is true for more highly educated Filipinos. Or Filipinos might face labor market discrimination across the board.

To explore the possibility of a discrimination effect that varies according to educational level, the earnings of Filipinos and non-Hispanic white Americans were evaluated at different levels of education. Wage regressions for non-Hispanic white Americans without high school diplomas, non-Hispanic white Americans with high school educations or associate's degrees, and non-Hispanic white Americans with bachelor's degrees or higher were estimated. Then the actual earnings of Filipino Americans with different levels of education were compared with what we would expect them to be earning if they were treated like non-Hispanic white Americans with similar levels of education. The results are presented in Table 9.

Filipinas appear to face less discrimination with increasing amounts of education. A Western cultural stereotype is that Filipinas are more passive than white women. If this stereotype is widely held, Filipinas may do better when they have credentials which establish their skill and initiative level. However, only the discrimination against Filipinas relative to white men with either a high school degree or an associate's degree was statistically significant. For Filipino men, it appears that they face the most discrimination at the top, some at the bottom, and the least in the middle of the occupational ladder. The differences at the top and the bottom were statistically significant. Another Western cultural stereotype is that Filipino men are less masculine than white men. If "masculinity" counts the most at the bottom and the top of the male labor market, and Filipino men are perceived as being less masculine than white men, it might explain this pattern of discrimination. A disproportionate number of highly educated Filipino men live in California, while a disproportionate number of poorly educated Filipino men live in Hawaii.

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Table 9 Expected earnings by educational attainment

	<HS	HS+	BA+
Filipino men/White men			
Hourly wage	0.97	0.99	0.92*
Annual wage	0.94*	0.97	0.92*
NOB	145	1,125	365
Filipinas/White women			
Hourly wage	0.95	0.99	1.09
Annual wage	0.91	0.97	1.08
NOB	108 (187)	854 (1,175)	345 (441)
Filipinas/White men			
Hourly wage	0.72	0.78*	0.95
Annual wage	0.68	0.74*	0.92
NOB	108 (187)	854 (1,175)	345 (441)

Notes: * indicates statistical significance at the 5% level. <HS: individuals without a high school diploma; HS+: individuals with a high school diploma or an associate's degree; BA+: individuals with a bachelor's degree or graduate degree; Industry, occupation, and region controls were included in the regressions.

Occupational discrimination – glass ceiling

In addition to being paid less for doing the same work, Filipino Americans may be less likely to be promoted on the job. Filipino Americans may be denied equal access to the higher rungs of the corporate ladder. To the extent that such discrimination exists, Filipino Americans may be excluded from spheres of power and influence along with the associated money earnings.

Probit models¹⁰ were estimated to explain the factors which affect the probability of someone becoming a manager. The model included variables for the level of education, for years of experience, disability status, marital status, rural area, number of children, and whether or not the person was Filipino. For the Filipinas and white women, probit models were estimated with sample selection.¹¹ The probit results are presented in Table 10. All the coefficients were generally of the expected sign and statistically significant. You are more likely to be a manager if you are well educated, have more experience than others, are not disabled, are married, and live in an urban area. Having children decreases the probability that a woman will be a manager. Being Filipino also decreases the probability of being a manager. Being a Filipina decreases the probability of being a manager from 14.5% to 12.1%¹² relative to a white woman with the same characteristics. Being a Filipino man decreases the probability of being a manager by 2.6 percent, decreasing the overall probability of being a manager by about 23 percent, relative to white men. The figures for

Table 10 Probability of being a manager/supervisor

Probit	Filipino men/White men		Filipinas/White women		Filipinas/White men	
	Manager	Supervisor	Manager	Supervisor	Manager	Supervisor
Constant	-2.657* (0.033)	-1.333* (0.025)	-1.776* (0.053)	-1.305* (0.052)	-2.654* (0.033)	-1.333* (0.025)
Filipino/a	- 0.117* (0.048)	- 0.115* (0.052)	- 0.112* (0.052)	- 0.062 (0.067)	- 0.084 (0.051)	- 0.291* (0.064)
High school	0.462* (0.013)	0.290* (0.010)	0.290* (0.017)	0.091* (0.016)	0.464* (0.013)	0.216* (0.010)
Associate	0.674* (0.016)	0.223* (0.015)	0.317* (0.021)	0.038* (0.024)	0.675* (0.016)	0.223* (0.015)
B.A.	1.097* (0.014)	0.149* (0.013)	0.506* (0.020)	0.016 (0.022)	1.099* (0.014)	0.149* (0.013)
M.A.	1.313* (0.016)	-0.097* (0.019)	0.568* (0.023)	-0.184* (0.033)	1.314* (0.016)	-0.096* (0.019)
Professional	0.598* (0.026)	-0.300* (0.040)	0.051 (0.042)	-0.337* (0.073)	0.598* (0.026)	-0.301* (0.040)
Ph.D.	1.031* (0.026)	-0.398* (0.054)	0.700* (0.046)	-0.674* (0.161)	1.033* (0.026)	-0.399* (0.055)
Exp.	0.037* (0.001)	0.020* (0.001)	0.022* (0.001)	0.011* (0.002)	0.037* (0.001)	0.020* (0.001)
Exp2	-0.0006* (0.00002)	-0.0003* (0.00003)	-0.0004* (0.00003)	-0.0002* (0.00004)	-0.0006* (0.00002)	-0.0003* (0.00003)
Disability	-0.109* (0.015)	-0.101* (0.015)	-0.056* (0.027)	-0.082* (0.033)	-0.109* (0.015)	-0.100* (0.015)
Marital	0.187* (0.008)	0.184* (0.008)	0.087* (0.010)	0.084* (0.013)	0.187* (0.008)	0.182* (0.008)
Rural	-0.161* (0.006)	-0.019* (0.006)	-0.144* (0.008)	-0.053* (0.010)	-0.161* (0.006)	-0.019* (0.007)
Kids	-0.002 (0.003)	0.005 (0.003)	-0.018* (0.003)	-0.009* (0.004)	-0.002 (0.003)	0.006 (0.003)
Pseudo-R ²	0.088	0.085	†	†	0.088	0.075
NOB	335,894	335,894	229,225 (374,345)	229,225 (374,345)	335,566	335,566

