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Abstract

How do social group boundaries evolve? Does the appearance of a new out-group change the in-group's perceptions of other out-groups? We introduce a conceptual framework of context-dependent categorization, in which exposure to one minority leads to recategorization of other minorities when the former is perceived as more distant than the latter. We test this framework by studying how Mexican immigration to the US affected whites' attitudes and behaviors towards African Americans. We combine survey and crime data with a difference-in-differences design and an instrumental variables strategy. Consistent with the theory, Mexican immigration improves whites' attitudes towards blacks, increases support for pro-black government policies and lowers anti-black hate crimes, while simultaneously increasing prejudice against Hispanics. Immigration of groups perceived as less distant than blacks does not have similar effects. Our findings imply that changes in the size of one group can affect the entire web of inter-group relations in diverse societies.

Keywords: Immigration, race, in-group–out-group relations.

Distinctions into in- and out-groups are a universal feature of human societies. Humans display in-group favoritism, which has been shown to support cooperation and successful collective action (Goette, Huffman and Meier 2006; Bauer et al. 2014), and out-group prejudice, which often triggers conflict and violence (Horowitz 1985; Bernhard, Fischbacher and Fehr 2006). Yet classifications of others into in- and out-groups are not fixed, but change over time and across contexts. A long tradition in the social sciences studies the forces driving out-group prejudice (Allport 1954; Gaertner and Dovidio 2011) and changes in social group boundaries (Barth 1969), usually focusing on the interaction between two groups. Significantly less work exists that generalizes the focus to multi-group relations in diverse societies.

In this paper, we attempt to fill this gap, by studying the effects of immigration on inter-group relations in a society with multiple minorities. With the rise of population movements across borders since the second half of the 20th century, the impact of immigration has received much attention, yet we know relatively little about how immigrants affect natives' views of racial or other minority groups. Extant work suggests that the size and characteristics of one minority group can change how majority members view other minorities, but the direction of this effect remains indeterminate. On the one hand, it is theoretically possible that new groups divert natives' prejudice from existing excluded minorities (Fouka, Mazumder and Tabellini 2019). On the other, attitudes can exhibit cultural sociotropism, with all culturally distant groups being lumped together in the minds of natives (Kinder and Kam 2010).

We propose a framework that accommodates both of these theoretical possibilities, and predicts when and how attitudes towards existing minorities change in response to the arrival of new groups. Building on self-categorization theory in social psychology (Turner et al. 1987; 1994), we hypothesize that individuals categorize others as in- or out-group members based on shared attributes. People have many attributes (e.g. socioeconomic status, race, gender), and can be similar in some dimensions but not in others. We introduce the concept of *affective distance* as a key determinant of which attributes will emerge as relevant for social categorization. Affective distance is a summary term for an individual's feelings towards

members of different groups. Like social status, it captures a group's perceived quality or value (Tajfel and Turner 1986).

Our main prediction is that increases in the size of one out-group change the way the majority classifies other out-groups, and lower prejudice against them, but only when the growing group is of higher *relative* affective distance (compared to other out-groups). The combination of group size and affective distance is thus the crucial driver of the majority's social categorization decisions and associated attitudes. Increases in the size of minority groups that are perceived as affectively closer to the majority do not lead to re-classification of more distant minority groups.

We provide evidence consistent with this theoretical framework in the context of the United States, by investigating the impact of Mexican immigration on whites' attitudes toward African Americans. We assemble data on immigration flows to the US between 1970 and 2010 and combine it with survey data on attitudes toward various minority groups from the American National Election Study (ANES), and with data on hate crimes from FBI's Uniform Crime Reporting system.

To help establish causality, we start from a difference-in-differences framework that leverages changes in Mexican immigration across states and over time, holding constant states' time-invariant characteristics and accounting for time-variant factors that affect all states within the same census division in a similar way. To account for the possibility that time-variant state-specific factors endogenously drive both immigrants' location decisions and racial attitudes, we follow Monras (Forthcoming) and predict Mexican immigration exploiting the distribution of ethnic enclaves across states in 1960. This strategy closely resembles the "shift-share" design adopted in the immigration literature (Card 2001), and builds on the empirical regularity that immigrants tend to locate in areas with an extant immigrant network. The identifying assumption is that states with higher shares of Mexican immigrants in 1960 were not on differential trajectories in terms of social, political or economic conditions that could have also affected racial attitudes. We provide multiple pieces of evidence consistent with this assumption. Our findings are robust to accounting for the time-varying effect of 1960 state characteristics, and are not driven by the linear time-varying effect of 1960 Mexican shares. A randomization inference exercise that assigns national inflows of different immigrant nationalities to initial Mexican enclaves also suggests that our results are not driven by the persistent

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effects of 1960 Mexican settlements.

Using this empirical design, we find that Mexican immigration reduces anti-black prejudice among whites. The effect is substantive in magnitude. According to our estimates, the increase in the share of Mexican immigrants experienced by the average US state between 1970 and 2010 can explain up to 36% of the increase in feelings of warmth (as captured by a feeling thermometer) expressed by whites towards blacks during the same period. Attitudinal changes among whites have implications for racial policy preferences, which become significantly more liberal in states that receive more Mexican immigrants. These changes are specific to government interventions that promote black-white equality, and are not driven by a general increase in liberal ideology. In fact, overall, white respondents become more – and not less – conservative in response to Mexican immigration. White attitudes towards Hispanics also deteriorate with increasing shares of Mexican immigrants, suggesting that whites become more positive towards blacks, but not more tolerant of minorities in general.

Attitudinal changes are reflected in behavioral patterns, with anti-black hate crimes registering a larger drop in counties that receive more Mexican immigrants. As with attitudinal changes, the effect is large. The average county-level increase in the share of Mexicans between 1992 and 2016 (1.4%) leads to 5 fewer hate crimes against blacks per 100,000 people – over 80% of the period mean. This drop is larger for crimes committed by white offenders, and is not due to compositional changes caused by Mexican inflows.

Interpreted through the lens of our theoretical framework, Mexican immigration improves attitudes and behaviors of native-born whites towards blacks, because Mexicans have a higher affective distance from whites than do blacks. Consistent with this hypothesis, using the feeling thermometer in ANES as a proxy of affective distance, we show that whites have cooler feelings towards Hispanics as compared to blacks, for every single survey year between 1980 and 2010.

The data allow us to test three additional implications of the theory. First, our framework predicts that the inflow of relatively more distant groups increases the salience of attributes along which those groups display maximal difference from the majority. In our context, the salience of immigrant status increases relative to the salience of race. Consistent with this prediction, white respondents in states experiencing a larger increase in the share of Mexicans become more likely to mention immigration policies as the country's most important

problem. They are instead less likely to be concerned about black-white relations as a threat to themselves, and more likely to consider the promotion of black-white equality as an important goal for the country.

Second, our framework predicts that prejudice against blacks should decrease the most for whites whose baseline views of Mexican immigrants are particularly negative (relative to their views of blacks). In support of this prediction, the effects of Mexican immigration on attitudes towards blacks are larger in states with larger baseline (i.e. pre-immigration) differences in thermometer ratings between Mexicans and blacks.

Third, our theory implies that inflows of groups of low affective distance from whites (compared to existing minorities) do not improve whites' attitudes towards blacks. We demonstrate this in the case of two immigrant groups perceived as less distant from white Americans than either Mexicans or blacks: immigrants from Europe and Canada, and immigrants from Asia. In contrast to the effects of Mexican immigration, increases in the relative size of these groups do not lead to a reduction in whites' anti-black prejudice.

Our study contributes to four strands of literature. First and most broadly, the fluid nature of group boundaries in multiethnic and multiracial societies has been extensively studied by scholars in both comparative and American politics. To factors like group mixing and shifting self-identification (Davenport 2016; 2018; Saperstein and Penner 2012; Davenport 2020), instrumental identity choices (Laitin 1995; Posner 2005), and institutionalized group classifications (Hochschild and Powell 2008), we add a new theoretical channel through which group categories can change, that of context-dependent classification based on relative distances between groups. Our framework formalizes insights from social identity theory and is close in spirit to Shayo (2009), but our focus and empirical application is on how individuals classify others, rather than on how they view themselves.

Second, we contribute to a literature on racial and ethnic politics in the US context. A majority of works in that literature focus on black-white relations (Bobo 1983; Glaser 1994; Kinder and Mendelberg 1995; Valentino and Sears 2005; Acharya, Blackwell and Sen 2018; Mazumder 2018), with a smaller but growing set of studies examining inter-minority relations (Bobo and Hutchings 1996; Oliver and Wong 2003; Meier et al. 2004; Fraga et al. 2006; Gay 2006; McClain et al. 2006; 2007; Masuoka and Junn 2013; Roth and Kim 2013; Hutchings and Wong 2014). Less attention has been paid to the role that other minorities play in

affecting whites' attitudes towards African Americans. Our paper provides new evidence that the increase in the numbers of immigrant minorities may ameliorate white prejudice toward African Americans, and identify conditions under which this is likely to happen.[1]

Third, our study contributes to a large literature in the social sciences studying the effects of minority group size on majority prejudice (Allport 1954; Key 1949; Blalock 1967). We add to this literature in two ways. First, we emphasize the importance of affective distance, as a factor that determines majority reactions to minority inflows jointly with group size. Our results indicate that increases in size alone are unlikely to affect prejudice when groups are relatively close to the majority in terms of affect. Second, most of the literature examines how increases in the size of a group affect the majority's views towards that group. We instead shift the focus to the majority's views towards other minorities, and thus to the broader implications of growing minority size in a multi-group society. In this respect, we also add to a small set of studies examining cross-group spillovers of attitudes.[2]

Finally, our study speaks to the politics of immigration. To date, much of this research focuses on the effects of immigration on native backlash and anti-immigrant sentiment (Sniderman, Hagendoorn and Prior 2004; Newman 2012; Hainmueller and Hopkins 2014; Abrajano and Hajnal 2017), or on the rise of far-right parties (Halla, Wagner and Zweimüller 2017; Hangartner et al. 2018; Dustmann, Vasiljeva and Piil Damm 2019). Fewer studies examine how the politicization of immigration affects immigrants and ethnic minorities (Pérez 2015a;b). We examine instead how immigration of one group shifts native-born individuals' attitudes toward other minority groups. In work closely related to ours, Hopkins (2010) finds that the, initially anti-Muslim, rhetoric that followed 9/11 triggered backlash against all immigrant groups. Our study places this finding in a broader context, by showing that spillovers

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[1] Our study thus complements existing work suggesting that immigration affects the US's racial hierarchy (Lee and Bean 2010; Hochschild, Weaver and Burch 2012), by proposing and testing a new mechanism generating such effects.

