

Affirmative Action Programs and Business Ownership among Minorities and Women

Report for the National Economic Development and Law Center

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1 Introduction

Affirmative action programs are widely used in federal public procurement markets and by some states and local governments, and contracts awarded through these programs are a significant source of revenue for some firms owned by minorities and women. Many of the existing federal, state and local government programs were created in the late 1970s and 1980s. The purpose of these minority and women business contracting programs is to develop minority and women enterprise, counter the effects of past discrimination, and reduce unemployment among minorities in urban communities. For the past two decades, however, state and local programs have been both judicially and legislatively challenged and in many cases dismantled (e.g. *Croson* 1989). Recent ballot initiatives in California and Washington have significantly curtailed the use of affirmative action in these states, and similar initiatives are under consideration in other states as well. At the same time, many states have initiated new affirmative action programs. Understanding the impact of affirmative action policies are therefore of considerable importance in the current policy debate.

In this report, we seek to estimate the effect of affirmative action on the business ownership rate of minorities and women. Self-employment is an outcome of considerable interest for several reasons.¹ First, business formation is often thought to be an engine of growth. Minorities and women are often found to face discrimination in credit markets, which will tend to limit business formation among these individuals even when the return of the business exceeds the market borrowing rate (Blanchflower, Levine

¹ We use the terms "self-employment" and "business ownership" synonymously in this report. This follows the convention of the U.S. Census Bureau in defining self-employment as being "self-employed in own not incorporated or incorporated business, professional practice, or farm."

and Zimmerman 2003 and Cavalluzzo, Cavalluzzo and Wolken 2002). Low levels of personal wealth and liquidity constraints may also limit opportunities to start and operate successful minority businesses (Bates 1997, Fairlie 1999, and Fairlie and Robb 2007). Minority firms are more likely to hire minorities, and it has been argued that promoting minority business growth may be a more effective method of reducing minority unemployment than overall economic and employment growth (Bates 1993, Boston 1999, 2006, and U.S. Census Bureau 1997).

Second, due to residential segregation, limited networks of employed friends and relatives, and discrimination, opportunities for traditional employment may be more limited for minorities and women. Self-employment is the primary alternative to the traditional labor market, and affirmative action may play an important role in creating business opportunities. Thus, racial disparities in business ownership may translate into broader income and wealth inequality (Bradford 2003). At the same time, the increase in self-employment due to limited opportunity in the traditional labor market, may only further racial disparities in business outcomes, as unprepared unemployed persons try their hand at self-employment.

There are two primary mechanisms through which affirmative action can affect the business ownership rate. First, affirmative action in procurement can lead to greater profits for incumbent and potential entrant disadvantaged business enterprises (DBEs) if it increases public purchases of goods and services from minority- and women-owned firms. The greater profits increase the likelihood of entry by potential entrants and reduce the likelihood of exit on the part of incumbent DBEs. This can occur either from encouraging the utilization of DBEs that are as productive as their white male

counterparts but are not getting opportunities due to discrimination or network limitations, or by creating opportunities for DBEs who are not yet as cost-effective.

The second mechanism by which affirmative action can affect self-employment is through altering opportunities in the traditional labor market. Affirmative action programs are broader than awarding procurement contracts and reach into employment by state agencies and contractors as well. Eliminating affirmative action therefore may limit employment opportunities along with procurement opportunities. Myers (2007) in fact finds significant adverse employment effects following the elimination of affirmative action in California due to Proposition 209. Broad affirmative action programs indirectly alter the self-employment rate by altering opportunities in traditional employment. Therefore, eliminating affirmative action can potentially have the counterintuitive effect of increasing the self-employment rate among minorities and women.

Although billions of contract dollars are awarded annually to minority and women firms through affirmative action programs, and these programs are in some forms controversial both politically and judicially, relatively little is known about their effectiveness. Previous research indicates that minority and women business contracting programs did not always increase utilization and may have lead to minority firms overextending themselves (Myers and Chan 1996, Bates and Williams 1996).² In addition, these programs may raise the cost of public procurement (Marion, 2007). The literature also indicates, however, that these programs may have increased the number of minority contracts and businesses in the United States, especially in the construction industry (Blanchflower and Wainwright 2004, Chatterji, Chay and Fairlie 2007,

² There is some recent evidence, however, indicating that utilization by MBEs declined after Proposition 209 in California (Discrimination Research Center 2007).

Enchautegui, et al., 1996, Boston 1998, Bates and Williams 1993). Given the heated debates over these programs it is surprising that so little is known about their effects. More research is clearly needed.

To estimate the impact of eliminating affirmative action on the self-employment rate, we consider voter initiatives in California and Washington that eliminated the use of race or gender as criteria in public employment and contracting. California's Proposition 209 was passed by voters in 1996, broadly implemented upon then-Governor Pete Wilson's executive order in March of 1998 requiring the cessation of its use. We will use 1998 as the date of implementation.³ Washington's Initiative 200 was passed by the voters towards the end of 1998, and we will use 2000 as the implementation date.

The elimination of affirmative action in these states will be used as a natural experiment. We examine the rate of minority business ownership before and after the elimination of the programs in California and Washington. To control for time-varying factors, we compare changes over time in minority business ownership in these two states to other states that did not experience changes in affirmative action programs. We also make comparisons to rates of business ownership among white men as another method of controlling for time-varying factors. This approach of using a difference-in-difference-in-difference estimator (DDD) is common in the literature examining the effects of changes in public policy.

Our findings indicate that eliminating affirmative action may in fact lead to more self-employment among minorities and women, supporting the idea that minorities and

³ Proposition 209 was passed in November of 1996 and withstood a series of legal challenges in 1997. However, prior to Governor Wilson's executive order in March 1998, many state agencies continued to use race- and gender-conscious methods in the awarding of state contracts. For instance, the California Department of Transportation continued to set requirements for the participation of minority- and women-owned subcontractors on projects using state funds.

women may turn to self-employment in response to reduced employment opportunities. For most race/gender groups, we find a statistically significant increase in the self-employment rates of minorities and women in both California and Washington after the elimination of state affirmative action. There are a couple of notable exceptions to this. The average self-employment rate of Black men is lower in California post-Proposition 209. However, our findings indicate that this is primarily related to a pre-existing downward trend in self-employment among Blacks in California. Relative to the trend that existed before Proposition 209 in California, the rate of Black self-employment after Proposition 209 increased as well. In Washington, eliminating affirmative action is associated with an increase in the self-employment rate among Latino men and women, Black women, and white women. Only men of other races experienced a statistically significant decline post-affirmative action.

To better understand the post-affirmative action increase in self-employment rates among minorities and women, we next consider the change in industry composition among self-employed minorities and women. Eliminating affirmative action can change the industry composition of the self-employed, since some industries derive greater revenues from government sources or are more likely to be considered by potential entrants responding to reduced employment opportunities. We find that the industry distribution of the self-employed becomes more tilted toward construction for minorities and women after affirmative action's elimination. Extending the previous logic, this may be caused by more limited employment options for minorities and women after Proposition 209, especially for minorities and women.

