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Immigration, Union Density, and Brown-Collar Wage Penalties

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A CRITICAL CONCERN FOR RESEARCHERS AND POLICYMAKERS ALIKE IS the potential impact of the recent wave of less-skilled immigrants on the wages of other workers. This is particularly salient in light of recent labor market polarization and the declining fortunes of the less-skilled workforce (Milkman and Dwyer 2002).

Less-skilled immigrants are highly segregated from native-born workers, and many metropolitan areas have witnessed the emergence of “brown-collar” occupations—occupations in which immigrant Latinos are overrepresented. These jobs are concentrated in low-level service, construction, agriculture, and manufacturing and include waiters’ assistants, gardeners and groundskeepers, cooks, farm workers, and painters. Immigrant Latinos account for up to two-thirds of the overall workforce in many of these fields. Moreover, Latino men who have recently immigrated are especially highly concentrated in such jobs: nationally they constituted only 1% to 5% of the total labor force in immigrant-receiving metropolitan areas in 1990, yet they accounted for up to 29% of workers in certain occupations (Catanzarite 2003).¹

Recent research includes some evidence that other workers experience wage penalties when they are employed in occupations with a large proportion of immigrants (Catanzarite 1998, 2003, 2004; Howell and Mueller 2000), but the mechanisms of wage suppression and the policies that might mitigate wage penalties need further attention. Are brown-collar wage penalties smaller in occupations where union density is higher?

This study investigates the impact of union density on pay penalties. Results indicate that unionization significantly eases the downward pressure on wages that is associated with the presence of newcomer Latinos in an occupation. The focus is on greater Los Angeles and the San Francisco Bay area. These two regions constitute the two largest metropolitan areas (CMSAs) in California, and they are among the

1. Generally, occupations are considered to have an overrepresentation of a particular group when that group’s share exceeds 1.5 or 2 times their representation in the labor force as a whole. The brown-collar occupations cited above include gross overrepresentations of immigrant Latinos.

nation's major immigrant-receiving urban areas as well.² The analyses also include comparisons with other important immigrant-receiving CMSAs in the United States. Although the potential for immigrant-native competition is a prominent issue nationally, it is of overarching significance in California. California is the country's premier immigrant-receiving state: 26% of its population in 2000 was foreign born. Further, like immigrants nationally, California's newcomers are disproportionately less skilled and Latino. Thus, analyses of wage effects in California are important in their own right and amplify understanding of the potential impact of immigrants on less-skilled workers more generally.

BACKGROUND

The extent and type of competition between newcomers and others has been a subject of intense debate. Some argue that immigrants negatively affect natives' wages, but until recently only limited evidence has appeared in the research literature (see Borjas 1999 for a review). Most studies have focused on comparing overall wage levels in immigrant-receiving metropolitan areas to wages in other areas. The weak and inconsistent findings resulting from this work have prompted scholars to argue that research on immigrant-native wage competition should more directly attend to the wage consequences of occupational segregation and occupations within local labor markets (Catanzarite 1998; Howell and Mueller 2000; Tienda 1998).

Research on immigrant wage effects that focuses on occupation as a critical locus of wage setting provides evidence that native-born workers experience pay penalties in heavily immigrant fields in New York (Howell and Mueller 2000) and that native-born workers and earlier-immigrant Latinos experience penalties in brown-collar occupations in Los Angeles (Catanzarite 1998). In addition, analyses across multiple immigrant-receiving metropolitan areas yield evidence of substantial wage penalties in local brown-collar occupations (Catanzarite 2003, 2004). These wage penalties are significant, even when workers' qualifications and occupational characteristics are taken into account. Evidence of *longitudinal* pay erosion in Los Angeles further supports the claim that a large concentration of recent immigrants in an occupation depresses wages for all workers (Catanzarite 2002).

As a large literature suggests, wage suppression in minority occupations—specifically, brown-collar occupations—may have multiple causes, including the devaluation of work done by low-status groups (Piore 1979; also see England et al. 1994; Tomaskovic-Devey 1993), the poor market position of labor-intensive occupations (Catanzarite 2002; Cohn 1985), the limited political power of low-status workers

2. The greater Los Angeles CMSA encompasses Los Angeles, Orange, Riverside, Ventura, and San Bernardino counties. The Bay Area CMSA is comprised of Alameda, Contra Costa, Marin, Napa, Santa Clara, Santa Cruz, San Francisco, San Mateo, Solano, and Sonoma counties.

(Catanzarite 2002), the labeling of brown-collar occupations (Catanzarite 2000; also see Oppenheimer 1985 on female-dominated fields), and the willingness of low-status workers to accept low wages (Bonacich 1972; Hodge and Hodge 1965). These are alternative explanations for the process by which a group's low social status may make an occupation susceptible to wage suppression. Importantly, these models suggest that wage suppression occurs for all incumbents in an occupation and is not restricted to low-status workers.

All else being equal, unionization should be a counterweight to such downward pressure on wages. Coverage under union contracts can protect low-status workers by increasing their political clout and market power, reducing their willingness to accept low wages, combating the devaluation process, and, more generally, counteracting the effects of low social status. Moreover, policies aimed at raising the social status of immigrants (for example, extending worker protections) should have the effect of protecting *native-born* workers from immigrant competition and brown-collar wage penalties (as I have argued elsewhere; see Catanzarite 2003, 2004).

Union presence in an occupation has spillover effects. If collective bargaining agreements are secured for any substantial group of workers in a given occupation, other workers in the same labor market are likely to benefit (even those not covered under such contracts), as the prevailing wage is likely to be pushed upward by the union's presence. Of course, occupations may be significantly bifurcated: incumbents in some industrial segments of an occupation may be more likely to be covered under a union contract and therefore better protected from downward wage pressures, including immigrant-related wage suppression, than those in other segments.

Generally, recent-immigrant Latinos are concentrated in the most marginal occupational settings. Marcelli and Heer (1997) provide evidence that this group of immigrants is particularly likely to be undocumented. Given the constraints on employment introduced by the 1986 Immigration Reform and Control Act (IRCA), many workers without viable documents are restricted to informal and marginal work arrangements. Recent-immigrant Latinos are highly unlikely to find employment in the public sector in California, where unionization levels are highest (Milkman and Rooks 2003). These Latinos tend to be most heavily represented in the least regulated occupations and industries, where union coverage is rare. In fact, immigrants have lower unionization rates than native-born workers do, particularly in California, and particularly among newcomers and Mexicans (Milkman and Rooks 2003; Waldinger and Der-Martorisian 2000). This is not to say that unionization is unattainable for California's immigrants; indeed, there is ample evidence to the contrary (Bonacich 2000; Delgado 1993; Milkman and Wong 2000; Sherman and Voss 2000; Wells 2000; Zabin 2000). Because newcomer Latinos have relatively low representation in unionized industries, however, union coverage may mitigate pay penalties for native workers and earlier-immigrant Latinos without necessarily benefiting recent immigrants themselves.

THE STUDY

This study focuses on greater Los Angeles and the San Francisco Bay Area, which are the two largest metropolitan areas (CMSAs) in California. Using data from the 2000 5% Census Public-Use Microdata Sample (PUMS) (U.S. Census Bureau 2000) in conjunction with pooled data on unionization from the 1998–2002 Current Population Surveys (CPS 1998–2002), I analyzed wage penalties associated with the presence of recent-immigrant Latino men (those who arrived in the United States between 1995 and 2000) for men aged eighteen to sixty-four who are U.S.-born Whites, African Americans, or Latinos or earlier-immigrant Latinos (those who arrived prior to 1995).³ (See Appendix A for further detail on data and methods.) To assess the generalizability of findings, national analyses are also conducted for all major immigrant-receiving urban areas combined. These number ten CMSAs, including Los Angeles and San Francisco.

