

NBER WORKING PAPER SERIES

IMMIGRATION AND REDISTRIBUTION

Alberto Alesina
Armando Miano
Stefanie Stantcheva

Working Paper 24733
<http://www.nber.org/papers/w24733>

NATIONAL BUREAU OF ECONOMIC RESEARCH

1050 Massachusetts Avenue
Cambridge, MA 02138
June 2018

For comments we are indebted to Nicola Gennaioli, Larry Katz, Thomas Piketty, Andrei Shleifer, Guido Tabellini, Diego Ubfal, Matthew Weinzierl, and seminar participants at Bocconi, Boston University, Brown, UCLA, and Yale. We thank Pierfrancesco Mei, Davide Tagliatela, Raphael Raux and especially Leonardo D'Amico for outstanding research assistance. Alesina and Stantcheva are grateful to the Pershing Square Fund for Research on the Foundations of Human Behavior and the Wiener Center for generous support. The views expressed herein are those of the author and do not necessarily reflect the views of the National Bureau of Economic Research.

NBER working papers are circulated for discussion and comment purposes. They have not been peer-reviewed or been subject to the review by the NBER Board of Directors that accompanies official NBER publications.

© 2018 by Alberto Alesina, Armando Miano, and Stefanie Stantcheva. All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission provided that full credit, including © notice, is given to the source.

Immigration and Redistribution
Alberto Alesina, Armando Miano, and Stefanie Stantcheva
NBER Working Paper No. 24733
June 2018
JEL No. D71,D72,H2

ABSTRACT

We design and conduct large-scale surveys and experiments in six countries to investigate how natives' perceptions of immigrants influence their preferences for redistribution. We find strikingly large biases in natives' perceptions of the number and characteristics of immigrants: in all countries, respondents greatly overestimate the total number of immigrants, think immigrants are culturally and religiously more distant from them, and are economically weaker – less educated, more unemployed, poorer, and more reliant on government transfers – than is the case. While all respondents have misperceptions, those with the largest ones are systematically the right-wing, the non-college educated, and the low-skilled working in immigration-intensive sectors. Support for redistribution is strongly correlated with the perceived composition of immigrants – their origin and economic contribution – rather than with the perceived share of immigrants per se. Given the very negative baseline views that respondents have of immigrants, simply making them think about immigration in a randomized manner makes them support less redistribution, including actual donations to charities. We also experimentally show respondents information about the true i) number, ii) origin, and iii) “hard work” of immigrants in their country. On its own, information on the “hard work” of immigrants generates more support for redistribution. However, if people are also prompted to think in detail about immigrants' characteristics, then none of these favorable information treatments manages to counteract their negative priors that generate lower support for redistribution.

Alberto Alesina
Department of Economics
Harvard University
Littauer Center 210
Cambridge, MA 02138
and IGIER
and also NBER
aalesina@harvard.edu

Stefanie Stantcheva
Department of Economics
Littauer Center 232
Harvard University
Cambridge, MA 02138
and NBER
sstantcheva@fas.harvard.edu

Armando Miano
Department of Economics
Harvard University
Littauer Center
Cambridge, MA 02138
amiano@g.harvard.edu

An online appendix is available at <http://www.nber.org/data-appendix/w24733>

1 Introduction

The current vitriolic debate about immigration may appear light-years away from the poem

*“Give me your tired, your poor,
Your huddled masses yearning to breathe free”*

on the Statue of Liberty. *The Economist* recently called immigration “perhaps the defining issue of the 2016 election” in the U.S.,¹ and it has also been an incandescent campaign topic in many recent elections in Europe. At the same time, despite a sharp increase in inequality, sustaining a generous level of redistribution in light of stagnating growth and aging populations is becoming increasingly difficult. The conflicts about scarce resources become even more intense when they are intertwined with national, ethnic, and religious fragmentation.

We examine native citizens’ perceptions of and attitudes towards immigration, and how these relate to support for redistribution. In what ways do people (mis)perceive the number and the characteristics of immigrants? Does a surge in real or perceived immigration flows reduce support for the welfare state? Are people worried about the number of immigrants or rather about their composition – in terms of origin, religion, or economic circumstances? We uncover large misperceptions about the quantity, origin, and characteristics of immigrants and these misperceptions are related to lower support for redistribution among natives.

We design and run large-scale international surveys on a representative sample of around 22,500 respondents from six countries (France, Germany, Italy, Sweden, the U.K., and the U.S.).² These countries are very different economically and socially, but, in many ways, have had the immigration issue at the center of their political arenas. We elicit the respondents’ perceptions of immigrants, such as the number, origin, or economic circumstances of the latter; we then explore natives’ attitudes towards immigrants, and their views on immigration and redistribution policies. To investigate the causal link between immigration perceptions and redistribution, we also randomly treat respondents with three “information treatments,” which provide different sets of information about the true share, the origin, and the work ethic of immigrants.

In the survey, we define an “immigrant” as somebody legally living in the country of the respondent, but born abroad; we repeat this definition very clearly several times in the survey.³ The surveys – which are restricted to natives – begin with detailed background information questions about respondents’ income, sector of work, family status, zip code, whether he has immigrant parents, political orientation, and voting. We then ask respondents about their perceptions of immigrants along many dimensions, which is one of our key contributions. Some perceptions can be verified using actual statistics and data: the number, the origin, the education, the employment,

¹*The Economist*, “The state of the opposition: Democrats have plenty of anger, but few good ideas.” 05/17/2018.

²The surveys are run through commercial survey companies between January and March 2018, with an additional wave in the U.S. in June 2018.

³This is the definition officially used by the OECD (OECD, 2015). See Section 2 for a more detailed justification of this definition.

the poverty of immigrants, and the transfers they receive. Others are personal attitudes about how hard immigrants work or whether they free-ride on the system. We then ask respondents about their views on their country’s immigration policies.⁴ The perception of immigration and attitudes towards immigration questions are referred to as the “immigration block.”

The next set of questions ask about respondents’ views on policies, with a focus on redistributive policies, such as how to allocate the government’s budget or how much of the total tax burden people with different incomes should bear. To get at the question of private (non-government based) redistribution, as well as to test for a real effect of the treatments, we also tell respondents that they are enrolled in a lottery to win \$1000, but that before knowing whether they have won, they have to commit a share (zero or positive) of their gain to one or two charities that help low-income people. This set of questions is called the “redistribution block.”

Natives have overall striking misperceptions about the number and composition of immigrants. In all the countries, the average and median respondents vastly overestimate the number of immigrants. For instance, in the U.S., the actual number of legal immigrants as defined above is 10%, but the average perception is 36%; In Italy, the true share of immigrants is 10%, but the perceived share is 26%. Respondents also systematically misperceive the composition of immigrants. They believe immigrants are more likely to come from more culturally distant regions (which are often branded as “problematic” in the public debate) and that they are economically much weaker and less able to contribute to their host country than is the case. For instance, respondents starkly overestimate the share of Muslim immigrants, immigrants from the Middle East and North Africa, and strongly underestimate the share of Christian immigrants. They believe that immigrants are less educated, poorer, more likely to be unemployed, and more likely to receive government transfers than they are in reality.

What is perhaps most striking is that these stark misperceptions hold across all groups of respondents, whether we split them by income, age, gender, education, political affiliation, or sector of work. While there is substantial heterogeneity and while some respondent groups are more accurate than others, they are still substantially wrong. Respondents who have the largest misperceptions along most dimensions we ask about are the low-skilled who work in sectors more exposed to immigrants, the non college educated, women, and right-wing respondents. While left and right-wing respondents misperceive the share of immigrants to the same extent, they have very different views about the composition of immigrants; right-wing respondents in all countries systematically consider immigrants to have “less desirable” in their views characteristics. Respondents who personally know an immigrant have more accurate perceptions of immigrations. Those who live in a commuting zone in the U.S. with a high share of immigrants have larger misperceptions.⁵

The perceived share of immigrants alone is not a key driver of the support for either immigration

⁴These include: how much immigration there should be, whether the government should care equally about immigrants and natives, when immigrants should be eligible for benefits, when they should be able to get citizenship and vote, when they would be considered to be truly part of the country, etc.

⁵We do not currently have as detailed local data for the European countries.

or redistribution policies, but the perceived characteristics of immigrants are. Controlling for the full array of individual respondent characteristics including political affiliation, we see that support for immigration and redistribution are strongly positively predicted by the perceived work ethic of immigrants, and the share of immigrants that are highly educated, as well as by knowing an immigrant personally. They are significantly negatively predicted by the perceived share of immigrants who are free-riding, low educated, unemployed, or Muslim.

We then turn to our experimental part and our informational treatments. We begin with our “order of the questions” treatment, whereby half of the respondents are randomly shown the immigration block before the redistribution block and vice versa. This allows us to study the effects of purely making respondents *think* about immigration and the characteristics of immigrants on their answers to redistribution policy related questions. We find significantly negative effects of simply prompting respondents to think about immigrants and their composition: respondents who are asked first about their perceptions of immigration (without receiving any information on immigrants) and only then about redistributive policies show a significantly larger aversion to redistribution – including actual donations to charity – than those who are asked about redistribution first and immigration second. This is to be interpreted in light of our aforementioned findings of very negative views that respondents hold about immigrants, their difference to them, and their economic contributions to their host country. Consistent with this, it is those respondents with the worst baseline priors about immigrants who react most negatively to being prompted to think about immigrants.

Respondents are also randomized into one of three informational treatment groups. The first informational treatment informs respondent about the true number of immigrants in their country; the second treatment informs them about which regions immigrants in their country come from; the third one shows them an anecdotal day in the life of a low-income, very hard-working immigrant.⁶ Our three informational treatments have strong first-stage effects: treated respondents’ perceptions on the number, origin, or hard work of immigrants are significantly different from those of the control group in the way that was expected. We also conducted a follow-up survey in the U.S. to show that the effects on perceptions of the informational treatments persist after one to three weeks.

The “hard working immigrant” treatment on its own has strong effects on support for redistribution: treated subjects become significantly more favorable to redistribution when reminded that at least some immigrants are hard-working. However, when respondents are shown the immigration block first, and are thus asked to go through detailed questions about the number and characteristics of immigrants, their negative priors dominate; none of the favorable informational treatments is able to overcome the negative effects on redistribution of prompting people to think at length about immigrants’ characteristics.

Since all groups of respondents have negative and biased baseline views of immigrants, all of

⁶In addition, our main surveys and experiments are complemented by a series of smaller pilots, in which we tested some other interesting randomizations, which we report in the text, such as randomizing the name given to immigrants in the examples.

them react negatively to being made to think about immigrants. Groups which have more negative baseline views (the non-college educated, the low-skilled in immigration intensive sectors, the right-wing) react more strongly to the order treatment and are less inclined to change their views after viewing the favorable “hard work treatment.”

Our results imply that people’s attitudes on immigration and redistribution are formed in an environment of misinformation – perhaps even disinformation. Rather than being corrected as we attempt to do here, these misperceptions may be strategically manipulated or even fostered by parties or interest groups averse to immigration or redistribution.

Our paper is related to the abundant literature on the relationship between general cultural and social fragmentation (not just immigration) and the welfare state. It is impossible to do justice to the full literature, which spans fields, from economics to sociology and political science. Many papers, mostly in economics, are reviewed in [Alesina and Giuliano \(2011\)](#) as well as in [Stichnoth and Van der Straeten \(2013\)](#). A common result is that generosity (both public and private) travels less well across racial, ethnic, religious, and nationality groups than it does within such groups.

[Luttmer \(2001\)](#) shows that “interpersonal preferences” defined as preferences that depend on the characteristics of others are key in understanding support for welfare benefits in the U.S., in addition to financial self-interest. Racial group loyalty means that individuals show stronger support for welfare spending if their own racial group is more strongly represented among its recipients. This can help explain why states with more racial fragmentation exhibit less welfare spending. Similar findings appear in [Lee and Roemer \(2006\)](#), [Roemer, Lee, and Van der Straeten \(2007\)](#), and [Gilens \(1995\)](#). [Luttmer and Singhal \(2011\)](#) show that immigrants bring with them and preserve the preferences for redistribution that apply in their country of origin.⁷

[Emmenegger and Klemmensen \(2013\)](#) argue that the link between preferences for redistribution and attitudes towards immigration may not be simple, depending on whether a voter is reciprocal, self-interested, egalitarian, or humanist. [Reeskens and Van Oorschot \(2012\)](#) address the sociology concept of the “New Liberal Dilemma” namely the difficulty of generating widespread support for welfare programs, which were put in place in times of cultural homogeneity. The authors use the European Social Survey (ESS) to show that preferences for redistribution and opinions about immigrants’ access to welfare are not related in the same way in different countries, depending on whether they are more or less culturally heterogenous.⁸ [Alesina and Angeletos \(2005\)](#) provide a model in which the perception of effort put in by the beneficiaries of redistribution is a crucial determinant of citizens’ views about the welfare state. This consideration applies to perceived effort by immigrants as well, as we will document empirically in this paper.

On the theory side, in recent work, [Bisin and Verdier \(2017\)](#) provide a model of public good

⁷[Finseraas \(2008\)](#) uses data from the ESS and demonstrates that support for redistribution among the rich is lower in regions where the proportion of ethnic minorities among the poor is high. Using the same data, [Mau and Burkhardt \(2009\)](#) show that there is only a weak negative effect of ethnic diversity on public social expenditure levels, but a significant negative effect on support for the welfare state and immigrants.

⁸[Reeskens and Van Oorschot \(2015\)](#) show that immigrants do not have significantly different preferences for redistribution than natives, after controlling for income.

provision as a function of the fragmentation versus integration of minorities. Hansen (2003) develops a model where the median voter is affected by the welfare burden of transfers to immigrants and has cultural preferences. Spolaore and Wacziarg (2017) also develop a theory of cultural heterogeneity and inter-group conflict that leads to different predictions depending on whether the focus is on public good provision (in which case heterogeneous groups face more conflict) or a rival good (in which case more homogeneous groups do).

Importantly, Bordalo, Coffman, Gennaioli, and Shleifer (2016) provide a model of “stereotypes,” building on Gennaioli and Shleifer (2010), which could explain many of our findings. In the Stereotypes model, when agents (in our setting, natives) form judgments about a target group (here, immigrants) they overweight its representative characteristics, i.e., those features that occur relatively more frequently in that group than in a reference group (in our case, natives). These stereotypes thus have a “kernel of truth” (in our case, it is true that immigrants are somewhat more unemployed, poorer, less educated, more likely to be Muslim, etc. than natives) but they tend to focus excessively on these differences and exaggerate them: this is in line with one of our main results about the very widespread and stark misperceptions about immigrants. We can also interpret the effects of our “hard work” treatment, which shows positive information about a hard working immigrant in this model: the treatment shifts the perceived frequency of hard working types in the target group and leads to an update in the beliefs about how hard immigrants work.

Several papers have studied the views on immigrants using existing surveys, such as the ESS, and how these views are correlated with views on *immigration* policies. The ESS has much less detailed variables than we have in our survey and does not have any experimental (causal) component. In this context, a long-standing debate focuses on whether anti-immigration sentiments arise purely from economic considerations or rather from worries about cultural dilution. Economic considerations can be socially-minded (e.g., the worry that an inflow of immigrants will reduce the wages of some workers or tilt public good provision in a less favorable direction for some natives) or self-interested (e.g., the worry that one’s own wages may decrease). Hainmueller and Hopkins (2010) argue that economic self-interest alone does not explain anti-immigration sentiments.⁹ Hanson, Scheve, and Slaughter (2007), however, show that fiscal pressure reduces support for immigration. Hainmueller and Hopkins (2015) provide an expansive conjoint analysis of what characteristics of immigrants U.S. natives deem “desirable.”¹⁰ Mayda (2006) studies which people are against immigration. On balance, it seems that there is support in the literature for both economic and cultural issues mattering.

Senik, Stichnoth, and Van der Straeten (2009) use the ESS to argue that there is only a weak negative link between the perceived presence of immigrants and natives’ support for the welfare state. Consistent with our findings, the authors argue that it is especially natives who dislike immigrants and who are worried about their economic impacts who react more negatively to a higher share of immigrants. Alesina, Murard, and Rapaport (2018) also use the ESS to examine

⁹Hainmueller and Hopkins (2015) also emphasize the importance of “sociotropic” rather than economic concerns.

¹⁰Bansak, Hainmueller, and Hangartner (2016) repeat this conjoint analysis on asylum seekers in Europe.

the correlation between preferences for redistribution and immigration in a sample of European countries. Their results are consistent with ours, despite the aforementioned shortcomings of the ESS. Dahlberg, Edmark, and Lundqvist (2012) identify a negative impact of refugees – a very specific type of immigrants – on reduced redistribution support in Swedish localities. Chevalier et al. (2017) look at the inflow of poor immigrants with voting rights in West Germany post WWII and their effects on redistribution. Tabellini (2018) shows that there has been political backlash against immigrants, even if the latter economically benefit the host community, by exploiting exogenous variation in European immigration to U.S. cities in the first half of the 20th century. Card, Dustmann, and Preston (2012) show that compositional concerns about local amenities and public goods is important in explaining support for immigration. In an important recent paper, Damm, Dustmann, and Vasiljeva (2016) estimate the causal impact of refugee migration on electoral outcomes in Denmark, exploiting a policy that assigned refugees quasi-randomly to different municipalities.¹¹

Methodologically, we are contributing to a growing literature that runs surveys and implements online information experiments. The most recent and closest work is by Kuziemko et al. (2015), Kuziemko et al. (2014), Charité, Fisman, and Kuziemko (2015), Karadja, Mollerstrom, and Seim (2017), Cruces, Perez-Truglia, and Tetaz (2013), Alesina, Teso, and Stantcheva (2018), Weinzierl (2017), and Fisman, Kuziemko, and Vannutelli (2017). In addition, two very recent papers study how providing the correct information about immigrants changes people’s views about immigration (not redistribution) policies, a focus different from ours. Grigorieff, Roth, and Ubfal (2018) consider giving correct information about immigrants in a survey in the U.S. Facchini, Margalit, and Nakata (2016) study the effects on support for immigration of an informational campaign in Japan about the economic contribution of immigrants in that country.

Finally, our estimates help assess the factors that people use when determining the “generalized social welfare weights” they place on others, as proposed by Saez and Stantcheva (2016) in the public economics literature on social preferences. Various principles for preferences for redistribution have recently been explored by Lockwood and Weinzierl (2015), Lockwood and Weinzierl (2016), Weinzierl (2014a), and Weinzierl (2014b), which our analysis can help inform.

We contribute the following four aspects to the earlier literature. First, we provide new detailed cross-country standardized surveys that combine a series of questions on immigration and different policies. Second we investigate more detailed perceptions than is usually the case, about not only the number of immigrants, but also their origins, religion, education, work effort, unemployment, and transfer receipts. Importantly, we check these perceptions against reality. Third, we not only

¹¹Our work is also related to the large literature studying the impacts of immigration on the wages of locals (Card (1990, 2009), Borjas, Freeman, and Katz (1992, 1996), Borjas et al. (1997), Borjas (2006)). Dustmann, Schönberg, and Stuhler (2016) analyze and try to reconcile the differences in the estimated impacts of immigration on locals in different studies. This could be one of the mechanisms explaining the opposition to immigration, which we find to be particularly stark among those employed in low-skilled jobs in sectors exposed to immigration (but not those in high-skilled in sectors exposed to immigration). Mayda and Facchini (2009) study whether support for immigration could be shaped by the welfare state and Mayda and Facchini (2012) focus specifically on skilled migration.

focus on the relation between perceptions and immigration policies, but also between perceptions and redistribution policies. Fourth and finally, our informational experiments allow us to show causality in these relations.

The rest of the paper is organized as follows. Our data collection, survey construction, and experimental design are explained in detail in Section 2. The full survey text is in the Appendix. Section 3 describes the perceptions about immigrants, across countries and respondent characteristics. Section 4 investigates the correlation between perceptions of immigration and preferences for redistribution. The findings from the experimental part of our study and the informational treatments are discussed in Section 5. The last section concludes.

2 The Survey, the Experiments, and Actual Data

2.1 Data Collection and Sample

We conducted large-scale surveys in six countries: Germany, France, Italy, Sweden, the U.K., and the U.S. The sample sizes are 4000 for the U.S., 4001 for the U.K., 4001 for Germany, 4000 for France, 4000 for Italy, and 2004 for Sweden, for a total of 22006 respondents. The surveys were conducted in January and February 2018 in the U.S. and in February and March in the European countries. In the U.S., a follow-up survey was implemented for each respondent, one week after he took the initial one. This allows us to test for the persistence of the treatment effects. Only natives (non-immigrants) between 18 and 70 years of age were allowed to take the survey in each country.

We design the surveys using an online platform; the survey links are then diffused by commercial survey companies in each country. For the U.S., the respondents were reached through C&T Marketing (<http://www.ctmarketinggroup.com>). The European countries were centrally managed by *Respondi* (<https://www.respondi.com/EN/>). These companies are in touch with panels of respondents to whom they send out survey links per email. Respondents who click on the link are first channelled through some screening questions that ensure that the final sample is nationally representative along gender, age, and income dimensions. Respondents are paid if they fully complete the survey. The pay per survey completed was \$2.75 in the U.S., and \$2.5 in Europe. The average time for completion of the survey was 27 minutes and the median time was 21 minutes.¹²

The final sample is close to representative in each country. Table 1 shows the characteristics of our sample relative to the population in each country. Population statistics come from the Census Bureau and the Current Population Survey for the U.S. and from Eurostat and various national statistical offices for European Countries, as described in the table notes. By construction, we are almost perfectly representative along the dimensions of age, gender, income (binned into four brackets, the way that the quotas are imposed during the survey). In addition, our sample is also representative on non-targeted dimensions such as the share of respondents who are married. Our

¹²The full distribution of survey durations is provided in Online Appendix OA.2.

sample is slightly less likely to be employed, but not more likely to be unemployed (except to a small extent in the U.S.).¹³ In some countries, such as the U.S., France, and Italy, respondents in our sample are more likely to be college-educated than the general population. In Online Appendix OA.6, we show that our results are robust to re-weighting the sample so that it is representative along the employment and education dimensions as well.