Although the focus of the study is on minority business ownership, we also examine the effects of eliminating affirmative action on business outcomes such as firm revenues. The revenues of the average minority-owned firm can be affected by the elimination of affirmative action either through altering business opportunities for existing firms or by changing the composition of firms in the market. For instance, if affirmative action led poor performing firms to exit, we could see an increase in the revenues of the average firm. The analysis of business outcomes, however, is constrained primarily due to data limitations. We use data from the 1997 Survey of Minority-Owned Business Enterprises (SMOBE) and 2002 Survey of Business Owners (SBO) conducted by the U.S. Census Bureau, finding mixed results of affirmative action on the revenues of the average firm depending on the race of the owner.

In the rest of the report, we describe the data we will use in this study, the statistical methods we will use to identify the effect of affirmative action, and the results.

2 Data

We use data from the 1990 to 2006 Current Population Survey (CPS) Outgoing Rotation Group (ORG) files. These surveys, conducted annually by the U.S. Bureau of the Census and the Bureau of Labor Statistics, are representative of the entire U.S. population. The ORG files contain annual samples that are roughly three times larger than those from a monthly CPS, such as the commonly used March Annual Demographic Files. The CPS is the only dataset large enough to allow for examining trends in self-employment for minority groups at the state level. Combining the 1990 to 2006 CPS data we have observations for more than 4 million individuals.

Self-employed workers are defined as those individuals who identify themselves as self-employed in their own not incorporated or incorporated business on the class of worker question.⁴ The ownership of both non-employer and employer firms is captured. The class of worker question refers to the job with the most hours during the reference week. We restrict the sample to include only working-age individuals (ages 20 to 64) to lessen concerns regarding retirement decisions. Unlike business-level datasets, the individual-level CPS includes information on non-business owners allowing us to directly measure business ownership rates. The CPS also includes detailed demographic and geographic information that is used to control for the determinants of business ownership.

The triple-difference empirical approach we take to examine the effect of eliminating affirmative action on this measure of self-employment status will require classifying individuals along three dimensions. First, we are interested in comparing outcomes for minorities and women with those of white men. We therefore classify individuals along eight race/gender categories: white, Black, Latino, and other minority men; and white, Black, Latino, and other minority women. The other minority category includes Asian/Pacific Islander, Native American, and other races. We also classify individuals by state of residence to separately compare the treated states, California and Washington, with similar control states that did not change affirmative action policy. Finally, we classify observations into the pre-affirmative action period and the post-affirmative action period.

3 Methods

⁴ Unpaid family workers are not counted as self-employed.

To estimate the effects of eliminating affirmation action programs in California and Washington, we use multivariate regression analysis. We focus on identifying the determinants of business ownership, including factors that change over time. The basic equation estimated for the self-employment probability is the following:

$$(1) Y_{ist} = \gamma_0 + \gamma_1 D_{CA} + \gamma_2 P_{98} + \gamma_3 M + \gamma_4 D_{CA} * P_{98} + \gamma_5 M * D_{CA} + \gamma_6 M * P_{98} + \gamma_7 M * D_{CA} * P_{98} + \varepsilon_{ist}$$

where $M=1$ if the person is a minority, $P_{98}=1$ if the observations is post 1998, and $D_{CA}=1$ if the observation is for California. There are also similar terms for Washington, which have been suppressed here for convenience. The coefficient of interest is γ_7 because it captures the change in the minority business ownership rate after controlling for national trends, national minority trends, and California and Washington trends in business ownership. The difference-in-difference-in-difference (DDD) estimates provide an estimate of the impact of removing the affirmative action programs in California and Washington on minority business ownership rates.

We extend the basic specification shown in (1) to include a full set of state effects, α_s , year effects λ_t , and a vector of controls, X_{ist} :

$$(2) Y_{ist} = \alpha_s + \lambda_t + \gamma_3 M + \gamma_4 D_{CA} * P_{98} + \gamma_5 M * D_{CA} + \gamma_6 M * P_{98} + \gamma_7 M * D_{CA} * P_{98} + \beta' X_{ist} + \varepsilon_{ist}$$

We also estimate a specification that controls for national trends in minority business ownership rates. We interact the minority dummy variable with the year fixed effects (λ_t^M), which control for differential national trends in minority business ownership.

$$(3) Y_{ist} = \alpha_s + \lambda_t + \lambda_t^M + \gamma_3 M + \gamma_4 D_{CA} * P_{98} + \gamma_5 M * D_{CA} + \gamma_6 M * P_{98} + \gamma_7 M * D_{CA} * P_{98} + \beta' X_{ist} + \varepsilon_{ist},$$

Finally, we are concerned about the effects of long-term trends in minority business ownership in California and Washington. For example, if minority business ownership rates are trending downward from 1990 to 2006, then we could be overestimating the decline in minority business ownership rates in the state due to the change resulting in 1998 from the removal of affirmative action programs. To address this concern, we estimate the following regression:

$$(4) Y_{ist} = \alpha_s + \lambda_t + \lambda_t^M + \gamma_3 M + \gamma_4 D_{CA} * P_{98} + \gamma_5 M * D_{CA} + \gamma_6 M * P_{98} + \gamma_7 M * D_{CA} * P_{98} + \gamma_8 M * D_{CA} * t + \beta' X_{ist} + \varepsilon_{ist},$$

where $t=1, \dots, 17$ for 1990 to 2006. The minority California time trend interactions ($M * D_{CA} * t$) capture the effects of differential trends over the 17 year period. A negative and statistically significant estimate of γ_8 indicates a downward trend in minority business ownership rates. The resulting estimate of γ_7 , which captures the post affirmative action effect, will be purged of any bias associated with these trends in minority business ownership rates.

In all specifications, we include detailed race and gender groups instead of a single minority variable. We include separate interactions for black men, Latino men, other minority men, white women, black women, Latino women, and other minority women. The effects of removing affirmative action programs might differ for each group.

Comparison Group States

The choice of comparison group states included in the sample is important because the included states identify the national trends in minority business ownership rates. We estimate the model with two sets of control states. First, we estimate the model including all states in the United States. This is the most comprehensive groups of states and essentially compares trends in California and Washington to the rest of the United States. Second, we define a second set of control states by identifying states that have similar minority compositions. The Appendix reports the minority share of the population for all states. We choose the 15 states closest in minority population shares to California and Washington, which are noted in the Appendix. For the two states, we estimate separate regressions and include the separately defined sets of control states.

