Economic Reasoning with a Racial Hue: Is the Immigration Consensus Purely Race Neutral?

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Leading research is converging on the finding that citizens from immigrant-receiving nations strongly prefer the entry of high-skilled to low-skilled immigrants. Prior studies have largely interpreted this “skill premium” as deriving from sociotropic economic considerations. We argue that a purely economic conceptualization offers an incomplete understanding of the processes generating the skill premium, as it overlooks the role of prejudice as a factor undergirding citizens’ preferences. We contend that the skill premium is a manifestation of prejudice inasmuch as it constitutes a preference for those atypical of the existing immigrant population. Through reanalysis of data from published work, as well as through original survey experiments, we demonstrate that a purely economic interpretation of the skill premium fails a range of critical tests. Our findings suggest that rather than solely representing a race-neutral preference for skilled immigrants, the skill premium partly represents a preference against disliked prevalent immigrants.

One of the most important and consistent findings to emerge from the academic study of immigration politics over the past decade is the seemingly uniform preference for high-skilled immigrants among citizens in the United States (e.g., Hainmueller and Hiscox 2010; Hainmueller and Hopkins 2015; Wright, Levy, and Citrin 2016) and many other industrialized nations (e.g., Bansak, Hainmueller, and Hangartner 2016; Iyengar et al. 2013; Valentino et al. 2017). Employing sophisticated experimental designs, these works demonstrate that, across a host of immigrant-receiving nations, citizens’ judgments about whether to admit an immigrant are significantly affected by an immigrant’s skill-level independent of her nationality, skin tone, or religious practices—and irrespective of citizens’ own economic position, ethnic prejudice, or partisanship.

These findings are significant in many respects. First, they stand in contrast to earlier work arguing that labor market competition drives immigration attitudes, with citizens opposing the entry of immigrants of their own skill level (e.g., Scheve and Slaughter 2001). This line of research is also distinct from a bedrock of existing scholarship that finds that cultural concerns and ethnic prejudice serve as paramount sources of mass opposition to immigration (e.g., Citrin et al. 1997), suggesting instead that the widespread preference for high-skilled immigrants from all ethnic backgrounds represents a “hidden consensus” (Hainmueller and Hopkins 2015). The principal conclusion of this recent work is that citizens’ attitudes toward immigration generally reflect “sociotropic” considerations as opposed to self-interest: high-skilled immigrants are preferred because people are making economic determinations about the net benefits of their entry vis-à-vis low-skilled immigrants. Second, on a normative level, if people’s sociotropic judgments are divorced from prejudice, then the skill premium implies a modicum of vindication of American citizens for their pronounced opposition to immigration. What previously appeared to be unbridled nativism may have been the distorted detection in crude research designs of what is more accurately a blanket opposition to low-skilled (and conversely support for high-skilled) immigrants of any country or creed. From a public policy perspective, these find-
ings suggest that the United States could easily transition to a Canadian- or Australian-style immigration system based on skill and economic need, as recently suggested by President Trump.

In this article, we raise important normative, theoretical, and empirical concerns about how to interpret the findings from this recent body of research. At a normative level, we attempt to come to terms with two seemingly disconcerting observations. First, Americans seem to prefer a type of immigrant that is rare, given that most of the foreign-born population in the United States is low skilled (Camarota 2012). Second, Americans seem to prefer high-skilled immigrants for putatively sociotropic economic reasons, even though low-skilled immigrant labor is an important backbone of the US economy, as whole sectors of the economy have become “structurally dependent” on low-skilled immigration (Cornelius and Rosenblum 2005).

With respect to theory, we focus on how we should interpret what we term the “skill premium” and question race-neutral interpretations. Prevailing sociotropic interpretations of the skill premium presume that it derives from a determination among citizens that high-skilled immigrants offer more economic benefits and impose fewer costs than low-skilled immigrants. Here we offer an alternative interpretation grounded in research on “new racism” and the “coding” of prejudice (Huddy and Feldman 2009), which is that the skill premium partly reflects a prejudice-based aversion to the modal immigrant most prevalent in one’s country. In other words, rather than solely representing a race-neutral preference for skilled immigrants, the skill premium represents a preference against disliked prevalent immigrants. In the American case, this would consist of a prejudice-based aversion to Latinos, who are by far the most prevalent immigrant group and who largely work low-skilled jobs. This alternative account helps explain why Americans strongly support immigrants who are the most atypical.

In terms of the empirical analysis of public opinion on immigration, this alternative account subsumes the contention that citizens make cultural judgments about immigrants based on information about their skill level and that these cultural judgments vary based on the race of the immigrant. Sophisticated experimental designs, such as conjoint analysis, attempt to address this concern by controlling for cultural attributes. However, as Dafoe, Zhang, and Caughey (2015) have shown, omitted-variable bias can still creep into these carefully controlled designs, creating problematic confounds. On top of this, none of the leading studies demonstrating the skill premium provide compelling, direct tests of the presumed race-neutral sociotropic mechanism underlying the observed premium. In sum, our contention is that cultural and economic considerations are deeply intertwined and likely not independent.

The purpose of this article is to subject the ostensibly race-neutral interpretation of the skill premium to a series of “critical tests” designed to offer confirmatory evidence for a purely economic mechanism. Where such tests completely (or partially) fail, we conduct further tests capable of offering supportive evidence for our thesis that prejudice partly underlies Americans’ preference for high-skilled immigrants. The initial critical test we perform assesses whether racial prejudice influences citizens’ conferring of a skill premium to specific immigrant groups (e.g., Latino immigrants), as race-neutral models alone would not predict heterogeneity by respondent prejudice. Initial evidence for our alternative interpretation, however, should be detectable in the form of prejudiced citizens going out of their way to select for skill when the judgment concerns an immigrant from a stigmatized and disliked group. As an initial test of this possibility, we reanalyze data from Hainmueller and Hopkins (2015) and find that the most prejudiced people confer a larger skill premium to Latino immigrants (vs. white immigrants) than those low in prejudice.

