
Proposition 209 and Affirmative Action at the University of California

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Many selective universities – including public universities in at least 25 states – provide explicit admissions advantages to applicants from underrepresented racial and ethnic groups. Proponents of these university affirmative action policies argue that they offset applicant qualification gaps that result from systemically unequal prior educational opportunities. Detractors argue that affirmative action limits opportunity for Asian and white applicants and may have unintended negative consequences for targeted students.

The resulting controversy has led to statewide affirmative action bans in 10 states and a series of high-profile Supreme Court cases. At the base of this controversy lie three open empirical questions. First, which students are targeted by affirmative action, and to what degree does affirmative action impact where those students go to college? Second, what are the short- and long-run effects of enrolling at a more-selective university because of affirmative action? Third, how are the net benefits and costs of affirmative action distributed across Asian, Black, Hispanic, and white university applicants?

California's Proposition 209 provides a useful 'natural experiment' with which to study each of these questions. Passed in 1996, Prop 209 has prohibited race-based admissions advantages at California public universities since the Fall 1998 student cohort. The most-impacted universities were the eight undergraduate campuses of the University of California (UC) system, which comprises all of the state's public research universities, from

the most-selective Berkeley and UCLA campuses to least-selective Santa Cruz and Riverside campuses.

In order to study the long-run student ramifications of Prop 209, I constructed a novel highly-detailed database including every California high school senior who applied to any UC campus between 1994 and 2002. The applicant records are individually linked to enrollment and degree records covering all American universities – even if they didn't attend a UC campus – as well as annual California employment records over the subsequent 16 years. The applicants are also linked to detailed California high school records, and most UC enrollees are linked to their full college transcripts.

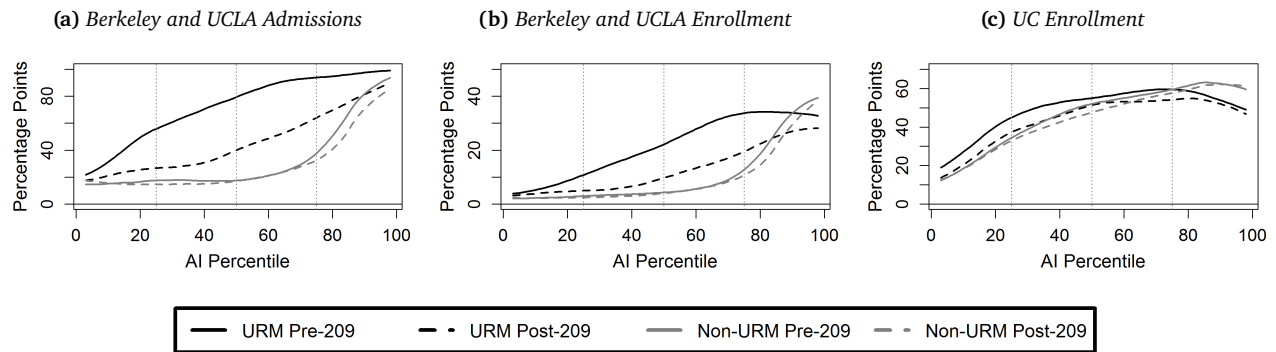
I estimate the effects of affirmative action by comparing the outcomes of the underrepresented minority (URM) Black and Hispanic UC applicants targeted by affirmative action with those of non-URM applicants in the two years before and after 1998, no matter where they chose to go to college. If URM applicants' outcomes diverged from those of their non-URM peers after 1998, the differences are likely the result of Prop 209. In order to compare 'apples to apples', I restrict the analysis to comparing applicants who attended the same high school and I control for between-applicant differences in standardized test scores and high school grades. The resulting estimated differences pin down the average relative effect of Prop 209 on UC's URM applicants.

Question 1: Enrollment

Prop 209 decreased nearly every URM applicant's likelihood of admission to every UC campus. Figure 1 shows

This brief summarizes the findings of "[Affirmative Action, Mismatch, and Economic Mobility after California's Proposition 209](#)," a comprehensive analysis of the impact of Prop 209 on university student outcomes. See that study for a complete set of acknowledgements.

