

THE STATE OF THE UNIONS IN 2014

A PROFILE OF UNION MEMBERSHIP IN GREATER LOS ANGELES, SAN FRANCISCO, CALIFORNIA, AND THE NATION

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This report is based on analyses of the CEPR Uniform Extracts of the U.S. Current Population Survey (CPS) Outgoing Rotation Group. All analyses in this report cover a fiscal year—the 12-month period from July of the previous year through June of the given year. Using this 12-month system, the authors analyzed data beginning with the 2012 State of the Unions publication. The analysis for 2013 covers the entire 12-month period from July 2012 through June 2013, rather than only the six months from January 2013 through June 2013. Unless stated otherwise, all years in the report refer to the fiscal year. All results are calculated using the CPS sampling weights. The sample includes all employed (but not self-employed) civilian wage and salary workers age 16 and over. All estimates in this report are subject to a margin of error, and the margin is higher for estimates based on smaller sample sizes, including metropolitan-level and industry group estimates. We report estimates as statistically significant based on a 95% confidence interval.

Contents

Executive Summary	2
Background and Purpose	2
New Analysis	3
How Unionization Changes: Across California and Over Time	4
Union Density by Demographics	11
Union Compensation	16
Unions and Inequality in California and Beyond	18
Conclusion	20
Bibliography	21

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Mural Credit

San Francisco Public Works of Art Project, San Francisco CA (1934)

Executive Summary

Each year, The Institute for Research on Labor and Employment (IRLE) tracks the level and significance of California unionization in its annual *State of the Unions* report. In addition to documenting trends in unionization in Los Angeles, California, and The United States, this report adds a discussion of unions in Greater San Francisco. Greater San Francisco is not only the state's wealthiest region, it along with Los Angeles, is one of the most unequal in the country. This report uses union data as a departure point for a discussion of how unions do and do not counteract income inequality.

We find that the workforce is more unionized in California than the Nation, with especially high densities in San Francisco. We trace these trends to activities in the public sector. California and San Francisco's public sectors tend to be unionized at higher rates, and rates in industries like hospitality also tend to be higher. We connect variance in unionization by demographic group to industrial composition.

We find that the returns to union membership vary across space. For instance there is no significant wage premium for unionized workers in San Francisco, compared to non-unionized workers, and only part of this can be explained by the presence of a high-paid, non-unionized technology sector in San Francisco. We also find that, adjusting for the cost of living in Greater San Francisco, union workers there earn lower real incomes than in Los Angeles.

We conclude that while unions can insulate lower educated workers from income inequality, they are less effective at combating living cost problems.

Background and Purpose

The Institute for Research on Labor and Employment (IRLE) tracks the level and significance of unionization in its annual *State of the Unions* report. Our estimates are based on analysis of the monthly *Current Population Survey (CPS)* – the only governmental survey to consistently track unionization. Many readers will already be familiar with the CPS. It is the most cited source for unemployment estimates. In publishing this report, we recognize that union activity can also change regularly, and that these changes are of interest to anyone who thinks about unions. Our report provides the most current snapshot of unionization across LA, California, and the United States. We seek to enrich *discussions* of unions among policymakers, scholars, concerned citizens, and unions themselves by answering the most basic descriptive questions related to unions. These include:

- What is the overall unionization rate in Greater Los Angeles, California and the United States?
- How does union activity vary by gender, race, industry, and other important demographic variables?
- How has unionization changed overall and across subpopulations?
- What do union members earn, compared to nonunion workers?

New Analysis

This year we consider these questions again, and also expand the reach of our study. For the first time we examine trends in the Greater San Francisco Region. This region, which includes San Francisco, Oakland and San Jose¹, is not only the second most populous region in California (containing 8 million residents), it is also the state's most prosperous region, and its wages are among the highest nationally. San Francisco's higher incomes are forged through a more technology-oriented industry base, and they are the envy of local officials across the country. A comparison with Los Angeles, whose industry base is more oriented towards entertainment, shipping and logistics, yields insights into how union participation changes from place-to-place. Before this year, we have not attempted any comparisons of this sort.

We also focus more on the topic of income inequality. Incomes are not necessarily spread evenly in a region. Indeed the seemingly prosperous San Francisco metro region², is seventh among all US city regions in terms of income inequality. The Los Angeles portion of Greater LA is even more uneven, in fact only New York and Miami have greater levels of income inequality (Census 2011). Various studies have found that on average a decline in unionization is associated with greater wage equality, particularly among men (Freeman, 1982; Freeman and Medoff, 1984; Card et al. 2004). These results suggest that unions can be a buffer for lower skill workers whose incomes might not have grown otherwise. Our study explores whether unions are a tool against wage inequality in LA and San Francisco, and how the impact of unions might vary spatially.

¹ When we discuss Greater San Francisco we are referring to what the Office of Management and Budget calls the San Jose- San Francisco- Oakland Consolidated Statistical Area. This region includes the metropolitan areas of San Francisco, San Jose, Santa Cruz, Vallejo, Stockton, Santa Rosa, and Napa. Greater Los Angeles includes LA, Long Beach, Riverside and Oxnard.

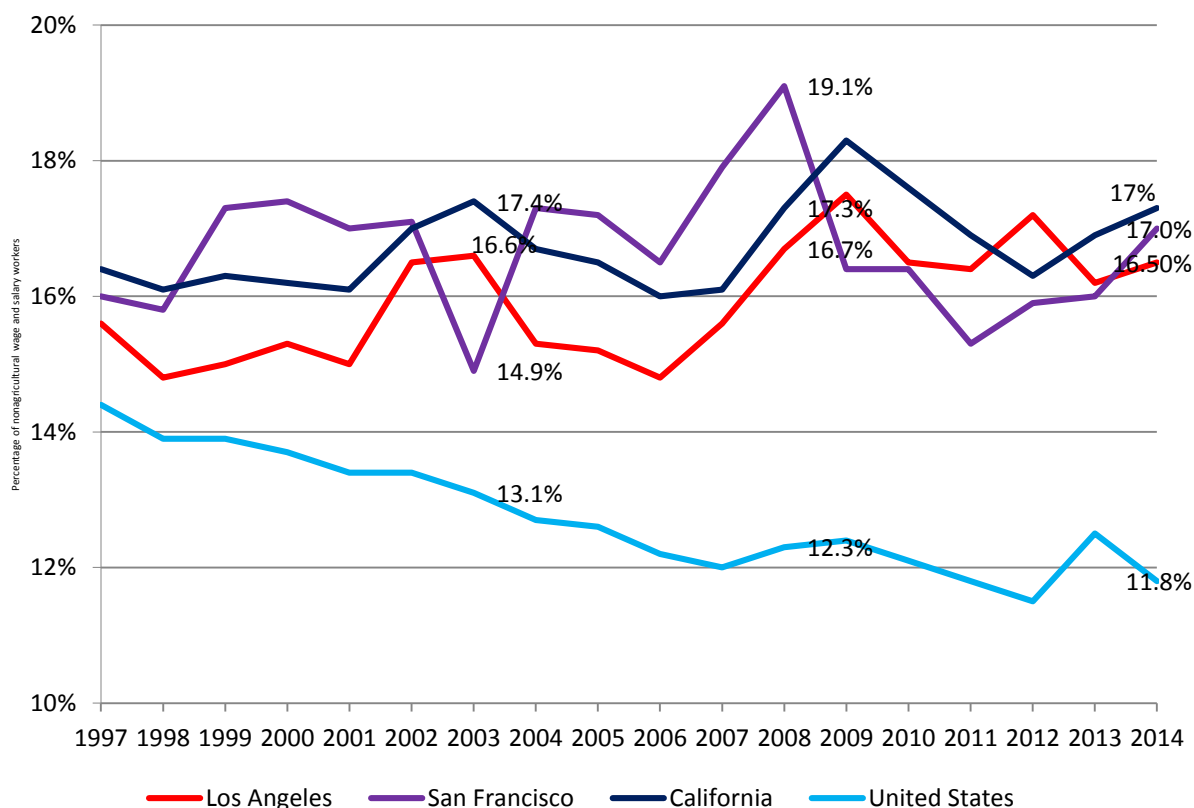
² The San Francisco Metro, which includes Oakland is the largest metropolitan area within Greater San Francisco.