4 Results

4.1 Basic Triple-Difference Results

We begin this section by presenting the basic DDD results by differencing mean self-employment rates for various race/gender groups with white men in California and Washington before versus after the elimination of affirmative action programs, and

comparing how this difference compares with the growth in the rest of the U.S. Doing so will further illustrate the identification strategy to be employed in the multivariate regression analysis. From equation (1), the change in minority self-employment in California from before the affirmative action ban to after is given by

$$(5) \Delta_{M,CA} = Y_{CA,M,post} - Y_{CA,M,pre} = \gamma_2 + \gamma_4 + \gamma_6 + \gamma_7.$$

The similar change for minorities in the control states is given by

$$(6) \Delta_{M,CONTROL} = Y_{CONTROL,post} - Y_{CONTROL,M} = \gamma_2 + \gamma_6,$$

which leads to a difference-in-difference (DD) effect for minorities of

$$(7) \Delta_M = \Delta_{M,CA} - \Delta_{M,CONTROL} = \gamma_4 + \gamma_7.$$

The DD effect for minorities may still include post-affirmative action shocks common to all individuals in California, as captured by the coefficient γ_4 . It is therefore necessary to consider the change in self-employment for white men in California relative to white men in a set of control states. The change in white male self-employment in California from before the affirmative action ban to after is given by

$$(8) \Delta_{W,CA} = Y_{CA,W,post} - Y_{CA,W,pre} = \gamma_2 + \gamma_4.$$

The similar effect for the control states is given by

$$(9) \Delta_{W,CONTROL} = Y_{CONTROL,W,post} - Y_{CONTROL,W} = \gamma_2.$$

The difference-in-difference effect for whites in California is given by subtracting (9) from (8):

$$(10) \Delta_W = \Delta_{W,CA} - \Delta_{W,CONTROL} = \gamma_4.$$

The DDD effect is given by subtracting (10) from (7)

$$(11) \Delta = \Delta_M - \Delta_W = \gamma_7.$$

The coefficient γ_7 represents how the change in the self-employment rate of minorities relative to whites in California compared with that of a set of control states.

In Table 1A, we present estimates of $\Delta_{M,CA}$, $\Delta_{W,CA}$, Δ_M , $\Delta_{M,CONTROL}$, $\Delta_{W,CONTROL}$, Δ_W , and Δ for minority men in California. In California, self-employment rates for minority men are 7.7 percent pre-affirmative action, higher than the rate of 6.2 percent for minority men outside of California. After affirmative action was eliminated, the minority male self-employment rate increases in California by 0.2 percentage points, which is slower by 0.2 percentage points than the rate in the rest of the U.S. However, the self-employment rate of white men in California falls even faster, declining by -0.6 percent relative white men in the U.S. This suggests a triple-difference estimate, γ_7 , of

0.5, or, in other words, the self-employment rate of minority men in California increased 0.5 percentage points more than we would have expected given the growth rate observed for whites and for minorities in areas outside California.

In Table 1A, we also break out the results for minorities into similar estimates for Black, Latino, and other minority men. The greater self-employment rates of minority men in California compared with minority men in other states seems to be owed largely to Black men, who are 2.4 percentage points more likely to be self-employed than Black men in other states. Post-affirmative action, the self-employment rate fell by 0.7 percentage points among Black men in California, a decline that is notable given the 0.4 percentage point increase for Black men in other states. Together with the relative change for white men in California, the DDD estimates suggest a 0.6 percentage point decline in self-employment for Black men after the affirmative action ban. In contrast to Black men, we estimate a positive effect for Latino men of 1.2 percentage points and a 0.8 percentage point increase for other minority men.

Eliminating affirmative action also seems to be a positive force in the self-employment decision of women. This same exercise is also conducted for women in California, and the results are presented in Table 1B. As with men, the self-employment rate of minority women, as well as white women, is higher in California than in other parts of the U.S. In the pre-Proposition 209 period, 3.7 percent of minority women in California report self-employment compared with 2.5 percent in the U.S. as a whole. This difference does not change in the post-affirmative action period, however white men in California experience a decline in self-employment of 0.6 percentage points relative to white men in other states. This implies a DDD estimate of 0.6, suggesting that minority

women in fact had a higher self-employment rate post-affirmative action than would have been the case had affirmative action been kept in place. When broken down by race categories, the estimates of γ_7 also indicate a positive effect of affirmative action for each of the individual minority groups, as the effect on Black women was 1.0 percentage points, for Latino women the effect was also 1.0 percentage points, and for women of other minorities it was 0.6 percentage points. The DDD estimates also tell a similar story for white women, indicating that their self-employment rate in California relative to the rest of the U.S. grew faster than for white men by 0.8 percentage points.

The DDD estimates for California provide somewhat puzzling findings. For most racial groups, business ownership rates increased relative to expected levels. The main exception being black men who experienced a decline in business ownership rates after Proposition 209. The results for most groups may be due to confounding factors and potentially offsetting effects on employment opportunities. The multivariate regression analysis discussed in the next section allows us to control for many potentially confounding factors.

In Tables 2A and 2B, we also provide estimates of γ_7 for Washington men and women. As in California, minority men in Washington are more likely to be self-employed than their counterparts in other states before the affirmative action ban. The higher rate appears to be due to compositional differences with the broader minority group. Within specific minority groups, the self-employment rates are not higher in Washington than in other states. Black men have a self-employment rate of 4.1 percent compared to 4.4 percent for Black men in other states. Latino men are also less likely to be self-employed if they reside in Washington, as are other minority men, which

primarily consists of Asians, whose self-employment rate of 9.5 percent is lower than the rate of 10.5 percent for Asian men in other states. While self-employment rates in Washington are similar to the rest of the U.S. within racial groups, the higher self-employment rate for minorities as a whole derives from Asians, who tend to have higher self-employment rates than other minority groups and comprise a greater percentage of Washington's minority population.

For minorities as a whole in Washington, eliminating affirmative action appears to be a negative force for self-employment rates. The triple-difference estimates suggest that minorities were 0.6 percentage points less likely to be self-employed following the affirmative action ban than had affirmative action been left in place. However, this result masks differing effects across racial groups. We obtain positive estimates for γ_7 for both Latino and in particular Black men, yet find a large negative effect for other minority men – primarily Asians.

For women in Washington, the estimated effects of eliminating affirmative action are more uniform. Women in Washington are more entrepreneurial than women in other states, and this difference remains unchanged in the post-affirmative action period for both minority women and white women. However, self-employment rates were falling in general in Washington relative to the U.S. during this time, as white men in Washington experienced a relative 0.6 percentage point decline. This leads to the conclusion that eliminating affirmative action propped up self-employment for women. The positive result for minority women is concentrated in Black and Latino women, for whom the DDD estimates are 3.6 and 1.9 percentage points, respectively. The change for women of other minorities in Washington relative to the rest of the U.S. mimicked the similar

change for white men, leading us to conclude that eliminating affirmative action had little effect on the self-employment rate for these groups.

Similar to California, the simple comparison of changes in self-employment rates does not provide evidence of negative effects from the elimination of affirmative action programs for most groups. We now turn to the findings from multivariate regressions to see if these results hold up under closer scrutiny.

