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Do Affirmative Action Bans Cause Students to Move Across State Lines to Attend College?

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This *Economic Commentary* studies whether statewide bans on affirmative action in admission to public universities cause students to move to a new state to attend college. Regression results using data from the decennial census and the American Community Survey provide little evidence that affirmative action bans result in migration across state lines to attend college. In addition to being of direct interest, these results provide a check on earlier research that treats different states roughly as separate higher education markets.

Affirmative action in college admissions has been in the headlines a fair amount recently. In addition to litigation surrounding the admissions practices of particular universities, a number of states have instituted statewide bans on affirmative action in the admissions process for public universities.

These statewide bans have a variety of documented effects. They generally do not affect whether people attend college but do displace some underrepresented minority students from selective colleges (Hinrichs, 2012). They lead to higher within-college graduation rates for underrepresented minorities at selective colleges but a lower overall stock of underrepresented minority graduates of selective colleges (Hinrichs, 2014). In some cases, they increase segregation but in other cases they reduce it, as measured by standard segregation indexes that capture the extent to which whites and blacks attend different colleges from each other (Hinrichs, forthcoming).

This *Economic Commentary* studies whether or not students move across state lines to attend college in response to an affirmative action ban. In doing this, I estimate the effects of affirmative action bans on a new outcome (migration) and also provide a check on the methodology of Hinrichs (forthcoming), which treats different states roughly as separate higher education markets.

The regression results, which use data from the decennial census and the American Community Survey, provide little evidence that affirmative action bans result in migration to attend college across state lines. The results thus do not support the view that interstate migration for college is a cause for concern when assessing the merits of affirmative action policies. The results also suggest that treating states as separate higher education markets is a reasonable first approximation in research on affirmative action bans.

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Affirmative Action and Racial Segregation

That a ban on affirmative action would increase segregation may be expected given that the goal of affirmative action in college admissions is to increase minority representation. However, Hinrichs (forthcoming) finds that affirmative action bans have had mixed effects on segregation as measured by standard segregation indexes, increasing it in some cases but reducing it in others. The reason that an affirmative action ban can reduce segregation is that there is a U-shaped relationship between measures of college quality, or selectivity, on the one hand and, on the other, the percentage of students who are black.[1] In other words, black students are underrepresented, not at the most selective or at the least selective institutions, the two extremes, but at moderately selective institutions. An affirmative action ban may reduce black enrollment at highly selective colleges and raise it at moderately selective colleges, thereby flattening the U shape and reducing segregation.[2] Such a reduction appears to have happened, for example, in California following a 1998 affirmative action ban as black enrollment rose at University of California (UC) campuses such as UC Riverside and UC Irvine while it fell at UC Berkeley and UCLA.

Hinrichs (forthcoming) studies the effects of affirmative action bans on segregation among the students attending college in a given state. Because of data limitations, I am unable to directly estimate effects on segregation among people who are state residents based on where they lived before attending college. If every state were a closed system and no one moved across state lines for college, the two effects—the effect of bans on college students in a state and the effect of bans on state residents—would be identical. In practice, though, the two effects might differ because some students attend college in a different state than the one in which they resided prior to attending college.

Both effects may be of interest. To the extent that people stay in a state after completing college there, racial segregation among the students in the colleges located in a state might matter for later residential segregation, friendship group segregation, or political economy outcomes. On the other hand, suppose that a state is deciding whether to ban affirmative action, that the state is interested in maximizing the welfare of those currently residing in the state (including people who may ultimately go on to attend college in a different state), and that the state believes that exposure to people of different races increases a person's welfare. In this situation, the exposure of the state's white residents to black students in college (regardless of which state the college is located in) is a relevant quantity.

