

iseak

# (Mis)Perceptions, attitudes, and preferences for immigrant integration: Evidence from a survey experiment

Authors:

*Odra Quesada*

*David Martinez de Lafuente*

Working Paper  
2024/4



# (Mis)Perceptions, attitudes, and preferences for immigrant integration: Evidence from a survey experiment\*

Odra Quesada<sup>1,†</sup> and David Martinez de Lafuente<sup>2</sup>

<sup>1</sup>University of the Basque Country (UPV/EHU)

<sup>1,2</sup>Fundación Iseak

<sup>†</sup>Corresponding author. E-mail address: [odra.quesada@ehu.eus](mailto:odra.quesada@ehu.eus), Postal Address: Fundación ISEAK, Henao, 13, 48009 Bilbao (Spain)

May 24, 2024

## Abstract

What drives support for immigrant integration in Spain? Using data from a nationally representative survey, we examine how perceptions of immigration shape support for immigration and their integration into the labor market. We find that the native population tends to overestimate the share of immigrants and underestimate their economic conditions, resulting in lower support for immigrant entry. Similarly, perceiving immigration as a threat in terms of labor, fiscal, or cultural impacts is associated with lower support for redistributive and redistributive policies. We use randomized survey experiments to estimate the causal effects of two types of information treatments. Our results show that qualitative information on the absence of adverse labor market effects of immigration does not increase support for immigrant integration policies. In contrast, quantitative information about immigrants' public service consumption increases support for immigrant integration through redistributive policies. Yet, our results suggest heterogeneity in treatment effects based on prior beliefs, such as concerns about immigration, and social media consumption for political news.

*Keywords:* Immigration, Survey experiment, Policy preferences, Biased beliefs, Decision making.

*JEL Classification:* C90, D83, D91, J15

---

\*Special thanks to Sara de la Rica for her continued support and guidance. The registration number of the trial at the AER RCT Registry is [AERCTR-0012642](https://aerctr.org/registration/0012642). Financial support from the Department of Employment and Social Inclusion of the Provincial Council of Biscay is gratefully acknowledged. The views expressed are our own and do not necessarily reflect those of the Department. Odra Quesada also acknowledges financial support from the Basque Government (Ref. IT1461-22).

# 1 Introduction

“When you change the way you look at things,  
the things you look at change.”

Max Planck, Nobel Prize in Physics

The aging process poses significant challenges to the sustainability of the pension system in Spain, giving rise to concerns regarding its long-term feasibility. To address this demographic challenge, the integration of immigration in the labor market has become a key consideration to account for. Although adopting a more inclusive immigration policy has the potential to strengthen the workforce, stimulate economic expansion, and maintain welfare systems, public opinion frequently exhibits strong opposition towards higher levels of immigration (Card et al., 2012). This creates a policy dilemma in which demographic decline meets fears of immigration.

Over the past two decades, Spain’s immigrant population has increased by 256%, rising from 5.7% in 2002 to 17.2% in 2023. The diverse backgrounds of immigrants, encompassing nationality, ethnicity, culture, religion, socioeconomic status, language skills, and education levels, pose significant challenges to effective social and labor market integration. The ability of Western democracies to integrate this influx of newcomers and adapt to escalating ethnic and religious diversity has become a pressing concern, reshaping the political landscape (Hainmueller and Hopkins, 2014; Kogan, 2016). Immigration has emerged as one of the most socially and politically divisive issues, characterized by public debates and individual attitudes that are often shaped by misperceptions rather than factual knowledge (Blinder, 2015; Gorodzeisky and Semyonov, 2020; Lutz and Bitschnau, 2023). This tone of public debate plays a crucial role in the rise of nativist parties in Europe, which have reinforced distinctly anti-immigrant currents of opinion (Davis and Deole, 2017).

Currently, the native population has mixed views on several initiatives promoting the integration of immigrants. Yet, the underlying considerations influencing these views may not always be evident across different public policies. To examine the mechanisms driving those policy views, this paper analyzes the native population’s perceptions, attitudes, and preferences toward immigrant integration policies. The aim of this paper is threefold. First, we explore natives’ perceptions and attitudes towards immigration in Spain. Second, we discuss how these views are correlated with preferences for immigrant-related policies, exploring which are the drivers for support or opposition, and third, we provide causal evidence on whether accurate information about immigration boosts support for immigrant-

related policies. What are the perceived consequences of immigration in areas such as the labor market, the welfare state, culture, and security? To what extent does the native population support immigrant entry, and which integration policies do they prefer, distinguishing between predistributive and redistributive policies? What mechanisms influence the native population's decision to support or oppose migration policies?

To answer these questions, we design and conduct an online survey in Spain on a representative sample of approximately 3,200 non-immigrant respondents to measure perceptions and attitudes toward immigration and analyze how they are linked to preferences for their social and labor integration. Using a randomized survey experiment, we generate exogenous variation in beliefs to evaluate the causal impact of information on natives' preferences for immigrant integration policies. Specifically, we randomly display a text containing information about (1) no aggregate employment effects of immigrants in the labor market and (2) the scope of immigrants' use of public services.

We find the following results: First, respondents' misperceptions about the proportion of immigrants, their characteristics, or their use of public resources reduce their support for more open policies. Second, providing the native population with accurate data can correct these biases. Specifically, providing statistics on the immigrant population's use of public resources such as social services or unemployment benefits significantly reduces the perception of immigration as a fiscal burden and, on the contrary, increases support for redistributive policies aimed at their labor market integration. Furthermore, we find that the treatments have a positive effect on support for predistribution among those respondents who were concerned about immigration, suggesting that information is more effective at higher levels of concern about immigration.

Our paper builds on several strands of the literature. First, it builds on the theoretical literature on attitude formation by analyzing the importance of labor market and welfare concerns, along with racial and cultural prejudice, as three key aspects that determine preferences about immigration. Second, it fits within the literature that analyzes how citizens' beliefs and perceptions are formed and how they translate into demand for immigration policies (Citrin and Sides, 2008; Card et al., 2005; Domènech-Arumí, 2023; Senik et al., 2009) and redistributive policies (Alesina et al., 2018; Steele and Perkins, 2019; Rodriguez-Justicia and Theilen, 2022; Golin and Romarri, 2023). Third, it extends a more recent branch of the literature that focuses on perceptions of immigration, using an experimental treatment to establish the mechanisms between perceptions and support for immigration (Alesina et al., 2021; Barrera et al., 2020; Boeri et al., 2023; Grigorieff et al., 2020; Haa-

land and Roth, 2020; Hopkins et al., 2019) and support for redistribution (Alesina et al., 2018).<sup>1</sup>

Our paper contributes to the empirical literature on the factors driving support for immigrant integration policies by studying the effects of providing information to correct people’s beliefs about the impact of immigration on the labor market and welfare. Our primary contributions arise from our survey design, which includes questions on perceptions of immigration, perceived effects and causes, and various immigrant-related policies, such as entry, predistributive, and redistributive policies. As far as we know, our paper is the first attempt to analyze what drives support for redistribution. Recently, Bozio et al. (2020) suggests that policy discussions on inequality should not focus exclusively on redistribution and pay more attention to policies affecting pre-tax inequality (e.g., redistribution policies). Finally, the use of this experimental methodology allows us to assess the impact of potential information campaigns on citizens’ perceptions, which are crucial for shaping public policy.

The rest of the paper is organized as follows. Our data collection, survey, and experimental design are explained in detail in Section 2. Section 3 describes perceptions about immigration and Section 4 describes preferences for integration policies. In Section 5 we explore the drivers of these perceptions, we discuss the experimental findings, and also we test for prior beliefs in Section 6. And, Section 8 concludes.

## **2 The Survey, The Experiments, and Data Source of Immigration**

### **2.1 Data Collection and Sample**

We designed the survey in-house and participants were recruited through an online survey company, *Netquest*. The survey company sends survey links to panels of respondents with specific socioeconomic characteristics, in this case, non-immigrants aged between 18 to 65. We also required respondents to be pre-screened to ensure that the final sample was nationally representative in terms of gender, age, and region of residence. Before launching the full-scale survey, we run a small-scale pilot on 112 individuals from our target population to pre-test. Based on the positive feedback from respondents and the smooth functioning of the response recording process, the survey was conducted in Spain between May 19

---

<sup>1</sup>For a detailed review of the literature on information experiments, see Haaland et al. (2023).

and May 29, 2023. Upon successful completion of the survey, the company would pay them approximately €3. In total, we collected 3,224 responses that completed the full survey. After applying the data quality checks, the size of our main analysis sample is 3,096 individuals.

Table 1 compares the characteristics of our main sample with those of the native Spanish population. To obtain a nationally representative sample in terms of gender, age, and educational attainment, we imposed sampling quotas. Our sample proves fairly comparable to the overall Spanish population along these dimensions, but also along employment status and political affiliation. In addition, since we also imposed quotas by province, we ensure that the sample is also well balanced geographically in terms of regional representation.<sup>2</sup>

Table 1: Main analysis sample characteristics

|                    | <b>Survey Sample<br/>(1)</b> | <b>Population<br/>(2)</b> |
|--------------------|------------------------------|---------------------------|
| Male               | 0.51                         | 0.51                      |
| Age 18 to 24 years | 0.11                         | 0.11                      |
| Age 25 to 34 years | 0.16                         | 0.17                      |
| Age 35 to 44 years | 0.23                         | 0.23                      |
| Age 45 to 54 years | 0.26                         | 0.25                      |
| Age 55 to 65 years | 0.25                         | 0.23                      |
| College graduates  | 0.30                         | 0.29                      |
| Unemployed         | 0.11                         | 0.11                      |
| Left-wing voters   | 0.46                         | 0.47                      |
| <b>Sample size</b> |                              | <b>3,224</b>              |

*Notes:* This table presents summary statistics for the main analysis sample (column 1) along with nationally representative statistics (column 2). Detailed sources for each variable are information on gender, age distribution, educational attainment, and employment status from the Spanish Labor Force Survey (SLFS).

The decision to interview only non-immigrant respondents was based on two main criteria. On the one hand, the native population constitutes a demographic majority and it is crucial to understand their perceptions and attitudes to obtain a representative view of society.<sup>3</sup> Secondly, the native population plays an essential role in the integration process,

<sup>2</sup>Regional representativeness of our sample is shown in Table A1.

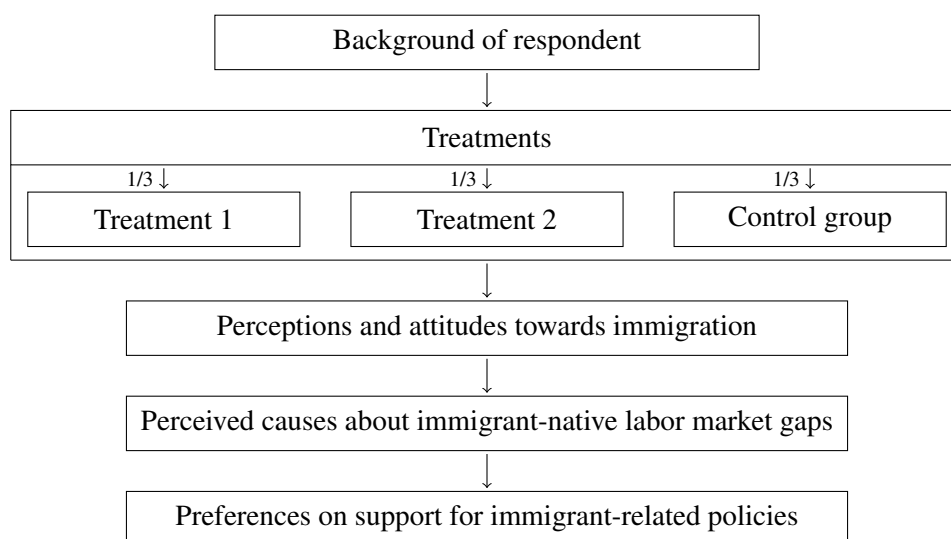
<sup>3</sup>In Spain, the right to vote in general elections is restricted to immigrants who are voting-age population and have Spanish citizenship. During the last general elections held in 2021, only 6.5% of the total voting-eligible population in Spain were immigrants.

as their perceptions can have a profound impact on policy-making by fostering negative attitudes towards the immigrant population, and can be an obstacle in promoting more inclusive policies that adequately address the needs and contributions of immigrants.

## 2.2 The Survey

In this survey, immigrants are defined as individuals living in Spain who were born abroad, following the definition provided by the Organization for Economic Cooperation and Development (OECD). The full survey in English is reported in Appendix for the sake of exposition, while the questionnaires were sent in Spanish. Figure 1 shows a diagram with the structure of the survey, which includes the four different blocks:

Figure 1: Survey Structure



**Background socioeconomic questions.-** This block serves two purposes: first, to ensure the representativeness of the sample by covering established demographic quotas, and second, to ask respondents about some personal information, such as socio-demographics—education level, employment situation, household income—, relationships with foreign-born relatives, and political affiliation. We also queried about general concerns—e.g., climate change, inflation, and immigration, among others—and their main source of news.

**Treatments.-** After completing the personal information block, we randomly introduce

an informational text to two-thirds of the sample. This treatment aims to assess the causal relationship between perceptions of immigration and support for immigration policy. This experimental technique is designed to examine how factual information influences the attitudes and preferences of native-born respondents, thereby allowing us to identify the specific mechanisms underlying immigration perceptions and policies.

**(Mis)Perceptions and attitudes about immigration.-** In this block, respondents are asked about their perceptions of immigration to estimate the native misperceptions of the immigrant population in terms of (1) its size, (2) its demographic composition, and (3) its socioeconomic characteristics, which include labor market outcomes (e.g., unemployment rates), educational attainment (e.g., the proportion of immigrants with compulsory secondary education), and dependence on social assistance programs. Then, we ask about their perceptions of the effects on (1) the labor market, (2) the welfare state, and (3) culture and security.

**Perceived causes about immigrants' labor market situation.-** In this block, we present a number of possible reasons why immigrants and natives perform differently in the labor market, and we ask about the importance that the respondent attaches to each of them. In this case, we are interested in knowing the importance that the native population attaches to factors unrelated to immigrants - such as discrimination or institutional barriers —or to factors related to their own characteristics— such as lack of effort, differences in cultural norms, required skills, etcetera.

**Preferences for immigrant integration policies.-** This block covers questions related to the preferences of the native population regarding immigrant-related policies. The objective is to analyze support or opposition to entry and labor integration policies, distinguishing between those predistributive and redistributive policies.

## 2.3 Quality of Responses

We implement ex-ante and ex-post measures to ensure the quality of responses and avoid careless questions in our survey. As part of our ex-ante approach, the survey company incorporated “screeners” into the questionnaire. These screeners consisted of questions strategically placed throughout the survey to assess respondents' attentiveness. By randomly presenting these screeners, we aimed to identify respondents who may not have



been fully engaged or attentive during the survey process. This proactive measure allowed us to filter out potentially unreliable responses before analysis, thereby enhancing the overall quality of the data.

Similarly, we conducted ex-post data quality checks to identify and discard respondents whose survey completion times fell outside pre-defined thresholds. We excluded respondents who completed the survey either too quickly or too slowly, defined as those in the top and bottom 2% of completion times, respectively. This post-survey filtering mechanism helped mitigate the inclusion of responses that may have been rushed or lacked sufficient attention to detail. We ended up with a main sample of 3,096 respondents.

Another potential concern with surveys is neutrality. In addition, respondents who perceive the survey to be biased must be evenly distributed between the treatment and control groups. To this end, we asked respondents whether they felt they had the opportunity to express their own ideas and whether they felt the survey was unbiased. 93% of respondents in the main sample felt that the survey allowed them to express their opinions and perceptions, and we found no differences between the treatment and control groups. Also, about 87% of respondents felt that the survey was unbiased, and this is equally distributed between the treatment and control groups.<sup>4</sup> By implementing both ex-ante and ex-post quality control measures, we aimed to ensure the integrity and reliability of the data collected, thereby strengthening the validity of our analysis and findings.

Some potential limitations remain. Our survey mainly captures respondents' "willingness to support" immigration by expressing their opinions on selected policies, and therefore, we may only capture stated preferences rather than revealed preferences. However, it is widely believed among scholars that stated preferences, which are the most common outcome in survey experiments, are advantageous for understanding real-world behavior. Besides, respondents may also be influenced by social desirability bias, wherein they may not honestly express their true preferences but instead express opinions that they perceive as more socially acceptable. This bias can affect their responses regarding immigrant integration.

However, the survey design was carefully carried out to ensure that potential risks were minimized as much as possible using the randomization of the order in which options appear and ensuring the anonymity of the responses and the respondents (Stantcheva, 2023).

---

<sup>4</sup>We run a test for equality of treatment effects on the pairs of groups, which is  $P - value = 0.8$  and  $P - value = 0.2$  for a flexible (in terms of expressing ideas) and unbiased, respectively.

### 3 Perceptions of Immigration: Perceived Characteristics, Effects, and Causes

We start our analysis with a detailed discussion of the perceptions of immigration in Spain, to shed light on the different dimensions according to their nature, motivations, and determinants, borrowed from different bodies of literature to obtain a global picture of the immigration phenomenon.