4.2 Regression Results from Full sample of states

In Table 3 we present the results of estimating equations (1)-(4) for the full sample of states. In column (1), the estimates of γ_7 are presented for each race/gender group for both California and Washington without detailed controls. These estimates are the regression equivalent to the exercise conducted in Tables 1 and 2, but with the standard errors presented. We will not go into detail regarding these results, except to note the statistical significance. In California, the estimated increases in self-employment for Latino men and women, other minority men and women, and Black women are statistically significant, as is the decline documented for Black men. For Washington, the estimated increases among Black and Latino men, and white, Black, and Latino women are all statistically significant, as is the decline among other minority men. Only the modest increase in the self-employment rate of other minority women was found not to be statistically significant. The significance of these results attests to the extremely large sample sizes in the CPS.

In the specification shown in column (2), we add demographic controls, state fixed effects, and year effects, and in the specification displayed in column (3) we further

add race-gender year effects. These additional controls have little effect on the estimated coefficients. For each race-gender group in both California and Washington, the estimated effect of eliminating affirmative action is estimated to be of the same sign and virtually the same magnitude as the specification without controls shown in column (1).

These estimated coefficients could be biased if there are unobserved factors unrelated to affirmative action that are affecting the self-employment rates among minorities in California and Washington over time. Such forces would lead to a pre-existing time trend specifically for minorities and women in these states. To account for this source of bias we add race time trends specific to California and Washington to the specifications. The results are shown in column (4).

Including this control has a noticeable effect on the DDD estimates for Black men in both California and Washington. As the prior results showed, self-employment among Black men was lower after affirmative action in California. However, relative to their trend, Black men were 0.8 percentage points more likely to be self-employed post-Proposition 209, implying that Black men in California were already facing a downward trend in self-employment prior to the elimination of affirmative action. Conversely, adding the race-Washington specific time trend turns the coefficient for Black men from strongly positive to statistically indistinguishable from zero.

Aside from the estimated effects of eliminating affirmative action on the self-employment of Black men, including race-state specific time trends does not qualitatively alter the estimates for other race-gender groups. However, the coefficients in general become larger.

4.3 *Restricting the comparison group states*

The estimated specifications presented in Section 4.2 indicate that the likelihood of self-employment for minorities and women was higher in California and Washington than it would have been had these states kept affirmative action. The estimation strategy leading to this conclusion assumes that the change in self-employment rates for minorities and women relative to white men in California and Washington would mimic the change observed in the rest of the U.S had affirmative action not been eliminated. Individuals in other states are treated as a counterfactual for individuals in California and Washington. However, the pattern observed in other states may not always provide an accurate counterfactual, as some states differ dramatically from California and Washington.

The racial composition of a state's population is one characteristic likely to affect outcomes for minority- and women-owned firms. In this section, we use only states with similar demographic characteristics as California and Washington, where we select comparison states based on the minority share of the population. This comparison group may provide a more accurate representation of how the likelihood of self-employment would have changed had California and Washington kept affirmative action.

California Comparison Group

We begin by restricting the sample of states to California and the fifteen states whose minority population share is closest to that of California (see the Appendix). We present the results of estimating equations (1)-(4) for this sample in Table 4. Restricting the sample in this manner has very little impact on the results. As before, for each group

other than Black men, the likelihood of self-employment rises after the elimination of affirmative action. Black women, Latino men and women, white women, and men and women of other minorities all witness growth in self-employment rates relative to white men that is faster than that observed in the group of comparison states. The estimates are both statistically and economically significant, as self-employment rates rose between 0.6 and 1.2 percentage points. These results are robust to the inclusion of state effects, year effects, demographic controls, and race/gender year effects, which we include in the specifications shown in columns (2) and (3). Finally, in column (4) we present the results of estimating equation (4), which includes as a control a race/gender time trend specific to California. This noticeably increases the estimated effect of eliminating affirmative action, indicating that minorities and women were experiencing a downward trend in self-employment prior to the implementation of Proposition 209. Finally, the estimated coefficient for Black men is now positive, indicating that Black men had a similar response to Proposition 209 as other minority groups once accounting for the pre-existing downward trend in their likelihood of self-employment.

Washington comparison group

We next perform a similar exercise considering a separately chosen set of control states for Washington. In Table 5 we present the results from restricting the sample to individuals in Washington and the fifteen states most closely matching its minority population share. The results are similar to the specifications estimated from the full sample. In column (1), results are presented from estimating equation (1) without controls. Each race/gender group experiences an increase in the likelihood of self-

employment after the elimination of affirmative action, except for men of non-Black and non-Latino minority groups. The decline in the likelihood of self-employment was 2 percentage points for this group. Among Latino men and other minority women, the change was statistically indistinguishable from zero. These results are generally robust to the inclusion of additional controls such as year effects, demographic controls, state fixed effects, and race/gender time trends.

4.3 *Industry distribution*

In the full regression specification presented in Table 3, we documented the response of self-employment rates by minorities and women to the elimination of affirmative action, finding a significant increase for many race/gender groups. The effects of affirmative action are likely to be unevenly distributed across industries. Affirmative action in procurement works to reallocate contracts toward firms owned by minorities and women. Since government contracts are likely to be concentrated in particular industries, such as road and building construction, the effects on self-employment of eliminating affirmative action are likely to be largest in those industries deriving a large fraction of revenue from public sources. Furthermore, eliminating affirmative action may have limited employment opportunities for minorities and women, leading the affected individuals to turn to self-employment. These entrants into self-employment are likely to differ from incumbents.

Our objective in this section is to decompose by industry the self-employment effects of eliminating affirmative action. To do so, we estimate the model described in

equation (4), yet with the dependent variable being an indicator for whether the individual is self-employed in the industry under consideration. This is estimated separately for construction, services, wholesale and retail trade, and other industries.

In column (1) of Table 6, we restate the results from the full specification of Table 3, which describes the DDD results controlling for race/gender time trends specific to California and Washington. In column (2) we present the results from the construction industry. In California, there is a movement into construction by minorities and women after affirmative action. A statistically significant greater fraction of individuals from each race/gender group are self-employed in construction after 1998, which seems to account for approximately half of the post-Proposition 209 increase in self-employment. One possible explanation for these results is that negative effects of Proposition 209 on employment opportunities in construction may have resulted in movement to self-employment, which is consistent with previous findings of a negative effect on female employment in construction (Discrimination Research Center and Equal Rights Advocates 2004).

In Washington, there also seems to be a movement towards construction, particularly among women. A statistically significant greater fraction of Black men and White, Latino, and other minority women are self-employed post-affirmative action in Washington. The construction effect for the other race/gender groups is not statistically distinguishable from zero.

