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Racial Identity in the Age of Affirmative Action**

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ABSTRACT

Incentives to Identify: Racial Identity in the Age of Affirmative Action^{*}

It is almost universally assumed that race is an exogenously given trait that is not subject to change. But as race is most often self-reported by individuals who must weigh the costs and benefits of associating with minority groups, we ask whether racial self-identification responds to economic incentives. To address this question, we link racial self-identification with changes in state-level affirmative action policies in higher education, contracting, and employment. Consistent with supporting evidence showing that individuals from underrepresented minority groups face an incentive to identify under affirmative action, we find that once affirmative action is outlawed, they are less likely to identify with their minority group. In contrast, we find that individuals from overrepresented minority groups, who face a disincentive to identify under affirmative action, are more likely to identify with their minority group once affirmative action is banned. To our knowledge, this is the first study to document a causal relationship between racial self-identification and economic incentives in the United States. As such, it has broad implications for understanding the impact of affirmative action policies, estimating broader trends in racial disparities, and the emerging literature on the construction of race and individual identity.

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I. INTRODUCTION

Race is almost always treated as an exogenously given, immutable trait. This assumption underlies the extensive research on racial disparities and the distribution of resources aimed at remedying them. What often goes overlooked, however, is that racial identification is almost always based on self-reports from individuals who must weigh the costs and benefits of associating themselves with minority groups when forming their own identities. This is particularly true for individuals with mixed ancestry. This raises the question of whether racial identification responds to economic incentives and thus presents the possibility that it is subject to change. This paper addresses this topic by linking data on racial self-identification with changes in affirmative action policies in higher education, contracting, and employment. We investigate whether populations subject to exogenous changes in returns to racial identity demonstrate changes in self-reported racial identification.

While past research has acknowledged the inherent endogeneity of identity overall (Akerlof and Kranton 2000, 2011) and modeled the choice of a racial identity in particular (Darity, Mason, and Stewart 2006; Bodenhorn and Ruebeck, 2003), empirical studies in this field are by and large descriptive accounts of the factors that are correlated with a choice of racial or ethnic identity and the resulting racial or ethnic attrition. These include characteristics such as intermarriage, education (Duncan and Trejo 2011a, 2011b, 2011c), earnings (Mason 2004), the experience of discrimination (Golash-Boza and Darity 2008), skin color (Darity, Hamilton, and Dietrich 2010), social status ((Saperstein and Penner 2012), and the demographic composition of the surrounding area (Bodenhorn and Ruebeck 2003; Hahn 1999). Qualitative research also confirms that multiracial individuals face the most salient choice of racial identity. Khanna and Johnson (2010) and Rockquemore and Arend (2002) demonstrate that children of Black and

White parents may adopt “monoracial” identities that are either Black or White, and that these identities may shift depending on the social context. Consistent with the results we present here, participants in those studies also acknowledge that affirmative action plays a role in their decision to identify as Black.¹

We contribute to the literature on the construction of race and identity by proposing an identification strategy that aims to recover the causal effect of affirmative action on racial identity. In spirit, our work is most closely related to Francis and Tannuri-Pianto (2013) who show that Brazilians change their self-reported racial identities following the adoption of racial quotas in university admissions. Cassan (2011) also exploits the introduction of a government program to show that individuals manipulated caste identities in response to land reforms in India. To our knowledge, ours is the first study to document a causal relationship between racial self-identification and economic incentives in the United States.

To do this, we take advantage of large-scale U.S. surveys that collect information on self-reported racial identity as well as measures of ancestry and ethnic origin. Comparing an individual’s reports of his ancestral origins to his willingness to identify as a member of a minority group produces rates of racial identification which we then connect with variation in economic incentives to identify as racial minorities. The latter come from changes in affirmative action policies across states over time as a wave of affirmative action bans went into effect beginning in the late 1990s.

¹ Khanna and Johnson (2010) “find that biracial respondents pass as black...in the post-civil rights era of affirmative action, to obtain advantages and opportunities sometimes available to them if they are black (e.g., educational and employment opportunities, college financial aid/scholarships).” Rockquemore and Arend (2002) assert, “in the context of societal perceptions that Affirmative Action is equivalent to ‘reverse discrimination’ and that it is *Blacks* that are institutionally and structurally privileged[,] mixed-race individuals, who understand themselves as White, *pass for Black* in order to receive social, economic, and educational opportunities” (emphasis in original).

Our use of the affirmative action bans as a source of variation in economic incentives to identify also connects this paper with the large literature on the hotly debated issue of affirmative action, which has recently been closely scrutinized by the U.S. Supreme Court (Liptak 2013a). Movements to outlaw the use of affirmative action by the state have gained popularity across the U.S., a practice which was also recently reviewed by the U.S. Supreme Court (Liptak 2013b). Several studies have used the timing of affirmative action bans across states to identify the impact of banning affirmative action on education and employment outcomes for racial and ethnic minorities (Arcidiacono et al. 2012, Dickson 2006, Fairlie and Marion 2012). We follow Hinrichs (2012) in exploiting the variation in affirmative action bans across states over time, but here we investigate whether the racial identities of individuals themselves respond to the policy change.² Do differences in the rates of racial attrition across states over time suggest that individuals are more or less likely to identify as racial minorities once affirmative action policies have been struck down?

In theory, the impact of the affirmative action bans on racial identification will depend, in part, on the relative benefits and costs these policies could have been expected to confer on the individual. As this varies depending on whether the individual's ancestry is connected to an underrepresented or overrepresented minority group, we conduct separate analyses documenting the extent of an individual's willingness to identify himself as either Black or Asian.³ Since past research has also noted that, relative to other groups, multiracial individuals are especially likely to change identities over time and generations (Hahn, Truman, and Barker 1996; Hahn 1999), we

² One implication of our work is that the results from previous studies may be partially explained by changes in self-reported racial identification. To our knowledge, however, the data sets used in those studies do not include measures of ancestry or ethnic heritage, and thus do not permit us to address the extent to which those results are explained by changes in the fraction of those individuals willing to identify as a minority.

³ Throughout the text, we also refer to these groups as African-American and Asian-American, respectively.

also categorize individuals based on whether they report “monoracial” ancestry, multiracial ancestry, or no relevant ancestry tied to that racial group.

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 to remedy that group's historic underrepresentation. In contrast, individuals with Asian ancestry are more likely to identify their race as Asian once affirmative action is outlawed. This is consistent with prior evidence that affirmative action is perceived to benefit individuals identifying as African-American (Rockquemore and Arend 2002) and penalize those identifying as Asian-American (Kiley 2012; Espenshade, Chung, and Walling, 2004). Together these results are consistent with a model in which affirmative action policies work to make institutions more representative of the population, and thus banning affirmative action decreases the incentives to identify for underrepresented groups and increases the incentives to identify for overrepresented groups.

We provide further support for this interpretation by showing that multiracial Blacks that are currently enrolled in college are especially responsive to changes in affirmative action policies relative to those who are not. Finally, we explore whether the response to affirmative action differs based on other observables to see whether the Black and Asian individuals we are apparently “losing” or “gaining” due to affirmative action are drawn from the upper or lower tails of a particular distribution. Overall, we find no concrete pattern of heterogeneous effects based on poverty status or parental education, suggesting that perceived racial disparities based on these measures are not severely biased by the racial attrition we document here.

This research has important implications for our perceptions of racial disparities as well as the perceived level of diversity in institutions such as colleges and universities. While a large

literature investigates the effects of affirmative action policies on outcomes for minorities in higher education (Arcidiacono 2005, Bowen and Bok 1998, Hinrichs 2012, Howell 2010), contracting, and employment (Fairlie and Marion 2012, Kurtulus 2012),⁴ to our knowledge, this is the first study to investigate whether racial self-identification itself responds to affirmative action in the U.S. As such, it has broad implications for our understanding of the impact of affirmative action policies, the social construction of race, and the concept of identity itself (Akerlof and Kranton, 2000).

The paper proceeds as follows. Section II provides a framework for understanding the expected impact of the affirmative action bans on racial identity. Section III reviews the data on affirmative action bans, self-reported racial identity and ancestry. Section IV discusses our empirical strategy which relies on variation across states over time, and Section V presents our main results on the response of racial self-identification to state-level affirmative action policies. Section VI shows that these results are robust to concerns about inter-state migration and provides support for the parallel trends assumption needed for identification of a causal effect. Section VII explores extensions of the main results and support for the mechanism by investigating whether estimated impacts vary by college enrollment, poverty status, and parental education. Section VIII concludes.

II. FRAMEWORK

We begin by tracing out the expected relationship between banning affirmative action and racial identity. First, we conceive of individuals who choose whether to identify as members of a minority group. As with any other economic choice, this decision involves weighing the

⁴ See Holzer and Neumark (2000) for a review of the literature assessing the economics effects of affirmative action programs in education, contracting and employment. Marion (2009) estimates the explicit costs of affirmative action policy associated with state-funded contracts.

costs (e.g. discrimination) and benefits (e.g. racial preferences) of identifying as a member of a racial group, subject to any operative constraints. For instance, one might expect that one constraint might be individual physical appearance or more generally, how the individual is viewed by others. While historically this may have been a binding constraint, in current times, researchers have found that racial self-identification may stand in sharp contrast to phenotype (Darity, Hamilton, and Dietrich 2010). Nevertheless, we acknowledge that how others view the individual plays a role in that individual's self-conception, just as having some genetic connection to more than one racial group affords him another racial option with which he feels he may identify. Consequently, we expect that individuals with multiracial ancestry will have the greatest choice over how to identify themselves, and thus are likely to display the greatest responsiveness to changes in economic incentives.