How Unionization Changes: Across California and Over Time

OVERALL UNION DENSITY

Union density varies considerably by state and only modestly by year. On average, workers in California are more likely to be in a union than in the United States at large. The rate of unionization is slightly below 12 percent nationwide, but close to 17 percent for the other three areas under study. Los Angeles (16.5 percent, and San Francisco (17 percent) show slightly lower shares than California (17 percent) but the differences are not statistically significant. Union density appears to have declined consistently since 1997 in the US, but to have remained basically level in California and its largest regions.

Figure 1: Union Density in Los Angeles, San Francisco, California and the United States, 1997-2014



California's unionization rate has not always matched the rate in its two largest regions but the differences have never been notable. The biggest gap in unionization between any of the jurisdictions occurred in 2003, when California's rate was 2.5 percent higher than San Francisco's. On average the

maximum distance has been only 1.7 percent. This is not surprising, as changes in the two regions directly affect changes in the state. Roughly 68 percent of California's live in Greater LA or Greater San Francisco.³

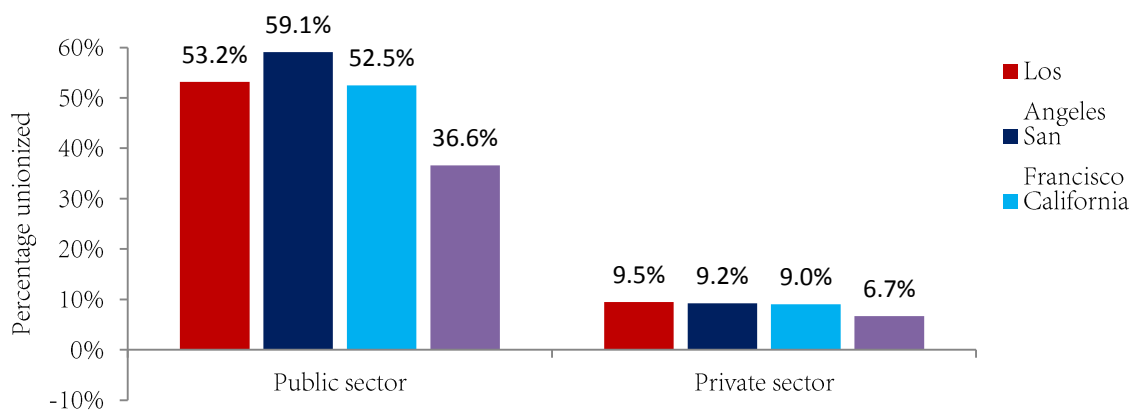
In the California jurisdictions, union density is modestly higher this year, by .2 percent in the two regions and by .3 percent in the state, but none of these changes can be considered statistically significant. A more interesting change has occurred in the US, where unionization grew by a percentage point between 2012 and 2013 but fell significantly, by .7 percent in 2014. Unionization today is lower nationally than it was at the height of the Great Recession in 2009.

PUBLIC SECTOR UNION DENSITY

California's higher union density can be partially explained by differences in public sector activity (See Figure 2). The majority (53 percent) of public sector workers in California are unionized. LA's rate is comparable to the state's and the Bay Area's rate is closer to 60 percent. Meanwhile, only 37 percent of public workers in America are unionized. Even though the public sector is a small part of any local economy, the large difference in public unionization is surely related to the general tendency to unionize.

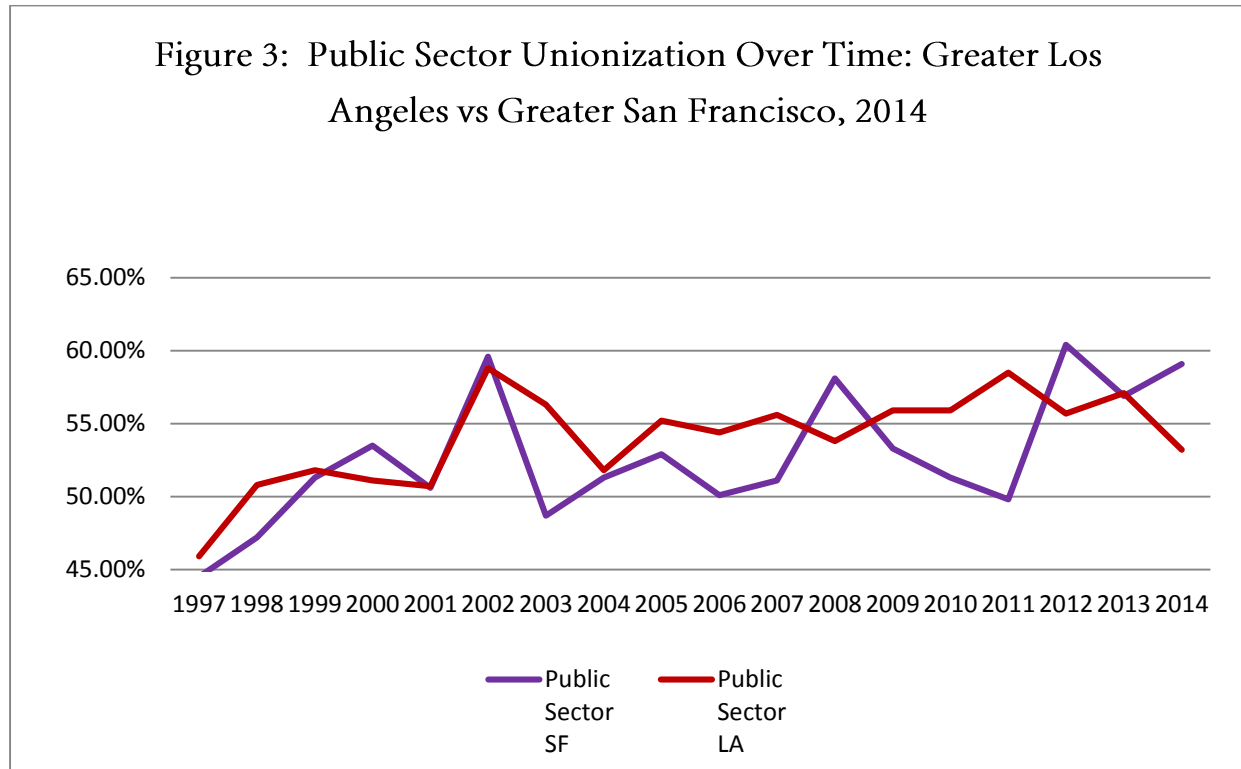
Since 2013, the public sector unionization rate has not changed significantly in California or the United States, but has increased by a notable 2.2 percent in San Francisco while it decreased by 4 percent in Greater Los Angeles.