The next sector we consider is the service industry, where the results are mixed. In California, there is not a consistent pattern of movement into or out of the service sector. Of the seven race/gender groups, four have negative DDD coefficients while

three have positive coefficients. In Washington, the movement seems to be away from the service sector. Four of the seven race/gender groups have a statistically significant negative DDD coefficient for this industry, while only Latino women increase self-employment in the services sector.

In column (4), we present the results for the wholesales and retail trade industries. For most race/gender groups in California and Washington, there is a movement away from wholesale and retail trade. In California, the DDD coefficient is positive for only Black and Latino women, and in Washington it is positive for only Black women. For all other race/gender groups in California and Washington, the change in the fraction of individuals self-employed in wholesale or retail trade post-affirmative action relative to whites is lower than in the rest of the country.

Finally, in the last column of Table 6, we present results for all other industries, including agriculture; mining; transportation and utilities; finance, insurance, and real estate; and public administration. These industries are grouped together as they are individually less prevalent among self-employed minorities. The results for these industries are mixed, though on the whole these industries seem to contribute positively to the increase in self-employment rates among minorities and women post-affirmative action, particularly in California. In California, a statistically significant DDD coefficient is obtained for Latino men, other minority men, Black women, and Latino women. None of the race gender groups in California experience a statistically significant decline in the fraction self-employed in these other industries. Among minorities and women in Washington, Black men and women, and Latino women both experience increases in

self-employment rates in these industries, while white and other minority women experience declines.

4.4 *Business Outcomes*

In this section we investigate how the outcomes of minority-owned firms changed around the time of the affirmative action bans in California and Washington. Examining relative changes in average revenues of minority firms provide evidence on two important aspects of the effects of eliminating affirmative action programs in California and Washington. First, eliminating affirmative action may adversely affect business opportunities of incumbent minority-owned firms. This would tend to depress the revenues of the average firm. Second, if eliminating affirmative action in employment induces individuals into self-employment, we would expect those new businesses to be less successful on average than the incumbent firms.

In Table 7, we present average revenues per firm from the 1997 Survey of Minority-Owned Business Enterprises (SMOBE) and 2002 Survey of Business Owners (SBO) by race and gender for California, Washington, and the rest of the United States. Unfortunately, the SBO/SMOBE data underwent several changes over time and are only available at 5-year intervals.⁵ The CPS data that we use do not include information on business revenues.

The estimates from the SMOBE/SBO data indicate that average revenues declined from 1997 to 2002 for businesses owned by most groups, which is consistent with major changes in macroeconomic conditions from the late 1990s to the early 2000s. The recession of the early 2000s hit its trough in November 2001, which potentially had a

⁵ See U.S. Small Business Administration (2007) for more details on changes in the SMOBE/SBO data.

large effect of business outcomes in 2002. For businesses owned by white men, average revenues dropped substantially in the United States, California, and Washington. These strong downward trends make it difficult to identify the effects of removing affirmative action programs. In contrast to these downward trends, black male-owned firms experienced revenue increases in California and Washington. But, in the rest of the United States businesses owned by black men experienced revenue declines. Although it is difficult to make comparisons with these data, the evidence suggests that firms owned by black men increased relative to predicted levels after the removal of affirmative action programs in California and Washington. One explanation for this unexpected finding is that the least successful firms were the ones most likely to be displaced by the removal of affirmative action programs. The extremely large increase in average revenues by black male-owned firms in Washington is likely to be due to a very successful outlier firm.

Businesses owned by Latinos experienced revenue declines that were larger than for white male-owned businesses in both California and Washington. For the rest of the United States the changes in average revenues, however, were similar between Latino and white male firms. This finding is consistent with the removal of affirmative action programs negatively impacting Latino firms. The results for other minority men are less clear. For this group, the decreases in average revenues were similar to those for white men for all geographical areas.

Examining female-owned businesses, we find mixed results. Businesses owned by white women experienced larger revenue declines in California than businesses owned by white men. The U.S. trend, however, was the opposite suggesting a negative impact of Proposition 209 in California. On the other hand, businesses owned by white women

in Washington experienced much smaller revenue declines than businesses owned by white men. The results for businesses owned by black and Latino women are fairly mixed and difficult to interpret.⁶

It is difficult to summarize the results from the SMOBE/SBO data for changes from 1997 to 2002. The estimates do not consistently show positive or negative effects of removing affirmative action programs. Comparisons may not be reliable because of changes in the data over time, changes in macroeconomic conditions between 1997 and 2002, and changes in the composition of firms.

5 Conclusion

In this report, we document the self-employment response of individuals in California and Washington to the elimination of affirmative action in those states. Eliminating affirmative action seems to be a positive factor in the self-employment decision, as the rate of business ownership increases after affirmative action for most race/gender groups. This somewhat surprising result can occur if eliminating affirmative action reduced the employment opportunities of minorities and women, forcing them to turn to self-employment. Previous research indicates negative employment effects following the elimination of affirmative action in California (Myers 2007) (Discrimination Research Center and Equal Rights Advocates 2004). If a reduction in employment opportunities leads workers to turn to self-employment, we might expect the resulting effect on the self-employment rate to be in those industries with low barriers to entry. Examination of self-employment rates by industry reveals that the positive effect

⁶ Estimates are not reported for other minority women because revenue estimates are suppressed for Washington in published sources because of small sample sizes.

of eliminating affirmative action seems largely concentrated in the construction sector, which may indicate that entry is easier in this industry and is consistent with the prevalence of small-scale construction contractors. Finally, those drawn into self-employment due to a reduction in employment opportunities should be largely marginal business owners – those who previously found traditional employment more attractive. Consistent with this, our findings using the SMOBE/SBO data provide some evidence of larger than expected declines in business revenues, but we consider these findings suggestive at best.

In our examination of seven different racial and gender groups, we find two exceptions to the consistently positive estimates of removing affirmative action programs on business ownership. In the base specifications for black men in California we find evidence of a negative and statistically significant effect on business ownership after Proposition 209. The finding, however, changes after we include controls for trends in black male self-employment in California for two of the three sets of analyses. The resulting positive estimates in these two specifications suggest that a downward trend in black male self-employment that existed prior to Proposition 209 may be responsible for the original negative estimates. For other minority men in Washington, we find negative estimates of the effects of Initiative 200 on business ownership in all of specifications. As discussed, affirmative action has opposing forces on self-employment, first through its effect on government employment and second on its effect via public contracting opportunities. Exposure to these channels could differ by racial group, which may help explain why we fail to find uniform effects of eliminating affirmative action.

It may not be surprising that eliminating affirmative action did not have a strong adverse effect on business ownership rates, especially in Washington, since even prior to Initiative 200 [tj11]there was no state affirmative action program in contracting in Washington, only local government programs. As a result, any positive factors for minority and women self-employment, such as reduced opportunities in the traditional labor market, may have outweighed the direct effects of eliminating affirmative action in the awarding of state procurement contracts.