Motivated by this finding, we perform an additional set of critical tests with original survey experiments and offer the following findings. First, we replicate with our data the finding that racial differences in the skill premium are concentrated among the most prejudiced individuals. Second, we uncover weak evidence that preexisting attitudes about the value of low- versus high-skilled workers moderate the skill premium. Rather, we find that such beliefs, to the extent they do so at all, condition the skill premium most for white versus Latino immigrants. Moreover, even respondents who claim that low-skilled workers are the most valuable still prefer high-skilled immigrants, suggesting that skill is potentially tapping cultural traits. Third, although the skill premium does decrease in response to exogenously manipulated information about the sociotropic value of low-skilled immigrants, these effects are concentrated among low-prejudice

1. By “omitted variable bias” in survey experiments, Dafoe et al. (2015) refer to the substantive interpretation of the experimental results. For instance, although it is true that a survey experiment can recover an unbiased estimate of the effect of the words “works in a high-skilled occupation,” it could be that when survey respondents read those words, they are instead responding to inferred cultural attributes (e.g., speaks English well) instead of the skill level per se.

2. For simplicity, we refer to sociotropic economic reasoning devoid of prejudice as “race neutral” or “purely economic.” Even if people are injecting race into their economic assessments, they still may be thinking sociotropically (i.e., not in terms of pure self-interest).
individuals evaluating a white immigrant. Fourth, and related to the second finding listed above, we find that manipulating
skill (despite holding cultural attributes constant) affects people’s perceptions of the cultural characteristics of immigrants (e.g., linguistic and cultural assimilation), which suggests that conjoint designs may not be able to perfectly control for cultural attributes. Importantly, we find that manipulating skill affects the perceived cultural characteristics of Latino immigrants to a greater extent than those of white immigrants.

Taken as a whole, the results from this article, rather than supporting the notion of an immigration politics driven by an unprejudiced and uniform public desire for a more skillful workforce, yield a picture of mass preferences over immigration best described as economic reasoning with a racial hue. In other words, although we do replicate the finding of an overall preference for high-skilled immigrants, this preference is not completely free from the influence of prejudice, as the amount of value that Americans place on skill varies in a racially discriminatory manner. The results from this article speak to ongoing scholarly efforts to track the continually morphing expression of prejudice within a sociopolitical context where strong norms discourage the overt expression of racial prejudice. We conclude by discussing the implications of our findings for studies of immigration politics and avenues for future research.

THE “SKILL PREMIUM”: EXISTING AND ALTERNATIVE EXPLANATIONS

The theory of sociotropic politics contends that citizens’ policy preferences and political decisions are strongly influenced by assessments of national economic conditions and the motivation to promote (oppose) policies and candidates believed to enhance (threaten) collective economic well-being (Kinder and Kiewiet 1981). Applied to the study of immigration politics, this theory suggests that public opinion on immigration is influenced by judgments about the health of the economy and beliefs about the economic impacts of immigration. A basic deduction from this theoretical framework is that citizens will support the entry of immigrants believed to benefit the national workforce and economy and, alternately, will oppose those believed to impose costs or stress on public works. Sociotropic theory has received support within the domain of immigration politics, as scholarship consistently finds that beliefs about the state of the national economy and concerns about the collective economic impacts of immigration predict citizens’ immigration policy preferences (e.g., Citrin et al. 1997). Over the past decade, however, unprecedented support for sociotropic theory has come from studies employing sophisticated experimental designs intended to isolate the causal effect of economic factors from other variables known to have large impacts on mass preferences over immigration, such as racial prejudice and cultural threat (Hainmueller and Hopkins 2014).

One prominent study within this recent body of work is Hainmueller and Hopkins (2015). In their leading study, Hainmueller and Hopkins conduct a conjoint analysis in which they present Americans with profiles of hypothetical immigrants and ask whether people would support their admission to the United States. Nine immigrant characteristics are manipulated: (1) country of origin, (2) profession, (3) education level, (4) prior trips to the United States, (5) language skills, (6) job experience, (7) employment plans, (8) reason for application, and (9) gender. The survey was administered on a nationally representative probability sample collected by Knowledge Networks (now Growth from Knowledge Custom Research). Hainmueller and Hopkins find strong and broad support among the mass public for skilled immigrants. Immigrants with a college degree are preferred 19.5 percentage points more than immigrants without a formal education. Immigrants in high-skilled occupations are also preferred over the baseline category of janitors: doctors (18.5 percentage points), research scientists (14.9 percentage points), and computer programmers (9.8 percentage points). Perhaps more importantly, Hainmueller and Hopkins find limited heterogeneity for this skill preference, with no significant differences between high-prejudice (HP) and low-prejudice (LP) respondents. In discussing how their findings bear on our understanding of what drives immigration politics, Hainmueller and Hopkins contend that “sociotropic explanations . . . receive strong support. Americans express a pronounced preference for immigrants who are well educated, are in high-skilled professions, and plan to work upon arrival” (2015, 545).3

While the existence of the skill premium represents a strong and very consistent finding, there are unanswered questions about the actual processes generating the premium and, more specifically, whether the premium is driven purely by race-neutral judgments and concerns. The primary alternative explanation we entertain is that prejudice is partly driving these results. Consider the type of immigrant receiving the warmest welcome among Americans in Hainmueller and Hopkins’s analysis: a German research scientist with a graduate degree who is fluent in English.4 What stands out immediately is that

3. These empirical conclusions also have policy implications. As Hainmueller and Hopkins (2015) note: “To the extent that opposition to immigrants is rooted in sociotropic perceptions about their likely contributions, that suggests very different immigration and settlement policies than does an opposition rooted in prejudice against specific countries” (546).

