Labor Market Concerns and Support for Immigration[*]

Ingar Haaland[†]   Christopher Roth[‡]

October 2020

Abstract

Do labor market concerns affect support for immigration? Using a large, representative sample of the US population, we first elicit beliefs about the labor market impact of immigration. To generate exogenous variation in beliefs, we then provide respondents in the treatment group with research evidence showing no adverse labor market impacts of immigration. Treated respondents update their beliefs and become more supportive of immigration, as measured by self-reported policy views and petition signatures. Treatment effects also persist in an obfuscated follow-up study. Our results demonstrate that information about the labor market impact of immigration causally affects support for immigration.
(*JEL* C91, D83, F22, J15)

Keywords: Labor market concerns, support for immigration, political behavior

1 Introduction

There is currently a heated debate about immigration in Western countries. Although arguments about the adverse labor market impact of immigration are prominent in this debate, the current consensus in the academic literature is that self-interested labor market concerns are not an important determinant of people's attitudes toward immigration (Hainmueller and Hopkins, 2014). In this paper, we study the relevance of labor market concerns by providing the first causal evidence on whether information about the labor market impact of immigration affects support for immigration.

In a pre-registered experiment with a large sample representative of the US population in terms of some important observable characteristics, we first elicit beliefs about the labor market impact of the Mariel boatlift, which is known as the "one historical event that has most shaped how economists view immigration" (Clemens, 2017). During the Mariel boatlift, which was an unexpected mass immigration of Cubans to the United States, the low-skilled workforce in Miami increased by 20 percent over the course of a few months. To generate exogenous variation in beliefs, we provide a random subsample of our respondents with information about the results from a widely cited research study showing no adverse labor market impacts of the Mariel boatlift on wages and unemployment in Miami (Card, 1990). We then measure our respondents' support for immigration using both self-reported attitudes on preferred immigration levels as well as behavioral measures: two anonymous real online petitions proposing changes to the annual cap on visas for low-skilled guest workers to the US. Finally, we conduct an obfuscated follow-up study one week later in which we hide the connection between the follow-up and the main study. The obfuscation allows us to address concerns about experimenter demand (de Quidt et al., 2018; Zizzo, 2010).

The main finding of the paper is that information about no adverse labor market

impacts of immigration substantially affects people's support for immigration. Treated respondents change their beliefs about the labor market impact of immigration and increase their support for admitting more low-skilled immigrants by 0.14 of a standard deviation (p<0.01). This effect size corresponds to about one fifth of the Democrat–Republican difference in policy views. Treated respondents are also 69.3 percent more likely to sign a real online petition in favor of increasing the annual cap on low-skilled guest workers to the US, compared to a control group mean of 3.9 percentage points (p<0.01). Moreover, we show persistence of treatment effects in the follow-up study designed to mitigate experimenter demand.

Our work contributes to several strands of the literature. First, we contribute to the literature on labor market concerns and attitudes toward immigration (Card et al., 2012; Citrin et al., 1997; Facchini et al., 2009; Hainmueller et al., 2015; Iyengar et al., 2013; Mayda, 2006; Scheve and Slaughter, 2001). While some studies find correlations which suggest that labor market concerns influence attitudes toward immigration (Mayda, 2006; Scheve and Slaughter, 2001), correlational studies are vulnerable to omitted variable bias and reverse causality.

To overcome the challenges with observational data, researchers have used experiments which measure support for hypothetical immigrants with randomly assigned characteristics, such as their education levels and whether they plan to find work. Such experiments can causally identify which characteristics of immigrants that people value, but do not allow us to identify the underlying motivations for why certain characteristics are valued. For instance, an experiment by Hainmueller and Hopkins (2015) finds that Americans are concerned about low-skilled immigrants who do not plan to find work. This finding could reflect economic considerations about the fiscal burden posed by these immigrants, but it could also reflect concerns about how low-skilled immigrants

who do not plan to find work fit in culturally in the US.

We experimentally manipulate beliefs about the economic impact of immigration.[1] While previous work mainly highlights cultural concerns and nationwide concerns about the fiscal impact of immigration as drivers of immigration attitudes (Hainmueller and Hopkins, 2014), our estimates show that information about the labor market impact of immigration also has a quantitatively important impact on attitudes toward immigration. This finding is thematically related to recent work by Bansak et al. (2016) who find an important role for sociotropic concerns about the potential economic contribution of asylum seekers in the context of the European refugee crisis. It also relates to recent work by Bansak et al. (2017) who study how the provision of factual information affects people's support for asylum policies.

In the context of immigration policy, our results differ from previous work showing muted responses of policy preferences to factual information about the fraction of immigrants (Hopkins et al., 2019; Sides and Citrin, 2007), the characteristics of immigrants (Alesina et al., 2018; Grigorieff et al., 2020; Lergetporer et al., 2017), or the characteristics of the immigration system (Bansak et al., 2017). A potential explanation for why we find stronger responses to new information than most previous studies on immigration attitudes could be that we give information that is easy to connect with public policy. Consistent with this explanation, Facchini et al. (2017) use online experiments in Japan to show that fictitious news articles about how immigration helps solve social and economic problems, such as the ageing of the population, are effective

---

[1]Methodologically, we relate to the literature that tries to understand the determinants of people's policy preferences by experimentally manipulating beliefs (Alan and Ertac, 2017; Alesina et al., 2018; Bursztyn et al., 2020; Cruces et al., 2013; Gilens, 2001; Haaland and Roth, 2019; Karadja et al., 2017; Kuklinski et al., 2000; Kuziemko et al., 2015). For a review of the literature using information provision experiments, see Haaland et al. (2020). Thematically, we also relate to the literature on how immigration affects voting outcomes (Dehdari, 2018; Halla et al., 2017; Mayda et al., 2018; Tabellini, 2019). Our results complement this literature by shedding light on the underlying motivations of voters.

in changing self-reported attitudes toward immigrants.[2]

Our findings are also related to the literature on whether people are open to persuasion on political issues. Several influential studies claim that behavioral biases, such as confirmation bias, make people unwilling to revise their political beliefs in response to disconfirming information and scientific evidence (Lord et al., 1979; Nyhan and Reifler, 2010; Taber and Lodge, 2006; Tappin et al., 2017). Our results challenge this claim by showing that an information treatment based on research evidence can be effective in changing beliefs and policy views for Republicans and Democrats alike, even on a highly contested issue such as immigration. These results complement recent evidence showing that research evidence can affect policy choices (Hjort et al., 2019) and that information about implicit stereotypes can lower discrimination against immigrants (Alesina et al., 2018).

More broadly, our findings contribute to a long-standing debate in the social sciences which discusses the relative importance of consequential, ideological, and social motives in driving people's political behavior (Alesina and La Ferrara, 2005; Bursztyn et al., 2019, 2017; DellaVigna et al., 2016). Our results support a consequentialist view of political behavior by highlighting that changes in beliefs about the economic consequences of a policy affect political behavior.

2   Experimental design and sample

Our experiment has two parts: A main experiment and an obfuscated follow-up study performed seven days after the main experiment. In the following, we describe the sample as well as the structure of the main experiment and the obfuscated follow-up

---

[2]However, see also Bansak et al. (2017) who find that providing people with an information treatment with policy-relevant arguments is ineffective in changing policy preferences on asylum policies.

study. Figure A.1 provides a summary of the structure.[3]

2.1 Sample

We recruited respondents using Research Now, an online market research company in the US that is regularly used by researchers to conduct academic studies (e.g., de Quidt et al., 2018). We recruited 3130 respondents and implemented demographic quotas to ensure that the participants are representative of the adult US population on some important observable characteristics. All respondents who finished the main study were invited to participate in the follow-up study, for which we received 2075 respondents. The experiment was run in late May and early June 2017. We submitted a pre-analysis plan to the AEA RCT Registry prior to the data collection, specifying the sample size, empirical specifications, and our hypotheses: `https://www.socialscienceregistry.org/trials/2247`.

By construction, our sample matches the distributions of gender, age, region and total household income (see Table A.1 and Table A.2). Furthermore, the treatment and control group are balanced in terms of observables both in the main study and the follow-up (Table A.3 and Table A.4) and there is no differential attrition in the response rates to the follow-up (Table A.5).

---

[3]Full instructions for the main experiment and the follow-up are provided in Section D and E of the Online Appendix, respectively. The Qualtrics survey for the main experiment is available on the following link: `https://nhh.eu.qualtrics.com/jfe/form/SV_8Am0WWUZiq4u2ax`. The Qualtrics survey for the obfuscated follow-up is available on the following link: `https://cessoxford.eu.qualtrics.com/jfe/form/SV_d71YFolo6Dw9Ump`.

2.2 Main experiment

In the main experiment we first ask questions about demographics, political affiliation and self-perceived skill levels, as well as eliciting our respondents' pre-treatment beliefs about the labor market impact of immigration. We then expose half of our respondents to the information treatment. Subsequently, we measure our respondents' support for immigration using self-reported policy views and signatures on real online petitions. Finally, we elicit post-treatment beliefs about the labor market impact of immigration.

2.2.1 Pre-treatment beliefs about the Mariel boatlift

We first elicit our respondents' beliefs about the labor market impact of the Mariel boatlift. To familiarize our respondents with the context, we present them with the following text:

> In 1980, Cuba's then President, Fidel Castro, suddenly announced that Cubans wishing to emigrate to the United States were free to do so. This led to an unexpected mass immigration to Miami, Florida, where most of the Cuban immigrants arrived by boat.

> With the arrival of the new Cuban immigrants, Miami's workforce grew by 55,000, or 8 percent, almost at once. The new immigrants were mostly low-skilled, which meant that the low-skilled workforce increased by 20 percent.

> The large, unexpected addition of 55,000 new immigrants to the Miami workforce has allowed researchers to study the impact of immigration on the labor market. To do so, the researchers studied wage and unemployment changes in Miami after the mass immigration relative to other US cities that,

because of geographic distance, were not affected by the mass immigration of Cubans.

Thereafter, we ask our respondents how they think "the mass immigration of Cubans" affected wages and unemployment in Miami for both low- and high-skilled workers. We elicit these beliefs on five-point Likert scales.

2.2.2 Research evidence of the Mariel boatlift

Following the belief elicitation, we inform respondents in the treatment group about the results from a seminal study about the labor market consequences of the Mariel boatlift (Card, 1990). Specifically, we present the following text to respondents in the treatment group (Figure A.17 provides a screenshot):

> The researchers who analyzed the short- and long-term effects of the mass immigration of Cubans to Miami concluded that, for both high-skilled and low-skilled workers, the mass immigration had **virtually no effect on wages** and **virtually no effect on unemployment**.

> According to the researchers, the mass immigration had virtually no effect on wages and unemployment because the new Cuban immigrants increased the overall demand for goods and services, which created more jobs.

Respondents in the control group do not receive any information and proceed directly from the belief elicitation questions to the outcome questions. There are several reasons for why we chose to focus on the Mariel boatlift in our experiment. First, the Mariel boatlift has strongly shaped how economists view immigration (Clemens, 2017) and it is straightforward to explain the setting to a general audience. Second, Card (1990) found that the boatlift had no adverse labor market impacts. Since most people think

7

that immigration has negative labor market impacts, the provision of research evidence showing no adverse labor market impacts is essential to create a strong effect on beliefs.[4] While the validity of our approach only depends on whether the treatment successfully changed our respondents' beliefs, we did not want to deceive respondents by giving them false information.[5]

2.2.3 Measuring support for immigration: self-reported policy views

To measure how the treatment affects support for immigration, we first investigate self-reported attitudes. Although we give people information about the labor market impact of low-skilled immigration, respondents could also use this information to update their beliefs about the labor market impact of high-skilled immigration. We therefore ask questions about both *low-skilled* and *high-skilled* immigrants. Furthermore, it is possible that the causal effect of beliefs on attitudes depends on the immigrants' cultural characteristics. To fix beliefs about the immigrants' cultural characteristics, we also differentiate between immigrants who are *highly familiar* and *not familiar* with American values and traditions, following the approach taken by Hainmueller et al. (2015).[6] All respondents are asked whether the US should allow more or less immigrants to come and live in the US. We asked this question for all four types of immigrants, randomizing the order of the questions between respondents.[7] Respondents report their answer on a five-point Likert scale from (1) "Allow a lot less of these

---

[4]That is, our focus is different from studies that try to correct people's biases in beliefs about immigrants (Grigorieff et al., 2020; Hopkins et al., 2019).

[5]Although a recent paper by Borjas (2017) argues that the boatlift had negative impacts on the least skilled workers in Miami, several papers argue that this result was spurious and driven by measurement error (Clemens and Hunt, 2017; Peri and Yasenov, 2019).

[6]Our belief data reveals that beliefs about the economic impact of immigrants also depend on their familiarity with American values (results available upon request). We did not, however, collect any direct data allowing us to test whether people think that the familiarity of immigrants with American values also affects the extent to which they are direct competitors in the labor market.

[7]We find little evidence of any order effects (Table A.7).

immigrants" to (5) "Allow a lot more of these immigrants."

2.2.4 Measuring support for immigration: political behavior

After measuring self-reported attitudes, we give our respondents the opportunity to sign real online petitions with concrete policy proposals to maximize external validity. We inform our respondents that Congress is debating whether to change the annual cap on non-agricultural guest workers to the US, the H-2B visa program. We chose to focus on the H-2B visa program because it was debated in Congress at the time of the experiment and because of the close connection between our informational treatment, which highlighted the labor market impact of low-skilled immigration, and the H-2B visa program, which is a program to bring low-skilled foreign nationals to the US.

To make sure that the debate surrounding the H-2B visa program is meaningful to the respondents, we suggest some arguments in favor of both increasing and decreasing the annual cap. Respondents are then told that they will be given the opportunity to sign one of two petitions related to this debate. The first petition suggests to increase the annual cap from 66,000 to 99,000, whereas the second petition suggests to decrease the annual cap from 66,000 to 33,000. We randomized the order of the petitions between participants.[8]

We ask our respondents whether they want to sign one of the two petitions. Respondents who say that they want to sign one of the petitions are provided with a link to a real petition that we created on the White House web page, petitions.whitehouse.gov (Figure A.13 provides a screenshot). To identify treatment differences in actual signatories, we provide respondents in the treatment and control group with different links to

---

[8]To minimize experimenter demand effects, we included both a right-leaning and a left-leaning petition.

identical petitions.[9]

Petitions on the White House web page have some noteworthy features. First, our petitions never became public and could only be reached through the links provided in our experiment. This was important to avoid contamination by people from outside the experiment. Second, the White House requires an email confirmation for petitions to count, thus making signings more costly. Third, the petition signatures were anonymous, meaning that only the White House could observe the names and emails of the signatories. This anonymity mitigates concerns about experimenter demand because respondents cannot use the petitions to signal that they conform to the experimenter's wishes.[10] Fourth, it takes several hours for the petition pages to update the number of signatures. Eventual differences in the number of signatures between the treatment and control petition page could be a confound as people may be more likely to sign a petition which already has more signatures. We measured the number of signatures over time and do not find that the treatment effects get stronger after the number of signatures on the petition pages gets updated (results available upon request).

2.2.5 Post-treatment beliefs about the impact of immigration

To explore mechanisms and to confirm that we successfully managed to induce exogenous variation in beliefs, we examine people's perceptions about how increasing the number of low-skilled or high-skilled immigrants to the United States would affect labor market outcomes and other theoretically relevant dimensions over the next five years. We randomize whether respondents answer the questions about low-skilled or

---

[9]While the perceived instrumental benefits of signing the petitions may be small as the petition needs to be signed by 100,000 people to get an official update from the White House, expressive benefits associated with the petition signatures may be larger.

[10]While the online petition signatures are anonymous, it is still possible that some respondents still were uncertain whether the researchers could observe the petition signatures.

high-skilled immigrants in order to reduce the risk of survey fatigue.

We elicit beliefs about both the impact of immigration on both the respondents' *own household* and on *most Americans*. To assess whether the treatment shifted beliefs about the labor market impact of immigration, we ask respondents how they think increased immigration affects wages and job security. To assess whether the treatment changed beliefs not related to the labor market, we also ask how they think increased immigration affects taxes and how it affects American culture and society as a whole. We elicit responses to all of these questions on five-point Likert scales.

2.3 Obfuscated follow-up study

A potential concern with the evidence from our main experiment is that treatment effects could be biased due to experimenter demand effects. While recent evidence suggests that this bias is not quantitatively important (de Quidt et al., 2018; Mummolo and Peterson, 2018), we take additional steps to address this concern by performing an obfuscated follow-up study with the same participants about one week after the main study.[11] We chose to have approximately one week between the follow-up and the main study to strike a balance between greater obfuscation and minimizing attrition.

The follow-up study is presented as an independent study to the participants. Since no treatment is administered in the follow-up study, differential experimenter demand between the treatment and control group is unlikely to be a concern unless respondents nonetheless realize that the follow-up is connected to the main study. While previous studies also have used a two-stage survey design to mitigate concerns about experimenter demand effects (e.g., Hainmueller and Hopkins, 2015), we take additional steps

---

[11]The actual number of days between the main study and the follow-up study varied between one and fourteen days for all subjects. The average difference was seven days.

to hide the connection between our two studies. First, we choose to collaborate with a market research company where respondents regularly receive invitations to participate in surveys. When sending out these invitations, the company uses generic invitations that only contain information about pay and expected completion time (Figure A.14 provides a screenshot). Second, we use different consent forms for the two studies: In the first study, respondents are forwarded to a survey with a consent form from the Norwegian School of Economics, while the second study presents a consent form from the University of Oxford (Figure A.15 and Figure A.16 provide screenshots). We also use different layouts for the two surveys. Third, to make the follow-up seem like an independent study, we first ask respondents a series of questions about their demographics. Fourth, to further obfuscate the purpose of the follow-up study, we ask several questions about government spending, taxation, and redistribution before we ask any questions about immigration.

At the end of the follow-up study we ask three questions about immigration regarding support for low-skilled immigration, support for high-skilled immigration, and beliefs about the labor market impact of immigration. Since three questions about immigration may send a signal that we are interested in immigration, thus increasing the chance that respondents realize that the two studies are connected, we ask each question on a separate page with the most important outcome question (preference for low-skilled immigration) on the first of these three pages. To minimize the chance that respondents realize the relationship between the two studies, we use different wordings for the questions on immigration in the follow-up compared to the main study.[12]

---

[12]In the follow-up study, we drop the distinction about familiarity with American values and ask: "In your view, should immigration of workers with little to no education be kept at its present level, increased, or decreased?"

3 Results

This section presents our main results. While our results on self-reported policy views and petition signatures were pre-specified, we also report some results that were not pre-specified, but which naturally follow from the pre-analysis plan. We end the section with a discussion of the robustness of our results. In Section B of the Online Appendix, we discuss a few minor deviations from the pre-analysis plan.

3.1 Pre-treatment beliefs about the Mariel boatlift

To aid interpretation of our main results, we first investigate which pre-treatment beliefs our respondents hold about the labor market impact of the Mariel boatlift (Figure A.2). The large majority of our respondents think that the boatlift negatively affected wages and unemployment for low-skilled workers in Miami. By contrast, the large majority of our respondents think that the boatlift had no effect on wages and unemployment for high-skilled workers in Miami. Since most of the Cuban immigrants were low-skilled, these results suggest that our respondents believe that immigration mainly affects labor market outcomes for native workers with similar skill levels as the immigrants.

We find that our respondents' pre-treatment beliefs about the Mariel boatlift vary systematically by their background characteristics. Differences in beliefs between self-identified Republicans and Democrats are especially pronounced. We also observe significant correlations between pre-treatment beliefs and college education, race, work status, age, and income (Figure A.3).

3.2 Do beliefs respond to the treatment?

To investigate whether the treatment affects our respondents' beliefs about the impact of immigration, we estimate the following equation using OLS:[13]

$$y_i = \alpha_0 + \alpha_1 T_i + \alpha_2 \mathbf{x}_i + \varepsilon_i$$

where y_i is the outcome of interest; T_i is an indicator for whether subject i received the research evidence; $\mathbf{x}_i$ is a vector of pre-specified controls[14]; and ε_i is an individual-specific error term. We use robust standard errors for all specifications.

Table 1 presents regression results for post-treatment beliefs about the impact of increased immigration today on most Americans (Panel A) as well as on the respondent's own household (Panel B). We randomized whether the respondents were asked about the impact of low-skilled immigration (columns 1–4) or high-skilled immigration (columns 5–8). In line with the pre-analysis plan, we z-score all outcomes using the mean and standard deviation of the control group. For robustness, we also report results using binary outcome measures (Table A.8 of the Online Appendix).

Columns 1 and 2 of Panel A in Table 1 show that the treatment significantly affects beliefs about the labor market impact of low-skilled immigration on most Americans. Specifically, the treatment increases people's optimism about both the wage and unemployment impact of low-skilled immigration by 0.17 of a standard deviation (p<0.01). We observe a much more muted effect on beliefs about the labor market impact of low-skilled immigration on the respondents' own household: as shown in

---

[13]The results are robust to employing ordered response models (results available upon request).