Descriptive Statistics

Table 4.1 provides descriptive statistics for the individuals in the sample, which comprised 158,143 men in greater Los Angeles and 67,839 men in the San Francisco Bay Area. Annual earnings for these workers in 1999 averaged \$42,796 in greater Los Angeles. Earnings were higher in the Bay Area, where the mean was \$58,224. Educational attainment was also higher in the Bay Area (13.65 years) than in Los Angeles (12.21 years). The racial/ethnic composition of the sample differed considerably between the two metropolitan areas. Los Angeles had a smaller share of Whites and a larger share of native-born Latinos and, especially, earlier-immigrant Latinos than did the Bay Area. Native-born Whites comprised less than half of the sample in Los Angeles (47%) and more than two-thirds in the Bay Area (69%); the L.A. sample included 16% native Latinos and 31% earlier-immigrant Latinos, compared to 10% native Latinos and 14% earlier-immigrant Latinos in the San Francisco Bay Area. The share of native-born African Americans was similar (6% in Los Angeles, 7% in the Bay Area).⁴

Potential labor force experience averaged about twenty years for men in both metropolitan areas.⁵ Other individual labor force characteristics that were similar were average hours per week (42.18 in Los Angeles, 42.77 in San Francisco), weeks worked (about 46 in both), and marital status (58% married in Los Angeles, 55% in the Bay Area).

Table 4.2 presents descriptive statistics at the occupational level for each metropolitan area. The percentage of recent-immigrant Latino men in local occupations

3. Asians, Pacific Islanders, and men of other ethnicities are omitted from the analyses because of their extreme heterogeneity in terms of both ancestry and immigration.

4. Throughout the text, “White” and “African American” refer to non-Latinos.

5. Labor force experience was computed as age minus education minus 6.

TABLE 4.1. Descriptive Statistics for Individuals, Greater Los Angeles and San Francisco Bay Area, 2000

Variable	LOS ANGELES CMSA (N = 158,143 INDIVIDUAL MEN)		SAN FRANCISCO CMSA (N = 67,839 INDIVIDUAL MEN)	
	Mean	s.d.	Mean	s.d.
Annual earnings	\$42,796	—	\$58,224	—
Log of annual earnings	10.15	1.10	10.46	1.14
Hours per week	42.18	—	42.77	—
Log of hours per week	3.69	.35	3.71	.36
Weeks worked	45.75	—	46.38	—
Log of weeks worked	3.74	.52	3.77	.47
Years of education	12.21	3.93	13.65	3.39
Married	.58	—	.55	—
Native-born White	.47	—	.69	—
Native-born African American	.06	—	.07	—
Native-born Latino	.16	—	.10	—
Earlier-immigrant Latino	.31	—	.14	—
Potential experience ^a	20.12	11.89	19.95	11.53

^a Potential experience is estimated as age minus years of education minus 6.

SOURCE: 2000 5% PUMS files.

TABLE 4.2. Descriptive Statistics for Local Occupations, Greater Los Angeles and San Francisco Bay Area, 2000

Variable	LOS ANGELES CMSA (N = 452 OCCUPATIONS)			SAN FRANCISCO CMSA (N = 400 OCCUPATIONS)		
	Mean	s.d.	Range	Mean	s.d.	Range
Proportion recent-immigrant						
Latino men	.02	.04	0–.26	.02	.04	0–.34
Proportion female	.36	.26	0–.98	.40	.27	0–.99
Natives' years of education	13.47	1.71	9.0–19.2	13.86	1.76	9.6–19.6
Natives' potential experience ^a	20.31	4.50	4.8–44.5	20.51	4.81	3.7–40.4
Proportion part-time	.18	.15	0–.78	.20	.16	0–.76
Proportion public sector	.15	.24	0–1.00	.15	.23	0–1.00
Union density (proportion covered)	.18	.11	.02–.56	.19	.11	.03–.54
Private sector union density	.11	.05	.02–.30	.13	.07	.03–.34

^a Potential experience is estimated as age minus years of education minus 6.

SOURCE: 2000 5% PUMS files.

ranged widely, from 0% to 26% in Los Angeles and 0% to 34% in the Bay Area. The distribution is highly skewed, meaning that recent-immigrant Latino men were highly concentrated in a relatively small number of occupations. The representation of women in local occupations varied widely (0% to 98% in Los Angeles and 0% to 99% in the San Francisco Bay Area), with averages of 36% in Los Angeles and 40% in the Bay Area. Occupations' mean education levels for native-born workers had a broad range (9 to 19.2 years in Los Angeles and 9.6 to 19.6 years in the San Francisco Bay Area), with averages of 13.5 and 13.9, respectively. The other proxy for occupational skill, natives' mean experience, averaged just over 20 years and ranged widely (nearly 5 to 45 years in Los Angeles, nearly 4 to 40 years in the Bay Area). The share of part-time workers in occupations averaged 18% in Los Angeles and 20% in the San Francisco Bay Area; the range was 0% to 78% and 0% to 76%, respectively. Occupations' average representation of public sector employees was 15%, and union coverage in these occupations ranged from 2% to 56% in greater Los Angeles and 3% to 54% in the Bay Area, with means of 18% and 19%, respectively. Private sector union coverage averaged 11% in greater Los Angeles and 13% in the Bay Area, with respective ranges of 2% to 30% and 3% to 34%.

Labor Force Representation and Occupational Segregation

Recent-immigrant Latino men comprise a relatively low proportion of the total workforce, even in California's largest metropolitan areas. Figure 4.1 compares their share of the labor force in each metropolitan area with the shares of native White, native African American, native Latino, and earlier-immigrant Latino men.⁶

Recent-immigrant Latino men constituted only 2.1% of the local labor force in greater Los Angeles and 1.4% in the Bay Area labor force. The representation of earlier-immigrant Latino men was 11.2% in Los Angeles and 4.5% in the Bay Area. Native White men had the highest representation, with 22.3% in Los Angeles and 27.2% in the Bay Area.⁷

Despite their very small share of the total labor force, recent-immigrant Latino men were overrepresented in many brown-collar occupations, making up more than a quarter of incumbents in some of these fields. Table 4.3 lists local occupations with the most pronounced representation of recent-immigrant Latino men (column 1). In many of these fields the majority of incumbents were immigrant Latino men (combining earlier immigrants and recent arrivals; see column 3).⁸ These brown-collar occupations are largely in low-level service, construction, manufacturing, and agriculture. Columns 4, 5, and 6 show the percentages of occupational incumbents

6. The denominator for these percentages is total workforce (including women and men of all ethnic and immigrant groups).

7. The figure does not show the shares of other groups in the labor force (for example, women or Asian Americans), so the bars do not total 100%.

8. Because the analyses here are limited to males, and given the pronounced gender segregation, this list does not include those brown-collar fields in which immigrant Latina women predominate.

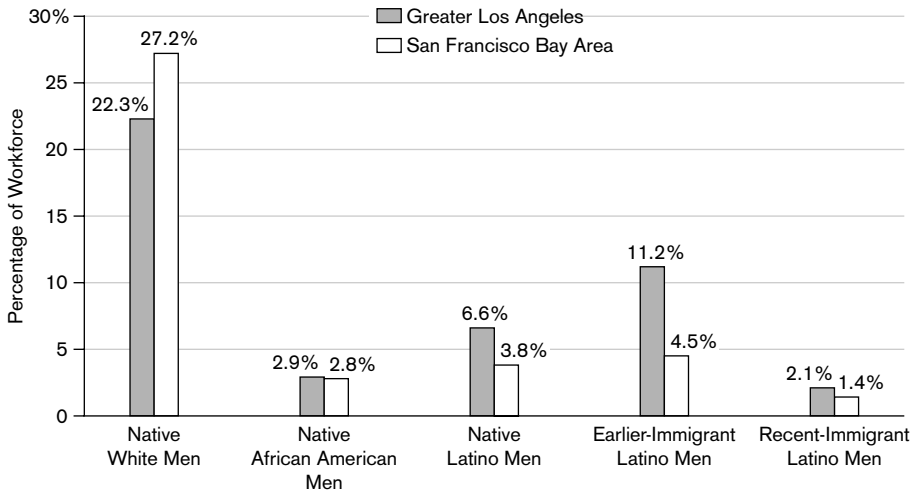


FIGURE 4.1. Labor Force Share of Men of Select Ethnic-Immigrant Groups, Greater Los Angeles and San Francisco Bay Area, 2000

SOURCE: 2000 5% PUMS files.

who were native Latino, native African American, and native White. Using 1.5 times the labor force share as a cutoff for overrepresentation, native Latino men are overrepresented in more than half of these fifty occupations, native African Americans are overrepresented in eleven, and native Whites in only three.