Figure 2. Unionization Rates by Sector,
Los Angeles, California, and the United States, 2014



³ For this reason, our analysis hereafter will either focus on the two regions, generally or the state overall.

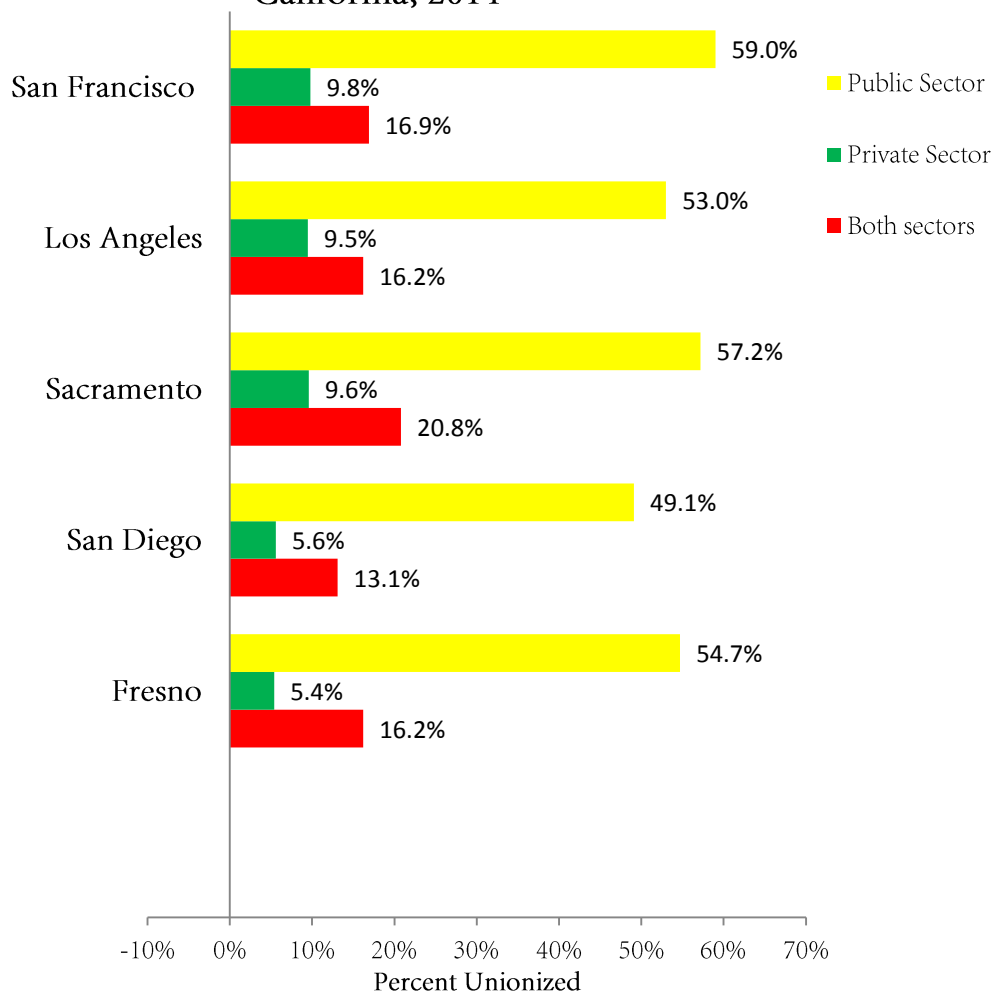
As of 2014 San Francisco's public sector is significantly more unionized than LA's. This seems all the more striking, considering that neither region contains the state capital and that each is home to large cities with strong local governments. The 2014 difference seems less remarkable in the context of Figure 3. Since 1997 public sector unionization has fluctuated such that LA has often had the higher rate. Over time the two areas are much more similar in terms of their public sector unionization than they are different.



The relationship between public sector unionization and the overall rate is corroborated by Figure 4. Here we show unionization by metropolitan area – a smaller geographic unit⁴. This allows for us to compare activity in the main portion of Greater Los Angeles and San Francisco with activity in other California metropolitan areas.

⁴ The San Francisco Metropolitan area (officially called the Metropolitan Statistical Area) includes Oakland but not San Jose, Vallejo, Santa Rosa, Stockton or Napa. The LA Metro area includes Long Beach and Orange County but not Riverside or Oxnard.

Figure 4: Unionization Rates in Selected Metropolitan Areas, California, 2014



San Francisco's public sector unionization is highest among all regions under observation. The only region with public sector unionization under 50 percent is San Diego, and its overall unionization rate is also the lowest. Fresno and San Diego have equivalent private sector rates. Sacramento's rate is lower than San Francisco's but not significantly so. Still, the fact that their rates are similar is interesting, considering that Sacramento is the seat of California's government. Sacramento has a significantly higher overall rate but this seems to be driven by differences in the private sector. One out of every 10 private sector employees in Sacramento is in a union.

Sacramento's public sector commands a relatively high share of its workforce. Roughly 27 percent of all Sacramento workers (unionized and nonunionized) are in the public sector, twice the proportion of San Francisco (14 percent) or Los Angeles (15 percent) workers. 18 percent of all Americans work in the public sector. While public sector unionization has an outside influence on the overall rate, it is important to also investigate private sector variation.