Figure 1: UC Admissions and Enrollment before and after Prop 209 by Ethnicity and AI Percentile



Note: The percent of applicants to UC Berkeley and UCLA who are admitted to those campuses, and the percent of all UC applicants who first enroll at Berkeley/UCLA or at any UC campus before ('96-97 cohorts) and after ('98-99 cohorts) the end of affirmative action, by URM status and by percentile of academic index (*AI*) measured among 1996-1999 URM UC applicants. Statistics are smoothed with a triangular kernel with bandwidth 15. Source: UC Corporate Student System and National Student Clearinghouse.

admissions and enrollment outcomes for URM and non-URM UC applicants in the two years before and after 1998 across the distribution of UC's contemporaneous "Academic Index" (*AI*), a weighted sum of applicants' high school GPA and SAT scores. It shows that a broad swath of URM applicants became at least 40 percentage points less likely to be admitted to UC's more-selective Berkeley and UCLA campuses after Prop 209. Non-URM applicants' admissions likelihood was unchanged for all but the highest-*AI* applicants.

URM applicants' decreased likelihood of UC admissions led to disproportionate declines in URM UC enrollment across the *AI* spectrum, both at UC's more-selective campuses and across UC as a whole. As a result, URM applicants cascaded into less-selective colleges and universities: high-testing URM students were pushed from highly-selective universities to less-selective universities, replacing lower-testing URM students who were pushed to even less-selective universities, and on and on. This resulted in a substantial net outflow of lower-income students from selective public universities in California.

Prop 209 also deterred more than 1,000 URM high school seniors from applying to any UC campus each year, despite the fact that most of them would still have been admitted to many UC campuses. In total, Prop 209 caused total UC URM enrollment to decline by about 800 students per year, with hundreds of additional URM students enrolling at less-selective campuses.

Question 2: Student Outcomes

What happened to UC's 10,000 annual URM applicants as a result of their enrolling at lower-quality colleges and universities after Prop 209? Figure 2 summarizes Prop 209's effects on URM UC applicants. Lower-testing

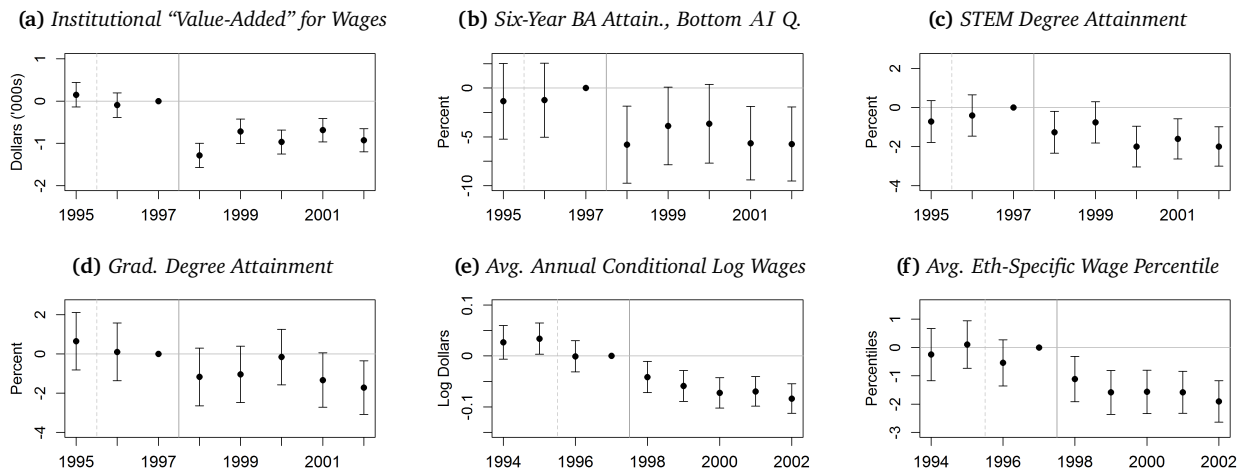
URM applicants – the applicants most likely to exit the UC system because of the end of affirmative action – became more than 4 percentage points less likely to earn a Bachelor's degree from any US college or university. The average URM applicant became less likely to earn a college degree in a STEM field. About 1 in 70 URM UC applicants would have eventually earned a graduate degree if UC had continued affirmative action, but ended up not earning the degree as a result of Prop 209.