The final two columns of Table 4.3 provide information on union coverage in these fields. Although these brown-collar occupations show generally low levels of union coverage, union density levels were above the mean in approximately one-third of these occupations (sixteen occupations with above-average union coverage, and eighteen with above-average private sector union coverage).

Figure 4.2 indicates that newcomer Latino men are highly segregated from native-born men, especially Whites. The measure of segregation shown in the figure may be interpreted as the percentage of recent-immigrant Latino men that would have to change to an occupation currently typical of the other group to achieve integration relative to that group. For example, approximately two-thirds of newcomer Latino men (66% in Los Angeles and 70% in the Bay Area) would have to switch to occupations held by native White men to integrate these two groups across occupations. The least extent of segregation was found between newcomer Latinos and earlier-immigrant Latinos; nevertheless, at 25% for Los Angeles and 28% for the Bay Area, it was still substantial.⁹

9. Figure 4.2 uses the Duncan and Duncan (1955) Dissimilarity Index (DI), which has a possible range of 0 (indicating complete integration) to 100 (indicating absolute segregation). The Association Index (Charles and Grusky 1995) shows a similar pattern of pronounced occupational segregation from native workers and far less from earlier-immigrant Latinos. The Association Index is compositionally invariant and therefore is better suited to the comparisons of interest here. I present the DI because it is more widely used and understood.

TABLE 4.3. Top Fifty Brown-Collar Occupations with Highest Representation of Recent-Immigrant Latino Men, Greater Los Angeles and San Francisco Bay Area, 2000

CMSA	Occupation	OCCUPATIONAL COMPOSITION					UNION DENSITY		
		Recent-Immigrant Latino Men + Latino Men =	Earlier-Immigrant Latino Men	Immigrant Latino Men	Native African American Men	Native White Men	Union Coverage	Union Coverage	Private Sector Union Coverage
SF	Helpers: installation, maintenance, and repair	33.8%	19.7%	53.5%	26.3%	5.6%	9.9%	15.9%	14.7%
SF	Plasterers and stucco masons	26.4%	32.6%	59.0%	6.9%	4.2%	28.7%	33.6%	31.9%
LA	Dishwashers	25.8%	35.9%	61.7%	8.8%	1.4%	8.9%	10.4%	8.7%
SF	Dishwashers	25.7%	23.9%	49.6%	4.1%	3.4%	10.6%	12.2%	11.0%
SF	Helpers: production workers	21.1%	20.5%	41.6%	4.6%	2.1%	7.5%	13.3%	11.6%
SF	Wood sawing machine setters, operators, and tenders	19.7%	12.7%	32.5%	3.7%	7.4%	25.2%	8.2%	8.1%
SF	Helpers: construction trades	17.5%	45.1%	62.6%	5.3%	1.7%	24.7%	30.0%	28.2%
SF	Grinding, lapping, polishing, and buffing	17.1%	30.1%	47.1%	9.2%	6.2%	14.2%	8.9%	8.1%
SF	Cleaners of vehicles and equipment	16.7%	24.7%	41.3%	7.0%	8.5%	18.2%	14.6%	12.7%
LA	Forest and conservation workers	16.6%	49.0%	65.6%	3.7%	13.9%	6.6%	18.0%	11.0%
LA	Shoe machine operators and tenders	16.4%	44.3%	60.8%	1.8%	0.0%	0.0%	9.3%	9.1%
LA	Helpers: installation, maintenance, and repair	15.6%	44.1%	59.8%	11.8%	0.0%	10.6%	12.6%	10.8%
LA	Helpers: construction trades	15.5%	39.3%	54.8%	16.6%	1.6%	16.1%	19.9%	16.7%
LA	Wood sawing machine setters, operators, and tenders	14.8%	50.5%	65.3%	9.0%	0.0%	6.3%	8.9%	8.7%
LA	Cleaners of vehicles and equipment	14.6%	41.1%	55.7%	10.7%	3.9%	12.0%	10.7%	9.5%
SF	Logging workers	14.5%	27.4%	41.9%	11.9%	0.0%	31.5%	7.4%	7.3%
LA	Furniture finishers	14.3%	49.4%	63.7%	7.5%	0.0%	17.7%	8.5%	8.3%
LA	Grinding, lapping, polishing, and buffing	14.2%	53.1%	67.3%	9.0%	0.7%	7.7%	8.9%	8.7%
LA	Miscellaneous agricultural workers, including animal breeders	14.0%	42.9%	56.9%	6.6%	0.3%	2.6%	4.6%	3.6%
SF	Miscellaneous agricultural workers, including animal breeders	13.6%	40.0%	53.6%	5.6%	1.3%	5.9%	4.8%	4.6%
LA	Woodworking machine setters, operators	13.5%	41.0%	54.5%	14.9%	2.1%	12.9%	10.2%	9.8%
SF	Fence erectors	13.0%	38.8%	51.7%	14.1%	3.3%	23.0%	32.9%	31.2%

LA	Grounds maintenance workers	12.9%	52.7%	65.6%	10.0%	2.3%	12.4%	9.3%	7.0%
LA	Textile cutting machine setters, operators, and tenders	12.8%	48.8%	61.7%	2.2%	1.3%	3.6%	8.4%	8.4%
SF	Roofers	12.8%	42.8%	55.5%	10.6%	3.3%	24.0%	33.3%	31.4%
SF	Drywall and ceiling tile installers	12.7%	30.2%	42.9%	8.0%	6.7%	34.6%	33.2%	31.5%
SF	Dining room and cafeteria attendants	12.7%	18.3%	31.0%	6.4%	2.0%	17.6%	12.7%	11.0%
LA	Paving, surfacing, and tamping equipment operators	12.4%	32.9%	45.3%	23.0%	7.7%	18.7%	19.7%	17.4%
LA	Subway, streetcar, and other rail transport workers	12.2%	23.1%	35.3%	10.2%	8.3%	24.3%	25.7%	19.7%
LA	Lathe and turning machine tool setters	12.1%	36.4%	48.5%	9.6%	4.8%	15.0%	8.7%	8.6%
SF	Miscellaneous woodworkers, including model and pattern makers	12.0%	4.7%	16.7%	13.4%	1.9%	56.8%	6.2%	6.2%
LA	Painting workers	11.7%	51.9%	63.5%	9.2%	2.6%	8.9%	9.0%	8.2%
SF	Brick masons, block masons, and stonemasons	11.6%	19.5%	31.1%	10.5%	3.9%	49.7%	32.0%	30.2%
LA	Construction laborers	11.5%	46.1%	57.5%	10.9%	3.0%	20.2%	19.5%	17.1%
SF	Construction laborers	11.4%	31.9%	43.3%	9.1%	4.3%	29.1%	33.0%	31.1%
LA	Painters, construction, and maintenance	11.4%	43.4%	54.8%	8.8%	2.9%	20.3%	19.1%	16.3%
LA	Electronic equipment installers and rep for motor vehicles	11.3%	30.6%	41.9%	9.9%	3.1%	25.5%	9.5%	9.0%
LA	Textile knitting and weaving machines	11.1%	27.4%	38.5%	0.0%	0.0%	0.0%	8.4%	8.5%
SF	Grounds maintenance workers	10.9%	35.5%	46.4%	7.2%	3.4%	23.6%	8.6%	6.6%
LA	Helpers: production workers	10.9%	36.8%	47.7%	8.7%	1.4%	9.2%	10.0%	8.5%
SF	Cooks	10.8%	21.8%	32.5%	4.7%	1.8%	9.5%	12.8%	11.1%
LA	Upholsterers	10.5%	59.5%	70.0%	9.6%	1.3%	5.0%	8.9%	8.6%
SF	Cement masons, concrete finishers, and terrazzo workers	10.5%	35.7%	46.2%	15.1%	8.7%	26.6%	32.7%	30.6%
LA	Butchers and other meat, poultry, and fish processors	10.2%	41.6%	51.8%	10.7%	2.7%	15.6%	8.3%	8.1%
LA	Hazardous materials	9.7%	33.4%	43.1%	7.7%	7.6%	23.3%	26.5%	11.8%
SF	Painters, construction, and maintenance	9.4%	23.5%	32.9%	8.2%	3.9%	35.3%	31.9%	29.7%
LA	Molders, shapers, and casters, X metal and plastic	9.1%	38.8%	47.9%	2.4%	2.5%	24.0%	10.0%	9.4%
SF	Iron and steel workers	8.8%	12.4%	21.2%	13.6%	4.2%	50.2%	30.3%	28.5%
LA	Pressers of textiles, garments, and related materials	8.6%	28.8%	37.3%	1.9%	1.1%	0.5%	6.8%	6.8%
LA	Graders and sorters of agricultural products	8.5%	15.0%	23.5%	3.4%	0.0%	0.0%	6.1%	5.6%

SOURCE: 2000 5% PUMS files and 1998-2002 CPS-MORG files.