The all encompassing nature of the elimination of affirmation action in both California and Washington creates significant challenges from a research perspective. By affecting public-sector employment opportunities and educational opportunities, California Proposition 209 and Washington Initiative 200 may not provide a clean enough natural experiment to identify the effects of eliminating affirmative action contracting programs on minority businesses.

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Table 1A (Men)
 Business Ownership Rate Trends in California and the United States by Race
 Current Population Survey (1990-2006)

State	Group	Pre 1998	Post 1998	Change over Time	DD (CA vs. U.S. Change)	DDD (Group vs. Wht. Men)
California	Minority Men	7.7%	8.0%	0.2%	-0.2%	0.5%
U.S.	Minority Men	6.2%	6.6%	0.4%		
California	Black Men	6.8%	6.1%	-0.7%	-1.2%	-0.6%
U.S.	Black Men	4.4%	4.8%	0.5%		
California	Latino Men	6.5%	7.1%	0.6%	0.6%	1.2%
U.S.	Latino Men	7.3%	7.2%	0.0%		
California	Oth. Min. Men	11.6%	10.7%	-0.9%	0.1%	0.8%
U.S.	Oth. Min. Men	10.7%	9.7%	-1.0%		
California	White Men	16.9%	15.2%	-1.7%	-0.6%	
U.S.	White Men	13.5%	12.3%	-1.1%		

Notes: (1) The sample includes all individuals ages 20-64. (2) U.S. estimates exclude California and Washington.

Table 1B (Women)
 Business Ownership Rate Trends in California and the United States by Race
 Current Population Survey (1990-2006)

State	Group	Pre 1998	Post 1998	Change over Time	DD (CA vs. U.S. Change)	DDD (Group vs. Wht. Men)
California	White Women	8.4%	8.6%	0.2%	0.1%	0.8%
U.S.	White Women	6.1%	6.1%	0.0%		
California	Minority Women	3.7%	4.3%	0.6%	0.0%	0.6%
U.S.	Minority Women	2.5%	3.1%	0.6%		
California	Black Women	2.8%	3.8%	1.0%	0.4%	1.0%
U.S.	Black Women	1.6%	2.3%	0.6%		
California	Latino Women	2.9%	3.6%	0.7%	0.4%	1.0%
U.S.	Latino Women	2.9%	3.2%	0.3%		
California	Oth. Min. Women	6.1%	5.9%	-0.2%	0.0%	0.6%
U.S.	Oth. Min. Women	5.5%	5.3%	-0.2%		
California	White Men	16.9%	15.2%	-1.7%	-0.6%	
U.S.	White Men	13.5%	12.3%	-1.1%		

Notes: (1) The sample includes all individuals ages 20-64. (2) U.S. estimates exclude California and Washington.

Table 2A (Men)
 Business Ownership Rate Trends in Washington and the United States by Race
 Current Population Survey (1990-2006)

State	Group	Pre 2000	Post 2000	Change over Time	DD (WA vs. U.S. Change)	DDD (Group vs. Wht. Men)
Washington	Minority Men	7.3%	6.6%	-0.7%	-1.2%	-0.6%
U.S.	Minority Men	6.2%	6.7%	0.5%		
Washington	Black Men	4.1%	6.3%	2.1%	1.6%	2.3%
U.S.	Black Men	4.4%	4.9%	0.5%		
Washington	Latino Men	6.0%	6.3%	0.3%	0.2%	0.9%
U.S.	Latino Men	7.2%	7.3%	0.1%		
Washington	Oth. Min. Men	9.5%	6.9%	-2.7%	-1.9%	-1.2%
U.S.	Oth. Min. Men	10.5%	9.7%	-0.8%		
Washington	White Men	13.1%	11.3%	-1.7%	-0.6%	
U.S.	White Men	13.3%	12.2%	-1.1%		

Notes: (1) The sample includes all individuals ages 20-64. (2) U.S. estimates exclude California and Washington.

Table 2B (Women)
 Business Ownership Rate Trends in Washington and the United States by Race
 Current Population Survey (1990-2006)

State	Group	Pre 2000	Post 2000	Change over Time	DD (WA vs. U.S. Change)	DDD (Group vs. Wht. Men)
Washington	White Women	6.1%	5.9%	-0.2%	0.0%	0.6%
U.S.	White Women	5.5%	5.3%	-0.2%		
Washington	Minority Women	4.8%	5.3%	0.5%	0.0%	0.6%
U.S.	Minority Women	2.6%	3.1%	0.5%		
Washington	Black Women	2.8%	6.4%	3.5%	2.9%	3.6%
U.S.	Black Women	1.7%	2.3%	0.6%		
Washington	Latino Women	3.5%	4.9%	1.4%	1.2%	1.9%
U.S.	Latino Women	3.0%	3.2%	0.2%		
Washington	Oth. Min. Women	6.1%	5.2%	-0.9%	-0.5%	0.1%
U.S.	Oth. Min. Women	5.6%	5.2%	-0.4%		
Washington	White Men	16.9%	15.2%	-1.7%	-0.6%	
U.S.	White Men	13.5%	12.3%	-1.1%		

Notes: (1) The sample includes all individuals ages 20-64. (2) U.S. estimates exclude California and Washington.

Table 3
 Linear Probability Regressions for Business Ownership - U.S. Sample
 CPS (1990-2006)

Explanatory Variables	(1)	(2)	(3)	(4)
Black Men California Post 1998	-0.00555 (0.00148)	-0.00591 (0.00160)	-0.00590 (0.00158)	0.00807 (0.00357)
Latino Men California Post 1998	0.01208 (0.00454)	0.00718 (0.00387)	0.00737 (0.00396)	0.00619 (0.00304)
Oth. Min. Men California Post 1998	0.00782 (0.00284)	0.00640 (0.00291)	0.00661 (0.00293)	0.02292 (0.00431)
White Women California Post 1998	0.00767 (0.00123)	0.00802 (0.00122)	0.00782 (0.00121)	0.01009 (0.00136)
Black Women California Post 1998	0.00973 (0.00167)	0.00853 (0.00166)	0.00841 (0.00167)	0.01358 (0.00208)
Latino Women California Post 1998	0.00971 (0.00216)	0.00708 (0.00162)	0.00692 (0.00166)	0.01542 (0.00271)
Oth.Min.Women California Post 1998	0.00654 (0.00292)	0.00451 (0.00298)	0.00452 (0.00299)	0.01239 (0.00506)
Black Men Washington Post 2000	0.02279 (0.00158)	0.02137 (0.00165)	0.02156 (0.00168)	-0.00202 (0.00237)
Latino Men Washington Post 2000	0.00883 (0.00399)	0.00907 (0.00337)	0.00951 (0.00337)	0.01788 (0.00442)
Oth. Min. Men Washington Post 2000	-0.01079 (0.00279)	-0.01341 (0.00288)	-0.01358 (0.00294)	-0.02544 (0.00384)
White Women Washington Post 2000	0.00274 (0.00107)	0.00331 (0.00106)	0.00353 (0.00105)	0.00708 (0.00122)
Black Women Washington Post 2000	0.03572 (0.00154)	0.03379 (0.00140)	0.03385 (0.00142)	0.03425 (0.00165)
Latino Women Washington Post 2000	0.01894 (0.00204)	0.02120 (0.00158)	0.02132 (0.00152)	0.02393 (0.00197)
Oth.Min.Women Washington Post 2000	0.00066 (0.00252)	-0.00319 (0.00252)	-0.00306 (0.00250)	-0.00126 (0.00347)
Demographic controls	No	Yes	Yes	Yes
State fixed effects	No	Yes	Yes	Yes
Year fixed effects	No	Yes	Yes	Yes
Race/gender year fixed effects	No	No	Yes	Yes
Race/gender CA and WA time trends	No	No	No	Yes
Mean of dependent variable	0.08904	0.08904	0.08904	0.08904
Sample size	4,267,176	4,267,176	4,267,176	4,267,176

