INCENTIVES TO IDENTIFY:

RACIAL IDENTITY IN THE AGE OF AFFIRMATIVE ACTION

Francisca Antman and Brian Duncan*

We link data on racial self-identification with changes in state-level affirmative action policies to ask whether racial self-identification responds to economic incentives. We find that after a state bans affirmative action, multiracial individuals who face an incentive to identify under affirmative action are about 30 percent less likely to identify with their minority groups. In contrast, multiracial individuals who face a disincentive to identify under affirmative action are roughly 20 percent more likely to identify with their minority groups once affirmative action policies are banned.

JEL Classification: J15, I28, Z13

Keywords: race, affirmative action, identity

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Antman: University of Colorado Boulder and IZA; Duncan: University of Colorado Denver.
I. INTRODUCTION

Surveys almost always rely on individual self-reports to identify a person’s race. What is often overlooked, however, is that individuals must weigh the costs and benefits of associating themselves with minority groups when forming and reporting their own identities. While past research has modeled the choice of racial identity (Darity, Mason, and Stewart 2006), empirical studies in this field typically describe the factors that are correlated with a choice of racial or ethnic identity (Duncan and Trejo 2011). In this paper, we investigate the causal question by asking whether populations subject to exogenous changes in returns to racial identity demonstrate changes in self-reported racial identification.\footnote{Our work is most closely related to Francis and Tannuri-Pianto (2013) who show that Brazilians changed their self-reported racial identities following the adoption of racial quotas in university admissions.}

To this end, we use large-scale U.S. surveys to compare an individual’s report of his ancestral origins with his willingness to identify as a member of a minority group. This produces rates of racial identification which we connect with variation in economic incentives to identify as racial minorities. For the latter, we follow Hinrichs (2012) in exploiting variation in state-level affirmative action bans that went into effect beginning in the late 1990s.

We view affirmative action as an effort to make the racial and ethnic make-up of institutions such as universities or state agencies more closely resemble that of the underlying population. This implies that while affirmative action policies are in effect, underrepresented racial minorities will have greater incentive to identify with their minority groups relative to racial groups that may be minorities within the population at large but are overrepresented at
institutions (overrepresented minority groups). Thus, once state affirmative action policies are banned, members of underrepresented minority groups will face a reduced incentive to identify and members of overrepresented minority groups will face a greater incentive to identify. To make these notions concrete, the analysis here focuses on Black/African-American self-identification as an example of the former case and Asian/Asian-American self-identification as an example of the latter. This approach is supported by evidence that affirmative action is perceived to benefit individuals identifying as African-American (Rockquemore and Arend 2002) and penalize those identifying as Asian-American (Espenshade, Chung, and Walling, 2004). We also investigate whether multiracial individuals in particular are more likely to respond to policy incentives, as they have an additional racial identity from which to choose and may have greater range in how they are viewed by others (Rockquemore and Arend 2002). We find that multiracial individuals who report having Black ancestry are less likely to identify themselves as Black once the state is barred from using affirmative action. In contrast, individuals with Asian ancestry are more likely to identify their race as Asian once affirmative action is banned.

II. DATA

Table 1 lists the years and states in which affirmative action bans were passed and implemented (Hinrichs 2012; Lohrentz 2007). These policy changes stemmed largely from state-wide voter initiatives designed to eliminate racial preferences by state institutions in government hiring, contracting, and admission to public colleges and universities.

3
The data on self-reported racial identity and ancestry come from the 5 percent public use samples of the 1990 and 2000 Censuses, as well as the 2001-2011 American Community Survey (ACS). Since these data were not collected with the expectation of any reward or penalty, they are arguably more likely to elicit the individual’s authentic view of himself, in particular when compared with data culled from educational or employment applications. Thus, we interpret these results as a lower bound of the degree of racial switching we would find in a “high-stakes” survey environment. At the same time, there may be some disconnect between a respondent’s self-perceptions and her responses to any survey, thus at a minimum the results suggest that racial self-reports, if not self-identification, respond to economic incentives.

The outcome variable in the analysis is the individual’s race, as reported by the survey respondent. The survey instructions read: “The concept of race, as used by the Census Bureau, reflects self-identification by individuals according to the race or races with which they identify” (U.S. Census Bureau 2011). Responses may include White, Black/African American, Chinese, Korean, and/or several Asian options, among others.