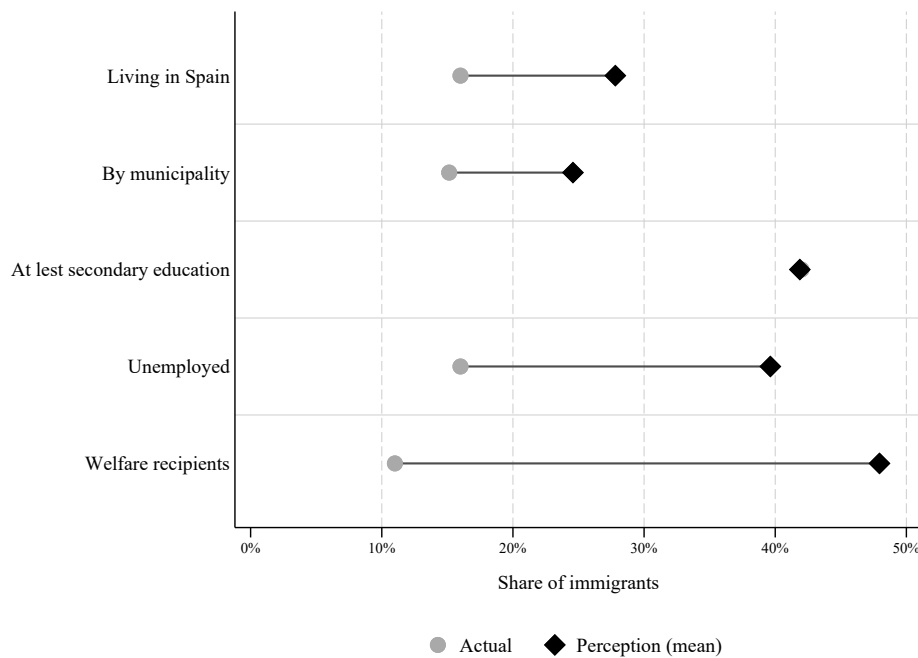
#### 3.1 (Mis)Perceptions of Immigrants' Characteristics

When individuals think about a phenomenon such as immigration, they think about a mental representation of what immigration means to them (Blinder, 2015). These representations often do not match reality, being a critical factor in shaping political preferences and behavior (Alesina and Tabellini (2022); Rodriguez-Justicia and Theilen (2022)). These biases — also called “misperceptions” — can reinforce stereotypes, generate prejudice, or even foster discrimination and social exclusion of immigrants, weakening social cohesion. We define misperceptions as evidently false beliefs about immigration such as Lutz and Bitschnau (2023), calculated as the difference between the perception and the actual data. To construct them, we use several statistics from three main data sources e.g., Continuous Register Statistic, Economically Active Population Survey, and Living Conditions Survey.

Figure 2 shows that non-immigrant population tends to overestimate the share of immigrants in almost all the properties of immigration. Related to innumeracy—which is the tendency to overestimate the number of immigrants—, respondents believe that 27.8% of the total population in Spain are immigrants when the actual share is 16% (11.8 percentage points difference). When we ask respondents for the share of immigrants in their municipality of residence, the perceived level of immigration is 61.5% higher than it actually is.

However, regarding those qualitative properties of immigration such as immigrants' educational attainment, unemployment level, and welfare recipients, the results are mixed. On the one hand, respondents correctly perceived the share of immigrants with secondary education or lower (41.8% vs. 42%). We find that this misperception is close to zero because respondents are overestimating the share of the secondary-educated population regardless of the origin of the population. On the other hand, respondents starkly overestimate the level of unemployed immigrants. A possible explanation in this context is that respondents do not understand what unemployed situation means and how it differs from those indi-

Figure 2: Perceived vs. actual share of immigrants and their socioeconomic circumstances



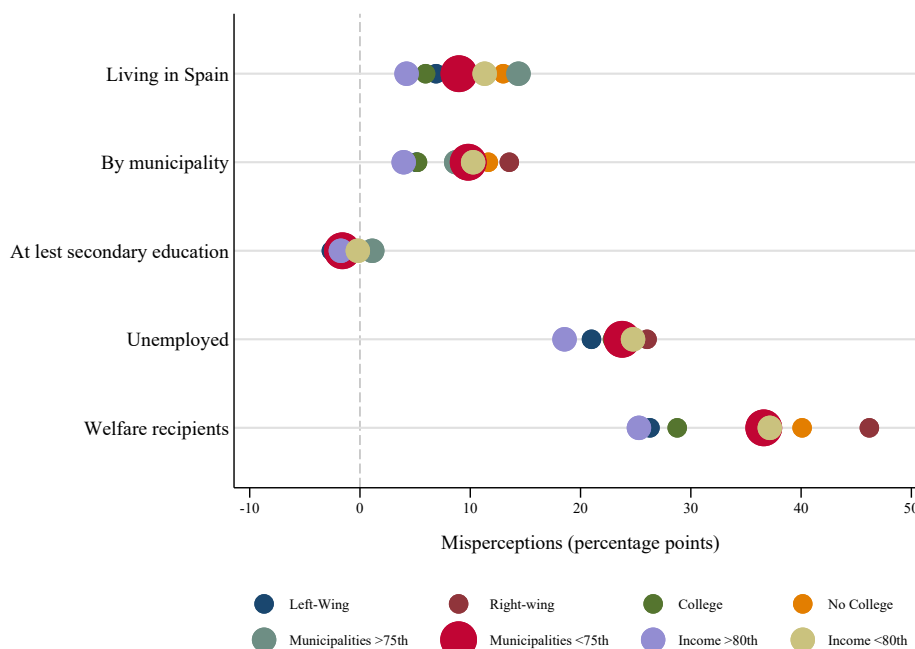
*Notes:* This figure shows the actual share of immigrants within each of the situations named in the Y-axis (gray circles) and the average perceived share of immigrants (black squares).

viduals who are outside of the labor market participation [Alesina et al. \(2021\)](#). Also, they dramatically overestimate the share of immigrants receiving social benefits, from 11% of actual share to 47.9% of perceived individuals.

Figure 3 depicts the percentage of misperceptions by group-characteristics in each of the misperceptions listed on the left. In general, respondents overestimates immigration and underestimates their socio-economic conditions, regardless the socio-demographic group they are. Only, perceptions about immigrants education are, again, almost perfectly identified.

However, it is starkly how right-wing respondents and those individuals without university studies overestimate immigrants in, almost, all the categories. Second, respondents living in municipalities with a proportion of resident immigrants above the 75th of the distribution of immigrants, perceive more immigrants than actually are living in Spain. Third, respondents living in high income households (above 80th), are the group with the lowest levels of misperceptions.

Figure 3: Misperceptions of immigrants' socioeconomic circumstances by non-immigrants characteristics



Notes: The figure shows the average misperceptions calculated as the difference between the perceived and actual share of immigrants by non-immigrant characteristics. The size of the circles is for visual purposes only.

## 3.2 Perceptions of Immigrants' Impact on the Economy

The simple thought of the migration phenomenon is enough to stimulate a feeling of threat among the native population (Homola, 2021). The fear of negative consequences due to the presence of migrants is a very common response (Hainmueller and Hopkins, 2014), raising concerns about the negative effects of immigration. In this section, we analyze the determinants of natives' attitudes towards immigration, based on the classification built by Dustmann and Preston (2007): (1) labor market, (2) welfare magnet, and (3) cultural concerns.

### 3.2.1 Labor market competition

The non-immigrant population may perceive the arrival of immigrants as having a negative impact on the labor market, reducing both the level and quality of employment. These ideas are consistent with the arguments of Borjas (2001), who argue that immigration poses sig-

nificant costs to many members of the host-country labor market, and these negative effects are persistent on the employment and wages of the native population. However, his ideas differ from those of most papers in the economic literature, which find null (Card, 2005; A. Clemens, 2022) or even positive (Ottaviano and Peri, 2012; Tabellini, 2020) effects of the arrival of immigrants on the employment outcomes of the native population.

The “realistic conflict theory” (LeVine, 1972) states that in-group belief that out-groups are direct competitors in the struggle for limited resources. Thus, individuals could perceive immigrants as labor competitors when they consider that the labor market is a constant quantity of jobs, and therefore immigrants get jobs at the expense of natives —known as the lump of labor fallacy.

To measure labor market concerns, we ask respondents about their perceptions of the effects of the arrival of immigration on job opportunities and wages. We show in Table 2 Panel A the average response of whether individuals agree or strongly agree to the following statements: immigrants take away jobs from natives (Q1); wages are brought down by immigrants (Q2); and immigrants reduce overall employment quality (Q3). The mean responses to those questions are scaled such that close to 0 is strongly disagree and close to 1 is strongly agree. The share of respondents who believe that immigration harms the quality of employment, in terms of wages and quality, is much higher (40% and 45%, respectively) than those who believe it negatively affects job quantity (27%).

Based on these questions, we construct an index of labor market threat following Kling et al. (2007). We calculate the index as a standardized and weighted average of the z-scores of its indicator variables, subtracting the mean and dividing by the standard deviation of the control group (those respondents who did not receive any of the information treatments). Indices are standardized so that, for the control group, the mean and the standard deviation is 0 and 1, respectively.

Table 2 Panel B shows that elementary educated, right-wing voters, unemployed, and those from a lower income household, as well as, those aged 45-54 years old are those with a higher perception of immigrants as competitors in the labor market. By far, university graduates and left-wing voters are those with the lowest level of this index. Also, those individuals who have an immigrant relative feel less fear of labor market competition than those who have not, which is aligned with the group conflict literature. In this sense, the contact hypothesis suggests that intergroup contact under appropriate conditions can effectively reduce prejudice between majority and minority group members, meaning a lower perception of threat by those individuals who have an immigrant relative.

Table 2: Average labor market threat indicators and index

| <i>Panel A: Labor market concerns (indicators)</i> |                         |  |  |  |  |
|--|-------------------------|--|--|--|--|
|  | <b>Mean<sup>a</sup></b> |  |  |  |  |
| Q1- Immigrants take away jobs from natives         | 0.27                    |  |  |  |  |
| Q2- Wages are brought down by immigrants           | 0.40                    |  |  |  |  |
| Q3- Immigrants reduce overall employment quality   | 0.45                    |  |  |  |  |
| <b>Labor market threat Index</b>                   | <b>0.00</b>             |  |  |  |  |

| <i>Panel B: Labor market threat index by socio-demographic group</i> |             |                |                             |             |                |
|--|-------------|----------------|-----------------------------|-------------|----------------|
|  | <b>Mean</b> | <b>P-value</b> |                             | <b>Mean</b> | <b>P-value</b> |
| <b>Gender</b>  |             |                | <b>Political Ideology</b>   |             |                |
| Male   | 0.02        | 0.45           | Left-wing voter             | -0.22       | 0.00           |
| Female   | -0.02       |                | Right-wing voter            | 0.24        |                |
| <b>Age</b>   |             |                | <b>Household income</b>     |             |                |
| 18-24  | -0.11       | 0.13           | Lower than €1499            | 0.13        | 0.02           |
| 25-34  | 0.00        |                | €1500 - €2999               | -0.08       |                |
| 35-44  | -0.01       |                | More than €3000             | -0.09       |                |
| 45-54  | 0.15        |                | <b>Labor situation</b>      |             |                |
| 55-65  | -0.10       |                | Employed                    | -0.06       | 0.02           |
| <b>Education</b>   |             |                | Unemployed                  | 0.15        |                |
| Uneducated   | 0.20        | 0.00           | Economically inactive       | 0.11        |                |
| Primary education  | 0.53        |                | <b>Immigrant ties</b>       |             |                |
| Secondary education  | 0.05        |                | Related to an immigrant     | -0.12       | 0.21           |
| University studies   | -0.23       |                | Not related to an immigrant | 0.02        |                |

*Notes:* The P-value column is obtained by applying the Wald test after a regression on the index and the variable of interest. The null hypothesis is that the means are equal between the groups. Sample: respondents who have not seen any information treatment.

<sup>a</sup> Original 5-point are linearly rescaled to lie between 0 (most negative response) and 1 (most positive).

### 3.2.2 Welfare concerns

Labor market competition is not the only channel through which self-interest may shape immigration attitudes (Hainmueller and Hopkins, 2014). In this regard, there is a continuing interest in assessing the fiscal impact of immigration in countries that provide more extensive social benefits (Borjas, 2001). In particular, the debate focuses on whether the fiscal contributions of the immigrant population offset (in economic terms) the costs associated with their participation in the welfare system (Borjas, 1999). Natives may believe that immigrants are more likely to receive assistance, attend public schools, and use the healthcare system than natives (Alesina and Tabellini, 2022). However, several studies find that immigrants have positive fiscal contributions over their lifetime due to the young age at which they decide to migrate (Orrenius, 2017).

In this section, we analyze whether the native population considers immigration to be a significant fiscal burden. This perception is related to those who claim that the arrival of immigrants implies greater costs for the welfare state - including aspects such as housing, health, public spending, and the incidence of the informal economy — compared to

the contributions they make. In this regard, using the European Social Survey data, [Dustmann and Preston \(2006\)](#) find that public burden concerns heavily influence native attitudes towards immigration.

To measure welfare concerns, we ask respondents about their perceptions of the impact of immigration on the welfare state depending on whether one evaluates its effect on the provision of services or the tax burden. We show in Table 3 Panel A, the average response of whether individuals agree or strongly agree to the following statements: immigration raises housing prices (Q4); immigration increases economic pressures on the public health system (Q5); immigration increases the size of the informal economy (Q6); immigration increases the government expenditure (Q7). Therefore, the fiscal burden index is increasing the more immigrants are perceived to take out more than they put in.

Table 3: Average fiscal burden indicators and index

| <i>Panel A: Welfare concerns (indicators)</i>             |             |                         |                             |             |                |
|---|-------------|-------------------------|-----------------------------|-------------|----------------|
|   |             | <b>Mean<sup>a</sup></b> |                             |             |                |
| Q4- Immigration raises housing prices                     |             | 0.32                    |                             |             |                |
| Q5- (...) increases pressures on the public health system |             | 0.46                    |                             |             |                |
| Q6- (...) increases the size of the informal economy      |             | 0.55                    |                             |             |                |
| Q7- (...) increases the government expenditure            |             | 0.61                    |                             |             |                |
| <b>Fiscal burden Index</b>                                |             | <b>0.00</b>             |                             |             |                |
| <i>Panel B: By socio-demographic groups</i>               |             |                         |                             |             |                |
|   | <b>Mean</b> | <b>P-value</b>          |                             | <b>Mean</b> | <b>P-value</b> |
| <b>Gender</b>   |             |                         | <b>Political Ideology</b>   |             |                |
| Male  | 0.01        | 0.70                    | Left-wing voter             | -0.35       | 0.00           |
| Female  | -0.02       |                         | Right-wing voter            | 0.44        |                |
| <b>Age</b>  |             |                         | <b>Household income</b>     |             |                |
| 18-24   | -0.04       | 0.38                    | Lower than €1499            | 0.01        | 0.51           |
| 25-34   | -0.07       |                         | €1500 - €2999               | -0.07       |                |
| 35-44   | -0.02       |                         | More than €3000             | 0.10        |                |
| 45-54   | 0.13        |                         | <b>Labor situation</b>      |             |                |
| 55-65   | -0.06       |                         | Employed                    | -0.02       | 0.27           |
| <b>Education</b>  |             |                         | Unemployed                  | 0.04        |                |
| Uneducated  | 0.44        | 0.00                    | Economically inactive       | 0.06        |                |
| Primary education   | 0.27        |                         | <b>Immigrant ties</b>       |             |                |
| Secondary education                                       | 0.02        |                         | Related to an immigrant     | -0.07       | 0.53           |
| University studies  | -0.14       |                         | Not related to an immigrant | 0.01        |                |

*Notes:* The P-value column is obtained by applying the Wald test after a regression on the index and the variable of interest. The null hypothesis is that the means are equal between the groups. Sample: respondents who have not seen any information treatment.

<sup>a</sup> Original 5-point are linearly rescaled to lie between 0 (most negative response) and 1 (most positive).

The share of respondents who perceive that immigration contributes to the rise in housing prices is 32%. This finding challenges the predictions of economic theory, which suggest that, in the face of limited resources such as housing, people may perceive immigration

as a threat (Lutz and Bitschnau, 2023). However, there is a greater concern about the effects of immigration on use of public services, such as healthcare provision, where the share of respondents who believe that immigration has a negative effect is significantly higher (46%). Likewise, the share of natives who considered that immigration increases the size of the informal economy and raises overall government expenditure reached 55% and 61%, respectively.

Respondents' individual characteristics are also found to play an important role in shaping their perceptions of the fiscal burden. As we can observe in Table 3 Panel B, respondents with the lowest levels of education—those uneducated and those with elementary education—and voters of right-wing parties exhibit a substantially higher perception of immigrants as a fiscal burden. Interestingly, there are two main differences between respondents who perceived immigration as competition in the labor market and those who perceived it as a fiscal burden. The individual's labor market situation is key to identifying perceptions of labor market competition, while income level is a more important factor in identifying perceptions of fiscal burden.

### 3.2.3 Cultural and security concerns

Immigration has become a prominent issue in political campaigns due to its perceived effects on cultural identity, social cohesion, and security. Evidence suggests that economic factors are insufficient to explain native preferences for immigration (Card et al., 2012). In particular, (Inglehart and Norris, 2016) suggests that the increase in votes for populist parties cannot be solely attributed to economic factors, but is largely a reaction against progressive cultural change (referred to as "cultural backlash"). Non-immigrant populations may prefer cultural homogeneity and therefore reject diversity, increasing hostility toward groups with very different cultural and ethnic backgrounds, which is an obstacle to social integration (Dustmann and Preston, 2007). Similarly, perceptions of threats to individual security may motivate people to oppose immigration.

We assume that concerns about the effects of immigration on culture and security are reflected whether respondents answer "agree" or "strongly agree" to the following five questions: it is harmful that everyone has equal opportunities (Q8); everyone must share the same religion (Q9); immigration harms traditions and culture (Q10); everyone must share the same customs and traditions (Q11); immigration raises crime rates (Q12); everyone must speak one common language (Q13). Using this set of questions, we construct the cultural and security threat index that is higher if the respondents perceived that immigra-



tion negatively affects culture, traditions, and crime.

Unlike most other studies on the subject, the native population in Spain is not very concerned about the adverse cultural effects of immigration (Mangum, 2019). Table 4 Panel A shows more variability across cultural and security concern indicators. In particular, while there is wide disagreement among those who believe that it is harmful that everyone has equal opportunities (Q8), there is a higher proportion of respondents who say that everyone must speak one common language (Q13) —5% versus 76%, respectively. Related to the latter, it is worth mentioning that the support for a common language could be interpreted as an economic concern rather than an opposition to diversity if individuals believe that a common language improves economic efficiency (Lazear, 1999). Religion is another concern that does not receive much support. About 13% respondents agree or strongly agree with a need to share the same religion.