To see the difference between the two approaches, consider the index of white exposure to blacks. This segregation index measures the percentage of students who are black at the college of the average white student. In Hinrichs (forthcoming), I calculate white exposure to blacks for California, for example, as the average percentage of students who are black at the colleges of white students in California. In principle, however, it would be possible to define a segregation index as the average percentage of students who are black at the colleges of the white students who were residents of California. This new segregation index could be calculated from information on the overall racial composition of colleges and information on how many black students from California attend Cornell University in New York, how many attend Duke University in North Carolina, and how many attend every other college in the nation. Unfortunately, data to calculate exposure in this way are not readily available.[3]

Data and Models

In the absence of a data set that would allow me to credibly estimate the impacts of affirmative action bans on state residents, I instead turn to data from the decennial census (covering 1990 and 2000) and the American Community Survey (covering each year from 2001 through 2016) to estimate the degree to which affirmative action bans cause students to migrate to a different state to attend college. In addition to being of interest in their own right as estimates for an important outcome (migration) that has not yet been studied in the context of affirmative action, these estimates offer some indication of how much the effects of an affirmative action ban on state residents are likely to differ from the effects on people who attend college within a given state. For example, if affirmative action bans do not cause people to move to a new state for college, then studying the impacts on segregation within the colleges in a state should be a good approximation of the impacts on state residents.[4] In contrast, if affirmative action bans do cause out-of-state migration, then the effects on students attending college within a state may differ from the effects on state residents.

In using the American Community Survey (ACS) and census data, I am able to estimate migration effects separately by racial group. This is important because affirmative action bans could potentially cause inflows of one group but outflows of another that would not be detected in a migration analysis that combined students of different races. In particular, blacks, Hispanics, and Native Americans might leave a ban state for another state that has more favorable admissions policies, and they might be replaced by white or Asian students.[5] Another strength of the data is that they include information on state of residence one year ago (ACS) or five years ago (census). Furthermore, college students are surveyed in the state of their college rather than their initial state of residence.[6]

Table 1 shows that an initial wave of affirmative action bans occurred in Texas, California, Washington, and Florida beginning in the late 1990s. A second wave of bans went into effect later in Michigan, Nebraska, Arizona, New Hampshire, and Oklahoma. Most affirmative action bans are the result of ballot initiatives, although they have also come about through a circuit court ruling in Texas, an executive order in Florida, and a vote of the state legislature in New Hampshire. In the subsequent analysis, I drop

observations from four states (Alabama, Georgia, Louisiana, and Mississippi) for which the classification of ban versus nonban is debatable.[7] However, the overall results are not sensitive to how these states are treated.

Table 2 shows summary statistics for three different time periods: 1990–2000, 2001–2016, and 2004–2016. The first two of these periods are shown separately because the migration time window changed from five years to one year with the 2001 ACS, while the third is shown because it corresponds to a time period studied in Hinrichs (forthcoming). I limit the sample to people who are 18 years old and attending college, a circumstance which I define as being enrolled in school and having already completed twelfth grade, in order to focus on the population that is arguably of the most interest.[8] Panel A reveals that 14.1 percent of non-Hispanic whites, 10.9 percent of non-Hispanic blacks, and 7.4 percent of Hispanics in the 1990–2000 census sample lived in a different state than they had five years earlier. The corresponding figures for one-year migration in the 2001–2016 and 2004–2016 ACS samples are somewhat lower, as are the corresponding figures in Panel B, which has a structure that parallels Panel A but requires that a move be to a nonban state.

I estimate the impacts of affirmative action bans on migration by studying whether the bans are related to moving to a new state in the past year (with the ACS data) or in the past five years (with the census data). In doing so, I treat the state of residence one year ago or the state of residence five years ago as a proxy for the state in which the person completed high school. I code the affirmative action ban variable based on whether there is a ban in place in that state at the current time.[9] Depending on the time period, the state variable is either the state of residence one year ago or the state of residence five years ago. The outcome variable is either an indicator for moving to a new state or an indicator for moving to a new state that is not an affirmative action ban state. I estimate models of the form

$$migrated_{ist} = ban_{st}\,\alpha + \mu_s + \delta_t + \varepsilon_{ist} \quad (1)$$

separately by race. Here $migrated_{ist}$ is an indicator for whether person i from state s in year t migrated, ban_{st} is an indicator for whether state s has an affirmative action ban in place in year t, μ_s is a full set of state indicators, δ_t is a full set of year indicators, ε_{ist} is the error term, and α is the parameter of interest.[10]

Table 1. Timing of Affirmative Action Bans

State	Years with ban for fall admissions cycle
Texas	1997–2004
California	1998–
Washington	1999–
Florida	2001–
Michigan	2007–
Nebraska	2009–
Arizona	2011–
New Hampshire	2012–
Oklahoma	2013–

Source: Hinrichs (forthcoming).