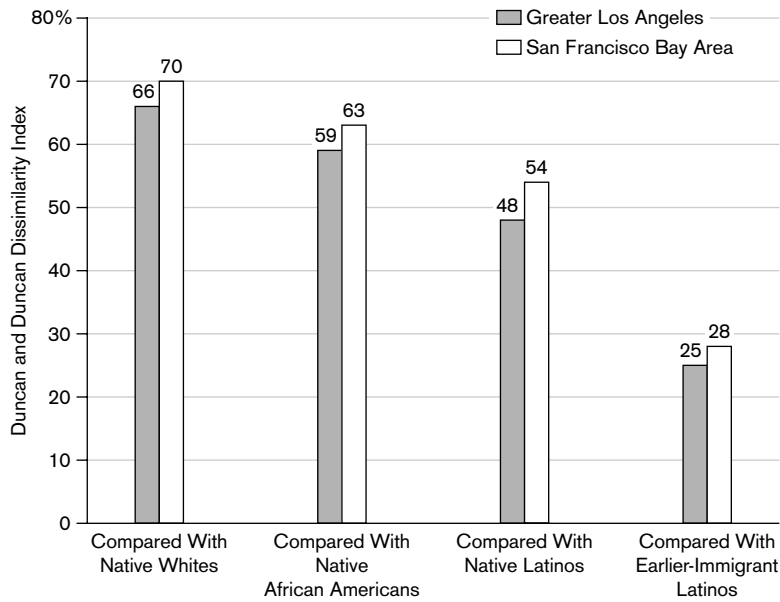


FIGURE 4.2. Occupational Segregation of Recent-Immigrant Latino Men from Other Men, Greater Los Angeles and San Francisco Bay Area, 2000
SOURCE: 2000 5% PUMS files.

Union Density

Figure 4.3 provides information on union density by major industry group for the Los Angeles and San Francisco areas; it shows unionization rates for public and private sectors combined.¹⁰ Because newcomer Latinos are less likely to find employment in the public sector, any analysis of the impact of union density on wage penalties must examine the mediating effects not only of overall union density within occupations but also of private-sector unionization within those fields. Figure 4.4 provides comparable data for the private sector only.

As expected, overall union density—that is, for public and private sectors combined—was highest in public administration, at 56% and 54% in the Los Angeles and San Francisco areas, respectively. Transportation, communications, and utilities also had a high rate of unionization. Unionization was least common in finance, insurance, and real estate (FIRE); agriculture, forestry, fishing, and mining; business and repair services; durable goods manufacturing; and wholesale trade.

Contrast between the two metropolitan areas was greatest in the construction

10. Union coverage includes both (a) members of unions and employee associations and (b) others covered by union or employee association contracts. The vast majority of covered workers are in the former category. (See Appendix A for more detail on the construction of this variable.)

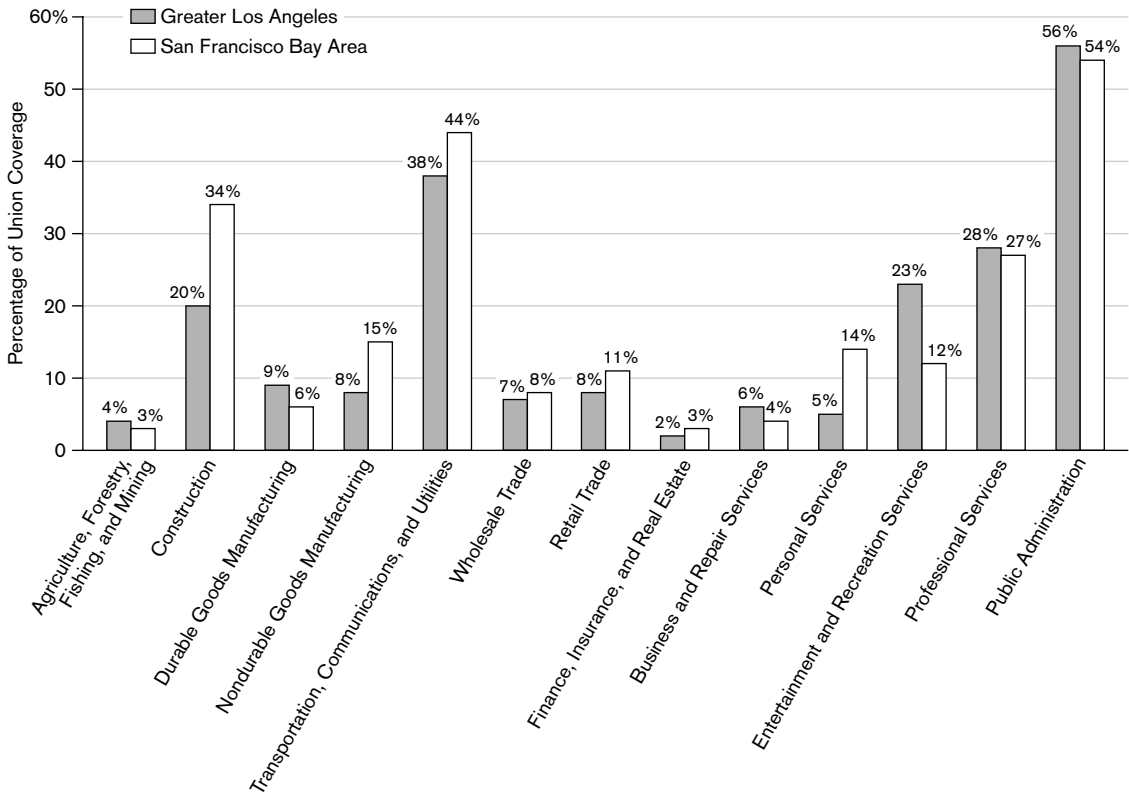


FIGURE 4.3. Union Coverage by Industry, Greater Los Angeles and San Francisco Bay Area, 2000
 SOURCE: 1998–2002 MORG files.

industry: overall union density was 34% in the Bay Area, but only 20% in greater Los Angeles. This difference was even more pronounced in the private sector, with almost twice as many unionized construction workers in the Bay Area (32%, versus 17% in greater Los Angeles). The difference in entertainment and recreation services was also marked: 23% of public and private sector workers in Los Angeles, but only 12% in the Bay Area, were covered by a union contract. For the private sector of this industry group the difference was similar: 22% in Los Angeles versus 9% in the Bay Area.