Table 4: Average cultural and security indicators and index

| <i>Panel A: Cultural and security concerns (indicators)</i> |                         |                |                             |             |                |
|---|-------------------------|----------------|-----------------------------|-------------|----------------|
|   | <b>Mean<sup>a</sup></b> |                |                             |             |                |
| Q8- It is harmful that everyone has equal opportunities     | 0.05                    |                |                             |             |                |
| Q9- Everyone must share the same religion                   | 0.13                    |                |                             |             |                |
| Q10- Immigration harms traditions and culture               | 0.33                    |                |                             |             |                |
| Q11- Everyone must share the same customs and traditions    | 0.39                    |                |                             |             |                |
| Q12- Immigration raises crime rates                         | 0.54                    |                |                             |             |                |
| Q13- Everyone must speak one common language                | 0.76                    |                |                             |             |                |
| <b>Cultural and security threat Index</b>                   | <b>0.00</b>             |                |                             |             |                |
| <i>Panel B: By socio-demographic groups</i>                 |                         |                |                             |             |                |
|   | <b>Mean</b>             | <b>P-value</b> |                             | <b>Mean</b> | <b>P-value</b> |
| <b>Gender</b>   |                         |                | <b>Political Ideology</b>   |             |                |
| Male  | 0.06                    | 0.12           | Left-wing voter             | -0.29       | 0.00           |
| Female  | -0.07                   |                | Right-wing voter            | 0.35        |                |
| <b>Age</b>  |                         |                | <b>Household income</b>     |             |                |
| 18-24   | 0.02                    | 0.33           | Lower than €1499            | 0.09        | 0.37           |
| 25-34   | -0.11                   |                | €1500 - €2999               | -0.06       |                |
| 35-44   | -0.03                   |                | More than €3000             | 0.05        |                |
| 45-54   | 0.10                    |                | <b>Labor situation</b>      |             |                |
| 55-65   | -0.02                   |                | Employed                    | -0.02       | 0.13           |
| <b>Education</b>  |                         |                | Unemployed                  | 0.08        |                |
| Uneducated  | 0.19                    | 0.00           | Economically inactive       | 0.03        |                |
| Primary education   | 0.32                    |                | <b>Immigrant ties</b>       |             |                |
| Secondary education   | 0.03                    |                | Related to an immigrant     | 0.06        | 0.34           |
| University studies  | -0.14                   |                | Not related to an immigrant | -0.01       |                |

*Notes:* The P-value column is obtained by applying the Wald test after a regression on the index and the variable of interest. The null hypothesis is that the means are equal between the groups. Sample: respondents who have not seen any information treatment.

<sup>a</sup> Original 5-point are linearly rescaled to lie between 0 (most negative response) and 1 (most positive).

However, more than half of respondents (54%) believe that immigration increases

crime. Although immigrants are over-represented among European prisons, recent research has documented null effects or very small effects of immigration on crime rates, but positive and significant effects on crime-related concerns (Ajzenman et al., 2023). The association between immigration and crime determines the formation of anti-immigrant attitudes (Fitzgerald et al., 2012).

Table 4 Panel B displays the distribution of the cultural and security threat index by socio-demographic group. Primary-educated and right-wing voters tend to perceive immigration as a cultural and security threat. More educated respondents and those aged 25-34 are generally less culturally and security threatened by immigration —although, there are no statistically significant differences between age groups.

Contrary to what we may expect, those individuals who have an immigrant relative feel more culturally and security threatened compared to those who have not while they do not perceive immigration neither as competitors in the labor market nor as more takers than givers on welfare consumption. This is also found in a large-scale survey that covers four European countries —Sweden, Italy, Germany, and France—, the UK, and the United States where respondents who have an immigrant friend or acquaintance overestimate immigrants’ cultural distance (Alesina et al., 2023).

### **3.3 Perceived Causes of Immigrant-Native Labor Market Gaps**

In this section, we describe the perceived determinants of immigrant-native labor market gaps. As it was explained in Section 2.2, we ask respondents to what extent they attribute those gaps to immigrant characteristics or external factors, such as discrimination or structural factors. By distinguishing whether respondents attribute these differences to explained or unexplained factors, we can determine the perceived responsibility of immigrants for labor market gaps.

Table 5 shows the extent to which respondents believe each of these factors contributes to the immigrant-native gap. First, with respect to immigrant characteristics, more than half of respondents (54%) indicate the extent to which they believe the differences in employment between natives and immigrants are due to a lack of effort on the part of immigrants. However, this is not the most important perceived reason in their explanation. In particular, respondents also find determinant factors such as lack of social network (63%), differences in social norms (64%) and language barriers (78%).

Second, factors that can be considered outside the control of immigrants are also identified as key determinants of these gaps. On the one hand, 52% of respondents believe that

Table 5: Average perceived causes indicators and indices

*Perceived Causes (indicators)*

| <b>Individual factors</b>       | <b>Mean<sup>a</sup></b> | <b>Discriminatory factors</b>       | <b>Mean<sup>a</sup></b> | <b>Structural factors</b>       | <b>Mean<sup>a</sup></b> |
|---------------------------------|-------------------------|-------------------------------------|-------------------------|---------------------------------|-------------------------|
| Lack of effort                  | 0.54                    | Hiring processes                    | 0.52                    | Competition with natives        | 0.56                    |
| Lack of social network          | 0.63                    | Housing market                      | 0.63                    | Barriers to quality education   | 0.64                    |
| Differences in social norms     | 0.64                    | Labor market                        | 0.73                    | Skills mismatches               | 0.73                    |
| Language barriers               | 0.78                    |                                     |                         | Recognition of studies          | 0.78                    |
|                                 |                         |                                     |                         | Work permits                    | 0.80                    |
| <b>Individual factors Index</b> | <b>0.00</b>             | <b>Discriminatory factors Index</b> | <b>0.00</b>             | <b>Structural factors Index</b> | <b>0.00</b>             |

*Notes:* Sample: respondents who have not seen any information treatment.

<sup>a</sup> Original 5-point are linearly rescaled to lie between 0 (most negative response) and 1 (most positive).

discrimination during the hiring process is a key factor in determining immigrant-native gaps in the labor market, as well as discrimination in the housing market (63%) and discrimination in the labor market (73%), which provides some information on the perceived prevalence of discrimination. On the other hand, a very high proportion of respondents (more than 70%) believe that structural factors, such as work permits (80%), recognition of studies (78%), and skills mismatches (73%), play a greater role in explaining differences in labor market outcomes between immigrants and natives. Competition with natives (56%) and barriers to quality education (64%) are also considered important.

As Table 5 shows, we construct three indices by averaging the factor variables detailed above to measure which are the most perceived determinants of the immigrant-native labor market gap, and we examine how these indices are distributed across socio-demographic groups (see Table A4). First, older people (45 years and older) are more likely to believe that immigrant characteristics are an important determinant of the labor market gaps. Second, a higher level of education is associated with a higher perception of discriminatory reasons behind the labor market gaps between immigrants and natives, contrary to what unemployed respondents believe. Third, respondents from higher-income households are more likely to believe that these gaps are caused by factors outside the control of immigrants - both discriminatory and structural. And finally, there are differences in perceptions of what drives labor market gaps by political ideology. In particular, right-wing voters believe that immigrants are responsible for these labor market gaps, and they are the socio-demographic group least likely to believe that discrimination is behind these gaps.

## 4 Policy Preferences on Immigrant Integration Policies

This section examines support for three types of immigration policies: (1) entry, (2) pre-distribution, and (3) redistribution policies. Higher support for these policies means higher support for integrating immigrants —socially and in the labor market.

### 4.1 Preferences on Entry Requirements

We start by describing the preferences of the native-born population regarding the application of entry requirements for the arrival of immigrants, focusing on the type of requirements by their nature —security, economic, and cultural criteria. A common finding of recent surveys is the prevalence of anti-immigration sentiments and support for more restrictive immigration policies, especially for immigrants from ethnically diverse countries. For example, the results of the International Social Survey Program, covering a total of 22 countries, suggest that only 7% of respondents support more open immigration policies (Javdani, 2020).

Government immigration policies legally define the conditions under which immigrants are granted the right to enter the territory. These policies often define the desirable characteristics of potential immigrants based on their economic status or level of education, aiming to match economic migration with labor market needs. Debates about the criteria that define what kind of immigration is “appropriate” are high on government policy agendas (Green, 2009), and could —or not— be supported by citizens’ opinions.

When we ask respondents their preferences about the criteria for entry, the least desirable characteristics are those related to cultural and religious factors, such as being white and catholic, as we can observe in Table 6 Panel A —only 9% and 11% of respondents perceive these factors as either important or very important. Economic factors, however, are highly valued for new immigrants.

Except for being young —which only 26% of respondents think about as a relevant characteristic— around half of the respondents consider either important or very important that immigrants are highly educated (48%), have a source of income before immigrating (58%), speak Spanish (67%),<sup>5</sup> and have an employment contract agreement signed before immigrating (74%). We also ask respondents whether they consider that the naturalization process must be shorter and if they are willing to maintain or increase immigration levels in their municipality.

---

<sup>5</sup>Speaking a common language could also be seen as a cultural factor.

Table 6: Average entry requirements indicators and entry index

Panel A: Entry requirements (indicators)

|                            | Mean <sup>a</sup> |   | Mean <sup>a</sup> |
|----------------------------|-------------------|---|-------------------|
| Be white                   | 0.09              | Maintain or increase immigration levels | 0.64              |
| Be catholic                | 0.11              | Speak Spanish                           | 0.67              |
| Be young                   | 0.26              | Have a work contract                    | 0.74              |
| High education level       | 0.48              | Less time to access nationality         | 0.75              |
| Minimum income             | 0.58              | No criminal records                     | 0.92              |
| <b>Entry Support Index</b> | 0.00              |   |                   |

Panel B: By socio-demographic groups

|                     | Mean  | P-value |                             | Mean  | P-value |
|---------------------|-------|---------|-----------------------------|-------|---------|
| <b>Gender</b>       |       |         | <b>Political Ideology</b>   |       |         |
| Male                | -0.03 | 0.66    | Left-wind voter             | 0.24  | 0.00    |
| Female              | 0.04  |         | Right-wind voter            | -0.30 |         |
| <b>Age</b>          |       |         | <b>Household income</b>     |       |         |
| 18-24               | -0.14 | 0.04    | Lower than €1499            | 0.00  | 0.68    |
| 25-34               | 0.16  |         | €1500 - €2999               | 0.00  |         |
| 35-44               | 0.06  |         | More than €3000             | 0.04  |         |
| 45-54               | -0.05 |         | <b>Labor situation</b>      |       |         |
| 55-65               | -0.03 |         | Employed                    | 0.01  | 0.70    |
| <b>Education</b>    |       |         | Unemployed                  | -0.02 |         |
| Uneducated          | -0.74 | 0.00    | Economically inactive       | -0.03 |         |
| Primary education   | -0.29 |         | <b>Immigrant ties</b>       |       |         |
| Secondary education | -0.01 |         | Related to an immigrant     | 0.00  | 0.89    |
| University studies  | 0.14  |         | Not related to an immigrant | 0.00  |         |

Notes: The P-value column is obtained by applying the Wald test after a regression on the index and the variable of interest. The null hypothesis is that the means are equal between the groups. Sample: respondents who have not seen any information treatment.

<sup>a</sup> Original 5-point and 7-point (*Less time to nationality*) are linearly re-scaled to lie between 0 (most negative response) and 1 (most positive).

Overall, respondents show higher preferences for acquired immigration criteria rather than ascribed criteria, which is highly correlated to support for immigration. On the one hand, acquired criteria are those skills and attitudes that immigrants could, in principle, acquire if they so wished (such as education, language, income, and job stability). On the other hand, ascribed criteria include those categorical qualities related to the inherent characteristics of a social category, such as being white, Catholic, and young.

Based on these questions, we construct an index to capture support for entry. This index is higher for respondents who are more open to immigration, e.g., less in favor of imposing qualifications for entry, more in favor of reducing the processing time for naturalization, and more in favor of the actual immigration levels in their municipality of residence. Panel B Table 6 shows that more educated people impose fewer restrictions on immigrants, which leads to a higher willingness to adopt more open immigration policies. On the contrary, the older the respondents are, the less open they are to immigration.

## 4.2 Preferences on Predistribution and Redistribution Policies

The integration of immigrants into the labor market is key to ensuring their effective integration into host societies and their positive impact on the economy, while avoiding marginalization and social exclusion. In this section, we describe the respondents' support for predistributive and redistributive policies, focusing on those specifically designed to integrate immigrants into the labor market. We first analyze support for predistributive policies, such as training and language courses, recognition of foreign diplomas, qualifications, and/or skills, and personalized employment pathways, that aim to improve immigrants' opportunities in the labor market. We then analyze support for redistributive policies, such as fiscal incentives for employers who hire immigrants, and more funding for social benefits, scholarships, and grants for immigrants.

Overall, Table 7 shows that respondents prefer predistribution policies (Panel A)—those public policies that can also affect the pre-tax distribution of income—over redistribution policies as a tool for integrating immigrants into the labor market (Panel B). Regarding predistribute policies, more than half of the respondents are (totally) in favor of predistribution policies such as offering immigrants personalized employment pathways (53%), recognition of foreign diplomas, qualifications, and/or skills (65%), school segregation measures (63%), and offering immigrants training and languages courses (66%).

Table 7 Panel B shows that, on average, respondents express lower support for redistribution compared to their preferences on predistributive policies. In particular, less than a quarter of respondents support offering financial incentives to companies to hire immigrant workers e.g., by reducing the social security contributions for labor. Such incentives, which reduce part of the wage costs of companies that hire a specific type of workers, are part of the active employment policies of most Western countries. Although is the least preferred policy, it is proven to be a very effective policy tool in the labor market (Card et al., 2010) to help the most disadvantaged workers find employment. On the other hand, respondents who support increasing funds intended for social benefits, scholarships, and grants for immigrants is also relatively low —29% and 35%, respectively.

To capture support for predistribution and redistribution policies, we construct two indices based on the methodology described in the previous sections. These are derived from the variables shown in Panel A and Panel B, respectively. Both indices are higher for respondents who express a preference for predistribution and redistribution policies. Older, more educated, and left-wing voters, as well as those in higher income households, show higher levels of support for predistribution, as shown in Panel C Table 7. Similar results

Table 7: Average predistribution and redistribution policies and support for pre-distribution and redistribution indices

| <i>Panel A: Predistribution policies (indicators)</i>          |                         |                |                       |                |
|--|-------------------------|----------------|-----------------------|----------------|
|  | <b>Mean<sup>a</sup></b> |                |                       |                |
| Personalized employment pathways                               | 0.53                    |                |                       |                |
| Recognition of foreign diplomas, qualifications, and/or skills | 0.63                    |                |                       |                |
| School segregation measures                                    | 0.64                    |                |                       |                |
| Training and language courses                                  | 0.66                    |                |                       |                |
| <b>Support for Predistribution Index</b>                       | <b>0.00</b>             |                |                       |                |
| <i>Panel B: Redistribution policies (indicators)</i>           |                         |                |                       |                |
|  | <b>Mean<sup>a</sup></b> |                |                       |                |
| Fiscal incentives for employers who hire immigrants            | 0.22                    |                |                       |                |
| Social benefits  | 0.29                    |                |                       |                |
| More funding for scholarships and grants for immigrants        | 0.35                    |                |                       |                |
| <b>Support for Redistribution Index</b>                        | <b>0.00</b>             |                |                       |                |
| <i>Panel C: By socio-demographic groups</i>                    |                         |                |                       |                |
|  | <b>Predistribution</b>  |                | <b>Redistribution</b> |                |
|  | <b>Mean</b>             | <b>P-value</b> | <b>Mean</b>           | <b>P-value</b> |
| <b>Gender</b>  |                         |                |                       |                |
| Male   | -0.01                   | 0.55           | -0.01                 | 0.88           |
| Female   | 0.01                    |                | 0.01                  |                |
| <b>Age</b>   |                         |                |                       |                |
| 18-24  | -0.06                   | 0.00           | -0.05                 | 0.37           |
| 25-34  | -0.09                   |                | 0.02                  |                |
| 35-44  | -0.19                   |                | -0.07                 |                |
| 45-54  | -0.01                   |                | 0.00                  |                |
| 55-65  | 0.27                    |                | 0.08                  |                |
| <b>Education</b>   |                         |                |                       |                |
| Uneducated   | -0.22                   | 0.00           | 0.36                  | 0.03           |
| Primary education  | -0.35                   |                | -0.10                 |                |
| Secondary education  | -0.02                   |                | -0.05                 |                |
| University studies   | 0.13                    |                | 0.12                  |                |
| <b>Political Ideology</b>                                      |                         |                |                       |                |
| Left-wind voter  | 0.26                    | 0.00           | 0.25                  | 0.00           |
| Right-wind voter   | -0.21                   |                | -0.22                 |                |
| <b>Household income</b>  |                         |                |                       |                |
| Lower than €1499   | -0.11                   | 0.00           | 0.11                  | 0.00           |
| €1500 - €2999  | 0.11                    |                | 0.08                  |                |
| More than €3000  | 0.18                    |                | -0.05                 |                |
| <b>Labor situation</b>   |                         |                |                       |                |
| Employed   | -0.02                   | 0.47           | 0.00                  | 0.33           |
| Unemployed   | 0.12                    |                | 0.10                  |                |
| Economically inactive  | -0.01                   |                | -0.05                 |                |
| <b>Immigrant ties</b>  |                         |                |                       |                |
| Related to an immigrant  | 0.15                    | 0.01           | 0.18                  | 0.00           |
| Not related to an immigrant                                    | -0.03                   |                | -0.03                 |                |

*Notes:* The P-value column is obtained by applying the Wald test after a regression on the index and the variable of interest. The null hypothesis is that the means are equal between the groups. Sample: respondents who have not seen any information treatment.