Thinking further about how racial identification will respond to banning affirmative action in particular, we recognize that this will depend on the extent to which affirmative action programs present an incentive to identify as a member of a racial minority. While there is no uniform definition of affirmative action across institutions, in its most general form, affirmative action can be viewed as an effort to make the racial and ethnic make-up of institutions more closely resemble that of the underlying population. This implies that the impact of banning affirmative action will be different for underrepresented versus overrepresented minority groups. Thus, underrepresented racial minorities will tend to benefit more from affirmative action policies and will have greater incentive to identify while such policies are in place. In contrast, racial groups that may constitute a minority of the population at large, but are overrepresented at institutions, will have a disincentive to identify while affirmative action policies are in effect. The converse, of course, is that once affirmative action policies are outlawed, 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.

While these outcomes should be symmetric, one might ask why an individual would stop identifying as a member of a minority group if he or she had already been identifying. Here, we acknowledge that we are not considering the full decision of whether to identify as a member of a minority group, but only how that choice responds to a specific change in economic incentives. There may also be considerable disincentives to identify as a member of the minority group (e.g. discrimination) which the individual weighs against the incentive to identify due to affirmative action, but which we do not model here. The point we emphasize here is that these other factors which play into the decision of the individual to identify should be static, or otherwise unrelated to changes in state affirmative action policy, so that in the analysis that follows the individual will only be considering the fact that there is a reduced incentive to identify as a member of an underrepresented minority group. Consequently, for some individuals, once affirmative action is outlawed, the costs of identifying as a minority may outweigh any benefits.

To make these notions concrete, the analysis here focuses on Black identification as a case of underrepresented minority group identification and Asian identification as a case of overrepresented minority group identification. To support this approach, we rely on several pieces of evidence. First, research quantifying the effects of eliminating affirmative action confirms that Blacks are under- and Asians are over-represented at some institutions in the absence of affirmative action. Past research links the removal of affirmative action with a decline in the representation of Blacks at elite schools (Howell 2010) and also a rise in the

representation of Asians (Hinrichs 2012).⁵ Demographics also support the view that affirmative action curbs the representation of Asian-Americans in higher education. While Asian-Americans represent about 5 percent of the U.S. population, they comprise nearly 20 percent of students at top private schools. In post-affirmative action California, however, Asian-Americans now make up 40 or even 50 percent of some campuses (Marcus 2011), while Black representation has declined significantly (Chace 2011). Our approach is also consistent with evidence that affirmative action programs were closed to Asian-Americans beginning in the 1970s in large part due to their overrepresentation (Lee 2006). Supporting research has also found affirmative action associated with a benefit for underrepresented minority groups in college admissions (Long 2004) and a penalty for Asians in particular (Espenshade, Chung, and Walling, 2004). Anecdotal evidence that Asian-American students are counseled not to identify themselves as Asian on their college applications (Kiley 2012) supports this understanding. At the same time, qualitative research shows that Black students perceive a benefit to identifying as Black on college admissions forms (Rockquemore and Arend 2002). Thus, affirmative action policies appear to have generated a disincentive to identify as Asian and incentive to identify as Black in the expected way. Conversely, banning affirmative action is expected to have resulted in a decreased incentive to identify as Black and increased incentive to identify as Asian.

A final aspect of identification that we acknowledge is that it may be situational, so that individuals do not necessarily maintain the same identity throughout their lives or even in different contexts at the same point in time. For instance, it is possible that individuals may

⁵ Hinrichs (2012) shows that the affirmative action bans led to decreases in the enrollment of Blacks and increases in the enrollment of Asians at selective colleges. But if the policy change affected the incentive to identify as a member of a minority group, then part of the observed effect may simply be the result of individuals no longer choosing to identify as Black and now willing to identify as Asian. Unfortunately, without data linking college admission data to an independent, arguably more objective measure of racial lineage, we have no way of measuring the extent to which this is the case.

identify themselves one way on their college applications but have an entirely different conception of themselves in their private lives. Indeed, qualitative research supports this view of racial identification for some multiracial individuals (Khanna and Johnson 2010, Rockquemore and Arend 2002). As we argue further in the next section, obtaining data on racial self-identification from “low-stakes” surveys, as we do here, is likely to reveal the most “accurate” truth about racial self-identity since the survey itself provides no obvious incentive to conceal or misrepresent responses in this context. At the very least, there is no reason to believe there are changes in external factors that would coincide with the variation in affirmative action bans across states over time which we exploit here.

III. DATA

III.A. Timing of Affirmative Action Bans

Analyzing the relationship between affirmative action bans and racial identification requires information on self-reported racial identity as well as the timing of affirmative action bans across states.⁶ The latter information comes largely from Hinrichs (2012), Lohrentz (2007a), and personal correspondence with Peter Hinrichs and Tim Lohrentz which was independently verified. Table 1 lists the years and states in which affirmative action bans were passed and implemented. With only two exceptions, these bans were put into place by state-wide voter initiatives designed to eliminate racial preferences by state institutions in government hiring, contracting, and admission to public colleges and universities.

⁶ While we have no institution-level records to verify that states were practicing affirmative action prior to the implementation of a ban, the collection of research on the impact of affirmative action bans on minority education, employment, and business outcomes (cited above) strongly supports this interpretation. Colburn et al. (2008) assert that before 1996, the year of the first affirmative action bans, “every public university in the Association of American Universities (AAU), an organization of the nation’s leading research universities, had employed affirmative action to ensure diversity among its entering freshman classes.”

Even in the two exceptions, the bans still profoundly altered the incentives to identify as a racial minority in the expected ways. Florida’s ban was the result of executive orders eliminating affirmative action in higher education (Hinrichs 2012) and public contracting by minority-owned businesses (Lohrentz 2007b). Texas’s ban was the result of a court order eliminating racial preferences in state college admissions (*Hopwood v. Texas*) that was later overturned by the Supreme Court (Hinrichs 2012). Although Florida and Texas both followed by implementing “percentage plans” that offered admission to students at the top of their high school classes, research has shown that such plans do not produce the same level of student body diversity as does traditional affirmative action (Long 2004). Research has also shown that despite additional efforts to maintain supplier diversity, after Florida banned affirmative action in public contracting, its drop in minority-owned businesses paralleled declines in states where affirmative action was banned by voter initiative (Lohrentz 2007b). Moreover, since race was no longer allowed to carry the same weight in college admissions or public contracting, changes to affirmative action policies in Texas and Florida still fundamentally altered the incentives to identify as a racial minority as in states with voter-initiated bans.

III.B. Data on Racial Identity and Ancestry

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).⁷ All of our samples are limited to U.S.-born individuals. The outcome variable in the analysis is the individual’s race, as reported by the survey respondent. The exact question, as stated in the 2011 ACS is “What is [this person]’s race?” (U.S. Census Bureau

⁷ These data are publicly available through the Integrated Public Use Microdata Series (IPUMS) at <http://usa.ipums.org/usa/>.

2011a). Here the respondent is presented with an array of choices including White, Black/African American, Chinese, Korean, and several other Asian options among others.⁸ While the 2000 Census and 2001-2011 ACS allow individuals to report identification with as many races as they choose, it is important to note that the 1990 Census only allowed for individuals to select one race. This should not present a problem for identification since the survey change was common to all states and thus will be differenced out by the year fixed effects in the analysis. Nevertheless, in the robustness section we do consider the analysis excluding the 1990 Census and find the results to be substantially similar.

The ACS instructions to the respondent with regard to the race question reflect our notion that race is a subjective concept. It informs the respondent that “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 2011b). Individuals with an allocated race or Hispanic origin are excluded from all samples. In the results reported below, we view all selections 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.

Although the questionnaire explicitly asks how the individual identifies as opposed to how the respondent views the individual, it is important to note that the individual may not necessarily be the one responding to the survey. Thus, our 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. Even if this were not the case, however, our

⁸ Note that the surveys do not include Hispanic backgrounds as possible responses to the race question, as this is asked in a separate question.

analysis would still demonstrate that individuals respond to policy changes by shifting with which race they are identified by close relations. For example, it is particularly unlikely that young children will be answering the survey for themselves, and thus what we term self-identification for them may instead be how their parents choose to identify them. Nevertheless, we argue that parents' views on the racial identities of their children are important components of those children's ultimate self-identification. Indeed, the research question of interest could easily be reframed to ask how changes in policy incentives affect how parents view the racial identities of their children. We also point out that this limitation of the survey remains constant throughout our analysis, and there is no reason to expect that the identity of the respondent is shifting in such a way as to generate the observed effects we attribute to the affirmative action bans.

In addition to the race question, we also take advantage of information collected later in the survey as a response to the ancestry question. Here, the respondent is asked "What is this person's ancestry or ethnic origin?" (U.S. Census Bureau 2011a). The instructions to the survey offer further explanation: "*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 2011b, emphasis in original). To allow for the possibility that individuals may not have a single ancestry, respondents are allowed to list multiple ancestries, but they must write in their own responses. In all years, the Census data and ACS data report the first two ancestries listed by the respondent.