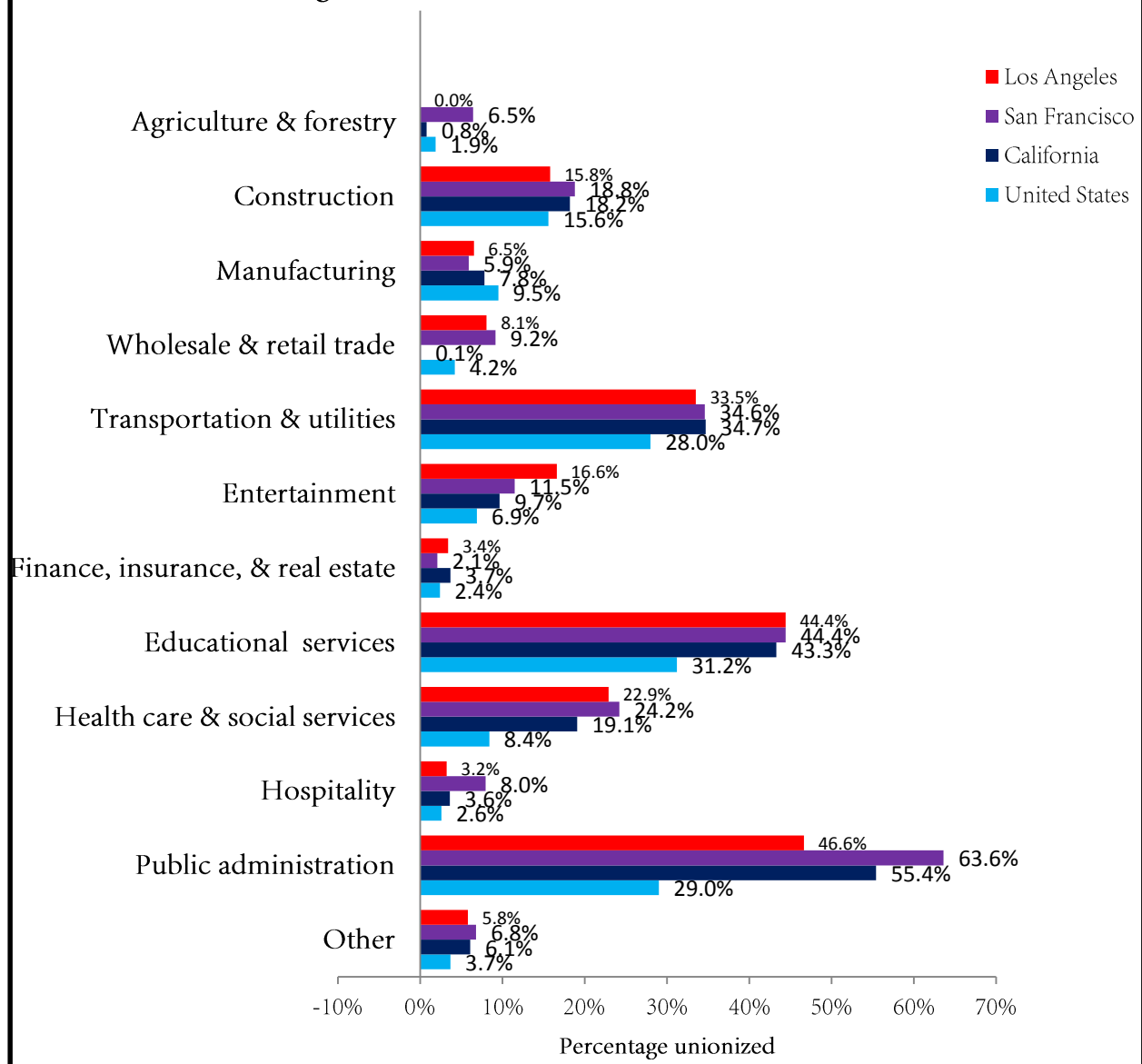
PRIVATE SECTOR UNION DENSITY

We further explore private sector unionization by considering union density by industry. Industry refers to the setting of employment and not the type of employer (public vs. private). Public sector workers are highly concentrated in a few industries. Nationally, 78 percent of all public sector workers are in public administration (44 percent) and educational services (34 percent). When transportation, utilities, healthcare, and social services are included, a full 93 percent of all unionized public sector workers are represented. The private sector is mostly comprised by the remaining eight industry groups.

Figure 5 shows the proportion of each industry that is unionized in each area. California and its key regions have higher unionization rates in almost every industry. The most notable exception is in manufacturing, where the national average (9.5 percent) is significantly higher than in California (7.8 percent) or Greater LA (6.5 percent) and the Bay Area (5.9 percent). California's manufacturing rate is lower than the rate in Illinois (19 percent in 2013⁵), but higher than New York's (4 percent in 2013). LA and San Francisco's manufacturing rates are higher than rates in the New York metropolitan region (2.3 percent) and lower than Chicago's (14.6 percent).

⁵ Illinois estimates come from Manzo, Bruno and Parks, 2014. New York estimates come from Milkman and Luce, 2013

Figure 5: Unionization Rates by Industry Group,
Los Angeles, California, and the United States, 2014



There have been several statistically significant changes to union density since 2013. Entertainment unionization increased in LA by nearly 6 percent while Public Administration unionization decreased by 14 percent. The rate at the state's schools dropped by more than 5 percent. Finally, manufacturing unionization dropped in the country by a whole percentage point. There have not been any significant industry-level changes in San Francisco.

LA and San Francisco differ by the tendency for some industries to unionize. LA's entertainment workers are more likely to be unionized, but the sector only accounts for five percent of union workers there (See Figure 5). On the other hand, the public administration sector in San Francisco is more unionized. San Francisco's advantage in public sector unionization seems to be rooted in unionization

among bureaucrats (as opposed to teachers, medical professionals or social workers). San Francisco also has higher unionization among industries not otherwise classified (other). This category, which includes information and communications technology, contains a full 24 percent of all employees in the area, but less than 8 percent of all unionized workers. Hotel workers are especially unionized in San Francisco – its 8 percent unionization rate is notably higher than LA’s (3.2), California’s (3.6) and the nations’ (2.6) (Figure 5).

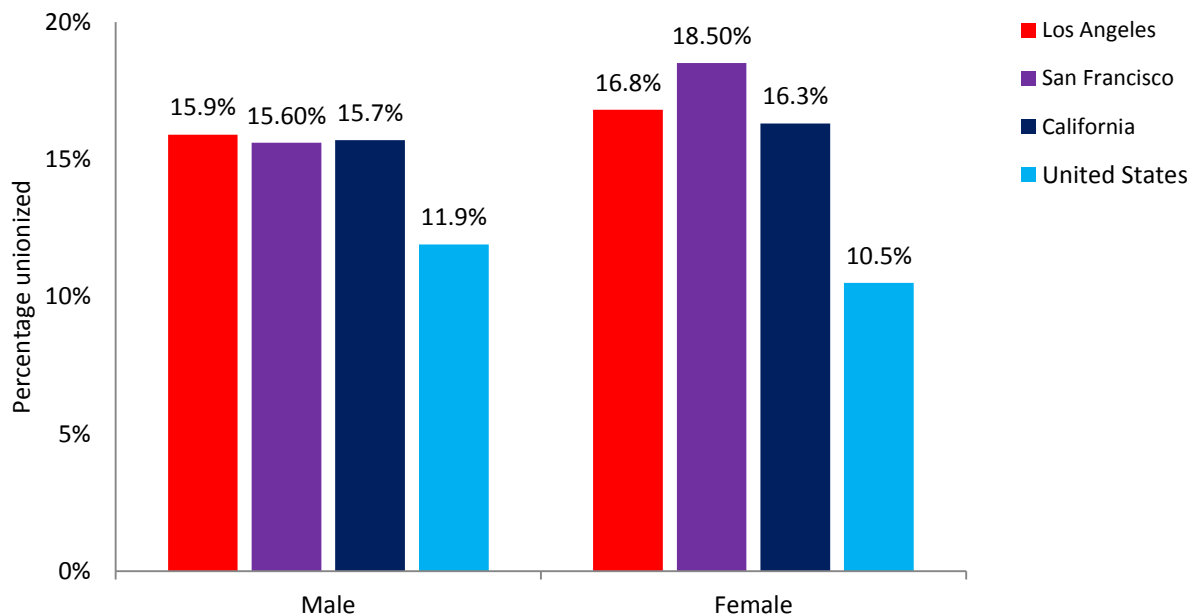
Figure 6: Share of All Union Workers by Industry				
	Los Angeles	San Francisco	California	United States
Industry group	% Of Total	% Of Total	% Of Total	% Of Total
<i>Agriculture & forestry</i>	0.0%	0.1%	0.1%	0.1%
<i>Construction</i>	5.1%	7.4%	6.6%	7.4%
<i>Manufacturing</i>	4.6%	4.1%	5.2%	9.7%
<i>Wholesale & retail trade</i>	7.1%	6.5%	7.5%	5.7%
<i>Transportation & utilities</i>	11.6%	11.0%	11.1%	13.1%
<i>Entertainment</i>	5.1%	1.3%	2.2%	1.7%
<i>Finance, insurance, & real estate</i>	1.2%	1.2%	1.5%	1.6%
<i>Educational services</i>	27.3%	24.9%	24.7%	27.8%
<i>Health care & social services</i>	16.7%	19.3%	14.2%	11.4%
<i>Hospitality</i>	1.4%	2.5%	1.6%	1.6%
<i>Public administration</i>	13.5%	13.9%	17.9%	14.3%
<i>Other</i>	6.4%	7.9%	7.4%	5.6%
Total	100.0%	100.0%	100.0%	100.0%

Union Density by Demographics

Union density varies considerably by demographic characteristics including gender, race, ethnicity, and education and immigration status. The prevailing explanation for this in labor studies is that demographic differences in employment by industry account for most of this variation (Milkman, 2007). Unions are by their nature not the outcome of individual decisions. Even in “right-to-work” states union members tend to be clustered together in union-heavy firms, and as we have seen, unionized workplaces are concentrated in union-heavy industries.