Impact of Unionization on Pay Penalties

Men with brown-collar jobs experienced a substantial wage penalty, as Figure 4.5 shows. Workers in these fields—whether they were native-born White, African American, or native Latino men or earlier-immigrant Latino men—earned less than did other workers with similar labor force characteristics and in comparable local

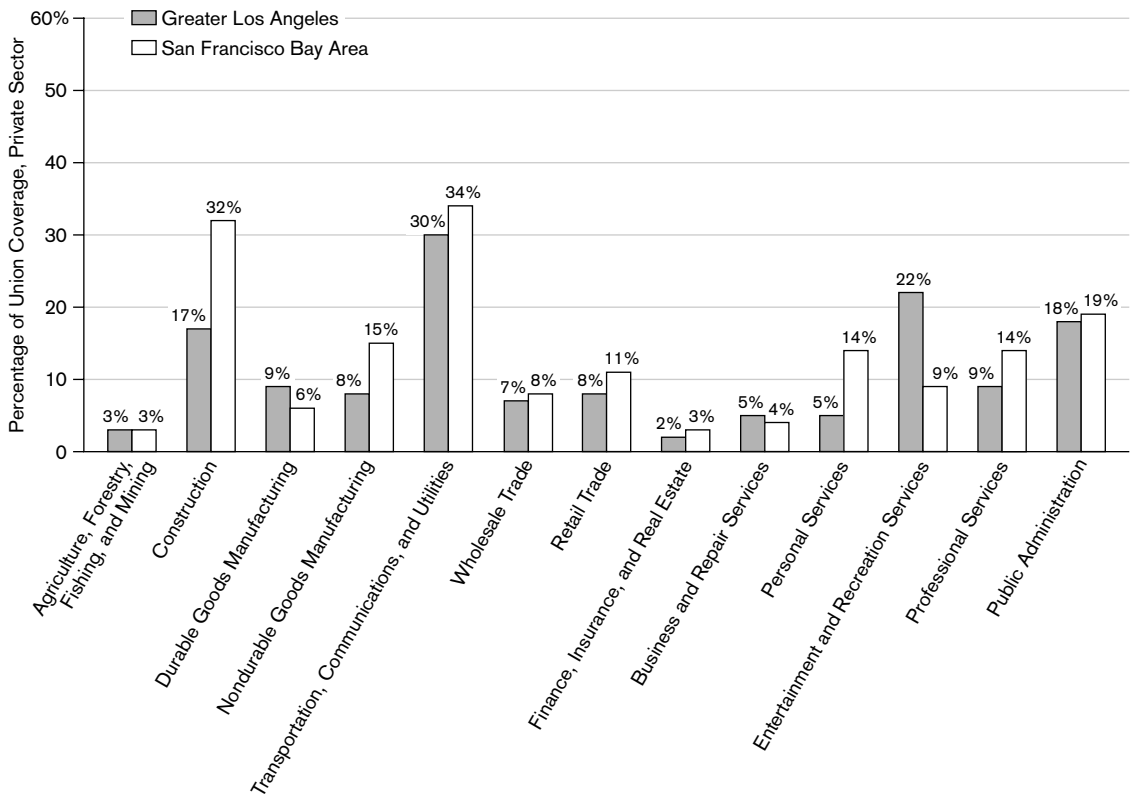


FIGURE 4.4. Union Coverage in the Private Sector, by Industry, Greater Los Angeles and San Francisco Bay Area, 1998–2002
SOURCE: 1998–2002 MORG files.

occupations. This finding holds even when other occupational characteristics are taken into account: brown-collar occupations pay less than do jobs in other fields when other variables are controlled.¹¹

The average worker employed in an occupation in which 15% of incumbents were newcomer Latino men earned \$8,855 per year less in Los Angeles and \$6,522 less in the Bay Area than did a comparable worker in an occupation with no newcomer Latino men.¹² The penalties decreased as the percentage of newcomer Latino men

11. These variables are: percentage female, proportion part-time, proportion in the public sector, natives' average education, natives' average experience, and union density. The model on which Figure 4.5 is based is the "intermediate" model described in Appendix A. They are simpler versions of the models presented in the first column of Appendix B; they include the main effect of union density, but not the interaction of unionization with recent-immigrant Latino men. Parameter estimates are available on request. Also note that the skill proxies are based on average education and experience data for native workers and, thus, they are unaffected by the relatively low average human capital of newcomer Latinos.

12. Because the modeling uses the natural logarithm of earnings, the effects are nonlinear—that is, the wage penalties associated with recent-immigrant Latino men vary at different points of

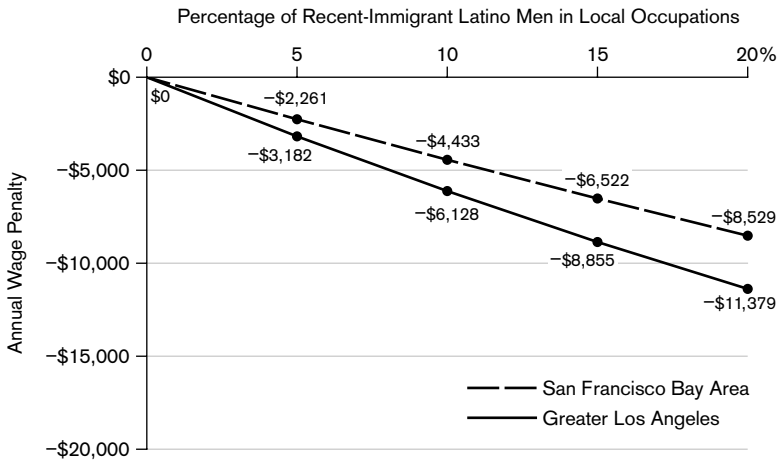


FIGURE 4.5. Wage Penalties for Average Worker in Brown-Collar Occupations, Greater Los Angeles and San Francisco Bay Area, 2000

SOURCE: 2000 5% PUMS files.

NOTE: Penalties are computed at the mean of annual earnings: Los Angeles, \$42,796; San Francisco, \$58,224.

dropped: 10% representation produced penalties of \$6,128 and \$4,433 in Los Angeles and the Bay Area, respectively; 5% representation yielded penalties of \$3,182 and \$2,261. These are substantial wage discounts, given that in 1999 the average annual earnings for the men in the study sample were \$42,796 in Los Angeles and \$58,224 in the Bay Area. Those working in Los Angeles not only had lower average wages than did their counterparts in San Francisco but also experienced considerably larger wage penalties.

How are these pay penalties affected by unionization? The analyses suggest that penalties are smaller where union density is higher, as Figures 4.6 and 4.7 show.¹³ For example, in greater Los Angeles (see Figure 4.6), a man working in an occupation in which newcomer Latino men comprised 15% of the workforce absorbed a

the earnings distribution (for workers with different individual and occupational characteristics). The penalties represented in Figure 4.5 are calculated at the mean of earnings. Also note that, while the range of recent-immigrant Latino men goes up to 34%, these graphs are truncated at 20%, as there are only five occupations with more than 20% newcomer Latino men.

13. Parameter estimates for the greater Los Angeles and Bay Area models with overall versus private sector union density are provided as Appendix B. The values for union density in the figures start at 2% (the minimum), and the distribution is truncated at 32%. Although union density ranges up to 56%, highly unionized occupations tend to have very fairly low representation of newcomer Latinos, as Table 4.3 shows. There are no brown-collar occupations with more than 34% union coverage. To be specific, at union coverage rates greater than 34%, the share of newcomer Latino men ranges from 0% to 3%.

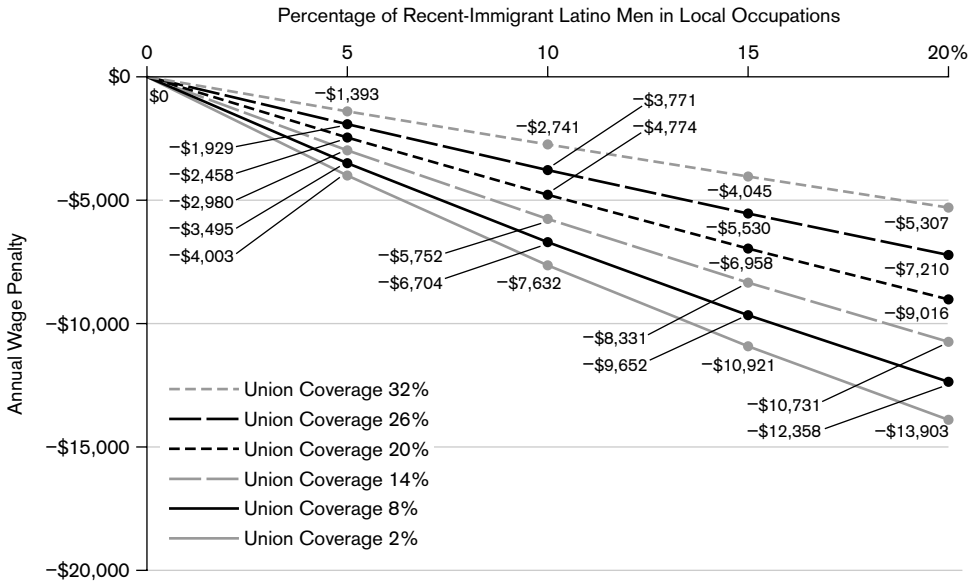


FIGURE 4.6. Wage Penalties for Average Worker in Brown-Collar Occupations, by Union Density, Greater Los Angeles, 2000

SOURCE: 2000 5% PUMS files and 1998–2002 MORG files.