[14]The pre-specified controls include gender, age, ethnicity, region, household size, household income, education, employment status, party affiliation, whether the respondent was born in the US, whether the subject's parents were born in the US, self-perceived skill-level, and pre-treatment beliefs about the labor market impact of low-skilled (or high-skilled) immigration. The controls are coded as described in the pre-analysis plan.

columns 1 and 2 of Panel B, the treatment does not significantly affect these beliefs (though Table A.8 shows a small but statistically significant impact on beliefs about the wage impact on own household when using a binary outcome measure).

The treatment also affects beliefs about the labor market impact of high-skilled immigration. As shown in columns 5 and 6 of Panel A in Table 1, the treatment increases people's optimism about the wage and unemployment impact of high-skilled immigration on most Americans by 0.19 and 0.26 of a standard deviation, respectively (both $p<0.01$). These estimates are not significantly different from the ones on beliefs about the labor market impact of low-skilled immigration ($p=0.73$ and $p=0.18$ for wage and unemployment impact, respectively).[15] Column 6 of Panel B shows that the treatment also increases optimism about the employment impact of high-skilled immigration on the respondents' own household by 0.16 of a standard deviation ($p<0.01$). Table A.8 shows similar patterns when using binary outcome measures.

The broadly similar effect sizes on beliefs about the labor market impact of low-skilled and high-skilled immigration could reflect that we gave treated respondents a reason for why the Mariel boatlift did not adversely affect labor market outcomes, namely that "the immigrants increased the overall demand for goods and services, which created more jobs," which is not specific to low-skilled immigrants. Furthermore, there was equal scope to change people's beliefs about the labor impact of high-skilled and low-skilled immigrants: as illustrated in Figure A.4, control group respondents are about equally pessimistic about the labor market impacts of increased high-skilled and low-skilled immigration on most Americans today.

Previous literature suggests that beliefs about the labor market impact of immigration may affect beliefs about (i) the fiscal burden of immigration and (ii) the cultural

---

[15]These p-values are calculated using seemingly unrelated regressions (implemented using the `suest` command in Stata).

impact of immigration (Hainmueller and Hopkins, 2014, 2015). We generally see small and insignificant treatment effects on these outcomes in the main specifications (columns 3–4 and 6–7 of Table 1).[16] The treatment effects on the wage and employment impacts of low-skilled immigration are significantly different from the treatment effects on beliefs about the fiscal impact of low-skilled immigration (both $p = 0.01$) as well as on the cultural impact of low-skilled immigration (both $p = 0.04$). Treatment effects on beliefs about the labor market impact of high-skilled immigration are also significantly different from treatment effects on beliefs about the fiscal and cultural impact of high-skilled immigrants. Table A.8 indicates significant and modest treatment effects on people's optimism about both the fiscal and cultural impact of immigration for the binary outcome measures. These results thus provide suggestive evidence that our respondents hold mental models according to which immigrants who find work are less likely to put a burden on public services and more likely to comply with American work-related norms (Hainmueller and Hopkins, 2014, 2015).

[Insert Table 1 here]

Overall, we thus find strong and significant treatment effects on beliefs about the labor market impact of immigration and more muted treatment effects on beliefs about the impact of immigration on taxes and culture.

3.3 Do policy preferences respond to the treatment?

Table 2 presents regression results for our main outcome measures on self-reported policy views for all respondents who completed these outcome measures in the main

---

[16]The minimum detectable effect sizes with 80 percent power and a significance threshold of 5 percent are 0.134 of standard deviation and 0.137 standard deviations for beliefs about the fiscal and cultural effects of low-skilled immigrants on most Americans, respectively.

survey. We use a pre-specified index to assess self-reported policy views on low-skilled immigration. The index is defined as the average of the standardized responses to the following two questions taken from Hainmueller et al. (2015): support for increasing the number of low-skilled immigrants that are (i) *highly familiar* with American values and traditions and (ii) *not familiar* with American values and traditions. We use an analogous index to assess attitudes toward high-skilled immigration.

Column 3 of Table 2 shows our first main result:

Result 1. *Information about no adverse labor market impacts of immigration causally affects attitudes toward immigration. The information treatment increases support for low-skilled immigration by 0.14 of a standard deviation (p<0.01).*

Column 5 shows that the treatment also increases support for high-skilled immigration by 0.07 of a standard deviation (p<0.05). The treatment effect on support for low-skilled immigrants is significantly larger than the effect on high-skilled immigrants (p<0.01).[17] The more muted treatment effects on support for high-skilled immigration despite the strong effects on beliefs about the labor market impact of high-skilled immigrants is consistent with several possible interpretations. First, it is possible that there are ceiling effects, i.e. the baseline level of support for high-skilled immigration is relatively high, which leaves less scope for variation. As illustrated in Figure 1, control group respondents are about one quarter of a standard deviation more supportive of high-skilled immigration than low-skilled immigration. Second, it is possible that concerns about labor market impacts are less important for people's overall assessment of high-skilled immigrants than for low-skilled immigrants. For instance, high-skilled immigrants might be seen as more likely to adhere to American norms, making people less sensitive to their perceived labor market impacts.

_____

[17]This p-value is calculated using seemingly unrelated regressions.

17

[Insert Table 2 here]

Does the treatment mainly increase support for immigration or mainly decrease opposition to immigration? Figure 1, which shows the distribution of responses for both control and treatment group respondents, highlights that the treatment makes people both less likely to support decreased immigration and more likely to support increased immigration. For instance, the treatment increases the share of respondents who say that they want to "allow more" or "allow a lot more" of low-skilled immigrants that are not familiar with American values and traditions by 31.4 percent and decreases the share saying that they want to "allow less" or "allow a lot less" of these immigrants by 15.7 percent (see also Figure A.5).

[Insert Figure 1 here]

Interpreting effect sizes   To interpret the magnitude of the treatment effects on beliefs and policy preferences, we relate the observed effect sizes to differences in beliefs and policy views between self-identified Republicans and Democrats. The effect size on beliefs about the wage and unemployment impact of increased low-skilled immigration corresponds to, respectively, 95 and 59 percent of the Republican–Democrat difference in beliefs. By comparison, the effect size on support for low-skilled immigration corresponds to 22 percent of the Republican–Democrat difference in policy support. This benchmarking exercise thus underscores that the treatment effects we observe are quite sizable when contrasted with political differences in beliefs and policy views on immigration.[18]

---

[18] Self-identified political party is the only covariate that is robustly associated with both beliefs about labor market impacts and support for immigration. We therefore restricted the benchmarking exercise to political party differences. Other important covariates, such as employment status, education, income and gender, are not robustly correlated with both beliefs and policy views.

Obfuscated follow-up   Column 7 of Table 2 shows statistically significant treatment effects on support for low-skilled immigration in the obfuscated follow-up study. The treatment effect corresponds to 0.11 of a standard deviation ($p<0.01$). There is also some persistence of treatment effects for high-skilled immigrants (column 8), but the point estimate of 0.06 of a standard deviation is not statistically significant ($p=0.13$). It is also not statistically different from the effect on support for low-skilled immigration ($p=0.43$). Column 5 of Table 1 shows persistent treatment effects on beliefs about the overall labor market impact of immigration ($p<0.01$).[19]

Since we use different questions in the follow-up and the main study, the treatment effects observed in the follow-up are not directly comparable. Nevertheless, comparing magnitudes for the subsample of respondents who completed both the main study and the obfuscated follow-up, the effect sizes we observe in the follow-up are not significantly different from those observed in the main study ($p=0.44$ and $p=0.83$ for low-skilled and high-skilled immigrants, respectively; both p-values obtained from seemingly unrelated regressions).[20] Overall, the results from the obfuscated follow-up demonstrate that our respondents genuinely changed their attitudes toward immigration and that it is unlikely that demand effects or the increased salience of labor market concerns associated with the treatment severely bias the treatment effects observed in the main experiment.

---

[19]We explored whether there were any heterogeneous treatment responses by number of days between the main study and the follow-up, but did not find any systematic differences (see Table A.19 in the online Appendix).

[20]Results on treatment effects in the main experiment for the sample of respondents who also complete the follow-experiment can be seen in Table A.12. Furthermore, comparing magnitudes based on the full sample, the effect sizes we observe in the follow-up are still not significantly different from those in the main study ($p=0.37$ and $p=0.89$ for low-skilled and high-skilled immigrants, respectively; both p-values obtained from seemingly unrelated regressions).

3.4 Behavioral measures

To provide evidence of a more externally valid outcome measure, we analyze whether the treatment affects people's willingness to sign real online petitions regarding the cap on non-agricultural guest workers to the US, the H-2B visa program.

First, we analyze how the treatment affects respondents' stated willingness to sign one of the petitions. Table 3 presents the results.[21] Column 1 shows that the treatment increases the share of respondents who say that they would sign the petition to increase the annual cap on H-2B visas by 4.9 percentage points (p<0.01), which corresponds to a 17.1 percent increase from the control group mean of 28.6 percentage points. Similarly, column 2 shows that the treatment decreases the share of respondents who say that they want to sign the petition to decrease the annual gap by 6 percentage points (p<0.01), corresponding to a 18.8 percent decrease from the control group mean of 32.1 percentage points.

Next, we investigate whether the observed changes in intentions to sign the petitions are reflected in actual petition signatures. Column 4 demonstrates that this is the case for the petition suggesting an increase in the annual cap:

Result 2. *The treatment increases the share of respondents signing the petition in favor of increasing the annual cap by 2.7 percentage points (p<0.01). This corresponds to a 69.3 percent increase from the control group mean of 3.9 percentage points.*

Column 5 shows that the treatment decreases the share actually signing the petition in favor of reducing the annual cap by 0.4 percentage points, which corresponds to a 9.6 percent decrease in signatures from the control group mean of 4.6 percentage points.

---

[21]In this section, we focus on the results without controls since controls are not available for actual signings of the petitions. However, including controls for the intentions to sign the petitions yields virtually identical results.

This difference, however, is not statistically significant from zero (p=0.55). It is worth noting that only a small fraction of those who say they will sign the petition actually sign the petition. This underscores the importance of collecting costly behavioral outcomes on top of survey-based measures.

[Insert Table 3 here]

3.5 Heterogeneous treatment effects

We hypothesized in the pre-analysis plan that treatment responses would depend on people's pre-treatment beliefs about the labor market impact of the Mariel boatlift.

Post-treatment beliefs We find negative and significant interaction effects of the treatment and pre-treatment beliefs about how the Mariel boatlift affected low-skilled workers on people's post-treatment beliefs about how most Americans are affected by low-skilled immigration (Panel A of Table A.15). In other words, respondents with more (less) positive pre-treatment beliefs about the Mariel boatlift impact are less (more) responsive to the information treatment. We also observe negative interaction effects between the treatment and pre-treatment beliefs on post-treatment beliefs about the effect of immigration on people's own household, but these effects are not statistically significant.[22]

---

[22]One concern is that heterogeneous treatment effects by pre-treatment beliefs may be driven by correlations between pre-treatment beliefs and other characteristics, such as political views, race, work status, and income. We therefore decompose the total variation in pre-treatment beliefs into a component predicted by the pre-specified observables we use as control variables throughout the paper, and the residual component of pre-treatment beliefs that is not explained by these observables. Reassuringly, we find very similar results using the variation in pre-treatment beliefs that is not explained by our pre-specified covariates. By contrast, the variation in pre-treatment beliefs explained by our pre-specified covariates does not predict heterogeneous responses (results available upon request). This suggests that the observed interaction effects between the treatment and pre-treatment beliefs are indeed driven by genuine changes in beliefs.

21

While we document significant treatment heterogeneity by pre-treatment beliefs about how the Mariel boatlift affected low-skilled workers, we do not find any evidence of treatment heterogeneity by pre-treatment beliefs about how the Mariel boatlift affected high-skilled workers.[23] This could reflect the fact that the large majority of our respondents thought that the Mariel boatlift had no impact on high-skilled workers.

Policy preferences We find a negative interaction effect between the treatment and pre-treatment beliefs about how the Mariel boatlift affected low-skilled workers on support for low-skilled immigration, but the estimated coefficient is only marginally significant (Panel A of Table A.16). That we find a less significant interaction effect for policy preferences than for beliefs could reflect a lack of statistical power as we observe smaller average treatment effects on policy preferences than on beliefs. As Panel A of Figure A.7 shows, we find large and significant treatment effects conditional on having pessimistic pre-treatment beliefs, and imprecisely estimated null effects conditional on having optimistic pre-treatment beliefs. On support for high-skilled immigration, we do not observe any significant treatment heterogeneity by pre-treatment beliefs. However, statistical power is lower since the average treatment effect on support for high-skilled immigration was significantly lower than on support for low-skilled immigration.

Heterogeneity by political affiliation and skill-level We also pre-specified to examine heterogeneous responses on self-reported policy views by people's political affiliation and self-perceived skill levels. We find no evidence of heterogeneity based on self-identifying as Republican (Panel B of Table A.16). This result could reflect different mechanisms going in opposite directions. While Republicans have more pes-

---

[23]We also study heterogeneity in belief updating by our respondents' confidence in their prior beliefs (see online Appendix Figure A.8). We find no clear evidence for heterogeneous treatment effects, though we have relatively little statistical power. The lack of heterogeneity could be due to measurement error in confidence or due to correlations of confidence with other variables.

simistic pre-treatment beliefs than non-Republicans—suggesting there is more scope to change their beliefs with the research evidence—they may also be more likely to engage in partisan motivated reasoning to dismiss the research evidence. We also find no evidence of heterogeneity based on people's self-perceived skill level (Panel C of Table A.16).[24]

Machine learning approaches to heterogeneity   The selection of pre-specified covariates for the heterogeneity analysis in the previous section was motivated by theoretical considerations. As a supplement to this analysis, we implement a machine learning procedure, generalized random forests (Athey et al., 2019; Wager and Athey, 2018).[25] Random forests involve the estimation of many regression trees with randomness added to each step of the process to reduce the scope for overfitting. This method allows us to consider all covariates in our data set and select those which predict maximum differences in the magnitude of treatment effects for different sub-populations, while simultaneously controlling for multiple hypothesis testing.

To graphically illustrate the results from the random forest procedure, we calculate a measure of the 'importance' for each variable used to estimate the heterogeneous treatment effects by taking a simple weighted sum of how many times each variable was split at each depth in the forests (Tibshirani et al., 2019). As shown in Figure A.11 and Figure A.12, prior beliefs about the labor market impacts of the Mariel boatlift appear to be among the single most important predictors of heterogeneous treatment effects on post-treatment beliefs about the labor market impacts of increased immigration today.

---

[24]The minimum detectable effect size for heterogeneous treatment effects by skill level on support for low-skilled immigration is given by 0.19 of a standard deviation for a power of 80 percent and a significant threshold of 5 percent. This indicates relatively low statistical power to detect heterogeneous treatment effects by skill level.

[25]Specifically, we train a causal forest using the causal_forest function of the `grf` package in R (Tibshirani et al., 2019).

Prior beliefs also appear to be among the most important predictors of heterogeneous treatment effects on attitudes toward immigration (Figure A.10). Interestingly, income and age also appear important for explaining heterogeneous treatment effects on both attitudes and belief updating. Other covariates, such as political views, region, ethnicity, and education, consistently appear much less important than prior beliefs to explain heterogeneous treatment effects.

3.6 Robustness

In this subsection we discuss the external validity and the interpretation of our findings.

Reweighting Our sample is by construction representative of the US population in terms of age, gender, region and income, but not in terms of education; our respondents are substantially more likely than the general population to be college educated. In order to examine the external validity of our findings, we use the 2015 American Community Survey to create weights that also make our sample representative of the general population in terms of education. Specifically, we create weights based on the following 64 cells: gender (2 cells) × aged above 42 (2 cells) × above median income (2 cells) × at least college degree (2 cells) × region of residence (4 cells; West, South, Northeast, Midwest). As shown in Table A.20 and Table A.21, we find that reweighting has no appreciable effects on our main findings. Since unweighted results should be less sensitive to outliers than weighted results, we follow the pre-specification and focus on unweighted results in the main tables.

Priming Both treatment and control respondents are primed on the humanitarian aspect of immigration in the main survey, which could potentially affect the external

validity of our findings. Since the effects of priming are most likely short-lived (Cavallo et al., 2017), the obfuscated follow-up survey should help us to identify treatment effects for which the humanitarian aspect of immigration does not affect the external validity of our findings.

Researcher identity It is possible that respondents' behavior is affected by the fact that the researchers of this study are foreigners (Bursztyn et al., 2019). However, we consider this unlikely for two reasons: first, the researcher identity was not very salient in our survey. Second, prior evidence by White et al. (2018) shows that researcher identity does not strongly affect response behavior in the context of online surveys in the US.

Perception of research setting How did our respondents perceive the research evidence? We leverage a unique set of subjective beliefs about the research evidence that aids with the interpretation of our estimated treatment effects. Consistent with the significant treatment effects of the research information on post-treatment beliefs about the effects of immigration today, the majority of our respondents agree that the research evidence on the labor market impacts of the Mariel boatlift is relevant for assessing the costs and benefits of increased immigration today (as shown in Figure A.9). Moreover, the majority of our respondents find the information trustworthy and think that it accurately reflects the labor market impacts of the Mariel boatlift on Miami in 1980. Finally, 65 percent of our respondents indicate that they found our survey to be neither left-wing biased nor right-wing biased.

Within-survey attrition We have some attrition after the main outcomes on support for immigration in the main study. The attrition, which is unrelated to treatment status

(as shown in Table A.6), leads to a lower sample size in our measures of post-treatment beliefs. Table A.10 and Table A.11 of the Online Appendix highlight the robustness of our results on support for immigration using the sample of respondents who completed the post-treatment belief questions.

3.7 Discussion

Our causal estimates demonstrate that information about the labor market impact of immigration has a quantitatively important impact on attitudes toward immigration. This raises the question whether the underlying mechanisms are self-interested concerns about own labor market outcomes or sociotropic concerns about how immigration affects the national labor market. To provide some suggestive evidence on this question, we provide a simple correlational analysis of the relationship between people's beliefs and attitudes toward immigration. Specifically, we run regressions with control group respondents simultaneously including beliefs about the labor market impact of increased immigration on "most Americans" as well on the respondents' own household. We find that beliefs about the labor market impact on "most Americans" are more strongly associated with support for immigration than beliefs about the labor market impact on people's own household (as shown in Table A.13). While a one standard deviation change in beliefs about the wage impact of immigration on most Americans is associated with a 0.12 to 0.21 standard deviation change in attitudes toward different types of immigrants, the corresponding point estimates for beliefs about the wage impact on people's own household are either zero or negative. The same pattern holds after controlling for beliefs about the cultural impact of immigration.

Furthermore, these correlations may shed some light on why we find an important role for labor market concerns even though previous studies consistently find that

people's policy preferences on immigration vary little with their own labor market position (Hainmueller and Hopkins, 2014). This finding from previous studies suggests that self-interested labor market concerns are not a quantitatively important driver of attitudes toward immigration, but it does not rule out an important role for labor market concerns about the nationwide labor market effect of immigration. While our causal estimates do not allow us to conclusively differentiate between self-interested and nationwide labor market concerns, the correlations we uncover are consistent with previous work highlighting a role of nationwide economic concerns on attitudes toward immigration (Bansak et al., 2016; Citrin et al., 1997; Hainmueller and Hopkins, 2015). For instance, in the context of the European refugee crisis, a conjoint experiment by Bansak et al. (2016) finds stronger support for sociotropic concerns about the potential economic contribution of immigrants than self-interested concerns about labor market competition.

4 Concluding remarks

In this paper, we present evidence that information about no adverse labor market impacts of immigration substantially affects public support for immigration. The information treatment changes people's beliefs about the labor market impact of immigration and affects people's support for immigration both in terms of self-reported attitudes and signatures on real online petitions. Immigration is now said to rival economics as "the driving force in Western politics," and may continue to dominate the political discussion for decades to come.[26] While natural experiments studying the impact of immigration on voting outcomes cannot identify the underlying motivations of voters,

---

[26]Rachman, Gideon. "Migration will drive western politics for decades to come," *Financial Times,* May 8, 2018. https://www.ft.com/content/7f4c6222-4f94-11e8-9471-a083af05aea7

our findings suggest that beliefs about the labor market impact of immigration may be an important mechanism at play.

We believe that using the results from natural experiments to measure and shock people's beliefs about the expected costs and benefits of economic policies could be applied in many different settings. A large literature has investigated whether people hold accurate beliefs about policy-relevant facts. The consensus from this literature is that people suffer from widespread political misperceptions, which undermine their ability to form meaningful opinions. However, to form meaningful opinions about topics such as immigration, taxation, and monetary policy, it is arguably equally important for voters to engage in counterfactual policy analysis. We think that a promising avenue for future research is to assess the economic competence of voters by investigating two related questions: (i) which mental models people use to assess the economic implications of different policies and (ii) how people use new evidence to update their mental models of the economy.

References

Alan, S. and S. Ertac (2017). Belief in hard work and prosocial behavior: Evidence from a randomized field experiment.

Alesina, A., M. Carlana, E. L. Ferrara, and P. Pinotti (2018). Revealing stereotypes: Evidence from immigrants in schools. Technical report, National Bureau of Economic Research.

Alesina, A. and E. La Ferrara (2005). Preferences for Redistribution in the Land of Opportunities. *Journal of Public Economics 89*(5), 897–931.