Figure 7 shows union density by gender. We see that women are slightly more likely than men to unionize in San Francisco, while men are slightly more likely to unionize in the country at large. LA and California have statistically equivalent unionization rates across genders. These trends are consistent with industrial explanations.

Figure 7: Unionization Rates by Gender,
Los Angeles, California, and the United States, 2014

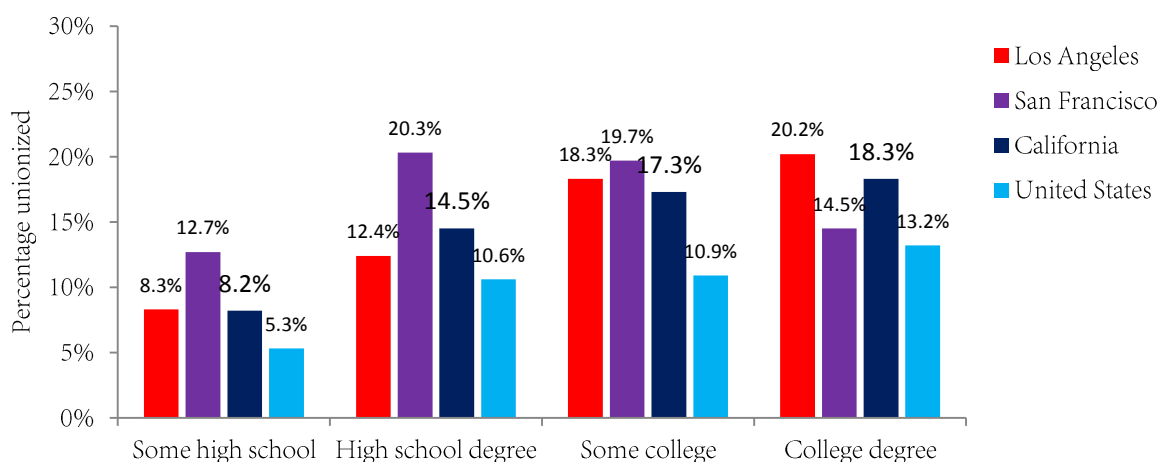


San Francisco’s union base is more feminized, at least in part because of its high healthcare and social work employment. In San Francisco this sector is 73 percent female, and numbers in other areas are similar. The fact that relatively more of San Francisco’s workers come from healthcare (See Figure 6), translates into a more feminized union workforce.

In the nation, men are more likely to be in unions than women because of trends in male dominated industries. America's union members are more likely to be employed in manufacturing and transportation and utilities than union members in California (See Figure 6). These industries are predominantly male, 70 percent in the case of manufacturing and 76 percent in the case of transportation⁶.

Union density by education also seems to be patterned by industries, although different industries emerge in this analysis. In Figure 8 we see that in LA, the most educated workers are most likely to be unionized. More than 20 percent of those with college degrees, and 18 percent of those with some college experience are unionized, compared to 12 and 8 percent for the cohorts with less formal education. Part of this is a function of LA's entertainment specialization.

Figure 8: Unionization Rates by Education, Los Angeles, California, and the United States, 2014



Workers with more than a high school degree predominate in the entertainment industry, especially LA's. In the nation as a whole 71 percent of entertainment workers have more than a college degree, and in LA the rate is 73 percent in LA. Other industries (e.g. healthcare, finance insurance and real estate) are also highly educated, but they do not command a significantly higher share of unionized workers in LA, like entertainment does.

Another striking feature in Figure 8, is San Francisco's higher unionization rate among the two less educated cohorts, when compared to LA and the state as a whole. This cannot be related to the city's healthcare sector, where only 18 percent of workers are less educated. The construction sector, larger among unionized workers in San Francisco than in California and LA, is also less educated. In both San

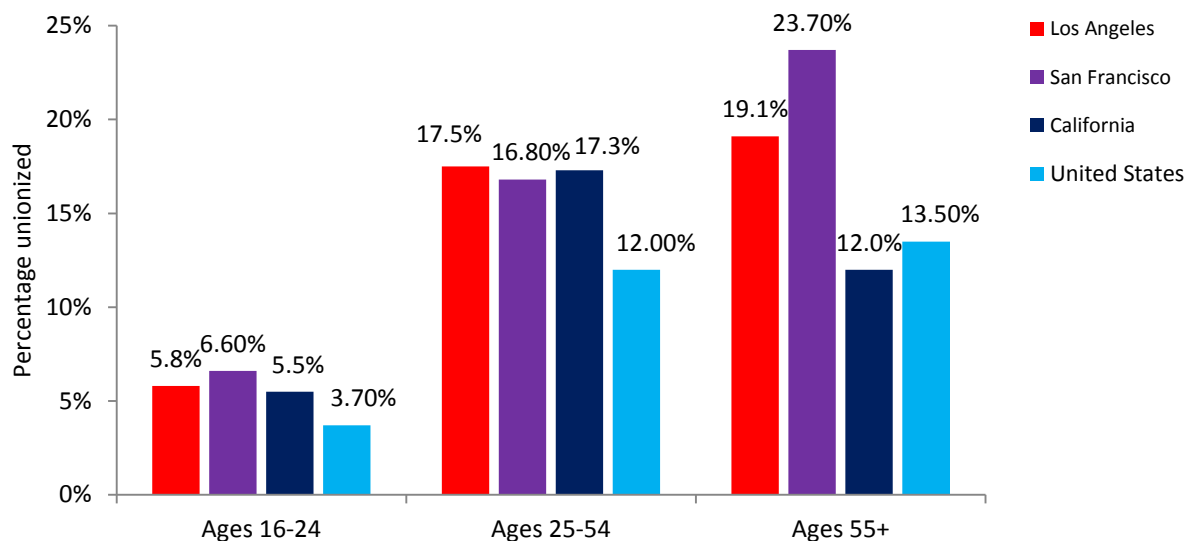
⁶ This estimate is for the nation as a whole. In California the unions are still male dominated: 67 percent for manufacturing and 76 percent for transportation and utilities.

Francisco and the US as a whole, 58 percent of construction workers have a high school degree or less. Thus, more union workers in construction suggests more union workers without college experience.

Industry trends at this level of aggregation cannot fully explain the different unionization rates between San Francisco and the US. An analysis with more industry categories may well do this. We should also note that, on average, San Francisco's labor force is more educated than California or the nation's.

Unionization rates depend on the age of the worker (See Figure 9). The differences across age cohorts are more interesting here. In each area we study, older workers tend to belong more to unions. This finding is replicated in studies of Illinois and New York (Manzo, Bruno and Parks, 2014; Milkman and Luce, 2013), and can be explained with confidence.