NOTE: Penalties are computed at the mean of annual earnings: Los Angeles, \$42,796.

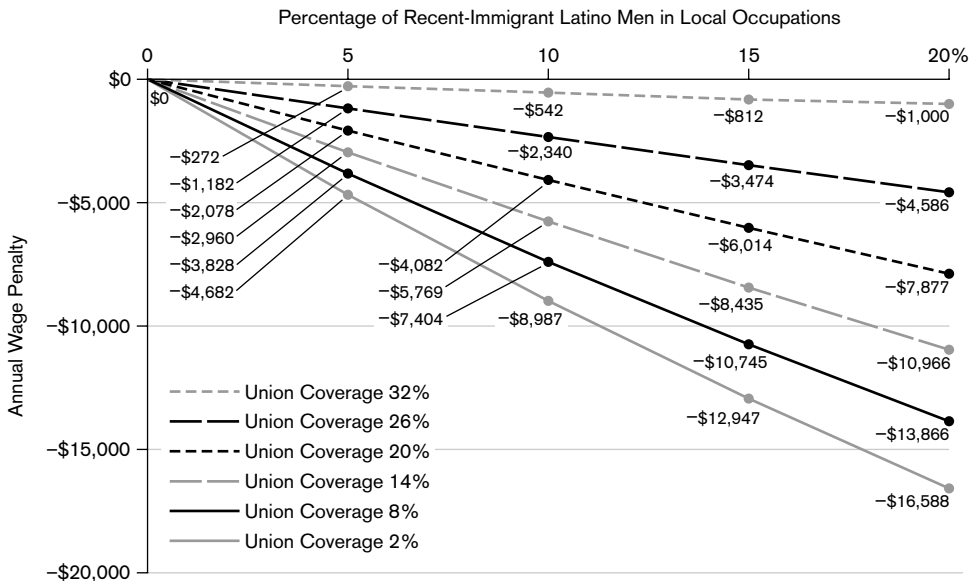


FIGURE 4.7. Wage Penalties for Average Worker in Brown-Collar Occupations, by Union Density, San Francisco Bay Area, 2000

SOURCE: 2000 5% PUMS files and 1998–2002 MORG files.

NOTE: Penalties are computed at the mean of annual earnings: San Francisco, \$58,224.

wage penalty of \$10,921 when only 2% of the workers in this occupation were unionized. When 32% of workers were covered by a union contract the penalty plummeted to \$4,045.¹⁴ The brown-collar penalties declined steadily as union density rose in both metropolitan areas, although the brown-collar penalties varied more in the Bay Area than in Los Angeles.¹⁵

Because newcomer Latinos are so highly concentrated in the private sector, private sector workers are likely to be most susceptible to brown-collar pay penalties. Public sector workers, who are unlikely to share workplaces with newcomer Latinos, tend to be buffered from penalties, and this buffer is reinforced by the greater union density that is characteristic of the public sector. Unionization rates mitigated wage penalties in the private sector, as shown in Figures 4.8 and 4.9. In fact, in greater Los Angeles the mediating effect of private sector unionization (see Figure 4.8) was stronger than that of overall unionization (see Figure 4.6).¹⁶ This is reflected in the larger spread between lines on the graph in Figure 4.8 than in Figure 4.6.

Unionization, then, did have an impact on brown-collar wage penalties in greater Los Angeles and the San Francisco Bay Area. Workers in fields that had a higher rate of unionization suffered smaller penalties than did workers in less unionized occupations. It appears that workers without union representation bear the brunt of wage penalties in brown-collar occupations.

Nationwide Comparison

To determine whether the results for California's two largest immigrant-receiving metropolitan areas represent a general phenomenon, further analyses were conducted for all the ten immigrant-receiving CMSAs in the United States combined.¹⁷ Brown-collar wage penalties were significantly lower in local occupations with higher rates of overall union density. However, wage penalties did not vary significantly by private sector union density in the national analyses. Further, both the brown-collar

14. These penalties are calculated at the mean of annual earnings. Hence, they approximate penalties for workers with average individual and local occupation characteristics.

15. The interaction of overall union density*proportion recent-immigrant Latino men is statistically significant in the Bay Area, but just shy of statistical significance in greater Los Angeles ($p < .054$). An alternative model combining the two CMSAs also shows a statistically significant interaction. The results for overall union density in Los Angeles should be regarded as strongly suggestive.

16. The interaction of private sector union density with recent-immigrant Latino men is statistically significant in both the Los Angeles and San Francisco CMSAs.

17. Results are available on request. This sample is comprised of CMSAs in which at least 1% of the labor force is recent-immigrant Latinos: greater Los Angeles, the San Francisco Bay Area, Chicago-Gary-Kenosha, Dallas-Ft. Worth, Denver-Boulder-Greeley, Houston-Galveston-Brazoria, Miami-Ft. Lauderdale, New York-Northern New Jersey-Long Island, Portland-Salem, and Washington-Baltimore. These multilevel models utilize data for 766,570 individuals and 3,877 local occupations (occupations-in-CMSAs).

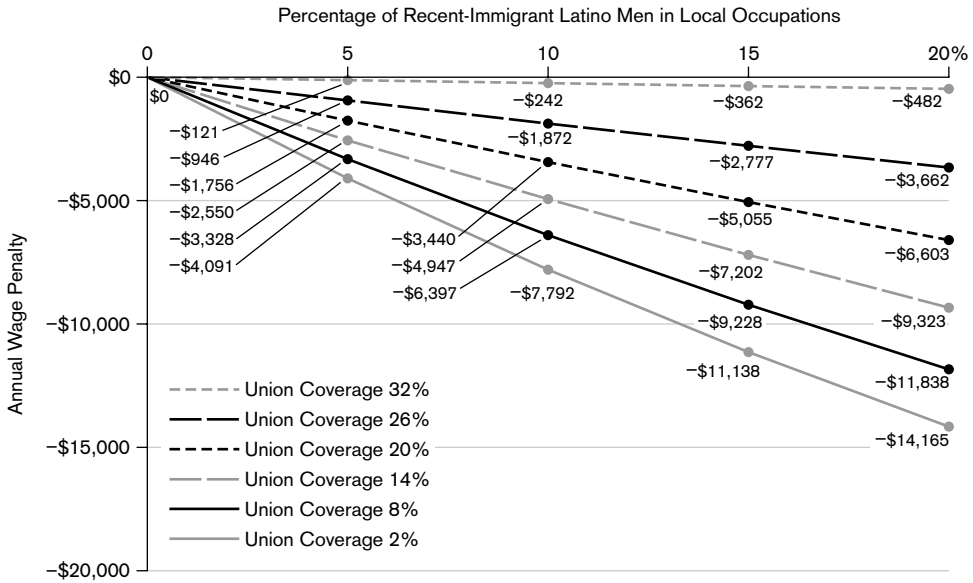


FIGURE 4.8. Wage Penalties for Average Worker in Brown-Collar Occupations in Private Sector, by Union Density, Greater Los Angeles, 2000

SOURCE: 2000 5% PUMS files and 1998–2002 MORG files.

NOTE: Penalties are computed at the mean of annual earnings: Los Angeles, \$42,796.