Notes: (1) Displayed are triple difference coefficients representing the change in the self-employment rate after the elimination affirmative action for the stated minority group relative to white males in the treatment state versus the rest of the United States. (2) The sample consists of individuals (ages 20-64). (3) Demographic controls include age, education, marital status, and urban status.

Table 4
 Linear Probability Regressions for Business Ownership - CA Sample Based on Minority Share
 CPS (1990-2006)

Explanatory Variables	(1)	(2)	(3)	(4)
Black Men California Post 1998	-0.00403 (0.00164)	-0.00459 (0.00203)	-0.00449 (0.00200)	0.01175 (0.00555)
Latino Men California Post 1998	0.01221 (0.00522)	0.00797 (0.00441)	0.00822 (0.00448)	0.00947 (0.00424)
Oth. Min. Men California Post 1998	0.01239 (0.00323)	0.01076 (0.00318)	0.01103 (0.00313)	0.02359 (0.00592)
White Women California Post 1998	0.00638 (0.00138)	0.00639 (0.00131)	0.00622 (0.00127)	0.01182 (0.00187)
Black Women California Post 1998	0.00973 (0.00170)	0.00842 (0.00176)	0.00836 (0.00177)	0.01929 (0.00264)
Latino Women California Post 1998	0.01040 (0.00239)	0.00800 (0.00160)	0.00783 (0.00161)	0.01978 (0.00379)
Oth.Min.Women California Post 1998	0.01003 (0.00343)	0.00824 (0.00312)	0.00820 (0.00317)	0.02148 (0.00666)
Demographic controls	No	Yes	Yes	Yes
State fixed effects	No	Yes	Yes	Yes
Year fixed effects	No	Yes	Yes	Yes
Race/gender year fixed effects	No	No	Yes	Yes
Race/gender CA time trends	No	No	No	Yes
Mean of dependent variable	0.08385	0.08385	0.08385	0.08385
Sample size	1,858,112	1,858,112	1,858,112	1,858,112

Notes: (1) Displayed are triple difference coefficients representing the change in the self-employment rate after the elimination affirmative action for the stated minority group relative to white males in the treatment state versus the rest of the United States. (2) The sample consists of individuals (ages 20-64). (3) Demographic controls include age, education, marital status, and urban status. (4) The comparison states include Alaska, Arizona, Florida, Georgia, Illinois, Louisiana, Maryland, Mississippi, Nevada, New Jersey, New Mexico, New York, South Carolina, Texas, and Virginia.

Table 5
 Linear Probability Regressions for Business Ownership - WA Sample Based on Minority Share
 CPS (1990-2006)

Explanatory Variables	(1)	(2)	(3)	(4)
Black Men Washington Post 2000	0.02368 (0.00251)	0.02101 (0.00272)	0.02137 (0.00272)	0.00054 (0.00538)
Latino Men Washington Post 2000	0.00586 (0.00544)	0.00381 (0.00605)	0.00412 (0.00598)	0.01416 (0.00598)
Oth. Min. Men Washington Post 2000	-0.01882 (0.00659)	-0.02026 (0.00701)	-0.02046 (0.00676)	-0.02881 (0.00911)
White Women Washington Post 2000	0.00558 (0.00168)	0.00624 (0.00158)	0.00654 (0.00156)	0.00743 (0.00171)
Black Women Washington Post 2000	0.04100 (0.00284)	0.03782 (0.00247)	0.03782 (0.00253)	0.03790 (0.00421)
Latino Women Washington Post 2000	0.02263 (0.00362)	0.02383 (0.00400)	0.02459 (0.00412)	0.02413 (0.00754)
Oth.Min.Women Washington Post 2000	0.00375 (0.00511)	-0.00038 (0.00563)	-0.00043 (0.00561)	-0.00095 (0.00743)
Demographic controls	No	Yes	Yes	Yes
State fixed effects	No	Yes	Yes	Yes
Year fixed effects	No	Yes	Yes	Yes
Race/gender year fixed effects	No	No	Yes	Yes
Race/gender WA time trends	No	No	No	Yes
Mean of dependent variable	0.08387	0.08387	0.08387	0.08387
Sample size	1,277,061	1,277,061	1,277,061	1,277,061

Notes: (1) Displayed are triple difference coefficients representing the change in the self-employment rate after the elimination affirmative action for the stated minority group relative to white males in the treatment state versus the rest of the United States. (2) The sample consists of individuals (ages 20-64). (3) Demographic controls include age, education, marital status, and urban status. (4) The comparison states include Arkansas, Colorado, Connecticut, Delaware, Kansas, Massachusetts, Michigan, Missouri, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, Tennessee, and Utah.

Table 6
 Linear Probability Regressions By Industry for Business Ownership - U.S. Sample
 CPS (1990-2006)