We view the response to the ancestry question as distinct from the response to the race question, and indeed in the 2011 ACS, they are asked in separate modules of the survey with

the race question appearing as number 6 (p. 2) and the ancestry question as number 13 (p. 8) (U.S. Census Bureau 2011a). We argue that the ancestry question is designed to elicit a factual response to the individual's racial and ethnic heritage, whereas the race question explicitly asks for the individual's view of himself in terms of the racial group with which he identifies. Thus, we treat the response to the ancestry question as a more objective measure of Black and Asian racial lineage.⁹

More specifically, we utilize the response to the ancestry question in order to identify which groups are the most responsive to the affirmative action bans (heterogeneous effects). We do this by grouping ancestries into what we characterize as Black or Asian ancestries based on whether the ancestry originated in Africa or Asia.¹⁰ For instance, an individual who lists one or two African countries would be considered to have Black ancestry while individuals who list Chinese or Korean ancestries would have Asian ancestry. Of course, this characterization is imperfect as every ancestral origin will include people of different races. Thus, this classification is only meant as an approximation of the expected link between ancestry and race in order to identify which groups are the most responsive to the affirmative action bans. In

⁹ One might ask why we do not conduct a similar analysis for Hispanics, as they constitute another underrepresented minority group. While the Census does not recognize Hispanic or Latino as a race, one might be tempted to use the Hispanic origin question instead. Unfortunately, the wording of the Hispanic origin question makes this difficult. The exact Hispanic origin question, as stated in the 2011 ACS is, "Is [this person] of Hispanic, Latino, or Spanish origin?" Note that, unlike the subjective self-identification question regarding race, the Hispanic origin question is deliberately more objective, and is very similar to the ancestry question. In fact, the ACS instructions to the respondent with regard to the Hispanic origin question are, "A person is of Hispanic, Latino, or Spanish origin if the person's origin (ancestry) is Mexican, Mexican American, Chicano, Puerto Rican, Cuban, Argentinean, Colombian, Costa Rican, Dominican, Ecuadoran, Guatemalan, Honduran, Nicaraguan, Peruvian, Salvadoran, from other Spanish-speaking countries of the Caribbean or Central or South America, or from Spain." The parenthetical "ancestry" appears in the original text. These instructions imply that Hispanic "origin" and Hispanic "ancestry" could be interpreted as synonyms, and thus we do not present those results here.

¹⁰ The IPUMS data center facilitates this characterization by grouping the response to the ancestry question into African-origin and Asian-origin groups that are consistent across years.

addition, we also consider the impacts of the bans on those individuals who list no ancestry that we believe to be consistent with either Black or Asian identification.¹¹

This approach is also useful because it allows us to consider multiracial individuals based on ancestry. This group is comprised of those individuals who report an ancestry we expect to be consistent with Black or Asian identification and one not consistent. For example, we would characterize a person who reported one African and one European ancestry as a multiracial individual with Black ancestry. As mentioned above, we expect that multiracial individuals should be the most responsive to changes in policy incentives, since they have an additional racial identity from which to choose. They may also have greater range in how they are viewed by others, and thus have greater flexibility in constructing their own racial identities and adapting it in response to economic incentives.

Finally, one might ask why we do not use data obtained in a (“high-stakes”) context in which there is a greater incentive to identify. For instance, one might expect that self-reported race data from college applications would generate the greatest degree of racial switching in response to the affirmative action bans. Unfortunately this is not feasible in the U.S. since (a) to our knowledge, college admissions data do not include a separate, more objective indicator of racial origin, such as the ancestry question and (b) it is unlikely that the same individual applies to the same college twice. More fundamentally, even if such an analysis were possible, it would only shed light on whether policy changes affect people’s strategic representations of themselves, as opposed to the deeper question we pursue here, which is whether policy changes affect people’s view of themselves.

¹¹ This allows for the possibility that individuals who do not know their ancestry, or those who do not mention any Black or Asian ancestry, might still identify racially as Black or Asian.

The latter question can only be answered in a “low-stakes” survey setting such as the Census or ACS where the respondent has no reason to believe that a given representation of his race will yield any reward or penalty. In contrast, using the “high-stakes” survey approach one could easily question whether the results were externally valid, or whether they really only demonstrated a context-specific change. The “low-stakes” environment, by more closely representing individuals’ more authentic view of themselves, is thus more likely to inform the debate over how policy changes affect people in the long-run. Nevertheless, we expect that people’s changing view of themselves is born out of that initial strategic response to policy changes, so if we observe individuals shifting their identities in one way in “low-stakes” environments, they are likely to shift them to an even greater extent in “high-stakes” settings. Thus, our results represent a lower bound of the degree of racial switching we would find in a “high-stakes” survey environment, where there would only be more incentive for individuals to shift their identities in the directions we find. Consequently, we argue that our results can be interpreted to show that changes in policy incentives affect not only how individuals identify themselves on applications with immediate rewards and penalties, but also fundamentally alter how individuals view themselves.

III.C. Descriptive Statistics

Table 2 provides descriptive statistics of the main sample used in the analysis. Since the affirmative action bans generally affected not only higher education, but also employment and contracting, this sample includes children and working age adults. Importantly, the table breaks down the sample by ancestry and links the ancestry response with self-reported race. As expected, the great majority of individuals who only report having Black ancestry identify themselves as Black (99.3 percent), just as individuals who only report Asian ancestry by and

large identify as Asian (93.65 percent). More interestingly, 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). Thus, in spite of the public focus on the persistence of the “one-drop” rule in which individuals with any Black ancestry are considered to be Black, our data show that the majority of multiracial Blacks do not actually identify as Black. The analogous share of multiracial individuals with Asian ancestry who also identify as Asian is somewhat higher (64 percent), but is still much lower than for those with only Asian ancestry. The fact that rates of racial identification for multiracial individuals fall so far below one hundred percent begs the question as to why individuals who have a race-specific ancestry do not identify themselves as a member of that race. Our analysis below explores the extent to which variation in economic incentives can answer that question. 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).

Another phenomenon documented in Table 2 is the fact that a small proportion of individuals who report no relevant race-specific ancestry actually identify with that racial group. For example, just over two percent of individuals who do not report any Black ancestry actually identify as Black, and just 0.28 percent of individuals reporting no Asian ancestry identify as Asian. We hypothesize that these individuals actually may have some tie to the relevant race-specific ancestry, but that connection may not be as strong as for those who actually report the ancestry. For the analysis here, the important point is that these individuals may well respond to affirmative action policies, but perhaps in a different way from those individuals reporting a relevant race-specific ancestry. In light of this, we will consider the impact of affirmative action

bans on individuals with and without any reported ancestral tie to the race-specific group. At the same time, it is important to note that the fraction of individuals who self-identify as Black or Asian without any reported ancestral ties to these groups is extremely small, and thus our focus will remain on the results for those individuals reporting to have Black or Asian ancestry. Finally, we note some differences in the summary statistics on gender and age that suggest it may be important to control for these variables in the specification below. Poverty status also appears to differ somewhat across groups, a point which we will investigate further in section VII.

Figures 1 and 2 connect these rates of racial identification by ancestry with the timing of the affirmative action bans, thus giving a sense for the spirit of the identification strategy. Here, the sample is limited to individuals living in states that passed an affirmative action ban sometime within our sample period.¹² Figure 1 shows that in states that ultimately banned affirmative action, there is fairly little variation over time in the rates of Black racial identification for individuals reporting no Black ancestry (close to zero). Similarly, rates of Black identification for those reporting only Black ancestry hover around 100 percent and do not appear to fluctuate around the implementation of the bans. In contrast, multiracial individuals who report both Black and non-Black ancestry display much lower rates of Black identification once affirmative action is banned. A less dramatic pattern of rising rates of Asian identification for individuals with Asian ancestry is documented in Figure 2. At the same time, there appears to be a rising trend in Asian self-identification over the entire period for the group reporting only

¹² Arizona is excluded from the graph because its affirmative action ban went into effect in 2011 which does not allow for a post ban trend. Texas is excluded because its affirmative action ban was overturned in 2003, confounding pre- and post-trends. Nevertheless, Figures 1 and 2 are substantially similar when individuals from Arizona and Texas are included in the sample.

Asian ancestry as well as those reporting Asian and non-Asian ancestry. This could indicate that it may be important to control for changes in rates of self-identification in comparison states.¹³

This is done in Table 3 which also gives a sense for the spirit of the difference-in-differences element of the identification strategy by comparing rates of self-identification in ban states relative to non-ban states in 2010-11 relative to 2000.¹⁴ While there are small or statistically insignificant effects for other groups, Table 3 shows that multiracial individuals with Black ancestry are the main group to display a drop in their rates of Black identification, with a decline of 3.33 percentage points in ban states by the end of the period relative to non-ban states over the same period. In contrast, it appears that the bans are associated with a statistically significant rise in rates of Asian self-identification for those who report only Asian ancestry (1.77 percentage points). Of course, these are purely descriptive statistics and do not control for any other factors, including state-specific trends, that may be important in estimating the impact of affirmative action bans on racial self-identification. For that, we turn to the regression analysis below.

IV. EMPIRICAL STRATEGY

The empirical strategy investigates the relationship between affirmative action bans and self-reported racial identity. In order to determine which groups are the most responsive to the affirmative action bans, we allow for heterogeneous effects of the bans for individuals with and without a relevant race-specific ancestry. A relevant ancestry is one that is consistent with the

¹³ Note that this graph does not constitute evidence in support of the parallel trends assumption, as the comparison group in our analysis (non-ban states) is not included in the graph. Evidence of parallel trends in the period prior to the implementation of the bans is offered in the robustness section below.