Alesina, A., A. Miano, and S. Stantcheva (2018). Immigration and redistribution. NBER Working Paper 24733.

Alesina, A., S. Stantcheva, and E. Teso (2018). Intergenerational mobility and preferences for redistribution. *American Economic Review 108*(2), 521–554.

Athey, S., J. Tibshirani, S. Wager, et al. (2019). Generalized random forests. *The Annals of Statistics 47*(2), 1148–1178.

Bansak, K., J. Hainmueller, and D. Hangartner (2016). How economic, humanitarian, and religious concerns shape european attitudes toward asylum seekers. *Science 354*(6309), 217–222.

Bansak, K., J. Hainmueller, and D. Hangartner (2017). Europeans support a proportional allocation of asylum seekers. *Nature Human Behaviour 1*(7), 0133.

Borjas, G. J. (2017). The wage impact of the marielitos: A reappraisal. *ILR Review 70*, 1077–1110.

Bursztyn, L., M. Callen, B. Ferman, S. Gulzar, A. Hasanain, and N. Yuchtman (2019, 09). Political Identity: Experimental Evidence on Anti-Americanism in Pakistan. *Journal of the European Economic Association*. jvz053.

Bursztyn, L., G. Egorov, and S. Fiorin (2017, May). From extreme to mainstream: How social norms unravel. Working Paper 23415, National Bureau of Economic Research.

Bursztyn, L., I. Haaland, A. Rao, and C. Roth (2020, May). I have nothing against them, but ... NBER Working Papers 27288.

Card, D. (1990). The impact of the mariel boatlift on the miami labor market. *Industrial and Labor Relations Review 43*(2), 245–257.

Card, D., C. Dustmann, and I. Preston (2012). Immigration, wages, and compositional amenities. *Journal of the European Economic Association 10*(1), 78–119.

Cavallo, A., G. Cruces, and R. Perez-Truglia (2017). Inflation expectations, learning, and supermarket prices: Evidence from survey experiments. *American Economic Journal: Macroeconomics 9*(3), 1–35.

Citrin, J., D. P. Green, C. Muste, and C. Wong (1997). Public opinion toward immigration reform: The role of economic motivations. *Journal of Politics 59*(3), 858–881.

Clemens, M. A. (2017). What the mariel boatlift of cuban refugees can teach us about the economics of immigration: An explainer and a revelation.

Clemens, M. A. and J. Hunt (2017, May). The labor market effects of refugee waves: Reconciling conflicting results. Working Paper 23433, National Bureau of Economic Research.

Cruces, G., R. Perez-Truglia, and M. Tetaz (2013). Biased Perceptions of Income Distribution and Preferences for Redistribution: Evidence from a Survey Experiment. *Journal of Public Economics 98*, 100–112.

de Quidt, J., J. Haushofer, and C. Roth (2018). Measuring and bounding experimenter demand. *American Economic Review 108*(11), 3266–3302.

Dehdari, S. (2018). Economic distress and support for far-right parties - evidence from sweden. available at SSRN: `https://ssrn.com/abstract=3160480`.

DellaVigna, S., J. A. List, U. Malmendier, and G. Rao (2016). Voting to tell others. *Review of Economic Studies 84*(1), 143–181.

Facchini, G., Y. Margalit, and H. Nakata (2017). Countering public opposition to immigration: The impact of information campaigns.

Facchini, G., A. M. Mayda, and R. Puglisi (2009). Illegal immigration and media exposure: Evidence on individual attitudes. *CEPR Discussion Papers 7593*.

Gilens, M. (2001). Political Ignorance and Collective Policy Preferences. *American Political Science Review 95*(2), 379–396.

Grigorieff, A., C. Roth, and D. Ubfal (2020). Does information change attitudes toward immigrants? *Demography 57*(3), 1–27.

Haaland, I. and C. Roth (2019). Beliefs about racial discrimination and support for pro-black policies. Working Paper 7828, CESifo.

Haaland, I., C. Roth, and J. Wohlfart (2020, June). Designing information provision experiments. Working paper 8406, CESifo.

Hainmueller, J., M. J. Hiscox, and Y. Margalit (2015). Do Concerns about Labor Market Competition Shape Attitudes Toward Immigration? New Evidence. *Journal of International Economics 97*(1), 193–207.

Hainmueller, J. and D. J. Hopkins (2014). Public Attitudes Toward Immigration. *Annual Review of Political Science 17*, 225–249.

Hainmueller, J. and D. J. Hopkins (2015). The Hidden American Immigration Consensus: A Conjoint Analysis of Attitudes Toward Immigrants. *American Journal of Political Science 59*(3), 529–548.

Halla, M., A. F. Wagner, and J. Zweimüller (2017). Immigration and voting for the far right. *Journal of the European Economic Association 15*(6), 1341–1385.

Hjort, J., D. Moreira, G. Rao, and J. F. Santini (2019). How research affects policy: Experimental evidence from 2,150 brazilian municipalities. NBER Working Paper 25941.

Hopkins, D. J., J. Sides, and J. Citrin (2019). The muted consequences of correct information about immigration. *Journal of Politics 81*(1), 315–320.

Iyengar, S., S. Jackman, S. Messing, N. Valentino, T. Aalberg, R. Duch, K. S. Hahn, S. Soroka, A. Harell, and T. Kobayashi (2013). Do attitudes about immigration predict willingness to admit individual immigrants? a cross-national test of the person-positivity bias. *Public Opinion Quarterly 77*(3), 641–665.

Karadja, M., J. Mollerstrom, and D. Seim (2017). Richer (and Holier) Than Thou? the Effect of Relative Income Improvements on Demand for Redistribution. *Review of Economics and Statistics 99*(2), 201–212.

Kuklinski, J. H., P. J. Quirk, J. Jerit, D. Schwieder, and R. F. Rich (2000). Misinformation and the currency of democratic citizenship. *Journal of Politics 62*(3), 790–816.

Kuziemko, I., M. I. Norton, E. Saez, and S. Stantcheva (2015). How Elastic are Preferences for Redistribution? Evidence from Randomized Survey Experiments. *American Economic Review 105*(4), 1478–1508.

Lergetporer, P., M. Piopiunik, L. Simon, et al. (2017). Do natives' beliefs about refugees' education level affect attitudes toward refugees? evidence from randomized survey experiments. Working Paper 6832, CESifo.

Lord, C. G., L. Ross, and M. R. Lepper (1979). Biased assimilation and attitude polarization: The effects of prior theories on subsequently considered evidence. *Journal of Personality and Social Psychology 37*(11), 2098.

Mayda, A. M. (2006). Who is Against Immigration? A Cross-country Investigation of Individual Attitudes Toward Immigrants. *Review of Economics and Statistics 88*(3), 510–530.

Mayda, A. M., G. Peri, and W. Steingress (2018, April). The political impact of immigration: Evidence from the united states. Working Paper 24510, National Bureau of Economic Research.

Mummolo, J. and E. Peterson (2018). Demand effects in survey experiments: An empirical assessment. *American Political Science Review 113*(2), 517–529.

Nyhan, B. and J. Reifler (2010). When Corrections Fail: The Persistence of Political Misperceptions. *Political Behavior 42*, 303–300.

Peri, G. and V. Yasenov (2019). The labor market effects of a refugee wave synthetic control method meets the mariel boatlift. *Journal of Human Resources 54*(2), 267–309.

Scheve, K. F. and M. J. Slaughter (2001). Labor Market Competition and Individual Preferences over Immigration Policy. *Review of Economics and Statistics 83*(1), 133–145.

Sides, J. and J. Citrin (2007). How Large the Huddled Masses? The Causes and Consequences of Public Misperceptions About Immigrant Populations. In *Annual Meeting of the Midwest Political Science Association, Chicago.*

Tabellini, M. (2019, 05). Gifts of the Immigrants, Woes of the Natives: Lessons from the Age of Mass Migration. *The Review of Economic Studies 87*(1), 454–486.

Taber, C. S. and M. Lodge (2006). Motivated Skepticism in the Evaluation of Political Beliefs. *American Journal of Political Science 50*(3), 755–769.

Tappin, B. M., L. van der Leer, and R. T. McKay (2017). The heart trumps the head: Desirability bias in political belief revision. *Journal of Experimental Psychology: General 146*(8), 1143.

Tibshirani, J., S. Athey, and S. Wager (2019). *grf: Generalized Random Forests.* `https://CRAN.R-project.org/package=grf`. R package version 1.0.1.

Wager, S. and S. Athey (2018). Estimation and inference of heterogeneous treatment effects using random forests. *Journal of the American Statistical Association 113*(523), 1228–1242.

White, A., A. Strezhnev, C. Lucas, D. Kruszewska, and C. Huff (2018). Investigator characteristics and respondent behavior in online surveys. *Journal of Experimental Political Science 5*(1), 56–67.

Zizzo, D. J. (2010). Experimenter Demand Effects in Economic Experiments. *Experimental Economics 13*(1), 75–98.

Main figures and tables

Figure 1: Distribution of attitudes toward immigrants: Treatment vs. control
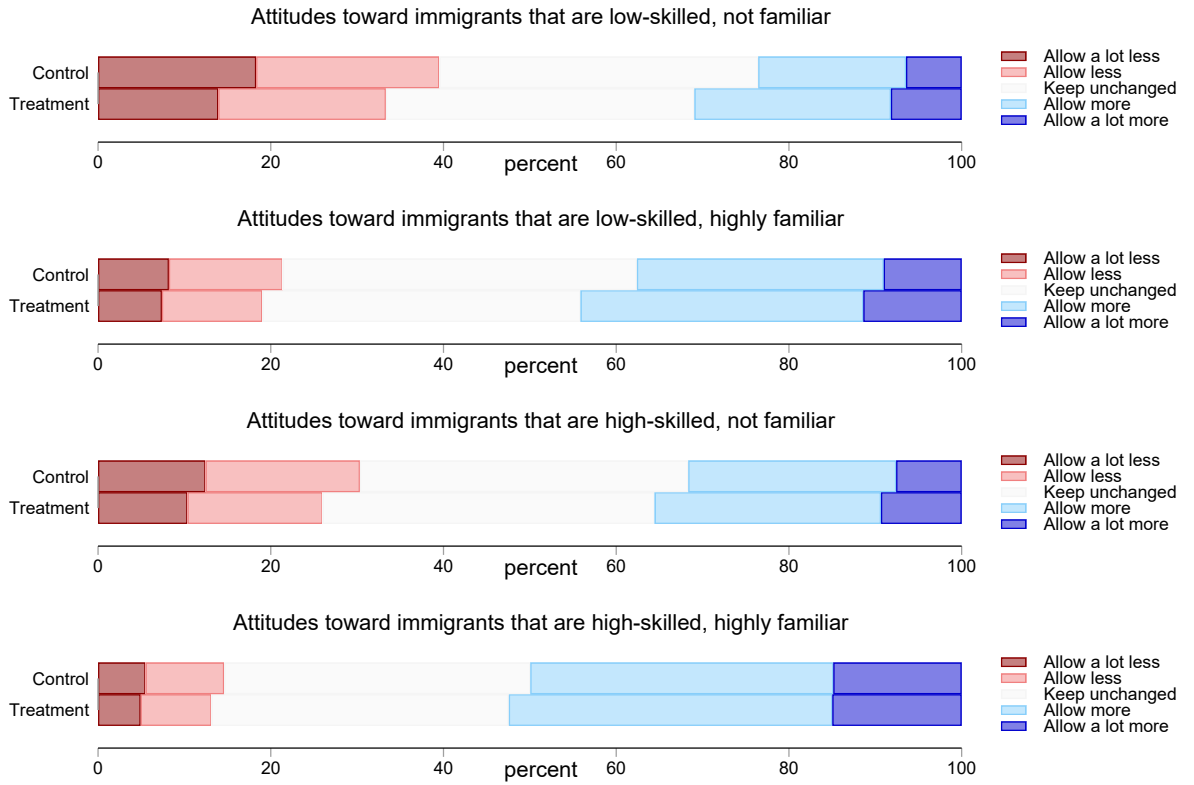
Notes: The figure shows the distribution of attitudes toward low-skilled/high-skilled immigrants that are highly familiar/not familiar with American values and traditions, disaggregated by the treatment and control group.

Table 1: Post-treatment beliefs about the impact of immigration

	Impact of low-skilled immigration				Impact of high-skilled immigration				Follow-up
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Wages	Employment	Taxes	Culture	Wages	Employment	Taxes	Culture	Workers
Panel A: Country									
Treatment	0.166***	0.165***	0.035	0.048	0.186***	0.254***	0.080*	0.046	0.125***
	(0.046)	(0.048)	(0.048)	(0.049)	(0.047)	(0.047)	(0.047)	(0.049)	(0.039)
N	1467	1462	1457	1445	1468	1462	1456	1441	2087
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Panel B: Household									
Treatment	0.027	0.017	0.028		0.065	0.146***	0.058		
	(0.048)	(0.049)	(0.049)		(0.047)	(0.048)	(0.047)		
N	1467	1462	1457		1468	1462	1456		
Controls	Yes	Yes	Yes		Yes	Yes	Yes		

Notes: The table shows OLS regression results on post-treatment beliefs about the impact of immigration. The dependent variable is indicated in each column. Columns 1—8 show results from the main study, while column 9 shows result from the obfuscated follow-up study. **Panel A** shows beliefs about the impact of immigration on *most Americans* while **Panel B** shows beliefs about the impact of immigration on the respondents' own household. Respondents in the main study were cross-randomized into answering questions about the impact of low-skilled immigration (columns 1–4) or about the impact of high-skilled immigration (columns 5–8). Column 9 reports result from the obfuscated follow-up study, in which all people were asked about the impact of immigration in general. For *Wages*, responses ranged from 1: Strongly decrease wages for my household/most Americans to 5: Strongly increase wages for my household/most Americans. For *Employment*, responses ranged from 1: Strongly reduce job opportunities or reduce job security for my household/most Americans to 5: Strongly increase job opportunities or job security for my household/most Americans. For *Taxes*, responses ranged from 1: Increase taxes a lot for my household/most Americans to 5: Decrease taxes a lot for my household/most Americans. For *Culture*, responses ranged from 1: greatly damage American culture and society to 5: greatly improve American culture and society. For *Workers* (whether increased immigration hurts American workers), responses ranged from 1: "Strongly disagree" to 5: Strongly agree. The outcomes are z-scored using the mean and standard deviation in the control group. Regressions include pre-specified controls (also listed in Table 2).

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Robust standard errors in parentheses.

Table 2: Self-reported attitudes toward immigration (post-treatment)

	Low-skilled (Main Study)			High-skilled (Main Study)			Follow-up	
	Not familiar	Familiar	Index	Not familiar	Familiar	Index	Low-skilled	High-skilled
Panel A: With controls								
Treatment	0.169***	0.106***	0.137***	0.103***	0.036	0.070**	0.104***	0.065
	(0.033)	(0.034)	(0.030)	(0.033)	(0.034)	(0.030)	(0.040)	(0.042)
Adjusted p-value	[0.001]	[0.001]		[0.003]	[0.167]			
Observations	3171	3167	3176	3167	3165	3170	2089	2089
Panel B: Without controls								
Treatment	0.173***	0.116***	0.144***	0.109***	0.045	0.078**	0.115***	0.071
	(0.036)	(0.036)	(0.033)	(0.035)	(0.035)	(0.032)	(0.043)	(0.043)
Adjusted p-value	[0.001]	[0.001]		[0.004]	[0.110]			
Observations	3171	3167	3176	3167	3165	3170	2089	2089

Notes: The table shows OLS regression results where the dependent variables are attitudes toward the different types of immigrants. The answers were given on a five-point scale from 1: "Allow a lot less of these immigrants" to 5: "Allow a lot more of these immigrants." The question order was randomized (statistical tests show no order effects). The outcomes are z-scored using the mean and standard deviation in the control group. The indices are created by taking the mean of the responses to immigrants with different familiarity with American values and traditions for each skill level. Adjusted p-values are in brackets. "Treatment" is an indicator equal to 1 if respondents received the research evidence. Controls include gender, age, ethnicity, region, household size, household income, education, employment status, party affiliation, whether the respondent was born in the US, whether the subject's parents were born in the US, self-perceived skill-level, and pre-treatment beliefs about the labor market impact of low-skilled (or high-skilled) immigration and are coded as described in the pre-analysis plan. * $p<0.1$, ** $p<0.05$, *** $p<0.01$. Robust standard errors in parentheses.

Table 3: Online petitions on H-2B visas (post-treatment)

	Intention: H2B Visas			Actual signatures H2B Visas	
	Increase	Decrease	Net support	Increase	Decrease
Panel A: With controls					
Treatment	0.048***	-0.058***	0.137***	–	–
	(0.016)	(0.016)	(0.034)	–	–
Observations	3114	3114	3114	–	–
Panel B: Without controls					
Treatment	0.049***	-0.060***	0.141***	0.027***	-0.004
	(0.017)	(0.016)	(0.036)	(0.008)	(0.007)
Control Mean	0.286	0.321	-0.000	0.039	0.046
Observations	3114	3114	3114	3114	3114

Notes: The three first columns show regression results where the dependent variable is intention to sign the petitions. "Increase" ("Decrease") is an indicator equal to 1 if a respondent wanted to sign the petition suggesting to increase (decrease) the annual cap on the H-2B visa program. "Net support" is a z-scored transformation of a variable taking value 1 (-1) if a respondent wanted to sign the petition to increase (decrease) the annual cap on the H-2B visa program and 0 otherwise. The two last columns show actual signatures. Since we only observe actual signatures on the treatment group level, we cannot include controls and run regressions for these outcomes. To do testing, we calculate standard errors using the standard formula for proportion tests. "Treatment" is an indicator equal to 1 if respondents received information about the labor market impact of the Mariel boatlift. We use the same controls as in Table 1. * $p<0.1$, ** $p<0.05$, *** $p<0.01$. For the questions on intention to sign the petitions, we apply robust standard errors in parentheses.

Labor Market Concerns and Support for Immigration

Ingar Haaland and Christopher Roth

Summary of the Online Appendix

Figure A.1 shows an overview of the structure of the experiment. Figure A.2 shows the distribution of the pre-treatment beliefs our respondents hold about the labor market impact of the Mariel boatlift. Figure A.3 displays the correlates of demographics with people's pre-treatment beliefs about the wage and employment impact of the Mariel boatlift. Figure A.4 displays the distribution of beliefs about the labor market impact of immigration on most Americans versus own household separately for the treatment and control group. Figure A.5 shows treatment effects in absolute and relative changes. Figure A.6 shows heterogeneous updating of beliefs about the labor market effects of immigrants. Figure A.7 shows heterogeneous treatment effects on support for low-skilled immigration by people's pre-treatment beliefs about the Mariel boatlift. Figure A.8 shows heterogeneous treatment effects by confidence in prior beliefs. Figure A.9 displays the distribution of beliefs about the research evidence and the survey as a whole. Figure A.10, Figure A.11, and Figure A.12 show the results from the generalised random forests on attitudes toward immigrants, beliefs about the impact of increased immigration on most Americans, and beliefs about the impact of increased immigration the respondents' own household, respectively.

Tables A.1 and A.2 provide descriptive statistics. Table A.3 shows covariate balance for the main sample, while Table A.4 provides evidence of covariate balance for the sample in the follow-up study. Table A.5 examines correlates of attrition in the follow-

up study. Table A.6 examines attrition in the main study. Table A.7 examines the relevance of order effects. Table A.8 shows our main treatment effects on binary measures of beliefs. Table A.9 shows our main treatment effects on beliefs without any controls. Tables A.10 and A.11 show the robustness of our results on support for immigration when restricting the sample to those who also completed the post-treatment belief questions. Table A.12 shows the main results on policy preferences restricting the sample to those who also completed the follow-up survey. Tables A.13 and A.14 examine the relative importance of self-interested vs. group-level concerns in shaping immigration preferences.

Table A.15 examines heterogeneous treatment effects on people's beliefs about the labor market impact of immigration. Table A.16 and Table A.17 examine heterogeneity for our main self-reported outcome questions by people's self-perceived skill level, their political affiliation, and their pre-treatment belief about the effect of the Mariel boatlift. Table A.18 examines heterogeneous treatment effects along these dimensions on people's intention to sign the petition. Section B lists some minor deviations from the pre-analysis plans.

Section C provides screenshots of the online petition, the invitation email for the follow-up study, and the consent forms in the main study and the obfuscated follow-up study. Finally, Section D and E provide experimental instructions for, respectively, the main experiment and the obfuscated follow-up.

A Appendix Figures

Figure A.1: Overview of the experiment

Enter main study (n=3,177)

Pre-treatment questions:
 (i) Socioeconomic questions
 (ii) Beliefs about the Mariel boatlift

Control group (n=1,589)

Treatment group (n=1,588)

Informational treatment:
Research evidence of the labor market
impact of the Mariel boatlift

Post-treatment outcomes:
 (i) Self-reported policy views
 (ii) Signatures on real online petitions
 (iii) Beliefs about immigration today

Obfuscated follow-up study (n=2,089;
1046/1043 from treatment/control, resp.)