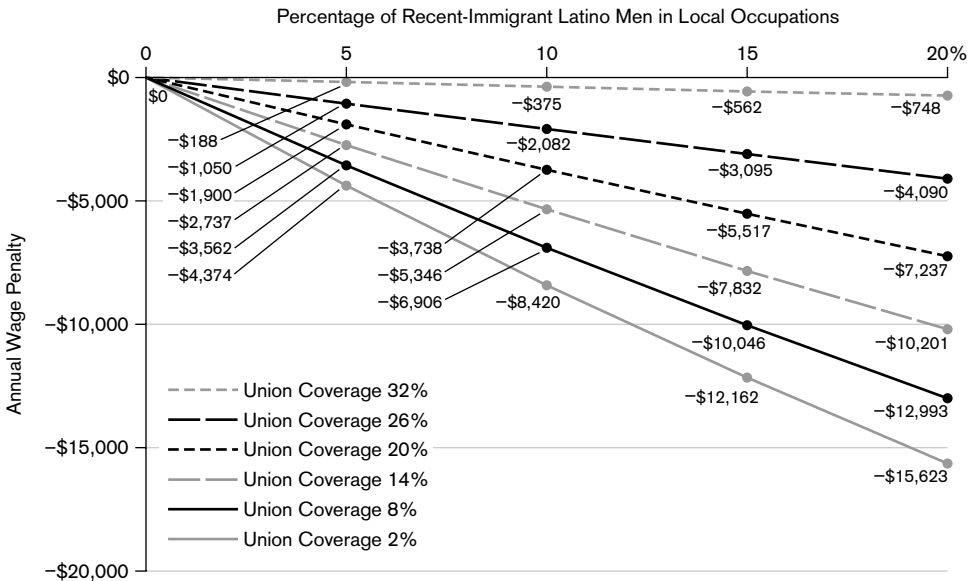


FIGURE 4.9. Wage Penalties for Average Worker in Brown-Collar Occupations in Private Sector, by Union Density, San Francisco Bay Area, 2000

SOURCE: 2000 5% PUMS files and 1998–2002 MORG files.

NOTE: Penalties are computed at the mean of annual earnings: San Francisco, \$58,224.

wage penalty and the mitigating effect of unionization appeared to be smaller in the national models than in California.

CONCLUSION

Employment in brown-collar occupations carried substantial wage disadvantages for native-born workers and earlier-immigrant Latinos, both in California and nationally, in 2000. This was the case across primary metropolitan statistical areas in 1990 (Catanzarite 2003, 2004) and for greater Los Angeles, at least, in 1980 as well (Catanzarite 1998). In addition, the presence of newcomer Latinos lowered relative wages for other workers in Los Angeles between 1980 and 1990, thus establishing a causal order (Catanzarite 2002). The findings reported here provide further evidence that new immigrants adversely influence wages for both natives and earlier immigrants working in brown-collar jobs.

The analyses also demonstrate that wage competition with new immigrants can be mitigated. The presence of unionization significantly reduces wage suppression in brown-collar occupations by improving working conditions and wages; where union density is high, workers incur smaller wage penalties than do their counterparts in less unionized fields. Union density is treated here as a structural feature of local occupations, and the implied mechanism for its influence is that the greater power to shape wages and working conditions benefits workers in the unionized segment of an occupation and those in the nonunionized segment as well. Those most likely to benefit from unionization are individuals covered under collective bargaining agreements, but the mere presence of such arrangements in a local occupation should push up prevailing wages and provide some benefits for nonunion workers.

This study suggests that recent-immigrant Latinos should be reaping some of the benefits brought about by high unionization rates in their local occupations. Yet, because newcomers are less likely to join a union (Waldinger and Der-Martorisan 2000), and because they are more likely to be employed in informal arrangements (for example, in residential construction or private household gardening), the effects of union density, including spillover effects, are likely to be small, particularly for the most marginalized workers.

The same logic applies to earlier-immigrant Latinos. Although they are more established than newcomers, this group is relatively unlikely to be unionized and includes a large share of unauthorized workers who are employed under informal arrangements. Unionization is less likely to buffer these workers from brown-collar wage penalties than is the case for native-born workers. In general, earlier immigrants suffer more negative consequences of immigration than do natives simply because they compete most directly with recent-immigrant Latinos. They are more likely than natives to be working side by side with newcomer Latinos (see Catanzarite 1998, 2004; Grossman 1982; Smith and Edmonston 1997); they are also more

likely than natives to be employed at the same worksites as newcomer Latinos and to have jobs that are similar. Earlier-immigrant Latinos also suffer larger pay penalties than do native-born workers (Catanzarite 1998, 2004).

Union representation may give greater protection to natives than to immigrants, but native-born workers still experience wage competition in the form of substantial brown-collar pay penalties. Both native-born men and earlier-immigrant Latino men in these jobs suffer a substantial wage discount relative to their counterparts in other fields.

These findings do not support a sweeping conclusion that immigration is generally harmful to native workers (as I have also noted elsewhere; see Catanzarite 2003, 2004). Many brown-collar occupations thrive precisely because of the availability of immigrant labor. If cheap immigrant labor were not abundant, more labor-intensive operations would relocate overseas and private household jobs might be performed by family members.¹⁸ Further, the population growth that accompanies immigration creates a broad range of job opportunities for native-born workers in production and services, and it thus provides many potential avenues for employment for native-born workers outside brown-collar fields.¹⁹

The debate about competition between native-born and immigrant workers has given scarce attention to policies that would lessen the potentially negative effects of immigration on wages. Given the likelihood that undocumented immigration will continue, and that policies intended to prevent it will remain relatively ineffective, policy debate should focus on identifying mechanisms to raise the status of less-skilled immigrants, not continually reargue the pros and cons of immigration restriction. The finding that union density buffers other workers from brown-collar wage effects indicates that policies to address immigrant wage competition can be mutually beneficial to newcomers and to the more established groups with whom they may compete. Strengthening the position of marginal workers in this way may, indeed, protect those higher in the employment hierarchy.

Unionization generally improves wages, regardless of the composition of any given occupation or industry in which it appears. The findings reported here suggest that in immigrant-rich labor markets, like those in California's two largest metropolitan areas, improving conditions for disadvantaged immigrants through unionization might be an effective strategy to protect the interests of native-born workers. It is perhaps no accident, then, that organized labor in recent years has become much more supportive of immigrants' rights and has devoted considerable attention to organizing immigrants, especially in California. Indeed, the AFL-CIO has been a

18. See Milkman et al. 1998 on the positive relationship between the incidence of domestic service employment and cities' immigrant presence.

19. Note also that some disadvantaged natives experience mobility out of brown-collar occupations into better positions; such workers complement immigrants and benefit from their influx. Others, however, may be pushed out of the labor force entirely if employers prefer newcomer Latinos in particular jobs.

leading voice in support of an amnesty for undocumented immigrants and, more generally, has emerged at the forefront of the immigration reform movement. This implicit recognition that native-born and immigrant workers have interests in common is borne out by the analyses presented here.

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APPENDIX A. Data and Methods

The analyses employ the 2000 5% Census PUMS in conjunction with the pooled 1998–2002 Current Population Survey (CPS) Merged Outgoing Rotation Group (MORG) files. The individual-level PUMS data are for men who are U.S.-born Whites, African Americans, or Latinos, or earlier-immigrant Latinos (arrived before 1995).¹ The age range is eighteen to sixty-four; individuals must have worked in the prior year and lived in either the Los Angeles–Riverside–Orange CMSA or the San Francisco–Oakland–San Jose CMSA, both of which received substantial shares of recent-immigrant Latinos in the late 1990s. Recent immigrants are defined as those who came to the United States between 1995 and 2000. Supplemental analyses include eight other Latino immigrant-receiving CMSAs.²

Multilevel models, discussed in detail below, predict workers' earnings as a function of individual and occupation-within-CMSA characteristics.

Level-1 independent variables include: years of education, potential labor force experience (age minus education minus 6), potential experience squared, marital status, the natural logarithm of hours worked per week last year, the natural log of weeks worked, and dummy variables distinguishing native African Americans, native Latinos, and earlier-immigrant Latinos (with native Whites the omitted category). The dependent variable is the natural logarithm of annual earnings in the prior year.

At level two, I construct a dataset for occupation-within-CMSAs, aggregated from PUMS data on all individuals at least sixteen years of age in the relevant CMSAs who worked in the prior year. The analyses are restricted to occupation-CMSAs with at least twenty incumbents in order to avoid estimation problems associated with small cell sizes.³ The resulting level-2 datasets have 452 units for greater Los Angeles and 400 for the Bay Area.