¹⁴ For this descriptive analysis, we drop the 1990 data so that the base period rates of racial identification are not influenced by the 1990 Census' limitations on the race question (discussed in section III.B. above). Since the difference-in-differences coefficient controls for this limitation of the survey that is common to all states in 1990, we include the 1990 data in the main analysis, but we also report the results after excluding the 1990 Census in the robustness section below.

race under consideration, either Black or Asian, as explained further in section III.B above. Using data from all 50 states plus the District of Columbia, we follow Hinrichs (2012) by using a difference-in-differences research design that compares individuals living in states before and after the enactment of an affirmative action ban, controlling for state and year fixed effects, as well as state-specific time trends. In recognition of the fact that individuals may self-identify with a minority group despite the fact that they report no relevant ancestry, we consider the impact of the bans on those who report no relevant ancestry as well as those who do. To investigate whether the bans had a greater impact on individuals with multiracial ancestry, we break down the group of individuals who report at least some relevant ancestry into a group who only reports relevant ancestry and a group who also reports a non-relevant ancestry, denoted here as multiracial individuals.

The main specification links these policy changes occurring at the state level over time with the self-reported racial identity of individuals:

$$\begin{aligned}
Identifies_{ist} = & \pi_1(ban_{st} \times NoRelevantAncestry_{ist}) \\
& + \pi_2(ban_{st} \times MultiracialRelevantAncestry_{ist}) \\
& + \pi_3(ban_{st} \times OnlyRelevantAncestry_{ist}) \\
& + \pi_4 MultiracialRelevantAncestry_{ist} + \pi_5 OnlyRelevantAncestry_{ist} \\
& + \mathbf{X}_{ist} \cdot \boldsymbol{\beta} + \mu_s + \delta_t + \theta_s t + \varepsilon_{ist}
\end{aligned} \tag{1}$$

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, and only relevant ancestry reported, respectively.¹⁵ π_1, π_2 and π_3 represent the association between an affirmative action ban and the racial identity of those with varying ties to the relevant ancestry.

All regressions also include state fixed effects (μ_s), year fixed effects (δ_t), and state-specific linear time trends (θ_{st}). 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.¹⁶ Standard errors are clustered at the state level. To allow for the possibility that the bans affected individuals differently depending on their age, we split the samples into five age groups. We also include a group of older adults, 70 years and older, to show the effects on individuals that are more likely to have left the labor market and thus are not likely to be directly affected by changes to affirmative action policies.

V. RESULTS

Table 4 presents the results from the regression above with the dependent variable equal to 1 if the individual identifies as Black/African-American. Each column indicates a separate regression, so that the impact of the bans can be seen for various age groups. For children and young adults, the clear pattern of negative coefficients on the interaction term between the ban indicator and the multiracial Black dummy indicates that affirmative action bans are associated with a decreased likelihood that individuals with multiracial Black ancestry self-identify as Black. The magnitudes of the coefficients suggest that for those children reported to have Black and non-Black ancestry, banning affirmative action reduces the likelihood of identifying him or

¹⁵ An alternate heterogeneous effects specification would simply estimate a separate regression for each ancestry category. This approach comes at a substantial cost in degrees of freedom, as each of the state and year fixed effects and each state-specific time trend are estimated separately for each ancestry category and age group. Nevertheless, this approach produces results that are substantially similar to those from the interaction model presented here.

¹⁶ Recall that immigrants are excluded from the sample.

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), affirmative action bans appear to have a sizable impact on Black self-identification. While the magnitude of the effects on multiracial Blacks is similar for working age adults 26-34 years old and 35-59, these effects are not statistically significant as the standard errors are larger for older age groups. The relatively stronger results for younger individuals may indicate that affirmative action is more important in higher education than in employment or simply that the racial identities of adults are likely to be more settled than those of children. The magnitude of the impact of affirmative action bans also drops significantly for the oldest group of adults, 70 years and older, who are likely to be much less affected by affirmative action policy and also likely to have a more defined sense of racial identity.

For other groups in Table 4, such as those with no Black ancestry or those with only Black ancestry, the coefficients are much smaller, ranging from .001 for those with no Black ancestry to .019 for those with only Black ancestry. While these point estimates are sometimes statistically significant, they are relatively small coefficients. Thus, the main results from Table 4 are consistent with a diminished economic incentive to identify as Black for multiracial individuals with Black ancestry once affirmative action is banned.

Table 5 presents the results from an analogous model with the dependent variable equal to 1 if the individual identifies as Asian. In contrast with the results for Blacks, individuals reporting any Asian ancestry are more likely to identify as Asian once affirmative action policies are banned. This is true for those reporting only Asian ancestry as well as multiracial Asians, but the magnitudes are much higher for the latter group. In particular, multiracial Asian children are about 14 to 15 percentage points more likely to identify as Asian when affirmative action

policies are banned. Thus, the absolute magnitude of the effect is very close to that observed in the multiracial Black population, but with a sign in the opposite direction. Comparing this to the 64 percent of multiracial Asians who identified as Asian seen in Table 2, we see that the relative magnitude is again large, and not too far from that observed for multiracial Blacks in Table 4.

Individuals with only Asian ancestry also appear to respond to the affirmative action bans, but the magnitudes are much smaller, hovering mostly around 5 percentage points, relative to an overall mean of 94 percent (Table 2). While the estimates for individuals reporting no Asian ancestry are statistically significant and negative in sign, the magnitudes are extremely small, ranging from $-.001$ to $-.004$, again suggesting essentially no change in these individuals' likelihood of identifying as Asian in response to the affirmative action bans. Thus, the main results from Table 5 are consistent with an increased economic incentive to identify as Asian for individuals with Asian ancestry, in particular for multiracial Asians who appear to be the most responsive.

VI. ROBUSTNESS

VI.A. *Interstate Movement*

One question that might arise from this approach is whether the results in Tables 4 and 5 are driven by individuals moving in and out of states in response to changes in affirmative action policy. To address this, Tables 6 and 7 replicate the analysis on the population of children and working age adults who reside in their birth state. Table 6 shows that the magnitude of the results rise only slightly and are statistically significant only for children and young adults with multiracial Black ancestry (point estimates range from $-.165$ to $-.184$), the main groups of interest in Table 4. Similarly, Table 7 shows that the magnitudes are slightly higher for those

with Asian ancestry with the highest point estimates again for those with multiracial ancestry around 17 percentage points. Thus, the results do not appear to be driven by selective migration.

VI.B. *Dropping the 1990 Sample and Testing for Pre-Existing Trends*

As is well-known, difference-in-differences estimation relies on the assumption that in the absence of treatment, the treatment and comparison groups would have maintained parallel trends. Thus, any deviation from these trends can be attributed to the treatment, in this case the banning of affirmative action. While this assumption is ultimately untestable, we can lend credence to it by investigating whether there appeared to be any deviations in those trends prior to the affirmative action bans. To do this, we introduce one- and two-year leads in the analysis that constitute indicators for the year before the affirmative action ban (ban_{st+1}) and two years before the affirmative action ban, (ban_{st+2}), where t indicates the year the ban went into effect:

$$\begin{aligned}
Identifies_{ist} = & \pi_1(ban_{st} \times NoRelevantAncestry_{ist}) \\
& + \pi_2(ban_{s,t+1} \times NoRelevantAncestry_{ist}) \\
& + \pi_3(ban_{s,t+2} \times NoRelevantAncestry_{ist}) \\
& + \pi_4(ban_{st} \times MultiracialRelevantAncestry_{ist}) \\
& + \pi_5(ban_{s,t+1} \times MultiracialRelevantAncestry_{ist}) \\
& + \pi_6(ban_{s,t+2} \times MultiracialRelevantAncestry_{ist}) \\
& + \pi_7(ban_{st} \times OnlyRelevantAncestry_{ist}) \\
& + \pi_8(ban_{s,t+1} \times OnlyRelevantAncestry_{ist}) \\
& + \pi_9(ban_{s,t+2} \times OnlyRelevantAncestry_{ist}) \\
& + \pi_{10}MultiracialRelevantAncestry_{ist} + \pi_{11}OnlyRelevantAncestry_{ist} \\
& + \mathbf{X}_{ist} \cdot \boldsymbol{\beta} + \mu_s + \delta_t + \theta_s t + \varepsilon_{ist}
\end{aligned} \tag{2}$$

Since this estimation requires data for the two years before the implementation of a ban, this necessitates limiting the investigation to the 2000-2011 period. Since this is a shorter period than the results reported above, we first re-estimate equation (1) for the 2000-2011 period to ensure that the results are comparable to the ones above. The results are reported in Tables 8 (Black identification) and 9 (Asian identification). While the response magnitudes appear to be slightly higher for individuals with multiracial Black ancestry and slightly lower for individuals with Asian ancestry, the pattern of results remains the same. The upshot of these tables is that they not only constitute a baseline from which to compare the test of pre-existing trends to follow (Tables 10 and 11), but also serve as a robustness check to ensure that the results are not sensitive to the inclusion of the 1990 Census.¹⁷

Finally, Tables 10 and 11 report the results from estimating equation (2) on the 2000-2011 sample to test for pre-existing trends, for Black and Asian identification respectively. Table 10 shows that the declines in Black self-identification rates for individuals with multiracial Black ancestry are generally not observed until the year the ban went into effect. This is consistent with the parallel trends assumption, since there appears to be no break in the trends prior to the implementation of the bans. As in Table 8, there still appear to be some changes in rates of self-identification for those with only Black ancestry, but the magnitudes are again small. Table 11 presents the results from estimating equation (2) with the indicator for Asian racial identification as the dependent variable. Again, the results support the parallel trend assumption by showing that the increases in rates of self-identification among individuals with Asian ancestry are occurring mainly once the ban is passed, as opposed to the year before or two years before.