Notes: Standard errors are in parentheses; * indicates statistical significance at the 5% level. Industry and regional controls were included, but are not reported. Manager: three-digit occupations codes 003–022. Supervisor: three-digit occupation codes 243, 303–307, 413–415, 433, 448, 456, 475, 476, 477, 485, 494, 497, 503, 553–558, 613, 628, 803, and 843. Education variables are dummy variables representing the individual's highest educational degree. † Stata does not report a pseudo-R² in their maximum likelihood probit estimation with sample selection.

Filipino men are smaller than those found by Duleep and Sanders' (1992) 1980 Census data.

Probit models were also estimated to measure the effect of being Filipino on the probability of being a supervisor. Supervisors are people in charge of other workers and are not in managerial or professional specialty occupations. You are most likely to be a supervisor if you have an associate's degree, and less likely if you are a very well educated individual. See Table 10 for the coefficient estimates. People with more experience than others, without disabilities, who are married, and who live in urban areas are more likely to be supervisors. Being a Filipina decreases the probability of being a supervisor from 7.2 percent to 3.9 percent relative to a white man with the same characteristics. Being a Filipino man decreases the probability of being a supervisor by 1.7 percent, making him about 20 percent less likely to be a supervisor relative to white men.

Thus the evidence suggests that Filipino Americans are less likely to be promoted to managers and supervisors than non-Hispanic whites. Filipinas are less likely to be promoted to managers than white women, and are less likely to be promoted to supervisors than white men. Filipino men are less likely to be promoted to both managers and supervisors than white men. Unfortunately the census data are flawed in three respects in dealing with the issue of being a manager. One problem is that the category "manager" includes a diverse range of occupational positions from high corporate positions to managers of small retail stores. The census data do not permit distinguishing high-status management positions from other types of management positions. Second, it is possible that some individuals hold nonmanagerial or nonsupervisory jobs because they prefer nonmanagerial and nonsupervisory jobs. It is impossible to tell if this is the result of personal choice or discrimination. And third, the census does not distinguish between a person's job responsibilities and the nature of the work.

CONCLUSION

This study finds that Filipino Americans face significant discrimination in the labor market. But the amount of discrimination faced by Filipino Americans varies according to combinations of factors like gender, region of residence, and level of education. Filipino men suffer the most wage discrimination in California and Hawaii. Filipinas face the most wage discrimination in the South and Midwest. At the same time, Filipinas seem to enjoy a wage premium in the West relative to white Americans, and in California relative to white women. The best educated and the least educated Filipino men face wage discrimination, while the amount of discrimination seems to decrease with education for Filipinas. And Filipino Americans face a glass ceiling. Both Filipinas and Filipino men are less

likely to be promoted to manager or supervisor than white Americans with comparable qualifications. But compared with similar estimates using 1980 Census data, we find less discrimination in the 1990 Census data for Filipino Americans.

Overall, Filipinas and Filipino men earn less than white men with comparable education, experience, and skill levels. But Filipinas seem to do as well as, if not better than, comparable white women. Thus, one is tempted to conclude that Filipino men suffer from racial discrimination, while Filipinas suffer from gender discrimination, but not racial discrimination. However, the technical difficulties in separating out degrees of gender discrimination and racial discrimination have already been noted. And one might also draw on Edward Said's (1978) observation that the West views the East as feminine and the West as masculine. Consequently Asian women are viewed as more feminine than white women, and Asian men are emasculated relative to white men. When the notions of gender and race become conflated in this way, it becomes impossible to tell if Filipino men earn less than white men because of racial discrimination or gender discrimination.

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NOTES

¹ Runaw Takaki (1989).

² Detailed data on Filipino Americans from the 2000 Census are not available as of June 2002.

³ A family is defined by the Census Bureau as a group of two persons or more related by birth, marriage, or adoption and residing together. A household is defined as all persons who occupy a housing unit. A house, an apartment or other group of rooms, or a single room is regarded as a housing unit when it is occupied as separate living quarters.

⁴ The minimum wage in 1989 was \$3.35 an hour.

⁵ Specific three-digit categories are in parentheses.

⁶ We are assuming that the wage offer function in a nondiscriminatory world would be the same as the non-Hispanic white wage offer function. This seems reasonable because the number of native-born non-Hispanic whites in the labor force outnumber native-born Filipinos by 200 to 1.

- ⁷ The female regression estimates are much less precise than the male regression estimates because of the sample selection issue.
- ⁸ See Cordelia Reimers (1985).
- ⁹ $13\% = 77/68 - 1$.
- ¹⁰ Logit models were also estimated. The results were almost identical, so only the probit results are presented.
- ¹¹ See Wynand Van de Ven and Bernard Van Pragg (1981).
- ¹² These percentages are evaluated from the probit coefficient estimates and the mean values of all the variables for Filipinos using a table for the cumulative normal distribution.

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