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2 These data are publicly available through the Integrated Public Use Microdata Series (IPUMS) at http://usa.ipums.org/usa/. All of our samples exclude individuals with an allocated race or Hispanic origin and include only U.S.-born individuals.

3 The use of the term self-identification throughout assumes that the respondent is answering the question as intended and reporting the race(s) with which the individual identifies, as opposed to how the respondent views the individual. Even if this were not the case, however, our analysis could still be interpreted to demonstrate that the racial groups to which individuals are assigned by close relations may shift in response to policy changes. For example, the results for young children could easily be reframed to show how policy incentives affect how parents view the racial identities of their children, which in turn are important components of those children’s ultimate self-identification.

4 The 2000 Census and 2001-2011 ACS allow individuals to identify with as many races as they choose. While the 1990 Census allowed for individuals to select only one race, the results are robust to dropping the 1990 Census.
indicating an Asian race as consistent with a self-reported Asian identity and all selections indicating a Black/African-American race as consistent with a self-reported Black identity.

We also take advantage of information on the individual’s ancestry or ethnic origin. The instructions read: “Ancestry refers to the person’s ethnic origin or descent, ‘roots,’ or heritage. Ancestry may also refer to the country of birth of the person or the person’s parents or ancestors before their arrival in the United States” (U.S. Census Bureau 2011, emphasis in original). Respondents are allowed to list multiple ancestries and in all years our data sources report the first two ancestries listed.

As suggested by the survey instructions, we treat the ancestry response as an objective representation of the individual’s racial and ethnic heritage, whereas the race question asks about the racial group(s) with which the individual subjectively chooses to identify. We further utilize the ancestry information to characterize individuals as having Black or Asian ancestries based on whether the ancestry originated in Africa or Asia, respectively. This characterization allows us to break down the sample used in each regression into three mutually exhaustive categories based on whether the individual reported (a) no relevant ancestry, (b) one relevant ancestry and one non-relevant ancestry (denoted as multiracial individuals), or (c) only relevant ancestry. This allows us to investigate whether multiracial individuals are the most responsive to changes in policy incentives.

5 The IPUMS data center facilitates this characterization by grouping responses into African-origin and Asian-origin groups that are consistent across years.
Table 2 provides descriptive statistics of the sample, linking the ancestry response with self-reported race. While the great majority of individuals who only report having Black ancestry identify themselves as Black (99.3 percent), a dramatically lower fraction of individuals reporting one Black and one non-Black ancestry (denoted here as multiracial Blacks) actually identify as Black (49.4 percent). This contrasts sharply with the purported “one-drop” rule in which individuals with any Black ancestry are considered to be Black. The analogous share of multiracial individuals with Asian ancestry who identify as Asian (64 percent) is also much lower than for those with only Asian ancestry (93.65 percent). While the absolute number of multiracial individuals is much smaller compared with the number of “monoracial” individuals, Census projections confirm that multiracial individuals are the fastest growing segment of the population and are expected to more than triple over the next 40 years (U.S. Census 2012).

Figures 1 and 2 illustrate variation in these rates of self-identification for those individuals living in states that passed an affirmative action ban sometime within our sample period. Most strikingly, Figure 1 shows that multiracial individuals with both Black and non-Black ancestry display much lower rates of Black identification once affirmative action is banned. In contrast, a pattern of rising rates of Asian identification for individuals with Asian ancestry is documented in Figure 2, albeit less dramatic.

III. EMPIRICAL STRATEGY

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6 Arizona and Texas are excluded from the graph because the timing of their bans does not allow for clean pre- and post-ban trends.
We investigate the relationship between state-level affirmative action bans and self-reported racial identity in a difference-in-differences research design that follows Hinrichs (2012):

\[
Identifies_{ist} = \pi_1 (ban_{st} \times NoRelevantAncestry_{ist}) \\
+ \pi_2 (ban_{st} \times MultiracialRelevantAncestry_{ist}) \\
+ \pi_3 (ban_{st} \times OnlyRelevantAncestry_{ist}) \\
+ \pi_4 MultiracialRelevantAncestry_{ist} + \pi_5 OnlyRelevantAncestry_{ist} \\
+ \mathbf{X}_{ist} \cdot \mathbf{\beta} + \mu_s + \delta_t + \theta_s t + \varepsilon_{ist}
\]  