2.2 The Survey Structure

The full survey in English is available in Appendix A-5. The questionnaires in German, Italian, French, and Swedish can be seen by following the links in the Appendix, which lead to the web interface of the survey. We enrolled the help of several native speakers for each language to ensure that the translation was suited to the local culture and understanding.¹⁴ Below, text in italic represents actual survey text. Italic text in square brackets represents the answer options provided to the respondents, if any. We provide the text as it is in the U.S. survey and refer to the host country as the U.S.

We give the following definition of an immigrant:

“In what follows, we refer to immigrants as people who were not born in the U.S. and legally moved here at a certain point of their life. We are NOT considering illegal immigrants.”

In general, there could be two definitions of *legal* immigrants: i) by citizenship, (i.e., all people legally living in the country who do not have citizenship), and ii) by country of birth (i.e., all people who legally live in the country but were born in another country). Our definition is the second one, which is also the one most frequently used by the OECD (OECD, 2015) because it is more comparable across countries, i.e., is not affected by countries’ citizenship policies, which are very heterogeneous.

The survey is structured as follows:

1) *Background socio-economic questions about the respondent:*

Employment status, family situation, highest education level achieved, household income, political orientation, sector of employment, immigrant parents, zip code, etc.

2) *Information Treatments:*

We show one of three information treatments to randomly chosen subsamples. Before proceeding, we provide the above definition of an immigrant. The first treatment provides the correct information about the number of immigrants in the respondent’s country; the second provides the correct information about the country of origin of the immigrants in the respondent’s country; the third shows an example of a “day in the life” of a hard-working immigrant.

We then have two blocs of questions, the order of which is randomized, in addition to the randomization of the information treatments.

¹³Our definition of employed includes full-time and part-time employment.

¹⁴The three authors are fluent in four of the five languages.

3) *Immigration Block:*

The first block includes questions about the perception of immigrants, namely, their number, origin, religion, economic circumstances, transfers received, and work ethic. It also contains questions about support for various immigration policies, such as how much immigration there should be, when immigrants should get citizenship, or when they should be eligible for benefits.

4) *Redistribution Block:*

The other set of questions is about redistributive policies, including the progressivity of the tax system, and the allocation of government spending. We also investigate the willingness of respondents to donate to charities and ask about attitudes towards government.

We now provide more details on each of these survey blocks.

Background socio-economic questions.

We collect information on respondents' gender, age, income, highest level of education achieved, sector of occupation, employment status, marital status, number of children, place of residence, and political orientation. The latter is investigated in two ways. First, we ask respondents to classify themselves in terms of their views on economic policy, along a spectrum ranging from "very conservative" to "very liberal."¹⁵ Second, we ask them for which party or candidate they voted or would have voted (in case they did not vote) in the last presidential (or chancellor) election.¹⁶ If an election is impending (as was the case for Italy and Sweden), we also ask which party or candidate they planned to vote for.

We also ask the respondent whether one or both of his parents were immigrants (i.e., not born in his current country of residence). We collect information on the respondent's sector of employment (and, if he is currently unemployed, on the sector in which he last worked). We are thus able to classify respondents into "high immigration sectors," which we define as sectors in which the share of immigrants is above the national average. The full sector classification is summarized in Appendix A-3, and described in greater detail and in the original language in Online Appendix OA.4.¹⁷

¹⁵ "On economic policy matters, where do you see yourself on the liberal/conservative spectrum?" With options [*Very liberal, Liberal, Center, Conservative, Very Conservative*] in the U.S. and the U.K., and [*Far left, Left, Center, Right, Far right*] in the other countries.

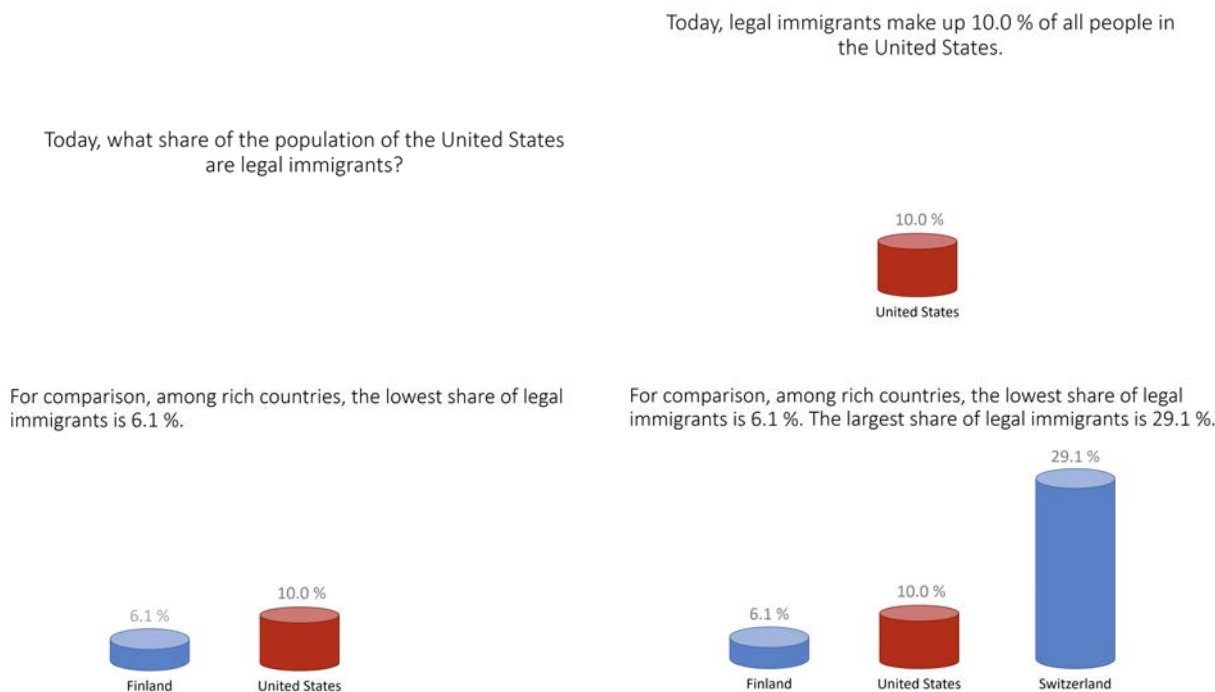
¹⁶ More precisely, we first ask respondents whether they voted in the last elections or not. If they did, we ask them to select the candidate or party they voted for; if they did not, we ask them to select the candidate or party they would have most likely supported if they had voted. In some countries, the electoral system is such that people vote for parties. In others, they vote for candidates. In the U.S. and in France we provide a list of all the presidential candidates. In the other countries we list all the major parties that together attract more than 95% of the vote and also add an empty field for "Other" where respondents can write the party that they voted for. Afterwards we classify candidates and parties into *Far left, Left, Center, Right* and *Far right*.

¹⁷ For instance, in the U.S., immigration intensive sectors are: Farming, fishing, and forestry; Building and grounds cleaning and maintenance; Construction and extraction; Computer and mathematical occupations; Production occupations; Life, physical, and social science; Food preparation and serving related occupations; Occupations related to transportation and material moving; Occupations related to personal care, childcare and leisure; Healthcare support occupations.

The information treatments

The randomly chosen treated respondents see one of three information videos, which are available on YouTube.¹⁸ We provide some screenshots below to give an idea of the design of each treatment.

FIGURE 1: TREATMENT “SHARE OF IMMIGANTS”



The first treatment informs respondents about the actual share of immigrants in their country, and compares this to the shares in the OECD countries with the lowest share of immigrants (Finland, with 6.1%) and the highest share (Switzerland, with 29.1%). This second piece of information is destined to give respondents an accurate view of how their own country ranks among other developed economies in terms of immigration. We refer to this treatment as the “Share of immigrants” treatment (see Figure 1).¹⁹

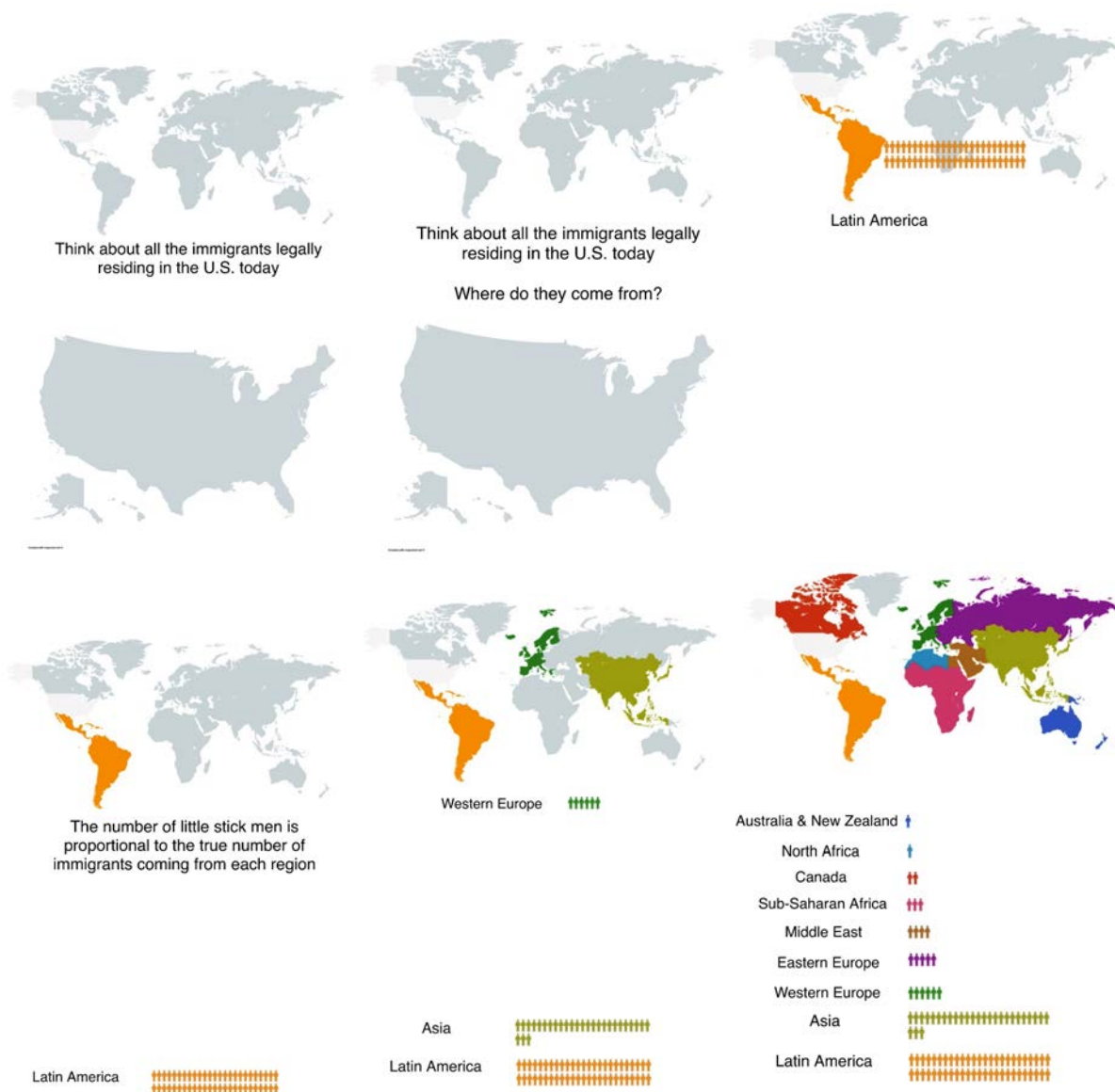
The second treatment informs respondents about the origins of the immigrants in their country. The world is broken down in nine broad areas (North America, Latin America, Eastern Europe, Western Europe, Sub-Saharan Africa, the Middle East, North Africa, Australia and New Zealand, and Asia). Respondents are shown a map, with each region sequentially appearing in a different color (so that there is no doubt about which region any given country is part of) and a number of

¹⁸The links are: <https://youtu.be/2bVzfv0a-fE>; https://youtu.be/-603kdm_GkA; https://youtu.be/_1SoLYX80yE.

¹⁹For the U.S., we run two versions of this treatment: one version shows respondents the share of total immigrants (13.5%) and one shows them the share of legal immigrants (10%). Each version specifies in the text displayed whether the number relates to total or legal immigrants. As we show in Section 5, neither of these two treatments manages to increase support for redistribution, which is not driven by the perceived share of immigrants per se, but rather by their perceived characteristics.

“stick men” proportional to the number of immigrants from that region appearing and moving to the bottom of the screen, where they remain until the end of the video. This is referred to as the “Origin of immigrants treatment.” It is illustrated in Figure 2.

FIGURE 2: TREATMENT “ORIGIN OF IMMIGRANTS”



The third treatment shows a “day in the life” of a very hard-working immigrant woman, based on true cases.²⁰ She works long hours, puts in a lot of effort to also study at night in order to

²⁰There are many articles in the media providing examples of very hard-working immigrants. We have combined several sources and changed the names. Two examples are: *The Washington post* “They said I was going to work like a donkey. I was grateful” July 11, 2017 available at <https://www.washingtonpost.com/news/wonk/wp/2017/07/11/they-said-i-was-going-to-work-like-a-donkey-i-was-grateful> and *Forbes* “6 Immigrant Stories That Will Make You Believe In The American Dream Again” Oct 4, 2016 available at <https://www.forbes.com/sites/monteburke/2016/10/04/6-immigrant-stories-that-will-make-you-believe-in-the-american-dream-again>.

improve her modest living conditions and that of her children, and hopes to start her own small business in the future. The video (see the screenshots in Figure 3) walks respondents through the hours of the day, as indicated by a clock at the top of the screen.

FIGURE 3: TREATMENT “HARD WORK OF IMMIGRANTS”

Emma legally came to the U.S. at age 25.



She lives with her husband - a construction worker - and two small children in a one-bedroom apartment.

She starts work at 5 am every day of the week, earning the minimum wage for such tasks as restocking the shelves, helping customers, mopping the floor and cleaning the bathrooms.



When her day shift at the store ends at 3 pm, Emma starts her second job as a cleaning lady.

For the past 5 years, she has been working in a retail store.

She takes two buses to get to her clients.



She finishes around 7 pm and gets home by 8 pm.



She then makes dinner for her family and sometimes helps the children with their homework before they go to bed.



Emma takes online courses. She stays up until midnight to work on her courses.

Emma and her husband have no free time, no weekends, and haven't taken any holidays since arriving in the U.S..

She cannot take out a loan to go to a full-time college.

Despite working two jobs and barely making ends meet, Emma is very happy to be in the U.S..

She hopes that thanks to her hard work she will one day be able to start her own small business.

Immigration block

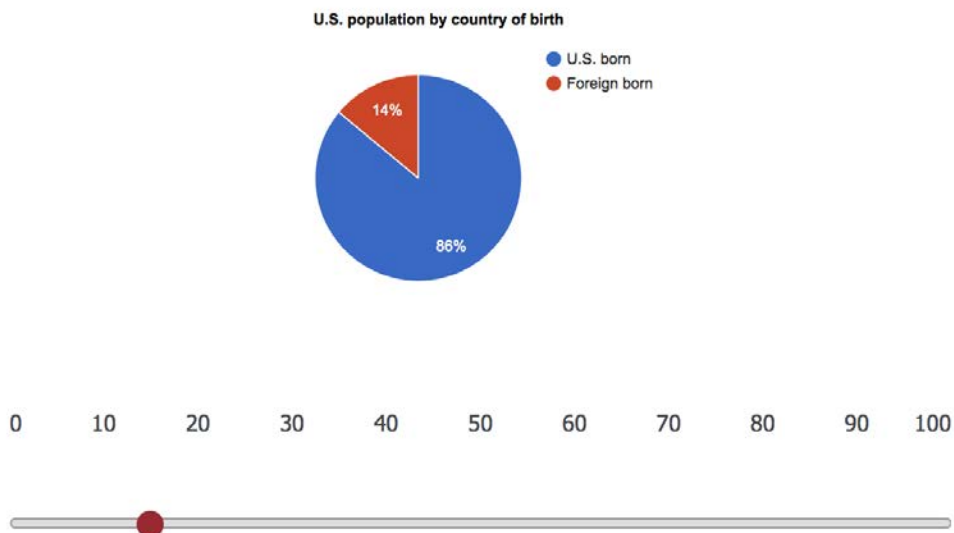
This block begins with the key questions about perceptions of immigrants. First, the respondent is asked about what share of the population are immigrants using a slider and a pie chart as illustrated in Figure 4. When the respondent lands on this page, the pie chart appears fully grey and the slider is at zero. If anything, this initialization should bias respondents towards providing a small number, the exact opposite of our findings. As respondents move the slider, the pie chart interactively appears in two colors, one representing the share of U.S. born people, the other the share of foreign born ones. The slider and pie chart design serves two purposes: first, it is much less tempting to enter round numbers: indeed, as the histograms in Figure A-4 show, there are relatively few round numbers reported. Second, the interactive and colored display, that reacts in real-time to a respondent's movements captures his attention.

We then ask respondents about what share of the total immigrants in their country come from each of the nine regions of origin (described above in the context of treatment “Origin of

immigrants.”) Again, we use a slider plus pie chart display shown in Figure 5. There is one slider per region of origin and the pie chart adapts in real-time with different colors for each region. A sticky map at the top shows the boundaries of each region, with matching colors.

FIGURE 4: ELICITING PERCEPTIONS ON THE SHARE OF IMMIGRANTS

The pie chart below represents all the people currently living in the U.S. Out of all these people currently living in the U.S., how many do you think are legal immigrants? Move the slider to indicate how many out of every 100 people you think are legal immigrants.



The next questions ask about the share of immigrants of each of the major religions. We then turn to questions about the economic conditions of immigrants, namely, their unemployment levels, the share with high (at least college) and low education (who have not completed high school), the share living below the poverty line in the country, and the average transfer they get relative to the average native. We always ask first about natives and then about immigrants, in order to have a comparison point, as well as to make respondents specifically think about the difference between natives and immigrants.

To give an example, for poverty the question reads:

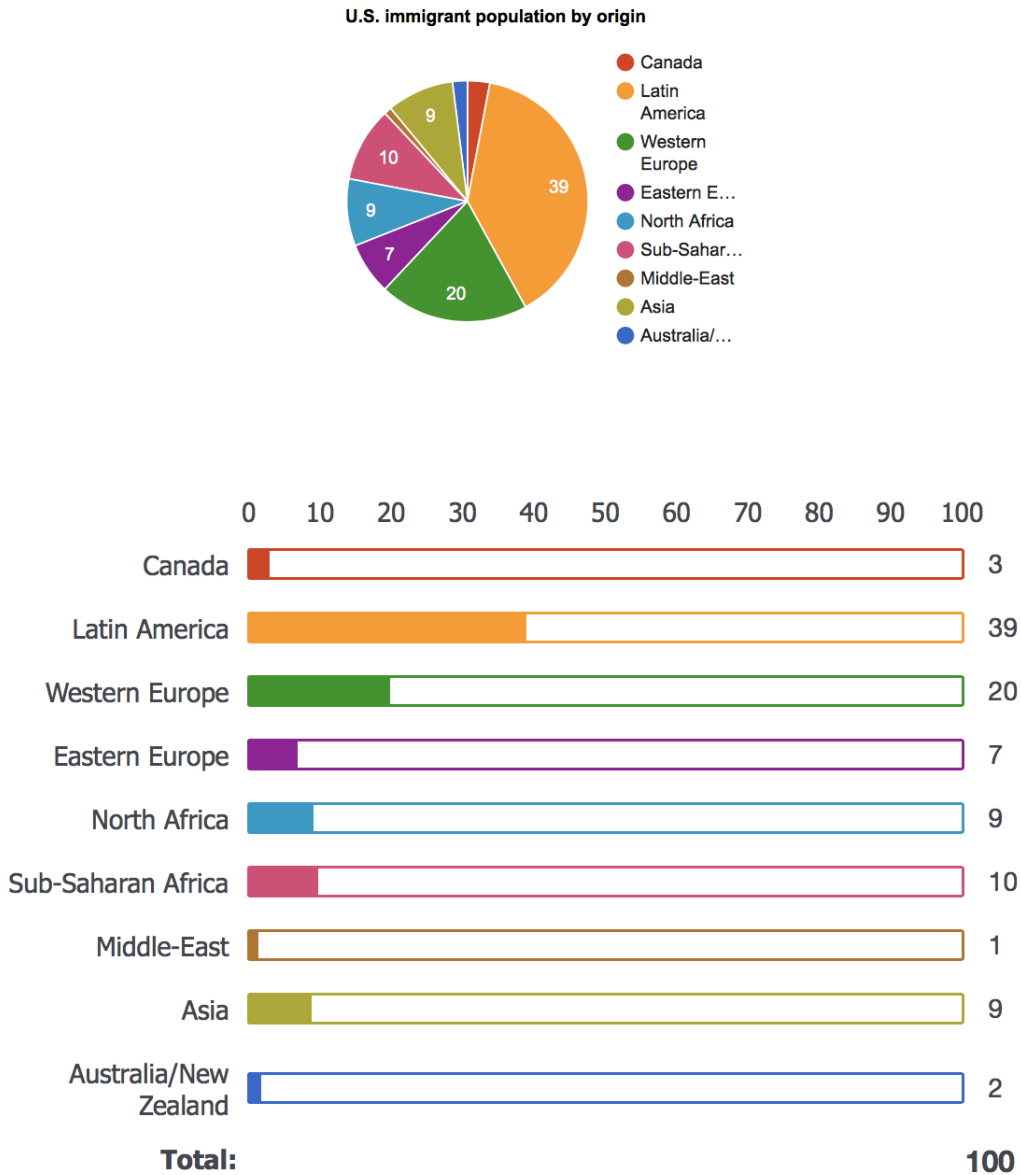
“Out of every 100 people born in the U.S., how many live below the poverty line? The poverty line is the estimated minimum level of income needed to secure the necessities of life.”

“Let’s compare this to poverty among legal immigrants. Out of every 100 legal immigrants in the U.S. today, how many do you think live below the poverty line?”