The level-2 file includes information on the demographic composition of occupations within each CMSA (for example, the percentage of recent-immigrant Latino men, the percentage of women).⁴ It also contains aggregate indicators of skills in the local occupation (natives' mean education, natives' mean potential labor force experience). Because recent-immigrant Latinos tend to pile up in low-skill occupations (Catanzarite 2002), I control for

1. PUMS data are weighted by the census weighting field divided by the mean weight; thus, the sample size is still 5% of the population.
2. In preliminary analyses with the 1% Census PUMS, I identified CMSAs for potential inclusion based on labor force share of recent-immigrant Latinos. Casting a broad net, I included CMSAs with a minimum of 1% recent-immigrant Latinos (women and men combined). After compiling the 5% data on these candidate CMSAs, I eliminated three that had less than 1% recent-immigrant Latinos in this larger dataset (Boston–Worcester–Lawrence, Milwaukee–Racine, and Sacramento–Yolo). The ten that are included in the national analyses are: greater Los Angeles, the San Francisco Bay Area, Chicago–Gary–Kenosha, Dallas–Ft. Worth, Denver–Boulder–Greeley, Houston–Galveston–Brazoria, Miami–Ft. Lauderdale, New York–Northern New Jersey–Long Island, Portland–Salem, and Washington–Baltimore.
3. Because of this restriction, results may not be generalizable to very small local occupations.
4. In the Los Angeles and San Francisco areas, the lion's share of immigrant Latinos are Mexican or Central American. Alternate analyses using local occupations' share of recent-immigrant Mexican or Central American men did not differ substantially from those using the larger group of recent-immigrant Latino men either nationally or in California; hence I use the latter variable in the analyses presented here.

these skill proxies to avoid spurious effects. To further guard against possible spurious effects associated with contingent work, I construct controls for the proportion of part-time jobs and the proportion of public sector jobs in the occupation-CMSA. The level-2 data file also includes aggregated information on union density in each local occupation.

Union density in the occupation-CMSA is estimated using the CPS's annual merged outgoing rotation group (MORG) data for 1998–2002. These five years of data, centered around 2000, are pooled to construct a sample large enough to produce reliable estimates of union density for major industry groups (MIGs) within CMSAs. The 1998–2002 pooled, unweighted Ns are 34,947 for greater Los Angeles and 12,348 for the San Francisco Bay Area. CPS data are weighted prior to constructing the union density variables, and the five-year weighted Ns are 27,992,967 for greater Los Angeles and 13,748,611 for the Bay Area.⁵

Employed civilian wage and salary workers, ages sixteen and over, are asked two questions concerning union coverage: whether the individual is a member of a labor union or an employee association similar to a union; and, if not, whether she or he is covered by a union or employee association contract. I constructed two unionization variables: union coverage (including both members and nonmembers), and private sector union coverage (for those employed in the private sector). I then collapsed the detailed industry categories to thirteen MIGs based on the 1990 industry classifications and aggregated the CPS data to obtain unionization rates in each local major industry group (that is, each MIG-within-CMSA). These data were then merged onto the individual-level PUMS file, matching by 1990 MIG.⁶ Thus, each individual in the census was assigned a union density variable corresponding to their local industry (for example, workers employed in the greater Los Angeles wholesale trade industry receive a union coverage score of 7%). When these data are aggregated to the occupation-CMSA level, they are averaged across incumbents in the local occupation and represent union density in the occupation—that is, each individual is assigned the unionization rate for their industry, and these are then averaged across workers in an occupation to get the occupation's unionization rate.

I employed hierarchical modeling (Bryk and Raudenbush 1992; Wong and Mason 1991), predicting individuals' annual earnings as a function of both individual-level and occupation-by-CMSA level characteristics. The key effects of interest are the influence of the proportion of recent-immigrant Latino men (RILM) in the local occupation on other men's earnings and the interaction of RILM by occupations' union density. I estimate the magnitude of pay penalties associated with brown-collar occupations and the mediating influence of union density on brown-collar wage penalties.

Models take into account the importance of other local occupation factors on the earnings determination process. Level 2 controls include local occupations' proportion women, the skill proxies (mean of natives' education, and mean of natives' potential experience), employment regularity (proportion part-time, proportion public sector), as well as the main effect of union coverage.

5. I used the recently-released (and slightly improved) 2000 census-based weights for 2000 through 2002. (This differs from estimates on Hirsch and MacPherson's www.unionstats.com website, as the revised weights were not yet released when they published their figures.) These are provided on the CPS-MORG files compiled by the National Bureau of Economic Research.

6. The coding of Census's 2000 industries to 1990 MIGs was informed by the U.S. Census Bureau's industry crosswalk (Scopp 2003)

The full models take the following form and are simultaneously estimated.

$$y_{ij} = b_{0j} + b_{1j}\text{Native Black} + b_{2j}\text{Native Latino} + b_{3j}\text{Earlier-Imm Latino} + \mathbf{B}\mathbf{X} + e_{ij} \quad (1)$$

where y_{ij} is the earnings of individual i in occupation-by-MA j ; \mathbf{X} is a vector of individual characteristics, \mathbf{B} is a vector of their coefficients, and e is the error term. The control variables are fixed across local occupations, with the exception of the ethnicity dummy variables. The latter are permitted to vary across occupation-CMSAs; this estimation decision is based on other research showing differential ethnicity effects across local occupations (Catanzarite 2004).

The occupation-by-MA models use the intercept, b_{0j} , as the dependent variable:

$$B_{0j} = a_{00} + \mathbf{Z}\mathbf{O} + r_{0j} \quad (2)$$

where \mathbf{O} is a vector of occupation-by-MA characteristics, including the main effects of RILM and union density, and in the final model, the interaction of these two terms. \mathbf{Z} is a vector of their coefficients, and r is the error term.

An intermediate model, including the main effects of RILM and union coverage, but no error term, uses all grand-mean centered variables, with the exception of RILM. This model tests the overall effect of RILM on individual wages.

In the final model, all variables are grand-mean centered, except the terms for proportion RILM, union coverage, and the interaction of these two variables. The interaction of union coverage \times proportion RILM tests whether brown-collar pay penalties are significantly lower in local occupations where industrial union density is higher. Alternative models use either overall unionization rates or private sector unionization within industries.

VARIANCE ACROSS OCCUPATION-CMSA

In addition to the two models discussed above, a baseline model, with no variables, but with an intercept that varies by occupation-CMSA, provides information on the variance of earnings across level 2 units. This analysis of variance yields an intraclass correlation coefficient of .26 in Los Angeles and .27 in the Bay Area, indicating that 26% of the variance in earnings is between occupations in Los Angeles and 27% is between occupations in the Bay Area. The models depicted graphically in Figures 4.8 and 4.9 (with the interaction of RILM by private sector union density) demonstrate that the wage determination process is strongly influenced by contextual factors associated with the local occupation: local occupations' demographic composition, average skills, employment regularity, and private sector union density explain 94% of the between-occupation variance in greater Los Angeles and 93% in the San Francisco Bay Area.

APPENDIX B. Occupation-Level Effects on Individual-Level Coefficients from Between-Context Hierarchical Linear Model Regressions Greater Los Angeles and San Francisco Bay Areas, 2000

<i>Independent Variables: Occupation-Level Effects</i>	DEPENDENT VARIABLE: LEVEL-I INTERCEPT			
	<i>Los Angeles CMSA</i>		<i>San Francisco CMSA</i>	
Intercept	10.140 (.026)***	10.137 (.022)***	10.363 (.027)***	10.362 (.023)***
Proportion recent-immigrant latino men (RILM)	-2.051 (.397)***	-2.140 (.458)***	-1.782 (.422)***	-1.662 (.413)***
Proportion female	-.095 (.032)**	-.074 (.034)*	-.136 (.038)**	-.131 (.039)***
Natives' mean education	.092 (.008)***	.096 (.008)***	.074 (.008)***	.076 (.009)***
Natives' mean potential experience	-.005 (.002)*	-.004 (.002)*	-.007 (.002)*	-.007 (.002)*
Proportion public employed	.016 (.063)	.058 (.046)	-.040 (.065)	-.017 (.047)
Proportion part-time	-.775 (.071)***	-.760 (.072)***	-.735 (.075)***	-.728 (.076)***
Union density (proportion covered)	.252 (.143)*	—	.141 (.139)*	—
Union density × RILM	4.341 (2.694) ^a	—	5.277 (1.535)**	—
Private sector union density	—	.434 (.179)**	—	.217 (.160)
Private sector union density × RILM	—	6.510 (3.632)*	—	4.991 (1.627)**

SOURCE: 2000 5% PUMS files and 1998–2002 MORG files.

NOTE: * p < .05; ** p < .01; *** p < .001, one-tailed; ^a p < .054, one-tailed.

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