¹⁷ Concerns over the 1990 Census were discussed in section III.B.

Another advantage of estimating equation (2) is that the leading ban indicators also coincide with the year the ban was passed (ban_{st+1}) and the year before the ban was passed, (ban_{st+2}). As a result, these tests also provide support for our interpretation that it was the affirmative action bans in particular that serve as the mechanism for the changes in racial self-identification that we observe. For instance, without this evidence one might question whether it was the political and social climate surrounding the affirmative action bans, in particular the ballot initiatives, which resulted in the changes in rates of self-identification among racial minorities. If this were the case, however, we would expect to see it affecting rates of self-identification in the years leading up to the implementation of the ban, when the actual legislation was passed and the media attention and debate surrounding it would have peaked. Instead, we see that the effect mainly changes rates of self-identification in the year that the ban went into effect, which makes sense only if individuals were still basing their choice of racial self-identification on the rules of affirmative action in the years leading up to the ban. Thus, the evidence presented in Tables 10 and 11 supports the parallel trends assumption as well as our interpretation of the mechanism driving the results.

VII. EXTENSIONS

VII. A. Effects by College Enrollment

One way to provide further support for the mechanism driving the observed estimates is to investigate which groups are driving the effects. Given the popular emphasis of affirmative action bans on admissions to public colleges, Table 12 explores whether results for 18-25 year-olds differ depending on whether the individual is currently 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 individuals enrolled in college. These individuals demonstrate a decreased probability of identifying as Black of about 19 percentage points in response to the affirmative action ban. This supports the view that affirmative action policies in higher education in particular have an important impact on racial identification for multiracial Black individuals. This also suggests that estimates in other studies of the impact of affirmative action bans on the college enrollment of Blacks might be biased if multiracial Blacks are no longer identifying as Black once the ban goes into effect.

VII.B. Effects by Poverty Status

One implication of our study is that banning affirmative action has an important impact on the perceived demographics of the United States. In effect, banning affirmative action results in a perceived loss in the number of African-Americans and gains in the number of Asian-Americans in the United States. Moreover, if the individuals that we are “losing” or “gaining” are more likely to be drawn from one end of the distribution of a specific trait, this racial attrition will skew our perceptions of racial progress and disparities. This is not unlike the findings from the research on immigrant assimilation which shows that perceived assimilation patterns are biased due to selective ethnic attrition (Duncan and Trejo 2011a, 2011b, 2011c). Thus, another benefit of investigating which subgroups are driving the observed effects is that it sheds light on whether changes in rates of racial identification are likely to misrepresent the progress of racial minorities and bias the resulting estimates of racial disparities.

We begin to address this question by investigating whether the impact of affirmative action bans varies for groups above or below the poverty line. Table 13 presents the results for

Black identification. As before, the responses for individuals with no Black ancestry and only Black ancestry are generally small in magnitude, so we will focus on the results for multiracial individuals. The results for these individuals that lie above the poverty line are statistically significant, with magnitudes very close to those from the results above (point estimate about -0.15). For those individuals below the poverty line, the magnitude of the effect appears to drop for adults over 25, but is not statistically significant. For younger groups, the estimates for those below the poverty line are not far from the estimates for those above the poverty line, but are not always statistically significant, perhaps due to the relatively smaller sample size. Thus, we cannot conclude that the impact of the affirmative action bans on Black identification is primarily driven by those above or below the poverty line.

The analogous results for Asian identification can be found in Table 14. As before, the point estimates for those with no Asian ancestry are especially small (in the range of -.0007 to -.004). For individuals with multiracial Asian ancestry, the point estimates for those above the poverty line hover around the point estimates for the group as a whole (around 0.15) while the point estimates for those below the poverty line are somewhat smaller for some Asian groups (around 0.10). As before, those with only Asian ancestry also display somewhat smaller effects (ranging from 0.05 to 0.09), but this appears to be largely independent of poverty status.

VII.C. Effects by Parental Education

One reason we might expect the results to be somewhat weaker for those individuals below the poverty line, at least for children, is that it indicates parental resources which may be a rough proxy for parental education. Underlying this idea is the notion that parents with higher education may be more likely to respond strategically to changes in affirmative action policies,

particularly those in higher education. To determine whether there is evidence to support this, we ask whether the impact of affirmative action bans on racial identification varies based on parental education.

Table 15 shows the results for Black identification for children based on parents' highest level of education. Again, our focus here is on multiracial individuals with Black ancestry, as they appear to be the main group responding to the affirmative action bans. For the most part, the coefficient estimates are close in magnitude to the overall results, with little difference across groups based on parental education. Table 16 presents the analogous results for Asian identification. Here, the magnitudes of the point estimates appear to be somewhat higher for those individuals with parents with less than a college degree, but for the most part are still not far from the original point estimates.

Overall, these results suggest that the effects of affirmative action bans on racial identification are largely similar for individuals irrespective of poverty status or parental education. Thus, despite the fact that the main results imply a "loss" in the number of African-Americans and "gain" in the number of Asian-Americans in the U.S. population, we cannot conclude that there will be considerable misrepresentation of racial progress and racial disparities as a result.

VIII. 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 less likely to identify

as Black once affirmative action policies are banned. In contrast, individuals with any Asian ancestry are more likely to identify as Asian once the bans are implemented. These seemingly paradoxical results can be reconciled with a model in which affirmative action policies are designed to make the racial composition of institutions more closely resemble the underlying population. Consequently, only those individuals from under-represented minority groups will face a diminished economic incentive to self-identify when affirmative action policies are banned. Individuals from overrepresented groups, who face a penalty to racial identification under affirmative action, will be more willing to identify with their racial group once affirmative action is banned.

These results have important implications for the research assessing the impact of affirmative action in particular as well as the wider literature documenting the causes and extent of racial disparities. First, researchers investigating the various consequences of public policies should consider the possibility that observed outcomes for different racial groups may actually reflect some movement not only in the outcome of interest, but also in the racial identity of the respondents. More generally, researchers should recognize that estimates of racial disparities based on self-reported racial identity may be biased because not everyone with minority ancestry identifies as a member of the minority group. There is not a simple solution to this problem as most data sets do not include an independent, more objective measure of racial lineage. Even if they did, self-reported data from any “high-stakes” application setting may suffer from the same problem if respondents feel their responses on the independent measure of race will be taken into account as part of their evaluation. One possible remedy would be for applications and surveys to collect data after the decision on the application has been made, and thus allow for the individual to represent his race free of any concerns about whether it will be taken into account

by decision-makers. At a minimum, panel data sets should collect data on race and ethnicity from the respondent at more than one point in time. These measures could help shed light on the true impact of public policy on racial disparities, free of any incentives to identify that might skew the results.

Finally, this research casts significant doubts on the validity of demographic trends and projections as commonly conceived. As documented here, policy changes can result in real changes in the perceived populations of racial minorities—in this case, the “loss” in the number of African-Americans and “gain” in the number of Asian-Americans due to the banning of affirmative action. This begs the question, as others have raised (Golash-Boza and Darity 2008), whether reported demographic trends in the growth of minority groups will actually take place as projected (U.S. Census Bureau 2012). Whether the U.S. will become a majority-minority country in 2043, for instance, may ultimately depend on the relative opportunities available for minority groups.

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

State	Date Passed	Years in Effect
Texas ¹	1996 (overturned in 2003)	1997 - 2004
California	November 1996	1998 -
Washington	November 1998	1999 -
Florida	1999	2001 -
Michigan	November 2006	2007 - 2011
Nebraska	November 2008	2009 -
Arizona	November 2010	2011 -

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

Race/Ethnicity	Black Ancestry			Asian Ancestry		
	None	Multiracial	Only	None	Multiracial	Only
Black	2.24	49.37	99.29	12.03	7.68	.91
Hispanic	8.82	14.34	.38	8.11	17.56	1.48
Asian	2.01	34.79	.21	.28	64.02	93.65
White	91.86	41.53	1.54	84.06	70.73	14.52
Non-Hispanic white only	85.48	12.68	.43	78.25	28.46	5.38
Female	49.99	50.94	52.84	50.29	50.40	49.16
Below poverty threshold	12.26	18.71	29.29	13.97	11.28	12.21
Age	29.02 (.30)	20.21 (3.13)	27.12 (.91)	29.00 (.29)	17.76 (3.54)	18.53 (1.98)
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 except for age. Standard errors are shown in parentheses. Race/Ethnicity categories are not mutually exclusive.

Table 3: Black and Asian Identification in 2000 and 2010-11 in States that Did and Did Not Enact an Affirmative Action Ban in the 2000s.