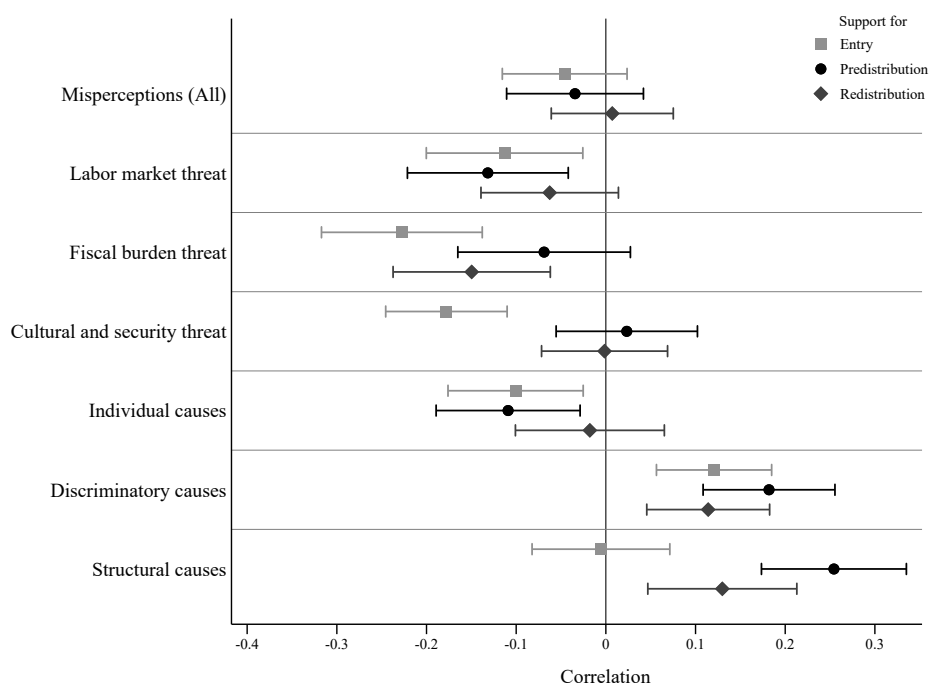
<sup>a</sup> Original 5-point are linearly rescaled to lie between 0 (most negative response) and 1 (most positive).

are found for support for redistribution. However, we find a key difference between those who support predistribution and those who support redistribution: higher income, higher support for predistribution, and more opposition to redistribution.

## 5 Perceptions of Immigration and Policy Preferences

We now discuss what drives support for immigration integration. The purpose of this analysis is twofold: first, to identify which perceptions influence support for or opposition to various immigration policies; and second, to identify which socio-demographic groups are more predictive of support for public policies. To this end, we regress the three indices of interest — support for entry, support for predistribution, and support for redistribution — on (mis)perceptions of immigration and perceived causes, controlling for individual characteristics, and province-fixed effects. Figure 4 shows the main coefficients of the regressions that represent partial correlations between the variables listed on the left and the indices of interest.

Figure 4: What drives support for immigration policies?



*Notes:* This figure shows the correlation between the variables listed on the left and the three indices of interest: Support for entry (squares), predistribution (circles), and redistribution (diamonds). Each set of correlations is estimated using OLS regression including indicator variables for gender, age less than 45, political affiliation, having an immigrant relative, having a college degree, being unemployed, household income brackets, and province fixed effects. All variables are transformed into z-scores, and the reported coefficients can be interpreted as partial correlations. 95% confidence intervals constructed from robust standard errors are displayed. Sample: respondents who have not seen any treatment.

Firstly, we describe what drives support for more open immigration policies. Perceiving immigration as a threat —either as a competitor in the labor market, as a fiscal burden, or



as a cultural threat— is strongly negatively correlated with the support for entry. We find that perceiving immigration as a fiscal burden is the strongest predictor of opposition to entry. A 1 s.d. increase in the perceived fiscal burden index reduces support for immigrant entry by 0.26 s.d. Also, a 1 s.d. increase in the perceived cultural and security (labor) threat reduces still the support for entry in 0.18 s.d. (0.11 s.d.). However, perceiving that immigrants and non-immigrants employment gaps are caused by discrimination is the stronger predictor of higher support for more open immigration policies. In particular, a 1 s.d. increase in the discriminatory index increases support for entry by 0.12 s.d. On the other hand, misperceptions about immigration and structural factors as perceived causes are uncorrelated to support for entry.

Secondly, we analyze the drivers of support for redistributive policies. The belief that immigrant-native labor market gaps are caused by factors that immigrants can not control —e.g., discrimination or structural factors—, is starkly correlated with a higher support on redistribution. A 1 s.d. increase in the perception of discrimination (structural factors) as a cause of immigrant-native labor market gaps, increases redistribution support by 0.25 s.d. (0.18 s.d.). On the other hand, perceiving immigrants' characteristics as the cause of differences in the labor market outcomes between immigrant and native populations is highly and negatively correlated to support for redistribution policies—a 1 s.d. increase in the individual causes index reduces support for redistribution by 0.11 s.d. The belief that immigration harms native workers in the labor market is also negatively correlated with support for redistributive policies—a 1 s.d. increase in the labor threat index reduces support for redistributive policies by 0.13 s.d. Misperceptions about immigration, as well as perceptions of immigration as a fiscal burden and as a cultural threat, are uncorrelated to support for redistribution.

Thirdly, we examine the drivers of support for redistributive policies. When respondents attribute discriminatory causes or structural factors to causes of immigrant-native labor market gaps, the support for redistribution is higher—1 s.d. increase in the discriminatory and structural causes increases the support for redistribution by 0.13 s.d. and 0.11 s.d., respectively. Conversely, the strongest predictor of opposition to redistribution is fiscal concerns. Specifically, a 1 s.d. increase in the fiscal burden index decreases the support for redistribution by 0.15 s.d. The rest of the perceptions are uncorrelated to the support for redistributive policies.

Overall, the perception that factors outside the control of immigrants are responsible for labor market gaps between immigrants and natives is positively correlated with support

for immigrant integration. In contrast, the belief that immigrants harm the labor market, welfare, and/or culture is negatively correlated with it.

In Table A3, we also examine the partial correlations between socio-demographic characteristics and preferences for entry, predistribution, and redistribution policies. The distribution varies greatly by index. First, being young is strongly associated with opposition to predistribution. Second, individuals with a college education show higher levels of support for both predistributive and redistributive policies. Third, political ideology significantly influences attitudes toward immigrant entry and integration policies. Left-wing individuals are more supportive of all three indices than their right-wing counterparts. Specifically, being left-wing is associated with higher support for entry, predistribution, and redistribution policies. In addition, higher household income is positively correlated with support for predistribution and redistribution, but not with support for entry. These results highlight the significant influence of socio-demographic characteristics on attitudes toward immigration and integration policies, with education, age, political ideology, and income playing a prominent role.

## **6 Experimental Effects of Information on the Impact of Immigration**

### **6.1 The Treatments**

Since it is impossible to change the characteristics of immigrants when studying attitudes toward immigration, the only way we can change perceptions of immigration is by correcting people’s misconceptions (Grigorieff et al., 2020; Haaland et al., 2023). We designed an experiment with two information treatments to test whether increased information availability can correct misperceptions and influence support for immigration policy. Respondents were randomly divided into three equal groups: (1) those who received no additional information, (2) those who received treatment 1, and (3) those who received treatment 2. The experimental design is articulated according to previous landmark studies assessing how information affects support for immigration (e.g., Alesina et al. (2021)) and support for redistributive policies (e.g., Alesina et al. (2023)).

Treatment 1 (“no aggregate employment effects”) provides information about no adverse labor market impacts of immigration on the host country’s labor market since their skills, knowledge, and work experience complement the native workforce using the em-

pirical evidence from [Card \(2005\)](#). Although this treatment does not present quantitative information<sup>6</sup>, it aims to correct misperceptions about the effects of immigration in the labor market, generating exogenous variation in beliefs to evaluate the causal impact on labor concerns —e.g., labor market competition— related to the inclusion of immigrants in the labor market and support for integration policies.

On the other hand, Treatment 2 (“use of public services”) provides factual data on the use of public and social services by the immigrant population, following ([Barrera et al., 2020](#)). Given that natives may think that immigrants are more likely to be on welfare compared to natives, we expect that the treatment reduces the fiscal burden threat, as well as positive effects on support for immigration entry and preferences for integration policies.

These types of information experiments generate exogenous variation in perceptions of real-world environments, allowing us to causally address policy-relevant questions and test economic theories by varying the amount of information available to respondents ([Haaland et al., 2023](#)).

## 6.2 Experimental Results

In this section, we investigate whether the information treatments affect our respondents’ support for immigrant integration policies. We estimate Equation 1 using OLS:

$$Index_i = \alpha + \beta_1 Treatment\ 1_i + \beta_2 Treatment\ 2_i + \mathbf{X}'_i \delta + \theta province_i + \epsilon_i, \quad (1)$$

where the dependent variable  $Index_i$  represents the index of interest,  $Treatment\ 1_i$  is a dummy variable for whether respondent $_i$  received the information treatment “*No aggregate employment effects*”,  $Treatment\ 2_i$  is a dummy for whether respondent $_i$  received the information treatment “*Use of public services*”,  $X_i$  is a vector of individuals controls which includes dummy variables for gender, age less than 45, political affiliation, having an immigrant relative, having a college degree, being unemployed, household income brackets,  $\theta$  province fixed effects, and  $\epsilon_i$  is an individual-specific error term. We use robust standard errors for all specifications.

Since we cannot ensure that respondents randomly assigned to the treatment group read the information, we assume that the treatment effects estimated from Equation 1 reflect intention-to-treat (ITT) effects rather than average treatment effects (ATE). Regardless, we will now refer to them as treatment effects.

---

<sup>6</sup>We include the source of information in both treatment to increase the credibility of your information.

## 6.2.1 Treatment effects on (mis)perceptions and perceived causes

Table 8 Panel A shows that the treatments have nuanced effects on perceptions of immigration. On the one hand, *No aggregate employment effects* treatment has negative but insignificant effects on the fears about labor market competition. However, this treatment has significantly negative effects on the feeling of cultural and security threat, which is the threat more related to opposition to immigration integration (Figure 4). On the other hand, *Use of public services* treatment has a negative effect on misperceptions about immigration and also on the perceptions of the fiscal burden of immigration on welfare.

Table 8: Treatment effects on (mis)perceptions and perceived causes

| <i>Panel A: Treatment effects on (mis)perceptions indices</i> |                                 |                       |                           |                        |
|---|---------------------------------|-----------------------|---------------------------|------------------------|
|   | <b>Misperceptions (All)</b>     | <b>Labor threat</b>   | <b>Fiscal Burden</b>      | <b>Cultural threat</b> |
|   | (1)                             | (2)                   | (3)                       | (4)                    |
| <i>T1: No aggregate employment effects</i>                    | -0.0149<br>(0.0399)             | -0.0279<br>(0.0419)   | -0.0389<br>(0.0411)       | -0.104**<br>(0.0413)   |
| <i>T2: Use of public services</i>                             | -0.101**<br>(0.0416)            | -0.0239<br>(0.0421)   | -0.116***<br>(0.0411)     | -0.0361<br>(0.0423)    |
| Observations  | 3,089                           | 3,089                 | 3,089                     | 3,089                  |
| $R^2$   | 0.151                           | 0.102                 | 0.158                     | 0.093                  |
| Control group mean  | 0.00                            | 0.00                  | 0.00                      | 0.00                   |
| <i>Panel B: Treatment effects on perceived causes indices</i> |                                 |                       |                           |                        |
|   | <b>Personal characteristics</b> | <b>Discrimination</b> | <b>Structural factors</b> |                        |
|   | (5)                             | (6)                   | (7)                       |                        |
| <i>T1: No aggregate employment effects</i>                    | 0.000475<br>(0.0431)            | -0.0832**<br>(0.0421) | -0.0165<br>(0.0428)       |                        |
| <i>T2: Use of public services</i>                             | 0.0222<br>(0.0434)              | -0.0321<br>(0.0416)   | 0.0534<br>(0.0426)        |                        |
| Observations  | 3,089                           | 3,089                 | 3,089                     |                        |
| $R^2$   | 0.025                           | 0.137                 | 0.042                     |                        |
| Control group mean  | 0.00                            | 0.00                  | 0.00                      |                        |

*Notes:* The table shows OLS regression results where the dependent variables are misperceptions indices (column 1), perceived effects of immigration (columns 2-4), and perceived causes indices (columns 5-7), all z-scored using the mean and standard deviation in the control group. T1 and T2 are indicator variables equal to 1 if respondents received the information treatment. Controls included in all regressions are: indicator variables for gender, age less than 45, political affiliation, having an immigrant relative, having a college degree, being unemployed, household income brackets, and province fixed effects. Complete results are reported in Table A5. Robust standard errors in parentheses. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

Telling respondents the actual share of immigrants who consume public goods and how they are not more likely to be on welfare than non-immigrants, it is not surprising that they have also shifted (lower) their misperceptions about the share of immigrants who receive social benefits and are unemployed.

Concerning perceived causes of immigrant-native labor market gaps, Table 8 Panel B shows that *No aggregate employment effects* treatment reduces the perceptions that immigrants have a lower performance in the labor market is not caused by discriminatory factors. This means that the treatment neutralizes the effect on respondent’s labor market fears and, at the same time, reduces the importance they give to discriminatory factors as being a root cause of differences in the labor market.

## 6.2.2 Treatment effects on support for immigrant integration policies

We now discuss the treatment effects on our main outcomes of interest — support for entry, predistribution, and redistribution — and on each of their dimensions. Table 9 shows the effects of the treatments on respondents’ preferences for entry qualifications. Overall, both treatments reduce natives’ preferences for entry qualifications.

Table 9: Treatment effects of accurate information about immigrants on support for entry

|  | Entry requirements   |                      |                      |                    |                      | Entry support index |
|--|----------------------|----------------------|----------------------|--------------------|----------------------|---------------------|
|  | Criminal records     | Work contract        | Min. Income          | High educated      | Young                |                     |
|  | (1)                  | (2)                  | (3)                  | (4)                | (5)                  |                     |
| <i>T1: No aggregate employment effects</i> | -0.0156<br>(0.0115)  | -0.00410<br>(0.0186) | -0.00120<br>(0.0217) | 0.0138<br>(0.0219) | -0.0339*<br>(0.0190) |                     |
| <i>T2: Use of public services</i>          | -0.00670<br>(0.0117) | 0.0213<br>(0.0188)   | 0.0197<br>(0.0217)   | 0.0105<br>(0.0219) | -0.0346*<br>(0.0191) |                     |
| Observations                               | 3,089                | 3,089                | 3,089                | 3,089              | 3,089                |                     |
| $R^2$                                      | 0.040                | 0.091                | 0.064                | 0.047              | 0.032                |                     |
| Control group mean                         | 0.92                 | 0.76                 | 0.66                 | 0.46               | 0.23                 |                     |

|  | Entry requirements  |                       |                      | Preferences          |                      | Entry support index  |
|--|---------------------|-----------------------|----------------------|----------------------|----------------------|----------------------|
|  | Speak Spanish       | Catholic              | White                | Nat. process         | More imm.            |                      |
|  | (6)                 | (7)                   | (8)                  | (9)                  | (10)                 |                      |
| <i>T1: No aggregate employment effects</i> | -0.0222<br>(0.0207) | 0.00477<br>(0.0122)   | -0.00650<br>(0.0117) | 0.0132<br>(0.0209)   | 0.0494**<br>(0.0200) | -0.00683<br>(0.0418) |
| <i>T2: Use of public services</i>          | -0.0220<br>(0.0207) | -0.000242<br>(0.0124) | -0.0153<br>(0.0121)  | -0.00610<br>(0.0214) | 0.0483**<br>(0.0200) | -0.00165<br>(0.0430) |
| Observations                               | 3,089               | 3,089                 | 3,089                | 2,430                | 3,089                | 3,089                |
| $R^2$                                      | 0.048               | 0.052                 | 0.037                | 0.063                | 0.114                | 0.105                |
| Control group mean                         | 0.66                | 0.09                  | 0.07                 | 0.75                 | 0.64                 | 0.00                 |

*Notes:* The table shows OLS regression results where the dependent variables are entry requirements indicators (columns 1-8) and preferences for immigration in columns (columns 9-10). Original 4-point, 5-point, and 7-point scale responses are linearly rescaled to lie between 0 (most negative response) and 1 (most positive). For the Entry support index estimation, the variable is z-scored using the mean and standard deviation in the control group. T1 and T2 are indicator variables equal to 1 if respondents received the information treatment. Controls included in all regressions are: indicator variables for gender, age less than 45, political affiliation, having an immigrant relative, having a college degree, being unemployed, household income brackets, and province fixed effects. Complete results are reported in Table A6. Robust standard errors in parentheses. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

However, only being young is statistically different from zero (Column 5). In particular, the *No aggregate employment effects* treatment reduces the share of respondents who consider it (very) important to be young as a qualification for new immigrants by about 3 percentage points, which is about 4% of the control group mean. The *Public services use*

treatment also reduces the importance of being young as a requirement for immigrant entry to the same extent.

Providing information—whether it comes from information treatment 1 or 2—causally affects natives’ willingness to increase or maintain the levels of immigration (Column 10). *No aggregate employment effects* treatment increases the share of respondents who are in favor of the actual levels of immigration in their municipality by about 5 percentage points, in line with [Haaland and Roth \(2020\)](#), who find positive effects of information about no adverse labor market impacts of immigration on support for immigration. We observe very similar effects concerning *Use of public services*. This information treatment raises the percentage of respondents who support increasing immigration by 8% compared to those in the control group who did not receive any information.

Despite the strong effects on respondents’ willingness to increase or maintain the levels of immigration, we find null treatment effects on our measure for entry support, which is consistent with the treatment design. Both information treatments are supposed to affect either labor concerns or welfare dimensions, thus it is not intended to affect qualifications criteria.

We now turn to support for predistribution. Table 10 shows the effects of the treatments on respondents’ views on predistribution. First, the *No aggregate employment effects* treatment, which focuses on correcting misperceptions about the aggregate employment effects of immigration, has no effects on support for predistribution. In particular, while the treatment leads to a slight decrease in support for courses/training and a negligible effect on school segregation, it also causes a small decrease in support for recognition policies and employment pathways but none of these results are statistically significant ( $p - value > 0.10$ ).