4. Reported in Hainmueller and Hopkins (2015), fig. 3.
this most preferred type of immigrant—presumably white and well educated—stands in stark contrast to the most prevalent type of immigrant entering and residing within the United States for several decades: low-skilled Latinos who do not speak fluent English (Lopez, Passel, and Rohal 2015). At the time that Hainmueller and Hopkins’s survey was fielded (December 2011 to January 2012), only 1.5% of the foreign-born population in the United States was from Germany, whereas 52.6% were from Latin America, with 28.9% from Mexico alone (US Census Bureau 2012). The overwhelming majority of Mexican immigrants were classifiable as low skilled because roughly 22% had less than a high school diploma, only 4.8% held a bachelor’s degree or higher (Motel and Patten 2012), and roughly 77% worked in service, construction, farming, or maintenance positions (Lopez 2015).

What does it mean when one of the most advanced and high-quality studies to date essentially finds that Americans as a whole largely prefer immigrants unlike those most present within their nation? One possibility is that prejudice has at least something (but admittedly not everything) to do with this story. We are not the first to raise this conjecture. Indeed, Hainmueller and Hopkins (2015) themselves raise this possibility in the conclusion to their article: “And while it remains plausible that the preference for well-educated immigrants is in part masking prejudices about immigrant groups thought to have low levels of education, that is an issue best addressed in future research” (546). This article represents the future research recommended by Hainmueller and Hopkins.

The conjecture that the skill premium is channeling prejudice appears highly plausible in light of several findings in the literature. First, there is a wealth of evidence that prejudice is a paramount driver of public opinion on immigration. Second, much of this work finds that, to the extent they are found to be significant predictors of opinion, the substantive significance of economic factors pales in comparison to prejudice (e.g., Malhotra, Margalit, and Mo 2013). Third, one of the most active veins of research over the past few decades centers on scholars’ attempts to chronicle how the emergence of strong norms against the holding and expression of prejudice in the post–Civil Rights era has driven prejudice underground, with the consequence being the emergence of new forms of “modern” or “symbolic” prejudice that are more subtle and fused with seemingly race-neutral content (Kinder and Sanders 1996; Mendelberg 2001; Sears 1988).

Work in this latter vein of research finds that prejudice can be unmasked or “decoded,” as in the case of Feldman and Huddy (2005), who find that opposition to race-conscious policies is higher among racially resentful citizens when the target beneficiary is black versus white. In the context of immigration, Sniderman, Hagendoorn, and Prior (2004) observe that seemingly distinct types of threat judgments about immigrants are commonly underscored by antipathy toward immigrant minorities. Building on this, Brader, Valentino, and Suhay (2008) observe that citizens become more opposed to immigration in response to news stories about the costs of immigration when the media focus on Latino compared to white immigrants. Similarly, Hartman, Newman, and Bell (2014) find that citizens express greater indignation over various transgressive behaviors when engaged in by a Latino versus white immigrant. The key point is that this research identifies a persistent pattern, from the study of prejudice toward African Americans to Latino immigrants, where racial animus is channeled into putatively race-neutral concerns. Importantly, this literature identifies a clear tendency for the coding of racial animus into economic concerns. With African Americans, the literature points to the channeling of negative affect into expressions of concern over the failure of blacks to adhere to the Protestant work ethic and the violation of meritocratic principles by affirmative action programs (Kinder and Sanders 1996). With Latino immigrants, the literature points to the channeling of negative affect into concern over labor market competition, depressed wages, and the consumption of public services (Brader et al. 2008; Hartman et al. 2014).

Taken together, this literature lays a strong foundation for the plausibility that the skill premium may in fact be subtly channeling some Americans’ prejudices toward specific immigrant groups, such as Latinos. On this point, one important possibility is that the decision task presented to respondents in recent leading research offers a forum for the exercise of two very different constellations of preferences and motives that nonetheless result in the observation of the same outcome—the skill premium. On the one hand, citizens may be exercising a race-neutral preference for skilled immigrants of any race, color, or creed. On the other hand, citizens may enter such decision tasks with a stored image in mind of the type of immigrant most prevalent within their country (i.e., a low-skilled Latino) and consequently exercise a prejudice-based preference against this immigrant by endorsing the admission of dissimilar immigrants.

**FOUR CRITICAL TESTS**

With this possibility in mind, we offer the following “critical tests” aimed at assessing the likelihood that the skill premium stems completely from race-neutral economic determinations as compared to partly from racial prejudice previously eluding detection. The first critical test described below can be conducted using data from Hainmueller and Hopkins’s study, while the remaining three critical tests require original data collection.
Critical test 1: Does racial prejudice condition the skill premium?
A purely economic interpretation of the sociotropic hypothesis would suggest that the skill premium does not vary by immigrants’ country of origin or citizens’ levels of racial prejudice. Indeed, if the skill premium solely derives from citizens’ determinations about the economic costs and benefits of admitting an immigrant and the presumed desire to strengthen the national economy by promoting a more highly skilled workforce, then all citizens in theory should prefer a doctor over a janitor regardless of country of origin. If, however, selecting for skill represents a choice partly motivated by a prejudice-based aversion to specific immigrant groups, such as those stigmatized by the mass media or most prevalent within one’s country, then we should observe heterogeneity in the conferring of the skill premium across targeted contrasts of immigrant groups by respondents’ level of racial prejudice. Heterogeneity in the skill premium by immigrant country of origin in conjunction with respondent prejudice was not tested in Hainmueller and Hopkins’s original study.

The possibility of this type of heterogeneity is bolstered by research demonstrating that the prevalence of an immigrant group is strongly associated with stigmatization and public antipathy. In the United States, Latinos are mentioned more than any other group in media coverage of immigration (Valentino, Brader, and Jardina 2013) and are constructed by media and political elites as a threat to the nation (Chavez 2013), with the scale and persistence of Latino immigration often cited as a central source of threat (Huntington 2004). Accompanying this work, there is accumulating evidence of the uniquely threatened response of Americans to Latino immigrants. Scholarship finds that residing near large Latino populations is associated with greater prejudice toward immigrants (Ha 2010), that negative affect toward Latinos is a paramount predictor of opposition to immigration (Valentino et al. 2013), and perhaps most important, that judgments about immigration policy are substantially influenced by negative implicit (i.e., unconscious) attitudes toward Latino immigrants (Pérez 2010). This work renders it highly plausible that, when faced with the task of choosing between the admission of experimenter-presented immigrant profiles, people may contrast presented profiles with the default mental image of the modal immigrant residing in the United States: a low-skilled Latino. To the extent an individual is prejudiced toward Latinos, a likely outcome is the selection of immigrant profiles most dissimilar to a low-skilled Latino. This process should be particularly likely when the decision task activates ingrained mental images by presenting a Latino applicant. In this way, the skill premium may partially derive from what cognitive psychologists term a “contrast effect” (Scwarz, Strack, and Mai 1991), where judgments about an object reflect a contrasting of the target object with frequently used and mentally accessible information.