[2] For example, work on "secondary transfer effects" (Weigert 1976; Pettigrew 1997; 2009; Tausch et al. 2010) suggests that positive contact with one group can spillover to other out-groups. Hopkins (2010) and McConnell and Rasul (2018) both examine attitudinal spillovers from Muslims to Hispanics and other immigrants in the US after 9/11. The only other study we are aware of that examines how changes in the size of a group impact discriminatory behavior towards other groups is Adida, Laitin and Valfort (2016). They find that increases in the salience of Senegalese Christians, either do not affect or even increase prejudice of French individuals towards Senegalese Muslims. This result is consistent with our framework of recategorization and with Christian immigrants being of lower affective distance to the French than Muslims.

of attitudes from one minority to others can be positive or negative, depending on groups' relative perceived distances from the majority.

Conceptual framework

We rely on self-categorization theory (Turner et al. 1987; 1994), which studies how individuals classify themselves and others into in- and out-groups. Such categorization has real implications, because prejudice is higher towards members of the out-group, as is evidenced by a large literature in the social sciences (see, for example, Duckitt 1994; Bernhard, Fischbacher and Fehr 2006 and Shayo 2020). To understand how new minorities affect prejudice of the majority towards extant minorities, we examine the classification decisions of majority members.

Social categorization takes place on the basis of shared attributes.[3] The more attributes are shared by two individuals, the more likely it is that one categorizes the other as member of their in-group. Since people have multiple attributes, and share similarities in some, but not in others, the relevant question is which attributes determine social categorization. We hypothesize that attributes crucial in defining social cleavages emerge and change endogenously depending on the number of individuals with a specific attribute and on their underlying distance to in-group members. Below we explain, first intuitively, and then formally, how this happens.

Self-categorization theory posits that classification is context-dependent. The same person can be classified as a member of the in-group or the out-group, depending on whom they are compared to. This concept is known as 'comparative fit' (McGarty 1999). More precisely, classification is assumed to follow the rule of maximization of the *meta-contrast ratio*, defined as the ratio of *across category differences* over *within category differences* (Turner et al. 1987, p.47). Intuitively, this implies that humans form categories of stimuli, so that within-category differences are small (i.e. a given category is sufficiently homogeneous) and across-group differences are large (i.e. categories are sufficiently different from each other). Experimental evidence suggests that humans indeed follow such a heuristic for categorization (Tajfel and

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[3]We take attributes to refer to (relatively) easily verifiable characteristics of a person, like skin color, gender, or income, but not subjective qualities, like "nice" or "lazy".

Wilkes 1963; Turner et al. 1987).[4] We apply this general classification principle to a setup with two categories: in-group and out-group.

To capture relevant differences between individuals, we use a summary measure, which we term *affective distance*, and denote by δ. Affect is a heuristic of decision-making (Zajonc 1980) based on an emotional response. Affective distance from a person or a group of people can be driven by many factors, such as the group's perceived competence or quality, or the degree to which it is perceived to be threatening or in competition with the in-group (Tajfel and Turner 1986).[5][6]

Affective distance need not be fixed. For example, affective distance of immigrant minorities may decline as they spend time in the host country. In their study of naturalization decisions taken by referenda in Switzerland, Hainmueller and Hangartner (2013) find that discrimination against Italian immigrants decreases over time (and is substituted by discrimination against Yugoslavs and Turks). Affective distance can itself be endogenous to categorization. A central assumption is that recategorization of an individual from out- to in-group is followed by a reduction in prejudice. This can be expressed as a reduction of an individual's affective distance to $\mu\delta$, with $\mu < 1$, for all individuals classified as in-group members. In our empirical context, affective distance neatly maps onto feelings of warmth towards different minorities captured by the feeling thermometer question in ANES.[7]

With J binary attributes, and denoting each individual's affective distance from the in-group by δ^i, the relevant attribute used by an in-group member to categorize individual i solves

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[4]Fryer and Jackson (2008) propose a similar rule of classification and provide a microfoundation for its emergence. For another use of the meta contrast principle in political economy see Gennaioli and Tabellini (2018).

[5]A related concept is social status. This framework has many similarities to Shayo (2009). In that model there are multiple possible categories used for social classification, the salience of different attributes is exogenously given, and social status develops endogenously. Here we consider one relevant categorization. We start from an exogenously given affective distance and endogenize the salience of different attributes. We restrict attention to individual decision-making, while Shayo (2009) provides a general equilibrium model that is interested in different predictions.

[6]Other factors that may drive affective distance or a group's perceived quality are media environments or elite rhetoric (Hopkins 2010; Newman, Shah and Collingwood 2018). Though see Hopkins and Washington (2020) for limits to the effects of the latter.

[7]Empirically, we will use the feeling thermometer to measure both affective distance and prejudice towards a group. It is important to stress that this is not a circular definition, but rather reflects the aforementioned dynamic process that connects classification decisions to affective distances.

$$\max_j R_j = \frac{\frac{\sum\limits_i \delta^i I_j^i}{\sum\limits_i I_j^i}}{\frac{\sum\limits_i \delta^i (1-I_j^i)}{\sum\limits_i (1-I_j^i)}}$$

where R_j is the meta-contrast ratio for attribute j, and I_j^i is an indicator equal to 1 if individual i differs from the in-group along the jth attribute. R_j can be thought of as the salience of attribute j for in-group out-group distinctions.

Defining a group k as the set of individuals with common attributes, we can rewrite the above problem in terms of group-level categorization for K groups:

$$\max_j R_j = \frac{\frac{\sum\limits_{k \in K} \delta^k n^k I_j^k}{\sum\limits_{k \in K} n^k I_j^k}}{\frac{\sum\limits_{k \in K} \delta^k n^k (1-I_j^k)}{\sum\limits_{k \in K} n^k (1-I_j^k)}} \tag{1}$$

where δ^k denotes the average affective distance of members of group k from the in-group and n^k is the size of group k. The numerator is a weighted average of affective distances across all out-groups $k \in K$, with the weights corresponding to each group's relative size. This formulation makes clear that both relative size and affective distance matter for categorization. Increases in group size are more likely to lead to recategorization when the group's affective distance from the in-group is large.

An example: African Americans and Mexican immigrants

We illustrate this general principle with a stylized example from our specific empirical context. Consider three groups, $k \in \{W, B, M\}$, for whites, blacks and Mexicans, and two binary attributes $j \in \{rac, nat\}$, for race and nativity. Suppose we are interested in how native-born whites classify blacks. Blacks differ from whites in terms of skin color ($I_{rac}^B = 1$), but not in terms of native status ($I_{nat}^B = 0$). Is nativity or race the relevant attribute for in-group classification? Assuming that Mexicans are not black, and normalizing δ^W to zero, we can write the meta-contrast ratio for nativity as

$$R_{\text{nat}} = \frac{\frac{\delta^M n^M}{n^M}}{\frac{\delta^B n^B}{n^W + n^B}}$$

and for race as

$$R_{\text{rac}} = \frac{\frac{\delta^B n^B}{n^B}}{\frac{\delta^M n^M}{n^W + n^M}}$$

The principle of meta-contrast ratio maximization implies that race will be the relevant attribute for categorization whenever

$$\left(\frac{\delta^B}{\delta^M}\right)^2 > \frac{\frac{n^M}{n^W + n^M}}{\frac{n^B}{n^W + n^B}}$$

or whenever the affective distance of blacks (from whites) is larger than that of Mexicans, and blacks are a relatively large group. Conversely, the likelihood that nativity becomes the attribute that divides in- from out-group increases in the difference between δ^M and δ^B and in the relative size of the Mexican group.[8]

Testable implications

This simple framework generates four testable implications. We state them here generally and provide evidence consistent with each of them in the following sections, focusing on Mexican immigration and whites' attitudes towards blacks.

Prediction 1. *An increase in the size of a group k, with $\delta^k > \delta^{-k}$ increases the salience of attribute j as a dimension of social categorization if $I_j^k = 1$, and decreases the salience of attribute j as a dimension of social categorization if $I_j^k = 0$.*

This follows directly from equation 1 and the fact that $\frac{\partial R_j}{\partial n^k} > 0$. Intuitively, an increase

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[8]This is a stylized example with two attributes. More generally, if Mexicans are of higher affective distance from whites than blacks, increases in their size will accentuate any attribute shared between blacks and whites that is not shared between whites and Mexicans (e.g. language).

in the size of a group distant in terms of affect shifts the basis of social categorization to the attribute along which that group differs from the in-group. When an immigrant group that is perceived as distant or threatening grows in size, immigrant status becomes the salient cleavage in a society.

This gives rise to the following, central implication of our framework.

Prediction 2 (Prejudice reduction). *Suppose a group l with $I_m^l = 1$ is classified as out-group based on attribute m. A (large enough) increase in the size of another group k, with $I_m^k = 0$ and $I_j^k = 1$, leads to recategorization of group l as in-group when $I_j^l = 0$ and $\delta^k > \delta^l$.*

This follows directly from Prediction 1, and the fact that, when the increase in n^k is large enough, R_j becomes larger than R_m and attribute j endogenously arises as the determinant of classification into in- and out-group. Intuitively, increases in the size of an out-group of high (relative to other out-groups) affective distance draws the majority's attention to the attribute that distinguishes that group from the majority, and away from other attributes. The differences between majority and other out-groups are thus de-emphasized. This leads to recategorization of existing minorities from out- to in-group status, and a concomitant reduction in prejudice. In the case of immigration and race, an increase in the salience of immigrant status reduces the importance of skin color as a group classifier, and thus reduces white prejudice against blacks.

Prediction 3. *Suppose a group l with $I_m^l = 1$ is classified as out-group based on attribute m. The increase in the size of another group k, with $I_m^k = 0$ and $I_j^k = 1$, that is needed for recategorization of group l as in-group when $I_j^l = 0$ is decreasing in $\delta^k - \delta^l$.*

This prediction states that what matters for classification is not the absolute distance of a group from the majority, but its distance *relative to* other groups. Majority members evaluate different groups in comparison to each other, and not in isolation. The more distant an out-group is perceived to be compared to other out-groups, the more an increase in its size improves attitudes towards the latter. In our empirical setup, the more distant or threatening immigrants are perceived to be (for whites) relative to blacks, the more anti-black prejudice drops in response to immigration.

Prediction 4. *Suppose a group l with $I_m^l = 1$ is classified as out-group based on attribute*

m. An increase in the size of another group k, with $I_m^k = 0$ and $I_j^k = 1$, does not lead to recategorization of group l as in-group when $\delta^k < \delta^l$.

This prediction is the converse of Prediction 2. An increase in the size of an out-group can accentuate, rather than de-emphasize, existing dimensions of difference between the majority and other out-groups. This is the case when that group is of lower affective distance to the majority than other groups. When an expanding group is culturally close to the majority (e.g. immigrants from Western countries), or when it is perceived as less threatening than other groups (e.g. Asians), its comparison with racial minorities does not decrease, and may even increase, prejudice against the latter.

Data and empirical strategy

Data

We construct a state-level panel of Mexican and overall immigration using data from the US Census (Ruggles et al. 2019) for each decade between 1970 and 2010. We complement this data with state-level demographic characteristics (Ruggles et al. 2019; Manson et al. 2019). To assess whether immigrant inflows from Mexico affect whites' attitudes toward African Americans, we rely on survey data from the American National Elections Study (ANES). The ANES is a nationally representative public opinion survey conducted biannually since 1948 by the University of Michigan. We focus primarily on attitudes towards African Americans, but also examine attitudes towards Hispanics and Asian Americans when investigating mechanisms. Because data on immigrant population is decadal, but the ANES is conducted every two years until 2000, and every four years thereafter, we map immigration to survey responses in the years closest to, and centered around, the year when immigrant numbers were recorded. For example, the share of Mexican immigrants in 1980 is mapped to survey responses in 1978, 1980 and 1982.

We use two measures of whites' attitudes towards blacks. The first one is the black-white feeling thermometer. The scale of responses ranges from 0 to 100, with higher values indicating warmer feelings. The feeling thermometer has the advantage of having been consistently asked over time throughout our period of study. We construct a second measure of attitudes, by combining the feeling thermometer with variables capturing stereotypical views of blacks.

Specifically, we focus on whether the respondent believes that blacks are hard-working, intelligent, violent or trustworthy (items coded on a 1 to 7 scale). We recode all items so that higher values indicate lower prejudice and create an index out of all standardized items (including the feeling thermometers) to reduce noise and avoid multiple hypothesis testing (Ansolabehere, Rodden and Snyder 2008). We construct similar measures for Hispanics and Asian Americans. Table A.1 presents summary statistics for all variables used in our analyses. Tables A.2 and A.3 report the exact wording and years of availability of ANES survey questions.

Empirical strategy

We start from a generalized difference-in-differences design. We compare changes in racial attitudes across states experiencing differential changes in the fraction of Mexican immigrants over time, holding constant time-invariant state characteristics and accounting for time-varying unobservables common to all states within the same census region. We estimate:

$$Y_{irst} = \beta_1 M_{rst} + \beta_2 S_{rst} + \gamma_{rs} + \mu_{rt} + \mathbf{X}_{irst} + \eta_{irst} \tag{2}$$

where M_{rst} is the fraction of the total population that is born in Mexico in census region r and state s in time t. Our key parameter of interest is β_1, which represents the impact of Mexican immigration on attitude Y_{irst} for an individual i. γ_{rs} and μ_{rt} represent state and decade by census region fixed effects. Their inclusion implies that β_1 is estimated from changes in Mexican immigration within a state over time, as compared to other states within the same region in the same decade. To account for the fact that patterns of Mexican immigration within the US may be correlated with and capture the effect of immigration more generally, we always control for S_{rst}, the share of (non-Mexican) immigrants in a state and decade. Finally, we control for a set of baseline individual-level characteristics (age, age squared, and gender) collected in the vector $\mathbf{X}_{irst}$. We cluster standard errors at the state level.

This approach differences out all time-invariant unobservable characteristics of states that could affect both immigrant location choices and racial prejudice. However, one might still worry that local time-varying factors are influencing both immigrants' settlements and the social integration of minorities. Immigrants' location decisions may be endogenous to op-

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portunities for social integration or to natives' views towards minorities. On the one hand, immigrants might be increasingly attracted to areas growing more liberal over time. On the other, changes in the economic environment that attracts immigrants may be correlated with increasing conservatism and intolerance of minorities.

To overcome these concerns, we predict the number of Mexican immigrants settling in a given area over time using a version of the shift-share instrument commonly adopted in the immigration literature (Card 2001). The instrument assigns immigration flows from Mexico between 1970 and 2010 to destinations within the United States proportionally to the shares of Mexican immigrants who had settled there in 1960, prior to the change in immigration regime introduced in 1965. In the specific context of Mexican immigration, a similar approach is used in Monras (Forthcoming).

Formally, the predicted number of Mexican immigrants in decade t is computed as

$$Z_{st} = \alpha_s^{Mex} O_t^{Mex} \tag{3}$$

where α_s^{Mex} is the share of Mexican immigrants living in state s in 1960 (relative to all Mexican immigrants in the US), and O_t^{Mex} is the number of Mexican immigrants entering the United States between year t and $t - 10$, for decades 1970 to 2010. We scale Z_{st} by a state's population. To avoid dividing with an endogenous variable, we use predicted population based on the population of a state in 1970 and pre-1970 population growth rate.

In our analysis, we always control for the predicted share of non-Mexican immigrants, to ensure that our instrument for Mexican immigration does not capture changes in immigrant inflows more generally. We construct predicted immigrant inflows using the approach in Card (2001) by generalizing equation 3 above to

$$Z_{st}^{NM} = \sum_n \alpha_s^n O_t^n \tag{4}$$

where n indexes immigrant nationalities. In that case α_s^n is the share of immigrants of nationality n living in state s in 1960 (relative to all immigrants of that nationality in the

US).[9]

We report first stage results in Table A.4 in the Appendix. The first stage relationship is strong and insensitive to controlling for predicted immigration from countries other than Mexico or to the inclusion of interactions between year dummies and a number of 1960 variables that could conceivably have a time-varying effect on both immigration and racial attitudes. Figure A.1 displays graphically the relationship between the fraction of immigrants from Mexico and the corresponding instrument at the state level.

The key identifying assumption behind the instrument is that places that received more Mexican immigrants before 1960 are not on differential trajectories in terms of changes in whites' attitudes or in the social assimilation of minorities (Goldsmith-Pinkham, Sorkin and Swift 2018). We provide multiple pieces of evidence in support of this assumption when presenting our results in the next section.

Main results

Prejudice reduction (Prediction 2)

Table 1 presents our main results. We report OLS and 2SLS estimates in columns 1-3 and 2-4 respectively. 2SLS results suggest that Mexican immigration increases both the feeling thermometer (column 2) and the average of standardized whites' racial attitudes (column 4). OLS coefficients are negative, implying that Mexican immigrants move to states where whites' racial views were becoming more conservative over time.[10]

The magnitude of the estimates is substantive. One percentage point increase in the share of Mexicans raises the black feeling thermometer by 1.2% and the average (inverse) measure of prejudice by more than 28%, relative to their baseline means. Between 1970 and 2010 the fraction of Mexicans increased, on average, by 2.1 percentage points. Our estimates indicate

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[9]Controlling for instrumented (instead of predicted) share of non-Mexican immigrants does not qualitatively affect our results, but the presence of multiple instruments reduces the predictive power of the first stage. We report robustness checks with this alternative specification in the Appendix.

[10]This bias is consistent with our theoretical mechanism. If Mexican immigrants tend to move to states with more positive views towards Hispanics, reductions in anti-black prejudice in those states would be smaller, consistent with Prediction 3. As expected, OLS coefficients increase substantially in magnitude after controlling for a set of baseline state controls interacted with year fixed effects, as in Table A.7, consistent with omitted variable bias. Results available upon request.

that this can account for 36% of the average increase in the black thermometer (4.41) and 63% of the average increase in the mean (0.11) over the same time frame.

Table 1. Baseline effects on attitudes (ANES)

Dependent variable	Feeling thermometer blacks		Average	
	OLS	2SLS	OLS	2SLS
	(1)	(2)	(3)	(4)
Share Mexican	-15.751	76.030**	-1.747	4.224**
	(28.663)	(36.305)	(1.304)	(1.733)
Mean dep. variable	63.067	63.067	-0.139	-0.139
Observations	17,188	17,188	17,446	17,446
R-squared	0.034	0.033	0.033	0.031
F-stat		131.3		132.1

Notes: Years 1970-2010. The sample is restricted to white respondents. Average is the mean of the following (standardized) items: feeling thermometer, blacks hardworking, blacks intelligent, blacks violent, blacks trustworthy. Higher values indicate warmer feelings (thermometer) or less prejudice (average). All columns include controls for age, age squared, gender, state and year by region fixed effects. Columns 1 and 3 control for share of non-Mexican immigrants and columns 2 and 4 control for share of non-Mexican immigrants predicted by equation 4. Standard errors clustered at the state level.

We conduct several checks to verify that these effects represent causal estimates. Table A.5 in the Appendix shows that results are unaffected when we control for instrumented, instead of predicted share of non-Mexican immigrants. Given that state-level shares of Mexican immigrants in 1960 are not random (Table A.6), in Table A.7 we control for a number of 1960 state characteristics interacted with year fixed effects. These are meant to account for the fact that states that received more Mexican immigrants in 1960 might have been on differential trends in terms of their economies, population composition, or social and political conditions, that could have also affected the evolution of racial attitudes. Reassuringly, the inclusion of these controls does not significantly affect our results.

Even after controlling for the time-varying effect of observables, there may still be time-variant unobservable factors correlated with whites' attitudes and with the initial spatial distribution of Mexican immigrants. We provide evidence against this concern in two ways. First, we show that a linear trend based on the 1960 fraction of Mexican immigrants has no explanatory power for racial attitudes. To perform this placebo test, we interact the state-level fraction of Mexicans in 1960 with the average inflow of Mexican immigrants over the period 1970-2010 and create a stock version of the instrument by recursively summing up predicted inflows constructed in this way. If the baseline distribution of Mexican immigrants was correlated with time-varying unobservables affecting racial attitudes, we would expect

this instrument to positively and significantly predict our outcomes of interest. Results are shown in Table A.8. Columns 1–2 and 3–4 display reduced form and 2SLS coefficients for our actual and placebo instrument, respectively. Placebo Mexican inflows have an insignificant effect on both the feeling thermometer (columns 3–4) and average prejudice (columns 7–8).

Second, we take a more systematic approach to rule out a persistent effect of the 1960 state-level fraction of Mexican immigrants by conducting a randomization inference exercise (Young 2018). We reconstruct predicted immigrant inflows at the state level by randomly assigning national-level immigrant inflows from different nationalities to the 1960 shares of Mexican immigrants within states and decades (without replacement). We randomly draw 1,000 sets of placebo assignments of inflows to shares and re-estimate our baseline equation. The upper panel of Figure A.2 plots the distribution of t-statistics resulting from this exercise for the feeling thermometer (left) and average prejudice (right). Vertical lines are drawn at the value of the t-statistic for our actual treatment effect. We report empirical p-values as the share of t-statistics that are larger than the actual one. This approach yields t-statistics lower than our baseline estimates 98% of the time.

We repeat this procedure by randomly assigning 1960 shares of immigrants from different nationalities to actual (decade-specific) Mexican inflows and recomputing the instrument for Mexican immigration. This exercise is meant to address the concern that the push component of our instrument (the size of immigrant inflows) may be driven by unobserved time-varying shocks to states with large Mexican enclaves in 1960. The lower panel of Figure A.2 plots the distribution of t-statistics resulting from 1,000 iterations of this procedure. T-statistics are lower than those in our baseline regressions over 99% of the time. This indicates that our results are unlikely to be driven by the endogeneity of Mexican inflows.

Finally, we investigate whether our results are sensitive to omitting from the sample states with a large Mexican population, like California and Texas. Figure A.3 replicates results in Table 1 by dropping one state at a time and shows that this is not the case. Excluding larger states like New York affects estimate precision, but point estimates remain positive and large for both the thermometer and average prejudice.