These results suggest that simply providing information about the employment effects of immigration may not significantly shift preferences for redistributive policies. On the other hand, *Use of public services* treatment, shows more positive effects on support for redistributive policies, especially on preferences for offering immigrants language courses and training. However, the effects of this treatment are not statistically significant ( $p - value > 0.10$ ). One possible interpretation of this result is the presence of ceiling effects. This means that the baseline level of support for redistributive policies is already high—on average, more than 60% of respondents (control group mean) agree or totally agree to support redistribution policies—, leaving less room for variation.

Table 11 shows the estimated effects of the treatments on support for redistributive poli-

Table 10: Treatment effects of accurate information about immigrants on support for predistribution

|  | Predistributive policies |                           |                     |                         | Predistribution support Index |
|--|--------------------------|---------------------------|---------------------|-------------------------|-------------------------------|
|  | Courses/Training<br>(1)  | School Segregation<br>(2) | Recognition<br>(3)  | Employment paths<br>(4) |                               |
| <i>T1: No aggregate employment effects</i> | 0.0185<br>(0.0205)       | 0.00203<br>(0.0214)       | -0.0151<br>(0.0210) | -0.0150<br>(0.0223)     | -0.00553<br>(0.0422)          |
| <i>T2: Use of public services</i>          | 0.0326<br>(0.0204)       | 0.00557<br>(0.0214)       | 0.0116<br>(0.0210)  | 0.0153<br>(0.0223)      | 0.0457<br>(0.0421)            |
| Observations                               | 2,933                    | 2,861                     | 2,917               | 2,896                   | 3,089                         |
| $R^2$                                      | 0.077                    | 0.090                     | 0.088               | 0.075                   | 0.113                         |
| Control group mean                         | 0.68                     | 0.64                      | 0.65                | 0.54                    | 0.00                          |

*Notes:* The table shows OLS regression results where the dependent variables are predistributive policy indicators (columns 1-4) and the Support for Predistribution Index (last not numbered column). Original 5-point scale responses are linearly re-scaled to lie between 0 (most negative response) and 1 (most positive). For the Support for Predistribution Index estimation, the variable is z-scored using the mean and standard deviation in the control group. T1 and T2 are indicator variables equal to 1 if respondents received the information treatment. Controls included in all regressions are: indicator variables for gender, age less than 45, political affiliation, having an immigrant relative, having a college degree, being unemployed, household income brackets, and province fixed effects. Complete results are reported in Table A6. Robust standard errors in parentheses. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

cies. Both treatments have positive effects on support for redistribution, but they are mostly insignificant, except for financial incentives. In particular, informing respondents about the null effect of immigration on the labor market slightly increases ( $p$ -value  $> 0.10$ ) support for financial incentives, social benefits, and grants/scholarships for immigrants.

Table 11: Treatment effects of accurate information about immigrants on support for redistribution

|  | Redistributive policies     |                        |                     | Redistribution support Index |
|--|-----------------------------|------------------------|---------------------|------------------------------|
|  | Financial incentives<br>(1) | Social Benefits<br>(2) | Grants<br>(3)       |                              |
| <i>T1: No aggregate employment effects</i> | 0.0155<br>(0.0192)          | 0.0121<br>(0.0201)     | 0.00748<br>(0.0209) | 0.0291<br>(0.0422)           |
| <i>T2: Use of public services</i>          | 0.0452**<br>(0.0196)        | 0.0310<br>(0.0205)     | 0.0173<br>(0.0213)  | 0.0877**<br>(0.0440)         |
| Observations                               | 2,907                       | 2,906                  | 2,909               | 3,089                        |
| $R^2$                                      | 0.055                       | 0.106                  | 0.115               | 0.111                        |
| Control group mean                         | 0.23                        | 0.30                   | 0.37                | 0.00                         |

*Notes:* The table shows OLS regression results where the dependent variables are redistributive policy indicators (columns 1-3) and the Support for Redistribution Index (last not numbered column). Original 5-point scale responses are linearly re-scaled to lie between 0 (most negative response) and 1 (most positive). For the Support for Redistribution Index estimation, the variable is z-scored using the mean and standard deviation in the control group. T1 and T2 are indicator variables equal to 1 if respondents received the information treatment. Controls included in all regressions are: indicator variables for gender, age less than 45, political affiliation, having an immigrant relative, having a college degree, being unemployed, household income brackets, and province fixed effects. Complete results are reported in Table A6. Robust standard errors in parentheses. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

On the other hand, the *Use of public services* treatment significantly increases support for integrating immigrants by offering financial incentives to employers who hire immigrants. In particular, this information, which emphasizes immigrants' actual use of public services, increases support for financial incentives by 19% relative to the control group (Column 1). Overall, the *Use of public services* treatment increases the index of support for redistribution, boosting preferences for one of the least preferred policies—only 23%

of respondents were in favor of financially incentivizing firms that hire immigrants.

While both treatments aim to provide accurate information about immigrants, the *Use of public services* treatment has the most significant positive effects on overall support for immigrant integration, and *No aggregate employment effects* treatment barely has any effect. These findings suggest that while highlighting immigrants' use of social services through actual statistics may increase public support for redistributive policies, its impact on predistributive policies may be more limited because they have already received more support among natives.

## 7 Treatment Effects Heterogeneity

### 7.1 Testing Prior Beliefs: Concerns About Immigration

In the first part of the survey, right after the block of background questions, we ask (all) participants about their general concerns, such as, unemployment, climate change, inflation, quality of the education system, and also immigration. In particular, we ask them to indicate whether they are very worried, somewhat worried, not very worried, or not at all worried. 31% of respondents were already concerned about immigration before the survey began. We then construct a variable measuring concern about immigration (CAI), which indicates whether a respondent was very or somewhat concerned about immigration before receiving any information about the survey topic.

In this section, we evaluate how respondents' prior beliefs about immigration moderate the effects of information treatments on their support for immigration-related policies. To this end, we estimate treatment effects accounting for respondents with prior immigration aversion. This channel has been investigated by [Dylong and Uebelmesser \(2024\)](#) but focuses on prior beliefs about the perceived share of immigrants and their perceived unemployment rate. In this paper, we are interested in respondents' prior beliefs about immigration as a social and economic concern without eliciting cognitive effort. Table 12 shows how previous concerns about immigration shape the effects of information treatments on support for entry, predistribution, and redistribution policies, estimating the following heterogeneous treatment regression:



$$\begin{aligned}
Index_i = & \alpha + \beta_1 \text{Treatment } 1_i + \beta_2 \text{Treatment } 2_i + \beta_3 \text{CAI}_i + \beta_4 \text{Treatment } 1_i \times \text{CAI}_i \\
& + \beta_5 \text{Treatment } 2_i \times \text{CAI}_i + \mathbf{X}'_i \delta + \theta \text{ province}_i + \epsilon_i,
\end{aligned}
\tag{2}$$

where the dependent variable  $Index_i$  represents the index of interest,  $Treatment\ 1_i$  is a dummy variable for whether respondent $_i$  received the information treatment “*No aggregate employment effects*”,  $Treatment\ 2_i$  is a dummy for whether respondent $_i$  received the information treatment “*Use of public services*”,  $CAI_i$  is a dummy variable equals 1 when the respondent $_i$  reported being very concern or somewhat concern about immigration,  $X_i$  is a vector of individuals controls which includes dummy variables for gender, age less than 45, political affiliation, having an immigrant relative, having a college degree, being unemployed, household income brackets,  $\theta$  province fixed effects, and  $\epsilon_i$  is an individual-specific error term. We use robust standard errors for all specifications.

Table 12: Effects of information on policy preferences: biases in prior beliefs

|  | Entry support        |                       | Support for predistribution |                       | Support for redistribution |                       |
|--|----------------------|-----------------------|-----------------------------|-----------------------|----------------------------|-----------------------|
|  | (1)                  | (2)                   | (3)                         | (4)                   | (5)                        | (6)                   |
| <i>T1: No aggregate employment effects</i> | -0.00683<br>(0.0418) | -0.0713<br>(0.0480)   | -0.00553<br>(0.0422)        | -0.0269<br>(0.0487)   | 0.0291<br>(0.0422)         | 0.0131<br>(0.0524)    |
| <i>T2: Use of public services</i>          | -0.00165<br>(0.0430) | -0.0687<br>(0.0494)   | 0.0457<br>(0.0421)          | -0.0146<br>(0.0490)   | 0.0877**<br>(0.0440)       | 0.0523<br>(0.0537)    |
| Concerns about immigration (CAI)           |                      | -0.667***<br>(0.0632) |                             | -0.347***<br>(0.0693) |                            | -0.233***<br>(0.0629) |
| T1 $\times$ CAI                            |                      | 0.230***<br>(0.0876)  |                             | 0.0787<br>(0.0949)    |                            | 0.0582<br>(0.0873)    |
| T2 $\times$ CAI                            |                      | 0.247***<br>(0.0911)  |                             | 0.212**<br>(0.0949)   |                            | 0.126<br>(0.0912)     |
| Observations                               | 3,089                | 3,089                 | 3,089                       | 3,089                 | 3,089                      | 3,089                 |
| $R^2$                                      | 0.105                | 0.157                 | 0.113                       | 0.127                 | 0.111                      | 0.117                 |
| Control group mean                         | 0.00                 |                       | 0.00                        |                       | 0.00                       |                       |

*Notes:* The table shows OLS regression results where the dependent variables are Entry Support Index (columns 1-2), Support for Predistribution (columns 3-4), and Support for redistribution (columns 5-6). All the indexes are z-scored using the mean and standard deviation in the control group. T1 and T2 are indicator variables equal to 1 if respondents received the information treatment. CAI is an indicator variable equals 1 if the respondent is very worried or somewhat worried about immigration. Controls included in all regressions are: indicator variables for gender, age less than 45, political affiliation, having an immigrant relative, having a college degree, being unemployed, household income brackets, and province fixed effects. Robust standard errors in parentheses. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

First, concerning support for entry, neither *No aggregate employment effects* nor *Use of public services* treatment show significant main effects (Column 1). However, we find strongly negative and significant effects ( $p < 0.01$ ) on support for entry and integration of immigrants when we include in the regression an indicator to capture concerns about

immigration (CAI). As we might expect, higher levels of concern about immigration imply lower support for immigration entry. In addition, we find highly significant positive treatment effects on respondents' willingness to support more open immigration policies when these respondents were (already) concerned about immigration. In particular, we now find positive treatment effects ranging from about 23 to 24.7 s.d.

Second, similar patterns emerge regarding support for predistribution policies. We find that *Use of public services* treatment has a positive effect on support for predistribution among those respondents who are concerned about immigration, suggesting that the treatment is effective at higher levels of concern about immigration. This could also be interpreted as a result of ceiling effects: natives show high support for redistributive policies, leaving no room for improvement when respondents are not worried about immigration, but not in the opposite case.

Finally, *Use of public services* treatment itself has a positive effect on the support for redistribution. We find no statistically significant differences in the treatment effects related to respondents concerned about immigration. We interpret these results such as those individuals who can be in favor of redistribution were already there. Moreover, prior concerns about immigration turn out to be a crucial source of heterogeneity in the treatment response pattern, i.e., respondents concerned about immigration tend to be less responsive to the treatment in terms of increasing support for immigrant-related policies.

## 7.2 The Role of Social Media

We now examine whether the effects of our information treatments vary when respondents use social media as a source of political information. Given the widespread use of social media platforms to get informed about political news, it is crucial to understand how they shape individuals' political perceptions and policy preferences. In the context of immigration, social media is particularly important by two main features ([Zhuravskaya et al., 2020](#)). First, social media is considered a powerful tool to spread quickly fake news — disinformation or false information that is purposely spread to deceive people. Second, due to the low barriers to entry, marginalized groups that were previously excluded from the political debate can now spread political information, increasing their reach and influence but also making the control of the spread of political information much less effective ([Lazer et al., 2018](#)).

We re-estimate Equation 2 for respondents who use social media to get informed about politics, to identify the heterogeneous effects of social media use on political attitudes and

preferences:

$$\begin{aligned}
 Index_i = & \alpha + \beta_1 \text{ Treatment } 1_i + \beta_2 \text{ Treatment } 2_i + \beta_3 \text{ Social Media}_i \\
 & + \beta_4 \text{ Treatment } 1_i \times \text{ Social Media}_i + \beta_5 \text{ Treatment } 2_i \times \text{ Social Media}_i \quad (3) \\
 & + \mathbf{X}'_i \delta + \theta \text{ province}_i + \epsilon_i,
 \end{aligned}$$

where the dependent variable  $Index_i$  represents the index of interest,  $Treatment\ 1_i$  is a dummy variable for whether respondent $_i$  received the information treatment “*No aggregate employment effects*”,  $Treatment\ 2_i$  is a dummy for whether respondent $_i$  received the information treatment “*Use of public services*”,  $SocialMedia_i$  is a dummy variable equals 1 when the respondent $_i$  gets their political news primarily through social media (e.g., Facebook, Twitter, Instagram, etc.),  $X_i$  is a vector of individuals controls which includes dummy variables for gender, age less than 45, political affiliation, having an immigrant relative, having a college degree, being unemployed, household income brackets,  $\theta$  province fixed effects, and  $\epsilon_i$  is an individual-specific error term. We use robust standard errors for all specifications.

Table 13: Effects of information and use of social media to get politically informed on perceived threats and policy preferences

|  | <b>Labor threat</b><br>(1) | <b>Fiscal burden</b><br>(2) | <b>Cultural threat</b><br>(3) | <b>Entry support</b><br>(4) | <b>Support for redistribution</b><br>(5) | <b>Support for redistribution</b><br>(6) |
|--|----------------------------|-----------------------------|-------------------------------|-----------------------------|--|--|
| <i>T1: No aggregate employment effects</i> | 0.0738<br>(0.0573)         | 0.0558<br>(0.0572)          | -0.0816<br>(0.0570)           | -0.0602<br>(0.0557)         | -0.0539<br>(0.0575)                      | 0.0286<br>(0.0587)                       |
| <i>T2: Use of public services</i>          | 0.0829<br>(0.0562)         | -0.0189<br>(0.0546)         | -0.00616<br>(0.0569)          | -0.0423<br>(0.0561)         | 0.00613<br>(0.0563)                      | -0.0101<br>(0.0577)                      |
| T1 × Social Media                          | -0.196***<br>(0.0740)      | -0.138*<br>(0.0746)         | 0.00836<br>(0.0721)           | 0.0539<br>(0.0738)          | 0.0683<br>(0.0740)                       | 0.0333<br>(0.0783)                       |
| T2 × Social Media                          | -0.220***<br>(0.0739)      | -0.229***<br>(0.0730)       | -0.0444<br>(0.0743)           | 0.102<br>(0.0787)           | 0.122*<br>(0.0734)                       | 0.283***<br>(0.0833)                     |
| Social Media                               | 0.134***<br>(0.0495)       | 0.111**<br>(0.0483)         | 7.22e-05<br>(0.0492)          | -0.0631<br>(0.0487)         | 0.120**<br>(0.0488)                      | 0.0980*<br>(0.0506)                      |
| Observations                               | 2,586                      | 2,586                       | 2,586                         | 2,586                       | 2,586                                    | 2,586                                    |
| $R^2$                                      | 0.111                      | 0.176                       | 0.098                         | 0.114                       | 0.131                                    | 0.127                                    |
| Control group mean                         | 0.00                       | 0.00                        | 0.00                          | 0.00                        | 0.00                                     | 0.00                                     |

*Notes:* The table shows OLS regression results where the dependent variables are perceived threats (columns 1-3) or policy preferences (columns 4-6). All the indexes are z-scored using the mean and standard deviation in the control group. T1 and T2 are indicator variables equal to 1 if respondents received the information treatment.  $SocialMedia_i$  is a dummy variable equals 1 when the respondent $_i$  gets their political news primarily through social media (e.g., Facebook, Twitter, Instagram, etc.). Controls included in all regressions are: indicator variables for gender, age less than 45, political affiliation, having an immigrant relative, having a college degree, being unemployed, household income brackets, and province fixed effects. Robust standard errors in parentheses. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

First, respondents who usually get their political news primarily through social media

are more threatened by immigration than those who get informed through other mass media—such as television, newspapers, radio, social networks, etcetera. In particular, getting political news primarily through social media increases the labor market (fiscal burden) threat by 0.13 s.d. (0.11 s.d.). The “*No aggregate employment effects*” treatment significantly reduces the labor market (fiscal burden) threat index by 0.22 s.d. (0.20 s.d.). Similarly, the “*Use of public services*” treatment reduces the labor market and the fiscal burden threat by 0.23 s.d. and 0.14 s.d., respectively.

Second, “*Use of public services*” treatment increases the support for predistribution and redistribution among individuals who get political information through social media. Specifically, the treatment increases the support for predistribution over those social media users by 0.12 s.d. and the support for redistribution by 0.28 s.d.

In the actual context of the rise of social media, we prove the importance of accurate information in the natives’ formation of perceptions and policy preferences. We find that the effect of information treatments mitigates the perception of threat on those individuals who get political news through social media. Also, the effects remain positive on the support for integration policies.

## 8 Conclusions

This paper examines the native population’s perceptions and attitudes toward immigration in Spain and their implications for support or opposition to immigration policies. We find that natives tend to overestimate immigration (innumeracy), underestimate immigrants’ economic conditions, and exaggerate its negative effects on the labor market, welfare state, culture, and security. Moreover, respondents perceive structural factors as more important than individual characteristics in explaining immigrant-native labor market gaps. Our analysis also examines preferences for immigration entry requirements and integration policies.

First, we find that misperceptions and feelings of threat strongly predict opposition to immigration entry. Second, respondents who believe that immigrants’ characteristics cause immigrant-native labor market gaps, present higher opposition to integration policies. Third, more educated individuals and left-wing voters are more supportive of immigration, both their entry and integration. Overall, respondents prefer predistribution policies over redistribution policies.

Providing information about the non-aggregate employment effects of immigrant integration into the labor market and factual information about immigrants’ use of public

services significantly increases support for increased immigration and also increases support for redistributive policies. Our experimental results reveal other remarkable insights. First, providing the public with information about the complementarities between native and immigrant workers in the labor market reduces the sense of cultural threat, a critical factor in predicting anti-immigrant sentiment. Second, informing the public about immigrant resource use not only corrects misperceptions about unemployment and welfare use, but also reduces the perceived fiscal burden.