Questions to obfuscate follow-up purpose:
 (i) Socioeconomic questions
 (ii) Views on taxation and spending
Questions on immigration:
 (i) Self-reported policy views
 (ii) Beliefs about impact today

Figure A.2: Pre-treatment beliefs about the labor market impacts of the Mariel boatlift
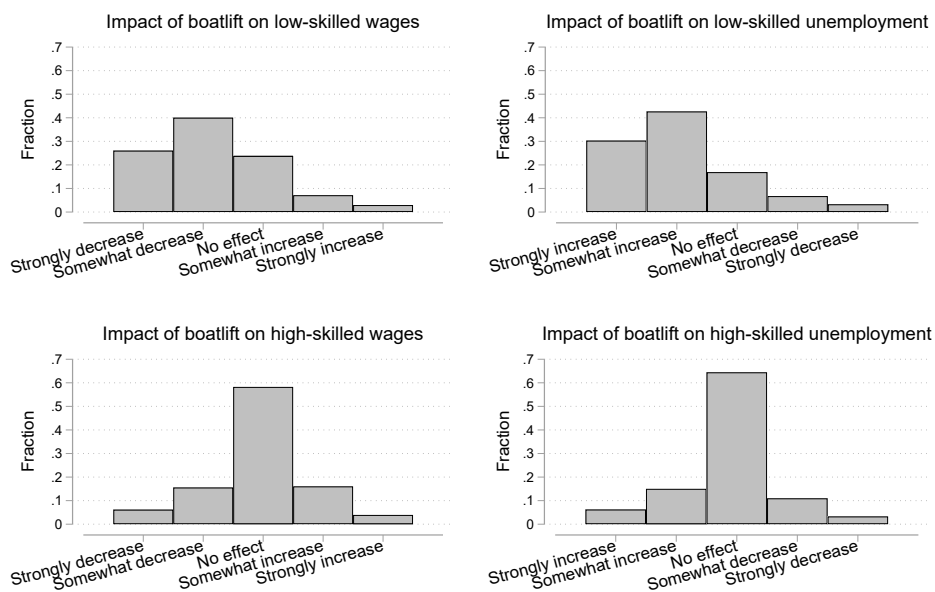
Notes: The figure shows the distribution of pre-treatment beliefs about the impact of the Mariel boatlift on wages (left panels) and unemployment (right panels) for low-skilled workers (top panels) and high-skilled workers (bottom panels). Respondents are asked two question on wages: "In the five-year period after 1980, how do you think wages of low-skilled (high-skilled) workers in Miami were affected by the mass immigration of Cubans?" The responses are on a five-point scale ranging from (1) Strongly decrease to (5) Strongly increase. They are also asked two questions about unemployment: "In the five-year period after 1980, how do you think unemployment among low-skilled (high-skilled) workers in Miami was affected by the mass immigration of Cubans?" The responses are on a five-point scale ranging from (1) Strongly increase to (5) Strongly decrease.

Figure A.3: Correlates of pre-treatment beliefs about the Mariel boatlift
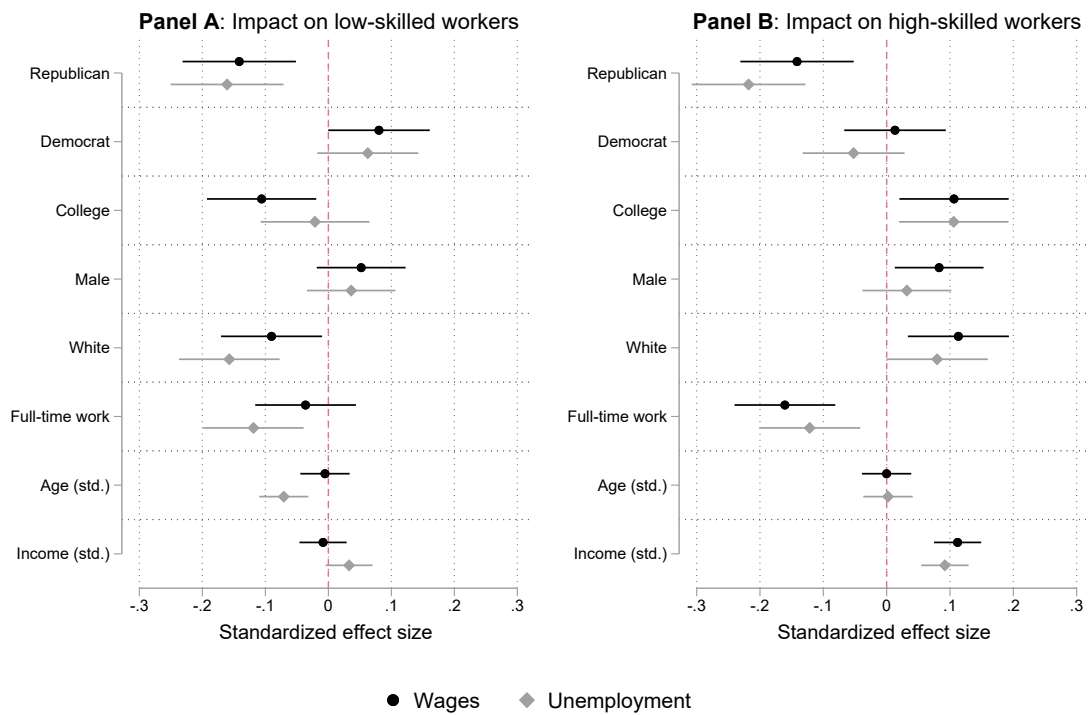
Notes: The dots indicate the mean values of the estimated multiple regression coefficients. The lines indicate 95 percent confidence interval of the mean. In **Panel A**, the outcome variables are people's beliefs about the labor market impact of the Mariel boatlift on low-skilled workers; in **Panel B**, the outcome variables are beliefs about the labor market impact on high-skilled workers. Higher values correspond to more optimistic beliefs about the wage and employment effects of the Mariel boatlift on low-skilled and high-skilled workers respectively.

Figure A.4: Beliefs about the impact of increased immigration today
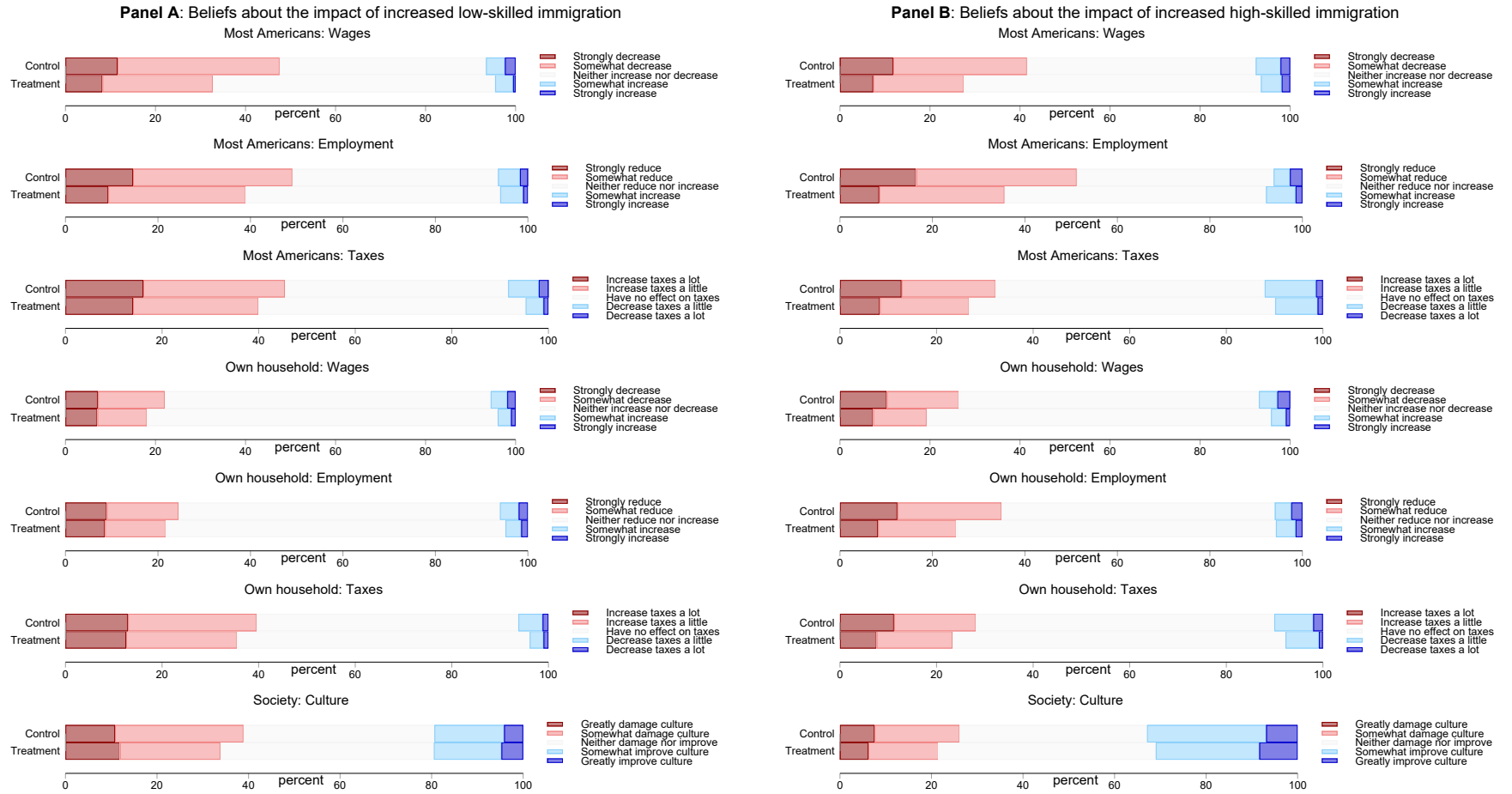
Panel A: Beliefs about the impact of increased low-skilled immigration

Panel B: Beliefs about the impact of increased high-skilled immigration

Notes: The figure shows the distribution of beliefs about the impact of increased low-skilled/high-skilled immigration, disaggregated by the treatment and control group.

Figure A.5: Treatment effects on attitudes toward immigrants
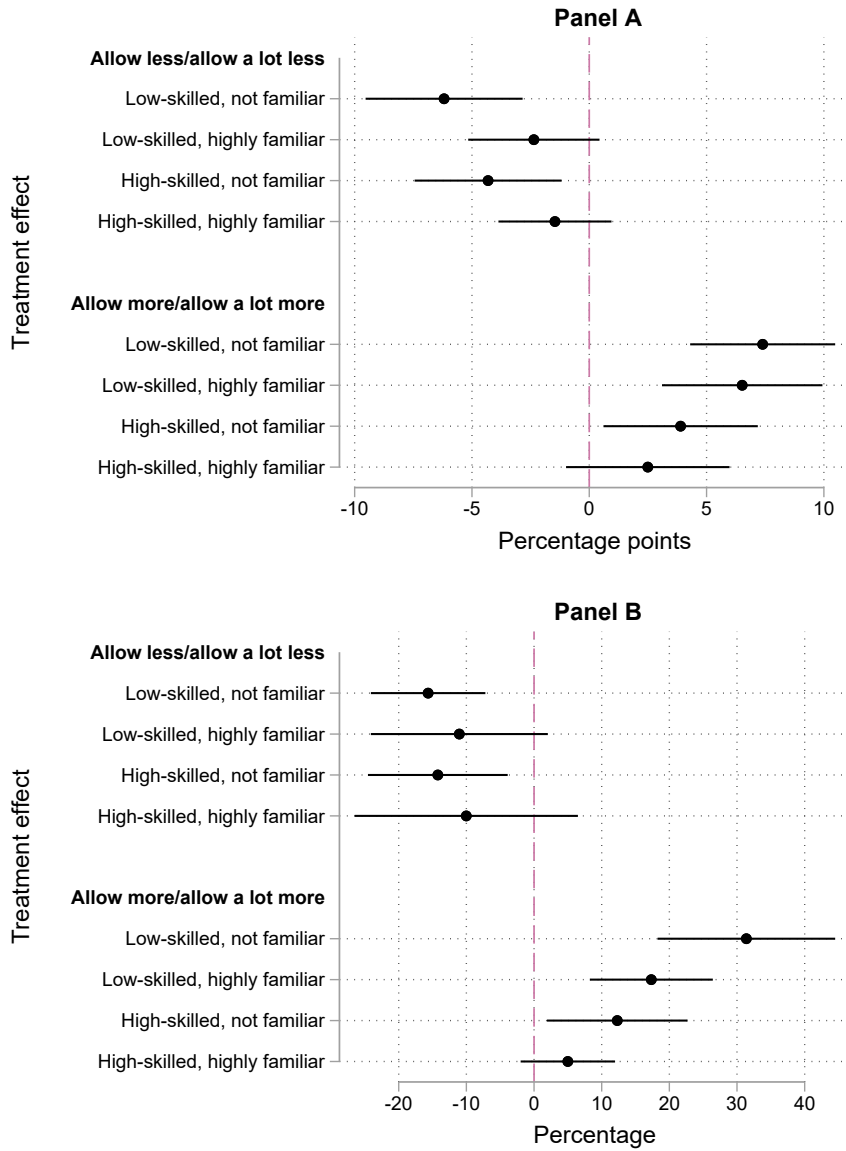
Notes: The figure shows treatment effects on the fraction of respondents who answer that they want to allow more/allow a lot more and allow less/a lot less of low-skilled/high-skilled immigrants that are highly familiar/not familiar with American values and traditions. **Panel A** shows the treatment effects in percentage point changes. **Panel B** shows the treatment effects in percent changes. Lines indicate 95 percent confidence intervals.

Figure A.6: Heterogeneity in belief updating: Labor market impact of low-skilled immigration

Panel A: Wages
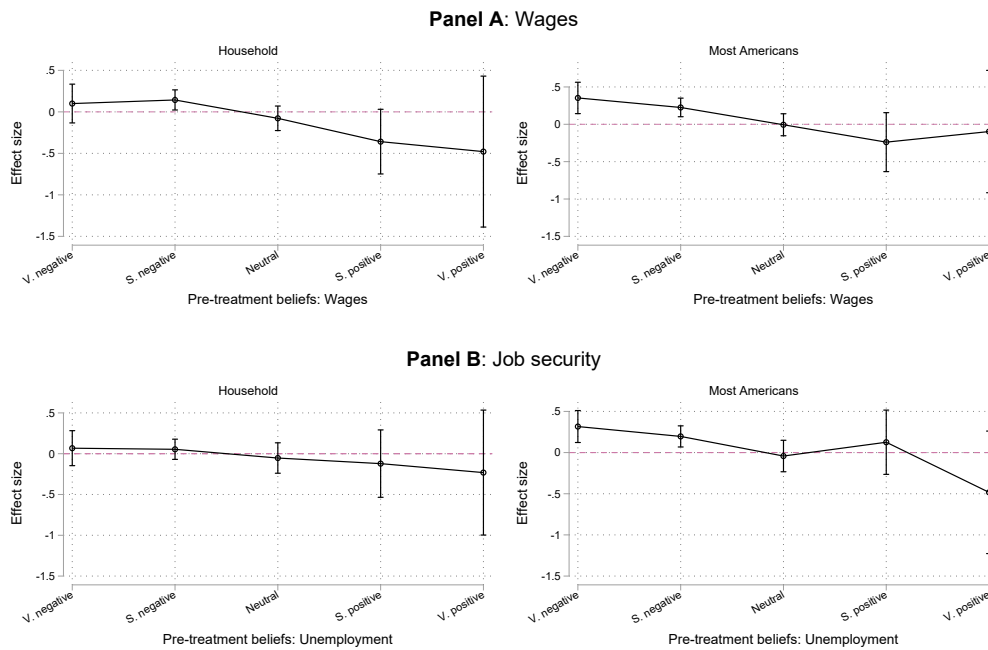
Notes: The figure shows standardized treatment effects on beliefs about the wage and unemployment impact of low-skilled immigration by their pre-treatment beliefs about the wage and unemployment impact of the Mariel boatlift. The outcomes are based on the follow questions: how do you think admitting more low-skilled immigrants would affect (i) "wages," and (ii) "job opportunities and job security" for their own household as well as for most Americans. The regressions include pre-specified controls (listed in Table 2). 95 percent confidence intervals are indicated.

Figure A.7: Support for low-skilled immigration, treatment heterogeneity by pre-treatment beliefs
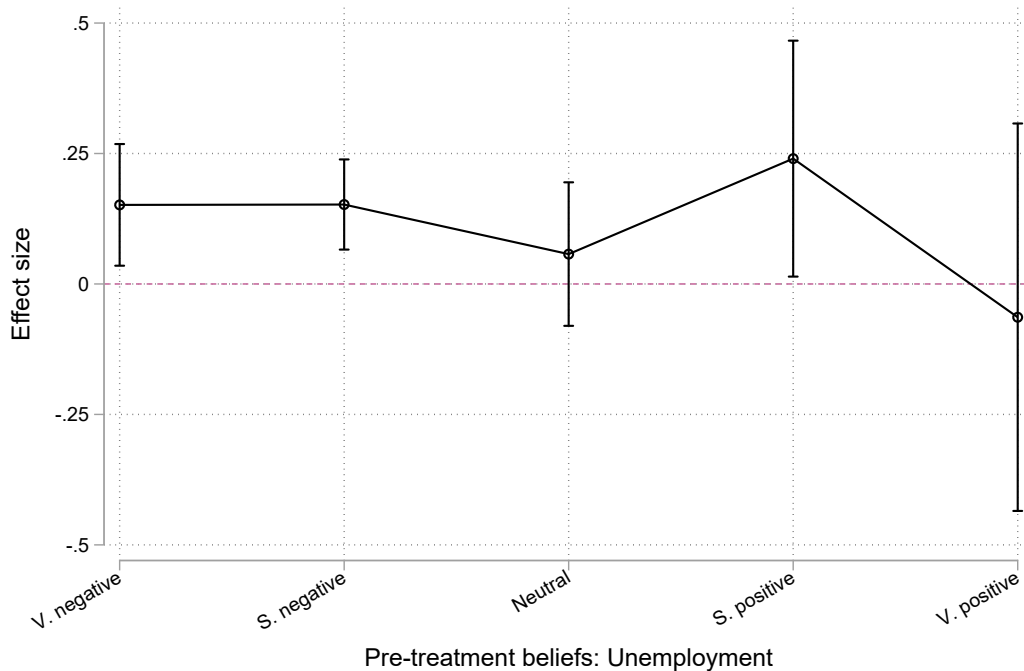
Notes: The figure shows heterogeneous treatment effects on support for low-skilled immigration based on people's pre-treatment beliefs about the low-skilled wage and unemployment impact of the Mariel boatlift. The regressions include pre-specified controls (listed in Table 2). 95 percent confidence intervals are indicated.

Figure A.8: Beliefs about the impact of increased low-skilled immigration today: Heterogeneity by confidence in pre-treatment beliefs
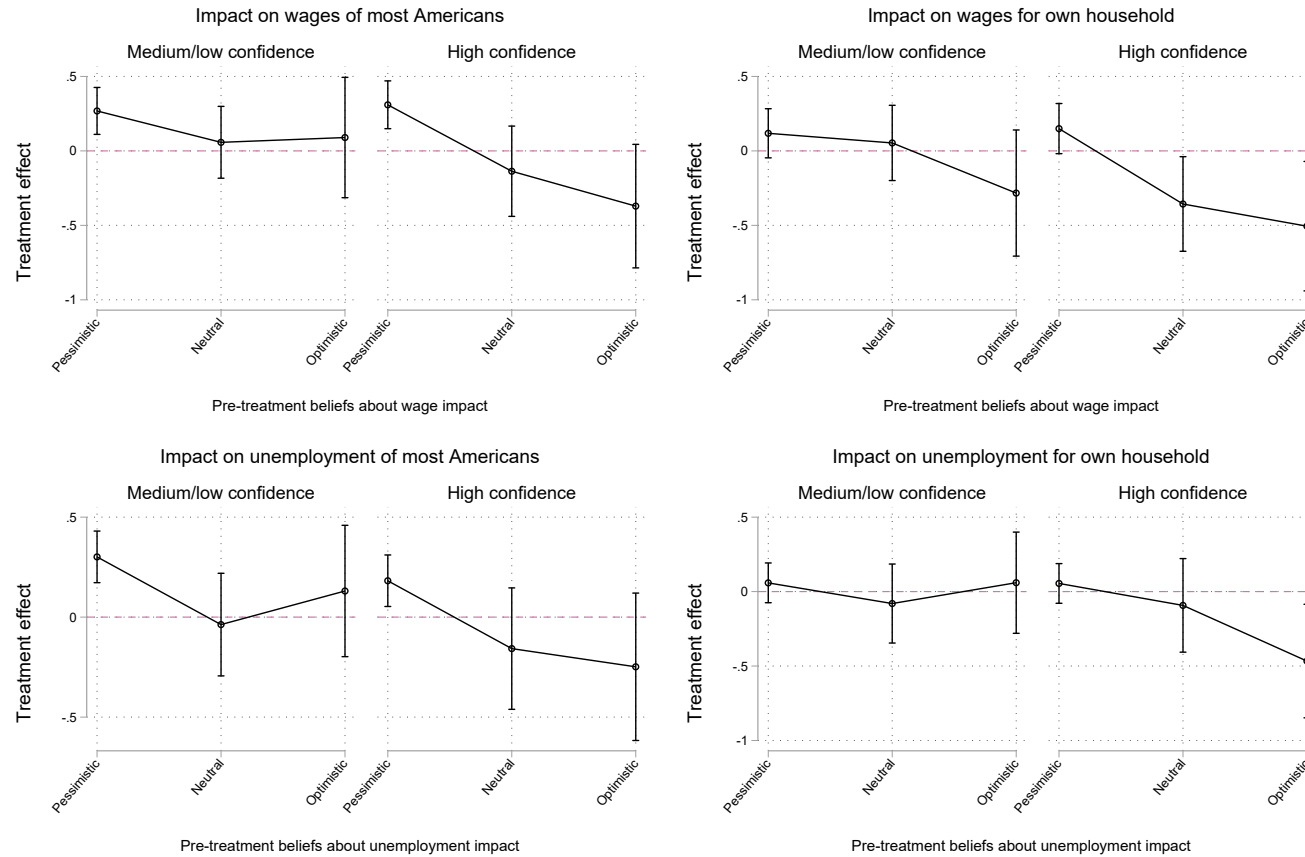
Notes: The figure shows heterogeneous treatment effects on beliefs about the impact of increased low-skilled immigration today by pre-treatment beliefs about the low-skilled wage and unemployment impact of the Mariel boatlift and confidence in those beliefs. Pre-treatment beliefs about wages were elicited on a five-point scale from 1: Strongly decrease wages to 5: Strongly increase wages. "Pessimistic" takes the value one for respondents who chose "Strongly decrease wages" or "Somewhat decrease wages." "Neutral" takes the value one for respondents who chose "Virtually no effect on wages". "Optimistic" takes the value one for respondents who chose "Somewhat increase wages" or "Strongly increase wages." The scale is similarly constructed for the unemployment prior. Confidence was elicited on a five-point scale from 1: Very Unsure to 5: Very sure. In the figure, "High confidence" corresponds to the options "Sure" and "Very sure" and "Medium/low confidence" corresponds to the options "Somewhat sure", "Unsure" and "Very Unsure."