Percent of Individuals Aged 0-59 Identified as Black					Percent of Individuals Aged 0-59 Identified as Asian				
<u>No Black Ancestry</u>					<u>No Asian Ancestry</u>				
	2000	2010-11	Difference	Double Difference		2000	2010-11	Difference	Double Difference
Ban State	3.74 (.02)	4.03 (.03)	.30*** (.04)	.62*** (.04)	Ban State	.19 (.00)	.34 (.01)	.15*** (.01)	-.01 (.01)
Non-Ban State	3.06 (.01)	2.74 (.01)	-.32*** (.01)		Non-Ban State	.23 (.002)	.39 (.004)	.17*** (.004)	
<u>Multiracial Black Ancestry</u>					<u>Multiracial Asian Ancestry</u>				
	2000	2010-11	Difference	Double Difference		2000	2010-11	Difference	Double Difference
Ban State	64.49 (.76)	72.38 (.66)	7.89*** (1.06)	-3.33*** (1.12)	Ban State	57.91 (1.01)	66.97 (1.06)	9.06*** (1.41)	-2.19 (1.49)
Non-Ban State	51.83 (.28)	63.06 (.26)	11.23*** (.37)		Non-Ban State	63.53 (.35)	74.78 (.33)	11.25*** (.49)	
<u>Only Black Ancestry</u>					<u>Only Asian Ancestry</u>				
	2000	2010-11	Difference	Double Difference		2000	2010-11	Difference	Double Difference
Ban State	99.51 (.02)	99.46 (.04)	-.05 (.05)	-.05 (.05)	Ban State	88.37 (.42)	91.97 (.48)	3.59*** (.53)	1.77*** (.55)
Non-Ban State	99.41 (.01)	99.41 (.01)	.0004 (.02)		Non-Ban State	93.48 (.09)	95.30 (.11)	1.82*** (.15)	

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

Source: 2000 Census data and 2010-11 ACS data.

Notes: Standard errors 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. No black ancestry, multiracial black ancestry, and only black ancestry are mutually exclusive and exhaustive categories. States that enacted an affirmative action ban in the 2000s include Florida, Michigan, and Nebraska. States that enacted an affirmative action ban in the 90s and Arizona are excluded from the analysis.

Table 4: Affirmative Action Bans and Black Identification among Individuals with and without Black Ancestry, by Age Group

	<u>Age 0-9</u>	<u>Age 10-17</u>	<u>Age 18-25</u>	<u>Age 26-34</u>	<u>Age 35-59</u>	<u>Age 70+</u>
Ban × No black ancestry	.0005 (.0014)	-.000002 (.00125)	.002 (.001)	.002** (.001)	.001* (.001)	.002 (.001)
Ban × Multiracial black ancestry	-.150** (.056)	-.159** (.070)	-.163** (.080)	-.134 (.088)	-.117 (.112)	-.024 (.133)
Ban × Only black ancestry	.010 (.011)	.011 (.012)	.010 (.009)	.008* (.004)	.011*** (.003)	.019*** (.004)
Multiracial black ancestry	.459*** (.045)	.480*** (.057)	.511*** (.065)	.546*** (.075)	.615*** (.099)	.713*** (.117)
Only black ancestry	.938*** (.005)	.946*** (.005)	.951*** (.004)	.963*** (.003)	.969*** (.003)	.966*** (.004)
Sample size	6,456,827	5,278,051	4,486,068	5,109,783	14,853,314	4,109,417

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

Source: 1990 and 2000 Census Data, 2001-2011 ACS data.

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. The sample of individuals aged 70 and older is limited to those not in the labor force (i.e., retired). 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. No black ancestry, multiracial black ancestry, and only black ancestry are mutually exclusive and exhaustive categories.

Table 5: Affirmative Action Bans and Asian Identification among Individuals with and without Asian Ancestry, by Age Group

	<u>Age 0-9</u>	<u>Age 10-17</u>	<u>Age 18-25</u>	<u>Age 26-34</u>	<u>Age 35-59</u>	<u>Age 70+</u>
Ban × No Asian ancestry	-.004** (.002)	-.003*** (.001)	-.002*** (.0004)	-.002** (.001)	-.001* (.0003)	-.0004 (.0004)
Ban × Multiracial Asian ancestry	.150*** (.038)	.149*** (.039)	.136*** (.042)	.145*** (.040)	.115* (.062)	.047 (.132)
Ban × Only Asian ancestry	.035*** (.011)	.047*** (.015)	.054*** (.012)	.065*** (.012)	.074*** (.011)	.102*** (.009)
Multiracial Asian ancestry	.588*** (.020)	.580*** (.022)	.583*** (.026)	.554*** (.032)	.532*** (.057)	.519*** (.123)
Only Asian ancestry	.904*** (.012)	.897*** (.015)	.893*** (.012)	.873*** (.013)	.867*** (.014)	.875*** (.012)
Sample size	6,456,827	5,278,051	4,486,068	5,109,783	14,853,314	4,109,417

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

Source: 1990 and 2000 Census Data, 2001-2011 ACS data.

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. The sample of individuals aged 70 and older is limited to those not in the labor force (i.e., retired). 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. No Asian ancestry, multiracial Asian ancestry, and only Asian ancestry are mutually exclusive and exhaustive categories.

**Table 6: Robustness—Affirmative Action Bans and Black Identification among
Individuals with and without Black Ancestry Who Reside in Their Birth State, by Age Group**

	<u>Age 0-9</u>	<u>Age 10-17</u>	<u>Age 18-25</u>	<u>Age 26-34</u>	<u>Age 35-59</u>
Ban × No black ancestry	.0005 (.0014)	-.0001 (.0012)	.001 (.001)	.0003 (.0013)	.0006 (.0012)
Ban × Multiracial black ancestry	-.165 ^{***} (.061)	-.181 ^{**} (.082)	-.184 [*] (.101)	-.164 (.124)	-.130 (.165)
Ban × Only black ancestry	.012 (.012)	.014 (.012)	.014 (.011)	.011 (.008)	.013 (.008)
Multiracial black ancestry	.471 ^{***} (.052)	.494 ^{***} (.073)	.525 ^{***} (.090)	.565 ^{***} (.111)	.601 ^{***} (.146)
Only black ancestry	.937 ^{***} (.005)	.944 ^{***} (.006)	.946 ^{***} (.006)	.956 ^{***} (.005)	.960 ^{***} (.005)
Sample size	5,632,806	4,255,379	3,223,228	3,344,004	9,080,139

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

Source: 1990 and 2000 Census Data, 2001-2011 ACS data.

Notes: Standard errors clustered at the state level are shown in parentheses. The samples include U.S.-born individuals in the indicated age range who reside the state in which they were born. 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. No black ancestry, multiracial black ancestry, and only black ancestry are mutually exclusive and exhaustive categories.

**Table 7: Robustness—Affirmative Action Bans and Asian Identification among
Individuals with and without Asian Ancestry Who Reside in Their Birth State, by Age Group**

	Age 0-9	Age 10-17	Age 18-25	Age 26-34	Age 35-59
Ban × No Asian ancestry	-.004** (.002)	-.003** (.001)	-.002*** (.001)	-.002* (.001)	-.001* (.001)
Ban × Multiracial Asian ancestry	.164*** (.041)	.170*** (.043)	.179*** (.047)	.171*** (.044)	.163*** (.054)
Ban × Only Asian ancestry	.040*** (.015)	.057** (.024)	.079** (.031)	.113** (.043)	.183*** (.052)
Multiracial Asian ancestry	.574*** (.023)	.560*** (.027)	.543*** (.034)	.516*** (.036)	.485*** (.054)
Only Asian ancestry	.901*** (.016)	.891*** (.025)	.871*** (.032)	.828*** (.047)	.768*** (.056)
Sample size	5,632,806	4,255,379	3,223,228	3,344,004	9,080,139

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

Source: 1990 and 2000 Census Data, 2001-2011 ACS data.

Notes: Standard errors clustered at the state level are shown in parentheses. The samples include U.S.-born individuals in the indicated age range who reside the state in which they were born. 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. No Asian ancestry, multiracial Asian ancestry, and only Asian ancestry are mutually exclusive and exhaustive categories.

Table 8: Robustness—Affirmative Action Bans and Black Identification in 2000-2011 among Individuals with and without Black Ancestry, by Age Group

	Age 0-9	Age 10-17	Age 18-25	Age 26-34	Age 35-59
Ban × No black ancestry	-.0029 (.0017)	-.0056* (.0031)	-.0004 (.0021)	-.0030 (.0026)	-.0010 (.0011)
Ban × Multiracial black ancestry	-.183*** (.066)	-.191** (.078)	-.186** (.087)	-.161* (.095)	-.131 (.116)
Ban × Only black ancestry	.008 (.013)	.007 (.013)	.011 (.010)	.004 (.007)	.010*** (.003)
Multiracial black ancestry	.489*** (.047)	.506*** (.061)	.532*** (.068)	.568*** (.077)	.627*** (.102)
Only black ancestry	.936*** (.005)	.944*** (.005)	.948*** (.004)	.961*** (.003)	.968*** (.003)
Sample size	4,741,706	4,018,095	3,247,871	3,489,592	11,628,380

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

Source: 2000 Census Data, 2001-2011 ACS data (1990 Census data are not included in the sample).

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. No black ancestry, multiracial black ancestry, and only black ancestry are mutually exclusive and exhaustive categories.