However, we find heterogeneous treatment effects depending on respondents' prior beliefs about immigration and social media use. First, we find that information highly improves support for immigrant entry and support for redistribution among those respondents concerned about immigration, where prejudices might play a role in forming preferences about immigrant integration policies. These results suggest that while emphasizing immigrants' positive contributions to welfare may increase public support for redistributive policies, its effect on redistributive policies may be more limited, underscoring the importance of considering individuals' prior concerns about immigration when assessing the effectiveness of information treatments in shaping support for immigration-related policies. Second, we find a positive relationship between getting political news through social media and the sense of labor market and fiscal burden threat. Providing individuals with accurate information about immigration reduces those perceptions significantly.

Our findings underscore the importance of addressing misinformation to promote immigrant integration. Policies should focus on alleviating identity and economic concerns among the native population in order to increase social cohesion and economic wellbeing. Our paper also highlights the importance of focusing on preventive measures rather than intervening through higher taxes and benefits to address income inequality. Our results show that there's already significant public support for these policies – more than 60% of respondents were in favor. This support creates a favorable environment for the effective implementation of such policies. Therefore, policymakers should leverage this support by prioritizing redistributive policies to address income inequality for long-term socioeconomic progress.

## References

- A. Clemens, M. (2022). Migration on the rise, a paradigm in decline: The last half-century of global mobility. In *AEA Papers and Proceedings*, volume 112, pages 257–261. American Economic Association 2014 Broadway, Suite 305, Nashville, TN 37203.
- Ajzenman, N., Dominguez, P., and Undurraga, R. (2023). Immigration, crime, and crime (mis) perceptions. *American Economic Journal: Applied Economics*, 15(4):142–176.
- Alesina, A., Ferroni, M. F., and Stantcheva, S. (2021). Perceptions of racial gaps, their causes, and ways to reduce them. Technical report, National Bureau of Economic Research.
- Alesina, A., Miano, A., and Stantcheva, S. (2023). Immigration and redistribution. *The Review of Economic Studies*, 90(1):1–39.
- Alesina, A., Stantcheva, S., and Teso, E. (2018). Intergenerational mobility and preferences for redistribution. *American Economic Review*, 108(2):521–554.
- Alesina, A. and Tabellini, M. (2022). The political effects of immigration: Culture or economics? Technical report, National Bureau of Economic Research.
- Barrera, O., Guriev, S., Henry, E., and Zhuravskaya, E. (2020). Facts, alternative facts, and fact checking in times of post-truth politics. *Journal of Public Economics*, 182.
- Blinder, S. (2015). Imagined immigration: The impact of different meanings of ‘immigrants’ in public opinion and policy debates in Britain. *Political Studies*, 63(1):80–100.
- Boeri, T., Gamalerio, M., Morelli, M., and Negri, M. (2023). Pay-as-they-get-in: Attitudes towards migrants and pension systems. *BAFFI CAREFIN Centre Research Paper*.
- Borjas, G. J. (1999). Immigration and welfare magnets. *Journal of Labor Economics*, 17(4):607–637.
- Borjas, G. J. (2001). Does immigration grease the wheels of the labor market? *Brookings papers on economic activity*, 2001(1):69–133.
- Bozio, A., Garbinti, B., Goupille-Lebret, J., Guillot, M., and Piketty, T. (2020). Predistribution vs. redistribution: Evidence from France and the US. Technical report, Center for Research in Economics and Statistics.

- Card, D. (2005). Is the new immigration really so bad? *The economic journal*, 115(507):F300–F323.
- Card, D., Dustmann, C., and Preston, I. (2005). Understanding attitudes to immigration: The migration and minority module of the first european social survey. centre for research and analysis of migration. Technical report, Discussion Paper No03/05. London.
- Card, D., Dustmann, C., and Preston, I. (2012). Immigration, wages, and compositional amenities. *Journal of the European Economic Association*, 10:78–119.
- Card, D., Kluve, J., and Weber, A. (2010). Active labour market policy evaluations: A meta-analysis. *The economic journal*, 120(548):F452–F477.
- Citrin, J. and Sides, J. (2008). Immigration and the imagined community in europe and the united states. *Political Studies*, 56(1):33–56.
- Davis, L. and Deole, S. S. (2017). Immigration and the rise of far-right parties in europe. *ifo DICE Report*, 15(4):10–15.
- Domènech-Arumí, G. (2023). Neighborhoods, perceived inequality, and preferences for redistribution: Evidence from barcelona. *Available at SSRN 3863594*.
- Dustmann, C. and Preston, I. (2006). Is immigration good or bad for the economy? analysis of attitudinal responses. In *The economics of immigration and social diversity*, volume 24, pages 3–34. Emerald Group Publishing Limited.
- Dustmann, C. and Preston, I. P. (2007). Racial and economic factors in attitudes to immigration. *The BE Journal of Economic Analysis & Policy*, 7(1).
- Dylong, P. and Uebelmesser, S. (2024). Biased beliefs about immigration and economic concerns: Evidence from representative experiments. *Journal of Economic Behavior & Organization*, 217:453–482.
- Fitzgerald, J., Curtis, K. A., and Corliss, C. L. (2012). Anxious publics: Worries about crime and immigration. *Comparative Political Studies*, 45(4):477–506.
- Golin, M. and Romarri, A. (2023). Broadband internet and attitudes towards migrants: Evidence from spain. *Available at SSRN 4390253*.

- Gorodzeisky, A. and Semyonov, M. (2020). Perceptions and misperceptions: actual size, perceived size and opposition to immigration in european societies. *Journal of Ethnic and Migration Studies*, 46(3):612–630.
- Green, E. G. (2009). Who can enter? a multilevel analysis on public support for immigration criteria across 20 european countries. *Group Processes & Intergroup Relations*, 12(1):41–60.
- Grigorieff, A., Roth, C., and Ubfal, D. (2020). Does information change attitudes toward immigrants? *Demography*, 57(3):1117–1143.
- Haaland, I. and Roth, C. (2020). Labor market concerns and support for immigration. *Journal of Public Economics*, 191.
- Haaland, I., Roth, C., and Wohlfart, J. (2023). Designing information provision experiments. *Journal of economic literature*, 61(1):3–40.
- Hainmueller, J. and Hopkins, D. J. (2014). Public attitudes toward immigration. *Annual Review of Political Science*, 17:225–249.
- Homola, J. (2021). Partisanship and perceived threats about immigration. *Party Politics*, 27(5):977–982.
- Hopkins, D. J., Sides, J., and Citrin, J. (2019). The muted consequences of correct information about immigration. *Journal of Politics*, 81:315–320.
- Inglehart, R. F. and Norris, P. (2016). Trump, brexit, and the rise of populism: Economic have-nots and cultural backlash. *HKS Working paper no. RWP16-026*.
- Javdani, M. (2020). Public attitudes toward immigration—determinants and unknowns. *IZA World of Labor*.
- Kling, J. R., Liebman, J. B., and Katz, L. F. (2007). Experimental analysis of neighborhood effects. *Econometrica*, 75(1):83–119.
- Kogan, I. (2016). Integration policies and immigrants' labor market outcomes in europe. *Sociological science*, 3:335–358.
- Lazear, E. P. (1999). Culture and language. *Journal of political Economy*, 107(S6):S95–S126.



- Lazer, D. M., Baum, M. A., Benkler, Y., Berinsky, A. J., Greenhill, K. M., Menczer, F., Metzger, M. J., Nyhan, B., Pennycook, G., Rothschild, D., et al. (2018). The science of fake news. *Science*, 359(6380):1094–1096.
- LeVine, R. A. (1972). Ethnocentrism: Theories of conflict, ethnic attitudes and group behavior. (*No Title*).
- Lutz, P. and Bitschnau, M. (2023). Misperceptions about immigration: Reviewing their nature, motivations and determinants. *British Journal of Political Science*, 53:674–689.
- Mangum, M. (2019). Revisiting economic threat and cultural concerns: public opinion toward immigration and non-citizens by race. *Social science research*, 83:102309.
- Orrenius, P. M. (2017). New findings on the fiscal impact of immigration in the united states. Technical report, FRB of Dallas Working Paper.
- Ottaviano, G. I. and Peri, G. (2012). Rethinking the effect of immigration on wages. *Journal of the European economic association*, 10(1):152–197.
- Rodriguez-Justicia, D. and Theilen, B. (2022). Immigration and tax morale: the role of perceptions and prejudices. *Empirical Economics*, 62(4):1801–1832.
- Senik, C., Stichnoth, H., and Van der Straeten, K. (2009). Immigration and natives' attitudes towards the welfare state: evidence from the european social survey. *Social indicators research*, 91:345–370.
- Stantcheva, S. (2023). How to run surveys: A guide to creating your own identifying variation and revealing the invisible. *Annual Review of Economics*, 15:205–234.
- Steele, L. G. and Perkins, K. M. (2019). The effects of perceived neighborhood immigrant population size on preferences for redistribution in new york city: a pilot study. *Frontiers in Sociology*, page 18.
- Tabellini, M. (2020). Gifts of the immigrants, woes of the natives: Lessons from the age of mass migration. *The Review of Economic Studies*, 87(1):454–486.
- Zhuravskaya, E., Petrova, M., and Enikolopov, R. (2020). Political effects of the internet and social media. *Annual review of economics*, 12:415–438.

# Appendix

Table A1: Survey representativity by provinces

|               | <b>Total Sample</b> | <b>Population</b> |                        | <b>Total Sample</b> | <b>Population</b> |
|---------------|---------------------|-------------------|------------------------|---------------------|-------------------|
|               | <b>(1)</b>          | <b>(2)</b>        |                        | <b>(3)</b>          | <b>(4)</b>        |
| Álava         | 0.01                | 0.01              | Lleida                 | 0.01                | 0.01              |
| Albacete      | 0.04                | 0.01              | La Rioja               | 0.01                | 0.01              |
| Alicante      | 0.01                | 0.04              | Lugo                   | 0.01                | 0.01              |
| Almería       | 0.01                | 0.02              | Madrid                 | 0.13                | 0.15              |
| Ávila         | 0.00                | 0.00              | Málaga                 | 0.04                | 0.04              |
| Badajoz       | 0.02                | 0.01              | Murcia                 | 0.03                | 0.03              |
| Illes Balears | 0.02                | 0.03              | Navarra                | 0.01                | 0.01              |
| Barcelona     | 0.11                | 0.12              | Ourense                | 0.01                | 0.01              |
| Burgos        | 0.01                | 0.01              | Asturias               | 0.02                | 0.02              |
| Cáceres       | 0.01                | 0.01              | Palencia               | 0.00                | 0.00              |
| Cádiz         | 0.03                | 0.03              | Las Palmas             | 0.03                | 0.03              |
| Castellón     | 0.01                | 0.01              | Pontevedra             | 0.02                | 0.02              |
| Ciudad Real   | 0.01                | 0.01              | Salamanca              | 0.01                | 0.01              |
| Córdoba       | 0.02                | 0.02              | Santa Cruz de Tenerife | 0.02                | 0.02              |
| A Coruña      | 0.02                | 0.02              | Cantabria              | 0.01                | 0.01              |
| Cuenca        | 0.00                | 0.00              | Segovia                | 0.00                | 0.00              |
| Girona        | 0.01                | 0.02              | Sevilla                | 0.05                | 0.04              |
| Granada       | 0.02                | 0.02              | Soria                  | 0.00                | 0.00              |
| Guadalajara   | 0.01                | 0.01              | Tarragona              | 0.02                | 0.02              |
| Guipúzcoa     | 0.02                | 0.01              | Teruel                 | 0.00                | 0.00              |
| Huelva        | 0.01                | 0.01              | Toledo                 | 0.02                | 0.02              |
| Huesca        | 0.00                | 0.00              | Valencia               | 0.06                | 0.06              |
| Jaén          | 0.02                | 0.01              | Valladolid             | 0.01                | 0.01              |
| León          | 0.01                | 0.01              | Vizcaya                | 0.02                | 0.02              |

**Notes:** This table presents the distribution of respondents re-weighting the sample by provinces (odd columns) along with the actual distribution of the population among provinces (even columns). We use the Continuous Population Statistics (CPS) at 1 October 2023.

Table A2: Correlations between main outcomes of interest and (mis)perceptions and perceived causes indices

|                                    | Entry Support Index   |                       |                       | Support for Predistribution Index |                       |                        | Support for Redistribution Index |                       |                       |
|------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------------------|-----------------------|------------------------|----------------------------------|-----------------------|-----------------------|
|                                    | (1)                   | (2)                   | (3)                   | (4)                               | (5)                   | (6)                    | (7)                              | (8)                   | (9)                   |
| Misperceptions Index               | -0.0440<br>(0.0324)   | -0.0446<br>(0.0352)   | -0.0459<br>(0.0355)   | -0.0696**<br>(0.0354)             | -0.0329<br>(0.0370)   | -0.0343<br>(0.0389)    | -0.00340<br>(0.0319)             | 0.0140<br>(0.0334)    | 0.00715<br>(0.0347)   |
| Labor Threat Index                 | -0.112***<br>(0.0397) | -0.118***<br>(0.0412) | -0.113**<br>(0.0445)  | -0.118**<br>(0.0457)              | -0.114**<br>(0.0456)  | -0.132***<br>(0.0458)  | -0.0512<br>(0.0384)              | -0.0630*<br>(0.0381)  | -0.0626<br>(0.0391)   |
| Fiscal Burden Index                | -0.257***<br>(0.0415) | -0.230***<br>(0.0443) | -0.227***<br>(0.0457) | -0.0984**<br>(0.0473)             | -0.0754<br>(0.0485)   | -0.0688<br>(0.0491)    | -0.190***<br>(0.0440)            | -0.135***<br>(0.0437) | -0.150***<br>(0.0447) |
| Cultural and Security Threat Index | -0.176***<br>(0.0343) | -0.173***<br>(0.0340) | -0.178***<br>(0.0345) | 0.0187<br>(0.0399)                | 0.0143<br>(0.0408)    | 0.0233<br>(0.0402)     | -0.00981<br>(0.0346)             | -0.0161<br>(0.0343)   | -0.00145<br>(0.0358)  |
| Individual Causes Index            | -0.115***<br>(0.0363) | -0.104***<br>(0.0370) | -0.101***<br>(0.0385) | -0.0838**<br>(0.0409)             | -0.0968**<br>(0.0401) | -0.109***<br>(0.0410)  | -0.0144<br>(0.0435)              | -0.0194<br>(0.0432)   | -0.0178<br>(0.0424)   |
| Discriminatory Index               | 0.117***<br>(0.0304)  | 0.104***<br>(0.0320)  | 0.121***<br>(0.0328)  | 0.209***<br>(0.0354)              | 0.188***<br>(0.0369)  | 0.182***<br>(0.0375)   | 0.136***<br>(0.0329)             | 0.118***<br>(0.0332)  | 0.114***<br>(0.0349)  |
| Institutional Index                | 0.0131<br>(0.0387)    | 0.00502<br>(0.0391)   | -0.00548<br>(0.0392)  | 0.250***<br>(0.0420)              | 0.244***<br>(0.0414)  | 0.254***<br>(0.0412)   | 0.122***<br>(0.0429)             | 0.120***<br>(0.0433)  | 0.130***<br>(0.0424)  |
| Male                               |                       | -0.0101<br>(0.0310)   | -0.0101<br>(0.0315)   |                                   | 0.0186<br>(0.0331)    | 0.0170<br>(0.0341)     |                                  | 0.0157<br>(0.0333)    | 0.0117<br>(0.0336)    |
| Young                              |                       | 0.0203<br>(0.0297)    | 0.0162<br>(0.0311)    |                                   | -0.102***<br>(0.0323) | -0.0893***<br>(0.0335) |                                  | -0.0512<br>(0.0322)   | -0.0473<br>(0.0336)   |
| University Studies                 |                       | 0.0190<br>(0.0307)    | 0.0122<br>(0.0326)    |                                   | 0.0421<br>(0.0343)    | 0.0374<br>(0.0353)     |                                  | 0.0524<br>(0.0341)    | 0.0368<br>(0.0349)    |
| Left-wing Ideology                 |                       | 0.0642<br>(0.0447)    | 0.0529<br>(0.0433)    |                                   | 0.134***<br>(0.0501)  | 0.147***<br>(0.0502)   |                                  | 0.146***<br>(0.0490)  | 0.153***<br>(0.0496)  |
| Right-wing Ideology                |                       | -0.0139<br>(0.0441)   | -0.00557<br>(0.0437)  |                                   | 0.0337<br>(0.0488)    | 0.0487<br>(0.0495)     |                                  | 0.0204<br>(0.0447)    | 0.0452<br>(0.0453)    |
| Other Ideology                     |                       | 0.0472<br>(0.0302)    | 0.0505*<br>(0.0297)   |                                   | 0.0299<br>(0.0337)    | 0.0256<br>(0.0328)     |                                  | 0.0514<br>(0.0353)    | 0.0530<br>(0.0346)    |
| Immigrant Relative                 |                       | -0.00309<br>(0.0259)  | 0.00766<br>(0.0269)   |                                   | 0.0527*<br>(0.0311)   | 0.0465<br>(0.0317)     |                                  | 0.0555*<br>(0.0324)   | 0.0398<br>(0.0332)    |
| Unemployed                         |                       | 0.00626<br>(0.0278)   | 0.0163<br>(0.0289)    |                                   | 0.0929***<br>(0.0308) | 0.0973***<br>(0.0329)  |                                  | 0.0484<br>(0.0307)    | 0.0367<br>(0.0329)    |
| Monthly net household income 1     |                       | 0.0543<br>(0.0359)    | 0.0396<br>(0.0365)    |                                   | 0.0232<br>(0.0411)    | 0.0243<br>(0.0423)     |                                  | 0.159***<br>(0.0367)  | 0.139***<br>(0.0386)  |
| Monthly net household income 2     |                       | 0.00867<br>(0.0391)   | -0.00550<br>(0.0392)  |                                   | 0.0838*<br>(0.0427)   | 0.0787*<br>(0.0440)    |                                  | 0.124***<br>(0.0383)  | 0.101**<br>(0.0396)   |
| Monthly net household income 3     |                       | 0.0289<br>(0.0343)    | 0.0145<br>(0.0357)    |                                   | 0.0777*<br>(0.0406)   | 0.0779*<br>(0.0416)    |                                  | 0.0520<br>(0.0371)    | 0.0346<br>(0.0379)    |
| Observations                       | 1,017                 | 1,015                 | 1,015                 | 1,017                             | 1,015                 | 1,015                  | 1,017                            | 1,015                 | 1,015                 |
| R <sup>2</sup>                     | 0.307                 | 0.317                 | 0.365                 | 0.179                             | 0.217                 | 0.269                  | 0.111                            | 0.157                 | 0.216                 |
| Respondents' characteristics       |                       | ✓                     | ✓                     |                                   | ✓                     | ✓                      |                                  | ✓                     | ✓                     |
| Province fixed effects             |                       |                       | ✓                     |                                   |                       | ✓                      |                                  |                       | ✓                     |
| Control group mean                 |                       | 0.00                  |                       |                                   | 0.00                  |                        |                                  | 0.00                  |                       |