Therefore, an initial critical test of the race-neutral interpretation of the skill premium is whether the conferring of a skill premium is moderated by racial prejudice, especially with respect to the evaluation of Latino applicants. A race-neutral interpretation would not predict that prejudice should condition responses to skill differentials of white versus nonwhite immigrants. This test builds on prior work seeking to uncover hidden prejudice in the form of assessing whether measured racial antipathies moderate the impact of a treatment directed at a nonwhite target but not a white target (e.g., Feldman and Huddy 2005). The basic logic of this test is straightforward: if we observe respondents awarding a skill premium to Latino immigrants but not to white immigrants, evidence that such a differential is rooted in racial prejudice would be supported by finding this difference among those expressing prejudice against Latinos but not among those exhibiting low levels of prejudice. Finding that LP and HP citizens both award a skill premium to Latino immigrants but not white immigrants would suggest that a factor other than prejudice is motivating this type of heterogeneity in the skill premium by race. This leads to the following set of competing expectations (below we use “CT” to represent an empirical pattern consistent with a race-neutral interpretation of the skill premium and “CT,” to indicate an alternative empirical pattern consistent with the injection of prejudice into citizen attitudes):

**CT1:** American citizens will confer a skill premium equally to white and Latino immigrants. If they do not, this difference will not be conditioned by prejudice toward Latinos.

**CT1+:** American citizens will confer a skill premium to Latino immigrants but not white immigrants, and this difference will be most pronounced among those highest in prejudice toward Latinos.

Critical test 2: Do preexisting sociotropic beliefs about skill condition the skill premium?
A second critical test examines whether preexisting sociotropic beliefs about the relative value of low- versus high-skilled workers condition the skill premium. One interpretation of the skill premium is that if people prefer skilled immigrants to nonskilled immigrants, they are doing so for purely economic reasons—that is, because they believe that high-skilled workers contribute more to the workforce and economy than low-skilled workers. A race-neutral interpre-
tation would predict that the skill premium should be concentrated among people who believe that high-skilled workers are more valuable to the economy than low-skilled workers and that such individuals should constitute the majority of the population. Importantly, this predisposition is not about immigrants per se but about workers generally. Further, there should be no variation by immigrant race. If these preexisting economic attitudes do not condition conferring of the skill premium, or only condition doing so for white immigrants, then it would suggest that prejudice comprises some of the skill premium.

CT2: American citizens’ preexisting sociotropic beliefs about skilled workers should condition their awarding of a skill premium, such that the skill premium is concentrated among those with the belief that high-skilled workers are more economically valuable than low-skilled workers.

CT2A: Manipulating skill will not alter citizens’ perceptions of an immigrant’s cultural characteristics and will do so without decreasing employment among American workers (Zavodny 2011). Do people respond to these sorts of sociotropic arguments? A race-neutral interpretation would suggest that people—motivated by the desire to promote the well-being of the economy—would be responsive to this information, whereas a competing view would hold that this information would have little efficacy because people mainly use skill as a signal for cultural attributes. Further, the race-neutral interpretation would not predict there to be any heterogeneity in receptivity to the information by individual levels of prejudice or immigrant country of origin.

CT3: The provision of information about the economic benefits of low-skilled immigrant labor will attenuate the skill premium. Responsiveness to this information will not vary by respondent prejudice and immigrant country of origin.

CT3A: The provision of information about the economic benefits of low-skilled immigrant labor will not attenuate the skill premium. Responsiveness to this information will be lower among prejudiced citizens when evaluating the admission of a Latino versus a white immigrant.

Critical test 3: Does providing information about the value of low-skilled immigrant workers attenuate the skill premium?

One presumption underlying the attribution of purely economic reasoning to the skill premium is that high-skilled immigrants are more economically beneficial than low-skilled immigrants. Indeed, germane to sociotropic theory accounting for the skill premium is the seemingly self-evident proposition that high-skilled immigrants contribute more to the national economy than low-skilled immigrants. However, such logic in many ways stands divorced from economic reality in the United States and many other immigrant-receiving nations, where various sectors of the economy are structurally dependent on low-skilled immigrant labor (Cornelius and Rosenblum 2005). Even if it were the case that many citizens believed that high-skilled workers are more beneficial to the economy, we know it to be true that low-skilled workers are extremely important to the maintenance of daily consumption patterns for native-born citizens throughout society. For example, immigration advocates argue that without low-skilled immigrant workers, the costs of farm produce would greatly increase, and high-skill jobs supported by low-skilled immigrant labor would suffer. Supporting this claim, several nonpartisan economic analyses report that low-skilled immigrant labor decreases the cost of a range of goods and services consumed by Americans (e.g., produce, clothing and textiles, construction; Cortes 2008) and does so without decreasing employment among American workers (Zavodny 2011). Do people respond to these sorts of sociotropic arguments? A race-neutral interpretation would suggest that people—motivated by the desire to promote the well-being of the economy—would be responsive to this information, whereas a competing view would hold that this information would have little efficacy because people mainly use skill as a signal for cultural attributes. Further, the race-neutral interpretation would not predict there to be any heterogeneity in receptivity to the information by individual levels of prejudice or immigrant country of origin.

Critical test 4: Does manipulating skill also manipulate cultural attributes?