The questions about unemployment and education are analogous. We also ask about the transfers received by immigrants. The question for the U.S. reads as follows (and is adapted to each country to reflect the transfer programs in place there):

“U.S. .born residents receive government transfers in the form of public assistance, Medicaid, child

FIGURE 5: ELICITING PERCEPTIONS ON THE ORIGIN OF IMMIGRANTS



credits, unemployment benefits, free school lunches, food stamps or housing subsidies when needed. How much do you think each legal immigrant receives on average from such government transfers? An average immigrant receives:” [No transfers; ... ; More than ten times as much as a US born resident].

We then ask about perceptions of the work effort of immigrants:

“Which has more to do with why an immigrant living in the U.S. is poor?” [Lack of effort on his

or her own part; Circumstances beyond his or her control.]

“Which has more to do with why an immigrant living in the U.S. is rich?” [Because she or he worked harder than others; Because she or he had more advantages than others.]

Our next question describes two people, John and Mohammad, who are identical along all dimensions, except that Mohammad is a legal immigrant. The exact names used are adapted to each country to feature one native-sounding and one Muslim-sounding name. Respondents are asked whether Mohammad pays more or less taxes than John and whether he receives more or less transfers. This complements the question above on unconditional transfers, by holding everything relevant fixed – thus, if respondents respond anything other than “the same” they are expressing some bias in favor or against the immigrant.

The next set of questions asks about views on immigration policy and covers four areas: 1) the number of immigrants the respondent believes should be allowed to enter the country and whether or not the current number is problematic; 2) when immigrants should be eligible for transfers such as welfare; 3) when immigrants should be allowed to apply for citizenship and vote in U.S. elections; 4) when the respondent would consider an immigrant to be “truly’ American.”

At the very end of the block, we also asked whether a respondent has a close acquaintance or friend who is an immigrant.

Redistribution block

This block of questions is about general redistribution towards low income individuals. It never make any reference to immigrants. The questions also refer to the “government” in general, not specifically to the incumbent government. For the U.S. and Germany (the two federal countries in our sample), we explicitly state that we refer to total spending and taxes at the “federal, state, and local levels.”

It is important in our view to separate respondents’ views on 1) the total size of the government (how much involvement and spending is optimal), 2) how to raise the funds needed for government policies and 3) how to spend a given level of funds. Our questions are designed to address each of these three aspects in isolation, holding the two other aspects fixed. We first explain to respondents that we will ask them separately about how to raise a given tax burden (aspect 2) and then how to allocate it to the different major spending categories (aspect 3): *“For the purpose of these questions, suppose that the level of government spending is fixed at its current level and cannot be changed.”* We also ask about support for various policies targeted to the poor (public housing assistance, support for schools for low-income children, and income support programs). Here, we allow the respondent to express a wish to either increase or decrease the total size of government (aspect 1), but we still emphasize that this may come at a cost: *“Keep in mind that, in order to finance an expansion of any of these, other types of spending (like spending on infrastructure and defense, for example) would have to be scaled down or taxes would have to be raised.”*

Taxes: To provide more detail about aspect 2), respondents are asked to select average income tax rates for four income groups using sliders: the top 1%, the next 9%, the next 40% and the bottom 50%. The taxes they select are constrained to raise the current level of revenue in their country. This is illustrated in Figure A-2.²¹

Spending: On aspect 3), we ask respondents to allocate 100% of the budget to seven spending categories: 1) Defense and National Security, 2) Public Infrastructure, 3) Spending on Schooling and Higher Education, 4) Social Security, Medicare, Disability Insurance, and Supplementary Security Income, 5) Social Insurance and Income Support Programs, 6) Public Spending on Health, and 7) Affordable Housing (see Appendix Figure A-3). Some of these spending categories are redistributive (in particular, 3), 4), 5), 6), and 7)) while others are not (i.e., 1) and 2)).

Views of government: We also ask respondents four questions about their views on the role and scope of government.²² These include whether “*income differences between rich and poor people*” are a problem or not; whether to “*reduce income differences between rich and poor people the government (at the local, state, or federal level) has the ability and the tools to do*” something or not; whether they generally trust the government to do what is right; and to rate how strongly the government should “*concern itself with income inequality*” on a scale of 1 (“*Not at all*”) to 7 (“*Everything in its power to reduce income inequality*”).

Donation to charity.

To end the redistribution block (and to check whether respondents put their money where their mouth is), we tell respondents that they have been automatically enrolled in a lottery to win \$1000. Before they know whether they have won or not, they need to commit to donating none of it, part of it, or all of it to one or two charities. We selected two charities in each country to be 1) targeted towards low income adults or children in general and not concerned with immigrants particularly; 2) popular and well-perceived in each country.²³

Layers of Randomization

The order in which the “redistribution block” and “immigration block” are shown to respondents is randomized. Therefore, there are two randomizations in place, which create eight treatment or control groups, summarized in Table OA1 in the Online Appendix: 1) the three information treatments (“Share of immigrants”, “Origin of immigrants” and “Hard work of immigrants”); 2)

²¹We already used an identically designed tax question and budget allocation question (described below) in Alesina et al. (2018). While respondents select tax rates on each of the four groups, a fifth slider at the bottom moves and depicts the fraction of the revenue target that has been raised. When the revenue target has been met, the slider turns green and a message alerts the respondent.

²²In Alesina et al. (2018), we found that the level of trust in government was quite low especially in France and Italy and this may lead to negative views about government intervention in general.

²³We also tried to pick charities without a religious connotation whenever possible, although this was sometimes difficult, e.g., in Italy.

the order of the redistribution and immigration blocks. Table 2 shows that each randomization is balanced along observable characteristics.

Based on these many and detailed survey questions, we define several variables and indices used in our analysis. We define them as we go and refer to them throughout the text and in the tables and figures. The reader can refer to their detailed definitions collected in Appendix A-1.

2.3 Data on Immigration Across Countries

Many of our perception questions can be checked against actual data. Appendix Section A-2 provides the detailed data sources. To summarize, for the number of immigrants and their origins, we used “Trends in International Migrant Stocks” from the U.N. (for the U.K., Italy, France, Germany), the OECD’s “International Migration Database” (for Sweden), and data from the Pew Research Center (for the U.S.). For the religion of immigrants, we used data from the Pew Research center, which was checked against other sources, such as *The New Immigrant Survey* for the US, or *Dossier Statistico Immigrazione (2017)* for Italy. Unemployment data comes from the OECD’s “International Migration Outlook”; poverty and education levels are from the Migration Policy Institute (for the U.S.) and Eurostat (for the U.K., Italy, France, Germany, and Sweden).

2.4 Ensuring High Quality Answers

We implemented several methods to ensure the highest possible quality of answers. In the survey’s landing page – the consent page, depicted in Appendix Figure A-1 – we warn respondents that *“responding without adequate effort may result in [their] responses being flagged for low quality and that their pay for the survey may be withheld.* We also attempt to make them feel involved and socially responsible by emphasizing that we are non-partisan researchers seeking to advance social studies. We highlight that it is *“it is very important for the success of our research that you answer honestly and read the questions very carefully before answering.”*

Questions are designed so as to prevent careless answers: for instance, percentages are constrained to add up to 100% and respondents cannot move to the next page before this is the case. Rather than using data entry boxes, we let the respondents move sliders, the values of which are shown in real-time on the pie charts. This fulfills two goals: first, respondents face an interactive screen, which captures their attention, and, second, there is much less risk of selecting round numbers. Questions are initialized in a neutral way, with sliders at zero and the pie charts fully grey (i.e., not showing any of the answer categories).

We also keep track of and check the time spent by the respondent on the survey as a whole, as well as on individual pages. Thus, we can flag respondents who spend too little time on either the full survey or on one of the questions about immigrant perceptions. For instance, only 1% of our respondents completed the survey in less than 6 minutes or spent less than 11 seconds on the question about immigrants origins. We also have the number of clicks on each page. For

the benchmark sample, we drop respondents in the top 2% and bottom 2% of the survey time distribution. We checked that none of our results are affected by trimming these outliers.²⁴

Just before the questions on immigrant perceptions, we strategically place an attention check question. We ask respondents whether they have paid careful attention to the preceding questions and whether they honestly believe that we should count their responses in our analysis. Almost all respondents (99.5%) answer that yes. This type of questions is used to prompt the respondents to pay attention to the subsequent questions of the survey. Its purpose is fulfilled regardless of whether the respondents answer honestly (Meade and Craig, 2012).

Finally, we ask respondents whether they thought that our survey was biased towards either left-wing or right-wing opinions. Only 16.8% of respondents say they felt some bias, out of which 10.6% thought it was left-wing biased and 6.2% thought it was right-wing biased.

3 Perceptions of Immigration

We now describe all the perceptions about immigrants, focusing on some key results in the Figures below. For a more comprehensive overview, Table 3 reports average perceived values and actual values for each country and for all perception-related variables, as well as the corresponding medians and interquartile ranges. Table 4 provides the same information, but by respondent groups. Online Appendix Tables OA5 to OA9 repeat Table 4, but splitting the sample in an even finer way, by country and by respondent characteristics.²⁵ All these descriptive statistics are based on the control group, namely the respondents who did not see any of the informational treatments.

3.1 The Share of Immigrants

Perceptions by country: Panel A of Figure 6 shows the average perception of respondents in each country about the share of immigrants (red squares), as well as the actual share (blue diamonds). The shaded areas represent the 95% confidence intervals around the average perceptions.

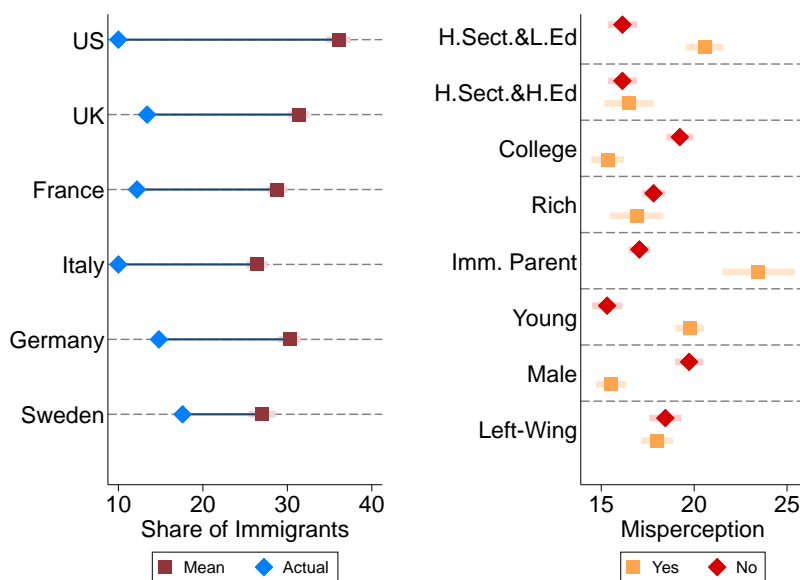
The discrepancy between perceptions and reality is striking. With the exception of Sweden, the average respondent in all countries thinks the share of immigrants is twice higher than in reality. In the U.S., respondents believe that there are on average 36.1% immigrants, when the actual share of immigrants is 10%. In Italy, the share of immigrants is 10%, but respondents believe it is 26.4%. Swedish respondents are the most accurate, but still substantially inaccurate: the actual number of immigrants is 17.6%, but the average perception is 27%.²⁶ As shown in Table 3, the median respondent perceives a lower share than the average respondent, indicating some right-skewness in the distribution of perceptions. However, even the median respondent starkly overestimates the

²⁴These results are available on demand. The distribution of survey durations is depicted in Online Appendix OA.2.

²⁵Online Appendix OA.6 re-weights the sample to make it fully representative also along the non-targeted dimensions of employment and education.

²⁶Sweden is the country with the highest share of immigrants.

FIGURE 6: PERCEIVED VS. ACTUAL SHARE OF IMMIGRANTS



Notes: The left panel shows the average perceived share of immigrants (red squares) and the actual share (blue diamonds) in each country. The right panel shows the average misperception (perceived minus actual share) of the share of immigrants by groups. Groups are defined by the indicator variables listed to the left: the mean when the indicator is equal to 1 (respectively, to 0) is represented by the orange squares (respectively, by the red diamonds). The shaded areas are 95% confidence intervals around the mean.

share of immigrants. In fact, it is only the 25th percentile respondent's perception that is somewhat closer to reality.

To further see the dispersion in responses, Figure A-4 shows the distribution of misperceptions of the share of immigrants. Misperceptions are defined as the perceived value minus the actual value. There is a share of respondents who believe the share of immigrants is very high. However, even if we exclude respondents whose misperception is in the top 20%, we still get very substantial misperceptions, as was already clear by looking at the median respondent: the average perceived share of immigrants excluding the top 20% is 27% in the U.S., 23% in the U.K., 22% in France, 19% in Italy, 22% in Germany, and 20% in Sweden. We also get very substantial misperceptions even if we exclude respondents who spent too little time on this question.²⁷

Perceptions by respondent characteristics: Panel B of Figure 6 shows the average misperceptions (distance between the perception and the actual value) of respondents grouped according to several personal characteristics (all countries pooled), listed on the y axis. The orange diamond

²⁷The average perceived share of immigrants excluding those who spent less than 12 seconds on this question is 35% in the U.S., 30% in the U.K., 28% in France, 24% in Italy, 30% in Germany, and 26% in Sweden.

shows the average perception among respondents who fall into this category (“Yes”); the red square shows the average perception among respondents who do not (“No”). The shaded areas represent the 95% confidence intervals around the average perceptions.

We distinguish between respondents who are highly educated in high immigration sectors, low educated in high immigration sectors, college-educated vs. not, rich vs. poor, those who have an immigrant parent, the young vs. old, male vs. female, and left-wing vs. right-wing. While most of these characteristics are self-explanatory, we provide more detail on two of them. First, as explained above, we classify respondents into high immigration sectors based on whether their current sector of employment (or their last sector, if they are currently unemployed), has an immigrant share higher than the national average. Within low and high immigration sectors, we distinguish between respondents with college education and those without. Left wing and right-wing respondents are classified based on their voting in the last election. Our classification of all parties into left, right and center is shown in Appendix A-1.; “center” respondents are not shown in the graphs. The results are robust to classifying respondents based on their views on economic policy issues (ranging from very conservative to very liberal).

There are three key findings. First, respondents in all groups think there are substantially more immigrants than there actually are – in no group is the average misperception lower than 15 percentage points. Second, some groups of respondents have substantially higher misperceptions than others. These are respondents who are low educated in high immigration sectors, the non college educated, those with an immigrant parent, the young, and women. Third, there is no difference in the average perception of the share of immigrants across the political spectrum.

Why are the misperceptions of the number of immigrants so large? One possibility is that respondents mistakenly include in their estimates illegal immigrants. It is hard to imagine this being the main reason for the large misperception, unless respondents are inflating the number of illegal immigrants to improbably large proportions: In the U.S., the actual share of illegal immigrants is 3.5% and in the European countries, it is generally less than 0.5% of the population. Alternatively, it may be that, because of media coverage and the general political rhetoric in these countries, the issue of immigration is highly salient. Finally, it could be that people confuse immigrants with minorities which have been in the country for several (sometimes many) generations. This may signal genuine lack of knowledge, or, alternatively an attitude that all minorities are “foreigners” (despite having been in the country for many generations).²⁸

3.2 Origin and Religion of Immigrants

Respondents misperceive not only the total share of immigrants in their country, but also their origins and religion.²⁹ These main perceptions on religion by country and respondent characteristics

²⁸We provide suggestive evidence for this in Section 3.5.

²⁹Recall that the complete set of perceptions about the fraction of immigrations that come from each possible origin region and their religion are shown in detail in Table 3 (by country) and Table 4 (by respondent characteristics). Appendix Tables OA5, to OA9 report all results by country.

are summarized in Figure 7.

Respondents in all countries think that immigrants come disproportionately from non-occidental countries – often branded as “problematic” in the recent public debate – such as the Middle East, Sub-Saharan Africa, or North Africa. They underestimate the share of occidental immigrants. There are some variations across countries: U.S. respondents very sharply overestimate North African and Middle Eastern immigrants, as do Italian, U.K, and Swedish respondents (the latter do so to a lesser extent). France overestimates Middle Eastern immigrants by a factor of two, but slightly underestimates North African immigrants (of which there are substantially more than in all other countries in our sample and who are in part linked to France’s colonial past). In Germany, respondents overestimate the share of North African immigrants by a factor of eight, but are exceptionally accurate on the share of Middle Eastern immigrants, perhaps because they are very aware that the large Turkish minority, to which they are accustomed, are not immigrants. Accordingly, in all countries except France, respondents also very significantly overestimate the share of Muslim immigrants. The largest misperceptions along this dimension are in the U.S. – where respondents believe that the share of immigrants who are Muslim is 23%, while the reality is closer to 10% – and in Sweden — where the perceived share of muslims is 45%, while the reality is 27%. The U.K., Italy, and Germany overestimate the share of Muslim immigrants by between 10 and 14 percentage points. In all countries, without exception, respondents strongly underestimate the share of Christian immigrants (the religion of the majority of people living in our sample countries), by at least 20 percentage points and often by much more. In the U.S. respondents believe 40% of immigrants are Christian, when the true number is 50% higher (at 61%); in the U.K, the perception is 30%, while there are in reality again almost twice as many at 58%. The same holds for all other countries.

These misperceptions are systematic: there is no group of respondents that does not overestimate the share of Muslim immigrants and underestimate the share of Christian immigrants. Those who have the largest misperceptions are the non college-educated, especially the non-educated working in a high immigration sector, and the older, the female, and the right-wing respondents. In this case, the gap between left and right-wing respondents is very large and significant.

3.3 Economic Circumstances of Immigrants

Figure 8 shows that in every country except Sweden the respondents believe that immigrants are much poorer than they actually are, especially in France and the U.S. In addition, in all countries, respondents overestimate the share of immigrants that is unemployed by an enormous amount: In Germany, the gap is 30 percentage points; in Italy it is 35 percentage points; in the U.S. it is around 25 percentage points. One conjecture is that respondents do not properly understand the distinction between unemployed and out of the labor force, although we do state it

clearly.³⁰ Indeed, respondents tend to overestimate the unemployment rate amongst natives as well. However, in all countries, and across all groups of respondents, perceptions and, most crucially, the *misperceptions* on immigrants' unemployment are systematically and significantly *larger* than for natives' unemployment (see Appendix Figure A-5). In addition, left and right-wing respondents do not significantly differ in their views on natives' unemployment, but do differ in terms of their views on immigrants' unemployment.

In all countries with the exception of Italy, respondents think that there are more immigrants who have not completed high school than is the case, as shown in Figure 9. Respondents also think that fewer respondents have college education than is true. However, the misperception gaps about education at the country level are not large. Nevertheless, there are clear heterogeneities by respondent characteristics, and some respondents have large misperceptions along the education dimension as well. The non college educated, those without education and working in high immigration sectors, right-wing respondents, older respondents, and female respondents have much larger misperceptions.

An important consideration respondents may have is whether those who benefit from redistribution are immigrants. Figure 10 addresses this question in two ways. First, the top left panel of Figure 10 plots the perceived share of immigrants among poor people in the country; the top right panel plots the perceived share of immigrants among the low-educated in the country.³¹ The perceived representation of immigrants among these economically fragile groups is starkly inflated relative to reality. Thus, respondents may be overestimating the extent to which redistribution and, thus, their own taxpayer dollars go towards helping immigrants rather than natives.

Second, and more directly, Figure 10 shows the perceived transfers to an average immigrant relative to the transfers to an average native, as well as the actual relative transfers, including or excluding pensions. Since immigrants in these six countries are on average younger than the general population, the relative transfers to immigrants including pensions are much lower than those excluding pensions. In most countries, the average perceived relative benefit is close to the true one excluding pensions, but significantly above the true one including pensions – three times as high in Italy, twice as high in France. Perhaps even more revealing, in all countries, a significant proportion of respondents (around 20% in the U.S., Italy, and Sweden, close to 25% in France) believe that immigrants receive more than twice as many benefits as natives (see Figure A-6); this view is especially common among right wing respondents. Once again, those who think immigrants benefit more from government transfers are very consistently the non college educated, women, lower income respondents, and left-wing respondents.

³⁰“*By unemployed we mean people who are currently not working, but searching for a job (and maybe unable to find one)*”

³¹We do not ask respondents about these numbers directly (see the Questionnaire in A-5), but infer them based on their perceived share of poor (respectively, low educated) immigrants and natives, as well as their perceived share of immigrants.

3.4 Perceived Effort and Contribution of Immigrants

Panel A of Figure 11 plots the share of respondents who say that immigrants are poor because of a lack of effort rather than due to circumstances beyond their control in each country (the red squares). This is compared to the share of respondents who say this about the general, non-immigrant population taken from our earlier work (Alesina, Teso, and Stantcheva, 2018) (the blue diamonds). In France and Italy people have a more negative attitude towards poor immigrants than they do towards poor people in general. In the U.K. and Sweden, there is no difference in views about immigrants and natives. In the U.S., views are slightly more positive towards immigrants. Even for natives, U.S. respondents put much more weight on individual responsibility in shaping outcomes and, perhaps because of that, assess better the hurdles stacked against immigrants when they have to make it out of poverty. We did not have data for Germany in our earlier survey.³²

Right-wing respondents are much more likely to believe that immigrants are poor because of lack of effort. These patterns fit well with earlier findings (see our literature review above) that U.S. respondents are much more likely to associate poverty with lack of effort than do European respondents (especially those from France and Italy) and that right-wing respondents are more inclined to blame poor people for their own fate. Despite these variations in views on the merits of poor immigrants, views on the merits of rich immigrants are strikingly consistent across countries.

Panel B of Figure 11 show the perceptions related to immigrants and natives for being rich because of one’s own effort (as opposed to exogenous advantages) by country and by core respondent characteristic. In all countries, respondents agree that, if an immigrant is rich, it must be mostly because of their own effort. Respondents also agree that this is more true for immigrants than it is for natives. In Italy the gap is particularly large: while Italians believe that only 17% of the rich people are rich because of their own effort, they think that 70% of rich immigrants are rich due to their own merit. The U.K. and France have less extreme, but still similar patterns. This may reflect the beliefs of Italians especially, but also French and English respondents, that the system is penetrated by family connections and social advantages, which maintain rich dynasties at the top even though they are not the ones who worked hardest. Consequently, because immigrants by construction lack these inherited advantages and sticky social classes, the (possibly very few) rich immigrants must have put in a lot of effort to become rich.