Table 9: Robustness—Affirmative Action Bans and Asian Identification in 2000-2011 among Individuals with and without Asian Ancestry, by Age Group

	<u>Age 0-9</u>	<u>Age 10-17</u>	<u>Age 18-25</u>	<u>Age 26-34</u>	<u>Age 35-59</u>
Ban × No Asian ancestry	-.0015 (.0010)	-.0017** (.0008)	-.0013** (.0006)	-.0008 (.0008)	-.0002 (.0005)
Ban × Multiracial Asian ancestry	.067** (.026)	.075** (.031)	.076** (.035)	.080** (.036)	.085 (.064)
Ban × Only Asian ancestry	.028* (.014)	.039** (.018)	.045*** (.015)	.058*** (.018)	.088*** (.018)
Multiracial Asian ancestry	.674*** (.012)	.654*** (.018)	.643*** (.025)	.620*** (.031)	.562*** (.059)
Only Asian ancestry	.914*** (.013)	.907*** (.017)	.903*** (.012)	.881*** (.014)	.854*** (.013)
Sample size	4,741,706	4,018,095	3,247,871	3,489,592	11,628,380

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

Source: 2000 Census Data, 2001-2011 ACS data (1990 Census data are not included in the sample).

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. No Asian ancestry, multiracial Asian ancestry, and only Asian ancestry are mutually exclusive and exhaustive categories.

Table 10: Suggestive Evidence of Parallel Trends—Affirmative Action Bans and Black Identification in 2000-2011 among Individuals with and without Black Ancestry, by Age Group

	Age 0-9	Age 10-17	Age 18-25	Age 26-34	Age 35-59
<u>Ban × No black ancestry:</u>					
Ban in Effect (<i>t</i>)	-.006** (.003)	-.009* (.005)	-.002 (.003)	-.004 (.003)	-.001 (.001)
Ban Passed (<i>t</i> +1)	.005* (.003)	.007** (.003)	.004 (.003)	.003 (.002)	.0002 (.0008)
Year Before Ban Passed (<i>t</i> +2)	-.004*** (.001)	-.004* (.002)	-.001 (.002)	-.001 (.002)	.0001 (.0010)
<u>Ban × Multiracial black ancestry:</u>					
Ban in Effect (<i>t</i>)	-.172*** (.05)	-.177*** (.05)	-.187*** (.06)	-.131** (.06)	-.123** (.06)
Ban Passed (<i>t</i> +1)	-.016 (.067)	-.029 (.034)	-.036 (.069)	-.102* (.059)	-.070 (.080)
Year Before Ban Passed (<i>t</i> +2)	.002 (.086)	.016 (.075)	.037 (.093)	.073 (.107)	.063 (.136)
<u>Ban × Only black ancestry:</u>					
Ban in Effect (<i>t</i>)	.034*** (.009)	.026*** (.008)	.023*** (.007)	.006 (.004)	.007*** (.001)
Ban Passed (<i>t</i> +1)	-.038*** (.011)	-.032*** (.009)	-.026** (.011)	-.005 (.007)	-.006* (.004)
Year Before Ban Passed (<i>t</i> +2)	.008 (.014)	.012 (.011)	.013 (.014)	.004 (.009)	.010* (.005)
Sample size	4,741,706	4,018,095	3,247,871	3,489,592	11,628,380

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

Source: 2000 Census Data, 2001-2011 ACS data (1990 Census data are not included in the sample).

Notes: Standard errors clustered at the state level are shown in parentheses. Regressions include same sample and controls reported in Table 7 (see Table 7 notes for details).

Table 11: Suggestive Evidence of Parallel Trends—Affirmative Action Bans and Asian Identification in 2000-2011 among Individuals with and without Asian Ancestry, by Age Group

	Age 0-9	Age 10-17	Age 18-25	Age 26-34	Age 35-59
<u>Ban × No Asian ancestry:</u>					
Ban in Effect (<i>t</i>)	-.0017 (.0011)	-.0021** (.0010)	-.0012 (.0008)	-.0014 (.0008)	-.0005 (.0005)
Ban Passed (<i>t</i> +1)	-.00001 (.0010)	.0013 (.0008)	-.0006 (.0005)	.0011 (.0009)	.0005 (.0004)
Year Before Ban Passed (<i>t</i> +2)	-.0001 (.0014)	-.0002 (.0010)	-.0007 (.0006)	.0003 (.0005)	.0001 (.0004)
<u>Ban × Multiracial Asian ancestry:</u>					
Ban in Effect (<i>t</i>)	.104*** (.032)	.101** (.049)	.108*** (.039)	.116** (.044)	.171*** (.061)
Ban Passed (<i>t</i> +1)	-.059 (.066)	-.099 (.071)	.00002 (.04179)	-.059 (.074)	-.105 (.086)
Year Before Ban Passed (<i>t</i> +2)	.021 (.061)	.073 (.062)	-.034 (.049)	.023 (.080)	.017 (.106)
<u>Ban × Only Asian ancestry:</u>					
Ban in Effect (<i>t</i>)	.039*** (.010)	.045*** (.008)	.065*** (.013)	.092*** (.029)	.126*** (.034)
Ban Passed (<i>t</i> +1)	-.033*** (.012)	-.017 (.011)	-.036** (.017)	-.045 (.039)	-.084 (.050)
Year Before Ban Passed (<i>t</i> +2)	.022** (.010)	.011 (.012)	.014 (.013)	.011 (.032)	.045 (.055)
Sample size	4,741,706	4,018,095	3,247,871	3,489,592	11,628,380

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

Source: 2000 Census Data, 2001-2011 ACS data (1990 Census data are not included in the sample).

Notes: Standard errors clustered at the state level are shown in parentheses. Regressions include same sample and controls reported in Table 8 (see Table 8 notes for details).

Table 12: Affirmative Action Bans and Racial Identification among College-Aged Individuals 18-25, by College Enrollment

	Black Ancestry		Asian Ancestry	
	Not in College	In College	Not in College	In College
Ban × No relevant ancestry	-.0002 (.0014)	.004 ^{***} (.001)	-.001 ^{**} (.001)	-.003 ^{***} (.001)
Ban × Multiracial relevant ancestry	-.093 (.101)	-.193 ^{***} (.066)	.134 ^{**} (.052)	.124 ^{***} (.036)
Ban × Only relevant ancestry	.008 (.008)	.009 (.010)	.095 ^{***} (.016)	.034 ^{***} (.010)
Multiracial relevant ancestry	.521 ^{***} (.090)	.492 ^{***} (.054)	.543 ^{***} (.041)	.616 ^{***} (.021)
Only relevant ancestry	.953 ^{***} (.004)	.957 ^{***} (.004)	.818 ^{***} (.011)	.917 ^{***} (.010)
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.

Source: 1990 and 2000 Census Data, 2001-2011 ACS data.

Notes: Standard errors clustered at the state level are shown in parentheses. The samples include U.S.-born individuals aged 18-25 with a high school or GED degree, but not a bachelor's degree. 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. No relevant ancestry, multiracial relevant ancestry, and only relevant ancestry are mutually exclusive and exhaustive categories.

**Table 13: Affirmative Action Bans and Black Identification among
Individuals with and without Black Ancestry, by Age Group and Poverty Status**

	<u>Age 0-9</u>	<u>Age 10-17</u>	<u>Age 18-25</u>	<u>Age 26-34</u>	<u>Age 35-59</u>
<u>Above Poverty Line:</u>					
Ban × No black ancestry	.001 (.001)	.001 (.001)	.0004 (.0007)	.001 (.001)	.0005 (.0004)
Ban × Multiracial black ancestry	-.141*** (.051)	-.153** (.066)	-.156* (.083)	-.149* (.088)	-.135 (.115)
Ban × Only black ancestry	.004 (.009)	.006 (.009)	.005 (.008)	.005 (.004)	.008*** (.002)
Sample Size	5,258,404	4,476,438	3,351,665	4,489,924	13,568,868
<u>Below Poverty Line:</u>					
Ban × No black ancestry	-.016*** (.005)	-.015*** (.005)	.002 (.005)	-.0003 (.0059)	-.001 (.005)
Ban × Multiracial black ancestry	-.095 (.063)	-.126* (.070)	-.152** (.069)	-.051 (.059)	-.012 (.069)
Ban × Only black ancestry	.038* (.022)	.039* (.023)	.022* (.012)	.029** (.011)	.037*** (.009)
Sample size	1,198,423	801,613	1,134,403	619,859	1,284,446

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

Source: 1990 and 2000 Census Data, 2001-2011 ACS data.

Notes: Standard errors clustered at the state level are shown in parentheses. Regressions include same sample and controls reported in Table 4 (see Table 4 notes for details).

**Table 14: Affirmative Action Bans and Asian Identification among
Individuals with and without Asian Ancestry, by Age Group and Poverty Status**

	<u>Age 0-9</u>	<u>Age 10-17</u>	<u>Age 18-25</u>	<u>Age 26-34</u>	<u>Age 35-59</u>
<u>Above Poverty Line:</u>					
Ban × No Asian ancestry	-.004** (.002)	-.003*** (.001)	-.003*** (.001)	-.002** (.001)	-.0007** (.0004)
Ban × Multiracial Asian ancestry	.148*** (.038)	.152*** (.040)	.147*** (.044)	.152*** (.039)	.112* (.062)
Ban × Only Asian ancestry	.032*** (.011)	.045*** (.014)	.061*** (.014)	.062*** (.012)	.072*** (.010)
Sample size	5,258,404	4,476,438	3,351,665	4,489,924	13,568,868
<u>Below Poverty Line:</u>					
Ban × No Asian ancestry	-.002 (.001)	-.001 (.001)	-.001 (.001)	.0001 (.0008)	-.0002 (.0003)
Ban × Multiracial Asian ancestry	.157*** (.035)	.103*** (.038)	.108*** (.035)	.090* (.046)	.146** (.072)
Ban × Only Asian ancestry	.048*** (.016)	.062** (.023)	.040*** (.011)	.096*** (.018)	.095*** (.030)
Sample size	1,198,423	801,613	1,134,403	619,859	1,284,446

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

Source: 1990 and 2000 Census Data, 2001-2011 ACS data.