Table 2. Summary Statistics

	5-year	1-year	
	1990–2000	2001–2016	2004–2016
	A. Moved to a new state		
White	0.141	0.094	0.105
	89,017	183,359	171,616
Black	0.109	0.074	0.082
	13,612	25,130	23,987
Hispanic	0.074	0.041	0.044
	6,388	24,047	23,259
	B. Moved to a nonban state		
White	0.135	0.081	0.091
	89,017	183,359	171,616
Black	0.106	0.066	0.074
	13,612	25,130	23,987
Hispanic	0.066	0.031	0.033
	6,388	24,047	23,259

Note: The table shows weighted means calculated with person weights, as well as the sample size.
Sources: Author's calculations from American Community Survey and decennial census data from IPUMS USA, University of Minnesota, www.ipums.org.

Results

The results shown in table 3 do not provide strong evidence that affirmative action bans are associated with migration.[11] Although a few statistically significant coefficients appear in the table, the results do not point in a consistent direction across time periods or racial groups.

For example, on the top panel of table 3, the results suggest that blacks were 3.0 percentage points more likely to move to a new state for college when an affirmative action ban is in place in their home state over the time period 2001–2016. However, I do not find a similar result for the 1990–2000 and 2004–2016 time periods, suggesting that the 2001–2016 results might be due to random chance.

Furthermore, the other two statistically significant coefficients on the top panel of the table suggest that affirmative action bans are associated with higher outflows of whites and lower outflows of Hispanics in the 1990–2000 time period. While these outcomes are certainly plausible, they are somewhat counterintuitive. Because an affirmative action ban creates more favorable admissions circumstances for whites but removes an admissions preference for Hispanics, a more intuitive result would be for affirmative action bans to result in lower outflows of whites and higher outflows of Hispanics, the opposite of the results seen in table 3 for 1990–2000.

An additional piece of evidence that the statistically significant results in table 3 are a result of random chance or other data limitations is that the results for blacks differ from the results for Hispanics. For 1990–2000, the coefficient for Hispanics is negative and statistically significant, while the coefficient for blacks is very close to 0. For 2001–2016, the coefficient for blacks is positive and statistically significant, while the coefficient for Hispanics is very close to 0. While there is a distinct possibility that the effects for blacks could differ from the effects for Hispanics, the results would be more convincing if they were the same for both groups because the immediate result of an affirmative action ban is removing an admissions preference for both blacks and Hispanics.

The bottom panel of table 3 shows results for moving to a nonban state. These results are very similar to the results for moving to a different state regardless of whether it is a ban state or a nonban state, although the coefficient for Hispanics in 1990–2000 is smaller in magnitude and ceases to be statistically significant in the bottom panel of the table, while the coefficient for blacks for 2004–2016 becomes marginally significant.

Table 3. Effects of Affirmative Action Bans on Migration

		5-year	1-year	
		1990–2000	2001–2016	2004–2016
		A. Moved to a new state		
White	Coefficient	0.017**	–0.009	–0.015
	Standard error	(0.008)	(0.017)	(0.010)
	Number in sample	89,017	183,359	171,616
Black	Coefficient	0.004	0.030***	0.019
	Standard error	(0.017)	(0.010)	(0.015)
	Number in sample	13,612	25,130	23,987
Hispanic	Coefficient	–0.029**	0.006	0.009
	Standard error	(0.013)	(0.008)	(0.006)
	Number in sample	6,388	24,047	23,259
		B. Moved to a nonban state		
White	Coefficient	0.018*	-0.066	–0.010
	Standard error	(0.010)	(0.013)	(0.007)
	Number in sample	89,017	183,359	171,616
Black	Coefficient	0.001	0.030**	0.021*
	Standard error	(0.016)	(0.012)	(0.012)
	Number in sample	13,612	25,130	23,987
Hispanic	Coefficient	–0.014	0.008	0.002
	Standard error	(0.013)	(0.008)	(0.008)
	Number in sample	6,388	24,047	23,259

Notes: The table shows regression estimates of equation (1) at the individual level. Regressions use person weights. Each cell corresponds to a separate regression and shows the coefficient on the affirmative action ban dummy variable, along with (in parentheses) standard errors that are robust to clustering at the state level, as well as the sample size. A single asterisk denotes statistical significance at the 10 percent level, a double asterisk at the 5 percent level, and a triple asterisk at the 1 percent level.
Sources: Author's calculations from American Community Survey and decennial census data from IPUMS USA, University of Minnesota, www.ipums.org.