Figure 9: Unionization Rates by Age,
Los Angeles, California, and the United States, 2014

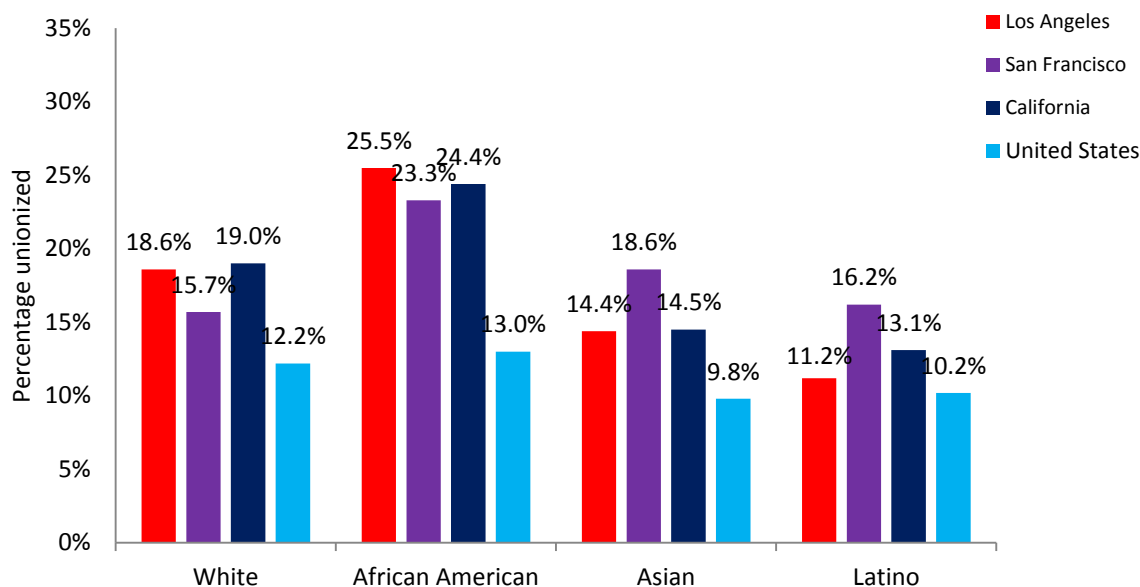


The first explanation is based on the terms of union membership. Union contracts often reward seniority, and in some cases unionization is based on tenure within a company, so since tenure and age are correlated union workers do tend to be older. Second, union workers tend to earn higher wages, and this serves to lower turnover. As a result, there are fewer unionized jobs for younger workers to access.

Aversion to unions among young workers does not explain these trends. Even though young workers are less likely to be in unions, they actually hold them in higher esteem than the average American. Pew (2013) recently tracked attitudes to unions among Americans. They found that a clear majority (61 percent) of 18 to 29 year olds have a favorable opinion of unions, while only half of 30 to 64 year olds do and 42 percent of those above the retirement age do.

Figure 10 shows union density by race and ethnicity. As with age, there is not too much variation by race across space. In each place, African American density is significantly higher than density for other groups. White density is second highest outside of San Francisco.

Figure 10: Unionization Rates by Race/Ethnicity,
Los Angeles, California, and the United States, 2014



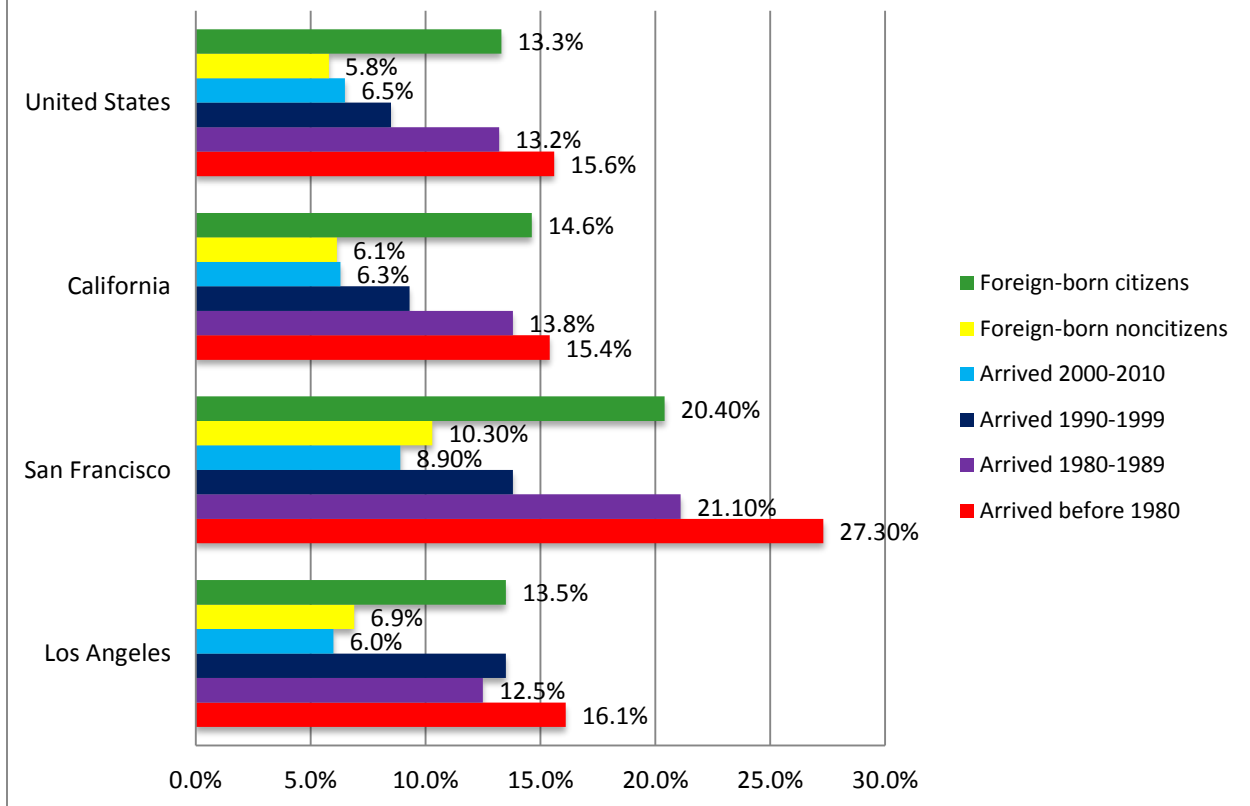
Support for unions differs by race and the tendency to unionize. According to the Pew study, support for unions is highest among African Americans. 69% of African Americans support unions. Latinos who are the relatively least unionized also tend to support unions (58%). Meanwhile less than half of whites (46 percent) support unions.

Asian workers in San Francisco are significantly more likely to be in unions than elsewhere. Their 19 percent union density is as high as white unionization in LA. Again, this is related to industry structure. San Francisco's workers are more likely to be Asian across the board, but this is especially true in the health and social service sector. While 9 percent of healthcare workers in America are Asian, over thirty-three percent of San Francisco's workers are⁷. Because San Francisco has more healthcare workers, its rate among Asians will be higher.

Finally, we consider unionization by immigration status. Across geographies there is a tendency for native-born Americans to unionize at higher rates than immigrants (See Figure 11).

⁷ The disparity is much smaller in most other industries. Only 7 percent of construction workers in San Francisco are Asian compared to two percent in the country. 19 percent of public administration workers in the city are Asian, compared to 5 percent of Americans. 11% of educational officials are Asian (compared to 3 percent).