Controlling for cultural attributes related to assimilation such as language skill and previous trips to the United States should ensure that manipulating skill in an experimental setting does not also signal cultural characteristics. Accordingly, the fourth and final critical test we propose is simply a manipulation check to ensure that varying skill (while holding cultural traits constant) uniquely affects people’s perceptions of an immigrant’s skill level and not the possibility of cultural assimilation. In other words, we assess whether people are using economic variables such as skill as a proxy for cultural variables such as assimilation potential. Further, we can test whether any failures of a manipulation check are conditional on the race of the immigrant.

CT4: Manipulating skill will not alter citizens’ perception of an immigrant’s cultural characteristics and level of assimilation.

CT4A: Manipulating skill will alter citizens’ perception of an immigrant’s cultural characteristics and will do so the most for Latino versus white immigrants.
REANALYSIS OF HAINMUELLER AND HOPKINS

The data collected by Hainmueller and Hopkins (2015) offer an opportunity to perform CT1 explicated above. We also replicate this test as part of our original data collection effort. With respect to CT1, we test for heterogeneity not explored by Hainmueller and Hopkins. In this test, we examine whether the skill premium differs by levels of racial prejudice and the applicant’s country of origin. We focus on four countries: Germany (a predominantly white nation that has the highest support for admission in the Hainmueller and Hopkins data), France and Poland (the two other predominantly white, developed economies in the Hainmueller and Hopkins study), and Mexico (a predominantly nonwhite nation that is the largest source of immigration to the United States). We compare the premium respondents give to three high-skilled occupations mentioned above relative to janitors, the least valued category.6

Per CT1, a race-neutral interpretation of the sociotropic hypothesis would suggest that people should prefer white European and Mexican high-skilled immigrants equally, particularly since variables related to cultural assimilation are controlled for in the conjoint design. However, as shown in figure 1, HP individuals confer a higher skill premium on Mexican immigrants than LP individuals.6 This is not consistent with a race-neutral interpretation of the skill premium, which would not predict that prejudice should be a conditioning variable (consistent with Hainmueller and Hopkins’s idea of a “hidden consensus”). As shown in figure 1, HP respondents on average provide no significant skill premium to white European immigrants combined (−10.3 percentage points; SE = 7.9) and an extremely large, statistically significant skill premium to Mexican immigrants (34.7 percentage points; SE = 15.7).7 However, LP respondents provide more similar skill premiums to white European immigrants (16.8 percentage points; SE = 6.1) and Mexicans (23.5 percentage points; SE = 9.6), both of which are statistically significant. These differences are primarily due to HP individuals accepting low-skilled Mexicans at a low rate (43.8%). We observe similar patterns when using education to proxy for skill by examining the effects of a graduate degree compared to a high school degree or lower (see fig. A1, available online). HP respondents in Hainmueller and Hopkins’s study go out of their way to reward for skill when evaluating an applicant from a stigmatized immigrant group but exhibit no such skill-based choice, on average, when evaluating white immigrants. These results demonstrate a previously overlooked interplay between an immigrant’s race and host country residents’ ethnic prejudices. In the next section, we replicate the results from our first critical test and then turn to our three remaining critical tests. As these tests involve variables not available in Hainmueller and Hopkins’s data, we needed to collect new data.

We conducted an original, two-wave longitudinal survey experiment on Amazon’s Mechanical Turk (MTurk), along with a replication study on a national sample collected by Survey Sampling International (SSI). Each data set has

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5. We use janitors as the baseline category because these workers receive the lowest level of admission support in the Hainmueller and Hopkins study and are also the baseline category in Hainmueller and Hopkins’s analysis. We obtain similar results if we broaden the category of low-skilled workers to janitors, waiters, child care providers, gardeners, and construction workers.

6. We bifurcate respondents into HP- and LP-based responses to the 0–100 feeling thermometer items for “Hispanics.” Respondents who exhibited a cold (below 50) disposition toward Hispanics were coded as LP. Results are similar when also including the feeling thermometers for “immigrants.” Feeling thermometers for blacks and Asians, which are also in the data, are not relevant for this analysis. We do not use Hainmueller and Hopkins’s definition of prejudice because it includes the feeling thermometer of the in-group. This produced codings in which 15.6% of HP individuals, for example, had positive feelings toward Hispanics. We believe it is more straightforward to assess whether people rate a group warmly or coldly on the feeling thermometer, regardless of their views toward their in-group.

7. The outcome variable is the primary binary measure reported by Hainmueller and Hopkins about whether a respondent would admit an immigrant based on the profile information presented.
unique advantages and disadvantages, and the fact that the results are similar across both provides confidence in the reported findings. The main advantage of the SSI data set is that the surveyed population is more diverse. However, for the MTurk study, we were able to administer the survey over two waves, which enabled us to measure important pretreatment moderators in the first wave and allowed time to pass to avoid priming or contaminating the main experiment administered in the second wave.8

**ORIGINAL LONGITUDINAL SURVEY EXPERIMENT**

Wave 1 of the MTurk study was administered on May 2, 2016, to 1,609 respondents. Wave 2 was administered between May 4 and May 5, 2016. The reinterview rate was 85.1%.9 Variables are recoded to lie between 0 and 1. Full question wordings are provided in appendix 1 (apps. 1–3 are available online). In wave 1 we collected demographic information, asked about respondents’ attitudes on the sociotropic value of high- versus low-skilled workers, and asked questions tapping into prejudice toward Latinos. In wave 2, we conducted the experiment and asked the outcome variables. The point of separating the two waves in time was to avoid priming prejudice or sociotropic thinking immediately prior to the experiment. The demographic characteristics of our sample are diverse. We compare our data to Hainmueller and Hopkins’s Knowledge Networks study, the 2012 American National Election Study (ANES), and the one-year and five-year samples of the 2014 American Community Survey in table A0 (tables A0–A7 are available online). As shown in the table, the MTurk sample was very much in line with the other samples on key demographics. Moreover, we replicate the key findings from Hainmueller and Hopkins in our own data set, giving us confidence in the validity of these data for the research questions at hand. Our sample was a bit more educated and more Left-leaning and contained fewer Latinos than the other surveys. If anything, this should bias us toward confirming the critical tests. Nonetheless, as explained below, we replicated some analyses using SSI data and obtained similar results.