Figure 12 plots the share of respondents, by country and by core characteristics who say that “Mohammad” gets more transfers or pays more taxes than “John.” This is to check whether there is implicit bias, i.e., whether respondents believe that Mohammad gets more than John not because he is poorer, but because he is an immigrant (John and Mohammad are described to be exactly the same except for the fact that one of them is an immigrant). In all countries except Sweden, a substantial share of respondents say this is the case, especially in France, Italy, and the U.S. The

³²To give a sense of attitudes in Germany for comparison, the Online Appendix describes German respondents’ answers to a question from the German General Social Survey (ALLBUS/GGSS, 2014), inquiring about the importance of several factors, including luck and hard work, for one’s success.

right panel shows that, again, it is low-educated respondents in high immigration sectors, those without college education, those who do not have immigrant parents, the old, and especially right-wing respondents that are significantly more likely to say Mohammad gets more on net from the government.

In a smaller pilot, we randomized the name of the immigrant that was given in this question between a name that sounded i) North American (“Jack”) in the U.S. and Western European for the European countries; ii) Hispanic in the U.S. (“Miguel”) and Eastern European in Europe; iii) Muslim (“Mohammad” or “Ibrahim”).³³ Appendix Figure A-8 tabulates the answers to the questions of whether that immigrant receives (respectively, pays) more, less or the same transfers (respectively, taxes) as “John.” There are no strong patterns. It thus seems that the answers to this question reflect a general anti-immigrant bias and a perception that immigrants may be free-riders, rather than a specifically anti-Muslim immigrant bias.

3.5 Exposure to Immigrants and Perceptions

Does exposure to immigrants shape respondent’s views on immigration? We explore this question in two ways. First, we make use of our survey question asking about direct contact with immigrants (“Do you have friends of close acquaintances which are immigrants?”). Second, we consider the correlation between perceptions of immigrants and local data on the share of immigrants, together with many other local characteristics. This analysis is currently done for the U.S. only at the commuting zone (CZ) level due to lack of data for European countries. These tests provide only simple correlations because where a native lives and whether he knows an immigration could be endogenous; we do control for the full array of personal characteristics in all the analyses below, but we do not claim causality.

We start with Figure 13, which plots the coefficients on a dummy for “Knowing an immigrant” in regressions of the form:

$$Y_i = \alpha + \beta \text{Knowing an Immigrant} + \gamma \mathbb{X}_i + \varepsilon_i$$

where Y_i is each variables listed on the y axis and \mathbb{X} are all individual level controls (income, education, political affiliation, etc.) including country fixed effects. The regression is performed on the full sample and all variables Y_i are turned into z-scores so as to make the coefficients directly comparable.

Knowing an immigrant is significantly and strongly correlated with lower misperceptions across all dimensions, even after controlling for the full set of individual characteristics. Respondents who know an immigrant overestimate by less the total share of immigrants, the share of Muslim immigrants, the share of low-educated, unemployed, and poor immigrants. They underestimate by less the share of Christian immigrants and the share of highly educated immigrants. They are much

³³The exact names used were as follows. UK: William, Andrei, Mohammad; France: Paul, José, Mohammad; Italy: Francesco, Andrei, Mohammad; Germany: Michael, Vladimir, Ibrahim.

less likely to think that immigrants are poor because of lack of effort and much more likely to think that they are rich because of their own effort. Finally, they are significantly less likely to believe that the average immigrant receives more transfers than the average native and that Mohammad gets more transfers (than John) on net.

Figure 14 shows immigration perceptions across U.S. states. Panel A represents the actual shares of legal immigrants in each state; Panel B shows the average perception of the national share of legal immigrants across respondents in each state.³⁴ As the colors move from darker green to darker red, the share of immigrants (actual or perceived) becomes higher. The misperceptions are very large in all states, as can be seen by the complete lack of overlap of colors between the two panels. Some states with relatively more immigrants, such as California, Texas, or Florida, appear to have larger absolute misperceptions about the share of immigrants. But there are other Midwestern and Southern states which also have high misperceptions, despite the fact that their share of immigrants is very low relative to the national average.³⁵

However, looking at the state-level may obscure heterogeneity at finer geographical levels. We thus turn to the commuting zone level. Figure 15 shows the coefficients β from a regression at the respondent level

$$\text{Perceived share of Immigrants}_i = \alpha + \beta \mathbb{A}_i + \gamma \mathbb{X} + \varepsilon_i$$

where the left-hand side is the respondent's perceived share of immigrants, \mathbb{A}_i is the full set of variables listed vertically (each of them standardized into a z-score), and \mathbb{X} is, as before, the full set of respondent characteristics. Respondents who live in CZs with a larger share of immigrants perceive a larger (and, hence, less accurate) share of immigrants. The same goes for respondents who live in areas with high crime rates. Conditional on the share of immigrants, a recent inflow of immigrants into the CZ (since 2010) is not significantly associated with the perceived share of immigrants. On the other hand, respondents who perceive a lower share of immigrants and are thus more accurate tend to live in areas with larger shares of Hispanics or African-Americans – this could indicate that they are much more aware about the distinction between immigrants and minorities, and are used to seeing Americans of different ethnicities. Consistent with this hypothesis, respondents from CZs with higher racial segregation tend to perceive a higher share of immigrants (but these effects are just marginally insignificant at the 10% level). Living in an area with a higher share of college-educated people is also correlated with a lower perceived share of immigrants (even conditional on a respondent's own education).

³⁴Recall that the actual average is 10% for legal immigrants.

³⁵The overall correlation between perceptions and reality is -0.05, but is not significant. Appendix Figure ?? shows the share of total immigrants (legal and illegal) at the state level.

4 Immigration Perceptions and Support for Redistribution

We now turn to the relation between perceptions of immigration and support redistribution. We start with some descriptive facts about support for redistribution and immigration across countries and respondents. These results are again based on the control group only.

4.1 Support for Immigration and Redistribution Policies

We start by describing results on support for immigration across countries and respondent characteristics. The complete set of results is in Tables A-1 and A-2, where we also tabulate the full set of descriptive statistics on redistribution.

Figure 16 tabulates the attitudes towards immigration by country (Panel A) and by core characteristics (Panel B). Each plot shows the share of respondents by country or group who answer yes to the following questions (from bottom to top): i) Immigration is not a problem; ii) Immigrants should be eligible for benefits at most three years after arrival; iii) Immigrants should be allowed to apply for citizenship at most five years after arrival; iv) The respondent would consider an immigrant to be truly “American” as soon as they get citizenship; v) The government should care equally about everyone living in the country whether native or not.

There are varied patterns of attitudes towards immigration in different countries, highlighting the need to ask several questions about different aspects, as we do. In the U.S., people believe strongly that immigrants should be considered “truly American” as soon as they become citizens, and that they should get citizenship relatively soon. They are also most likely to say immigration is not a problem and relatively likely to say that the government should care equally about everyone in the country. However, and consistent with their general aversion to benefits, they are the least likely to say that immigrants should be eligible for benefits soon. In contrast, in European countries, most starkly in France, Italy, Germany, and, to a lesser extent in the U.K., respondents are less likely to say the government should care equally about everyone, that immigrants should be allowed to apply for citizenship soon, or that they will be considered as truly part of the country upon citizenship. Very few respondents (around a fifth) say that immigration is not a problem in their country. Overall, the U.S. is the country that is most supportive of immigration and France, Italy, and Germany are the least supportive ones.

Turning to the attitudes towards immigration by respondent characteristics, we see that for all variables, the most favorable attitude for any respondent group is always that of left wing respondents, and the least favorable view is that of right-wing respondents. In between, the non college-educated are consistently less supportive than the college-educated, across all dimensions. Those who are not highly-educated in immigration-intensive sectors are more averse to immigration than either people in high immigration sectors in general, or the non college-educated in general. On the other hand, those who are high-skilled in high immigration sectors are weakly more supportive than those with college. This large heterogeneity even within immigration intensive sectors is clear in the public debate too; recall in the U.S. the outcry in Silicon Valley (a perfect example of a high

skill, immigrant intensive area) in light of the Trump immigration bans.

4.2 Perceptions, Redistribution and Immigration policies

To summarize views of immigration and redistribution, we construct two standardized indices, called the “Immigration Support Index,” and the “Redistribution Index” following the methodology in Kling et al. (2007). Each index consists of an equally weighted average of the z-scores of the policy outcomes variables related to immigration support (respectively, support for redistribution) with signs oriented so that more support for those policies means a higher corresponding index. The full set of variables used in the construction of these indices is tabulated across countries and respondent characteristics in Table A-1 and in columns (1) to (12) of Table A-2.

The immigration support index components are variables i) through v) from Figure 16, which we just described.³⁶ For the redistribution support index, they are a set of dummies each equal to one if i) the respondent supports more spending on education, ii) public housing, iii) income support programs for low income people, and iv) if they believe that inequality is a big problem, v) a variable ranging from 1 to 7 where 1 means that the respondent thinks that the government should not care at all about income inequality and 7 means they think that the government should do everything in its power to reduce inequality, vi) their preferred tax rate on the top 1%, vii) minus their preferred tax rate on the bottom 50%, viii) the share of the budget they would like to allocate to health, ix), education, x) safety net policies, xi) pensions, and xii) affordable housing.³⁷

Figure 17 highlights two key patterns related to support for immigration and redistribution. The top panel plots the redistribution index against the immigration support index by bins, controlling for many individual characteristics and country fixed effects. Support for redistribution and immigration are closely correlated. The bottom panel plots the redistribution index against the perceived representation of immigrants among the poor. This graph shows more directly that, conditional on a set of individual-level controls, respondents who believe that immigrants are more represented among the beneficiaries of redistribution and to receive transfers also support less redistribution.

Figure 18 plots the vector of coefficients β from the regression:

$$\text{Immigration Support Index}_i = \alpha + \beta \mathbb{A}_i + \text{country fixed effects} + \varepsilon_i$$

³⁶Variable v) enters the index in levels from 1 to 7, as it is asked in the survey, where 1 means the respondent thinks that the government should only care about natives and 7 means he thinks that the government should care equally about everyone living in the country.

³⁷Appendix Figures A-9 shows the results from a regression of the immigration support index (left panel) and the redistribution support index (right panel) on all respondent core characteristics and on the country fixed effects (all included jointly), i.e., the coefficients β and γ from:

$$\text{Index} = \alpha + \beta \mathbb{X}_i + \gamma \text{country FE} + \varepsilon$$

The single strongest factor is again political affiliation, with left-wing respondent being much more supportive of both immigration and redistribution, but especially of more redistribution.

where the left-hand side is the respondent’s Immigration Support index and \mathbb{A}_i is the full set of variables listed vertically (each of them standardized into a z-score), which includes perceptions of immigrants, as well as personal characteristics. The perceived share of immigrants has no effect at all on support for immigration. On the contrary, the perceived share of Muslim immigrants, of North African and Middle Eastern immigrants, the perceived share of unemployed immigrants and immigrants with low education is negatively correlated with support for immigration. Those respondents who believe that immigrants are poor because of lack of effort, that immigrants who are rich have no merit, that there are few highly educated immigrants, that immigrants get more transfers than natives, and that “Mohammad” gets more transfers on net support much less immigration. Thus, even conditional on political affiliation, which is itself very highly correlated with support for immigration, a favorable attitude towards immigration is very strongly correlated with a respondents’ beliefs about the economic contribution of immigrants to the host country and their hard work.

Figure 19 repeats this analysis, but the dependent variable is now support for redistribution, and the set \mathbb{A} is expanded to also include views on immigration policy. Consistent with the findings on support for immigration, the perceived share of immigrants per se does not negatively impact support for redistribution (if anything, the correlation is mildly positive after including this detailed set of controls). Again, respondents’ beliefs on whether immigrants can contribute economically to the host country are strongly correlated with views on redistribution, especially beliefs on the hard work of immigrants and, importantly, the share of poor who are immigrants, as discussed above. A lot of the effects are absorbed by the proximate variables entering the immigration support index. These proximate variables summarize a respondent’s overall attitude towards immigrants, itself shaped by their underlying perceptions about the characteristics of immigrants: respondents who support more redistribution are those who think that immigration is not a problem, that the government should care about everyone equally, that immigrants should be entitled to benefits and allowed to apply for citizenship soon after arrival. Finally, despite controlling for both proximate and more fundamental perceptions, the left-wing dummy is still very strongly correlated with support for redistribution.

Figure 20 plots the coefficients on a dummy for “Knowing an immigrant” in regressions of the form:

$$Y_i = \alpha + \beta \text{Knowing an Immigrant} + \gamma \mathbb{X}_i + \varepsilon_i$$

where Y_i is each variables listed on the y axis and \mathbb{X} are all individual level controls (income, education, political affiliation, etc.) including country fixed effects. Again, the regression is performed on the control group only and all variables are z-scores so as to make the coefficients directly comparable. Knowing an immigrant is significantly correlated with support for immigration overall, as well as according to each separate dimension.

5 Experimental Evidence on Immigration and Redistribution

So far, we have focused on correlations between support for redistribution and immigration, conditional on personal respondent characteristics. We now turn to the experimental evidence to provide a causal link.

5.1 The Order of Questions Treatment

Our first experimental treatment is simply to randomize the order in which respondents see the “Redistribution block” and the “Immigration block.” The effects of this treatment are shown in the first line of Table 5. Those who were shown the immigration questions first are more averse to redistribution, believe inequality is less of a serious problem, and donate less to charity. The magnitudes are economically significant; Being prompted to think about immigrants reduces the redistribution index by 0.02; this effect is equivalent to 7% of the gap in the redistribution index between left and right wing respondents.³⁸ The share of respondents who say inequality is a serious problem declines by 3%, which represents around 5% of the control group mean and 13% of the gap between left and right-wing respondents.³⁹ Thus, when natives are prompted to think about immigration, all the negative views on immigration which we documented in Section 3 resurface and, as we showed in Section 4, these negative views are correlated with lower support for redistribution. The other lines of the table focuses on the effects of the three informational treatments, to which we now turn.

5.2 First Stage Effects of the Informational Treatments

We randomly show respondents one of the three informational treatments described in Section 2. The control group sees no such information. The first-stage effects on the key perceptions of immigration of these treatments are shown in Table 6 and work very well. Each treatment significantly affects perceptions along the dimension it was designed to do and generally does not shift perceptions along the other dimensions. In Appendix Table A-3, we show the treatment first-stage effects on the full range of perception variables.

The treatment “Share of immigrants” significantly reduces respondents’ misperception of the share of immigrants by 5 percentage points (column 1). Given how far perceptions were from reality to start with, this represents about one third of the average misperception in the control group. This is to be expected: some respondents may not have believed the info provided, especially if it clashes with their prior, or they may not have paid sufficient attention to the exact number. Appendix Figure A-4 shows the full histograms of responses in the control and treatment groups for each country. The “Share of immigrants” treatment significantly compresses all responses in the treatment group towards zero or low misperceptions. Some respondents – especially those

³⁸The average redistribution index is 0.126 for left-wing respondents and -0.15 for right-wing respondents.

³⁹The answers to all questions about redistribution and all components of the redistribution index are tabulated by country and respondent characteristics in Table A-2.

with extreme initial responses maintain their extreme opinions. Column 2 shows the effects of the treatment on a dummy equal to 1 if the respondent’s misperception is zero.⁴⁰ While only 4.3% of respondents are correct in the control group, this share increases to 27% among respondents treated with information on the number of immigrants. In fact, the share of respondents who are accurate within 2 percentage points is 34% in the treatment group, as opposed to 10% in the control group; the share of those who are accurate within 5 percentage points is 49% in the treatment group and 25% in the control group. This treatment does not significantly affect the perceived origin of immigrants, nor their perceived work ethic, which is as intended.

The treatment “Origin of immigrants” on the other hand significantly reduces the misperception on the origins of immigrants. It decreases the misperception of the share of immigrants from the Middle East and North Africa by 42% relative to the control group (column 3), as well as Muslim immigrants overall by 17% (column 5). It decreases also the misperceptions (equivalent to increasing the perceived shares) of immigrants from North America, Eastern and Western Europe by 35% (column 4) and Christian immigrants by 9% (column 6). It does not shift the perceived work effort of immigrants (column 7). It does, however, increase the perceived share of immigrants overall. This may be due to the fact that the animation makes respondents think about all the regions that immigrants may come from and this not only makes the topic more salient, but also can lead them to perceive that there are more immigrants.

The third treatment, “Hard work of immigrants,” is designed to influence the perception of the work effort of immigrants. Indeed, treated respondents are 5 percentage points less likely to say that lack of effort is the reason why poor immigrants are poor, which represents a 14% reduction relative to the control group. There is no effect on the perceptions why rich immigrants are rich – which is consistent with the fact that the experiment only focused on a poor, hard-working immigrant, and not on wealth and effort (see Appendix Table A-3). In addition, there is very small and barely significant effect on the perceived total share of immigrants, which could again be due to the treatment prompting people to think about immigrants overall.⁴¹

5.3 Persistence of the Effects

We also ran a follow-up survey to check how persistent the effects on perceptions were. We limit ourselves to the U.S. for this exercise and send out follow-up survey invitations to respondents one week after they take the first survey. 25% of the originally surveyed respondents end up taking the follow up between one and three weeks after the original survey. There is no strong selection on who took the follow-up; groups which in general have lower response rates, namely male, rich, and young respondents are less likely to take the follow-up (see Appendix Table OA11.)

⁴⁰Technically, we allow for an error of less than 1 in absolute value, so that the respondent can round the true number up or down to the nearest integer.

⁴¹Note that this treatment also slightly reduces the perceived share of Muslim immigrants. This could be because of the non Muslim name “Emma.” However, as described in Section 5.6, we randomized the name in a smaller pilot and found no difference in the effect of the treatment on views about redistribution.

Table 7 shows the results. The treatment “hard work of immigrants” displays very strong persistence. The treatment effect on respondents who took the first and follow-up survey is almost identical in the first and follow-up surveys. The treatment “Origins of immigrants” also persistently affects the perceived share of Middle Eastern and North African immigrants (negatively) and the perceived share of Latin American immigrants (positively). The treatment “Share of immigrants” does not show persistent effects.

Perhaps the reason is that the “Share of immigrants” treatment is difficult to remember because it shows a precise number. On the other hand, the “Hard work” treatment may be the easiest for respondents to remember, as it does not require the memorization of any number, but simply conveys a message that is easy to hold on to. Treatment “Origins of immigrants” also does not require the memorization of an exact number, but rather conveys an impression about the share of immigrants from each region – respondents seem to easily remember this information as well.

5.4 Second Stage Effects of the Informational Treatments

The rest of Table 5 shows a selection of the main results of the three informational treatments on respondents’ views about immigration and redistributive policies, as well as the interactions of each informational treatment with having seen the Immigration block first. We show the effects of all the treatment combinations on the overall immigration support index, on whether respondents think immigration is not a problem, on the redistribution index, on whether respondents think that inequality is a serious problem, and on donations to charity.⁴²

Let us first consider the effects of the informational treatments on respondents who were not made to think about immigration first, i.e., on those respondents who saw the Redistribution block first.

All treatments affect support for immigration positively, and treatments “Share of immigrants” and “Hard Work of Immigrants” significantly so. Showing respondents information about the true number of immigrants increases support for immigration by 0.03, equivalent to 6.5% of the gap between left and right-wing respondents and the share of respondents who say that immigration is not a problem by 10% relative to the control group. Showing them an example of a hard-working immigrant increases support for immigration by even more, namely 9.3% of the left-right-wing gap. Thus, when respondents are informed about the correct number of immigrants and prompted to re-evaluate positively the work effort of immigrants, they seem to feel that immigration is less of a problem and become more supportive of pro-immigration policies.

Only the “hard work” treatment has a very significant positive effect on the redistribution index: treated respondents have a higher redistribution index by an amount equal to 11% of the gap between left and right-wing respondents. The other two treatments have essentially zero effect on support for redistribution.⁴³ These patterns are in line with our findings from Section 4 about

⁴²In Appendix Tables A-4 and A-5, we show the outcomes on all the components of the redistribution and immigration support indices.

⁴³Appendix Figure A-10 provides the results from a permutation test, which confirms that treatment “Hard work

the correlation of support for redistribution with perceptions, which was strongest for perceptions related to the economic contributions and hard work ethic of immigrants. To the contrary, the perceived share of immigrants per se was not negatively related to views on redistribution.

Next, consider the interaction effects of the informational treatments with having seen the immigration block first. None of the informational treatments manage to overcome the very negative effects on support for redistribution of making respondents think in detail about various characteristics of immigrants before answering redistribution questions. This is true even for the strong “hard work treatment,” for which the negative priors cancel almost entirely the positive effect of the favorable information.

To sum up, asking respondents about a series of characteristics of and attitudes towards immigrants before asking them about redistribution makes them significantly less favorable to redistributive policies. Presumably, this is due to the very negative baseline views they hold about immigrants, which are made salient as they go through our detailed questions. Providing some piece of reassuring information about immigrants on top of this – whether their actual number, their actual origins, or their hard work – does not manage to counteract the negative effect on support for redistribution.

5.5 Heterogeneity in Treatment Effects

Table 8 shows the heterogeneity in treatment effects according to three key respondent characteristics, which we highlighted in Section 3: left and right-wing respondents (Panel A); college and non-college educated (Panel B); low skill workers in immigration intensive sectors and the rest (Panel C). For brevity, we focus here on the effects of the “Order” treatment and the “Hard work” treatment (on those respondents who see the redistribution questions first), which are the two treatments with the strongest effects in the overall sample.

The groups which react most negatively to seeing the immigration block first are those with the most negative priors about immigrants, namely the right-wing, the non-college educated, and the low-skill in high-immigration sectors: these groups want to reduce government-based redistribution and private charity donations by more. Note that right-wing respondents react to this treatment by strongly reducing the charity donations only. This can be seen as a more “right-wing” way of redistributing income without relying on the government.