Figure 11: Unionization Rates by Citizenship and Date of Arrival, Los Angeles, California, and the United States, 2014



Immigrants from the Philippines constitute an exception. Filipino union density is significantly higher in Los Angeles, San Francisco and the United States, but lower in California overall. This may once more be related to the distribution of races across industries. A plurality of Filipino immigrants (32%) are employed in healthcare and social services, a sector that is more unionized on average.

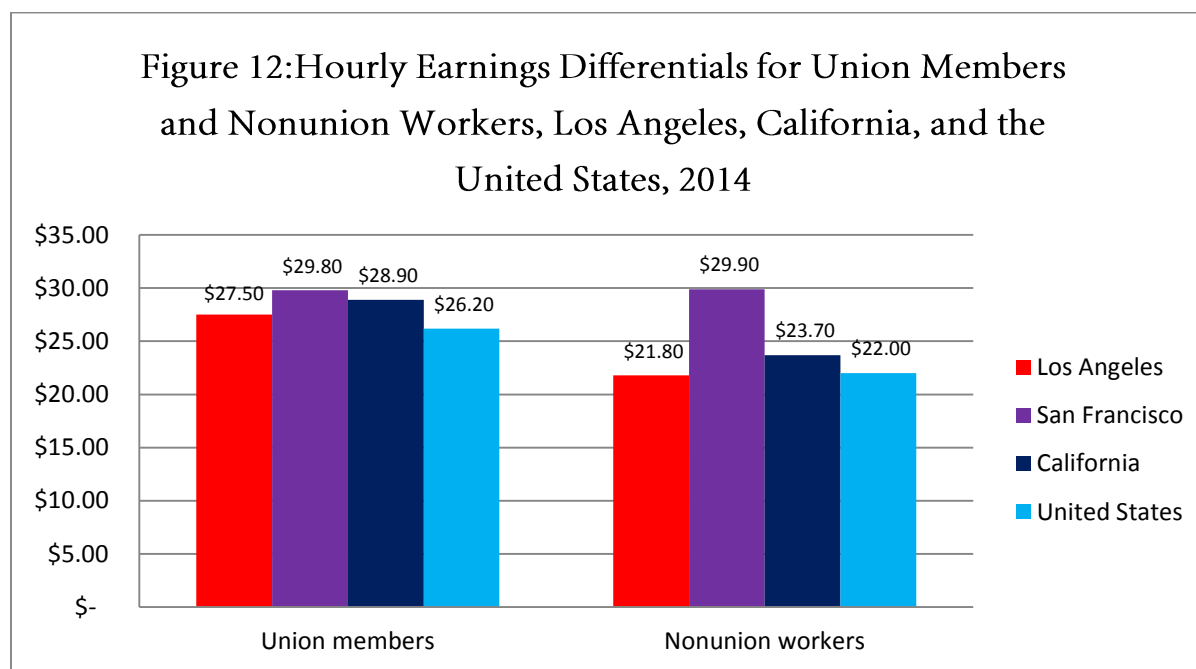
In addition (see Figure 11), immigrants with more tenure in the country and California tend to have higher union densities than recent ones, and citizens are more unionized (Figure 11). Tenure in the country is related to both age and tenure at a firm, so from that perspective this result is expected. According to the *2002 California Worker Survey* noncitizen immigrants tend to support unions more than the native born (66 percent to 42 percent) and foreign born immigrants. Lower unionization among immigrants is *not* due to anti-union sentiment.

Union Compensation

We now report geographic differences in rewards to union membership. The most direct way to assess the impact of unions is through average hourly earnings⁸. We analyze several facets of union compensation: its overall level, its relative level and its level adjusted for cost of living. We find that each of these tends to be associated with geographic differences.

Union workers make \$29.80 an hour, on average, in San Francisco and \$28.90 statewide in California. That is significantly more than LA's \$27.50 and the country's \$26.20. San Francisco and California have statistically comparable rates. The level of compensation has not changed significantly over the past year in any geography under study.

Union workers tend to earn more, relative to non-union workers. The so-called "union premium" is the earnings gap between union and non-unionized workers. Figure 12 reveals this gap in the four places. In LA, California, and the US there is a significant unionization gap ranging from 4 dollars an hour (US) to \$5.70 an hour (LA). On the other hand, unionized San Francisco workers earn wages that are statistically equal to those of their nonunion counterparts. This not only differs from other places in our study, but from studies of New York and Illinois which find sizeable union premia in those states and their big cities.



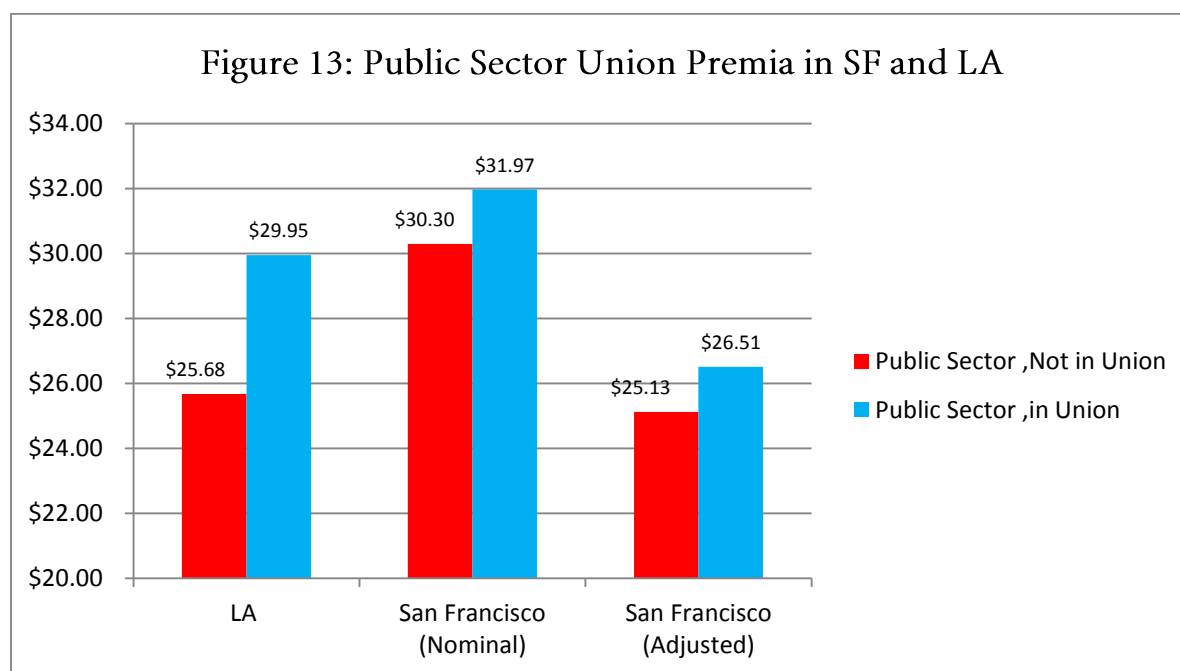
One should not read too much into the lack of an overall premium in San Francisco, since a large number of the area's high wage jobs are in technology and communications, an industry that is not as

⁸ Because the CPS is not a longitudinal survey, it is hard to assess how the stability of employment might change over time. Non-pecuniary benefits are not tracked by official surveys.

concentrated elsewhere and that has very low unionization. Comparing nonunion workers in San Francisco and LA is like comparing Apples and Warner Brothers.

In Figure 13, heterogeneity in private sector employment is excluded, and public sector premia are compared between Greater LA and San Francisco⁹. Now we do see a financial return to unionization in San Francisco, although the premium is still significantly larger in LA.