The design of our study employs Dafoe et al.’s (2015) controlled comparisons approach, where we fix a set of attributes of the immigrant profile and vary the ones that are relevant for our analysis.10 The experimental design is summarized in appendix 2. We employed a $2 \times 2 \times 2$ factorial design in which we manipulated three things. First, the country of origin of the immigrant: Canada, a predominantly white nation that is culturally similar to the United States, and Mexico, a predominantly nonwhite nation. Second, we manipulated two levels of skill: high and low. The high-skilled immigrant presented to respondents completed a graduate degree and was a doctor. The low-skilled immigrant had no formal education and was a farm laborer. We therefore operationalize skill as education and occupation jointly. As shown in appendix 2, we fix the other features that Hainmueller and Hopkins used in their conjoint design.11 The third manipulated factor was whether the respondent received nonpartisan information from technical reports about the sociotropic value of low-skilled immigrants before seeing the immigrant profile (treatment text can be found in app. 3). The treatment information conveyed that low-skilled immigration reduces the costs of goods and services without adverse labor market effects.

After viewing the immigrant profile, respondents were asked on a seven-point scale whether the United States should admit the immigrant. We measure prejudice with items tapping into negative stereotypes about Latinos (whites) for our analysis of admission support for Mexican (Canadian) applicants. Drawing upon the negative stereotype items from the 2008 ANES, we asked respondents on five-point scales to rate groups with respect to four characteristics: “lazy,” “intelligent,” “violent,” and “here illegally.” The response options were “extremely well,” “very well,” “somewhat well,” “slightly well,” and “not well at all.” For each scale, we created an additive index (Latinos: $\alpha = .74$; whites: $\alpha = .52$) and then standardized the scale. We measure preexisting beliefs about the economic benefits of low- versus high-skilled workers by asking whether low- or high-skilled workers contribute most to the strength of the American economy, allowing respondents to say that both contribute equally. For CT4, we included a manipulation check in which we asked respondents to rate the immigrant they just read about on a three-point scale (“low,” “medium,” “high”) with respect to six attributes:

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8. Some have raised concerns with the representativeness of MTurk data. However, the available empirical evidence does not validate these concerns. MTurk experimental results replicate very well when studies are run on more diverse samples (Mullinix et al. 2015), which is what we find here as well.

9. Because the experimental treatments and the outcome variables were both administered in wave 2, there is no issue with bias stemming from attrition from wave 1 to wave 2.

10. We did not employ a conjoint design because we wanted to conserve statistical power. Conjoint designs are most valuable in settings in which the researchers are interested in assessing the effects of numerous variables simultaneously (as in Hainmueller and Hopkins). Here, we focus on only two variables: skill and country of origin.

11. We fixed the attributes at the levels described in app. 2 so that we focus on the skill premium. We set most of the attributes at middling levels so that none of them swamped the skill effect. We set economic prospects at a high level in order to make sure that high skill was interpreted as a clear economic benefit.
(1) English language ability, (2) assimilation to American culture, (3) practicing a Christian religion, (4) level of education, (5) level of professional skills, and (6) likelihood of being employed in the United States. Attributes 1–3 reflect cultural characteristics that should not be affected by the skill manipulations. Indeed, attribute 1 is one of the fixed characteristics in the immigrant profile. Attributes 4–6 are skill characteristics that should be manipulated, particularly attribute 4, which is a component of the immigrant profile.

Results: Replicating the skill premium and critical test 1

First, we replicate the basic skill premium observed in prior work, as the skill manipulation exerted a positive and significant effect on respondents’ support for admission. Pooling across both countries of origin, respondents provide an overall skill premium to immigrants of 16.9 percentage points ($p < .001$), replicating what numerous studies in the field have found. This basic consistency with prior work provides confidence in our web-based sample. We next turn to our results for CT1. Figure 2A illustrates that individuals lowest in prejudice afford a roughly equal skill premium to Canadian ($\beta = .15, p = .002$) and Mexican ($\beta = .12, p = .008$) immigrants. The difference in the skill effect across ethnicities is not statistically significant ($p = .70$). However, individuals highest in prejudice provide a higher skill premium to Mexicans ($\beta = .35, p < .001$) as compared to Canadians ($\beta = .08, p = .39$), which is consistent with what we found in the Hainmueller and Hopkins data. The test of the differences between the two effects is significant at $p = .04$, and perhaps more importantly, the skill premium awarded to Mexican immigrants is significantly higher among HP respondents compared to LP respondents ($p = .04$).

In short, prejudice does not moderate the effect of skill on admission support for a Canadian applicant but does moderate the effect of skill on admission support for a Mexican applicant. The results of CT1 do not support a race-neutral interpretation of the skill premium. Rather, they demonstrate a previously overlooked interplay between an immigrant’s race and citizens’ ethnic prejudices. These findings align with what was found in our reanalysis of Hainmueller and Hopkins’s data and with our alternative account of the skill premium. The failure of findings from both the Hainmueller and Hopkins data and our own to pass CT1 offers some consistent and suggestive evidence of citizens’ exercise of economic reasoning in a partially racially discriminatory manner. The pattern of this racial heterogeneity suggests that economic factors matter more for prejudiced Americans when considering the admission of a nonwhite, stigmatized, and highly prevalent immigrant group than when considering a white, nonstigmatized, and lower-prevalence immigrant group.