Second, almost all groups respond positively to the “hard work of immigrants” treatment by increasing their support for redistribution, as was the case for the full sample. However, those same groups which have the more negative baseline views of immigrants also seem harder to convince to support more redistribution: they react less in the positive direction on the redistribution margin, after seeing the favorable information on the hard work of immigrants. The low-skilled in immigration-intensive sectors for instance – who hold especially negative views of immigrants – are

of immigrants” has significantly positive effects on all components of the Immigration and Redistribution support indices.

not moved at all to support more redistribution by the favorable “hard work” treatment.

5.6 Summary of Robustness Checks

To conclude, we summarize in one place the robustness checks we do on all the results in Sections 3 - 5, which were alluded to before. We check that dropping respondents who (i) spend too little time on the survey, or ii) felt that the survey was biased (based on their response to the feedback questions at the end of the survey), or (iii) give extreme answers to the perception questions does not significantly change our results.⁴⁴ The full set of results for these alternative respondent samples are available on demand.

In a smaller pilot study, we randomize the names given as examples of immigrants in the question about whether immigrants receive more transfers on net (see Section 3.4 and Appendix Figure A-8). We also randomized the name of the immigrant whose story is told in the hard work treatment between i) a native-sounding name (“Emma”); ii) a Hispanic sounding name (“Isabella”) for the U.S. and an Eastern European name for European countries; and iii) a Muslim-sounding name (“Fatima”). The effects of the “Hard work” treatment were not significantly different across the three name groups, but the samples were small.

Finally, we re-weight the sample to make it representative also along the two non-targeted dimensions of education and employment. As a result, the sample is representative along all important dimensions. These results are in Online Appendix OA.6.

6 Conclusion

According to our surveys, natives from six developed countries have strongly biased views about immigrants. They think that there are many more immigrants than there actually are. They also have incorrect views about the origins of immigrants: they overestimate the share of immigrants from the Middle East, North Africa, and the share of Muslim immigrants, and they sharply underestimate the share of Christian immigrants. Natives also believe that immigrants are poorer, more reliant on the host country’s welfare state, more unemployed, and less educated than they actually are. All these misperceptions contribute to making natives more averse to redistribution, as they perceive that immigrants are culturally and religiously more distinct from them and that they benefit disproportionately from the generosity of the welfare state. Respondents who know an immigrant personally have more accurate perceptions; the opposite holds for respondents who live in high immigration areas, although both of these margins are endogenous. Misperceptions about immigrants, and the subsequent lack of support for immigration and redistribution, are starkest among three groups of respondents: the non-college educated, the low-skilled working in immigration intensive sectors, and right-wing respondents.

⁴⁴Dropping respondents who felt the survey was biased strengthens the significance of the treatment effects, perhaps because the remaining respondents are more receptive to what they perceive to be non-biased information.

Given the very negative priors that people have of immigrants, our randomized order treatment that prompts respondents to think about immigration and immigrants' characteristics generates a significant negative effect on support for redistribution. Respondents who are prompted to think that at least some immigrants are very hard-working become significantly more favorable to redistribution. However, if respondents are also first prompted to think in detail about immigrants' number and composition, then none of the favorable information treatments is able to compensate for the negative priors that resurface and that lower support for redistribution.

These results suggest that much of the political debate about immigration takes place in a world of misinformation. Citizens and voters have distorted views about the number, the origin, and the characteristics of immigrants. The amount and nature of information that citizens receive is endogenous. Anti-immigration parties have an incentive to maintain and even foster the extent of misinformation. Because information is endogenous, a vicious cycle of disinformation may arise. The more natives are misinformed, the more they become averse to immigrants and redistribution, and the more they may look for confirmation of their views in the media. As a result, the media has an incentive to offer information supporting these views. For instance, immigrants who commit crimes or who free-ride on the welfare system may receive more media coverage than a non-immigrant doing the same. In addition, anti-redistribution parties, even those not averse to immigration *per se*, can play the immigration card to generate backlash against redistribution.

References

- Alesina, A. and G.-M. Angeletos (2005). Fairness and Redistribution. *American Economic Review* 95(4), 960–980.
- Alesina, A. and P. Giuliano (2011). Preferences for Redistribution. In *Handbook of social economics*, Volume 1, pp. 93–131.
- Alesina, A., E. Murard, and H. Rapaport (2018). Immigration and the European Welfare State. *Mimeo, Harvard University*.
- Alesina, A., E. Teso, and S. Stantcheva (2018). Intergenerational Mobility and Preferences for Redistribution. *The American Economic Review* 108(2), 521–554.
- Bansak, K., J. Hainmueller, and D. Hangartner (2016). How economic, humanitarian, and religious concerns shape european attitudes toward asylum seekers. *Science*, aag2147.
- Bisin, A. and T. Verdier (2017). Inequality, redistribution and cultural integration in the welfare state. *European Journal of Political Economy* 50, 122–140.
- Bordalo, P., K. Coffman, N. Gennaioli, and A. Shleifer (2016). Stereotypes. *Quarterly Journal of Economics* 131(4), 1753–1794.

- Borjas, G. J. (2006). Native Internal Migration and the Labor Market Impact of Immigration. *Journal of Human resources* 41(2), 221–258.
- Borjas, G. J., R. B. Freeman, and L. Katz (1996). Searching for the Effect of Immigration on the Labor Market. *American Economic Review* 86(2), 246–251.
- Borjas, G. J., R. B. Freeman, and L. F. Katz (1992). On the Labor Market Effects of Immigration and Trade. In *Immigration and the workforce: economic consequences for the United States and source areas*, pp. 213–244. University of Chicago Press.
- Borjas, G. J., R. B. Freeman, L. F. Katz, J. DiNardo, and J. M. Abowd (1997). How Much Do Immigration and Trade Affect Labor Market Outcomes? *Brookings papers on economic activity* 1997(1), 1–90.
- Card, D. (1990). The Impact of the Mariel Boatlift on the Miami Labor Market. *ILR Review* 43(2), 245–257.
- Card, D. (2009). Immigration and Inequality. *American Economic Review* 99(2), 1–21.
- Card, D., C. Dustmann, and I. Preston (2012). Immigration, wages, and compositional amenities. *Journal of the European Economic Association* 10(1), 78–119.
- Charité, J., R. Fisman, and I. Kuziemko (2015). Reference Points and Redistributive Preferences: Experimental Evidence. Technical report, National Bureau of Economic Research.
- Chetty, R., M. Stepner, S. Abraham, S. Lin, B. Scuderi, N. Turner, A. Bergeron, and D. Cutler (2016). The Association between Income and Life Expectancy in the United States, 2001–2014. *Jama* 315(16), 1750–1766.
- Chevalier, A., B. Elsner, A. Lichter, and N. Pestel (2017). Immigration and Redistribution: Evidence from 8 Million Forced Migrants.
- 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.
- Dahlberg, M., K. Edmark, and H. Lundqvist (2012). Ethnic diversity and preferences for redistribution. *Journal of Political Economy* 120(1), 41–76.
- Damm, A. P., C. Dustmann, and K. Vasiljeva (2016). Refugee Migration and Electoral Outcomes. *CReAM DP 19/16*.
- Dustmann, C., U. Schönberg, and J. Stuhler (2016). The Impact of Immigration: Why Do Studies Reach such Different Results? *Journal of Economic Perspectives* 30(4), 31–56.

- Emmenegger, P. and R. Klemmensen (2013). Immigration and Redistribution Revisited: How Different Motivations Can Offset Each Other. *Journal of European Social Policy* 23(4), 406–422.
- Facchini, G., Y. Margalit, and H. Nakata (2016). Countering Public Opposition to Immigration: the Impact of Information Campaigns.
- Finseraas, H. (2008). Immigration and Preferences for Redistribution: an Empirical Analysis of European Survey Data. *Comparative European Politics* 6(4), 407–431.
- Fisman, R., I. Kuziemko, and S. Vannutelli (2017). Distributional Preferences in Larger Groups: Keeping up with the Joneses and Keeping Track of the Tails.
- Gennaioli, N. and A. Shleifer (2010). What Comes to Mind. *Quarterly Journal of Economics* 125(4), 1399–1433.
- Gilens, M. (1995). Racial Attitudes and Opposition to Welfare. *The Journal of Politics* 57(4), 994–1014.
- Grigorieff, A., C. Roth, and D. Ubfal (2018). Does Information Change Attitudes Towards Immigrants? Representative Evidence from Survey Experiments. *University of Bocconi Working paper*.
- Hainmueller, J. and D. J. Hopkins (2010). Attitudes toward Highly Skilled and Low-skilled Immigration: Evidence from a Survey Experiment. *American Political Science Review* 104(1).
- 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.
- Hansen, J. D. (2003). Immigration and Income Redistribution in Welfare States. *European Journal of Political Economy* 19(4), 735–746.
- Hanson, G. H., K. Scheve, and M. J. Slaughter (2007). Public Finance and Individual Preferences over Globalization Strategies. *Economics & Politics* 19(1), 1–33.
- 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.
- Kling, J. R., J. B. Liebman, and L. F. Katz (2007). Experimental Analysis of Neighborhood Effects. *Econometrica* 75(1), 83–119.
- Kuziemko, I., R. W. Buell, T. Reich, and M. I. Norton (2014). “Last-place Aversion”: Evidence and Redistributive Implications. *The Quarterly Journal of Economics* 129(1), 105–149.

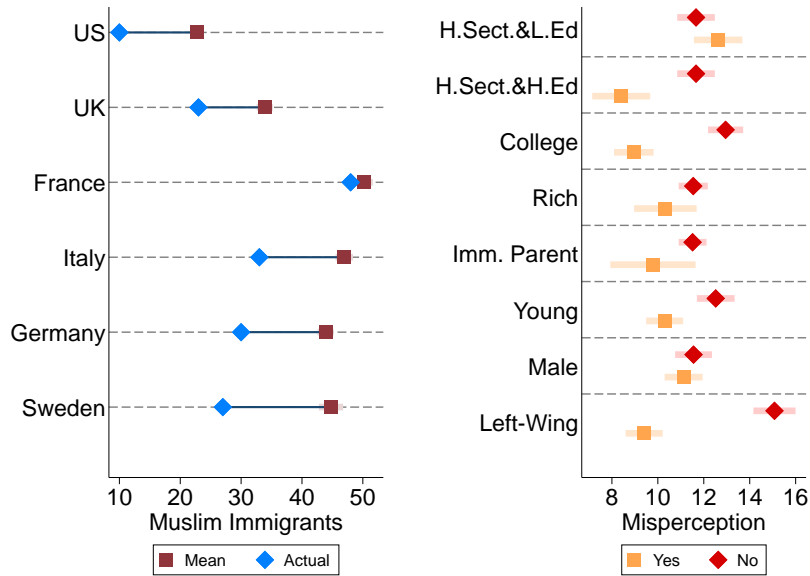
- Kuziemko, I., M. I. Norton, E. Saez, and S. Stantcheva (2015). How Elastic are Preferences for Redistribution? Evidence from Randomized Survey Experiments. *American Economic Review* 105(4), 1478–1508.
- Lee, W. and J. E. Roemer (2006). Racism and Redistribution in the United States: a Solution to the Problem of American Exceptionalism. *Journal of public Economics* 90(6-7), 1027–1052.
- Liebig, T. and J. Mo (2013). The Fiscal Impact of Immigration in OECD Countries, Chapter 3. In *OECD International Migration Outlook 2013*. OECD Publishing, Paris.
- Lockwood, B. and M. Weinzierl (2015). De Gustibus non est Taxandum: Theory and Evidence on Preference Heterogeneity and Redistribution. *Journal of Public Economics* 124, 74–80.
- Lockwood, B. and M. Weinzierl (2016). Positive and Normative Judgments Implicit in US Tax Policy, and the Costs of Unequal Growth and Recessions. *Journal of Monetary Economics* 77, 30–47.
- Luttmer, E. F. (2001). Group loyalty and the taste for redistribution. *Journal of political Economy* 109(3), 500–528.
- Luttmer, E. F. and M. Singhal (2011). Culture, context, and the taste for redistribution. *American Economic Journal: Economic Policy* 3(1), 157–79.
- Mau, S. and C. Burkhardt (2009). Migration and Welfare State Solidarity in Western Europe. *Journal of European Social Policy* 19(3), 213–229.
- Mayda, A. M. (2006). Who is Against Immigration? A Cross-country Investigation of Individual Attitudes towards Immigrants. *Review of Economics and Statistics* 88(3), 510–530.
- Mayda, A. M. and G. Facchini (2009). Does the Welfare State Affect Individual Attitudes toward Immigrants? Evidence across Countries. *Review of Economics and Statistics* 91(2), 295–314.
- Mayda, A. M. and G. Facchini (2012). Individual Attitudes towards Skilled Migration: an Empirical Analysis across Countries. *The World Economy* 35(2), 183–196.
- Meade, A. W. and S. B. Craig (2012). Identifying Careless Responses in Survey Data. *Psychological methods* 17(3), 437.
- OECD (2015). Indicators of Immigrant Integration 2015: Settling In. *OECD Publishing, Paris*.
- Reeskens, T. and W. Van Oorschot (2012). Disentangling the 'new liberal dilemma': On the relation between general welfare redistribution preferences and welfare chauvinism. *International Journal of Comparative Sociology* 53(2), 120–139.

- Reeskens, T. and W. Van Oorschot (2015). Immigrants' attitudes towards welfare redistribution. an exploration of role of government preferences among immigrants and natives across 18 european welfare states. *European Sociological Review* 31(4), 433–445.
- Roemer, J. E., W. Lee, and K. Van der Straeten (2007). *Racism, Xenophobia, and Distribution: Multi-issue Politics in Advanced Democracies*. Harvard University Press.
- Saez, E. and S. Stantcheva (2016). Generalized Social Marginal Welfare Weights for Optimal Tax Theory. *American Economic Review* 106(1), 24–45.
- Senik, C., H. Stichnoth, and K. Van der Straeten (2009). Immigration and Natives' Attitudes towards the Welfare State: Evidence from the European Social Survey. *Social indicators research* 91(3), 345–370.
- Spolaore, E. and R. Wacziarg (2017). The Political Economy of Heterogeneity and Conflict. Working Paper 23278, National Bureau of Economic Research.
- Stichnoth, H. and K. Van der Straeten (2013). Ethnic Diversity, Public Spending, and Individual Support for the Welfare State: A Review of the Empirical Literature. *Journal of Economic Surveys* 27(2), 364–389.
- Tabellini, M. (2018). Gifts of the Immigrants, Woes of the Natives: Lessons from the Age of Mass Migration.
- Weinzierl, M. (2014a). Revisiting the Classical View of Benefit-Based Taxation. *Economic Journal, forthcoming* 14(101).
- Weinzierl, M. (2014b). The Promise of Positive Optimal Taxation: Normative Diversity and a Role for Equal Sacrifice. *Journal of Public Economics* 118, 128–142.
- Weinzierl, M. (2017). Popular Acceptance of Inequality Due to Innate Brute Luck and Support for Classical Benefit-based Taxation. *Journal of Public Economics* 155, 54–63.

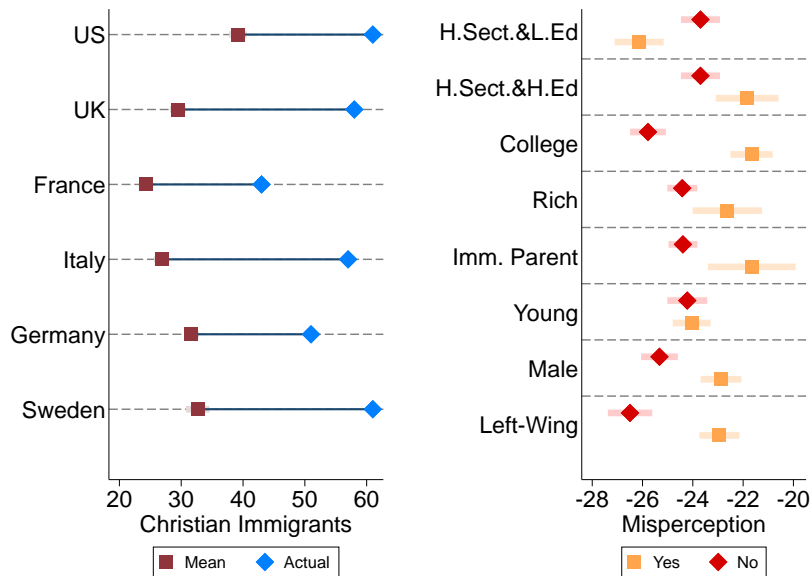
FIGURES AND TABLES

FIGURE 7: PERCEIVED RELIGION OF IMMIGRANTS

(A) PERCEIVED SHARE OF MUSLIM IMMIGRANTS



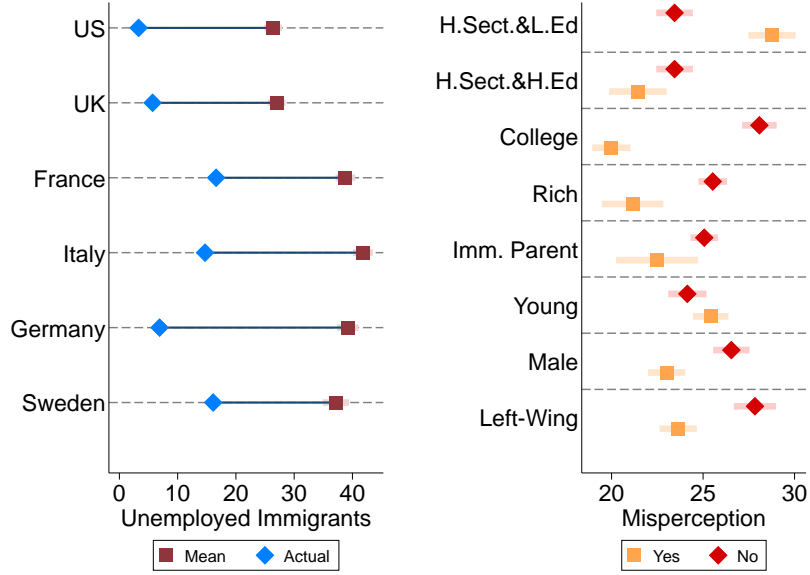
(B) PERCEIVED SHARE OF CHRISTIAN IMMIGRANTS



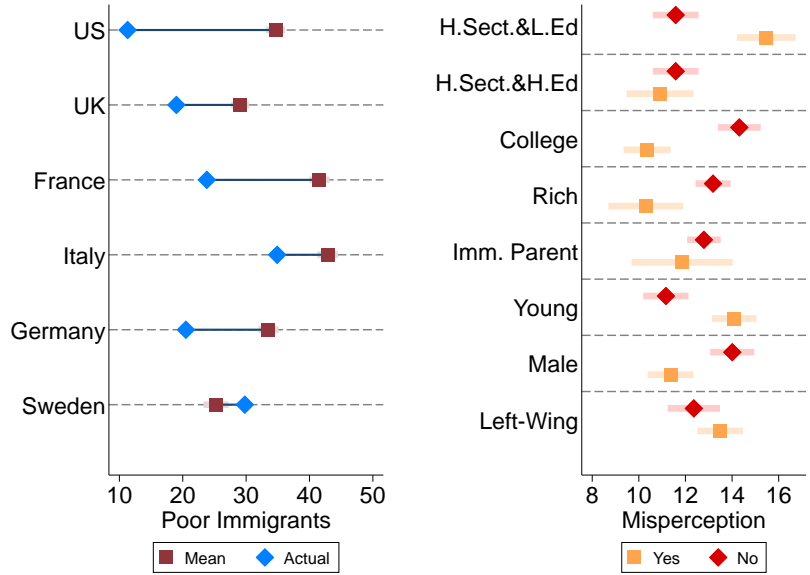
Notes: Panel A shows the perceived share of Muslim immigrants; panel B shows the perceived share of Christian immigrants. See the notes to Figure 6.

FIGURE 8: PERCEIVED ECONOMIC CIRCUMSTANCES OF IMMIGRANTS

(A) PERCEIVED SHARE OF UNEMPLOYED IMMIGRANTS



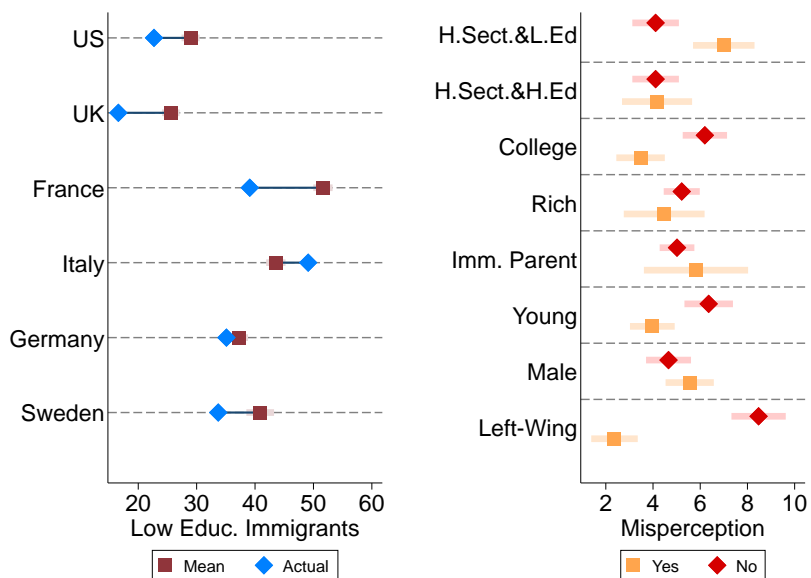
(B) PERCEIVED SHARE OF POOR IMMIGRANTS



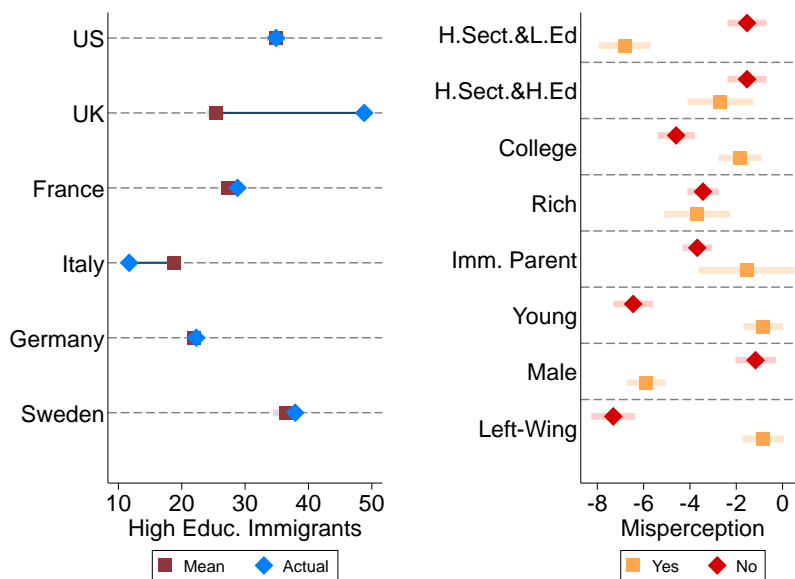
Notes: Panel A shows the perceived immigrants' unemployment rate: panel B shows the perceived share of immigrants who live in poverty. See the notes to Figure 6.