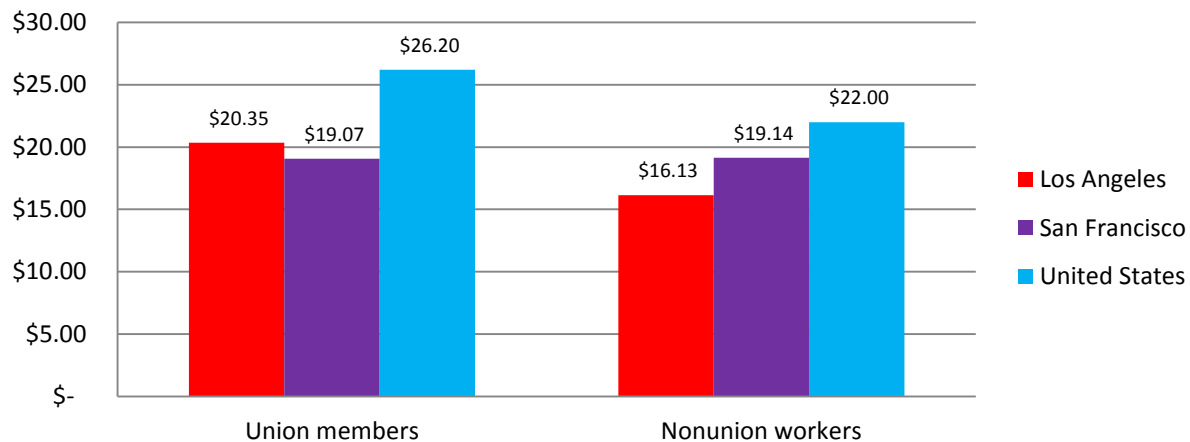
Thus far, we have dealt in nominal amounts, that is, the raw amounts that workers take home on average. From this perspective, there appears to be a “San Francisco premium” in our data. Nonunionized workers in San Francisco appear to earn more on average than unionized workers anywhere else. When the wages are adjusted by cost of living, much of this apparent advantage disappears.



In Figure 13, we also adjust San Francisco earnings into Los Angeles dollars, using cost of living weights from the 2010 Census. This accounts for relatively high cost of living for things like housing and groceries in San Francisco versus LA. When real dollars are used, non-unionized public sector workers end up making similar wages in San Francisco and LA, but unionized workers do better in Los Angeles. It seems that LA’s public sector unions have a more powerful effect on earnings than San Francisco’s.

⁹ This comparison seems more prudent given that the two areas are non-capitol regions, containing a multitude of public sector actors.

Figure 14: Adjusted Hourly Earnings Differentials for Union Members and Nonunion Workers, Los Angeles, San Francisco, and the United States, 2014



We adjusted LA and San Francisco wages to US wages in Figure 14. Here, non-unionized workers in LA do the worst in real terms. Unionized LA workers get \$20.35, more than union SF workers (\$19.07) and nonunion SF workers (\$19.14). The highest earning cohort is unionized workers in the country.

We should point out that comparisons based on adjusting by cost of living are not necessarily definitive, because it is difficult to decide precisely what to compare and what not to compare. With that said, an understanding of how much buying power union workers have is crucial if we are to appreciate the impact of unions. Nominal wage levels cannot by themselves tell the whole story of the impact of unionization, and we have tried here to synthesize the two

Unions, Inequality and Cost of Living

The academic literature tends to agree that unions buffer income inequality by raising the incomes towards the bottom of the income distribution (Freeman, 1982; Freeman and Medoff, 1984; Card et al. 2004). Of course, as unions become ever more “white collar” in their orientation, it is worth asking whether they still function the same way, and whether the union earnings advantage changes across space. It is also worth wondering, as income inequality grows, whether unions are an antidote.

Figure 15 shows the union premium by educational cohort and area. We see that, in general, the rewards to membership are greatest for those with the least human capital. College educated workers in unions actually earn less on average in San Francisco and non-California areas, than non-union workers do. LA’s degreed workers earn statistically equivalent wages. The presence of a “negative premium” does not suggest that unions depress wages for their members, since union and nonunion sectors are very different. It does, conclusively, suggest that unions are a bulwark against inequality, at least for workers with a high school degree or less. Unions do not seem to offer much earnings help to

degreed workers, who themselves do not necessarily earn high wages. (Of course, earnings are only one aspect of the union advantage: benefits, due process, and voice are also important.)

Figure 15: Union Wage Premium by Area and Educational Attainment, Non CA,
San Francisco and Los Angeles

Area	Some High school	High School Degree	Some College	College degree	Sample Size
Non CA	27.65%	23.89%	29.58%	-3.78%	1,177,039
SF	31.87%	22.34%	26.20%	-9.95%	23,445
LA	26.42%	24.94%	19.11%	1.68%	49,098

Given that union membership is largely public, and that unionization fights inequality, it might stand to reason that the public sector officials should encourage unionization in an attempt to combat inequality.

Still, discussions of unions and inequality that focus entirely on nominal income are incomplete. Union membership might mean a bigger pay check, but it won't mean much more if 60% of that goes to rent. Put another way, nominal income gains from unionization can be offset by high costs of living. Our cost of living analysis shows that Greater San Francisco and to a lesser extent Greater Los Angeles are high cost areas whose housing and transportation costs *could* erase the union earnings advantage. Policies that regularly adjust wages in the face of rising living costs might help to maintain union benefits, but they will not obviate cost of living concerns.

Greater San Francisco is expensive, largely *because* of what is happening in the non-unionized, private sector – particularly in technology. The presence of very high earnings in these sectors tends to increase the cost of living for everyone, as high earners bid up the cost of scarce goods like housing. These “congestion costs” then eat away at the power of union wages. In short, the high inequality in San Francisco (and Los Angeles), can diminish the impact of unions as much as unions can diminish the impact of high inequality. Unions are not a panacea for all the impacts of inequality. But nor are they simply an anachronism of an older, more equal time: unions continue to exert salutary inequality-reducing effects.

Conclusion

Our analysis of unions in California and its biggest regions yields lessons about how unions and urban economies function.

We see that the secular decline in union density in America, has not been matched in California or the two regions that make up roughly 70% of its population. We also find that, on average, San Francisco tends to be more unionized than Los Angeles, or California generally.

In explaining these patterns, we rely heavily on public sector unionization and industry composition. California and its regions have higher union densities among their public employees, particularly those in public administration, education, transportation, and health care and social services. San Francisco has higher unionization than LA because it tends to be more unionized in the public sector and because it has higher density in hospitality.

Demographic variation in unions is likewise conditioned by industry, especially the industrial structure of the region as a whole. Small but significant changes in the types of industries that are unionized, tend to affect the types of people that are in unions. San Francisco's union workers are drawn disproportionately from health care, and construction, industries with higher densities among Asians and the less educated respectively. Los Angeles's unions are relatively more likely to come from entertainment and to have college degrees.

For all of San Francisco's relative union density, it sees less of an impact from unions. There is no union premium over its (admittedly very special) non-unionized sector, there is a very small premium in the public sector, and cost-of-living adjustments reduce what seem to be high levels of pay in San Francisco enough that union workers in Los Angeles have higher real incomes than in San Francisco.

We conclude that unions can help to insulate cities income inequality, especially when they have higher shares of less educated workers. At the same time, unions cannot inoculate cities from high living costs, which can offset the effect of unions on wages.

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