All in all, the results in table 3 do not provide strong support for the idea that migration can explain the segregation results in Hinrichs (forthcoming). Although affirmative action bans may have an impact on other outcomes, there is little convincing evidence that they affect migration.

Conclusion

This *Economic Commentary* studies whether statewide bans on affirmative action in admission to public universities cause students to move to a new state to attend college. Regression results using data from the decennial census and the American Community Survey provide little evidence that affirmative action bans result in migration across state lines to attend college. In addition to being of direct interest, these results provide a check on earlier research that roughly treats different states as separate higher education markets.

Footnotes

1. The U-shaped relationship between college quality and underrepresented minority share has been found by Arcidiacono, Aucejo, and Hotz (2016); Arcidiacono, Khan, and Vigdor (2011); Hinrichs (forthcoming); and Reardon, Baker, and Klasik (2012).

2. Segregation across colleges is one of many issues that should be considered when assessing the effects of affirmative action policies. Among others are whether the economic return to attending a selective college is higher or lower for underrepresented minority students who are pulled in to selective colleges as a result of affirmative action policies compared to those who are pushed out, as well as the effects of college racial diversity on attitudes and behaviors.

3. Although the Integrated Postsecondary Education Data System (IPEDS) Residence and Migration survey gives information on attendance at each college in the United States by state of residence, it does not break this information down by race. With this caveat in mind, Hinrichs (2012) used these data to estimate the impacts of affirmative action bans on the percentage of college-going students from a state who attend college within their home state and found no overall effect.

4. One complication is that affirmative action bans may also cause some residents of a state to shift from one out-of-state college to a different out-of-state college. While this may happen in certain instances, I assume that this effect is negligible.

5. The most intuitive movement across state lines in response to affirmative action bans is underrepresented minority students who would have attended an in-state public university under affirmative action being pushed to an out-of-state university or, alternatively, white or Asian students who would not have attended an in-state public university if there were an affirmative action policy in place now being pulled into one. However, other types of movement are also possible. For example, underrepresented minority students, or possibly even white or Asian students, who would have attended a private institution that is not even subject to an affirmative action ban may be pushed to an out-of-state institution if there is a "chilling" effect and they perceive a hostile atmosphere in the state. Alternatively, underrepresented minority students who may have otherwise attended an out-of-state institution may be drawn back in to a public in-state institution when affirmative action is banned because attending the institution may now be a stronger signal of the students' ability.

6. For example, the 2017 ACS form at https://www2.census.gov/programs-surveys/acs/methodology/questionnaires/2017/quest17.pdf explicitly mentions to "not include anyone who is living somewhere else for more than 2 months, such as a college student living away." To be sure, I cannot completely rule out the possibility that misreporting by respondents leads to some college students being erroneously listed on their parents' ACS form even after they have moved away for college.

7. As noted in Hinrichs (2012), Louisiana and Mississippi are part of the same regional court circuit as Texas but were also under federal desegregation orders that pointed them in a conflicting direction. A circuit court ruling in a different circuit invalidated the University of Georgia's particular affirmative action policy, after which the University of Georgia decided to discontinue affirmative action. I also drop observations from Alabama, which is part of the same circuit as Georgia.

8. The decision to limit the sample to college students may raise a concern about sample selection bias because affirmative action bans could potentially impact whether people attend college. However, Hinrichs (2012) found that affirmative action bans do not affect whether people attend college even though they do affect which colleges people attend.

9. For example, in estimating models using the 1990–2000 census data, a student attending college in Minnesota in 2000 who lived in California five years prior would be coded as being subject to an affirmative action ban because there was a ban in place in California in 2000. A student attending college in California in 2000 who lived in Minnesota five years prior would not be coded as being subject to an affirmative action ban because there was not a ban in place in Minnesota in 2000. One limitation of the data is that some of these moves may have happened before the affirmative action ban actually went into effect. This is especially a limitation with the census data, which include information on the state of residence five years prior to the survey year.

10. I estimate the models using weighted least squares with person weights, and I cluster standard errors at the state level.

11. Although not shown here, results are similar when I drop observations with imputed migration data.

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