where \(Identifies_{ist}\) is a dummy variable equal to one if person \(i\) in state \(s\) and year \(t\) identifies with that racial identity (e.g. Black) and zero otherwise, and \(ban_{st}\) is a dummy variable equal to one if state \(s\) has an affirmative action ban in year \(t\) and zero otherwise. The dummy variables \(NoRelevantAncestry_{ist}\), \(MultiracialRelevantAncestry_{ist}\), and \(OnlyRelevantAncestry_{ist}\) are mutually exclusive and exhaustive categories for no relevant ancestry reported, one relevant ancestry and one non-relevant ancestry reported (denoted as multiracial individuals), and only relevant ancestry reported, respectively. \(\pi_1, \pi_2\) and \(\pi_3\) represent the association between an affirmative action ban and the racial identity of those with varying ties to the relevant ancestry.

All regressions include state fixed effects \((\mu_s)\), year fixed effects \((\delta_t)\), and state-specific linear time trends \((\theta_s t)\). \(\mathbf{X}_{ist}\) includes controls for age and gender, the fraction of the state population that is foreign born, and the fractions of the state population that are Black, Hispanic, and Asian. Standard errors are clustered at the state level.
IV. RESULTS

Table 3 presents the results from the regression above with the dependent variable equal to 1 if the individual identifies as Black/African-American. Each column reports results from a regression on a separate age group. While we interpret the differences across columns as heterogeneous age effects, these differences could also reflect cohort effects. The magnitudes of the coefficients suggest that for children with Black and non-Black ancestry, banning affirmative action reduces the likelihood of identifying him or her as Black by about 15 percentage points. Since the overall rate of self-identification for multiracial Black individuals is just under 50 percent (Table 2), this is close to a 30 percent drop.

In an analogous model, Table 4 shows that individuals reporting any Asian ancestry are more likely to identify as Asian once affirmative action is banned. In particular, multiracial Asian children are about 14 to 15 percentage points more likely to identify as Asian when affirmative action policies are banned. Comparing this to the 64 percent of multiracial Asians who identified as Asian (Table 2), we see that the relative magnitude is again large (about 23 percent). In both tables, we note that the coefficients for those with no relevant ancestry or those with only relevant ancestry are much smaller, consistent with the notion that multiracial individuals have a greater capacity to choose between racial identities. Additional robustness checks available in the Supplemental Appendix provide support for the parallel trends
assumption, suggesting that these results are not driven by pre-existing trends as the impacts were not observed until the bans went into effect.\textsuperscript{7}

To provide further support for the mechanism driving the observed estimates, Table 5 explores whether results for 18-25 year-olds currently enrolled in college display a greater response than those not enrolled in college. For individuals reporting Asian ancestry, the results look largely similar irrespective of college attendance. For individuals with multiracial Black ancestry, however, the results suggest that the striking decline in the probability multiracial individuals identify as Black among 18 to 25 year-olds is driven by a 19 percentage point drop by those individuals enrolled in college. This supports the view that affirmative action policies in higher education in particular have an important impact on patterns of racial identification.\textsuperscript{8}

V. CONCLUSION

Rather than being born into a fixed racial identity, the evidence presented in this paper suggests that individuals may shift their self-reported identities in response to economic incentives. Consistent with a diminished incentive to identify as an under-represented racial minority, we find that multiracial individuals with some Black ancestry are about 30 percent less likely to identify as Black once affirmative action policies are banned. In contrast, multiracial individuals with some Asian ancestry are about 20 percent more likely to identify as Asian once the bans are implemented. Nevertheless, as the biggest response comes from multiracial

\textsuperscript{7} The Supplemental Appendix also shows the results are robust to concerns regarding selective interstate migration and the use of the 1990 Census sample.