Figure A.9: Beliefs about the relevance of the study for immigration policy today
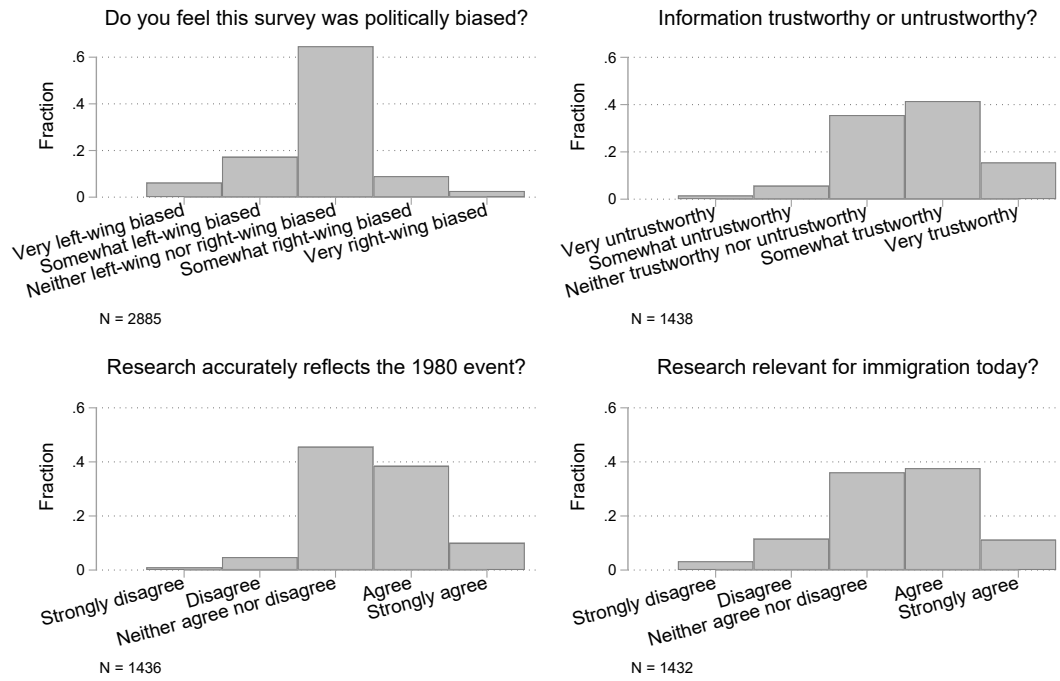
Notes: The histogram shows the distribution of answers to post-treatment questions on people's perception of the bias of the survey and their interpretation of the findings in the research study.

Figure A.10: Heterogeneous treatment effects: Attitudes toward immigrants
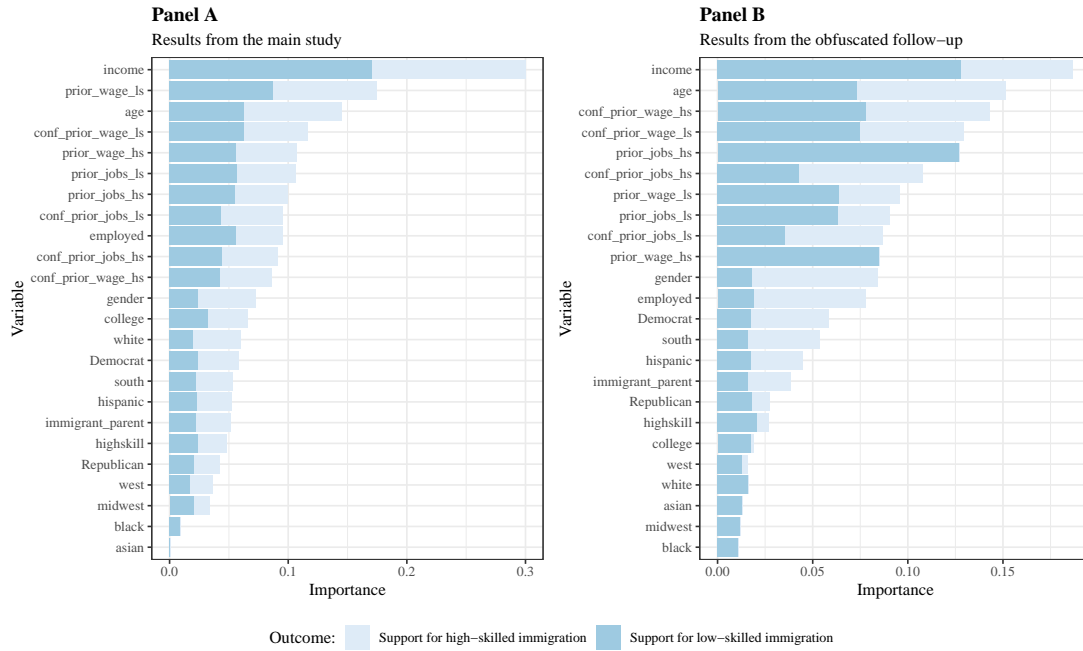
Notes: The figure displays results from a generalized random forests (Athey et al., 2019) used to estimate heterogeneous treatment effects on attitudes toward low-skilled and high-skilled immigration. The estimation was done using the causal_forest function of the grf package in R (Tibshirani et al., 2019). 'Importance' for each variable used to estimate the heterogeneous treatment effects is defined by taking a simple weighted sum of how many times each variable was split at each depth in the forests (for details, see Tibshirani et al., 2019). **Panel A** shows results from the main study and **Panel B** shows results from the obfuscated follow-up study. The following variables are used to estimate heterogeneous treatment effects: *highskill* (dummy for self-perceiving as high-skilled), *employed* (dummy for being in full-time work), *college* (dummy for having some college education), *west*, *south*, and *midwest* (regional dummies), *white*, *asian*, *black*, *hispanic* (race and ethnicity dummies), *age* (continuous), *income* (continuous), *gender* (dummy), *Democrat* and *Republican* (dummies for political party views), *immigrant_parent* (dummy for having immigrant parents), *prior_jobs_ls* (prior beliefs about the employment impact of low-skilled immigration), *prior_jobs_hs* (prior beliefs about the employment impact of high-skilled immigration), *prior_wage_ls* (prior beliefs about the wage impact of low-skilled immigration), *prior_wage_hs* (prior beliefs about the wage impact of high-skilled immigration), *conf_prior_jobs_ls* (confidence in prior beliefs about the employment impact of low-skilled immigration), *conf_prior_jobs_hs* (confidence in prior beliefs about the employment impact of high-skilled immigration), *conf_prior_wage_ls* (confidence in prior beliefs about the wage impact of low-skilled immigration), and *conf_prior_wage_hs* (confidence in prior beliefs about the wage impact of high-skilled immigration).

11

Figure A.11: Heterogeneous treatment effects: Beliefs about the impact of increased immigration on most Americans
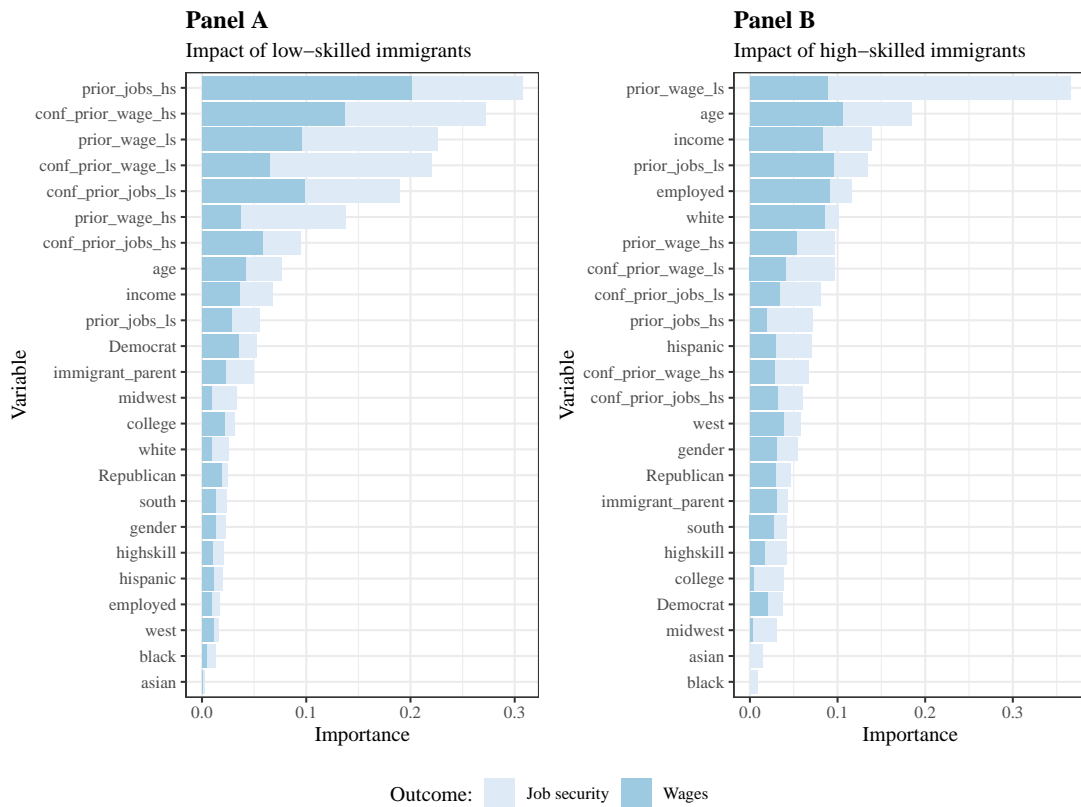
Notes: The figure displays results from a generalized random forests (Athey et al., 2019) used to estimate heterogeneous treatment effects on beliefs about the impact of increased immigration on most Americans. The estimation was done using the causal_forest function of the `grf` package in R (Tibshirani et al., 2019). 'Importance' for each variable used to estimate the heterogeneous treatment effects is defined by taking a simple weighted sum of how many times each variable was split at each depth in the forests (for details, see Tibshirani et al., 2019). **Panel A** shows results on beliefs about the impact of low-skilled immigrants and **Panel B** shows results on beliefs about the impact of high-skilled immigrants. An overview of all variables included is provided in Figure A.10.

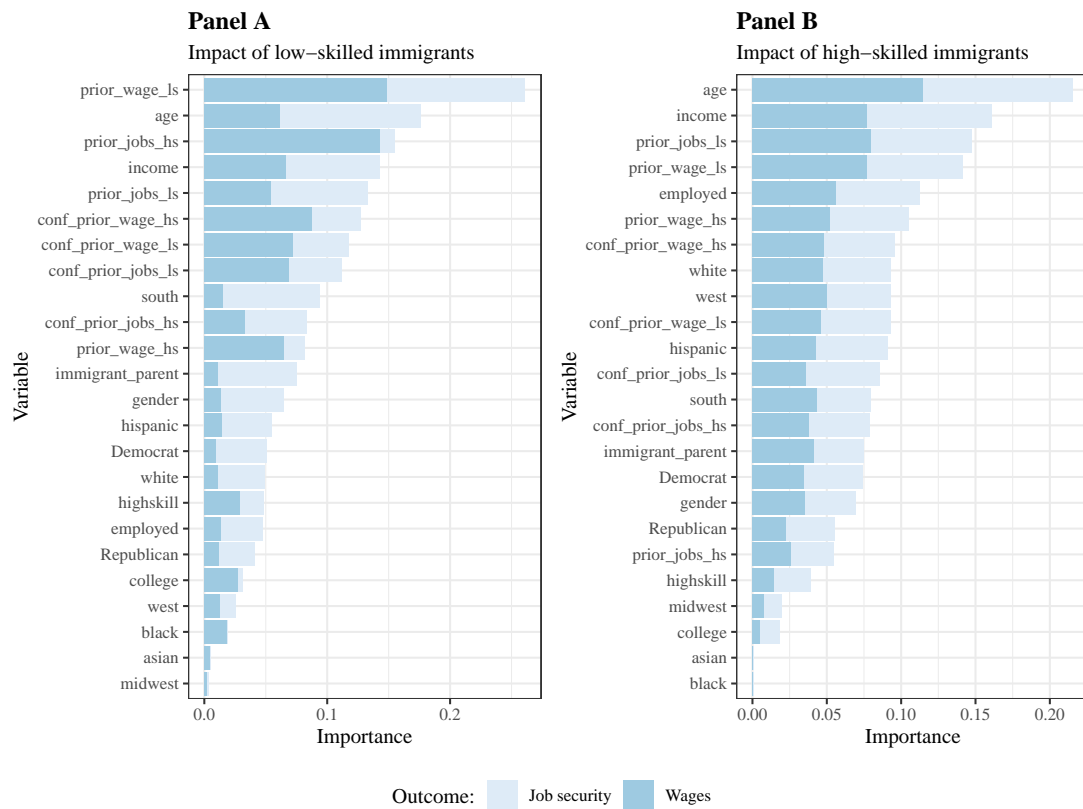Figure A.12: Heterogeneous treatment effects: Beliefs about the impact of increased immigration on own household

Notes: The figure displays results from a generalized random forests (Athey et al., 2019) used to estimate heterogeneous treatment effects on beliefs about the impact of increased immigration on the own household. The estimation was done using the causal_forest function of the grf package in R (Tibshirani et al., 2019). 'Importance' for each variable used to estimate the heterogeneous treatment effects is defined by taking a simple weighted sum of how many times each variable was split at each depth in the forests (for details, see Tibshirani et al., 2019). **Panel A** shows results on beliefs about the impact of low-skilled immigrants and **Panel B** shows results on beliefs about the impact of high-skilled immigrants. An overview of all variables included is provided in Figure A.10.

Table A.1: Summary statistics

	Mean	SD	Median	Min.	Max.	Obs.
Male	0.47	0.50	0.00	0.00	1.00	3177
Age (in years)	46.64	15.60	49.50	21.00	69.50	3177
Caucasian/White	0.73	0.44	1.00	0.00	1.00	3177
African American/Black	0.07	0.26	0.00	0.00	1.00	3177
Republican	0.25	0.44	0.00	0.00	1.00	3177
Democrat	0.38	0.49	0.00	0.00	1.00	3177
Independent	0.36	0.48	0.00	0.00	1.00	3177
Northeast	0.22	0.41	0.00	0.00	1.00	3177
Midwest	0.18	0.39	0.00	0.00	1.00	3177
West	0.24	0.43	0.00	0.00	1.00	3177
Household size	2.32	1.51	2.00	0.00	10.00	3177
Total household income	72820.27	50770.49	62500.00	7500.00	225000.00	3177
College	0.76	0.43	1.00	0.00	1.00	3177
High-skilled (self-perceived)	0.75	0.43	1.00	0.00	1.00	3177
Full-time employee	0.50	0.50	0.00	0.00	1.00	3177
Part-time employee	0.08	0.27	0.00	0.00	1.00	3177
Self-employed or small business owner	0.05	0.23	0.00	0.00	1.00	3177
Unemployed and looking for work	0.05	0.21	0.00	0.00	1.00	3177
Student	0.03	0.16	0.00	0.00	1.00	3177
Not in labor force	0.25	0.44	0.00	0.00	1.00	3177
Beliefs about effect of immigration on wages of low-skilled workers	2.21	1.00	2.00	1.00	5.00	3177
Beliefs about effect of immigration on wages of high-skilled workers	2.96	0.85	3.00	1.00	5.00	3177
Beliefs about effect of immigration on unemployment of low-skilled workers	2.10	1.02	2.00	1.00	5.00	3177
Beliefs about effect of immigration on unemployment of high-skilled workers	2.90	0.79	3.00	1.00	5.00	3177
Confidence in beliefs about wages of low-skilled workers	3.49	0.97	3.00	1.00	5.00	3177
Confidence in beliefs about unemployment of low-skilled workers	3.55	0.96	4.00	1.00	5.00	3177
Confidence in beliefsabout wages of high-skilled workers	3.52	0.96	3.00	1.00	5.00	3177
Confidence in beliefs about unemployment of high-skilled workers	3.50	0.96	3.00	1.00	5.00	3177

Notes: This table displays the summary statistics for our sample.

Table A.2: Characteristics of our sample compared to the US Census

	Mean: Online sample	Mean: Online sample – follow-up	Mean: ACS
Male	0.48	0.50	0.51
What is your age?	46.6	47.4	47.1
Northeast	0.22	0.23	0.179
Midwest	0.18	0.19	0.211
West	0.24	0.23	0.24
Total household income	72,820	72,820	82,433

Notes: This table summarizes the characteristics of our sample in the main survey as well as the follow-up survey along targeted dimensions as well as the characteristics of the 2015 American Community Survey.

Table A.3: Balance across the treatment and control group

	Treatment	Control	P-value(Treatment - Control)	Observations
Male	0.48	0.47	0.583	3177
Age (in years)	46.26	47.01	0.177	3177
Caucasian/White	0.75	0.72	0.079	3177
African American/Black	0.07	0.08	0.222	3177
Republican	0.26	0.25	0.457	3177
Democrat	0.37	0.38	0.496	3177
Independent	0.36	0.36	0.981	3177
Northeast	0.23	0.21	0.226	3177
Midwest	0.18	0.19	0.589	3177
West	0.24	0.24	0.779	3177
Household size	2.28	2.35	0.224	3177
Total household income	73687.03	71954.06	0.336	3177
College	0.77	0.75	0.303	3177
High-skilled (self-perceived)	0.75	0.75	0.846	3177
Full-time employee	0.50	0.50	0.929	3177
Part-time employee	0.08	0.07	0.318	3177
Self-employed or small business owner	0.05	0.06	0.277	3177
Unemployed and looking for work	0.05	0.04	0.606	3177
Student	0.03	0.02	0.380	3177
Not in labor force	0.24	0.27	0.115	3177
Beliefs about effect of immigration on wages of low-skilled workers	2.20	2.22	0.649	3177
Beliefs about effect of immigration on wages of high-skilled workers	2.96	2.96	0.850	3177
Beliefs about effect of immigration on unemployment of low-skilled workers	2.11	2.09	0.623	3177
Beliefs about effect of immigration on unemployment of high-skilled workers	2.90	2.90	0.825	3177
Confidence in beliefs about wages of low-skilled workers	3.45	3.53	0.022	3177
Confidence in beliefs about unemployment of low-skilled workers	3.51	3.58	0.050	3177
Confidence in beliefsabout wages of high-skilled workers	3.50	3.53	0.308	3177
Confidence in beliefs about unemployment of high-skilled workers	3.47	3.54	0.042	3177

Notes: This table examines covariate balance based on the sample of respondents from the main study. The p-value of an F-test testing for the joint significance of all covariates in predicting treatment status is 0.3588.