FIGURE 9: PERCEIVED EDUCATION OF IMMIGRANTS

(A) PERCEIVED SHARE OF LOW EDUCATED IMMIGRANTS



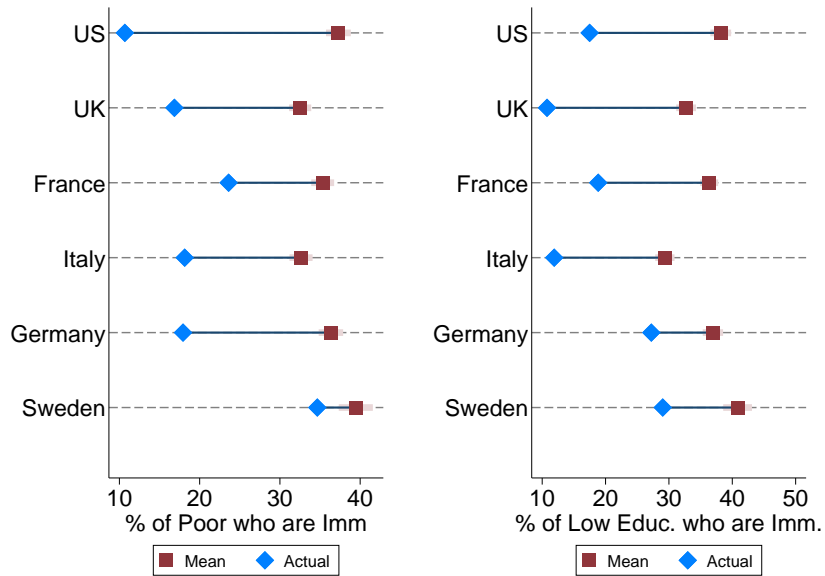
(B) PERCEIVED SHARE OF HIGH EDUCATED IMMIGRANTS



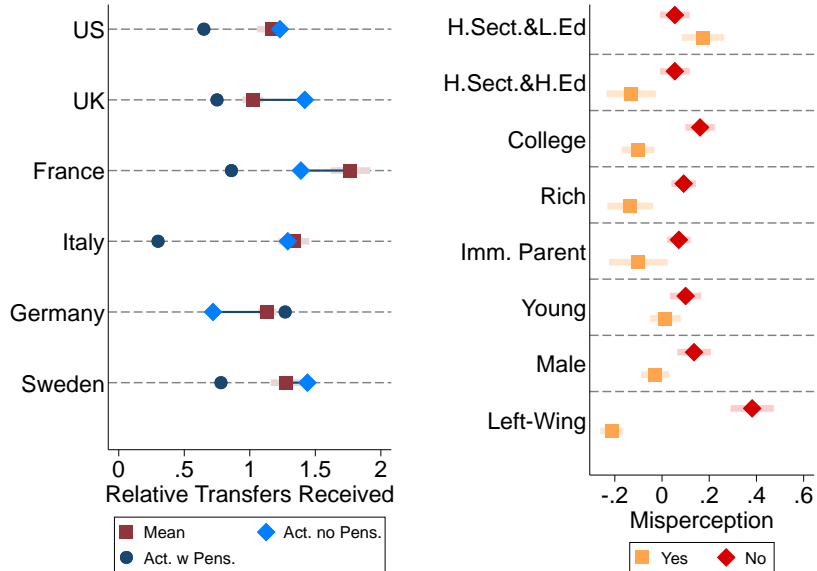
Notes: Panel A shows the perceived share of immigrants who have not completed high-school; panel B shows the perceived share of immigrants with a college degree. See the notes to Figure 6.

FIGURE 10: ARE IMMIGRANTS THE BENEFICIARIES OF REDISTRIBUTION?

(A) PERCEIVED REPRESENTATION OF IMMIGRANTS AMONG THE POOR AND THE LOW-EDUCATED



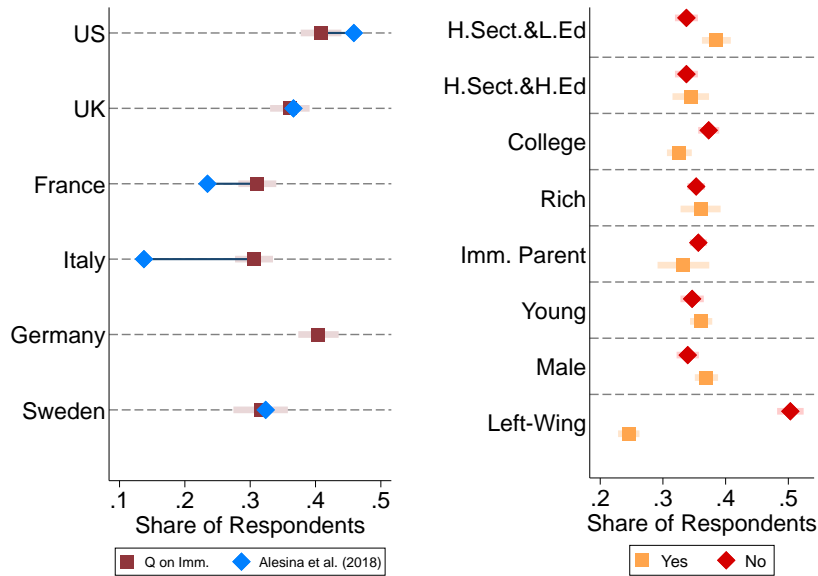
(B) PERCEIVED RELIANCE ON GOVERNMENT TRANSFERS OF IMMIGRANTS RELATIVE TO NATIVES



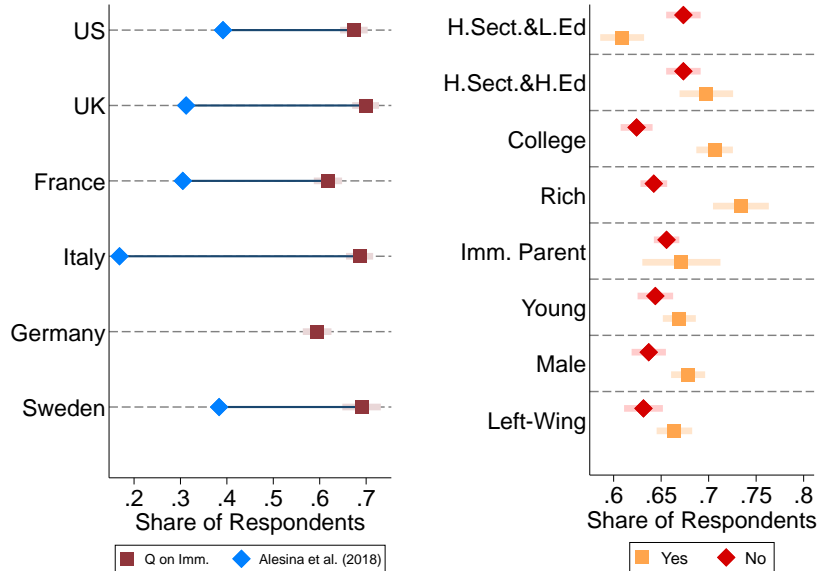
Notes: Panel A shows the perceived share of poor people who are immigrants, on the left, and the perceived share of low educated people who are immigrants, on the right; Panel B shows the perceived government transfers received by an average immigrant relative to the average native. Actual government transfers are represented by diamonds (excluding pension benefits) or circles (including pension benefits). See the notes to Figure 6.

FIGURE 11: VIEWS ON IMMIGRANTS' WORK EFFORT

(A) % OF RESPONDENTS WHO THINK IMMIGRANTS (OR NATIVES) ARE POOR DUE TO LACK OF EFFORT



(B) % OF RESPONDENTS WHO THINK IMMIGRANTS (OR NATIVES) ARE RICH BECAUSE OF OWN EFFORT



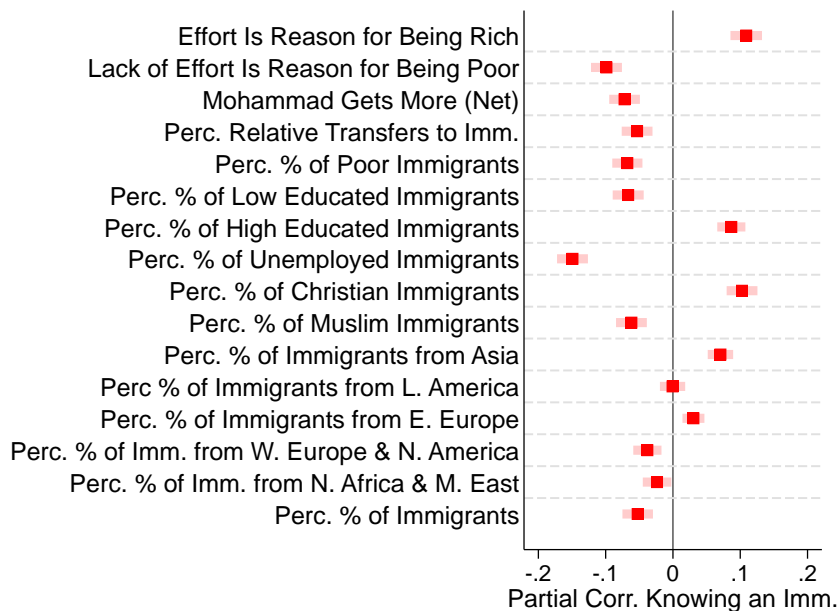
Notes: Panel A shows the share of respondents who think that immigrants who are poor are in that situation because of lack of effort, by country (left panel) and by groups (right panel). Panel B shows the share of respondents who think that immigrants who are rich owe this to their own effort. Blue diamonds report the share of respondents who say the same about the general, non-immigrant population, with numbers coming from Alesina et al. (2018). In the right panel, groups are defined by the indicator variables listed to the left: the share when the indicator is equal to 1 (respectively, to 0) is shown in orange (respectively, in red). The shaded areas are 95% confidence intervals around the average perception.

FIGURE 12: MOHAMMAD RECEIVES MORE ON NET



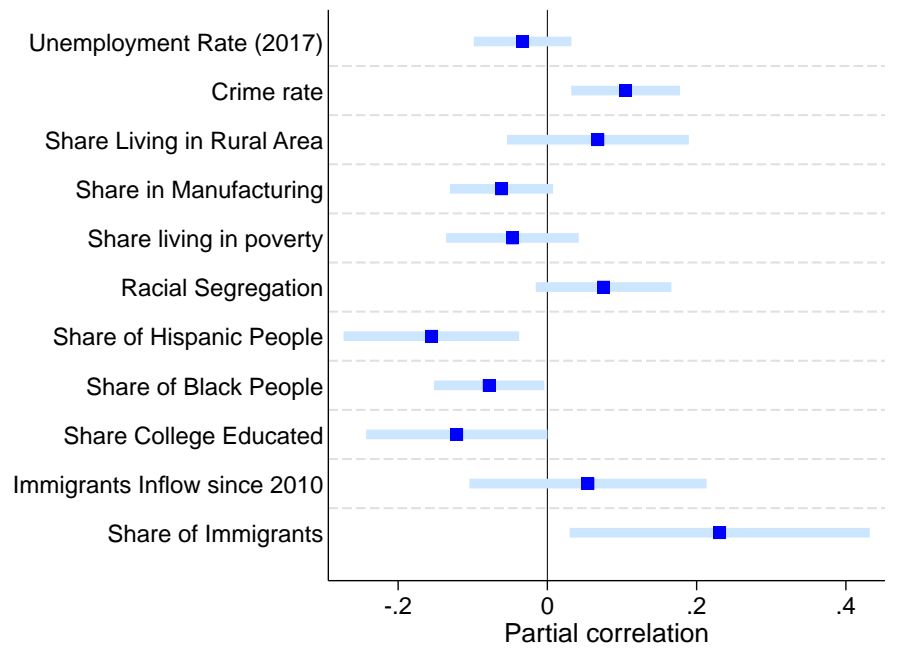
Notes: The figure shows the share of respondents who think that Mohammad receives more benefits on net (i.e., either receives more gross benefits or pays less taxes). See notes to Figure 11.

FIGURE 13: EFFECT OF KNOWING AN IMMIGRANT ON PERCEPTIONS OF IMMIGRANTS



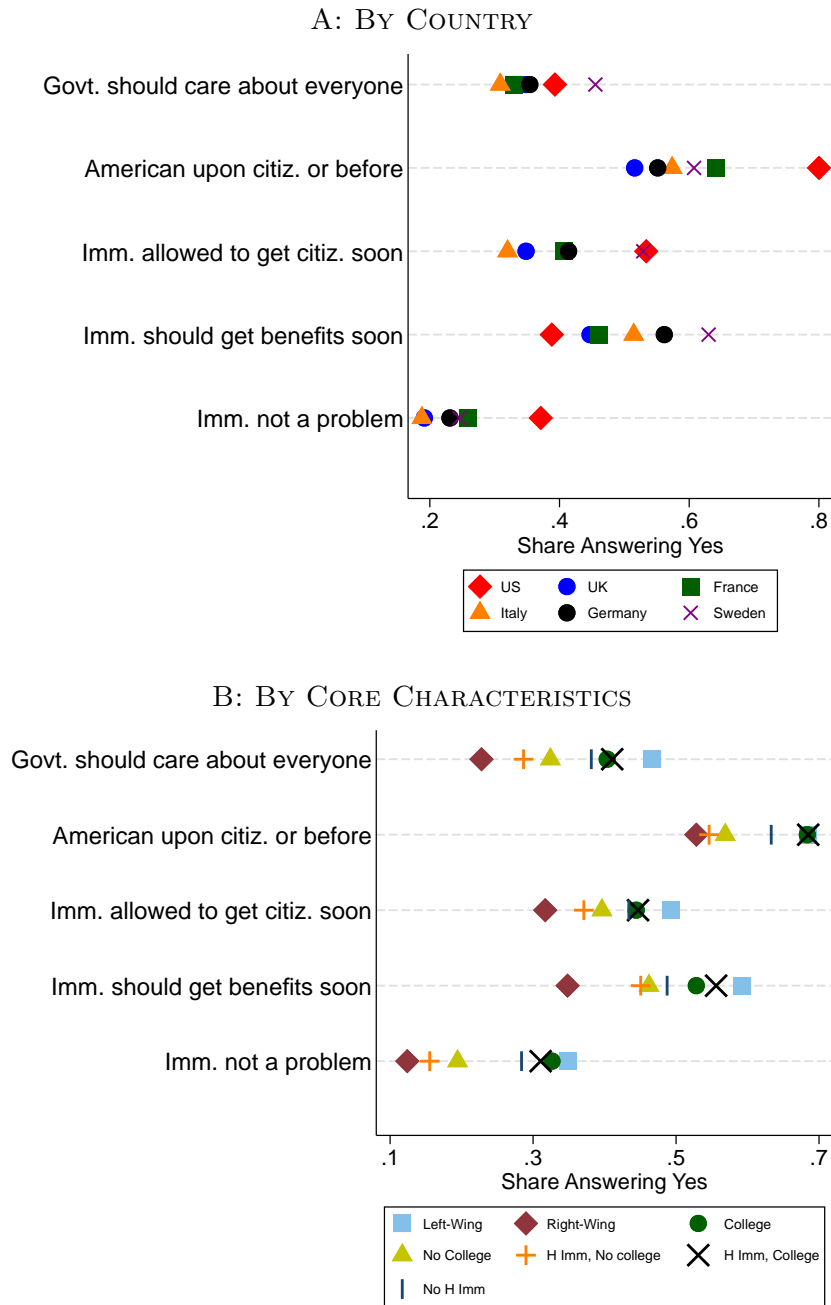
Notes: The figure shows the coefficients β from $Y_i = \alpha + \beta \text{Knowing an Immigrant} + \gamma \mathbb{X}_i + \varepsilon_i$ where Y_i is the z-score of each variable listed on the y axis and \mathbb{X} are all individual level controls (income, education, political affiliation, etc.) including country fixed effects. Variables Y_i are standardized z-scores and include the following misperceptions (from bottom to the top): share of immigrants, share of immigrants from North Africa and Middle East, share of immigrants from Western Europe and North America, share of immigrants from Eastern Europe, share of immigrants from Latin America, share of immigrants from Asia, share of Muslim immigrants, share of Christian immigrants, share of unemployed immigrants, share of high educated immigrants, share of low educated immigrants, share of poor immigrants, average transfers received by immigrants relative to natives. *Mohammad Gets More (Net)*, *Lack of Effort is Reason for Being Poor*, *Effort is Reason for Being Rich* are dummies equal to 1, respectively, if the respondent believes that Mohammad gets more transfers on net than John, immigrants are poor because of lack of effort, immigrants are rich thanks to their own effort. Shaded areas are 90% confidence intervals.

FIGURE 15: PERCEIVED % OF IMMIGRANTS AND CZ LEVEL CHARACTERISTICS



Notes: The figure shows the coefficients β from the regression: Perceived share of Immigrants_{*i*} = $\alpha + \beta A_i + \gamma X + \varepsilon_i$ where the left-hand side is the respondent's perceived share of immigrants, A_i is the full set of z-scores of the variables listed vertically, and X are all individual level controls (income, education, political affiliation, etc.). The shaded areas are 90% confidence intervals.

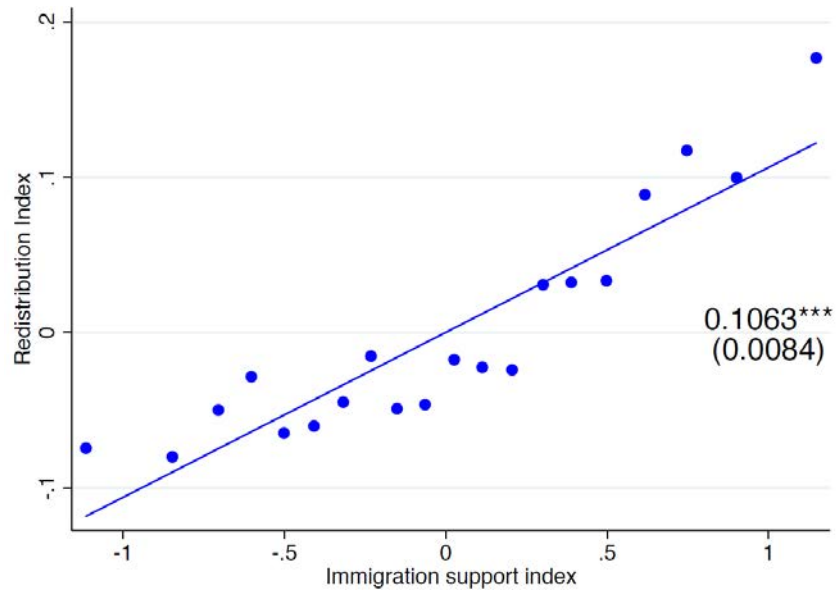
FIGURE 16: SUPPORT FOR IMMIGRATION



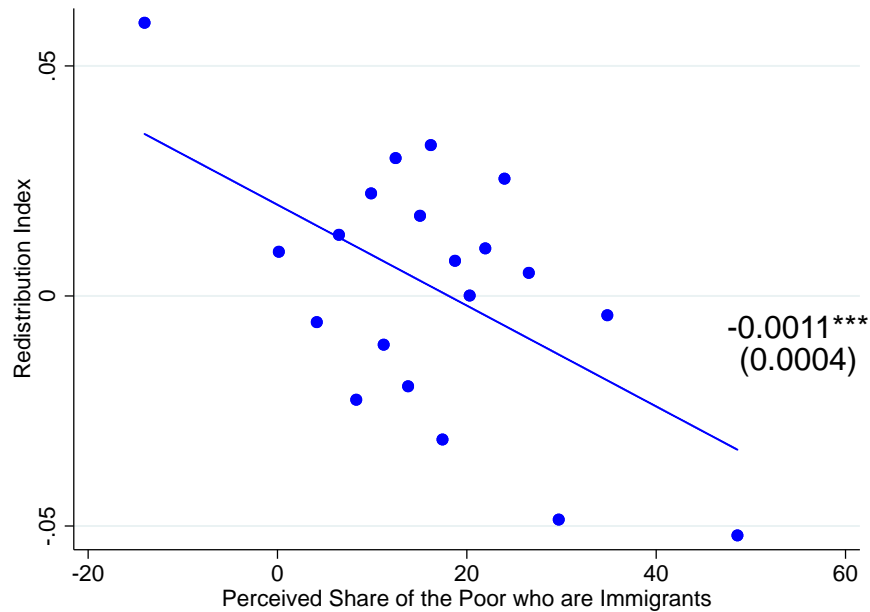
Notes: The figure shows the share of respondents answering “Yes” to the questions listed on the vertical axis, by country (Panel A) and respondent groups (Panel B). *Govt. should care about everyone* is a dummy equal to 1 if the respondent thinks that the government should care about all the people living in the country (6 and 7 in a scale from 1 to 7). *American upon citiz. or before* is a dummy equal to 1 if the respondent would consider an immigrant truly “American” at the latest when he gets citizenship. *Imm. allowed to get citiz. soon*, *Imm. should get benefits soon*, and *Imm. not a problem*, are dummies equal to 1 if the respondent thinks that immigrants should be allowed to apply for citizenship at most five years after arriving, immigrants should be eligible for benefits at most three years after arriving, and immigration is not a problem.