	Total effect	Construction	Services	Wholesale/ retail trade	Other
	(1)	(2)	(3)	(4)	(5)
Black Men California Post 1998	0.008 (0.004)	0.007 (0.003)	-0.007 (0.004)	-0.009 (0.001)	-0.001 (0.005)
Latino Men California Post 1998	0.006 (0.003)	0.002 (0.004)	-0.006 (0.005)	-0.010 (0.002)	0.008 (0.002)
Oth. Min. Men California Post 1998	0.023 (0.004)	0.012 (0.004)	0.013 (0.007)	-0.015 (0.004)	0.009 (0.005)
White Women California Post 1998	0.010 (0.001)	0.004 (0.001)	0.005 (0.002)	-0.004 (0.001)	-0.001 (0.001)
Black Women California Post 1998	0.014 (0.002)	0.007 (0.001)	-0.012 (0.004)	0.002 (0.001)	0.011 (0.002)
Latino Women California Post 1998	0.015 (0.003)	0.008 (0.001)	0.008 (0.003)	0.000 (0.002)	0.004 (0.001)
Oth.Min.Women California Post 1998	0.012 (0.005)	0.007 (0.001)	-0.006 (0.005)	-0.015 (0.007)	0.000 (0.002)
Black Men Washington Post 2000	-0.002 (0.002)	0.065 (0.003)	-0.110 (0.006)	-0.031 (0.002)	0.009 (0.005)
Latino Men Washington Post 2000	0.018 (0.004)	-0.001 (0.005)	-0.053 (0.007)	-0.036 (0.003)	0.001 (0.006)
Oth. Min. Men Washington Post 2000	-0.025 (0.004)	-0.005 (0.004)	-0.056 (0.009)	-0.042 (0.006)	0.005 (0.010)
White Women Washington Post 2000	0.007 (0.001)	0.007 (0.001)	0.003 (0.002)	-0.002 (0.001)	-0.005 (0.002)
Black Women Washington Post 2000	0.034 (0.002)	0.000 (0.001)	-0.021 (0.004)	0.021 (0.002)	0.089 (0.003)
Latino Women Washington Post 2000	0.024 (0.002)	0.018 (0.001)	0.038 (0.005)	-0.021 (0.002)	0.022 (0.002)
Oth.Min.Women Washington Post 2000	-0.001 (0.003)	0.013 (0.002)	-0.009 (0.006)	-0.013 (0.007)	-0.021 (0.004)

Notes: (1) Displayed are triple difference coefficients representing the change in the self-employment rate after the elimination affirmative action for the stated minority group relative to white males in the treatment state versus the rest of the United States. (2) The sample consists of individuals (ages 20-64). (3) Each specification contains state effects, year effects, demographic controls, race/gender specific year effects, and race/gender time trends specific to California and Washington. Demographic controls include age, education, marital status, and urban status.

Table 7
Trends in Average Business Revenues by Race/Gender
Survey of Minority-Owned Business Enterprises (1997) and Survey of Business Owners (2002)

State	Group	1997	2002	Change
California	White Men	\$749,807	\$664,671	-11.35%
Washington	White Men	\$849,618	\$599,339	-29.46%
United States	White Men	\$709,344	\$590,251	-16.79%
California	Black Men	\$100,448	\$109,597	9.11%
Washington	Black Men	\$127,089	\$192,397	51.39%
United States	Black Men	\$132,136	\$106,891	-19.11%
California	Latino Men	\$246,596	\$178,429	-27.64%
Washington	Latino Men	\$319,150	\$191,501	-40.00%
United States	Latino Men	\$214,811	\$183,785	-14.44%
California	Other Minority Men	\$523,612	\$387,054	-26.08%
Washington	Other Minority Men	\$498,086	\$329,123	-33.92%
United States	Other Minority Men	\$402,877	\$304,493	-24.42%
California	White Women	\$225,458	\$189,500	-15.95%
Washington	White Women	\$138,288	\$128,294	-7.23%
United States	White Women	\$178,868	\$162,035	-9.41%
California	Black Women	\$65,028	\$55,885	-14.06%
Washington	Black Women	\$51,058	\$99,021	93.94%
United States	Black Women	\$46,780	\$35,541	-24.03%
California	Latino Women	\$66,910	\$64,080	-4.23%
Washington	Latino Women	\$89,811	\$60,599	-32.53%
United States	Latino Women	\$101,004	\$65,721	-34.93%

Notes: (1) U.S. estimates exclude California and Washington. (2) White estimates exclude Latino-owned firms.

Appendix
Comparison States by Minority Share of Population
Census 2000

State	Total Population	Minority Percent	Black Percent	Latino Percent	Min. Share States
Alabama	4,447,100	29.7	26.0	1.7	
Alaska	626,932	32.4	3.5	4.1	CA
Arizona	5,130,632	36.2	3.1	25.3	CA
Arkansas	2,673,400	21.4	15.7	3.2	WA
California	33,871,648	53.3	6.7	32.4	CA
Colorado	4,301,261	25.5	3.8	17.1	WA
Connecticut	3,405,565	22.5	9.1	9.4	WA
Delaware	783,600	27.5	19.2	4.8	WA
District of Columbia	572,059	72.2	60.0	7.9	
Florida	15,982,378	34.6	14.6	16.8	CA
Georgia	8,186,453	37.4	28.7	5.3	CA
Hawaii	1,211,537	77.1	1.8	7.2	
Idaho	1,293,953	12.0	0.4	7.9	
Illinois	12,419,293	32.2	15.1	12.3	CA
Indiana	6,080,485	14.2	8.4	3.5	
Iowa	2,926,324	7.4	2.1	2.8	
Kansas	2,688,418	16.9	5.7	7.0	WA
Kentucky	4,041,769	10.7	7.3	1.5	
Louisiana	4,468,976	37.5	32.5	2.4	CA
Maine	1,274,923	3.5	0.5	0.7	
Maryland	5,296,486	37.9	27.9	4.3	CA
Massachusetts	6,349,097	18.1	5.4	6.8	WA
Michigan	9,938,444	21.4	14.2	3.3	WA
Minnesota	4,919,479	11.8	3.5	2.9	
Mississippi	2,844,658	39.3	36.3	1.4	CA
Missouri	5,595,211	16.2	11.2	2.1	WA
Montana	902,195	10.5	0.3	2.0	
Nebraska	1,711,263	12.7	4.0	5.5	
Nevada	1,998,257	34.8	6.8	19.7	CA
New Hampshire	1,235,786	4.9	0.7	1.7	
New Jersey	8,414,350	34.0	13.6	13.3	CA
New Mexico	1,819,046	55.3	1.9	42.1	CA
New York	18,976,457	38.0	15.9	15.1	CA
North Carolina	8,049,313	29.8	21.6	4.7	
North Dakota	642,200	8.3	0.6	1.2	
Ohio	11,353,140	16.0	11.5	1.9	WA
Oklahoma	3,450,654	25.9	7.6	5.2	WA
Oregon	3,421,399	16.5	1.6	8.0	WA
Pennsylvania	12,281,054	15.9	10.0	3.2	WA
Rhode Island	1,048,319	18.1	4.5	8.7	WA
South Carolina	4,012,012	33.9	29.5	2.4	CA
South Dakota	754,844	12.0	0.6	1.4	
Tennessee	5,689,283	20.8	16.4	2.2	WA
Texas	20,851,820	47.6	11.5	32.0	CA
Utah	2,233,169	14.7	0.8	9.0	WA
Vermont	608,827	3.8	0.5	0.9	
Virginia	7,078,515	29.8	19.6	4.7	CA
Washington	5,894,121	21.1	3.2	7.5	WA
West Virginia	1,808,344	5.4	3.2	0.7	
Wisconsin	5,363,675	12.7	5.7	3.6	
Wyoming	493,782	11.1	0.8	6.4	

Notes: (1) Estimates of minority share of the total population are from the 2000 Census. (2) See text for more details on selection of minority share and affirmative action program comparison states for California and Washington.