Results: Critical test 2

We next turn to CT2. Interestingly, most of our sample does not operate with a standing belief about the superior economic importance of high-skilled workers. Indeed, 71.6% of our sample views high- and low-skilled workers as equally important, 13.8% views low-skilled workers as contributing more to the economy and workforce than low-skilled workers. Such findings

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12. All reported $p$-values are two-tailed. The regression results on which the figures are based are presented in apps. 1–3. For CT1, CT2, and CT4, we analyze respondents who received no information about the economic value of high-education immigrants.
offer some pause when dealing with any account of the skill premium predicated on citizens’ belief that high-skilled workers benefit the economy more than low-skilled workers. The distribution of responses to this item, however, is not of primary concern to our analysis. A purely economic view of the sociotropic hypothesis would predict that the skill premium should be concentrated among people who perceive that high-skilled workers are more valuable to the economy than low-skilled workers. Importantly, this predisposition is not about immigrants per se but about workers generally. Further, there should be no variation by the race of an immigrant.

As shown in figure 3A, we find that prior beliefs about the value of occupational skill condition the skill premium, pooling all groups of immigrants together. As seen in the left-hand side of the figure, people who believe that high-skilled workers are more beneficial exhibit a skill premium of 23 percentage points ($p < .001$), and people who believe that low-skilled workers are more beneficial exhibit a smaller skill premium of 11 percentage points ($p = .001$). Further, the difference between those believing in the superior value of high- versus low-skilled immigrants is statistically significant ($p = .051$). In short, there appears to be a somewhat monotonic increase in the skill premium across the spectrum of preexisting beliefs concerning the value of occupational skill to the national economy. All of this seems consistent with a race-neutral interpretation of the skill premium.

However, there are two patterns in the data that suggest that prejudice is an important source of sociotropic judgments. First, even people believing that low-skilled workers are more important or equally important exhibit a positive and statistically significant skill premium. A purely economic interpretation would have predicted that individuals holding these beliefs would exhibit a negative and zero skill premium, respectively. This suggests that part of the observed skill premium is picking up noneconomic considerations. Second, as shown in the center and right regions of figure 3A, economic predispositions condition the skill premium for Canadian immigrants but not for Mexican immigrants. For Canadians, people who think that high-skilled workers contribute more exhibit a skill premium of nearly 20 percentage points ($p < .001$). People who think that low-skilled workers contribute more exhibit a statistically insignificant skill premium of 6.7 percentage points ($p = .13$). The difference between these effects is significant at $p = .10$. However, for Mexican immigrants, the skill premium for people valuing high-skilled workers is 25 percentage points ($p < .001$), which is statistically indistinguishable ($p = .39$) from the 17 percentage point ($p = .001$) skill premium for people valuing low-skilled workers. Overall, the results from CT2 are mixed but are generally inconsistent with the race-neutral interpretation. Regardless of economic predispositions, most people prefer skilled immigrants. Furthermore, economic predispositions only seem to condition the skill premium for white immigrants.

**Results: Critical test 3**

The third critical test takes advantage of the third factor of the experimental design—whether people received information about the importance of low-skilled workers to the economy prior to viewing the immigrant profile. A race-neutral interpretation of the sociotropic hypothesis would

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13. Estimating the effects separately for the three levels of the beliefs about skill indicates that a linear operationalization is warranted. The skill premium of the middle category is 17.0 percentage points ($p = .001$), very similar to the estimated value of 17.3 percentage points.
suggest that people would be responsive to this information, whereas a competing view would hold that this information would have little efficacy because people mainly use skill as a signal for cultural attributes. Further, the race-neutral interpretation would not predict there to be any heterogeneity in receptivity of the information by immigrant race or across levels of respondent prejudice.

As shown in figure 4A, we find some evidence that providing information about the benefits of low-skilled workers attenuates the skill premium, as we observe a reduction of nearly 6 percentage points ($p = .017$). However, this effect differs somewhat for Canadians and Mexicans, as the interaction of the skill manipulation and low-skill benefits information manipulation is negative and significant for Canadian immigrants ($\beta = -.07, p = .038$) and negative but insignificant for Mexicans ($\beta = -.04, p = .233$). These differences suggest that the skill premium citizens are willing to confer is somewhat more responsive to information about the economic benefits of low-skilled immigration when considering a white, compared to a Latino, immigrant. Such differential responsiveness would not be expected if citizens were solely drawing upon economic considerations when considering admission decisions. Although the difference between these effects is not statistically significant at conventional levels, substantial heterogeneity emerges once we also take into account respondent prejudice.

As illustrated in figure 4B, HP respondents do not respond at all to the information manipulation, as the interaction between the skill manipulation and information manipulation is statistically insignificant for both Canadians ($\beta = .005, p = .91$) and Mexicans ($\beta = -.023, p = .68$). However, LP respondents do decrease their skill preference noticeably more in response to the information manipulation, with the interaction term between the skill and information manipulations for evaluating Canadians being large and highly significant ($\beta = -.14, p = .003$) and less substantial and marginally significant for those evaluating Mexicans ($\beta = -.07, p = .10$). Pooled across countries, HP individuals are significantly less responsive to the treatment information than LP individuals ($\beta = .10, p = .04$). Taken as a whole, these findings muddy the waters further with respect to a purely economic mechanism underlying the skill premium. The provision of ostensibly objective sociotropic information should be salient to respondents and, thus, used to update what are believed to be sociotropic judgments about the benefits of specific types of immigrants, with the result being the attenuation of the skill premium. What we find is that such attenuation only really occurs for a white immigrant and is most noticeable among respondents low in prejudice. Although the effects by respondent prejudice are not overly striking, they do uncover a pattern that fails to comport with a race-neutral interpretation and suggests that prejudice conditions whether ostensibly objective information is used by citizens to update their sociotropic judgments and that prejudice serves as a source of resistance to engaging in purely economic reasoning.

**Results: Critical test 4**

Moving to CT4, we hope that the design manipulates skill per se. Similar to Hainmueller and Hopkins, we control for cultural attributes related to assimilation such as language skill and previous trips to the United States. However, we want to make sure that manipulating skill does not also signal cultural characteristics and that this is not particularly the case for nonwhite immigrants.

As shown in figure 5, manipulating skill also seems to manipulate attributes related to cultural assimilation, suggesting a
While our sample compares reasonably well on several key demographics to other online samples, our sample nonetheless contains a higher share of educated, liberal, and non-Latino respondents. Furthermore, an additional concern with MTurk samples is the nonnaive of respondents who take a high volume of surveys weekly or daily.