Can our results be simply explained by a broader improvement of whites' attitudes towards minorities? In Table 2 we estimate the effects of an increase in the share of Mexicans on attitudes towards Hispanics. 2SLS results, reported in columns 2 and 4, indicate that Mexican

immigration increases whites' prejudice towards Hispanics, suggesting that immigration does not make whites more tolerant of minorities in general.[11] These patterns are consistent with findings in several studies in political science and economics showing that immigration more often than not triggers natives' backlash against immigrants (Hainmueller and Hopkins 2014; Hangartner et al. 2018; Dustmann, Vasiljeva and Piil Damm 2019).

Table 2. Effects on attitudes towards Hispanics

Dependent variable	Feeling thermometer Hispanics		Average	
	OLS	2SLS	OLS	2SLS
	(1)	(2)	(3)	(4)
Share Mexican	42.587	-320.526*	1.037	-10.984*
	(59.578)	(182.423)	(2.945)	(6.017)
Mean dep. variable	61.288	61.288	-0.112	-0.112
Observations	11,399	11,399	11,672	11,672
R-squared	0.061	0.056	0.073	0.070
F-stat		90.70		89.40

Notes: Years 1980-2010. The sample is restricted to white respondents. Average is the mean of the following (standardized) items: feeling thermometer, Hispanics hardworking, Hispanics intelligent, Hispanics violent, Hispanics trustworthy. Higher values indicate warmer feelings (thermometer) or less prejudice (average). All columns include controls for age, age squared, gender, state and year by region fixed effects. Columns 1 and 3 control for share of non-Mexican immigrants and columns 2 and 4 control for share of non-Mexican immigrants predicted by equation 4. Standard errors clustered at the state level.

These results are consistent with Prediction 2 and suggest that Mexican immigration leads whites to change the definition of the in-group so as to include blacks and exclude Hispanics. In what follows, we provide more evidence consistent with this mechanism.

The role of affective distance

A fundamental premise in our argument is that Mexican immigrants have a higher affective distance from native whites than do blacks. This is a testable assumption, which is supported by existing evidence (Davis 2007; McConnell and Rasul 2018) and by our own analysis of the ANES data. Figure 1 plots average values of the black and Hispanic thermometers among white respondents (compared to average values of the white thermometer as benchmark) for every survey year in the ANES. Whites consistently express warmer feelings towards blacks, as compared to Hispanics, and differences between the two groups are always statistically

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[11]Unsurprisingly, OLS coefficients are upwards biased, suggesting that Mexican immigrants were indeed moving to states where attitudes towards Hispanics were improving over time. The fact that whites' attitudes towards blacks and Hispanics move in opposite directions in response to Mexican immigration reduces concerns about bias resulting from differential out-migration of racially intolerant individuals.

significant. In Figure A.4 we verify this result using an alternative measure of affective distance. Respondents were asked to indicate whether they feel close to various groups, in terms of their ideas, interests and feelings about things. We average binary responses over time and compute the difference from the average value white respondents assign to their own group. Consistent with thermometer ratings, Hispanics are perceived by whites as more distant than blacks.[12]

Figure 1. Feeling thermometer over time, blacks and Hispanics
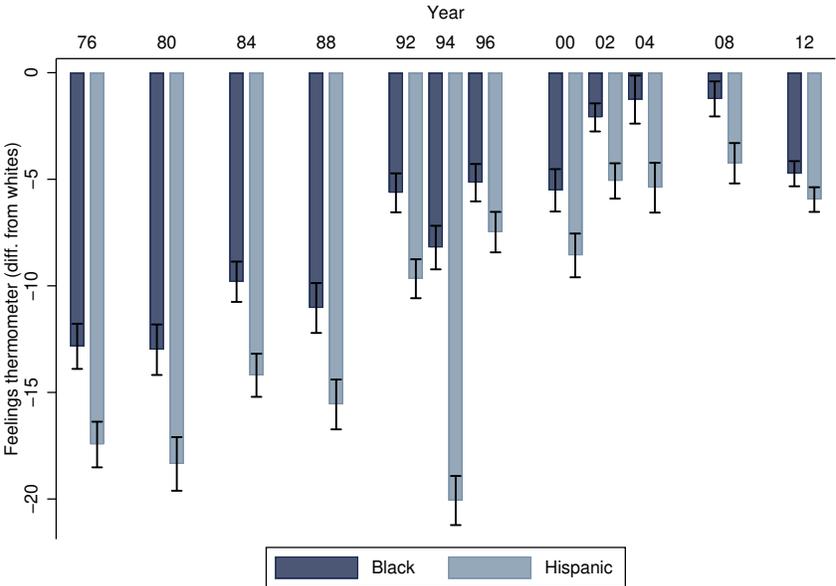
Notes: Sample restricted to white respondents.

The high affective distance of Hispanics from whites traces its origins to the 1970s. The large influx of undocumented Mexican immigrants that followed the abrupt ending of the Bracero program was exploited by opportunistic politicians to construct a narrative around the "Latino threat" (Massey and Pren 2012). Americans continue to believe that most Mexican immigrants enter the country illegally, reinforcing perceptions of high affective distance from this immigrant group.[13]

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[12]In what follows, we use the feeling thermometer as a measure of affective distance, since this variable is available for more years and groups than the measure of closeness.

[13]While the majority of Mexicans are not undocumented, Mexicans do constitute the majority (around 60%) of undocumented immigrants to the US (Passel et al. 2005).

Increase in the salience of immigrant status (Prediction 1)

Mexican inflows lower prejudice against blacks because they reduce the salience of race and increase the salience of nativity or immigrant status as the relevant dimension for in-group-out-group distinctions. We provide evidence for this mechanism by exploiting ANES responses to the question "What do you think are the most important problems facing the country?". This is an open-ended question, but the ANES reclassified the answers of respondents into broader categories. We focus on two categories that do not change over time: immigration policies and racial problems. For the latter, we can further identify the exact position the respondent takes on various racial issues and whether it indicates positive or negative attitudes towards African Americans (e.g. supports vs opposes fair employment practices). We construct an indicator for respondents who mentioned a category as the single most important problem facing the country at the time.

2SLS results in columns 2 of Table 3 indicate that Mexican immigration significantly increases the share of white respondents who mention immigration policies as the most important issue facing the country at the time of the survey. The share of respondents who mention race-related problems and place themselves in opposition to the expansion of rights for blacks decreases (columns 3–4). Conversely, the share of those who mention race-related problems and express support for black-white equality increases (columns 5–6).

These results are consistent with Mexican inflows increasing the salience of immigration, and reducing the salience of race as a dividing line between blacks and whites. Instead, white Americans appear to shift their attention to issues that unite, rather than divide them from black Americans.

Table 3. Most important problem in the country

Dependent variable	Immigration policies		Racial problems (negative)		Racial problems (positive)	
	OLS	2SLS	OLS	2SLS	OLS	2SLS
	(1)	(2)	(3)	(4)	(5)	(6)
Share Mexican	0.290**	0.154*	-0.096	-0.143	0.406***	0.478***
	(0.125)	(0.078)	(0.118)	(0.176)	(0.092)	(0.088)
Observations	10,726	10,726	10,726	10,726	10,726	10,726
R-squared	0.012	0.012	0.022	0.022	0.015	0.015
F-stat		154.7		154.7		154.7

Notes: Years 1970-2010. The sample is restricted to white respondents. Column titles refer to the categories of problems representing the first choice of ANES respondents for the most important problem facing the country. All columns include controls for age, age squared, gender, state and year by region fixed effects. Columns 1, 3 and 5 control for share of non-Mexican immigrants and columns 2, 4 and 6 control for share of non-Mexican immigrants predicted by equation 4. Standard errors clustered at the state level.

Effects increasing in the difference of affective distances (Prediction 3)

Prediction 3 states that the effect of immigration on attitudes towards blacks is higher the more distant immigrants are perceived to be by whites, compared to blacks. We test this prediction empirically by exploring heterogeneity patterns within the ANES sample.

We construct state-level averages of the difference in thermometer values between blacks and Hispanics in 1980 – the first survey decade for which attitudes on Hispanics began to be systematically collected. Larger values indicate that white respondents have warmer feelings towards blacks than they do towards Hispanics. We then interact the effect of the share of Mexicans with this variable. Table 4 presents heterogeneous effects by baseline difference in affective distance between blacks and Hispanics. The results indicate that a significantly larger improvement in whites' feelings towards blacks comes from states whose residents viewed Mexicans more coolly than blacks in 1980 (column 2). A similar positive, though not statistically significant, interaction effect is found for average prejudice (column 4). Taken together, these

Table 4. Effects by baseline difference in black-Hispanic thermometer

Dependent variable	Feeling thermometer blacks		Average	
	OLS	2SLS	OLS	2SLS
	(1)	(2)	(3)	(4)
Share Mexican	-42.074	45.634	-3.049	6.288*
	(62.348)	(57.539)	(2.790)	(3.444)
Share Mexican × 1980	9.331*	16.663***	0.349	0.117
diff. black-Hispanic thermometer	(5.128)	(3.920)	(0.240)	(0.175)
Mean dep. variable	63.314	63.314	-0.127	-0.127
Observations	14,818	14,818	15,062	15,062
R-squared	0.034	0.033	0.032	0.030
AP F-Stat Share Mexican		147.8		144.8
AP F-Stat interaction		45.24		41.94

Notes: Years 1980-2010. The sample is restricted to white respondents. Average is the mean of the following (standardized) items: feeling thermometer, blacks hardworking, blacks intelligent, blacks violent, blacks trustworthy. Higher values indicate warmer feelings (thermometer) or less prejudice (average). All columns include controls for age, age squared, gender, state and year by region fixed effects. Columns 1 and 3 control for share of non-Mexican immigrants and columns 2 and 4 control for share of non-Mexican immigrants predicted by equation 4. Standard errors clustered at the state level.

results provide evidence in support of Prediction 3.[14]

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[14]We find similar patterns of heterogeneity when splitting the sample by partisanship. As compared to Republicans, Democrats view Hispanics less warmly *relative* to blacks in the baseline. Consistent with Prediction 3, increases in the share of Mexicans improve attitudes towards blacks more for Democrats than for Republicans (Appendix Figure A.5 and Table A.9).

Effects of less distant immigrant groups (Prediction 4)

Finally, a corollary of our theory is that one should not observe any reduction in prejudice in response to inflows of immigrant groups that are less distant, in terms of affect, from whites than are blacks. To test this, we compare the effects of Mexican immigration to those of two groups of immigrants perceived as affectively less distant by white Americans: immigrants from Europe and Canada, and immigrants from Asia.

European and Canadian immigrants are predominantly white and highly skilled, both characteristics that presumably lower their affective distance from white Americans. While we do not have an explicit measure of affective distance of those groups *relative* to blacks, it is reasonable to assume that this measure is lower than the respective measure for Hispanics.