FIGURE 17: SUPPORT FOR IMMIGRATION AND SUPPORT FOR REDISTRIBUTION

Panel A: Correlation between support for immigration and redistribution

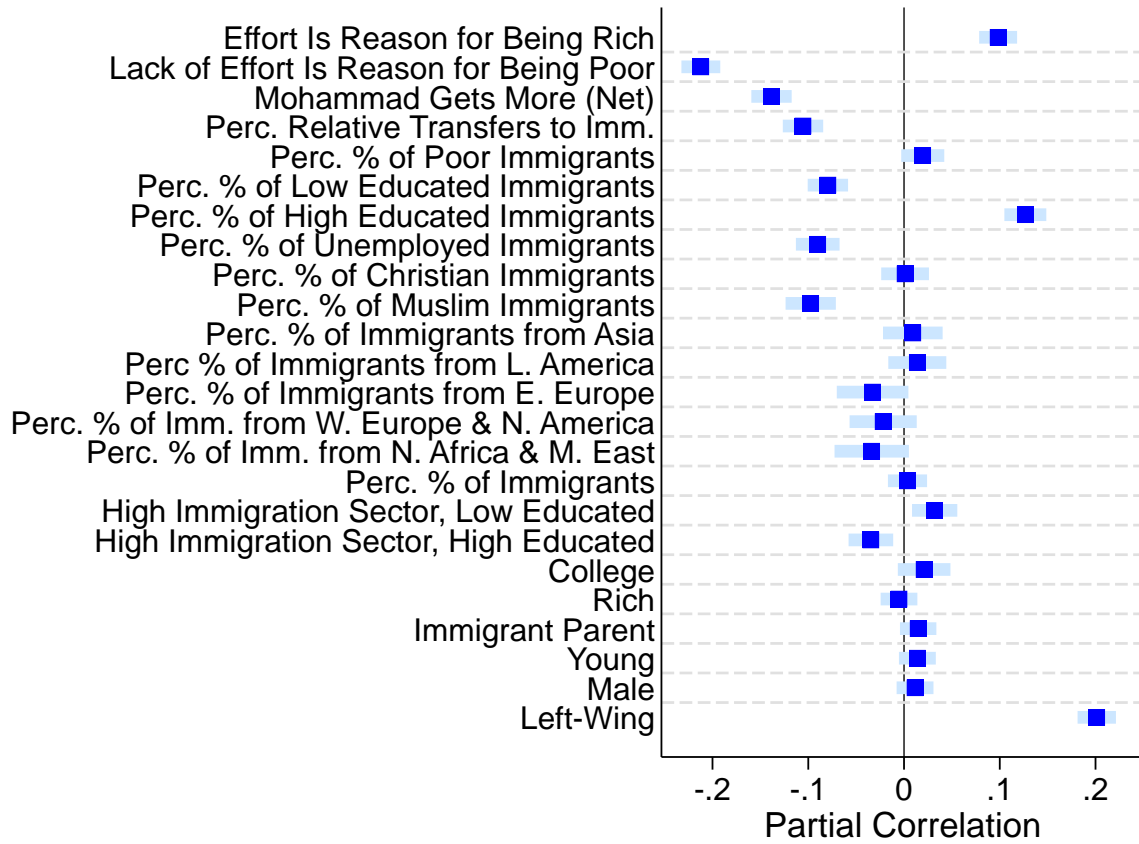


Panel B: Perceived share of poor who are immigrants and support for redistribution



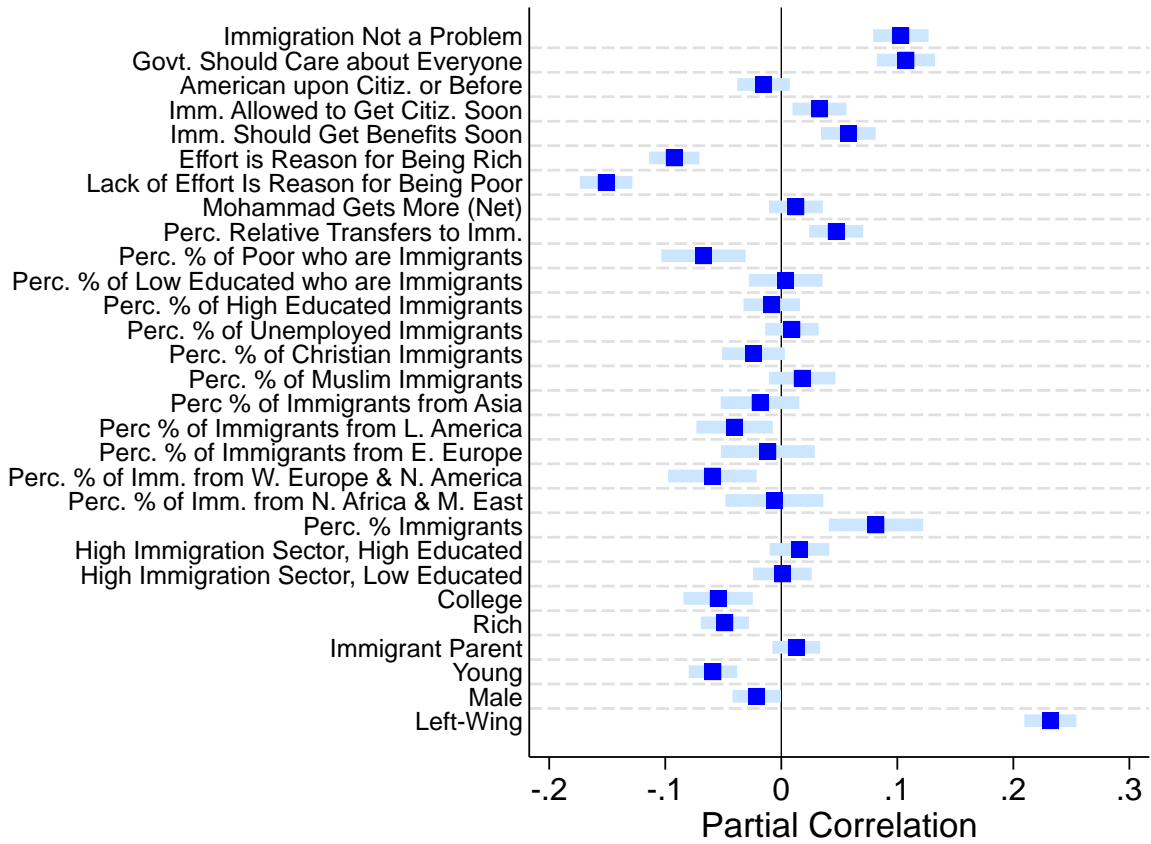
Notes: Binscatter of the Redistribution Support index against the Immigration Support index (top panel) and the perceived share of poor people in the country who are immigrants (bottom panel). Indices are constructed following the methodology in Kling et al. (2007), as explained in detail in Section 4. Each dot is the average residual in each bin from regressing respondents' redistribution and immigration indices on \mathbb{X} , i.e., all individual level controls (income, education, political affiliation, etc.), including country fixed effects; in the bottom panel we also add as controls all variables from Figure 19. The fitted line and reported coefficient β come from the regression: $\text{Support for Redistribution}_i = \alpha + \beta \text{Support for Immigration}_i + \gamma \mathbb{X} + \varepsilon_i$. Standard error in parenthesis. *** $p < 0.01$.

FIGURE 18: WHAT CORRELATES WITH SUPPORT FOR IMMIGRATION?



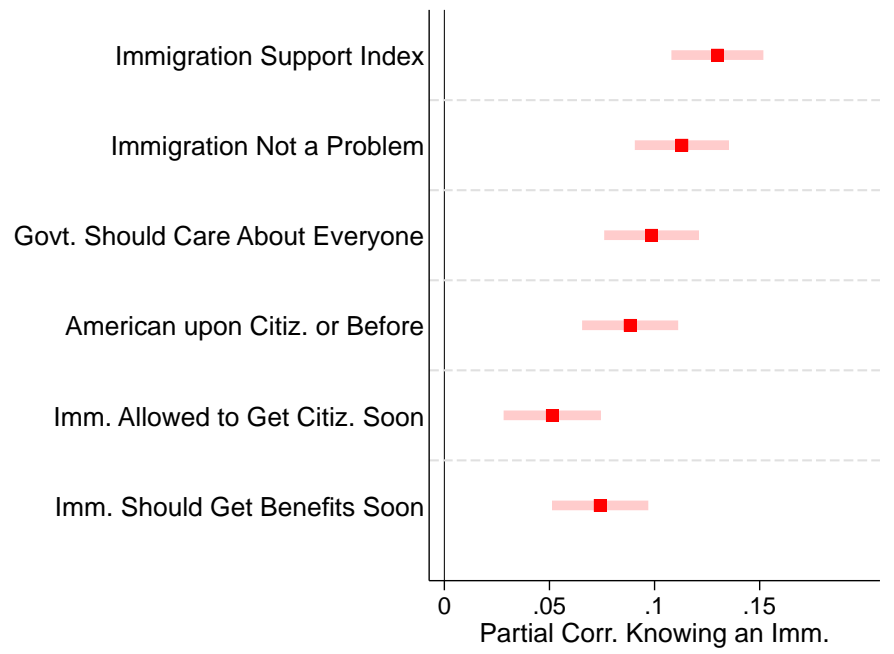
Notes: The figure shows the coefficients β from the regression $\text{Immigration Support index}_i = \alpha + \beta A_i + \text{country fixed effects} + \varepsilon_i$ where the left-hand side is the respondent's Immigration support index and A_i is the full set of z-scores of the variables listed vertically, which includes perceptions of immigrants, as well as personal characteristics. Shaded areas are 90% confidence intervals. See notes to Figure 13.

FIGURE 19: WHAT CORRELATES WITH SUPPORT FOR REDISTRIBUTION?



Notes: The figure shows the coefficients β from the regression $\text{Redistribution Support Index}_i = \alpha + \beta \mathbb{A}_i + \text{country fixed effects} + \varepsilon_i$ where the left-hand side is the respondent's Redistribution support index and \mathbb{A}_i is the full set of z-scores of the variables listed vertically, which includes perceptions of immigrants, as listed in the notes to Figure 18, and personal characteristics. \mathbb{A}_i also includes views on immigration policy (see notes to Figure 16). *Govt. Should Care About Everyone* ranges from 1 to 7, where 1 means that the respondent thinks the government should only care about natives and 7 means that he thinks the government should care about all the people living in the country. Shaded areas represent 90% confidence intervals.

FIGURE 20: EFFECT OF KNOWING AN IMMIGRANT ON SUPPORT FOR IMMIGRATION



Notes: See notes to Figure 13. Variables on the y-axis are as defined in the notes to Figure 16 and 19.

TABLE 1: SAMPLE CHARACTERISTICS

	US		UK		France		Italy		Germany		Sweden	
	Sample (1)	Pop (2)	Sample (3)	Pop (4)	Sample (5)	Pop (6)	Sample (7)	Pop (8)	Sample (9)	Pop (10)	Sample (11)	Pop (12)
Male	0.48	0.49	0.48	0.48	0.49	0.49	0.50	0.50	0.49	0.49	0.50	0.50
18-29 y.o.	0.24	0.24	0.25	0.26	0.23	0.23	0.20	0.19	0.23	0.22	0.24	0.24
30-39 y.o.	0.19	0.20	0.19	0.19	0.20	0.20	0.22	0.22	0.18	0.18	0.19	0.19
40-49 y.o.	0.19	0.19	0.22	0.21	0.21	0.21	0.24	0.23	0.20	0.20	0.20	0.21
50-59 y.o.	0.20	0.20	0.18	0.18	0.20	0.20	0.18	0.19	0.23	0.23	0.19	0.18
60-69 y.o.	0.17	0.17	0.16	0.16	0.15	0.15	0.16	0.17	0.15	0.17	0.18	0.18
Income Bracket 1	0.16	0.16	0.30	0.31	0.31	0.32	0.28	0.27	0.25	0.26	0.33	0.33
Income Bracket 2	0.19	0.19	0.37	0.35	0.33	0.30	0.31	0.28	0.30	0.29	0.25	0.29
Income Bracket 3	0.22	0.22	0.12	0.11	0.14	0.14	0.20	0.19	0.23	0.23	0.28	0.22
Income Bracket 4	0.43	0.43	0.23	0.23	0.24	0.24	0.24	0.26	0.22	0.22	0.17	0.17
Married	0.51	0.49	0.52	0.41	0.42	0.46	0.58	0.46	0.48	0.46	0.34	0.33
Employed	0.60	0.70	0.68	0.74	0.64	0.65	0.66	0.57	0.66	0.75	0.72	0.77
Unemployed	0.08	0.05	0.04	0.05	0.10	0.09	0.11	0.11	0.04	0.04	0.04	0.05
College	0.51	0.41	0.37	0.36	0.51	0.31	0.36	0.16	0.27	0.25	0.43	0.36

Notes: This table displays summary statistics from our surveys (in odd columns) alongside nationally representative statistics (in even columns). Detailed sources for each variable and country are: 1) For the U.S.: The Census Bureau and Current Population Survey. Income brackets (annual gross household income) are defined as less than \$20,000; \$20,000-\$40,000; \$40,000-\$70,000; more than \$70,000. 2) For the U.K.: Eurostat Census Data and Office of National Statistics. Income brackets (monthly net household income) are: less than £1,500; £1,500-£2,500; £2,500-£3,000; more than £3,000. 3) For France: Eurostat Census Data and INSEE. Income brackets (monthly net household income, in Euros) are: less than 1,500; 1,500-2,500; 2,500-2,000; more than 3,000. 4) For Italy: Eurostat Census Data, Bank of Italy and ISTAT. Income brackets (monthly net household income, in Euros) are: less than 1,500; 1,500-2,450; 2,450-3,350; more than 3,350. 5) For Germany: Eurostat Census Data and GfK Demographics. Income brackets (monthly net household income, in Euros) are: less than 1,500; 1,500-2,600; 2,600-4,000; more than 4,000. 6) For Sweden: Eurostat Census Data and Statistics Sweden. Income brackets (monthly gross household income, in SEK) are: less than 33,000; 33,000-42,000; 42,000-58,000; more than 58,000. We count as employed both full-time and part-time employees. Out of the labor force = 1 - (employed + unemployed).

TABLE 2: ABILITY OF COVARIATES TO PREDICT TREATMENT STATUS

	Imm Q First		Share of Immigrants		Origins of Immigrants		Hard Work of Immigrants	
	Coefficient	P-value	Coefficient	P-value	Coefficient	P-value	Coefficient	P-value
Voted right	-0.006	0.436	-0.001	0.888	0.004	0.548	-0.006	0.325
Voted left	0.002	0.820	-0.003	0.668	-0.002	0.758	0.009	0.150
Male	0.009	0.168	-0.003	0.588	0.002	0.721	-0.000	0.999
Young	-0.001	0.918	0.009	0.130	-0.003	0.671	-0.011	0.063
Immigrant parent	0.009	0.479	0.003	0.738	0.002	0.875	-0.013	0.195
College degree	-0.001	0.887	0.011	0.088	0.001	0.934	-0.011	0.087
Rich	-0.006	0.516	0.001	0.857	-0.003	0.732	-0.005	0.558
High immigration sector	-0.005	0.485	0.004	0.518	-0.004	0.537	-0.002	0.769

Notes: The table shows the coefficients and p-values from a series of regressions of the form $y_{ic} = \alpha + \beta Covariate_i + \gamma_c + \epsilon_{ic}$, where $Covariate_i$ is the variable listed in the row and γ_c are country fixed effects. In the column “Imm Q First”, y_{ic} is a dummy equal to one if the respondent was shown the Immigration block before the Redistribution block. In columns “Share of Immigrants”, “Origins of Immigrants”, and “Hard Work of Immigrants” y_{ic} is a dummy equal to one if the respondent saw the corresponding informational treatment.

TABLE 3: PERCEPTIONS BY COUNTRY

	U.S.			U.K.			France		
	Actual	Perceived		Actual	Perceived		Actual	Perceived	
		Mean	Median		Mean	Median		Mean	Median
	(1)	(Stand. Error)	[Interq. Range]	(4)	(Stand. Error)	[Interq. Range]	(7)	(Stand. Error)	[Interq. Range]
	(2)	(3)		(5)	(6)		(8)	(9)	
Panel A: Perceptions									
Share of Immigrants	10.00	36.08 (0.73)	31.00 [20.00, 48.00]	13.40	31.39 (0.64)	30.00 [15.00, 42.00]	12.20	28.81 (0.61)	25.00 [14.00, 40.00]
Share Immigrants from North Africa	1.00	8.43 (0.23)	7.00 [4.00, 11.00]	1.00	9.88 (0.27)	10.00 [5.00, 14.00]	35.00	27.21 (0.50)	25.00 [18.00, 35.00]
Share of Immigrants from Middle East	4.00	12.20 (0.32)	10.00 [5.00, 16.00]	5.00	10.84 (0.34)	9.00 [5.00, 15.00]	6.00	10.98 (0.34)	9.00 [4.00, 15.00]
Share of Immigrants from Western Europe	7.00	10.88 (0.27)	10.00 [5.00, 15.00]	19.00	16.22 (0.43)	13.00 [7.00, 21.00]	29.00	10.94 (0.33)	10.00 [4.00, 15.00]
Share of Immigrants from Easter Europe	6.00	9.88 (0.23)	10.00 [5.00, 13.00]	20.00	23.51 (0.47)	20.00 [14.00, 30.00]	5.00	14.53 (0.34)	13.00 [8.00, 20.00]
Share of Immigrants from North America	2.00	9.69 (0.33)	7.00 [4.00, 11.00]	3.00	6.10 (0.22)	5.00 [2.00, 9.00]	1.00	5.97 (0.31)	3.00 [1.00, 7.00]
Share of Immigrants from Latin America	42.00	24.42 (0.55)	20.00 [12.00, 32.00]	4.00	5.61 (0.19)	5.00 [2.00, 8.00]	3.00	5.69 (0.20)	4.00 [2.00, 8.00]
Share of Muslim Immigrants	10.00	22.69 (0.50)	20.00 [10.00, 30.00]	23.00	33.89 (0.68)	30.00 [20.00, 45.00]	48.00	50.23 (0.72)	50.00 [30.00, 65.00]
Share of Christian Immigrants	61.00	39.17 (0.72)	40.00 [20.00, 50.00]	58.00	29.45 (0.65)	25.00 [15.00, 40.00]	43.00	24.30 (0.53)	20.00 [10.00, 31.00]
Share of Unemployed Immigrants	3.30	26.39 (0.77)	20.00 [8.00, 40.00]	5.70	27.00 (0.78)	20.00 [8.00, 40.00]	16.60	38.79 (0.85)	30.00 [15.00, 60.00]
Share of Poor Immigrants	11.30	34.66 (0.76)	30.00 [16.00, 50.00]	19.00	29.05 (0.72)	22.00 [10.00, 40.00]	23.80	41.57 (0.82)	40.00 [20.00, 60.00]
Share of Low-Educated Immigrants	22.70	28.96 (0.79)	20.00 [10.00, 40.00]	16.60	25.58 (0.76)	20.00 [8.00, 40.00]	39.10	51.62 (0.84)	50.00 [30.00, 70.00]
Share of High-Educated Immigrants	34.90	34.86 (0.77)	30.00 [15.00, 50.00]	48.80	25.33 (0.69)	20.00 [10.00, 40.00]	28.80	27.36 (0.61)	24.50 [10.00, 40.00]
Relative Transfers Received	1.23	1.17 (0.06)	1.00 [0.33, 1.00]	1.42	1.02 (0.04)	1.00 [0.50, 1.00]	1.39	1.77 (0.08)	1.00 [1.00, 1.10]
Panel B: Attitudes									
Immigrants Poor due to Lack of Effort		0.41 (0.02)			0.36 (0.02)			0.31 (0.01)	
Immigrants Rich because of Effort		0.67 (0.02)			0.70 (0.01)			0.62 (0.02)	
Mohammad Gets More		0.26 (0.01)			0.18 (0.01)			0.34 (0.02)	
Observations		960			973			980	

TABLE 3: PERCEPTIONS BY COUNTRY (CONT.)