Because of their declines in enrollment quality and degree attainment after Prop 209, every URM UC applicant earned 5 percent lower average annual wages between ages 24 and 34, with larger proportional effects for lower-testing applicants. This sharp decline cannot be explained by other ethnicity-specific wage trends in California, and does not appear to diminish as the students age and spend more time in the workforce. Given the magnitude of UC's applicant pool, these estimates imply that by 2014, Prop 209 had caused an aggregate decline in the number of Black and Hispanic Californians in their early 30s earning over \$100,000 by at least 700 people, or 3 percent.

About 20 percent of URM UC applicants were Black, with the rest mostly Hispanic. While degree attainment after Prop 209 declined among both Black and Hispanic applicants, Prop 209's effects on wages earned in California were largely experienced by Hispanic applicants. As a result, UC's affirmative action served as an important economic mobility pipeline, but had little measurable impact on the state's white-black earnings gap.

Before Prop 209, Black and Hispanic UC students tended to earn lower grades and were less likely to persist in introductory STEM courses than their non-URM peers. These gaps were often blamed on affirmative action leading those students to enroll at schools where they had a difficult time competing with their higher-testing

Figure 2: Annual Difference-in-Difference Estimates of URM UC Applicants' Outcomes after Prop 209



Note: OLS difference-in-difference coefficient estimates of the change in URM UC applicant outcomes relative to non-URM applicants, compared to the 1997 baseline. For details on outcome definitions, see the [full study](#); this replicates Figure 4. Panel (a) reports institutional “value-added” measures for early-30s wages following Chetty *et al* (2020). Panel (f)’s outcome is defined as the average annual ethnicity-specific CA wage percentile between 6 and 16 years after UC application, to account for ethnicity-specific wage trends. Models include high school fixed effects, ethnicity indicators, and the components of UC’s Academic Index; 1994 NSC data are omitted. Panel (b) restricts the sample to the bottom *AI* quartile as measured among ‘96-97 URM UC applicants. Bars show robust 95-percent confidence intervals. Source: UC Corporate Student System, National Student Clearinghouse, California Employment Development Department, and the American Community Survey.

peers. However, the STEM performance and persistence of URM UC enrollees did not improve after Prop 209, and the observed gaps can instead be fully explained by URM students’ poorer high school opportunities and prior preparedness, no matter where they went to college.

In sum, affirmative action substantially benefited UC’s URM applicants until 1998, after which Prop 209 led them to substantial educational and labor market deterioration.

Question 3: Policy Efficiency

For every additional net Black or Hispanic UC student who enrolled as a result of affirmative action, UC enrollment had to decline by approximately one white or Asian student. There is no evidence that Prop 209 disproportionately impacted Asian UC applicants relative to white UC applicants in terms of their enrollment or long-run wage outcomes.

Interestingly, analysis of the non-URM students likely to “crowd into” UC Berkeley after Prop 209 shows that even if Berkeley had rejected them, they would have nevertheless enrolled at similar-quality universities and experienced similar degree attainment and postgraduate wages. Additional evidence suggests that the Black and Hispanic students who enrolled at more-selective universities because of affirmative action received far above-average returns from those universities. In combination, this suggests that URM students’ net gains from

affirmative action substantially exceed other students’ (potentially small) net losses.

Conclusion

Affirmative action provided very large admissions advantages to mostly-lower-income Black and Hispanic applicants at every UC campus, especially the more-selective campuses. It enabled those URM applicants to enroll at more-selective and higher-quality universities, leading to higher degree attainment and higher California wages over the subsequent 15 years. As a result, Prop 209 caused a substantial decline in the number of high-earning early-career URM Californians that persists more than 20 years later. Affirmative action policies have ‘winners’ and ‘losers,’ but because white and Asian students had alternative access to high-quality public and private universities, there is little evidence that they benefited by the end of affirmative action at UC.

Several previous studies have suggested that Prop 209 caused *improvements* in overall and STEM degree attainment among URM Californians, potentially as a result of “mismatch” between more-selective universities and the academic preparedness of the URM students who benefited from affirmative action. The findings in this study are inconsistent with this “Mismatch Hypothesis”. For detailed discussions of the limitations of that previous research in the context of these new findings, see the online appendices to the [full study](#).