\textsuperscript{8} We investigate additional heterogeneity in outcomes in the Supplemental Appendix including effects by poverty status and parental education. Results do not indicate notable variation along these margins.
individuals, and each of these groups represents a relatively small portion of the Black and Asian ancestry samples, it is unlikely that the effects seen here could be resulting in any significant distortions in demographic trends in the near term.\footnote{We address the possibility that they may result in a misrepresentation of racial disparities in the Supplemental Appendix.} As the group of multiracial individuals continues to grow rapidly, however, and affirmative action policies continue to be struck down, this may present cause for concern in the future.
REFERENCES


Table 1: State Affirmative Action Bans in Government Hiring, Contracting and Admission to Public Universities in Effect over Sample Period, 1990-2011

<table>
<thead>
<tr>
<th>State</th>
<th>Date Passed</th>
<th>Years in Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Texas¹</td>
<td>1996 (overturned in 2003)</td>
<td>1997 - 2004</td>
</tr>
<tr>
<td>California</td>
<td>November 1996</td>
<td>1998 -</td>
</tr>
<tr>
<td>Washington</td>
<td>November 1998</td>
<td>1999 -</td>
</tr>
<tr>
<td>Florida</td>
<td>1999</td>
<td>2001 -</td>
</tr>
<tr>
<td>Michigan</td>
<td>November 2006</td>
<td>2007 - 2011</td>
</tr>
<tr>
<td>Nebraska</td>
<td>November 2008</td>
<td>2009 -</td>
</tr>
<tr>
<td>Arizona</td>
<td>November 2010</td>
<td>2011 -</td>
</tr>
</tbody>
</table>

¹Affirmative action ban applies only to college admissions.
Notes: “November” indicates that affirmative action ban was the result of a ballot measure.
Table 2: Descriptive Statistics for Individuals Aged 0-59, by Ancestry

<table>
<thead>
<tr>
<th>Self-Reported Race</th>
<th>Black Ancestry</th>
<th></th>
<th></th>
<th></th>
<th>Asian Ancestry</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>None</td>
<td>Multiracial</td>
<td>Only</td>
<td>None</td>
<td>Multiracial</td>
<td>Only</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>2.24</td>
<td>49.37</td>
<td>99.29</td>
<td>12.03</td>
<td>7.68</td>
<td>.91</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>2.01</td>
<td>34.79</td>
<td>.21</td>
<td>.28</td>
<td>64.02</td>
<td>93.65</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>91.86</td>
<td>41.53</td>
<td>1.54</td>
<td>84.06</td>
<td>70.73</td>
<td>14.52</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sample size: 32,472,755 | 263,041 | 3,448,247 | 35,433,613 | 171,917 | 578,513

Source: 1990 and 2000 Census Data, 2001-2011 ACS data. The samples include U.S.-born individuals aged 0-59 with the indicated ancestry. Individuals with an allocated race or Hispanic origin are excluded.

Notes: All numbers are percentages. Race categories are not mutually exclusive or exhaustive.
### Table 3: Affirmative Action Bans and Black Identification among Individuals with and without Black Ancestry, by Age Group

<table>
<thead>
<tr>
<th></th>
<th>Age 0-9</th>
<th>Age 10-17</th>
<th>Age 18-25</th>
<th>Age 26-34</th>
<th>Age 35-59</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ban × No black ancestry</td>
<td>.0005</td>
<td>-.000002</td>
<td>.002</td>
<td>.002**</td>
<td>.001*</td>
</tr>
<tr>
<td></td>
<td>(.0014)</td>
<td>(.00125)</td>
<td>(.001)</td>
<td>(.001)</td>
<td>(.001)</td>
</tr>
<tr>
<td>Ban × Multiracial black ancestry</td>
<td>-.150**</td>
<td>-.159**</td>
<td>-.163**</td>
<td>-.134</td>
<td>-.117</td>
</tr>
<tr>
<td></td>
<td>(.056)</td>
<td>(.070)</td>
<td>(.080)</td>
<td>(.088)</td>
<td>(.112)</td>
</tr>
<tr>
<td>Ban × Only black ancestry</td>
<td>.010</td>
<td>.011</td>
<td>.010</td>
<td>.008*</td>
<td>.011***</td>
</tr>
<tr>
<td></td>
<td>(.011)</td>
<td>(.012)</td>
<td>(.009)</td>
<td>(.004)</td>
<td>(.003)</td>
</tr>
</tbody>
</table>

Sample size:
- 6,456,827 (Age 0-9)
- 5,278,051 (Age 10-17)
- 4,486,068 (Age 18-25)
- 5,109,783 (Age 26-34)
- 14,853,314 (Age 35-59)

*Statistically significant at 10% level; **at 5% level; ***at 1% level.