Notes: Standard errors clustered at the state level are shown in parentheses. Regressions include same sample and controls reported in Table 5 (see Table 5 notes for details).

**Table 15: Affirmative Action Bans and Black Identification among
Individuals with and without Black Ancestry, by Age Group and Parents' Education**

	Parents' Highest Level of Education				
	No High School	High School	Some College	College Degree	Unknown
<u>Children Aged 0-9:</u>					
Ban × No black ancestry	-.005 (.004)	-.004** (.001)	.002 (.002)	.004*** (.001)	-.019** (.007)
Ban × Multiracial black ancestry	-.151* (.086)	-.117 (.078)	-.124** (.055)	-.134*** (.039)	-.101 (.068)
Ban × Only black ancestry	.039** (.018)	.012 (.018)	.005 (.011)	-.0005 (.0048)	.060** (.022)
Sample Size	599,310	1,565,167	1,998,892	2,069,388	224,070
<u>Children Aged 10-17:</u>					
Ban × No black ancestry	-.011*** (.003)	-.0002 (.0018)	.001 (.001)	.002** (.001)	-.012* (.006)
Ban × Multiracial black ancestry	-.265*** (.071)	-.138 (.092)	-.144** (.070)	-.162*** (.051)	-.060 (.095)
Ban × Only black ancestry	.031 (.031)	.014 (.017)	.006 (.009)	-.002 (.005)	.038** (.017)
Sample size	423,085	1,319,359	1,694,528	1,575,319	265,760

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

Source: 1990 and 2000 Census Data, 2001-2011 ACS data.

Notes: Standard errors clustered at the state level are shown in parentheses. Regressions include same sample and controls reported in Table 4 (see Table 4 notes for details). High school means completed 12 grade, high school graduate or GED.

**Table 16: Affirmative Action Bans and Asian Identification among
Individuals with and without Asian Ancestry, by Age Group and Parents' Education**

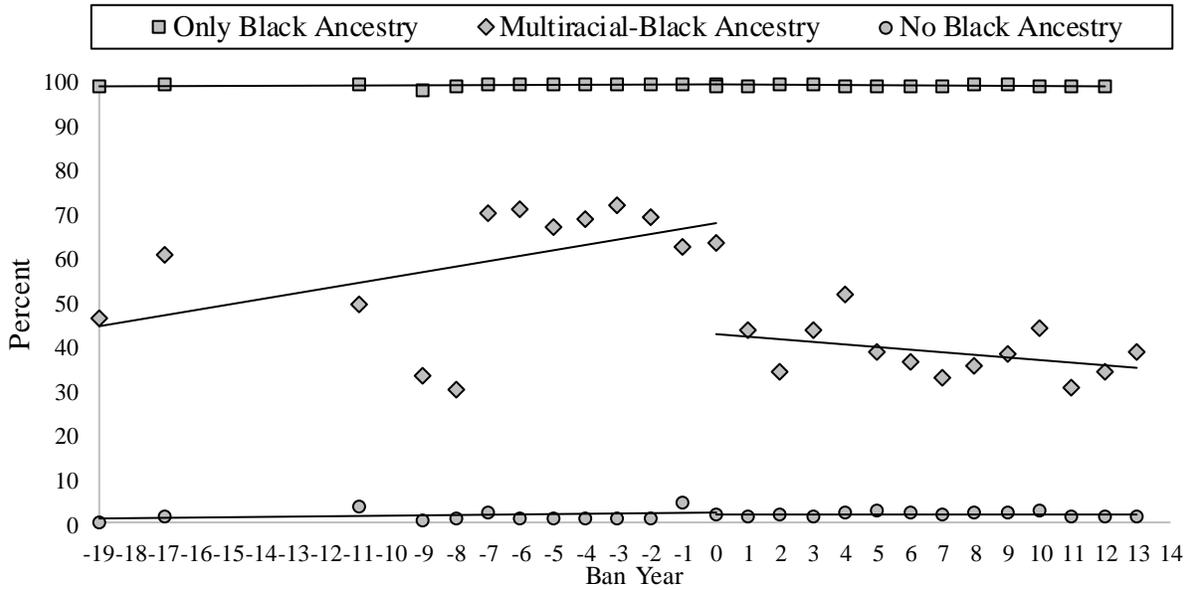
	Parents' Highest Level of Education				
	No High School	High School	Some College	College Degree	Unknown
<u>Children Aged 0-9:</u>					
Ban × No Asian ancestry	-.003 ^{***} (.001)	-.001 (.001)	-.003 ^{**} (.001)	-.006 ^{**} (.002)	-.003 (.002)
Ban × Multiracial Asian ancestry	.203 ^{***} (.039)	.192 ^{***} (.053)	.166 ^{***} (.042)	.119 ^{***} (.030)	.105 ^{**} (.045)
Ban × Only Asian ancestry	.038 ^{***} (.011)	.069 ^{***} (.023)	.066 ^{***} (.014)	.003 (.006)	.103 ^{***} (.034)
Sample size	599,310	1,565,167	1,998,892	2,069,388	224,070
<u>Children Aged 10-17:</u>					
Ban × No Asian ancestry	-.0005 (.0013)	-.003 ^{**} (.001)	-.003 ^{***} (.001)	-.004 ^{***} (.001)	.0001 (.0014)
Ban × Multiracial Asian ancestry	.164 ^{***} (.038)	.169 ^{***} (.046)	.164 ^{***} (.041)	.126 ^{***} (.037)	.160 ^{***} (.040)
Ban × Only Asian ancestry	.043 ^{***} (.013)	.077 ^{***} (.028)	.085 ^{***} (.018)	.017 ^{**} (.008)	.092 ^{**} (.034)
Sample size	423,085	1,319,359	1,694,528	1,575,319	265,760

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

Source: 1990 and 2000 Census Data, 2001-2011 ACS data.

Notes: Standard errors clustered at the state level are shown in parentheses. Regressions include same sample and controls reported in Table 5 (see Table 5 notes for details). High school means completed 12 grade, high school graduate or GED.

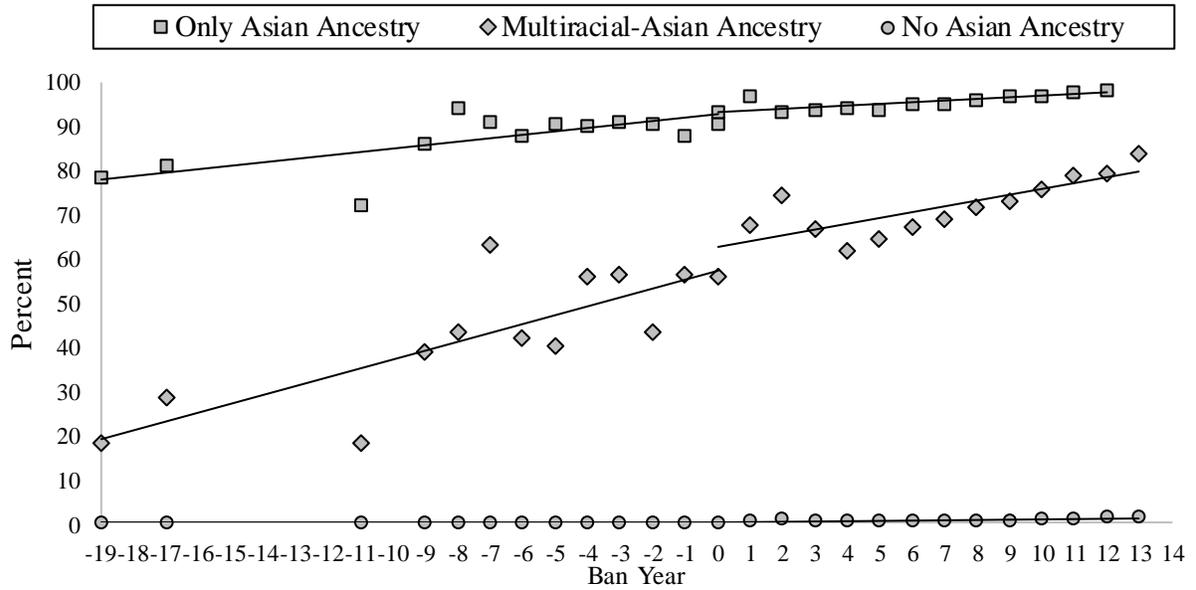
Figure 1: Black Identification in States That Passed an Affirmative Action Ban among Individuals with and without Black Ancestry



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 black ancestry, multiracial black ancestry, and only black 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



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 Asian ancestry, multiracial Asian ancestry, and only Asian ancestry are mutually exclusive and exhaustive categories.