	Italy			Germany			Sweden		
	Actual	Perceived		Actual	Perceived		Actual	Perceived	
		Mean	Median		Mean	Median		Mean	Median
	(10)	(Stand. Error)	[Interq. Range]	(13)	(Stand. Error)	[Interq. Range]	(16)	(Stand. Error)	[Interq. Range]
	(11)	(12)	(14)	(15)	(17)	(18)			
Panel A: Perceptions									
Share of Immigrants	10.00	26.41	20.00	14.80	30.26	25.00	17.60	27.00	21.00
		(0.65)	[10.00, 35.00]		(0.68)	[15.00, 40.00]		(0.81)	[15.00, 33.00]
Share Immigrants from North Africa	10.00	24.90	23.00	2.00	16.02	15.00	1.00	12.09	10.00
		(0.49)	[15.00, 31.00]		(0.37)	[8.00, 21.00]		(0.37)	[7.00, 17.00]
Share of Immigrants from Middle East	3.00	8.95	8.00	17.00	16.84	14.00	24.00	25.09	22.00
		(0.25)	[3.00, 13.00]		(0.45)	[7.00, 23.00]		(0.72)	[15.00, 34.00]
Share of Immigrants from Western Europe	14.00	6.02	4.00	15.00	13.43	10.00	24.00	15.00	10.00
		(0.24)	[1.00, 9.00]		(0.42)	[4.00, 20.00]		(0.71)	[4.00, 20.00]
Share of Immigrants from Easter Europe	38.00	18.63	18.00	43.00	23.45	22.00	22.00	13.80	13.00
		(0.38)	[10.00, 25.00]		(0.41)	[15.00, 30.00]		(0.41)	[8.00, 20.00]
Share of Immigrants from North America	1.00	4.55	2.00	1.00	4.92	4.00	1.00	4.74	3.00
		(0.26)	[0.00, 5.00]		(0.20)	[1.00, 6.00]		(0.41)	[1.00, 5.00]
Share of Immigrants from Latin America	9.00	9.59	9.00	3.00	5.42	5.00	6.00	7.93	6.00
		(0.26)	[4.00, 13.00]		(0.16)	[2.00, 8.00]		(0.32)	[3.00, 10.00]
Share of Muslim Immigrants	33.00	46.95	45.00	30.00	43.89	40.00	27.00	44.77	40.00
		(0.73)	[30.00, 60.00]		(0.68)	[30.00, 60.00]		(1.01)	[30.00, 60.00]
Share of Christian Immigrants	57.00	26.82	20.00	51.00	31.66	30.00	61.00	32.67	30.00
		(0.63)	[10.00, 40.00]		(0.61)	[20.00, 45.00]		(0.97)	[16.00, 48.00]
Share of Unemployed Immigrants	14.70	41.80	40.00	6.90	39.20	30.00	16.10	37.16	30.00
		(0.87)	[20.00, 60.00]		(0.93)	[12.00, 60.00]		(1.14)	[15.00, 55.00]
Share of Poor Immigrants	34.90	42.86	40.00	20.50	33.53	30.00	29.80	25.26	20.00
		(0.82)	[20.00, 60.00]		(0.81)	[10.00, 50.00]		(1.00)	[10.00, 35.00]
Share of Low-Educated Immigrants	49.10	43.56	40.00	35.10	37.23	30.00	33.70	40.88	38.00
		(0.84)	[20.00, 60.00]		(0.80)	[16.00, 50.00]		(1.21)	[20.00, 60.00]
Share of High-Educated Immigrants	11.70	18.75	10.00	22.30	21.88	20.00	37.90	36.39	35.00
		(0.59)	[5.00, 30.00]		(0.58)	[10.00, 30.00]		(1.01)	[20.00, 50.00]
Relative Transfers Received	1.29	1.34	1.00	0.72	1.13	1.00	1.44	1.28	1.00
		(0.06)	[0.50, 1.10]		(0.04)	[1.00, 1.00]		(0.06)	[1.00, 1.10]
Panel B: Attitudes									
Immigrants Poor due to Lack of Effort		0.31			0.40			0.32	
		(0.01)			(0.02)			(0.02)	
Immigrants Rich because of Effort		0.69			0.59			0.69	
		(0.01)			(0.02)			(0.02)	
Mohammad Gets More		0.33			0.20			0.01	
		(0.02)			(0.01)			(0.01)	
Observations		971			973			481	

Notes: Panel A reports mean and median perceptions for each country. The standard errors of the means are in parentheses and the interquartile ranges (25th and 75th percentiles) are in square brackets. The actual value of the statistic for each country is reported in columns (1), (4), (7), (10), (13) and (16). Panel B reports the mean of each attitude variable for each country and its standard error (in parentheses).

TABLE 4: MISPERCEPTIONS BY RESPONDENT GROUPS

		Immigrants		Muslim		Christian		Unemployed		Poor		Low Educ		High Educ		Transfers		Obs.
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
College Educated	Yes	15.34 (0.45)	10.00 [0.0;25.0]	8.95 (0.44)	7.00 [-3.0;20.0]	-21.66 (0.43)	-23.00 [-37.0;-11.0]	19.98 (0.53)	13.10 [1.7;34.3]	10.35 (0.51)	6.20 [-8.8;25.1]	3.47 (0.52)	-0.10 [-14.1;18.4]	-1.83 (0.48)	-4.90 [-17.9;11.2]	-0.10 (0.03)	-0.39 [-0.8;-0.2]	2155
	No	19.23 (0.37)	15.80 [3.0;30.0]	12.95 (0.39)	10.00 [-3.0;27.0]	-25.78 (0.36)	-28.00 [-41.0;-12.0]	28.08 (0.48)	23.10 [4.3;46.7]	14.31 (0.47)	10.10 [-6.0;31.2]	6.20 (0.48)	2.30 [-14.1;24.9]	-4.59 (0.41)	-6.70 [-18.8;8.3]	0.16 (0.03)	-0.29 [-0.4;0.3]	3185
Rich	Yes	16.90 (0.74)	11.50 [0.1;26.5]	10.33 (0.69)	7.00 [-3.0;22.0]	-22.63 (0.70)	-26.00 [-37.0;-11.0]	21.15 (0.86)	13.90 [0.3;35.3]	10.30 (0.82)	5.10 [-9.0;25.2]	4.47 (0.87)	0.90 [-14.1;20.9]	-3.69 (0.73)	-6.70 [-18.1;8.3]	-0.13 (0.05)	-0.39 [-0.8;-0.1]	872
	No	17.82 (0.31)	14.20 [1.6;27.8]	11.54 (0.32)	10.00 [-3.0;25.0]	-24.42 (0.30)	-27.00 [-41.0;-11.0]	25.53 (0.40)	18.10 [3.4;43.9]	13.18 (0.38)	9.50 [-7.8;29.5]	5.22 (0.39)	0.90 [-14.1;22.3]	-3.44 (0.34)	-6.70 [-18.8;11.2]	0.09 (0.03)	-0.29 [-0.4;0.3]	4470
Young	Yes	19.77 (0.39)	16.60 [3.6;30.0]	10.30 (0.41)	7.00 [-3.0;22.0]	-24.05 (0.38)	-27.00 [-38.0;-11.0]	25.42 (0.49)	18.40 [3.4;43.9]	14.10 (0.49)	9.50 [-5.5;31.0]	3.97 (0.48)	0.90 [-14.7;20.9]	-0.83 (0.44)	-2.30 [-17.3;12.7]	0.01 (0.03)	-0.34 [-0.8;0.3]	2826
	No	15.32 (0.41)	10.00 [0.0;25.0]	12.52 (0.42)	10.00 [-2.0;27.0]	-24.22 (0.40)	-27.00 [-41.0;-11.0]	24.14 (0.53)	15.30 [3.1;43.1]	11.16 (0.50)	6.20 [-9.0;26.2]	6.36 (0.52)	0.90 [-13.7;24.9]	-6.45 (0.44)	-8.30 [-19.3;5.1]	0.10 (0.03)	-0.29 [-0.4;0.3]	2516
Male	Yes	15.52 (0.42)	10.00 [0.0;25.0]	11.12 (0.42)	9.50 [-3.0;25.0]	-22.88 (0.41)	-26.00 [-38.0;-11.0]	23.01 (0.52)	14.30 [1.7;41.7]	11.36 (0.50)	6.20 [-9.0;26.2]	5.55 (0.52)	0.90 [-14.1;23.4]	-5.88 (0.43)	-7.90 [-18.8;7.1]	-0.03 (0.03)	-0.29 [-0.7;0.3]	2615
	No	19.73 (0.39)	16.80 [4.2;30.0]	11.56 (0.41)	10.00 [-3.0;23.0]	-25.33 (0.37)	-28.00 [-41.0;-12.0]	26.55 (0.50)	21.70 [4.3;44.3]	14.01 (0.48)	9.50 [-5.0;30.1]	4.66 (0.49)	0.90 [-14.1;20.9]	-1.17 (0.44)	-2.30 [-17.8;12.7]	0.14 (0.04)	-0.29 [-0.4;0.3]	2727
Left-Wing	Yes	18.01 (0.43)	14.00 [1.2;27.8]	9.40 (0.41)	7.00 [-3.0;20.0]	-22.94 (0.41)	-26.00 [-37.0;-11.0]	23.64 (0.52)	15.30 [3.1;41.7]	13.49 (0.50)	9.50 [-4.9;29.5]	2.37 (0.50)	-1.60 [-15.1;17.4]	-0.83 (0.46)	-2.30 [-14.9;12.1]	-0.21 (0.03)	-0.34 [-0.8;-0.2]	2452
	No	18.45 (0.44)	15.00 [2.4;29.0]	15.08 (0.47)	12.00 [0.0;30.0]	-26.50 (0.45)	-31.00 [-41.0;-13.0]	27.84 (0.59)	21.70 [4.3;46.7]	12.36 (0.57)	8.70 [-9.0;30.1]	8.47 (0.59)	3.40 [-12.7;27.3]	-7.31 (0.48)	-8.80 [-23.8;5.1]	0.38 (0.05)	-0.23 [-0.4;0.4]	2146
Immigrant Parent	Yes	23.46 (0.99)	20.00 [5.2;36.6]	9.79 (0.95)	7.00 [-3.0;22.0]	-21.66 (0.89)	-23.00 [-36.0;-11.0]	22.48 (1.14)	14.30 [3.1;39.3]	11.85 (1.10)	8.70 [-8.8;28.7]	5.82 (1.12)	-1.10 [-12.7;21.3]	-1.55 (1.05)	-2.30 [-18.8;12.7]	-0.10 (0.06)	-0.39 [-0.7;0.3]	505
	No	17.05 (0.30)	12.80 [1.0;26.9]	11.51 (0.31)	10.00 [-3.0;25.0]	-24.39 (0.29)	-27.00 [-40.0;-11.0]	25.07 (0.38)	17.70 [3.4;43.4]	12.79 (0.37)	8.70 [-8.5;29.5]	5.02 (0.37)	0.90 [-14.6;21.3]	-3.68 (0.33)	-6.70 [-18.8;8.3]	0.07 (0.03)	-0.29 [-0.4;0.3]	4836
Immigrant Acquaintances	Yes	16.37 (0.35)	11.60 [0.4;26.2]	10.33 (0.35)	7.00 [-3.0;22.0]	-22.47 (0.33)	-23.00 [-37.0;-11.0]	21.84 (0.42)	14.30 [2.3;36.7]	10.83 (0.42)	6.20 [-9.0;26.2]	3.99 (0.42)	-0.10 [-14.1;20.9]	-1.88 (0.38)	-3.80 [-17.3;11.2]	-0.02 (0.03)	-0.32 [-0.4;0.3]	3560
	No	20.27 (0.50)	16.60 [4.0;31.6]	13.37 (0.54)	10.00 [-3.0;27.0]	-27.44 (0.49)	-31.00 [-42.0;-13.0]	30.78 (0.66)	25.30 [5.8;53.1]	16.49 (0.61)	13.70 [-4.0;35.1]	7.32 (0.66)	3.40 [-13.6;27.3]	-6.68 (0.54)	-8.80 [-20.8;7.7]	0.21 (0.05)	-0.29 [-0.7;0.3]	1782
Low Educ in High-Imm Sector	Yes	20.56 (0.51)	17.20 [4.2;30.8]	12.62 (0.54)	10.00 [-3.0;27.0]	-26.13 (0.50)	-28.00 [-41.0;-13.0]	28.77 (0.66)	23.40 [4.3;46.7]	15.47 (0.64)	11.00 [-4.9;35.1]	7.00 (0.66)	3.40 [-14.1;26.3]	-6.82 (0.57)	-8.80 [-23.4;7.7]	0.17 (0.05)	-0.29 [-0.4;0.3]	1721
	No	16.14 (0.34)	11.20 [0.2;26.0]	11.66 (0.35)	10.00 [-3.0;23.0]	-23.70 (0.33)	-26.00 [-38.0;-11.0]	23.44 (0.43)	15.30 [3.1;42.3]	11.58 (0.42)	6.70 [-8.8;28.7]	4.11 (0.42)	0.90 [-15.1;20.9]	-1.53 (0.36)	-3.80 [-15.3;11.2]	0.05 (0.03)	-0.29 [-0.4;0.3]	3593
High Educ in High-Imm Sector	Yes	16.49 (0.67)	10.80 [0.2;26.6]	8.40 (0.64)	7.00 [-5.0;20.0]	-21.84 (0.64)	-23.00 [-37.0;-11.0]	21.44 (0.80)	13.40 [1.7;35.3]	10.91 (0.73)	6.20 [-8.8;26.0]	4.17 (0.76)	-1.60 [-12.7;17.3]	-2.69 (0.72)	-4.90 [-18.8;12.1]	-0.13 (0.05)	-0.42 [-0.9;-0.2]	1025
	No	16.14 (0.31)	11.20 [0.2;26.0]	11.66 (0.32)	10.00 [-3.0;23.0]	-23.70 (0.31)	-26.00 [-38.0;-11.0]	23.44 (0.39)	15.30 [3.1;42.3]	11.58 (0.39)	6.70 [-8.8;28.7]	4.11 (0.39)	0.90 [-15.1;20.9]	-1.53 (0.33)	-3.80 [-15.3;11.2]	0.05 (0.02)	-0.29 [-0.4;0.3]	4289

Notes: The table shows the mean (in odd columns) and median (in even columns) misperceptions – computed as perceived minus real – by groups. Groups are defined by the indicator variables listed to the left: the mean and median when the indicator is equal to 1 (respectively, to 0) are shown in the “Yes” row (respectively, in the “No” row). The standard errors of the means are in parentheses and the interquartile ranges (25th and 75th percentiles) are in square brackets.

TABLE 5: TREATMENT EFFECTS ON SUPPORT FOR IMMIGRATION AND REDISTRIBUTION

	Imm Support Index (1)	Imm Not A Problem (2)	Redistribution Index (3)	Inequality Serious Problem (4)	Donation Above Median (5)
Imm Questions First			-0.0184* (0.0102)	-0.0280** (0.0132)	-0.0479*** (0.0138)
Share of Immigrants	0.0200* (0.0119)	0.0233*** (0.00826)	-0.00211 (0.0103)	-0.00569 (0.0133)	-0.0159 (0.0139)
Origins of Immigrants	0.00614 (0.0119)	0.00456 (0.00826)	0.00183 (0.0103)	0.00505 (0.0133)	0.00136 (0.0139)
Hard Work of Immigrants	0.0465*** (0.0119)	0.0255*** (0.00826)	0.0310*** (0.0102)	0.0162 (0.0133)	0.00828 (0.0139)
Share of Immigrants X Imm. Q. First			-0.00311 (0.0145)	0.0134 (0.0188)	0.0179 (0.0196)
Origins of Immigrants X Imm. Q. First			-0.0120 (0.0145)	-0.0184 (0.0188)	-0.0116 (0.0196)
Hard Work of Immigrants X Imm. Q. First			-0.0290** (0.0145)	-0.00718 (0.0188)	0.00183 (0.0196)
Observations	20049	20011	20049	20049	20049
Control mean	0.000	0.248	0.000	0.572	0.446

Notes: The table reports the effect of the Order treatment and the three information treatments, as well as their interactions on the variables in the columns. Outcome variables are described in Appendix A-1. Controls included in all regressions are: indicator variables for gender, age less than 45, having children, being in the top quartile of the income distribution, having a college degree, political affiliation, having at least one parent not born in the country, working in a high immigration sector, and country fixed effects. Standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

TABLE 6: FIRST STAGE TREATMENT EFFECTS ON PERCEPTIONS

	All Immigrants (misp.) (1)	Accurate Perception All Immigrants (2)	M. East and N. Africa (misp.) (3)	N. America, W. and E. Europe (misp.) (4)	Muslim (misp.) (5)	Christian (misp.) (6)	Lack of Effort Reason Poor (7)
Share of Immigrants	-4.716*** (0.421)	0.224*** (0.00559)	-0.255 (0.304)	0.184 (0.355)	0.00816 (0.407)	0.146 (0.395)	0.000963 (0.00907)
Origins of Immigrants	2.314*** (0.422)	0.00285 (0.00560)	-4.762*** (0.304)	1.785*** (0.355)	-1.825*** (0.407)	2.471*** (0.395)	-0.000169 (0.00908)
Hard Work of Immigrants	0.752* (0.422)	-0.00409 (0.00560)	-0.431 (0.304)	0.433 (0.355)	-0.854** (0.407)	0.732* (0.395)	-0.0529*** (0.00907)
Observations	20018	20018	20031	20011	20045	20041	20049
Control mean	17.021	0.043	12.448	-5.397	11.295	-23.985	0.356

Notes: The table reports first-stage effects on (mis)perceptions of immigration. Misperceptions are computed as perception minus actual statistic. *Accurate Perception All Immigrants* is a dummy equal to 1 if the absolute value of the respondent’s misperception of the share of immigrants is less than 1. Appendix A-1 defines all variables. All regressions include the same controls as Table 5. Standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

TABLE 7: FIRST STAGE EFFECTS: PERSISTENCE IN FOLLOW-UP (US ONLY)

	All immigrants (misp.) (1)	Accurate Perception All immigrants (2)	M. East and N. Africa (misp.) (3)	L. America (misp.) (4)	Muslim (misp.) (5)	Christian (misp.) (6)	Lack of Effort reason poor (7)
Panel A: First survey who took the follow-up							
Share of Immigrants	-7.045*** (2.051)	0.230*** (0.0217)	1.515 (1.032)	-1.016 (1.574)	0.578 (1.302)	3.745* (2.048)	0.0109 (0.0405)
Origins of Immigrants	1.671 (2.107)	-0.0214 (0.0223)	-7.220*** (1.060)	15.12*** (1.617)	-3.436** (1.338)	5.457*** (2.105)	-0.0470 (0.0417)
Hard Work of Immigrants	1.035 (2.030)	0.00854 (0.0215)	1.889* (1.020)	0.278 (1.556)	1.008 (1.287)	0.336 (2.025)	-0.0888** (0.0401)
Control mean	21.293	0.023	14.256	-16.550	12.080	-22.660	0.450
Panel B: Follow-up respondents							
Share of Immigrants	-1.369 (1.851)	0.0201 (0.0161)	0.853 (1.023)	-1.303 (1.420)	0.539 (1.229)	3.411* (1.947)	-0.0125 (0.0401)
Origins of Immigrants	-1.301 (1.902)	-0.0177 (0.0165)	-2.808*** (1.051)	7.234*** (1.459)	-0.566 (1.263)	2.148 (2.001)	-0.0424 (0.0412)
Hard Work of Immigrants	-1.246 (1.832)	-0.00130 (0.0159)	1.057 (1.012)	0.640 (1.403)	1.102 (1.215)	-1.584 (1.925)	-0.0821** (0.0397)
Observations	1032	1032	1033	1034	1034	1034	1034
Control mean	21.082	0.034	15.355	-18.309	11.050	-21.851	0.469

Notes: Panel A reports estimates of the first-stage effects in the first-round survey, on the subsample of respondents who also took the follow up survey. Panel B shows the persistence of treatment effects on that subsample in the follow up survey. See notes to Table 6. Standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

TABLE 8: HETEROGENEOUS TREATMENT EFFECTS

	Imm Support Index (1)	Imm Not A Problem (2)	Redistribution Index (3)	Inequality Serious Problem (4)	Donation Above Median (5)
Panel A: Right-Wing vs. Left-Wing					
Imm. Q First X Right			-0.0102 (0.0158)	0.00772 (0.0204)	-0.0526** (0.0212)
Imm. Q First X Left			-0.0291** (0.0148)	-0.0575*** (0.0191)	-0.0480** (0.0199)
p-value diff.			0.385	0.020	0.875
Control mean			-0.000	0.586	0.470
Observations			5064	5064	5064
Hard Work of Imm. X Right	0.0699*** (0.0259)	0.0236 (0.0179)	0.0310* (0.0159)	0.0195 (0.0204)	-0.00992 (0.0215)
Hard Work of Imm. X Left	0.0164 (0.0240)	0.00299 (0.0165)	0.0288** (0.0147)	0.0204 (0.0188)	0.0221 (0.0199)
p-value diff.	0.130	0.397	0.920	0.974	0.274
Control mean	0.000	0.238	-0.000	0.586	0.470
Observations	9964	9942	9964	9964	9964
Panel B: College-Educated vs. No College					
Imm. Q First X College			-0.000886 (0.0161)	-0.0161 (0.0208)	-0.0575*** (0.0217)
Imm. Q First X No College			-0.0296** (0.0133)	-0.0356** (0.0172)	-0.0406** (0.0179)
p-value diff.			0.170	0.470	0.547
Control mean			-0.000	0.586	0.470
Observations			5064	5064	5064
Hard Work of Imm. X College	0.0525** (0.0264)	0.0137 (0.0181)	0.0409** (0.0161)	0.0260 (0.0207)	0.0364* (0.0219)
Hard Work of Imm. X No College	0.0375* (0.0217)	0.0131 (0.0150)	0.0260* (0.0133)	0.00872 (0.0171)	-0.00937 (0.0180)
p-value diff.	0.661	0.978	0.476	0.519	0.107
Control mean	0.000	0.238	-0.000	0.586	0.470
Observations	9964	9942	9964	9964	9964
Panel C: High Immigration sector/No college vs. Not					
Imm. Q First x H imm			-0.0428** (0.0180)	-0.0308 (0.0233)	-0.0814*** (0.0242)
Imm. Q First x Not H imm			-0.00633 (0.0125)	-0.0266* (0.0161)	-0.0316* (0.0168)
p-value diff.			0.097	0.884	0.091
Control mean			-0.000	0.586	0.470
Observations			5064	5064	5064
Hard Work of Imm. X H Imm.	0.0603** (0.0293)	0.0352* (0.0202)	0.0171 (0.0179)	0.0157 (0.0230)	-0.0164 (0.0243)
Hard Work of Imm. X Not H Imm.	0.0345* (0.0205)	0.00239 (0.0141)	0.0392*** (0.0125)	0.0157 (0.0161)	0.0215 (0.0170)
p-value diff.	0.471	0.182	0.312	1.000	0.201
Control mean	0.000	0.238	-0.000	0.586	0.470
Observations	9964	9942	9964	9964	9964

Notes: The Table reports the effects of the Order and the Hard Work of Immigrants treatments. The effects of the Order treatment are estimated only on the respondents who have not seen any informational treatment. The effects of the “Hard work” treatment are estimated only on respondents who see the redistribution block first. Panel A reports heterogeneous effects on Left-wing and on Right-wing respondent. The regressions also include a “Treatment x Center” interaction, not reported. Panel B reports the effects on respondents with a college degree and respondents without. Panel C reports the effects on respondents working in a high immigration sector who do not have a college degree, and on all the other respondents. “p-value diff.” is the p-value of the test of equality of treatment effects on the pairs of groups. All regressions include the same controls as Table 5. Standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.