Notes: Standard errors clustered at the state level are shown in parentheses. The samples include U.S.-born individuals in the indicated age range. Individuals with an allocated race or Hispanic origin are excluded. All regressions include controls for age and gender, the fraction of the state population that is foreign born, the fraction of the state population that is Black, Hispanic, and Asian, state and year fixed effects, and state specific linear time trends. Controls for multiracial and only relevant ancestry are also included as level effects. No relevant ancestry, multiracial relevant ancestry, and only relevant ancestry are mutually exclusive and exhaustive categories.
Table 4: Affirmative Action Bans and Asian Identification among Individuals with and without Asian Ancestry, by Age Group

<table>
<thead>
<tr>
<th></th>
<th>Age 0-9</th>
<th>Age 10-17</th>
<th>Age 18-25</th>
<th>Age 26-34</th>
<th>Age 35-59</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ban × No Asian ancestry</td>
<td>-.004**</td>
<td>-.003***</td>
<td>-.002***</td>
<td>-.002**</td>
<td>-.001*</td>
</tr>
<tr>
<td></td>
<td>(.002)</td>
<td>(.001)</td>
<td>(.0004)</td>
<td>(.001)</td>
<td>(.0003)</td>
</tr>
<tr>
<td>Ban × Multiracial Asian ancestry</td>
<td>.150***</td>
<td>.149***</td>
<td>.136***</td>
<td>.145***</td>
<td>.115*</td>
</tr>
<tr>
<td></td>
<td>(.038)</td>
<td>(.039)</td>
<td>(.042)</td>
<td>(.040)</td>
<td>(.062)</td>
</tr>
<tr>
<td>Ban × Only Asian ancestry</td>
<td>.035***</td>
<td>.047***</td>
<td>.054***</td>
<td>.065***</td>
<td>.074***</td>
</tr>
<tr>
<td></td>
<td>(.011)</td>
<td>(.015)</td>
<td>(.012)</td>
<td>(.012)</td>
<td>(.011)</td>
</tr>
</tbody>
</table>

Sample size 6,456,827 5,278,051 4,486,068 5,109,783 14,853,314

*Statistically significant at 10% level; ** at 5% level; *** at 1% level.
See Notes below Table 3.
### Table 5: Affirmative Action Bans and Racial Identification among College-Aged Individuals 18-25, by College Enrollment

<table>
<thead>
<tr>
<th></th>
<th>Black Ancestry</th>
<th>Asian Ancestry</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not in College</td>
<td>In College</td>
</tr>
<tr>
<td><strong>Ban × No relevant ancestry</strong></td>
<td>-0.002 (0.014)</td>
<td>0.004*** (0.001)</td>
</tr>
<tr>
<td><strong>Ban × Multiracial relevant ancestry</strong></td>
<td>-0.093 (0.101)</td>
<td>-0.193*** (0.066)</td>
</tr>
<tr>
<td><strong>Ban × Only relevant ancestry</strong></td>
<td>0.008 (0.008)</td>
<td>0.009 (0.010)</td>
</tr>
</tbody>
</table>

**Sample size**: 1,717,251 1,466,532 1,717,251 1,466,532

Statistically significant at 10% level; ** at 5% level; *** at 1% level.


Notes: The samples include U.S.-born individuals aged 18-25 with a high school or GED degree, but not a bachelor’s degree. See additional notes below Table 3.
Figure 1: Black Identification in States That Passed an Affirmative Action Ban among Individuals with and without Black Ancestry

Source: 1990 Census and 2010-11 ACS data.

Notes: The samples include U.S.-born individuals aged 0-59 living in California, Washington, Florida, Nebraska, and Michigan. Individuals with an allocated race or Hispanic origin are excluded. No relevant ancestry, multiracial relevant ancestry, and only relevant ancestry are mutually exclusive and exhaustive categories.
Figure 2: Asian Identification in States that Passed an Affirmative Action Ban among Individuals with and without Asian Ancestry

| Only Asian Ancestry | Multiracial-Asian Ancestry | No Asian Ancestry |

Source: 1990 Census and 2010-11 ACS data.
Notes: See notes below Figure 1.