Table A.4: Balance across the treatment and control group in the follow-up

	Treatment	Control	P-value(Treatment - Control)	Observations
Male	0.49	0.50	0.743	2089
Age (in years)	46.96	48.01	0.121	2089
Caucasian/White	0.76	0.74	0.232	2089
African American/Black	0.06	0.08	0.167	2089
Republican	0.26	0.26	0.929	2089
Democrat	0.38	0.38	0.852	2089
Independent	0.36	0.35	0.821	2089
Northeast	0.23	0.23	0.743	2089
Midwest	0.18	0.20	0.099	2089
West	0.24	0.23	0.524	2089
Household size	2.42	2.47	0.388	2089
Total household income	74029.64	72905.08	0.607	2089
College	0.83	0.83	0.932	2089
High-skilled (self-perceived)	0.75	0.74	0.659	2089
Full-time employee	0.53	0.51	0.420	2089
Part-time employee	0.09	0.08	0.350	2089
Self-employed or small business owner	0.05	0.06	0.173	2089
Unemployed and looking for work	0.05	0.05	0.907	2089
Student	0.02	0.02	0.457	2089
Not in labor force	0.29	0.33	0.073	2089
Beliefs about effect of immigration on wages of low-skilled workers	2.23	2.23	0.971	2089
Beliefs about effect of immigration on wages of high-skilled workers	2.95	2.94	0.977	2089
Beliefs about effect of immigration on unemployment of low-skilled workers	2.13	2.10	0.494	2089
Beliefs about effect of immigration on unemployment of high-skilled workers	2.91	2.91	0.951	2089
Confidence in beliefs about wages of low-skilled workers	3.42	3.51	0.045	2089
Confidence in beliefs about unemployment of low-skilled workers	3.49	3.55	0.153	2089
Confidence in beliefsabout wages of high-skilled workers	3.48	3.51	0.492	2089
Confidence in beliefs about unemployment of high-skilled workers	3.44	3.53	0.047	2089

Notes: This table examines covariate balance for the follow-up sample. The p-value of an F-test testing for the joint significance of all covariates in predicting treatment status is 0.6034.

Table A.5: Attrition in the follow-up study

	Completed Follow-up Survey	Completed Follow-up Survey
Treatment	-0.002	-0.000
	(0.017)	(0.016)
Republican		-0.023
		(0.020)
Independent		0.019
		(0.019)
Log(Income)		0.024**
		(0.011)
High-skilled		0.123***
		(0.020)
Employed Full-Time		-0.004
		(0.023)
Employed Part-Time		-0.021
		(0.034)
Unemployed		-0.050
		(0.043)
Self-Employed		0.036
		(0.039)
Student		0.082
		(0.058)
High Education		0.053*
		(0.032)
Male		0.036**
		(0.016)
Age		-0.002***
		(0.001)
Observations	3177	3177

Notes: The outcome variables take value 1 for respondents who completed the follow-up study. 'Treatment" is an indicator equal to 1 if respondents received the research evidence. * p<0.1, ** p<0.05, *** p<0.01. * p<0.1, ** p<0.05, *** p<0.01. Robust standard errors in parentheses.

17

Table A.6: Attrition in the main study

	Finished the main study	
	(1)	(2)
Treatment	-0.005	0.002
	(0.010)	(0.003)
N	3177	3177
Controls	No	Yes

Notes: This table shows OLS regression results where the dependent variable takes the value 1 for respondents who completed the all questions in the main study. Column 2 includes pre-specified controls. "Treatment" is an indicator equal to 1 if respondents received information about the labor market impact of the Mariel boatlift.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Robust standard errors in parentheses.

Table A.7: Test of order effects for the main outcomes

	Self-reported policy views				Petition intentions	
	(1) Low-skilled: Not familiar	(2) Low-skilled: Highly familiar	(3) High-skilled: Not familiar	(4) High-skilled: Highly familiar	(5) H2B Visa: Increase	(6) H2B Visa: Decrease
Panel A						
Treatment	0.237***	0.076	0.153**	0.146**	0.058**	-0.040*
	(0.072)	(0.071)	(0.069)	(0.071)	(0.022)	(0.022)
Treatment × 2.order	-0.068	0.026	-0.094	-0.038	-0.019	-0.037
	(0.104)	(0.100)	(0.099)	(0.101)	(0.032)	(0.031)
Treatment × 3.order	-0.119	0.057	-0.070	-0.075		
	(0.104)	(0.100)	(0.102)	(0.098)		
Treatment × 4.order	0.019	0.052	0.009	-0.311***		
	(0.105)	(0.101)	(0.102)	(0.100)		
N	3171	3167	3167	3165	3114	3114
Controls	Yes	Yes	Yes	Yes	Yes	Yes
P-value: F-test	0.54	0.94	0.68	0.01	0.55	0.23
Panel B						
Treatment	0.191**	0.064	0.103	0.284***		
	(0.090)	(0.087)	(0.086)	(0.087)		
Treatment × c.order	0.002	0.018	0.004	-0.098***		
	(0.033)	(0.032)	(0.032)	(0.031)		
N	3171	3167	3167	3165		
Controls	Yes	Yes	Yes	Yes		

Notes: This table shows OLS regression results where the dependent variables are indicated in each column. In columns 1–4, answers were given on a scale from 1: "Allow a lot less of these immigrants" to 5: "Allow a lot more of these immigrants." These outcomes are z-scored using the mean and standard deviation in the control group. In columns 5 and 6, the answers were given on a binary scale from 0: "I do not want to sign this petition." to 1: "I want to sign this petition." All regressions include pre-specified controls. "Treatment" is an indicator equal to 1 if respondents received information about the labor market impact of the Mariel boatlift. We randomized the question order for both the questions on policy views (columns 1–4) and for the petition intentions (columns 5–6). In **Panel A**, the order variables are indicators (e.g., "2. order" takes the value 1 if the outcome was asked the second one we elicited). The p-value reported in the bottom of the panel refers to the joint significance of the treatment interactions. In **Panel B**, "c. order" is a continuous variable from 1 (asked first) to 4 (asked last).

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Robust standard errors in parentheses.

Table A.8: Post-treatment beliefs about the impact of immigration: Linear probability model

	Impact of low-skilled immigration				Impact of high-skilled immigration				Follow-up
	(1) Decrease wages	(2) Decrease employment	(3) Increase taxes	(4) Damage culture	(5) Decrease wages	(6) Increase employment	(7) Increase taxes	(8) Damage culture	(9) Hurt workers
Panel A: Society									
Treatment	-0.147***	-0.101***	-0.058**	-0.051**	-0.131***	-0.149***	-0.050**	-0.043**	-0.064***
	(0.024)	(0.025)	(0.025)	(0.024)	(0.024)	(0.025)	(0.023)	(0.021)	(0.020)
Constant	0.462	0.732***	0.023	-0.076	0.821***	0.458*	0.715***	0.168	0.536***
	(0.306)	(0.277)	(0.216)	(0.208)	(0.238)	(0.251)	(0.276)	(0.267)	(0.176)
N	1467	1462	1457	1445	1468	1462	1456	1441	2087
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Panel B: Household									
Treatment	-0.042**	-0.028	-0.045*		-0.071***	-0.093***	-0.046**		
	(0.020)	(0.021)	(0.024)		(0.021)	(0.023)	(0.022)		
Constant	0.790***	1.142***	-0.089		1.014***	0.758***	0.669**		
	(0.306)	(0.249)	(0.214)		(0.233)	(0.237)	(0.262)		
N	1467	1462	1457		1468	1462	1456		
Controls	Yes	Yes	Yes		Yes	Yes	Yes		

Notes: The table shows OLS regression results on post-treatment beliefs about the impact of immigration. The dependent variable is indicated in each column. Columns 1—8 show results from the main study, while column 9 shows results from the obfuscated follow-up study. **Panel A** shows beliefs about the impact of immigration on *most Americans* while **Panel B** shows beliefs about the impact of immigration on the respondents' own household. Respondents in the main study were cross-randomized into answering questions about the impact of low-skilled immigration (columns 1–4) or about the impact of high-skilled immigration (columns 5–8). Column 9 reports result from the obfuscated follow-up study, in which all people were asked about the impact of immigration in general. *Decrease wages* takes the value one (and zero otherwise) for respondents who think immigrants strongly or somewhat decrease wages. *Decrease employment* takes the value one (and zero otherwise) for respondents who think that immigrants strongly or somewhat decrease employment. *Increase taxes* takes the value one (and zero otherwise) for respondents who think immigrants increase taxes. *Damage culture* takes the value one (and zero otherwise) for respondents who think immigrants will greatly or somewhat damage American culture and society. *Decrease wages* takes the value one (and zero otherwise) for respondents who agree or strongly agree that increased immigration hurts American workers. Regressions include pre-specified controls (also listed in Table 2).

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Robust standard errors in parentheses.

Table A.9: Post-treatment beliefs about the impact of immigration: Results without controls

	Impact of low-skilled immigration				Impact of high-skilled immigration				Follow-up
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Wages	Employment	Taxes	Culture	Wages	Employment	Taxes	Culture	Workers
Panel A: Country									
Treatment	0.171***	0.166***	0.033	0.048	0.200***	0.268***	0.085*	0.055	0.142***
	(0.048)	(0.050)	(0.050)	(0.053)	(0.049)	(0.049)	(0.049)	(0.052)	(0.043)
N	1467	1462	1457	1445	1468	1462	1456	1441	2087
Controls	No	No	No	No	No	No	No	No	No
Panel B: Household									
Treatment	0.024	0.018	0.023		0.070	0.153***	0.059		
	(0.050)	(0.051)	(0.051)		(0.048)	(0.049)	(0.049)		
N	1467	1462	1457		1468	1462	1456		
Controls	No	No	No		No	No	No		

Notes: The table shows OLS regression results on post-treatment beliefs about the impact of immigration. This table is identical to Table 1 except that it shows results without controls. The dependent variable is indicated in each column. Columns 1—8 show results from the main study, while column 9 shows result from the obfuscated follow-up study. **Panel A** shows beliefs about the impact of immigration on *most Americans* while **Panel B** shows beliefs about the impact of immigration on the respondents' own household. Respondents in the main study were cross-randomized into answering questions about the impact of low-skilled immigration (columns 1–4) or about the impact of high-skilled immigration (columns 5–8). Column 9 reports result from the obfuscated follow-up study, in which all people were asked about the impact of immigration in general. For *Wages*, responses ranged from 1: Strongly decrease wages for my household/most Americans to 5: Strongly increase wages for my household/most Americans. For *Employment*, responses ranged from 1: Strongly reduce job opportunities or reduce job security for my household/most Americans to 5: Strongly increase job opportunities or job security for my household/most Americans. For *Taxes*, responses ranged from 1: Increase taxes a lot for my household/most Americans to 5: Decrease taxes a lot for my household/most Americans. For *Culture*, responses ranged from 1: greatly damage American culture and society to 5: greatly improve American culture and society. For *Workers* (whether increased immigration hurts American workers), responses ranged from 1: "Strongly disagree" to 5: Strongly agree. The outcomes are z-scored using the mean and standard deviation in the control group.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Robust standard errors in parentheses.

Table A.10: Self-reported attitudes toward immigration (post-treatment) – subsample who completed post-treatment beliefs

	Low-skilled (Main Study)			High-skilled (Main Study)			Follow-up	
	Not familiar	Familiar	Index	Not familiar	Familiar	Index	Low-skilled	High-skilled
Panel A: With controls								
Treatment	0.156***	0.104***	0.130***	0.096***	0.036	0.066**	0.109***	0.057
	(0.034)	(0.035)	(0.031)	(0.034)	(0.035)	(0.031)	(0.040)	(0.042)
Adjusted p-value	[0.001]	[0.001]		[0.009]	[0.176]			
Observations	2935	2935	2935	2935	2935	2935	2059	2059
Panel B: Without controls								
Treatment	0.161***	0.113***	0.137***	0.102***	0.044	0.073**	0.120***	0.063
	(0.037)	(0.037)	(0.034)	(0.037)	(0.036)	(0.033)	(0.044)	(0.044)
Adjusted p-value	[0.001]	[0.001]		[0.011]	[0.127]			
Observations	2935	2935	2935	2935	2935	2935	2059	2059

Notes: The table shows OLS regression results where the dependent variables are attitudes toward the different types of immigrants with the subsample who completed all post-treatment beliefs measures. The answers were given on a five-point scale from 1: "Allow a lot less of these immigrants" to 5: "Allow a lot more of these immigrants." The question order was randomized (statistical tests show no order effects). The outcomes are z-scored using the mean and standard deviation in the control group. The indices are created by taking the mean of the responses to immigrants with different familiarity with American values and traditions for each skill level. Adjusted p-values are in brackets. "Treatment" is an indicator equal to 1 if respondents received the research evidence. Controls include gender, age, ethnicity, region, household size, household income, education, employment status, party affiliation, whether the respondent was born in the US, whether the subject's parents were born in the US, self-perceived skill-level, and pre-treatment beliefs about the labor market impact of low-skilled (or high-skilled) immigration and are coded as described in the pre-analysis plan. * $p<0.1$, ** $p<0.05$, *** $p<0.01$. Robust standard errors in parentheses.

Table A.11: Online petitions on H-2B visas (post-treatment) – subsample who completed post-treatment beliefs

	Intention: H2B Visas			Actual signatures H2B Visas	
	Increase	Decrease	Net support	Increase	Decrease
Panel A: With controls					
Treatment	0.044***	-0.057***	0.131***	–	–
	(0.016)	(0.016)	(0.035)	–	–
Observations	2935	2935	2935	–	–
Panel B: Without controls					
Treatment	0.044***	-0.061***	0.137***	0.027***	-0.004
	(0.017)	(0.017)	(0.036)	(0.007)	(0.007)
Control Mean	0.277	0.310	0.003	0.039	0.045
Observations	2935	2935	2935	2935	2935

Notes: This table shows results for the subsample who completed all post-treatment beliefs measures. The three first columns show regression results where the dependent variable is intention to sign the petitions. "Increase" ("Decrease") is an indicator equal to 1 if a respondent wanted to sign the petition suggesting to increase (decrease) the annual cap on the H-2B visa program. "Net support" is a z-scored transformation of a variable taking value 1 (-1) if a respondent wanted to sign the petition to increase (decrease) the annual cap on the H-2B visa program and 0 otherwise. The two last columns show actual signatures. Since we only observe actual signatures on the treatment group level, we cannot include controls and run regressions for these outcomes. To do testing, we calculate standard errors using the standard formula for proportion tests. "Treatment" is an indicator equal to 1 if respondents received information about the labor market impact of the Mariel boatlift. We use the same controls as in Table 2. * $p<0.1$, ** $p<0.05$, *** $p<0.01$. For the questions on intention to sign the petitions, we apply robust standard errors in parentheses.

Table A.12: Self-reported attitudes toward immigration (post-treatment): Sample of respondents who completed the follow-up

	Low-skilled (Main Study)			High-skilled (Main Study)			Follow-up	
	Not familiar	Familiar	Index	Not familiar	Familiar	Index	Low-skilled	High-skilled
Panel A: With controls								
Treatment	0.157***	0.108***	0.132***	0.103**	0.042	0.072**	0.104***	0.065
	(0.040)	(0.042)	(0.037)	(0.040)	(0.042)	(0.037)	(0.040)	(0.042)
Adjusted p-value	[0.001]	[0.004]		[0.021]	[0.185]			
Observations	2089	2088	2089	2088	2088	2088	2089	2089
Panel B: Without controls								
Treatment	0.173***	0.126***	0.149***	0.117***	0.053	0.085**	0.115***	0.071
	(0.044)	(0.044)	(0.040)	(0.043)	(0.043)	(0.039)	(0.043)	(0.043)
Adjusted p-value	[0.001]	[0.002]		[0.013]	[0.120]			
Observations	2089	2088	2089	2088	2088	2088	2089	2089

Notes: The table shows OLS regression results where the dependent variables are attitudes toward the different types of immigrants and uses respondents who completed both the initial survey and the follow-up survey. The answers were given on a five-point scale from 1: "Allow a lot less of these immigrants" to 5: "Allow a lot more of these immigrants." The question order was randomized (statistical tests show no order effects). The outcomes are z-scored using the mean and standard deviation in the control group. The indices are created by taking the mean of the responses to immigrants with different familiarity with American values and traditions for each skill level. Adjusted p-values are in brackets. "Treatment" is an indicator equal to 1 if respondents received the research evidence. Controls include gender, age, ethnicity, region, household size, household income, education, employment status, party affiliation, whether the respondent was born in the US, whether the subject's parents were born in the US, self-perceived skill-level, and pre-treatment beliefs about the labor market impact of low-skilled (or high-skilled) immigration and are coded as described in the pre-analysis plan. * p<0.1, ** p<0.05, *** p<0.01. Robust standard errors in parentheses.

Table A.13: Self-interested labor market concerns vs. group-level labor market concerns

	Low-skilled		High-skilled		Low-skilled		High-skilled	
	Not familiar	Familiar	Not familiar	Familiar	Not familiar	Familiar	Not familiar	Familiar
Effect of immigrants on own household's wage	-0.116*	-0.024	-0.052	0.023	-0.140**	-0.034	-0.063	0.010
	(0.067)	(0.070)	(0.061)	(0.063)	(0.066)	(0.069)	(0.059)	(0.061)
Effect of immigrants on most Americans' wages	0.211***	0.118*	0.149***	0.143**	0.161***	0.065	0.064	0.061
	(0.059)	(0.061)	(0.057)	(0.059)	(0.058)	(0.060)	(0.056)	(0.058)
Effect of immigrants on own household's employment	-0.112*	-0.099	0.103*	0.104*	-0.130**	-0.113*	0.064	0.075
	(0.064)	(0.066)	(0.060)	(0.062)	(0.062)	(0.065)	(0.059)	(0.061)
Effect of immigrants on most Americans' employment	0.402***	0.330***	0.255***	0.191***	0.329***	0.274***	0.206***	0.145***
	(0.054)	(0.056)	(0.055)	(0.057)	(0.054)	(0.056)	(0.053)	(0.055)
Effect of immigrants on culture					0.263***	0.216***	0.290***	0.274***
					(0.036)	(0.038)	(0.037)	(0.038)
Observations	760	760	709	709	748	748	699	699

Notes: This table uses data from respondents in the control group. The table shows OLS regression results where the dependent variables are attitudes toward the four different types of immigrants: (i) low-skilled immigrants not familiar with American values and traditions, (ii) low-skilled immigrants highly familiar with American values and traditions, (iii) high-skilled immigrants not familiar with American values and traditions, and (iv) high-skilled immigrants highly familiar with American values and traditions. The answers were given on a five-point scale from 1: "Allow a lot less of these immigrants" to 5: "Allow a lot more of these immigrants." The question order was randomized (statistical tests show no order effects). The outcomes are z-scored using the mean and standard deviation in the control group. The independent variables are beliefs about the impact of low-skilled and high-skilled immigrants on the wages and employment of (i) people's own household and (ii) most Americans. On top of that, people's beliefs about the effect of immigrants on American culture are included on columns (5) to (8). All questions were answered on five-point Likert scales where higher values indicate more optimistic views regarding the effect of immigration. * p<0.1, ** p<0.05, *** p<0.01. Robust standard errors in parentheses.

Table A.14: Self-interested vs. nationwide labor market concerns: Evidence from the General Social Survey

	Support for immigration
Belief: Most Americans	0.331***
	(0.031)
Belief: Own household	0.031
	(0.028)
Observations	1263

Notes: This table uses data from the 1994 wave of the General Social Survey. *Support for immigration* is the standardized response as to whether "the number of immigrants to America nowadays" should be "decreased a lot" to "increased a lot." Self-interested labor market concerns are measured with people's answer to the following question: "What about immigrants? Is it very likely, somewhat likely, somewhat unlikely, or very unlikely that you or anyone in your family won't get a job or promotion while an equally or less qualified immigrant employee receives one instead?" We proxy for people's group-level labor market concerns with people's response to the following question: "How much do you agree or disagree with each of the following statements? Immigrants take jobs away from people who were born in America." * $p<0.1$, ** $p<0.05$, *** $p<0.01$. Robust standard errors in parentheses.

Table A.15: Heterogeneous treatment effects by pre-treatment beliefs: Post-treatment beliefs about the labor market impact of immigration

	Wages		Employment	
	Own household	Most Americans	Own household	Most Americans
Panel A: Effect on low-skilled				
Treatment ×	-0.061	-0.087*	-0.090*	-0.144***
Prior: Low skill	(0.057)	(0.051)	(0.052)	(0.047)
Treatment ×	-0.067	-0.047	0.024	0.111
Prior: High skill	(0.072)	(0.064)	(0.078)	(0.073)
Treatment	0.362	0.500**	0.139	0.150
	(0.244)	(0.216)	(0.257)	(0.240)
Observations	1467	1467	1462	1462
Panel B: Effect on high-skilled				
Treatment ×	-0.081*	-0.135***	-0.105**	-0.039
Prior: Low skill	(0.046)	(0.044)	(0.042)	(0.043)
Treatment ×	0.021	-0.009	-0.032	0.077
Prior: High skill	(0.065)	(0.062)	(0.068)	(0.067)
Treatment	0.182	0.508**	0.463**	0.110
	(0.221)	(0.210)	(0.223)	(0.214)
Observations	1468	1468	1462	1462

Notes: The dependent variables are beliefs about the economic impact of low-skilled and high-skilled immigrants. Respondents were asked how they thought admitting more low-skilled/high-skilled immigrants would affect (i) "wages" and (ii) "job opportunities and job security." We randomized whether respondents answered these questions with respect to low-skilled or high-skilled immigrants. All questions were answered on five-point Likert scales where higher values indicate more optimistic views regarding the effect of immigration. "Treatment" is an indicator equal to 1 if respondents received the research evidence. "Prior: Low-skill" ("Prior: High-skill") is people's pre-treatment belief about the wage and employment effects of the Mariel boatlift on low-skilled (high-skilled) workers. The regressions include pre-specified controls (listed in Table 2). * p<0.1, ** p<0.05, *** p<0.01. Robust standard errors in parentheses.

Table A.16: Heterogeneous treatment effects: Self-reports

	Low-skilled				High-skilled			
	Not familiar	Familiar	Index	Follow-up	Not familiar	Familiar	Index	Follow-up
Panel A: Prior Belief								
Treatment × Prior: Low-skilled	-0.060	-0.080*	-0.071*	-0.049	-0.069	-0.040	-0.053	-0.021
	(0.043)	(0.045)	(0.039)	(0.051)	(0.043)	(0.044)	(0.039)	(0.056)
Treatment × Prior: High-skilled	0.070	0.059	0.069	-0.004	0.040	0.024	0.032	-0.093
	(0.047)	(0.049)	(0.044)	(0.054)	(0.047)	(0.049)	(0.044)	(0.058)
Treatment	0.169***	0.106***	0.137***	0.104***	0.103***	0.036	0.070**	0.064
	(0.033)	(0.034)	(0.030)	(0.040)	(0.033)	(0.034)	(0.030)	(0.041)
					0.516	0.945	0.737	0.512
Observations	3171	3171	3171	3171	3171	3171	3171	3171
Panel B: Republican								
Treatment × (a) Republican	-0.065	0.007	-0.033	0.064	-0.019	-0.054	-0.038	0.009
	(0.076)	(0.082)	(0.071)	(0.095)	(0.078)	(0.083)	(0.072)	(0.100)
Treatment (b)	0.186***	0.105***	0.145***	0.087*	0.108***	0.050	0.079**	0.062
	(0.038)	(0.038)	(0.035)	(0.045)	(0.038)	(0.038)	(0.034)	(0.047)
Pr(a+b)=0	0.063	0.127	0.072	0.071	0.189	0.954	0.517	0.417
Observations	3171	3167	3176	2089	3167	3165	3170	2089
Panel C: High-skill								
Treatment × (a) High-skill	-0.062	-0.067	-0.067	-0.037	0.032	-0.032	-0.005	-0.027
	(0.075)	(0.077)	(0.069)	(0.089)	(0.075)	(0.079)	(0.069)	(0.093)
Treatment (b)	0.216***	0.157**	0.187***	0.131*	0.079	0.060	0.074	0.084
	(0.065)	(0.066)	(0.059)	(0.076)	(0.065)	(0.069)	(0.059)	(0.079)
Pr(a+b)=0	0.000	0.024	0.001	0.043	0.004	0.472	0.051	0.235
Observations	3171	3167	3176	2089	3167	3165	3170	2089

Notes: The table shows OLS regression results where the dependent variables are attitudes toward the four different types of immigrants: (i) low-skilled immigrants not familiar with American values and traditions, (ii) low-skilled immigrants highly familiar with American values and traditions, (iii) high-skilled immigrants not familiar with American values and traditions, and (iv) high-skilled immigrants highly familiar with American values and traditions. The answers were given on a five-point scale from 1: "Allow a lot less of these immigrants" to 5: "Allow a lot more of these immigrants." The question order was randomized (statistical tests show no order effects). The outcomes are z-scored using the mean and standard deviation in the control group. The indices are created by taking the mean of the responses to immigrants with different familiarity with American values and traditions for each skill level. "Treatment" is an indicator equal to 1 if respondents received the research evidence. "Prior: Low-skill" ("Prior: High-skill") is people's pre-treatment belief about the wage and employment effects of the Mariel boatlift on low-skilled (high-skilled) workers. "Republican" takes value 1 if our respondent self-identifies as a Republican and zero otherwise. "High-skill" takes values 1 if our respondent self-identifies as high-skilled and zero otherwise. We use the same controls as described in Table 2. * p<0.1, ** p<0.05, *** p<0.01. Robust standard errors in parentheses.

Table A.17: Heterogeneous treatment effects: Self-reports

	Low-skilled				High-skilled			
	Not familiar	Familiar	Index	Follow-up	Not familiar	Familiar	Index	Follow-up
Panel A: Prior Belief								
Treatment ×	-0.045	-0.068	-0.057	-0.050	0.027	0.016	0.022	-0.098*
Prior	(0.043)	(0.045)	(0.040)	(0.050)	(0.046)	(0.049)	(0.044)	(0.057)
Treatment	0.169***	0.106***	0.137***	0.104***	0.103***	0.036	0.070**	0.064
	(0.033)	(0.034)	(0.030)	(0.040)	(0.033)	(0.034)	(0.030)	(0.041)
	0.020	0.496	0.106	0.382	0.017	0.348	0.067	0.607
Observations	3171	3167	3176	2089	3167	3165	3170	2089
Panel B: Republican								
Treatment × (a)	-0.065	0.007	-0.033	0.064	-0.019	-0.054	-0.038	0.009
Republican	(0.076)	(0.082)	(0.071)	(0.095)	(0.078)	(0.083)	(0.072)	(0.100)
Treatment (b)	0.186***	0.105***	0.145***	0.087*	0.108***	0.050	0.079**	0.062
	(0.038)	(0.038)	(0.035)	(0.045)	(0.038)	(0.038)	(0.034)	(0.047)
Pr(a+b)=0	0.063	0.127	0.072	0.071				
Observations	3171	3167	3176	2089	3167	3165	3170	2089
Panel C: High-skill								
Treatment × (a)	-0.062	-0.067	-0.067	-0.037	0.032	-0.032	-0.005	-0.027
High-skill	(0.075)	(0.077)	(0.069)	(0.089)	(0.075)	(0.079)	(0.069)	(0.093)
Treatment (b)	0.216***	0.157**	0.187***	0.131*	0.079	0.060	0.074	0.084
	(0.065)	(0.066)	(0.059)	(0.076)	(0.065)	(0.069)	(0.059)	(0.079)
Pr(a+b)=0	0.000	0.024	0.001	0.043				
Observations	3171	3167	3176	2089	3167	3165	3170	2089

Notes: The table shows OLS regression results where the dependent variables are attitudes toward the four different types of immigrants: (i) low-skilled immigrants not familiar with American values and traditions, (ii) low-skilled immigrants highly familiar with American values and traditions, (iii) high-skilled immigrants not familiar with American values and traditions, and (iv) high-skilled immigrants highly familiar with American values and traditions. The answers were given on a five-point scale from 1: "Allow a lot less of these immigrants" to 5: "Allow a lot more of these immigrants." The question order was randomized (statistical tests show no order effects). The outcomes are z-scored using the mean and standard deviation in the control group. The indices are created by taking the mean of the responses to immigrants with different familiarity with American values and traditions for each skill level. "Treatment" is an indicator equal to 1 if respondents received the research evidence. "Prior: Low-skilled" ("Prior: High-skilled") is people's pre-treatment belief about the wage and employment effects of the Mariel boatlift on low-skilled (high-skilled) workers. "Republican" takes value 1 if our respondent self-identifies as a Republican and zero otherwise. "High-skill" takes values 1 if our respondent self-identifies as high-skilled and zero otherwise. We use the same controls as described in Table 2. * p<0.1, ** p<0.05, *** p<0.01. Robust standard errors in parentheses.

Table A.18: Heterogeneous treatment effects: Intention to sign petitions

	Intention: H2B Visas		
	Increase	Decrease	Net support

Panel A: Prior Belief

Treatment × (a)	-0.003	0.014	-0.037
Prior	(0.020)	(0.019)	(0.042)
Treatment (b)	0.048***	-0.058***	0.137***
	(0.016)	(0.016)	(0.034)
Pr(a+b)=0	0.086	0.057	0.064
Observations	3114	3114	3114

Panel B: Republican

Treatment × (a)	-0.036	-0.019	-0.013
Republican	(0.033)	(0.038)	(0.076)
Treatment (b)	0.058***	-0.054***	0.140***
	(0.019)	(0.017)	(0.040)
Pr(a+b)=0	0.421	0.034	0.049
Observations	3114	3114	3114

Panel C: High-skill

Treatment × (a)	-0.013	-0.013	0.016
High-skill	(0.035)	(0.036)	(0.078)
Treatment (b)	0.058*	-0.048	0.125*
	(0.030)	(0.032)	(0.068)
Pr(a+b)=0	0.016	0.001	0.000
Observations	3114	3114	3114

Notes: The three first columns show regression results where the dependent variable is intention to sign the petitions. "Increase" ("Decrease") is an indicator equal to 1 if a respondent wanted to sign the petition suggesting to increase (decrease) the annual cap on the H-2B visa program. "Net support" is a z-scored transformation of a variable taking value 1 (-1) if a respondent wanted to sign the petition to increase (decrease) the annual cap on the H-2B visa program and 0 otherwise. "Treatment" is an indicator equal to 1 if respondents received the research evidence. "Prior" is people's pre-treatment belief about the wage and employment effects of the Mariel boatlift on low-skilled (high-skilled) workers. "Republican" takes value 1 if our respondent self-identifies as a Republican and zero otherwise. "High-skill" takes values 1 if our respondent self-identifies as high-skilled and zero otherwise. We use the same controls as described in Table 2. * $p<0.1$, ** $p<0.05$, *** $p<0.01$. Robust standard errors in parentheses.

Table A.19: Heterogeneity by gap between main survey and follow-up

	Follow-up		
	Beliefs	Low-skilled	High-skilled
Panel A: Days between surveys			
Treatment ×	-0.033	0.022	0.007
Days between surveys	(0.022)	(0.018)	(0.018)
Treatment	0.402**	-0.050	0.018
	(0.170)	(0.138)	(0.141)
Observations	2087	2089	2089
Panel B: Above median days between surveys			
Treatment ×	0.039	0.068	0.001
Above median days between surveys	(0.089)	(0.071)	(0.074)
Treatment	0.148**	0.081	0.065
	(0.063)	(0.050)	(0.052)
Observations	2087	2089	2089

Notes: * p<0.1, ** p<0.05, *** p<0.01. Robust standard errors in parentheses.

Table A.20: Post-treatment beliefs about the impact of immigration – reweighted

	Impact of low-skilled immigration				Impact of high-skilled immigration				Follow-up
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Wages	Employment	Taxes	Culture	Wages	Employment	Taxes	Culture	Workers
Panel A: Country									
Treatment	0.147**	0.151**	0.043	0.102*	0.141**	0.229***	0.097	-0.002	0.131***
	(0.070)	(0.071)	(0.070)	(0.059)	(0.062)	(0.064)	(0.062)	(0.063)	(0.050)
N	1467	1462	1457	1445	1468	1462	1456	1441	2087
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Panel B: Household									
Treatment	0.053	0.012	0.012		-0.001	0.068	0.072		
	(0.073)	(0.071)	(0.072)		(0.059)	(0.062)	(0.064)		
N	1467	1462	1457		1468	1462	1456		
Controls	Yes	Yes	Yes		Yes	Yes	Yes		

Notes: The table shows OLS regression results on post-treatment beliefs about the impact of immigration. We employ weights to make our sample representative in terms of education, age, income, region, and gender. The dependent variable is indicated in each column. Columns 1—8 show results from the main study, while column 9 shows result from the obfuscated follow-up study. **Panel A** shows beliefs about the impact of immigration on *most Americans* while **Panel B** shows beliefs about the impact of immigration on the respondents' own household. Respondents in the main study were cross-randomized into answering questions about the impact of low-skilled immigration (columns 1–4) or about the impact of high-skilled immigration (columns 5–8). Column 9 reports result from the obfuscated follow-up study, in which all people were asked about the impact of immigration in general. For *Wages*, responses ranged from 1: Strongly decrease wages for my household/most Americans to 5: Strongly increase wages for my household/most Americans. For *Employment*, responses ranged from 1: Strongly reduce job opportunities or reduce job security for my household/most Americans to 5: Strongly increase job opportunities or job security for my household/most Americans. For *Taxes*, responses ranged from 1: Increase taxes a lot for my household/most Americans to 5: Decrease taxes a lot for my household/most Americans. For *Culture*, responses ranged from 1: greatly damage American culture and society to 5: greatly improve American culture and society. For *Workers* (whether increased immigration hurts American workers), responses ranged from 1: "Strongly disagree" to 5: Strongly agree. The outcomes are z-scored using the mean and standard deviation in the control group. Regressions include pre-specified controls (also listed in Table 2).

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Robust standard errors in parentheses.

Table A.21: Self-reported attitudes toward immigration (post-treatment) – reweighted

| | Low-skilled (Main Study) | | | High-skilled (Main Study) | | | Follow-up | |
	Not familiar	Familiar	Index	Not familiar	Familiar	Index	Low-skilled	High-skilled
Panel A: With controls								
Treatment	0.175***	0.141***	0.160***	0.100**	0.029	0.064	0.184***	0.117**
	(0.046)	(0.046)	(0.042)	(0.046)	(0.046)	(0.041)	(0.053)	(0.056)
Adjusted p-value	[0.001]	[0.001]		[0.066]	[0.350]			
Observations	3171	3167	3176	3167	3165	3170	2089	2089
Panel B: Without controls								
Treatment	0.199***	0.173***	0.188***	0.130**	0.056	0.093**	0.233***	0.137**
	(0.051)	(0.050)	(0.046)	(0.051)	(0.049)	(0.045)	(0.061)	(0.061)
Adjusted p-value	[0.001]	[0.001]		[0.020]	[0.145]			
Observations	3171	3167	3176	3167	3165	3170	2089	2089

Notes: The table shows OLS regression results where the dependent variables are attitudes toward the different types of immigrants. We employ weights to make our sample representative in terms of education, age, income, region, and gender. The answers were given on a five-point scale from 1: "Allow a lot less of these immigrants" to 5: "Allow a lot more of these immigrants." The question order was randomized (statistical tests show no order effects). The outcomes are z-scored using the mean and standard deviation in the control group. The indices are created by taking the mean of the responses to immigrants with different familiarity with American values and traditions for each skill level. Adjusted p-values are in brackets. "Treatment" is an indicator equal to 1 if respondents received the research evidence. Controls include gender, age, ethnicity, region, household size, household income, education, employment status, party affiliation, whether the respondent was born in the US, whether the subject's parents were born in the US, self-perceived skill-level, and pre-treatment beliefs about the labor market impact of low-skilled (or high-skilled) immigration and are coded as described in the pre-analysis plan. * $p<0.1$, ** $p<0.05$, *** $p<0.01$. Robust standard errors in parentheses.

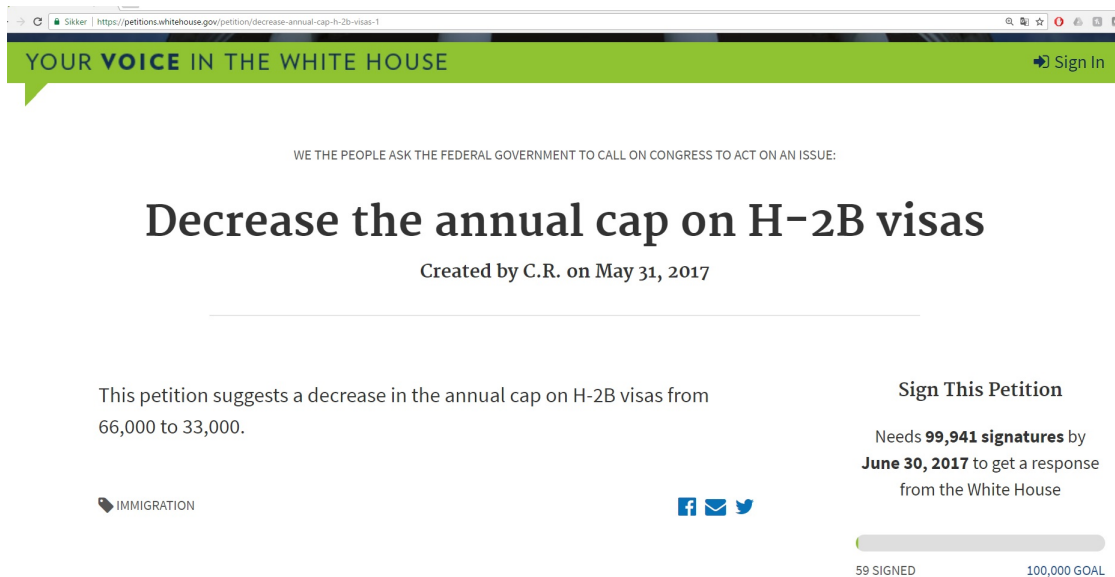# B   Deviations from the pre-analysis plan

We posted the original pre-analysis plan on May 31, 2017 before starting the data collection. We uploaded an updated pre-analysis plan June 7, before starting collecting the data collection for the obfuscated follow-up, that was identical to the original pre-analysis plan in all aspects except for some minor changes in the instructions for the obfuscated follow-up study. The reader should consult the updated pre-analysis plan to get the actual instructions used in the experiment (also included in Section E). Some minor deviations from the pre-analysis plan are listed below:

- We pre-specified a sample size of 3000 respondents. The survey provider delivered a sample of 3,177 respondents who completed the main outcome variables of interest. Out of those, 2,869 respondents completed all questions in the main study.

- Because not all respondents completed all the demographic questions asked at the end of the main survey, we have some missing observations for these questions. For all questions with missing values, we included a dummy for missing observations to account for this. We also supplemented some missing values from the background questions in the obfuscated follow-up survey.

- We specified applying a proportion test to the difference in the proportion of signatures on the petition in favor of increasing the annual cap and the petition in favor of decreasing the annual cap. We realized that the proportion test can only be applied to binary variables, so we applied it for each of the two petitions separately.

- We did not pre-specify the results presented on belief updating (Section 3.2) and and the machine learning approaches to heterogeneity (Section 3.5).

- When analyzing heterogeneous treatment effects on self-reported attitudes by pre-treatment beliefs, we pre-specified to only include the pre-treatment beliefs about the effect of the Mariel boatlift on low-skilled (high-skilled) workers when analyzing support for low-skilled (high-skilled) immigration. We later concluded that it was more informative to include interaction terms for both beliefs in both specifications. The pre-specified table is still included in the appendix (Table A.17).

- For the control variables, we pre-specified to only include the pre-treatment beliefs about the effect of the Mariel boatlift on low-skilled (high-skilled) workers when analyzing support for low-skilled (high-skilled) immigration. We later concluded that it was better to include all pre-treatment beliefs in our regular battery of controls.

C Miscellaneous

Figure A.13: Petition

Figure A.14: Invitation in the email sent out for the obfuscated follow-up study

Hi John,

You have an opportunity waiting!

Topic:	Personal Opinion
Incentive:	**$2.5 in e-Rewards® Currency**
Length:	**10 minutes**

LET'S BEGIN

Figure A.15: Consent form in the main study

This study is conducted by The Choice Lab at NHH Norwegian School of Economics. You must be a US citizen of at least 18 years of age to participate in this study. If you do not fulfill these requirements, please do not continue any further.

You are not allowed to participate in this study more than once. If you experience a technical error or problem, do not try to restart or retake the study. Rather, send us an email with a description of your problem and we will get back to you. If you have any questions regarding this study, please email thechoicelab@nhh.no

I have read and understood the above and want to participate in this study.

Yes

No

>>

Figure A.16: Consent form in the follow-up study

This study has received ethics clearance by the Oxford University Institutional Review Board.

If subjects have questions about this study or their rights, or if they wish to lodge a complaint or concern, they may contact us at the following email: christopher.roth@economics.ox.ac.uk

Next >>

0% ▮   100%

Consent form

- I have read the information provided on the previous page.
- I have had the opportunity to ask questions about the study.
- I understand that I may withdraw from the study at any time.
- I understand how to raise a concern or make a complaint.
- I understand that I can only participate in this experiment once.
- **I understand that close attention to the survey is required for my responses to count.**

If you are 18 years of age or older, agree with the statements above, and freely consent to participate in the study, please click on the "I Agree" button to begin the experiment.

I agree   I disagree
○   ○

Next >>

0% ▮▮   100%

Figure A.17: Screenshot of the informational treatment

NHH

The researchers who analyzed the short- and long-term effects of the mass immigration of Cubans to Miami concluded that, for both high-skilled and low-skilled workers, the mass immigration had **virtually no effect on wages** and **virtually no effect on unemployment**.

According to the researchers, the mass immigration had virtually no effect on wages and unemployment because the new Cuban immigrants increased the overall demand for goods and services, which created more jobs.

For online publication only:
Labor Market Concerns and Support for Immigration: Experimental instructions

Ingar Haaland and Christopher Roth

D   Instructions: Main experiment

D.1   Introduction

General instructions

This study is conducted by The Choice Lab at NHH Norwegian School of Economics.

You must be a US citizen of at least 18 years of age to participate in this study. If you do not fulfill these requirements, please do not continue any further.

You are not allowed to participate in this study more than once. If you experience a technical error or problem, do not try to restart or retake the study. Rather, send us an email with a description of your problem and we will get back to you.

If you have any questions regarding this study, please email thechoicelab@nhh.no.

I have read and understood the above and want to participate in this study.

   Yes

   No

D.2 Attention check

The next question is about the following problem. In questionnaires like ours, sometimes there are subjects who do not carefully read the questions and just quickly click through the survey. This means that there are a lot of random answers which compromise the results of research studies. To show that you read our questions carefully, please choose "Extremely interested" and "Not at all interested" as your answer in the next question.

How interested are you in sports?

Extremely interested

Very interested

A little bit interested

Almost not interested

Not at all interested

D.3 Pre-treatment background questions

1. What is your age? [18–24; 25–34; 35–44; 45–54; 55–64; 65 or older]

2. What is your gender? [Male; Female]

3. What was your family's gross household income in 2016 in US dollars? [Less than $15,000; $15,000 to $24,999; $25,000 to $49,999; $50,000 to $74,999; $75,000 to $99,999; $100,000 to $149,999; $150,000 to $200,000; More than $200,000; Prefer not to answer]

4. Which of the following best describes your race or ethnicity? [African American/Black; Asian/Asian American; Caucasian/White; Native American, Inuit or Aleut; Native Hawaiian/Pacific Islander; Other; Prefer not to answer]

5. Are you of Hispanic, Latino, or Spanish origin? [Yes, No]

6. In which state do you currently reside?

7. In politics, as of today, do you consider yourself a Republican, a Democrat, or an Independent? [Republican, Democrat, Independent]

D.4   Self-perceived skill level

People in the workforce differ by their professional skill levels. A high-skilled worker is someone who is highly educated or has special training and knowledge. A low-skilled worker is someone who does not have extensive education or special training or knowledge. A high-skilled worker is someone like an engineer or doctor, who is highly educated, or a computer programmer with special knowledge. A low-skilled worker is someone like an agricultural worker, housekeeper, or laborer who does not have extensive education or special knowledge.

In this context, do you consider yourself to be low-skilled or high-skilled?

High-skilled

Low-skilled

D.5   Elicitation of beliefs: labor market

We will now ask you a series of questions about the labor market impacts of immigrants. **It is important that you read all of the text carefully before you submit**

your answers.

{*page break*}

Background

In 1980, Cuba's then President, Fidel Castro, suddenly announced that Cubans wishing to emigrate to the United States were free to do so. This led to an unexpected mass immigration to Miami, Florida, where most of the Cuban immigrants arrived by boat.

With the arrival of the new Cuban immigrants, Miami's workforce grew by 55,000, or 8 percent, almost at once. The new immigrants were mostly low-skilled, which meant that the low-skilled workforce increased by 20 percent.

The large, unexpected addition of 55,000 new immigrants to the Miami workforce has allowed researchers to study the impact of immigration on the labor market. To do so, the researchers studied wage and unemployment changes in Miami after the mass immigration relative to other US cities that, because of geographic distance, were not affected by the mass immigration of Cubans.

What do you think?

In the five-year period after 1980, how do you think wages of **low-skilled** workers in Miami were affected by the mass immigration of Cubans?

> I think the mass immigration of Cuban workers strongly decreased wages of low-skilled workers

> I think the mass immigration of Cuban workers somewhat decreased wages of low-skilled workers

> I think the mass immigration had virtually no effect on wages of low-skilled workers

I think the mass immigration of Cuban workers somewhat increased wages of low-skilled workers

I think the mass immigration of Cuban workers strongly increased wages of low-skilled workers

{*page break*}

How sure are you about your answer to the previous question?

Very sure

Sure

Somewhat sure

Unsure

Very unsure

{*page break*}

In the five-year period after 1980, how do you think wages of **high-skilled** workers in Miami were affected by the mass immigration of Cubans?

I think the mass immigration of Cuban workers strongly decreased wages of high-skilled workers

I think the mass immigration of Cuban workers somewhat decreased wages of high-skilled workers

I think the mass immigration had virtually no effect on wages of high-skilled workers

I think the mass immigration of Cuban workers somewhat increased wages of high-skilled workers

I think the mass immigration of Cuban workers strongly increased wages of high-skilled workers

{*page break*}

How sure are you about your answer to the previous question?

Very sure

Sure

Somewhat sure

Unsure

Very unsure

{*page break*}

In the five-year period after 1980, how do you think unemployment among **low-skilled** workers in Miami was affected by the mass immigration of Cubans?

I think the mass immigration of Cuban workers strongly increased unemployment among low-skilled workers

I think the mass immigration of Cuban workers somewhat increased unemployment among low-skilled workers

I think the mass immigration had virtually no effect on unemployment for low-skilled workers

I think the mass immigration of Cuban workers somewhat decreased unemployment among low-skilled workers

I think the mass immigration of Cuban workers strongly decreased unemployment among low-skilled workers

{*page break*}

How sure are you about your answer to the previous question?

Very sure

Sure

Somewhat sure

Unsure

Very unsure

{*page break*}

In the five-year period after 1980, how do you think unemployment among **high-skilled** workers in Miami was affected by the mass immigration of Cubans?

I think the mass immigration of Cuban workers strongly increased unemployment among high-skilled workers

I think the mass immigration of Cuban workers somewhat increased unemployment among high-skilled workers

I think the mass immigration had virtually no effect on unemployment for high-skilled workers

44

I think the mass immigration of Cuban workers somewhat decreased unemployment among high-skilled workers

I think the mass immigration of Cuban workers strongly decreased unemployment among high-skilled workers

{*page break*}

How sure are you about your answer to the previous question?

Very sure

Sure

Somewhat sure

Unsure

Very unsure

D.6   Treatment: Labor market impacts

The researchers who analyzed the short- and long-term effects of the mass immigration of Cubans to Miami concluded that, for both high-skilled and low-skilled workers, the mass immigration had **virtually no effect on wages** and **virtually no effect on unemployment**.

According to the researchers, the mass immigration had virtually no effect on wages and unemployment because the new Cuban immigrants increased the overall demand for goods and services, which created more jobs.

D.7　Self-reported outcomes

D.7.1　Attitudes toward immigration: randomized order

Immigrants to the US differ in terms of their professional skill levels as well as their familiarity with American values and traditions.

Do you think the US should allow more or less **low-skilled** immigrants that are **highly familiar** with American values and traditions to come and live here?

> Allow a lot more of these immigrants
>
> Allow more of these immigrants
>
> Keep the numbers as they are
>
> Allow less of these immigrants
>
> Allow a lot less of these immigrants

{*page break*}

Do you think the US should allow more or less **high-skilled** immigrants that are **highly familiar** with American values and traditions to come and live here?

> Allow a lot more of these immigrants
>
> Allow more of these immigrants
>
> Keep the numbers as they are
>
> Allow less of these immigrants
>
> Allow a lot less of these immigrants

{*page break*}

Do you think the US should allow more or less **low-skilled** immigrants that are **not familiar** with American values and traditions to come and live here?

Allow a lot more of these immigrants

Allow more of these immigrants

Keep the numbers as they are

Allow less of these immigrants

Allow a lot less of these immigrants

{*page break*}

Do you think the US should allow more or less **high-skilled** immigrants that are **not familiar** with American values and traditions to come and live here?

Allow a lot more of these immigrants

Allow more of these immigrants

Keep the numbers as they are

Allow less of these immigrants

Allow a lot less of these immigrants

D.8   Petition

H-2B visas are work permits that allow US companies to temporarily hire low-skilled workers from abroad for seasonal, non-agricultural jobs, typically for work in restau-

rants, tourism, or construction. The annual cap on H-2B visas is currently 66,000. Congress is debating whether to change the annual cap.

Some argue that the quota should be increased because private companies say that there are not enough low-skilled American workers for hire. Others argue that the quota should be decreased because access to more foreign workers makes it easier for private companies to cut the wages of low-skilled American workers.

You will now have the possibility of signing a real petition related to this debate. If enough people sign the petition, the White House will consider it and post an official response.

Consider the following two petitions and decide whether you would like to sign one of them:

Increase the annual cap on H-2B visas (randomized order)

This petition suggests an increase in the annual cap on H-2B visas from 66,000 to 99,000.

I want to sign this petition.

I do not want to sign this petition.

Decrease the annual cap on H-2B visas (randomized order)

This petition suggests a decrease in the annual cap on H-2B visas from 66,000 to 33,000.

I want to sign this petition.

I do not want to sign this petition.

{*page break*}

48

(Not shown if "I do not want to sign this petition" was selected for both of the previous questions)

You stated that you want to sign the petition **"{*petition name*}"**. If you are interested in signing the petition, please click on the link below.

`https://petitions.whitehouse.gov/petition/...`

D.9 Beliefs about the effects of low-skilled immigration

Note: We randomize between subjects whether they are exposed to this block about low-skilled immigration or the next block about high-skilled immigration.

For the following questions, we would like you to think about how increasing the number of **low-skilled** immigrants to the United States would affect your household and how it would affect most Americans over the next five years.

D.9.1 Labor market prospects: wages

For **your household**, how do you think admitting more **low-skilled** immigrants will affect wages?

Strongly decrease wages for my household

Somewhat decrease wages for my household

Neither increase nor decrease wages for my household

Somewhat increase wages for my household

Strongly increase wages for my household

For **most Americans**, how do you think admitting more **low-skilled** immigrants will affect wages?

Strongly decrease wages for most Americans

Somewhat decrease wages for most Americans

Neither increase nor decrease wages for most Americans

Somewhat increase wages for most Americans

Strongly increase wages for most Americans

D.9.2 Labor market prospects: jobs

For **your household**, how do you think admitting more **low-skilled** immigrants will affect job opportunities and job security?

Strongly reduce job opportunities or job security for my household

Somewhat reduce job opportunities or job security for my household

Neither reduce nor increase job opportunities or job security for my household

Somewhat increase job opportunities or job security for my household

Strongly increase job opportunities or job security for my household

For **most Americans**, how do you think admitting more **low-skilled** immigrants will affect job opportunities and job security?

Strongly reduce job opportunities or job security for most Americans

Somewhat reduce job opportunities or job security for most Americans

Neither reduce nor increase job opportunities or job security for most Americans

Somewhat increase job opportunities or job security for most Americans

Strongly increase job opportunities or job security for most Americans

D.9.3 Fiscal burden

For **your household**, how do you think admitting more **low-skilled** immigrants will affect taxes?

Increase taxes a lot for my household

Increase taxes a little for my household

Have no effect on taxes for my household

Decrease taxes a little for my household

Decrease taxes a lot for my household

For **most Americans**, how do you think admitting more **low-skilled** immigrants will affect taxes?

Increase taxes a lot for most Americans

Increase taxes a little for most Americans

Have no effect on taxes for most Americans

Decrease taxes a little for most Americans

Decrease taxes a lot for most Americans

D.9.4 Overall economic impact

When you think about all of the potential positive and negative economic effects of increasing the number of **low-skilled** immigrants that are **highly familiar** with American values and traditions coming to the United States, do you think the overall effect would be positive or negative for the finances of **most Americans**?

The overall economic effect would be very positive for most Americans

The overall economic effect would be somewhat positive for most Americans

There would be no economic effect for most Americans

The overall economic effect would be somewhat negative for most Americans

The overall economic effect would be very negative for most Americans

{*page break*}

When you think about all of the potential positive and negative economic effects of increasing the number of **low-skilled** immigrants that are **not familiar** with American values and traditions coming to the United States, do you think the overall effect would be positive or negative for the finances of **most Americans**?

The overall economic effect would be very positive for most Americans

The overall economic effect would be somewhat positive for most Americans

There would be no economic effect for most Americans

The overall economic effect would be somewhat negative for most Americans

The overall economic effect would be very negative for most Americans

{*page break*}

Setting aside immigration's economic effects, how do you think that increasing the number of **low-skilled** immigrants to the United States would affect American culture and society as a whole?

It would greatly damage American culture and society

It would somewhat damage American culture and society

It would neither damage nor improve American culture and society

It would somewhat improve American culture and society

It would greatly improve American culture and society

D.10 Beliefs about the effects of high-skilled immigration

For the following questions, we would like you to think about how increasing the number of **high-skilled** immigrants to the United States would affect your household and how it would affect most Americans over the next five years.

D.10.1 Labor market prospects: wages

For **your household**, how do you think admitting more **high-skilled** immigrants will affect wages?

Strongly decrease wages for my household

Somewhat decrease wages for my household

Neither increase nor decrease wages for my household

Somewhat increase wages for my household

Strongly increase wages for my household

For **most Americans**, how do you think admitting more **high-skilled** immigrants will affect wages?

Strongly decrease wages for most Americans

Somewhat decrease wages for most Americans

Neither increase nor decrease wages for most Americans

Somewhat increase wages for most Americans

Strongly increase wages for most Americans

D.10.2   Labor market prospects: jobs

For **your household**, how do you think admitting more **high-skilled** immigrants will affect job opportunities and job security?

Strongly reduce job opportunities or reduce job security for my household

Somewhat reduce job opportunities or reduce job security for my household

Neither reduce nor increase job opportunities and job security for my household

Somewhat increase job opportunities or increase job security for my household

Strongly increase job opportunities or increase job security for my household

For **most Americans**, how do you think admitting more **high-skilled** immigrants will affect job opportunities and job security?

Strongly reduce job opportunities or reduce job security for most Americans

Somewhat reduce job opportunities or reduce job security for most Americans

Neither reduce nor increase job opportunities and job security for most Americans

Somewhat increase job opportunities or increase job security for most Americans

Strongly increase job opportunities or increase job security for most Americans

D.10.3   Fiscal burden

For **your household**, how do you think admitting more **high-skilled** immigrants will affect taxes?

Increase taxes a lot for my household

Increase taxes a little for my household

Have no effect on taxes for my household

Decrease taxes a little for my household

Decrease taxes a lot for my household

For **most Americans**, how do you think admitting more **high-skilled** immigrants will affect taxes?

Increase taxes a lot for most Americans

Increase taxes a little for most Americans

Have no effect on taxes for most Americans

Decrease taxes a little for most Americans

Decrease taxes a lot for most Americans

D.10.4   Overall economic impact

When you think about all of the potential positive and negative economic effects of increasing the number of **high-skilled** immigrants that are **highly familiar** with American values and traditions coming to the United States, do you think the overall effect would be positive or negative for the finances of **most Americans**?

The overall economic effect would be very positive for most Americans

The overall economic effect would be somewhat positive for most Americans

There would be no economic effect for most Americans

The overall economic effect would be somewhat negative for most Americans

The overall economic effect would be very negative for most Americans

{*page break*}

When you think about all of the potential positive and negative economic effects of increasing the number of **high-skilled** immigrants that are **not familiar** with American values and traditions coming to the United States, do you think the overall effect would be positive or negative for the finances of **most Americans**?

The overall economic effect would be very positive for most Americans

The overall economic effect would be somewhat positive for most Americans

There would be no economic effect for most Americans

The overall economic effect would be somewhat negative for most Americans

The overall economic effect would be very negative for most Americans

{*page break*}

Setting aside immigration's economic effects, how do you think that increasing the number of **high-skilled** immigrants to the United States would affect American culture and society as a whole?

It would greatly damage American culture and society

It would somewhat damage American culture and society

It would neither damage nor improve American culture and society

It would somewhat improve American culture and society

It would greatly improve American culture and society

D.11   Questions about the study

D.11.1   Questions asked to all subjects

Do you feel this survey was politically biased?

Very left-wing biased

Somewhat left-wing biased

Neither left-wing nor right-wing biased

Somewhat right-wing biased

Very right-wing biased

{*page break*}

Previously in this survey, we gave you some information about the mass immigration of Cubans to Miami in 1980. Please answer the following question to the best of your memory.

Were most of the Cuban immigrants that came to Miami in 1980 high-skilled or low-skilled?

High-skilled

Low-skilled

I am unsure

{*page break*}

Do you think most of the Cubans who migrated to Miami in 1980 were **highly familiar** or **not familiar** with American values and traditions?

Highly familiar

Not familiar

D.11.2   Questions only asked to subjects in the treatment

We provided you with information about the results from research on the labor market consequences of the mass immigration of Cubans to Miami in 1980. Did you find the information we provided you with trustworthy or untrustworthy?

Very trustworthy

Somewhat trustworthy

Neither trustworthy nor untrustworthy

Somewhat untrustworthy

Very untrustworthy

To what extent to do you agree with the following statement: "The research described in this survey accurately reflects the labor market effects of the mass immigration of Cubans to Miami in 1980."

Strongly disagree

Disagree

Neither agree nor disagree

Agree

Strongly agree

To what extent do you agree with the following statement: "The research on how the mass immigration of Cubans to Miami in 1980 affected the labor market is relevant when assessing the costs and benefits of allowing more or less immigrants into the United States today."

Strongly Disagree

Disagree

Neither agree nor disagree

Agree

Strongly Agree

D.12 Demographics

1. Including yourself, how many people are currently living in your household?

2. Which category best describes your highest level of education? [Eighth grade or less, Some high school, High school degree/GED, Some college, 2-year college degree, 4-year college degree, Master's degree, Doctoral degree, Professional degree (JD, MD, MBA)]

3. What is your current employment status? [Full-time employee, Part-time employee, Self-employed or small business owner, Unemployed and looking for work, Student, Not in labor force (for example: retired or full-time parent)]

4. What is the zip code of your current residence?

5. Was your father or your mother born abroad? [Yes, No]

D.13 Questions about employment

(Not shown if any of "Unemployed and looking for work", "Student", or "Not in labor force" were selected for the question about current employment status.)

Which of the following categories best describes the industry you primarily work in (regardless of your actual position)?

○ Computer programmers

○ Telemarketers

○ Computer systems analysts

○ Billing and posting clerks and Machine operators

○ Bookkeeping, accounting, And auditing clerks

○ Computer support specialists

○ Computer software engineers, Applications

○ Computer software engineers, sys-

tems software

○ Accountants

○ Welders, cutters, solderers, and brazers

○ Helpers–production workers

○ First-line supervisors/managers of production and operating workers

○ Packaging and filling machine operators and tenders

○ Team assemblers

○ Bill and account collectors

○ Machinists

○ Inspectors, testers, sorters, samplers, and weighers

○ General and operations managers

○ Stock clerks and order fillers

○ Shipping, receiving, and traffic clerks

○ Sales managers

○ Business operations specialists, all other

○ Does not apply.

{*page break*}

(Not shown if "Does not apply" was selected for the previous questions)

What do you think is the share of immigrants working in your local industry? [0 percent, ... , 100 percent]

E   Instructions: Follow-up

E.1   Consent form

This study has received ethics clearance by the Oxford University Institutional Review Board.

If subjects have questions about this study or their rights, or if they wish to lodge a complaint or concern, they may contact us at the following email: Christopher.Roth@economics.ox.ac.uk

{*page break*}

Consent form

- I have read the information provided on the previous page.

- I have had the opportunity to ask questions about the study.

- I understand that I may withdraw from the study at any time.

- I understand how to raise a concern or make a complaint.

- I understand that I can only participate in this experiment once.

- **I understand that close attention to the survey is required for my responses to count.**

If you are 18 years of age or older, agree with the statements above, and freely consent to participate in the study, please click on the "I Agree" button to begin the experiment. [I agree/I disagree]

E.2   Obfuscation: Demographics

1. What is your sex? [Male, Female, Prefer not to answer]

2. How old are you (in years)? [18–30, 30–50, 50–70, Older than 70, Prefer not to answer]

3. Information about income is very important to understand. Would you please give your best guess? Please indicate the answer that includes your entire household income in 2016 before taxes. [Income brackets from "Less than \$10 000" to "Less than \$150 000 or more"; Prefer not to answer]

4. Which statement best describes your current employment status? [Working (paid employee), Working (self-employed), Not working (looking for work), Not working (retired), Not working (temporary layoff from a job), Not working (disabled), Not working (other), Prefer not to answer]

5. Do you consider yourself a Republican, a Democrat, or an Independent? [Republican, Democrat, Independent, Prefer not to answer]

E.3   Obfuscation: Views on government

Do you think the overall amount of government spending should be increased, decreased, or remain the same?

Strongly increased

Somewhat increased

Kept at its present level

Somewhat decreased

Strongly decreased

{*page break*}

Do you think the overall amount of taxes raised by the government should be increased, decreased, or remain the same?

Strongly increased

Somewhat increased

Kept at its present level

Somewhat decreased

Strongly decreased

{*page break*}

People feel differently about how far a government should go. Here is a phrase which some people believe in and some don't. Do you think the government should or should not redistribute wealth by heavy taxes on the rich?

Yes, redistribute by heavy taxes on rich

No, should not redistribute wealth

No opinion

E.4   Key outcomes

We would like you to think about immigrants – that is, people who come from other countries to live here in the United States. In your view, should immigration of workers with little to no education be kept at its present level, increased, or decreased?

Strongly increased

Somewhat increased

Kept at its present level

Somewhat decreased

Strongly decreased

64

{*page break*}

In your view, should immigration of highly educated workers be kept at its present level, increased, or decreased?

Strongly increased

Somewhat increased

Kept at its present level

Somewhat decreased

Strongly decreased

{*page break*}

To what extent do you agree with the following statement: "Increased immigration hurts American workers"

Strongly agree

Agree

Neither agree nor disagree

Disagree

Strongly disagree