Columns 1 and 5 of Table 5 present estimates of the effect of European and Canadian immigration on the black feeling thermometer and average prejudice, respectively, while at

Table 5. Lower affective distance groups and attitudes towards blacks

Dependent variable	Feeling thermometer blacks				Average			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Share EU/Canadian	-75.043	-139.375			-6.327	-11.632		
	(101.408)	(178.189)			(5.256)	(9.023)		
Share Mexican	64.681*	74.130**	68.866*	65.308*	3.475*	4.252**	3.912**	3.796**
	(36.507)	(36.770)	(34.457)	(34.723)	(1.881)	(1.684)	(1.695)	(1.657)
Share Asian			11.513	14.145			-0.022	0.067
			(12.475)	(12.663)			(0.637)	(0.635)
Mean dep. variable	63.067	63.067	63.067	63.067	-0.139	-0.139	-0.139	-0.139
Observations	17,182	17,182	17,182	17,182	17,440	17,440	17,440	17,440
R-squared	0.033	0.033	0.033	0.033	0.032	0.031	0.031	0.032
AP F-Stat EU/Canadian	18.24	32.32			18.12	32.18		
AP F-Stat Mexican	44.16	65.35	70.46	67.48	44.28	65.74	70.79	67.82
AP F-Stat Asian			109.8	82.26			109.7	83.37

Notes: 2SLS coefficients reported. Years 1970-2010. The sample is restricted to white respondents. Average is the mean of the following (standardized) items: feeling thermometer, blacks hardworking, blacks intelligent, blacks violent, blacks trustworthy. Higher values indicate warmer feelings (thermometer) or less prejudice (average). All columns include controls for age, age squared, gender, state and year by region fixed effects. Columns 2 and 6 control for the predicted share of immigrants not from Europe, Canada or Mexico. Columns 4 and 8 control for the predicted share of immigrants not from Asia or Mexico. Standard errors clustered at the state level.

the same time controlling for the share of Mexican immigrants.[15] Columns 2 and 6 additionally include the (predicted) fraction of all other immigrants. In all cases, effects of European and Canadian immigration are far from statistical significance and go in opposite directions for the

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[15]Given the use of two instruments in these specifications, we follow Angrist and Pischke (2009) and report AP F-statistics for each instrument.

two measures of prejudice. In contrast, Mexican immigration continues to predict significantly higher warmth and lower prejudice in all specifications.

We next turn to immigration from Asia, another major immigrant-sending region during the 1970-2010 period. In this case, we can quantify Asians' affective distance from whites using the feeling thermometer. Figure 2 reveals that white respondents have warmer feelings towards

Figure 2. Feeling thermometer average, by group
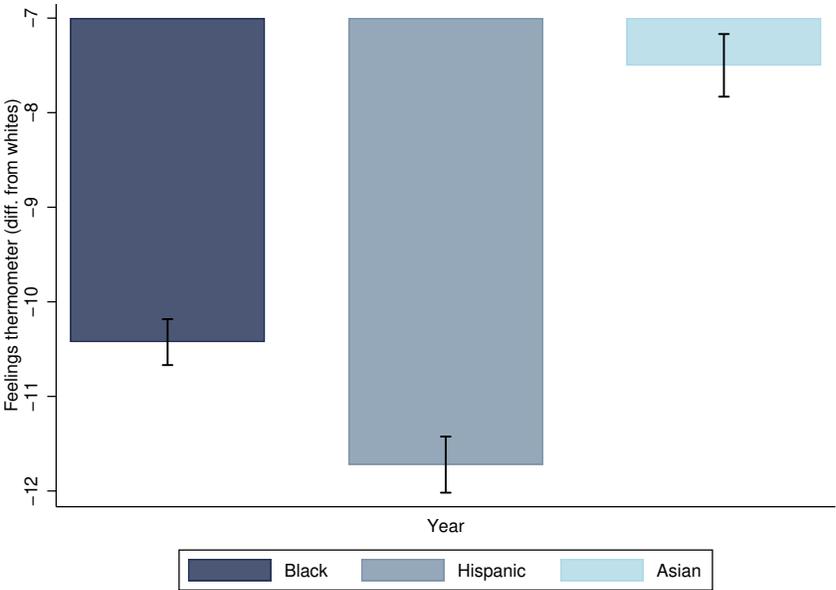
Notes: The figure plots the average difference between the feeling thermometer for each group from the respective value for whites. Sample restricted to white respondents.

Asian-Americans than they do towards either blacks or Hispanics. This lower distance can be a result of Asian-Americans being on average more educated and highly skilled, or perceived as less of a threat than other minorities.[16]

The impact of Asian immigration on whites' attitudes towards blacks is consistent with this ranking. Columns 3-4 and 7-8 of Table 5, show that the effects of an increase in the share of Asian immigrants are insignificant and ambiguous in direction. Effects of Mexican immigration remain positive and precisely estimated. These differences in the effects of Asian and Mexican immigration cannot be attributed to differences in the overall share of those

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[16]Studies asking Americans to evaluate various groups in terms of competence and warmth – two dimensions that have emerged as explanatory of attitudes towards minorities in social psychology – consistently find that Asians are scored as high-competence low-warmth, while Hispanics score low on both categories (Fiske, Cuddy and Glick 2007).

immigrant groups in the population, since Mexican and Asian immigration are comparable in size during the period under study (2% and 3.8%, respectively).[17]

Findings in Table 5 are helpful to establish more general conditions for the direction of the effect of immigration on the majority's attitudes towards other minorities. They suggest that relative size is not the only, or even the most important factor in driving prejudice. What crucially matters is the relative affective distance of incoming groups. Immigration redirects prejudice away from non-immigrant minorities only when expanding immigrant groups are perceived as relatively more distant.

Racial attitudes and policy preferences

To what extent do changes in racial attitudes brought about by immigration affect whites' policy preferences? The question of whether racial prejudice has political effects has long concerned scholars of American political behavior (Huddy and Feldman 2009). Ex-ante, it is unclear whether social changes such as the ones we document would translate into higher demand for racial equality. Policy preferences related to race are not shaped only by attitudes towards minorities, but by additional factors, such as political ideology and views on the role of government, which may be harder to change and orthogonal to racial attitudes.

The ANES includes a number of questions that capture preferences for government intervention to achieve black-white equality. We focus on four such questions that are consistently asked in at least three out of four decades in our sample. Respondents are asked whether they believe that the government should intervene to help blacks (agreement level on a 1-7 scale), whether black and white schools should be integrated, whether the government should see to it that blacks get fair treatment protection in jobs (agreement level on a 1-5 scale) and whether they are for or against preferential hiring for blacks (agreement level on a 1-5 scale). The precise question wording is reported in Table A.2. We recode all items so that higher values indicate policy preferences more supportive of government intervention in favor of blacks.

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[17]Results, not reported for brevity, are qualitatively similar when we only examine the effects of Chinese immigration, which is an order of magnitude smaller than that from Mexico (0.3% on average between 1970 and 2010). Available upon request.

Table 6. Effects on policy preferences

Dependent variable	Should gov. help blacks	School integration	Gov. guarantee FEP	Pref. hiring for blacks	Racial policy average
	(1)	(2)	(3)	(4)	(5)
Share Mexican	-63.150	0.905	13.505***	39.937	7.135***
	(174.660)	(0.820)	(3.296)	(26.003)	(1.321)
Mean dep. variable	3.185	0.409	2.803	1.519	-0.077
Observations	9,875	5,825	8,868	9,378	16,358
R-squared	0.045	0.090	0.033	0.011	0.044
F-stat	0.159	119.6	119.8	8.636	113.5

Notes: 2SLS estimates reported. Years 1970-2010. The sample is restricted to white respondents. All variables are coded so that higher values indicate higher support of respondents for the policy mentioned. Racial policy average is the average of standardized items in columns 1–4. All columns include controls for age, age squared, gender, state and year by region fixed effects, and predicted share of non-Mexican immigrants. Standard errors clustered at the state level.

Table 6 reports 2SLS coefficients from our main specification for each of these outcomes (Columns 1-4) as well as for an average of all four (standardized) items. Mexican inflows lead to increased support for intervention in favor of African Americans for three out of four policy measures.[18] The average of all measures is highly significant and indicates that Mexican immigration induces more liberal views among white respondents.

These changes in policy preferences concerning blacks are not part of a broader package of more liberal views spurred by immigration. Table A.10 examines the effect of Mexican immigration on broader ideology and policy preferences. The outcome in columns 1–2 is the respondent's self-placement on a 1–7 liberal-conservative scale, with higher values indicating higher conservatism. In columns 3–4 the dependent variable is the respondent's preference for provision of government services in exchange for government spending coded in a 1–7 scale, with higher values denoting lower preference for the role of government. Effects are not statistically significant, but, if anything, Mexican immigration tends to induce less, and not more liberal attitudes.

Taken together, results from Tables 6 and A.10 imply that Mexican immigration makes white respondents willing to demand or accept a bigger role for government specifically when intervention is aimed at helping blacks. Changes in attitudes appear to translate into changes in racial policy preferences, which may even go against respondents' general ideology or views

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[18]Support for government aid for blacks is negative, but, given the low first stage F-statistic in that regression, the coefficient cannot be readily interpreted.

of government's role.[19]

Mexican immigration and changes in whites' behavior

Our analysis so far relied on attitudinal variables, since the theoretical mechanism we propose is one of changes in perceptions and attitudes. Here, we explore the implications of our findings for real-world behavior. To assess whether reduction in anti-black prejudice among whites implies changes in behavioral outcomes, we examine rates of prejudice-motivated violence.

To do so, we use data on hate crimes available between 1992 and 2016, compiled by the FBI as part of the Uniform Crime Reporting (UCR) program, distributed by the Inter-University Consortium for Social Research at the University of Michigan (FBI and ICPSR 2018). The data comprises all reported hate crimes, defined as

> "[...] criminal offenses that are motivated, in whole or in part, by an offenders bias against a race, religion, disability, sexual orientation, ethnicity, gender, or gender identity." (FBI 2015, p.5)

The data contains information on the race of the perpetrator and on the crime's motivating bias. Based on the location of the reporting agency, as provided through the Originating Agency Identifier (ORI), we are able to match incidents to counties. We average crimes across decades and estimate the following county-level version of equation 2

$$Y_{cst} = \beta_1 M_{cst} + \beta_2 S_{cst} + \gamma_{cs} + \mu_{st} + \eta_{cst} \tag{5}$$

where Y_{cst} are anti-black or anti-Latino hate crimes per 100,000 people, and γ_{cs} and μ_{st} are county and state by decade fixed effects, respectively. S_{cst} is the share of Mexican immigrants in the county's total population. We construct a county-level instrument for this variable using the 1960 share of Mexicans in the county to predict later inflows, as in equation 3. As before, we are interested in the direction and magnitude of β_1, the effect of the change in the

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[19]Sniderman and Carmines (1997) show that white Americans' support for policies promoting racial equality increases with appeals that reach "beyond race" to broader moral values. Our findings here suggest the reverse pattern; in response to Mexican immigration, appeals for policies targeted to blacks may elicit more support from whites than appeals for policies that are not group-specific.

county-level share of Mexicans on hate crimes.

Table 7 reports the results. 2SLS estimates indicate that an increase in the share of Mexicans significantly reduces anti-black hate crimes (column 2). This reduction is higher when restricting attention to crimes committed by white offenders (column 4). Effects on hate crimes against Latinos are noisily estimated, but if anything tend to increase in response to Mexican immigration, especially when restricting attention to white offenders (columns 6 and 8). The effects are substantive in magnitude. The coefficient in column 4 suggests that a one percentage point increase in the share of Mexicans leads to 3 fewer anti-black hate crimes per 100,000 people, or 83% of the sample mean. For the average county in our sample, our estimates imply that an increase in the share of Mexicans leads to about 5 fewer hate crimes per 100,000 people against blacks and 1.8 more hate crimes against Hispanics, though the latter quantity is not statistically significant.

Table 7. Mexican immigration and hate crimes

Dependent variable	Hate crimes per capita							
	Against blacks				Against Hispanics			
	All offenders		White offenders		All offenders		White offenders	
	OLS	2SLS	OLS	2SLS	OLS	2SLS	OLS	2SLS
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Share Mexican	-13.286	-345.415**	-14.942	-385.685***	21.951	26.967	17.838	136.125
	(11.040)	(140.791)	(9.498)	(140.345)	(18.693)	(122.636)	(17.485)	(120.748)
Mean dep. variable	5.78	5.78	3.62	3.62	1.23	1.23	0.91	0.91
Observations	6,735	6,735	6,033	6,033	6,735	6,735	6,033	6,033
R-squared	0.605	0.557	0.566	0.417	0.492	0.493	0.475	0.413
F-stat		16.72		18.80		16.72		18.80

Notes: Years 1990-2010. The dependent variable is hate crimes per 100,000 people. All columns include controls for county and year by state fixed effects. Columns 1, 3 and 5 control for share of non-Mexican immigrants and columns 2, 4 and 6 control for predicted share of non-Mexican immigrants predicted by equation 4. Standard errors clustered at the county level.

These county-level estimates of the effect of Mexican immigration complement our previous state-level analysis and provide more direct granular evidence for a mechanism that operates through group contact and perceptions at the local level. We provide evidence that these effects are not due to selective migration and changing population demographics in response to Mexican immigration – a concern more pronounced at the county than at the state level. Table A.11 in the Appendix shows that changes in the share of Mexicans at the county level do not significantly affect the county's share of African Americans and do not trigger white flight.

Conclusion

Due to rising immigration, over the past five decades, the US and most European countries have become increasingly diverse. How does this trend contribute to shaping social group boundaries in these countries? To answer this question, we introduce a conceptual framework where group boundaries are endogenous and context-dependent. Building on core principles of self-categorization theory in social psychology (Turner et al. 1987; 1994), we start from the assumption that group classification follows the meta-contrast principle: group boundaries are formed along the dimension that maximizes across-group differences relative to within-group differences. We define a summary measure of difference that forms the basis for cross-group comparisons, which we term "affective distance" and which captures a group's perceived quality.

We map our theoretical predictions to the data by studying how Mexican immigration in the US between 1970 and 2010 influenced native whites' attitudes towards African Americans. We measure whites' racial attitudes using nationally representative survey data from the ANES. To overcome potential endogeneity issues, we predict Mexican immigration across states by interacting the 1960 share of Mexicans living in each US state with the national number of new immigrants for each decade from 1970 onwards. We find that Mexican immigration improves racial views among whites. These changes in attitudes translate into changes in policy preferences and behavior, with Mexican immigration significantly reducing hate crimes against blacks.

Our framework suggests that blacks are recategorized as in-group members and viewed more positively, because the affective distance of Mexicans from whites is higher than that of blacks. Consistent with this assumption, feeling thermometer ratings assigned by white respondents to Hispanics are consistently lower than those assigned to blacks.

We provide evidence consistent with three additional predictions of the theory. First, we document that Mexican immigration increases the salience of immigration policy and reduces that of race-related issues. Next, our estimated effects are significantly larger for individuals for whom the relative affective distance between blacks and Hispanics is higher. Finally, immigration from countries with low affective distance to white natives (relative to blacks), such as Europeans, Canadians and Asians, has unstable and insignificant effects on native

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whites' attitudes towards blacks.

A complementary explanation behind whites' reactions towards blacks in response to Mexican immigration is that of uniting against a common enemy. Lab-based evidence in evolutionary psychology indicates that coalitional considerations determine the importance of race as a social category (Kurzban, Tooby and Cosmides 2001). In observational data, the formation of cross-group coalitions in response to out-group threat has been documented empirically, but only across minorities (e.g. Rieder 1985). Given the majority's numerical advantage, its participation in such coalitions in response to out-group threat is a priori an unlikely reaction.

A distinct, but related to ours, framework is the common in-group identity model (Gaertner and Dovidio 2011), which predicts that priming a superordinate group identity can reduce out-group prejudice.[20] In the context at hand, Mexican inflows may prime a superordinate "American" identity and thus reduce the importance of race as a relevant social cleavage. Yet the fact that non-Mexican immigrants do not achieve the same effect necessitates that this theory be extended with additional assumptions in order to explain our empirical findings in their entirety.

Our conceptual framework helps to reconcile conflicting results in the literature. On the one hand, McConnell and Rasul (2018) find that 9/11, and the associated Islamophobic reaction among Americans, worsened attitudes towards Hispanics. On the other, Fouka, Mazumder and Tabellini (2019) find that 1915-1930 black in-migration to the US North, and the associated increase in racism among northern whites, improved the relative standing of (white European) immigrants. Our framework can explain these seemingly contradictory results. By raising the salience of dimensions related to immigration and foreign-born threat, 9/11 had negative spillovers on all groups differing from natives on such dimensions, including Hispanics.[21] Instead, by raising the salience of skin color, black in-migration to the US North reduced the importance of ethnicity as a dimension relevant for social categorization, thus helping white immigrants.

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[20]A number of studies provide evidence for the effectiveness of this mechanism in reducing prejudice (see, for example Charnysh, Lucas and Singh 2015; Levendusky 2018; Dinas, Fouka and Schläpfer 2020 and Siegel and Badaan 2019).

[21]Interestingly, and consistent with our framework and findings, McConnell and Rasul (2018) find no negative spillover of 9/11 on federal judges' behavior towards blacks.

Finally, we highlight implications of our study that travel beyond the US context. A large constructivist tradition in ethnic politics (Fearon and Laitin 2000; Posner 2005; Chandra 2006; Wimmer 2013) examines the conditions under which ethnicity emerges as a relevant cleavage in a society. This literature has focused primarily on group members' identification with their own ethnicity. Our study highlights a complementary dimension to in-group identity that matters for the salience of ethnicity: majority attitudes towards minorities. We suggest that whether majorities will discriminate on the basis of ethnicity or of another attribute is endogenous to the composition of out-groups in a society, primarily in terms of perceived affective distance from the majority. When the affective distance of majorities from groups differing on the basis of ethnicity is large, ethnicity will endogenously emerge as a basis for discrimination, allocation of privileges etc. in a society. Ethnicity can then become salient because members of ethnic groups rationally choose their ethnic identity – as the constructivist literature suggests – or because majorities discriminate on the basis of ethnicity – as our framework would indicate. We leave the full development and empirical test of this idea to future work.

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A Appendix – Additional Figures and Tables

Figure A.1. First stage
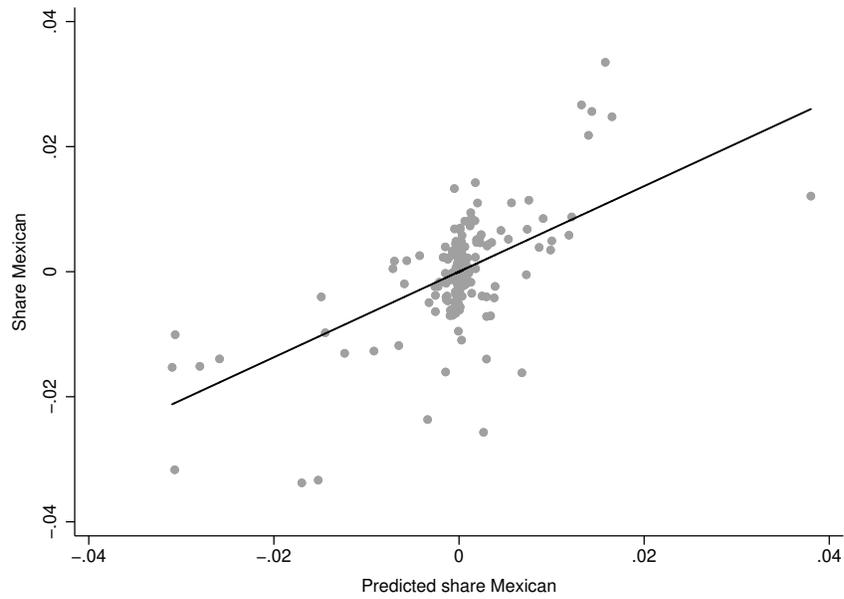
Notes: The figure shows the relationship between the change in actual and predicted fraction of immigrants of Mexican origin for the years 1970 to 2010. Each point represents the coefficient from a regression of actual on predicted fraction of Mexican immigrants, year by region and state fixed effects, and the predicted fraction of non-Mexican immigrants. Regressions are weighted by the number of observations in the ANES sample.

Figure A.2. Randomization inference
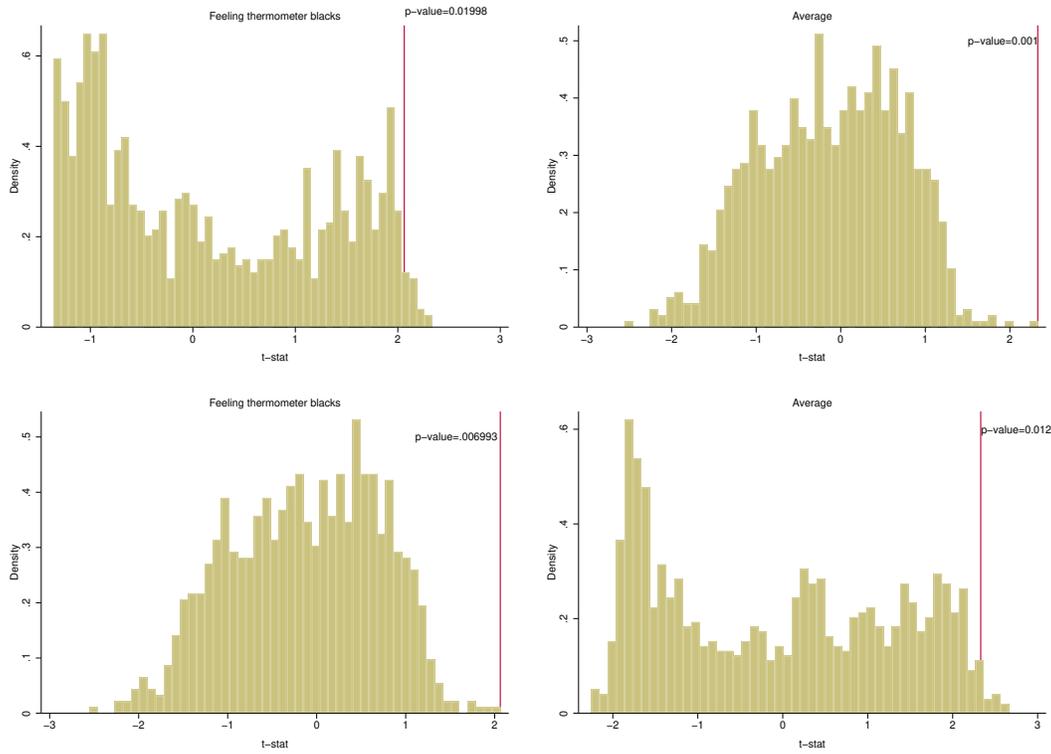
Notes: The figure plots, for each of the main outcomes, the distribution of t-statistics resulting from 1,000 iterations of estimating equation 2 with alternative computations of the instrument for Mexican immigrants. In the upper panel, predicted numbers of Mexicans are computed using 1960 Mexican shares and randomly assigned inflows of immigrants from different nationalities within state and decade. In the lower panel, predicted numbers of Mexicans are computed using Mexican inflows and randomly assigned 1960 shares of immigrants from different nationalities within state and decade. P-values are computed as the share 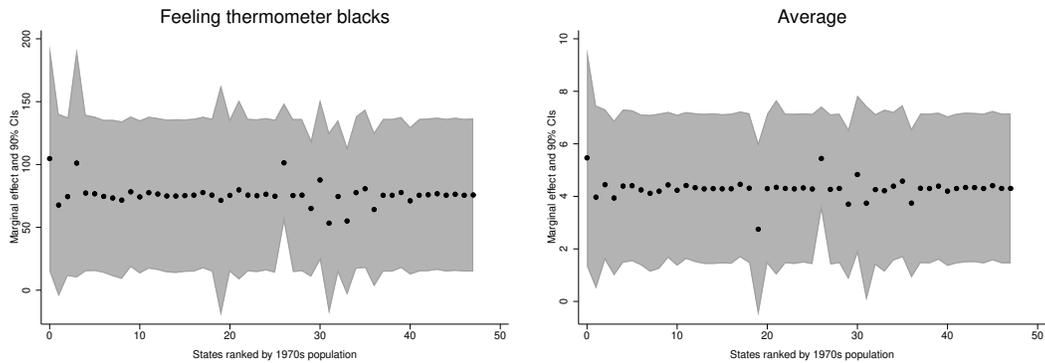of t-statistics whose value is more extreme than the value estimated using actual assignment of 1960 Mexican shares and decade-specific Mexican inflows.

Figure A.3. Assessing the influence of outliers

Notes: The figure plots point estimates and 90% confidence intervals for the share of Mexican immigrants, by estimating equation 3 after dropping one state at a time. States are ordered by their population in 1970.

Figure A.4. Average feelings of closeness, by group

Figure A.5. Difference in feelings between blacks and Hispanics, by party affiliation

Table A.1. Summary statistics

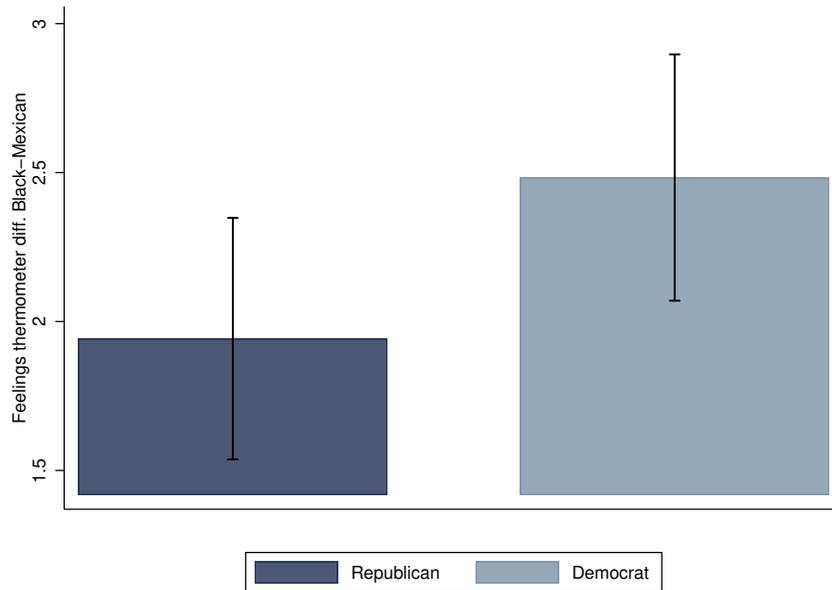| Variable	Mean	Std. Dev.	Min	Max	Obs.
State-level (ANES)					
Feeling thermometer blacks	63.066	19.872	0	97	17,277
Blacks intelligent	4.264	1.224	1	7	8,141
Blacks hard-working	3.920	1.288	1	7	8,171
Blacks violent	3.445	1.217	1	7	1,791
Blacks trustworthy	4.065	1.174	1	7	1,186
Average (blacks)	-0.139	0.871	-3.199	2.280	17,540
Feel close to blacks	0.112	0.315	0	1	7,548
Feeling thermometer Hispanics	61.286	20.327	0	97	11,463
Hispanics intelligent	4.338	1.186	1	7	8,049
Hispanics hard-working	4.671	1.353	1	7	8,083
Hispanics violent	3.779	1.129	1	7	1,718
Hispanics trustworthy	4.162	1.162	1	7	1,169
Average (Hispanics)	-0.112	0.806	-3.012	2.085	11,,741
Feel close to Hispanics	0.130	0.336	0	1	4,128
Feeling thermometer Asian-Americans	63.258	19.070	0	97	8,978
Problem: Immigration policies	0.004	0.065	0	1	12,545
Problem: Racial problems (positive)	0.008	0.088	0	1	12,545
Problem: Racial problems (negative)	0.001	0.028	0	1	12,545
Should gov. help blacks	3.185	1.707	1	7	14,580
School integration	0.409	0.492	0	1	5,841
Gov. guarantee FEP	2.803	1.990	1	5	8,921
Pref. hiring for blacks	1.519	1.344	1	5	9443
Racial policy average	-0.077	0.808	-1.351	2.590	18,182
Conservative	4.299	1.394	1	7	15,995
Increase gov. spending	4.060	1.627	1	7	12,765
Female	0.542	0.498	0	1	21,683
Age	47.093	17.716	17	99	21,564
Share Mexican	0.021	0.032	0	0.116	21,683
Share non-Mexican	0.063	0.052	0.004	0.203	21,683
County-level (FBI)					
Per capita hate crimes against blacks (all)	5.782	11.570	0	283.347	6,735
Per capita hate crimes against blacks (white offenders)	3.624	7.138	0	158.482	6,033
Per capita hate crimes against Hispanics (all)	1.235	4.204	0	124.255	6,735
Per capita hate crimes against Hispanics (white offenders)	0.907	3.551	0	99.404	6,033
Share Mexican	0.014	0.030	0	0.362	6,735
Share non-Mexican	0.022	0.032	0	0.378	6,735

Notes: Years 1970–2010 (upper panel) and 1990-2010 (lower panel). ANES sample restricted to white respondents.

Table A.2. Wording of questions from ANES data

Variable Name	Wording
Feeling thermometer [Group]	I'd like to get your feelings toward some people in the news these days. I'll read the name of a person and I'll ask you to rate that person on a thermometer that runs from 0 to 100 degrees. Rating above 50 means that you feel favorable and warm toward the person. Rating below 50 means that you feel unfavorable and cool toward the person. Rating right at the 50 degree mark means you don't feel particularly warm or cold. You may use any number from 0 to 100 to tell me how favorable or unfavorable your feelings are. Still using the thermometer how would you rate the following groups? [Group]
[Group] intelligent	The next set asks if people in each group tend to be "intelligent" or "unintelligent". Where would you rate [Group] (in general) on this scale? [1. Intelligent - 7. Unintelligent]
[Group] hard-working	Now I have some questions about different groups in our society. I'm going to show you a seven-point scale on which the characteristics of the people in a group can be rated. In the first statement a score of 1 means that you think almost all of the people in that group tend to be "hard-working". A score of 7 means that almost all of the people in the group are "lazy". A score of 4 means that you think that most people in the group are not closer to one end or the other, and of course you may choose any number in between. Where would R rate [group]'s work ethic on this scale?
[Group] violent	Do people in these groups tend to be violent or do they tend to be peaceful? Where would R rate the group's disposition? [Group] [1. Peaceful - 7. Violent]
[Group] trustworthy	Where would you rate [Group] on this scale? [1. Untrustworthy - 7. Trustworthy]
Feel close to [Group]	Please read over this list and tell me which of these groups you feel particularly close to– people who are most like you in their ideas and interests and feelings about things.
Problem: Immigration policies	Of those [problems] you've mentioned, what would you say is the single most important problem the country faces? Answers: immigration policy; against open immigration; immigration policies for open immigration; relaxation of immigration quotas; problems relating to the influx of political/economic refugees (Cubans, Haitians, Mexicans, etc.), prohibiting specified types of persons from entering the US.

Table A.2. – continued from previous page

Variable Name	Wording
Problem: Racial problems (positive)	Of those [problems] you've mentioned, what would you say is the single most important problem the country faces? Answers: protection (expansion) of negro civil rights; pro-busing; school, housing integration, fair employment practices; right to vote; fair treatment by police; other specific programs/proposals/legislation for (extending) civil rights; civil rights/racial problems; programs to enable blacks to gain social/economic/educational/ political equality; relations between blacks and whites.
Problem: Racial problems (negative)	Of those [problems] you've mentioned, what would you say is the single most important problem the country faces? Answers: protection (expansion) of white majority; prevention of race mixing; maintenance of segregated schools, anti-busing; right to choose own neighbors; right to discriminate in employment, against other specific programs/proposals/legislation for (extending) civil rights.
Should gov. help blacks	Some people feel that the government in Washington should make every effort to improve the social and economic position of blacks. Others feel that the government should not make any special effort to help blacks because they should help themselves. Where would you place yourself on this scale, or haven't you thought much about this? [1. Government should help blacks - 7. Blacks should help themselves]
School integration	Do you think the government in Washington should see to it that white and black children go to the same schools or stay out of this area as it is not its [the government's] business?
Gov. guarantee FEP	How do you feel? Should the government in Washington see to it that black people get fair treatment in jobs or is this not the federal government's business?
Pref. hiring for blacks	Some people say that because of past discrimination, blacks should be given preference in hiring and promotion. Others say that such preference in hiring and promotion of blacks is wrong because it gives blacks advantages they haven't earned. What about your opinion – are you FOR or AGAINST preferential hiring and promotion of blacks?
Conservative	We hear a lot of talk these days about liberals and conservatives. Here is a seven-point scale on which the political views that people might hold are arranged from extremely liberal to extremely conservative. Where would you place yourself on this scale, or haven't you thought much about this? [1. Extremely liberal - 7. Extremely conservative]

Table A.2. – continued from previous page

Variable Name	Wording
Increase gov. spending	Some people think the government should provide fewer services even in areas such as health and education in order to reduce spending. Suppose these people are at one end of a scale, at point 1. Other people feel it is important for the government to provide many more services even if it means an increase in spending. Suppose these people are at the other end, at point 7. And, of course, some other people have opinions somewhere in between, at points 2,3,4,5 or 6.

Notes: *[Group] intelligent:* for year 1992 the scale was [1. Unintelligent - 7. Intelligent] and has been reversed. *[Group] violent:* the scale was [1. Violent - 7. Peaceful] and has been reversed. *[Group] trustworthy:* the scale was [1. Trustworthy - 7. Untrustworthy] and has been reversed. *Most important problem questions:* For 1980 and 1982 the question reads: "Of those you've mentioned, which would you say is the single most important problem the government in Washington should try to take care of?". *Gov. guarantee FEP:* For 1972 the question reads: "How do you feel? Should the government in Washington see to it that black people get fair treatment in jobs or leave these matters to the states and local communities?" *Pref. hiring for blacks:* For 1988 the question reads: "Some people say that because of past discrimination, blacks should be given preference in hiring and promotion. Others say that such preference in hiring and promotion of blacks is wrong because it discriminates against whites. What about your opinion–are you for or against preferential hiring and promotion of blacks?". *Increase gov.spending:* the scale was reversed to [1. Government should provide many fewer services; reduce spending a lot - 7. Government should provide many fewer services; reduce spending a lot]. For years 1980, 1982 the question reads "Some people think the government should provide fewer services, even in areas such as health and education, in order to reduce spending. Other people feel it is important for the government to continue the services it now provides even if it means no reduction in spending. Where would you place yourself on this scale, or haven't you thought much about this?".

Table A.3. ANES Question availability across survey years

Variable Name	1972	1978	1980	1982	1988	1990	1992	1998	2000	2002	2008	2012
Feeling thermometer blacks	X		X	X	X	X	X	X	X	X	X	X
Blacks intelligent							X		X		X	X
Blacks hard-working							X		X		X	X
Blacks violent							X					
Blacks trustworthy									X			
Feel close to blacks	X		X		X		X		X			
Feeling thermometer Hispanics			X		X		X		X	X	X	X
Hispanics intelligent							X		X		X	X
Hispanics hard-working							X		X		X	X
Hispanics violent							X					
Hispanics trustworthy									X			
Feel close to Hispanics			X				X		X			
Feeling thermometer Asian-Am.							X		X	X	X	X
Problem: Immigration policies	X	X	X	X	X	X	X	X	X			
Problem: Racial problems (positive)	X	X	X	X	X	X	X	X	X			
Problem: Racial problems (negative)	X	X	X	X	X	X	X	X	X			
Should gov. help blacks					X	X	X	X			X	X
School integration	X	X				X	X		X			
Gov. guarantee FEP					X	X		X	X		X	X
Pref. hiring for blacks	X				X		X		X		X	X
Conservative	X	X	X	X	X	X	X	X	X	X	X	X
Increase gov. spending			X	X	X	X	X	X	X		X	X

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Table A.4. First stage

Dep. Variable	Share Mexican		
	(1)	(2)	(3)
Predicted share Mexican	0.800***	0.488***	0.748***
	(0.076)	(0.105)	(0.061)
Observations	21,570	21,570	21,570
R-squared	0.980	0.993	0.981
Baseline controls × Year FE		Yes	
Predicted share other immigrants			Yes

Notes: The sample consists of white ANES respondents. Years 1970-2010. All regressions control for state and census year by region fixed effects. Baseline controls include distance from Mexico and the following variables measured in 1960: share black, share foreign-born, share rural, share high school graduates and unemployment rate. Standard errors in parentheses, clustered at the state level. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.5. Robustness to instrumenting the share of non-Mexican immigrants

Dep. variable	Feeling thermometer blacks		Average	
	Baseline	Instrumented other imm.	Baseline	Instrumented other imm.
	(1)	(2)	(3)	(4)
Share Mexican	76.030**	84.230*	4.224**	4.642**
	(36.305)	(43.006)	(1.733)	(2.124)
Mean dep. variable	63.067	63.067	-0.139	-0.139
Observations	17,188	17,188	17,446	17,446
R-squared	0.033	0.033	0.031	0.031
F-stat	131.3	6.167	132.1	6.245
AP F-Stat Share Mexican		90.57		91.81

Notes: Years 1970-2010. The sample is restricted to white respondents. Average is the mean of the following (standardized) items: feeling thermometer, blacks hardworking, blacks intelligent, blacks violent, blacks trustworthy. Higher values indicate warmer feelings (thermometer) or less prejudice (average). All columns include controls for age, age squared, gender, state and year by region fixed effects. Columns 1 and 3 control for predicted and columns 2 and 4 for instrumented share of (non-Mexican) immigrants. Standard errors clustered at the state level.

Table A.6. Predictors of 1960 share of Mexican immigrants

Dep. Variable	Share Mexican
Share black 1960	-0.044**
	(0.021)
Share foreign-born 1960	0.029
	(0.023)
Share rural 1960	0.252
	(1.514)
Share high school graduates 1960	-0.079
	(0.072)
Share college graduates 1960	0.605**
	(0.281)
Unemployment rate 1960	0.161
	(0.147)
Distance from Mexico	-0.001**
	(0.000)
Observations	51
R-squared	0.404

Notes: Data on share foreign-born and share rural are from NHGIS. Data on the share of high school and college graduates and the unemployment rate are from the 5% IPUMS sample. Distance from Mexico measured in hundred kilometers. Robust standard errors in parentheses.

Table A.7. Robustness to the inclusion of baseline controls

Dep. variable	Feeling thermometer blacks		Average	
	Baseline (1)	State controls×Year FE (2)	Baseline (3)	State controls×Year FE (4)
Share Mexican	76.030**	159.208	4.224**	10.522**
	(36.304)	(100.746)	(1.733)	(4.145)
Observations	17,188	17,188	17,446	17,446
R-squared	0.033	0.036	0.031	0.034
F-stat	131.3	21.81	132.1	22.28

Notes: Years 1970-2010. The sample is restricted to white ANES respondents. Average is the mean of the following (standardized) items: feeling thermometer, blacks hardworking, blacks intelligent, blacks violent, blacks trustworthy. Higher values indicate warmer feelings (thermometer) or less prejudice (average). All columns include controls for age, age squared, gender, state and year by region fixed effects, and predicted share (non-Mexican) immigrants. Columns (2) and (4) further include interactions of the following state-level variables with census year fixed effects: share blacks in 1960, share immigrants in 1960, share rural in 1960, share high school graduates in 1960, unemployment rate in 1960, distance from Mexico. Standard errors clustered at the state level.

Table A.8. Accounting for the time-varying effect of 1960 Mexican shares

Dep. variable	feeling thermometer blacks				Average			
	Predicted share Mexican		Placebo		Predicted share Mexican		Placebo	
	Reduced form	2SLS	Reduced form	2SLS	Reduced form	2SLS	Reduced form	2SLS
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Predicted share Mexican	51.836**				2.874**			
	(23.103)				(1.182)			
Share Mexican		69.881**		10.145		3.910**		-0.792
		(33.876)		(37.785)		(1.679)		(1.683)
Placebo predicted share Mexican			-5.331				0.416	
			(19.808)				(0.886)	
Observations	17,188	17,188	17,188	17,188	17,446	17,446	17,446	17,446
R-squared	0.034	0.033	0.034	0.033	0.033	0.031	0.032	0.032
AP F-Stat Share Mexican		87.70		74.80		88.03		75.15

Notes: Years 1970-2010. The sample is restricted to white respondents. *Placebo predicted share Mexican* is constructed by assigning the average Mexican inflow over the period 1970-2010 to 1960 state-level shares of Mexicans. Average is the mean of the following (standardized) items: feeling thermometer, blacks hardworking, blacks intelligent, blacks violent, blacks trustworthy. Higher values indicate warmer feelings (thermometer) or less prejudice (average). All columns include controls for age, age squared, gender, state and year by region fixed effects. Standard errors clustered at the state level.

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Table A.9. Heterogeneity by party affiliation

Dependent variable	Feeling thermometer blacks		Average	
	(1)	(2)	(3)	(4)
Share Mexican	-2.056	21.574	0.361	1.243
	(32.535)	(31.717)	(1.237)	(1.252)
Share Mexican × Democrat	36.895***		1.483***	
	(9.314)		(0.495)	
Share Mexican × Republican		-21.312***		-0.703***
		(4.974)		(0.168)
Mean dep. variable	63.067	63.067	-0.139	-0.139
Observations	17,188	17,188	17,446	17,446
R-squared	0.031	0.030	0.030	0.029
AP F-Stat Share mexican	270.3	50.68	272.9	51.84
AP F-Stat interaction	20.60	105	20.58	105.6

Notes: 2SLS estimates reported. Years 1970-2010. The sample is restricted to white respondents. Average is the mean of the following (standardized) items: feeling thermometer, blacks hardworking, blacks intelligent, blacks violent, blacks trustworthy. Higher values indicate warmer feelings (thermometer) or less prejudice (average). All columns include controls for age, age squared, gender, state and year by region fixed effects, and predicted share of non-Mexican immigrants. Standard errors clustered at the state level.

Table A.10. Effects on ideology

Dependent variable	Conservative		Increase gov. spending	
	OLS	2SLS	OLS	2SLS
	(1)	(2)	(3)	(4)
Share Mexican	-2.531	5.538	-5.239	6.323
	(2.045)	(3.333)	(3.159)	(8.751)
Observations	15,916	15,916	12,700	12,700
R-squared	0.045	0.043	0.053	0.052
F-stat		139.7		63.84

Notes: Years 1970-2010. The sample is restricted to white respondents. All columns include controls for age, age squared, gender and state and year by region fixed effects. Columns 1 and 3 control for share of non-Mexican immigrants and columns 2 and 4 control for share of non-Mexican immigrants predicted by equation 4. Standard errors clustered at the state level.

Table A.11. Assessing the possibility of selective migration

Dependent variable	Share black		Log white population	
	OLS	2SLS	OLS	2SLS
	(1)	(2)	(3)	(4)
Share Mexican	-0.088***	-0.278	-0.014	-3.125
	(0.026)	(0.277)	(0.209)	(3.874)
Observations	6,735	6,735	6,735	6,735
R-squared	0.991	0.990	0.996	0.995
F-stat		16.72		16.72

Notes: Years 1990-2010. All columns control for county and year by state fixed effects. Columns 1 and 3 control for share of non-Mexican immigrants and columns 2 and 4 control for share of non-Mexican immigrants predicted by equation 4. Standard errors clustered at the county level.