To address these concerns, we conducted a replication check on key results using an online sample of 3,438 citizens collected by SSI. As shown in table A0, the SSI sample is more diverse with respect to education, ideology, and race. We restrict our analysis to non-Hispanic respondents. With these data, we focus on replicating the results for CT1 and CT2. We employed the same experimental design used in our MTurk study, with the main differences being that our SSI experiment was condensed into a single wave and did not include the low-skilled immigrant benefits information manipulation. Additionally, to assess whether our results are robust to comparisons between applicants from Mexico and a wider array of “white” immigrants, our SSI survey experiment uses Sweden as the comparison country of origin.

We present the results for CT1 in figure 2B. Consistent with the results from our reanalysis of Hainmueller and Hopkins and our MTurk panel study, we find that prejudice moderates the conferring of the skill premium. When evaluating the admission of a Swedish applicant, we find that LP individuals conferred a higher skill premium than HP individuals, although this difference is not statistically significant ($\beta = -.24, p = .24$). When evaluating a Mexican applicant, however, HP individuals exhibit a significantly higher skill premium than LP individuals ($\beta = .24, p = .08$). Importantly, the difference between these two effects is significant at $p = .04$. Turning to CT2, we present the results from our replication analysis in figure 3B.14 As is the case in the MTurk data, we find in our SSI data that respondents who perceive high-skilled workers as more beneficial award a significantly larger skill premium but only in the case of a white (i.e., Swedish) immigrant ($\beta = .11, p = .03$). With respect to Mexican applicants, we find no statistically significant differences in the skill premium across beliefs about the relative value of low- versus high-skilled.

14. For this study, when measuring respondents’ beliefs about the benefits of low- vs. high-skilled workers, we forced respondents to choose between the two, as prior research indicates that respondents holding discriminating beliefs may opt for a neutral response when provided one (Sturgis, Roberts, and Smith 2014). The results in fig. 3B indicate that this difference in measurement choice had little effect on the results. Further, we find that 60% of respondents believe that high-skilled workers are not more valuable than low-skilled workers, which again is not consistent with the view that Americans hold strong sociotropic beliefs about the value of high-skilled workers.

REPLICATION USING SSI DATA

One main benefit of the MTurk data is our panel design. Our measurement of prejudice, as well as beliefs about the benefits of low-skilled versus high-skilled workers, in wave 1 imparts confidence that our experimental results from wave 2 are not influenced by respondents having had their racial attitudes or economic beliefs primed immediately prior to treatment assignment. Countering this benefit, however, are concerns about the representativeness of MTurk samples.

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CONCLUSION

Very rarely do empirical findings in political science get repeatedly replicated by numerous researchers employing diverse, rigorous research designs. One exception is the recent result that host-country citizens seem to prefer high-skilled to low-skilled immigrants. This study provides one additional replication, increasing our assurance even more in this phenomenon. However, previous studies have offered limited evidence of what undergirds the skill premium. Our findings offer the literature some empirical patterns that are inconsistent with a race-neutral interpretation of the skill premium, suggesting instead that they likely reflect some degree of prejudice on the part of citizens. Disentangling these mechanisms is important because of the policy implications. If there is a broad immigration consensus devoid of prejudice, then it seems easy to obtain compromise on comprehensive immigration reform. Indeed, it does seem to be a puzzle that, despite apparent mass consensus on the issue, there has been significant gridlock in Washington. Our results may help tell part of that story: attitudes toward immigration may be based on economic reasoning but with a clear racial tinge. Our findings align with standing research on “new racism” and “coded” prejudice by suggesting that, similar to expressed concern over immigrants “taking jobs” and “not paying taxes” (Hartman et al., 2014), the expression of concern over immigrant skill can serve as a means of coding prejudice toward Latinos.

Our account is also consistent with recent debates around the Trump Administration’s proposed RAISE Act (S. 1720), which seeks to restrict legal immigration to the United States by shifting from a policy of family reunification to one based on skill. Hainmueller and Hopkins’s (2015) results would suggest that this bill reflects the “hidden consensus” of admitting immigrants based on skill. However, the bill has been vehemently opposed by many groups on the Left as having cultural connotations (Nakamura 2017), consistent with the findings of this article. For example, a popular host on the nationally syndicated radio program LatinoUSA publicly criticized the act by stating: “highly skilled permanent workers is code word for ‘not immigrants from Mexico or central America’” (Ortiz 2017). The bill was heavily influenced by the philosophies of Attorney General Jeff Sessions and Trump adviser Stephen Miller (Goldshan 2017). Some have argued that legislation such as the RAISE Act echoes the national quota system of the Immigration Act of 1924, which restricted immigration from non-European countries (Wong 2016). Interestingly, Sessions spoke positively about the sociotropic economic value of the 1924 restrictions in a 2015 interview with Trump advisor Stephen Bannon for Breitbart (Hahn 2015).

This study also lays the groundwork for future research. We have found evidence of economic reasoning with a racial hue in the context of US immigration. It is important to understand whether this result extends to other immigrant-receiving nations, such as those in Europe. Multiculturalism is a newer phenomenon causing strife in European societies, so it is possible that the heterogeneity by ethnicity and levels of prejudice found in this US-based study would be even more pronounced in other countries. Further, we have demonstrated how difficult it is to divorce skill-based from cultural-based characteristics in the minds of survey respondents, even when using sophisticated conjoint designs. Future scholarship may be able to leverage Dafoe et al.’s (2015) concept of “embedded natural experiments” in order to isolate the effects of immigrant skill per se. Doing so will afford us an improved grasp of how native citizens perceive potential immigrants and consequently a stronger understanding of potential policy reforms.

ACKNOWLEDGMENTS

We thank Jens Hainmueller, David Hendry, and Dan Hopkins for valuable feedback on this article. A previous version was presented at the 2017 Annual Meeting of the American Political Science Association.

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