Notes: The table shows OLS regression results where the dependent variables are Entry Support Index (columns 1-3), Support for Predistribution (columns 4-6), and Support for redistribution (columns 7-9). All the indexes are z-scored using the mean and standard deviation in the control group. Robust standard errors in parentheses. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

Table A3: Correlations between main outcomes of interest and socio-demographic characteristics

|                                | Entry Support Index<br>(1) | Support for Predistribution Index<br>(2) | Support for Redistribution Index<br>(3) |
|--------------------------------|----------------------------|--|---|
| Male                           | -0.0164<br>(0.0347)        | 0.0179<br>(0.0351)                       | 0.00499<br>(0.0332)                     |
| Young                          | 0.0335<br>(0.0351)         | -0.0991***<br>(0.0352)                   | -0.0525<br>(0.0341)                     |
| University Studies             | 0.0580<br>(0.0383)         | 0.0879**<br>(0.0379)                     | 0.0704*<br>(0.0368)                     |
| Left-wing                      | 0.159***<br>(0.0519)       | 0.227***<br>(0.0529)                     | 0.213***<br>(0.0498)                    |
| Right-wing                     | -0.110**<br>(0.0506)       | -0.00142<br>(0.0528)                     | -0.00659<br>(0.0464)                    |
| Other party                    | 0.0934**<br>(0.0398)       | 0.0444<br>(0.0372)                       | 0.0698*<br>(0.0372)                     |
| Immigrant Relative             | 0.0202<br>(0.0310)         | 0.0577*<br>(0.0348)                      | 0.0529<br>(0.0352)                      |
| Unemployed                     | -0.00120<br>(0.0335)       | 0.0869**<br>(0.0347)                     | 0.0331<br>(0.0340)                      |
| Monthly net household income 1 | 0.0430<br>(0.0433)         | 0.0244<br>(0.0450)                       | 0.143***<br>(0.0400)                    |
| Monthly net household income 2 | 0.0322<br>(0.0460)         | 0.0976**<br>(0.0468)                     | 0.118***<br>(0.0406)                    |
| Monthly net household income 3 | 0.0258<br>(0.0405)         | 0.108**<br>(0.0429)                      | 0.0450<br>(0.0386)                      |
| Observations                   | 1,015                      | 1,015                                    | 1,015                                   |
| $R^2$                          | 0.139                      | 0.152                                    | 0.149                                   |
| Province fixed effects         | ✓                          | ✓  | ✓                                       |
| Control group mean             | 0.00                       | 0.00                                     | 0.00                                    |

Notes: The table shows OLS regression results where the dependent variables are Entry Support Index (column 1), Support for Predistribution (column 2), and Support for redistribution (column 3). All the indexes are z-scored using the mean and standard deviation in the control group. Robust standard errors in parentheses. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

Table A4: Distribution of Causes indices among socio-demographic groups

|                             | Individual factors index |         | Discriminatory factors index |         | Structural factors index |         |
|-----------------------------|--------------------------|---------|------------------------------|---------|--------------------------|---------|
|                             | Mean                     | P-value | Mean                         | P-value | Mean                     | P-value |
| <b>Gender</b>               |                          |         |                              |         |                          |         |
| Male                        | -0.03                    | 0.18    | -0.05                        | 0.15    | -0.03                    | 0.26    |
| Female                      | 0.03                     |         | 0.05                         |         | 0.03                     |         |
| <b>Age</b>                  |                          |         |                              |         |                          |         |
| 18-24                       | -0.21                    | 0.00    | -0.07                        | 0.01    | -0.14                    | 0.09    |
| 25-34                       | -0.13                    |         | -0.18                        |         | -0.12                    |         |
| 35-44                       | -0.09                    |         | 0.00                         |         | -0.05                    |         |
| 45-54                       | 0.14                     |         | -0.01                        |         | 0.03                     |         |
| 55-65                       | 0.10                     |         | 0.16                         |         | 0.15                     |         |
| <b>Education</b>            |                          |         |                              |         |                          |         |
| Uneducated                  | 0.42                     | 0.38    | -0.25                        | 0.00    | -0.30                    | 0.02    |
| Primary education           | -0.06                    |         | -0.18                        |         | -0.15                    |         |
| Secondary education         | -0.02                    |         | -0.06                        |         | -0.03                    |         |
| University studies          | 0.04                     |         | 0.18                         |         | 0.13                     |         |
| <b>Political Ideology</b>   |                          |         |                              |         |                          |         |
| Left-wing voter             | -0.03                    | 0.05    | 0.29                         | 0.00    | 0.07                     | 0.04    |
| Right-wing voter            | 0.10                     |         | -0.28                        |         | -0.04                    |         |
| <b>Household income</b>     |                          |         |                              |         |                          |         |
| Lower than €1499            | -0.04                    | 0.58    | -0.11                        | 0.00    | -0.09                    | 0.04    |
| €1500 - €2999               | 0.01                     |         | 0.05                         |         | 0.01                     |         |
| More than €3000             | -0.04                    |         | 0.23                         |         | 0.14                     |         |
| <b>Labor situation</b>      |                          |         |                              |         |                          |         |
| Employed                    | -0.01                    | 0.79    | 0.02                         | 0.06    | 0.01                     | 0.75    |
| Unemployed                  | 0.05                     |         | -0.19                        |         | -0.05                    |         |
| Economically inactive       | 0.01                     |         | 0.03                         |         | 0.00                     |         |
| <b>Immigrant ties</b>       |                          |         |                              |         |                          |         |
| Related to an immigrant     | 0.08                     | 0.64    | 0.02                         | 0.96    | 0.02                     | 0.98    |
| Not related to an immigrant | -0.02                    |         | 0.00                         |         | 0.00                     |         |

*Notes:* The P-value column is obtained by applying the Wald test after a regression on the index and the variable of interest. The null hypothesis is that the means are equal between the groups. Sample: respondents who have not seen any information treatment.

Table A5: Treatment effects on (mis)perceptions and perceived causes - Complete results

|  | Misperceptions<br>(All)<br>(1) | Labor<br>threat<br>(2) | Fiscal<br>burden<br>(3) | Cultural<br>threat<br>(4) | Personal<br>characteristics<br>(5) | Discriminatory<br>factors<br>(6) | Structural<br>factors<br>(7) |
|--|--------------------------------|------------------------|-------------------------|---------------------------|------------------------------------|----------------------------------|------------------------------|
| <i>T1: No aggregate employment effects</i> | -0.0149<br>(0.0399)            | -0.0279<br>(0.0419)    | -0.0389<br>(0.0411)     | -0.104**<br>(0.0413)      | 0.000475<br>(0.0431)               | -0.0832**<br>(0.0421)            | -0.0165<br>(0.0428)          |
| <i>T2: Use of public services</i>          | -0.101**<br>(0.0416)           | -0.0239<br>(0.0421)    | -0.116***<br>(0.0411)   | -0.0361<br>(0.0423)       | 0.0222<br>(0.0434)                 | -0.0321<br>(0.0416)              | 0.0534<br>(0.0426)           |
| Male                                       | -0.353***<br>(0.0338)          | 0.0297<br>(0.0347)     | 0.00548<br>(0.0340)     | 0.0949***<br>(0.0346)     | -0.0746**<br>(0.0363)              | -0.120***<br>(0.0351)            | -0.148***<br>(0.0353)        |
| Young                                      | 0.241***<br>(0.0344)           | 0.00935<br>(0.0351)    | -0.0724**<br>(0.0342)   | 0.001000<br>(0.0353)      | -0.145***<br>(0.0367)              | -0.0555<br>(0.0352)              | -0.138***<br>(0.0360)        |
| University Studies                         | -0.245***<br>(0.0371)          | -0.253***<br>(0.0385)  | -0.158***<br>(0.0387)   | -0.118***<br>(0.0379)     | -0.0208<br>(0.0404)                | 0.239***<br>(0.0396)             | 0.111***<br>(0.0389)         |
| Left-wing                                  | -0.408***<br>(0.0571)          | -0.230***<br>(0.0541)  | -0.348***<br>(0.0539)   | -0.198***<br>(0.0540)     | 0.0114<br>(0.0554)                 | 0.402***<br>(0.0552)             | 0.191***<br>(0.0558)         |
| Right-wing                                 | -0.00734<br>(0.0586)           | 0.230***<br>(0.0572)   | 0.373***<br>(0.0551)    | 0.268***<br>(0.0580)      | 0.0549<br>(0.0578)                 | -0.0918<br>(0.0584)              | 0.0275<br>(0.0591)           |
| Other party                                | -0.245***<br>(0.0859)          | -0.125<br>(0.0852)     | -0.233***<br>(0.0857)   | -0.0917<br>(0.0877)       | -0.119<br>(0.0867)                 | 0.335***<br>(0.0844)             | 0.158*<br>(0.0819)           |
| Immigrant Relative                         | -0.0299<br>(0.0439)            | -0.0639<br>(0.0460)    | -0.0114<br>(0.0462)     | 0.0425<br>(0.0456)        | 0.0592<br>(0.0482)                 | 0.0528<br>(0.0456)               | 0.0593<br>(0.0454)           |
| Unemployed                                 | 0.0866<br>(0.0614)             | 0.123**<br>(0.0584)    | 0.0200<br>(0.0559)      | 0.111*<br>(0.0585)        | 0.0309<br>(0.0596)                 | -0.0591<br>(0.0574)              | 0.0475<br>(0.0580)           |
| Monthly net income 1                       | 0.0475<br>(0.0537)             | 0.0904*<br>(0.0527)    | 0.0256<br>(0.0504)      | 0.116**<br>(0.0526)       | -0.0364<br>(0.0548)                | -0.0776<br>(0.0531)              | -0.0252<br>(0.0535)          |
| Monthly net income 2                       | -0.141***<br>(0.0461)          | -0.00191<br>(0.0469)   | -0.0266<br>(0.0453)     | 0.0896*<br>(0.0470)       | -0.0659<br>(0.0479)                | 0.102**<br>(0.0469)              | 0.0203<br>(0.0467)           |
| Monthly net income 3                       | -0.294***<br>(0.0530)          | -0.114**<br>(0.0558)   | -0.0643<br>(0.0561)     | 0.155***<br>(0.0580)      | 0.00442<br>(0.0579)                | 0.249***<br>(0.0569)             | 0.116**<br>(0.0562)          |
| Constant                                   | 0.450***<br>(0.104)            | -0.0828<br>(0.0899)    | -0.0352<br>(0.0949)     | -0.211**<br>(0.0931)      | 0.0688<br>(0.0979)                 | -0.00227<br>(0.0921)             | -0.0640<br>(0.0980)          |
| Observations                               | 3,089                          | 3,089                  | 3,089                   | 3,089                     | 3,089                              | 3,089                            | 3,089                        |
| $R^2$                                      | 0.151                          | 0.102                  | 0.158                   | 0.093                     | 0.025                              | 0.137                            | 0.042                        |
| Province fixed effects                     | ✓                              | ✓                      | ✓                       | ✓                         | ✓                                  | ✓                                | ✓                            |
| Control group mean                         | 0.00                           | 0.00                   | 0.00                    | 0.00                      | 0.00                               | 0.00                             | 0.00                         |

Notes: The table shows OLS regression results where the dependent variables are misperceptions indices (column 1), perceived effects of immigration (columns 2-4), and perceived causes indices (columns 5-7), all z-scored using the mean and standard deviation in the control group. T1 and T2 are indicator variables equal to 1 if respondents received the information treatment. The categories of monthly net household income are *up to 1499 €*, *1500-2999 €* and *more than 3000 €*, respectively. Robust standard errors in parentheses. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

Table A6: Treatment effects on immigrant-related policy preferences - Complete results

|  | Entry support<br>Index<br>(1) | Support for<br>Predistribution<br>(2) | Support for<br>Redistribution<br>(3) |
|--|-------------------------------|---------------------------------------|--------------------------------------|
| <i>T1: No aggregate employment effects</i> | -0.00683<br>(0.0418)          | -0.00553<br>(0.0422)                  | 0.0291<br>(0.0422)                   |
| <i>T2: Use of public services</i>          | -0.00165<br>(0.0430)          | 0.0457<br>(0.0421)                    | 0.0877**<br>(0.0440)                 |
| Male                                       | -0.00474<br>(0.0352)          | -0.0293<br>(0.0350)                   | 0.0221<br>(0.0359)                   |
| Young                                      | 0.0451<br>(0.0357)            | -0.181***<br>(0.0355)                 | -0.0864**<br>(0.0361)                |
| University Studies                         | 0.160***<br>(0.0397)          | 0.267***<br>(0.0390)                  | 0.200***<br>(0.0428)                 |
| Left-wing                                  | 0.292***<br>(0.0557)          | 0.397***<br>(0.0548)                  | 0.480***<br>(0.0522)                 |
| Right-wing                                 | -0.235***<br>(0.0568)         | -0.0405<br>(0.0569)                   | -0.0369<br>(0.0508)                  |
| Other party                                | 0.353***<br>(0.0877)          | 0.310***<br>(0.0849)                  | 0.340***<br>(0.0905)                 |
| Immigrant Relative                         | 0.0260<br>(0.0453)            | 0.122***<br>(0.0465)                  | 0.207***<br>(0.0530)                 |
| Unemployed                                 | 0.0251<br>(0.0580)            | 0.139**<br>(0.0561)                   | 0.122**<br>(0.0589)                  |
| Monthly net income 1                       | -0.0828<br>(0.0533)           | -0.0115<br>(0.0528)                   | 0.194***<br>(0.0515)                 |
| Monthly net income 2                       | 0.0261<br>(0.0471)            | 0.127***<br>(0.0470)                  | 0.109**<br>(0.0461)                  |
| Monthly net income 3                       | 0.0617<br>(0.0581)            | 0.235***<br>(0.0572)                  | 0.162***<br>(0.0593)                 |
| Constant                                   | -0.0745<br>(0.102)            | -0.116<br>(0.0971)                    | -0.271***<br>(0.102)                 |
| Province fixed effects                     | ✓                             | ✓                                     | ✓                                    |
| Observations                               | 3,089                         | 3,089                                 | 3,089                                |
| $R^2$                                      | 0.105                         | 0.113                                 | 0.111                                |
| Control group mean                         | 0.00                          | 0.00                                  | 0.00                                 |

*Notes:* The table shows OLS regression results where the dependent variables are misperceptions indices (column 1), perceived effects of immigration (columns 2-4), and perceived causes indices (columns 5-7), all z-scored using the mean and standard deviation in the control group. T1 and T2 are indicator variables equal to 1 if respondents received the information treatment. The categories of monthly net household income are *up to 1499 €*, *1500-2999 €* and *more than 3000 €*, respectively. Robust standard errors in parentheses. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

Table A7: Effects of information and previous concerns on (mis)perceptions, perceived causes, and policy preferences - Complete results

|  | Misperceptions<br>(All)<br>(1) | Labor<br>threat<br>(2) | Fiscal<br>burden<br>(3) | Cultural<br>threat<br>(4) | Personal<br>characteristics<br>(5) |
|--|--------------------------------|------------------------|-------------------------|---------------------------|------------------------------------|
| <i>T1: No aggregate employment effects</i>       | 0.0231<br>(0.0440)             | 0.0217<br>(0.0455)     | 0.0131<br>(0.0477)      | -0.0667<br>(0.0430)       | 0.0104<br>(0.0510)                 |
| <i>T2: Use of public services</i>                | -0.103**<br>(0.0450)           | 0.00444<br>(0.0458)    | -0.111**<br>(0.0468)    | 0.000832<br>(0.0448)      | 0.0279<br>(0.0512)                 |
| <i>T1: No aggregate employment effects</i> × CAI | -0.138<br>(0.0926)             | -0.181*<br>(0.0936)    | -0.189**<br>(0.0845)    | -0.139<br>(0.0971)        | -0.0407<br>(0.0945)                |
| <i>T2: Use of public services</i> × CAI          | -0.0162<br>(0.0957)            | -0.122<br>(0.0927)     | -0.0471<br>(0.0833)     | -0.147<br>(0.0985)        | -0.0338<br>(0.0946)                |
| CAI  | 0.506***<br>(0.0702)           | 0.690***<br>(0.0694)   | 0.694***<br>(0.0608)    | 0.628***<br>(0.0722)      | 0.350***<br>(0.0701)               |
| Male   | -0.336***<br>(0.0332)          | 0.0510<br>(0.0334)     | 0.0277<br>(0.0323)      | 0.114***<br>(0.0336)      | -0.0625*<br>(0.0359)               |
| Young  | 0.262***<br>(0.0336)           | 0.0374<br>(0.0338)     | -0.0437<br>(0.0328)     | 0.0267<br>(0.0342)        | -0.129***<br>(0.0364)              |
| University Studies                               | -0.209***<br>(0.0367)          | -0.208***<br>(0.0374)  | -0.110***<br>(0.0373)   | -0.0783**<br>(0.0365)     | 0.00410<br>(0.0402)                |
| Left-wing  | -0.378***<br>(0.0559)          | -0.190***<br>(0.0511)  | -0.306***<br>(0.0521)   | -0.162***<br>(0.0526)     | 0.0327<br>(0.0552)                 |
| Right-wing                                       | -0.0730<br>(0.0573)            | 0.145***<br>(0.0542)   | 0.284***<br>(0.0533)    | 0.191***<br>(0.0564)      | 0.00731<br>(0.0576)                |
| Other party                                      | -0.229***<br>(0.0843)          | -0.107<br>(0.0816)     | -0.212***<br>(0.0812)   | -0.0768<br>(0.0855)       | -0.110<br>(0.0870)                 |
| Immigrant Relative                               | -0.0222<br>(0.0429)            | -0.0537<br>(0.0448)    | -0.000914<br>(0.0442)   | 0.0524<br>(0.0442)        | 0.0662<br>(0.0475)                 |
| Unemployed                                       | 0.0833<br>(0.0591)             | 0.120**<br>(0.0560)    | 0.0157<br>(0.0530)      | 0.108*<br>(0.0556)        | 0.0294<br>(0.0592)                 |
| Monthly net income 1                             | 0.0372<br>(0.0522)             | 0.0778<br>(0.0503)     | 0.0119<br>(0.0479)      | 0.104**<br>(0.0509)       | -0.0439<br>(0.0543)                |
| Monthly net income 2                             | -0.124***<br>(0.0452)          | 0.0211<br>(0.0453)     | -0.00307<br>(0.0435)    | 0.111**<br>(0.0454)       | -0.0537<br>(0.0476)                |
| Monthly net income 3                             | -0.277***<br>(0.0522)          | -0.0895*<br>(0.0538)   | -0.0402<br>(0.0533)     | 0.179***<br>(0.0566)      | 0.0188<br>(0.0574)                 |
| Constant   | 0.306***<br>(0.102)            | -0.279***<br>(0.0849)  | -0.232**<br>(0.0916)    | -0.390***<br>(0.0899)     | -0.0306<br>(0.0990)                |
| Province fixed effects                           | ✓                              | ✓                      | ✓                       | ✓                         | ✓                                  |
| Observations                                     | 3,089                          | 3,089                  | 3,089                   | 3,089                     | 3,089                              |
| $R^2$  | 0.193                          | 0.174                  | 0.234                   | 0.152                     | 0.047                              |
| Control group mean                               | 0.00                           | 0.00                   | 0.00                    | 0.00                      | 0.00                               |

Notes: The table shows OLS regression results where the dependent variables are Misperceptions Index (column 1), perceived threats Indices (columns 2-4), and Personal characteristics Index (column 5). All the indexes are z-scored using the mean and standard deviation in the control group. T1 and T2 are indicator variables equal to 1 if respondents received the information treatment. CAI is an indicator variable equals 1 if the respondent is very worried or somewhat worried about immigration. Robust standard errors in parentheses. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .



Table A7: Effects of information and previous concerns on perceived causes and policy preferences - Complete results (continued)

|  | <b>Discriminatory<br/>factors<br/>(6)</b> | <b>Structural<br/>factors<br/>(7)</b> | <b>Entry<br/>support<br/>(8)</b> | <b>Support for<br/>predistribution<br/>(9)</b> | <b>Support for<br/>redistribution<br/>(10)</b> |
|--|---|---------------------------------------|----------------------------------|--|--|
| <i>T1: No aggregate employment effects</i> | -0.0412<br>(0.0495)                       | -0.00187<br>(0.0512)                  | -0.0713<br>(0.0480)              | -0.0269<br>(0.0487)                            | 0.0131<br>(0.0524)                             |
| <i>T2: Use of public services</i>          | -0.00816<br>(0.0488)                      | 0.0711<br>(0.0506)                    | -0.0687<br>(0.0494)              | -0.0146<br>(0.0490)                            | 0.0523<br>(0.0537)                             |
| T1 × CAI                                   | -0.137<br>(0.0931)                        | -0.0515<br>(0.0939)                   | 0.230***<br>(0.0876)             | 0.0787<br>(0.0949)                             | 0.0582<br>(0.0873)                             |
| T2 × CAI                                   | -0.0699<br>(0.0932)                       | -0.0630<br>(0.0948)                   | 0.247***<br>(0.0911)             | 0.212**<br>(0.0949)                            | 0.126<br>(0.0912)                              |
| CAI  | -0.168**<br>(0.0679)                      | 0.123*<br>(0.0698)                    | -0.667***<br>(0.0632)            | -0.347***<br>(0.0693)                          | -0.233***<br>(0.0629)                          |
| Male                                       | -0.130***<br>(0.0348)                     | -0.145***<br>(0.0353)                 | -0.0228<br>(0.0342)              | -0.0384<br>(0.0348)                            | 0.0159<br>(0.0358)                             |
| Young                                      | -0.0666*<br>(0.0350)                      | -0.134***<br>(0.0359)                 | 0.0201<br>(0.0349)               | -0.194***<br>(0.0353)                          | -0.0952***<br>(0.0361)                         |
| University Studies                         | 0.221***<br>(0.0396)                      | 0.116***<br>(0.0391)                  | 0.123***<br>(0.0388)             | 0.250***<br>(0.0389)                           | 0.189***<br>(0.0428)                           |
| Left-wing                                  | 0.389***<br>(0.0549)                      | 0.198***<br>(0.0558)                  | 0.257***<br>(0.0540)             | 0.380***<br>(0.0543)                           | 0.468***<br>(0.0522)                           |
| Right-wing                                 | -0.0554<br>(0.0583)                       | 0.0155<br>(0.0597)                    | -0.163***<br>(0.0551)            | -0.00406<br>(0.0568)                           | -0.0120<br>(0.0510)                            |
| Other party                                | 0.331***<br>(0.0839)                      | 0.160*<br>(0.0822)                    | 0.338***<br>(0.0845)             | 0.306***<br>(0.0840)                           | 0.337***<br>(0.0903)                           |
| Immigrant Relative                         | 0.0438<br>(0.0452)                        | 0.0603<br>(0.0453)                    | 0.0188<br>(0.0441)               | 0.117**<br>(0.0463)                            | 0.204***<br>(0.0530)                           |
| Unemployed                                 | -0.0594<br>(0.0569)                       | 0.0470<br>(0.0580)                    | 0.0280<br>(0.0554)               | 0.140**<br>(0.0557)                            | 0.122**<br>(0.0585)                            |
| Monthly net income 1                       | -0.0709<br>(0.0528)                       | -0.0266<br>(0.0534)                   | -0.0733<br>(0.0516)              | -0.00728<br>(0.0525)                           | 0.197***<br>(0.0514)                           |
| Monthly net income 2                       | 0.0948**<br>(0.0467)                      | 0.0240<br>(0.0467)                    | 0.00497<br>(0.0458)              | 0.116**<br>(0.0467)                            | 0.102**<br>(0.0460)                            |
| Monthly net income 3                       | 0.237***<br>(0.0568)                      | 0.120**<br>(0.0562)                   | 0.0390<br>(0.0566)               | 0.220***<br>(0.0569)                           | 0.153***<br>(0.0591)                           |
| Constant                                   | 0.0457<br>(0.0924)                        | -0.0990<br>(0.0993)                   | 0.116<br>(0.0999)                | -0.0159<br>(0.0973)                            | -0.204**<br>(0.104)                            |
| Province fixed effects                     | ✓   | ✓                                     | ✓                                | ✓  | ✓  |
| Observations                               | 3,089                                     | 3,089                                 | 3,089                            | 3,089  | 3,089  |
| $R^2$                                      | 0.149                                     | 0.043                                 | 0.157                            | 0.127  | 0.117  |
| Control group mean                         | 0.00                                      | 0.00                                  | 0.00                             | 0.00   | 0.00   |

Notes: The table shows OLS regression results where the dependent variables are perceived causes indices (columns 1-2) and immigrant-related policy Index (columns 8-10). All the indexes are z-scored using the mean and standard deviation in the control group. T1 and T2 are indicator variables equal to 1 if respondents received the information treatment. CAI is an indicator variable equals 1 if the respondent is very worried or somewhat worried about immigration. Robust standard errors in parentheses. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

Table A8: Effects of information and use of social media to get politically informed on (mis)perceptions, perceived causes, and policy preferences - Complete results

|  | Misperceptions<br>(All)<br>(1) | Labor<br>threat<br>(2) | Fiscal<br>burden<br>(3) | Cultural<br>threat<br>(4) | Personal<br>characteristics<br>(5) |
|--|--------------------------------|------------------------|-------------------------|---------------------------|------------------------------------|
| <i>T1: No aggregate employment effects</i> | 0.0738<br>(0.0573)             | 0.0558<br>(0.0572)     | -0.0816<br>(0.0570)     | -0.0170<br>(0.0596)       | -0.0424<br>(0.0569)                |
| <i>T2: Use of public services</i>          | 0.0829<br>(0.0562)             | -0.0189<br>(0.0546)    | -0.00616<br>(0.0569)    | 0.00287<br>(0.0590)       | -0.0201<br>(0.0561)                |
| T1 × Social Media                          | -0.196***<br>(0.0740)          | -0.138*<br>(0.0746)    | 0.00836<br>(0.0721)     | -2.31e-05<br>(0.0770)     | 0.0350<br>(0.0762)                 |
| T2 × Social Media                          | -0.220***<br>(0.0739)          | -0.229***<br>(0.0730)  | -0.0444<br>(0.0743)     | 0.0451<br>(0.0768)        | 0.0364<br>(0.0737)                 |
| Social Media                               | 0.134***<br>(0.0495)           | 0.111**<br>(0.0483)    | 7.22e-05<br>(0.0492)    | 0.128**<br>(0.0509)       | 0.0271<br>(0.0490)                 |
| Male                                       | 0.0383<br>(0.0380)             | 0.00269<br>(0.0372)    | 0.124***<br>(0.0375)    | -0.0642<br>(0.0398)       | -0.0981**<br>(0.0386)              |
| Young                                      | 0.0464<br>(0.0396)             | -0.0532<br>(0.0387)    | 0.0247<br>(0.0399)      | -0.173***<br>(0.0414)     | -0.0903**<br>(0.0397)              |
| University Studies                         | -0.240***<br>(0.0414)          | -0.166***<br>(0.0418)  | -0.107***<br>(0.0411)   | -0.0450<br>(0.0436)       | 0.257***<br>(0.0427)               |
| Left-wing                                  | -0.170***<br>(0.0649)          | -0.338***<br>(0.0662)  | -0.189***<br>(0.0659)   | -0.000289<br>(0.0674)     | 0.386***<br>(0.0675)               |
| Right-wing                                 | 0.284***<br>(0.0685)           | 0.396***<br>(0.0673)   | 0.284***<br>(0.0699)    | 0.0600<br>(0.0699)        | -0.108<br>(0.0708)                 |
| Other party                                | -0.0396<br>(0.0989)            | -0.265***<br>(0.0992)  | -0.124<br>(0.1000)      | -0.189*<br>(0.0983)       | 0.358***<br>(0.0975)               |
| Immigrant Relative                         | -0.0679<br>(0.0493)            | -0.0342<br>(0.0495)    | 0.0380<br>(0.0490)      | 0.0689<br>(0.0509)        | 0.0582<br>(0.0493)                 |
| Unemployed                                 | 0.125*<br>(0.0649)             | 0.0387<br>(0.0616)     | 0.168***<br>(0.0637)    | 0.0366<br>(0.0641)        | -0.00354<br>(0.0636)               |
| Monthly net income 1                       | 0.126**<br>(0.0601)            | 0.0343<br>(0.0573)     | 0.0877<br>(0.0595)      | -0.00390<br>(0.0620)      | -0.0943<br>(0.0610)                |
| Monthly net income 2                       | 0.0197<br>(0.0518)             | -0.0303<br>(0.0503)    | 0.0733<br>(0.0526)      | -0.0775<br>(0.0542)       | 0.0819<br>(0.0533)                 |
| Monthly net income 3                       | -0.0826<br>(0.0601)            | -0.0700<br>(0.0610)    | 0.125**<br>(0.0620)     | 0.0157<br>(0.0639)        | 0.235***<br>(0.0623)               |
| Constant                                   | -0.287***<br>(0.108)           | -0.149<br>(0.111)      | -0.275**<br>(0.107)     | 0.000980<br>(0.119)       | 0.0174<br>(0.108)                  |
| Province fixed effects                     | ✓                              | ✓                      | ✓                       | ✓                         | ✓                                  |
| Observations                               | 2,586                          | 2,586                  | 2,586                   | 2,586                     | 2,586                              |
| R-squared                                  | 0.111                          | 0.176                  | 0.098                   | 0.035                     | 0.149                              |
| Control group mean                         | 0.00                           | 0.00                   | 0.00                    | 0.00                      | 0.00                               |

Notes: The table shows OLS regression results where the dependent variables are perceived causes indices (columns 1-2) and immigrant-related policy Index (columns 8-10). All the indexes are z-scored using the mean and standard deviation in the control group. T1 and T2 are indicator variables equal to 1 if respondents received the information treatment. CAI is an indicator variable equals 1 if the respondent is very worried or somewhat worried about immigration. Robust standard errors in parentheses. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

Table A8: Effects of information and use of social media to get politically informed on (mis)perceptions, perceived causes, and policy preferences - Complete results (continued)

|  | <b>Discriminatory<br/>factors<br/>(6)</b> | <b>Structural<br/>factors<br/>(7)</b> | <b>Entry<br/>support<br/>(8)</b> | <b>Support for<br/>predistribution<br/>(9)</b> | <b>Support for<br/>redistribution<br/>(10)</b> |
|--|---|---------------------------------------|----------------------------------|--|--|
| <i>T1: No aggregate employment effects</i> | -0.0692<br>(0.0590)                       | -0.0602<br>(0.0557)                   | -0.0539<br>(0.0575)              | 0.0286<br>(0.0587)                             | -0.0242<br>(0.0540)                            |
| <i>T2: Use of public services</i>          | 0.0211<br>(0.0571)                        | -0.0423<br>(0.0561)                   | 0.00613<br>(0.0563)              | -0.0101<br>(0.0577)                            | -0.131**<br>(0.0555)                           |
| T1 × Social Media                          | 0.0292<br>(0.0764)                        | 0.0539<br>(0.0738)                    | 0.0683<br>(0.0740)               | 0.0333<br>(0.0783)                             | 0.0365<br>(0.0699)                             |
| T2 × Social Media                          | 0.0828<br>(0.0738)                        | 0.102<br>(0.0787)                     | 0.122*<br>(0.0734)               | 0.283***<br>(0.0833)                           | 0.0421<br>(0.0745)                             |
| Social Media                               | 0.0765<br>(0.0506)                        | -0.0631<br>(0.0487)                   | 0.120**<br>(0.0488)              | 0.0980*<br>(0.0506)                            | 0.0220<br>(0.0479)                             |
| Male                                       | -0.154***<br>(0.0384)                     | -0.0298<br>(0.0384)                   | -0.0250<br>(0.0379)              | 0.0202<br>(0.0398)                             | -0.343***<br>(0.0370)                          |
| Young                                      | -0.166***<br>(0.0407)                     | 0.0525<br>(0.0407)                    | -0.213***<br>(0.0392)            | -0.124***<br>(0.0407)                          | 0.223***<br>(0.0391)                           |
| University Studies                         | 0.106**<br>(0.0414)                       | 0.156***<br>(0.0429)                  | 0.265***<br>(0.0415)             | 0.201***<br>(0.0467)                           | -0.246***<br>(0.0399)                          |
| Left-wing                                  | 0.179***<br>(0.0671)                      | 0.239***<br>(0.0647)                  | 0.367***<br>(0.0654)             | 0.469***<br>(0.0639)                           | -0.399***<br>(0.0703)                          |
| Right-wing                                 | 0.0245<br>(0.0706)                        | -0.286***<br>(0.0660)                 | -0.0632<br>(0.0676)              | -0.0619<br>(0.0623)                            | 0.0124<br>(0.0718)                             |
| Other party                                | 0.121<br>(0.0945)                         | 0.264***<br>(0.0994)                  | 0.373***<br>(0.0948)             | 0.386***<br>(0.105)                            | -0.304***<br>(0.0997)                          |
| Immigrant Relative                         | 0.0661<br>(0.0478)                        | 0.0182<br>(0.0494)                    | 0.105**<br>(0.0491)              | 0.176***<br>(0.0566)                           | -0.0358<br>(0.0464)                            |
| Unemployed                                 | 0.0668<br>(0.0631)                        | 0.00836<br>(0.0643)                   | 0.163***<br>(0.0619)             | 0.132*<br>(0.0673)                             | 0.0693<br>(0.0673)                             |
| Monthly net income 1                       | -0.0108<br>(0.0598)                       | -0.0936<br>(0.0597)                   | -0.0527<br>(0.0595)              | 0.191***<br>(0.0590)                           | 0.0735<br>(0.0603)                             |
| Monthly net income 2                       | 0.00964<br>(0.0522)                       | -0.0138<br>(0.0524)                   | 0.0926*<br>(0.0518)              | 0.110**<br>(0.0518)                            | -0.144***<br>(0.0501)                          |
| Monthly net income 3                       | 0.119*<br>(0.0610)                        | 0.0513<br>(0.0624)                    | 0.213***<br>(0.0606)             | 0.169***<br>(0.0651)                           | -0.284***<br>(0.0567)                          |
| Constant                                   | -0.0129<br>(0.111)                        | 0.0965<br>(0.118)                     | -0.0670<br>(0.116)               | -0.253**<br>(0.123)                            | 0.410***<br>(0.126)                            |
| Province fixed effects                     | ✓   | ✓                                     | ✓                                | ✓  | ✓  |
| Observations                               | 2,586                                     | 2,586                                 | 2,586                            | 2,586  | 2,586  |
| R-squared                                  | 0.049                                     | 0.114                                 | 0.131                            | 0.127  | 0.156  |
| Control group mean                         | 0.00                                      | 0.00                                  | 0.00                             | 0.00   | 0.00   |

Notes: The table shows OLS regression results where the dependent variables are perceived causes indices (columns 1-2) and immigrant-related policy Index (columns 8-10). All the indexes are z-scored using the mean and standard deviation in the control group. T1 and T2 are indicator variables equal to 1 if respondents received the information treatment. CAI is an indicator variable equals 1 if the respondent is very worried or somewhat worried about immigration. Robust standard errors in parentheses. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .