Uncovering in-group bias in preferences for redistribution: a survey experiment in Italy

Riccardo Bruni, Alessandro Gioffre, Maria Marino

November 2021

1 Introduction

Following the predictions of the median voter theory (Meltzer and Richard, 1981), studies have investigated over a long time if a higher level of inequality increases preferences for redistribution. Given the weak empirical evidence (Ashok, Kuziemko and Washington, 2015), scholars have started to question the theory's assumptions that individuals have accurate perceptions of inequality and that they are influenced by the objective level of inequality when forming their preferences for redistribution. Indeed, a growing evidence shows that people misperceive inequality (Bussolo, Ferrer-i Carbonell, Giolbas and Torre, 2019; Chambers, Swan and Heesacker, 2015; Davidai and Gilovich, 2015; Gimpelson and Treisman, 2018; Kraus, Rucker and Richeson, 2017; Niehues, 2014; Norton and Ariely, 2011). For such reason, many survey experiments with provision of information on the true level of inequality have started to appear (Alesina, Stantcheva and Teso, 2018b; Bublitz, 2017; Cruces, Perez-Truglia and Tetaz, 2013; Fehr, Mollerstrom and Perez-Truglia, 2019; Fehr, Müller, Preuss et al., 2020; Gärtner, Mollerstrom and Seim, 2020; Hoy, Mager et al., 2021; Karadja, Mollerstrom and Seim, 2017; Kuziemko, Norton, Saez and Stantcheva, 2015). The idea was that, if people ignore the true level of inequality, informing them would align their redistributive preferences according to the median voter theory. Nevertheless, individuals only slightly change their preferences

for redistribution when informed.

Several alternatives have been investigated to explain the above inconclusive findings, like beliefs in meritocracy (Fehr and Vollmann, 2020; Gärtner et al., 2020; Mijs, 2021; Mijs and Hoy, 2021), inevitability perceptions (Pellicer, Piraino and Wegner, 2019), locus of control (Aldama, Bicchieri, Freundt, Mellers and Peters, 2021) or trust (Kuziemko et al., 2015; Settele, 2019).

Alongside the above literature, another interesting hypothesis which has been investigated is that preferences for redistribution are not only affected by (perceptions of) inequality but they are also affected by (perceptions of) other facts like immigration (Alesina, Glaeser and Glaeser, 2004; Alesina, Murard and Rapoport, 2019; Dahlberg, Edmark and Lundqvist, 2012; Eger, 2010; Eger and Breznau, 2017; Gilens, 1995; Luttmer, 2001; Schmidt-Catran and Spies, 2016; Senik, Stichnoth and Van der Straeten, 2009).

That immigration depresses preferences for redistribution is an hypothesis that has been investigated over a long time, especially in the United States, and such hypothesis has been often supported by data (Alesina and Giuliano, 2011; Alesina et al., 2004). According to the literature, there are two mechanisms which might explain this negative relation between immigration and preferences for redistribution. We will refer to them as economic and cultural in-group bias. The first is generally known as the competition hypothesis. Since high rates of immigration are likely to redirect redistribution from poor natives to newly-arrived (more likely to be) poor immigrants, poor natives are less likely to support redistributive policies since they are more likely to be net contributors rather than net beneficiaries of those policies (Elsner and Concannon, 2020; Razin, Sadka and Swagel, 2002). The competition hypothesis implies thus a focus on the poverty dimension and how immigration affects changes among the composition of the poor in a country (Martinangeli and Windsteiger, 2019).

Support for redistribution is linked to immigration through an additional mechanism, namely cultural in-group bias. While the competition hypothesis is based on the idea that individuals are self-interested and in-group bias is purely based on economic reasons, natives tend to view immigrants as less deserving of social benefits and are less willing to share public goods with people

coming from a culturally distant group (Elsner and Concannon, 2020).¹ For instance, Alesina, Baqir and Easterly (1999) find that the more polarized the preferences across ethnic groups are, the lower is the provision of the public good either because it is more difficult to find an agreement on the type of public good, or because each group's utility level from a given public good is reduced if the other group also uses it. Luttmer (2001) shows that individuals preferences for income redistribution are affected by the characteristics of others around them. In other words, people tend to decrease their support to redistribution if the main recipients belong to another group. Such effect has been historically analyzed by behavioral economists. For instance, by using experimental set-up, Bowles, Gintis et al. (2000) show that people's willingness to share and their propensity to reciprocate when shared with are stronger when the social and ethnocultural distance among individuals is small. Such alternative mechanism suggests that when native-immigrant cultural distances are high, in-group may be more likely to oppose spending on immigrants and to favor spending on natives instead.

Several studies have investigated the relation between these two in-group biases related to immigration and preferences for redistribution but the findings are mixed. Although both economic and cultural in-group biases seem to matter (Burgoon and Rooduijn, 2021; Cavaillé and Trump, 2015; Finseraas, 2008; Goldschmidt and Rydgren, 2018; Gorodzeisky, 2013; Hjorth, 2016; Houle, 2017; Magni-Berton, 2014; Senik et al., 2009), the latter seem to be the most important source of opposition to welfare expansion (Cappelen and Midtbø, 2016; Citrin, Green, Muste and Wong, 1997; Ford, 2016; Fox, 2004; Garand et al., 2017; Gilens, 1995; Hainmueller and Hangartner, 2013; Harell, Soroka and Iyengar, 2016; Larsen, 2011; Sniderman, Hagendoorn and Prior, 2004).

To explain the in-group economic and cultural biases with respect to preferences for redistribution, some scholars have talked about welfare chauvinism (Andersen and Bjørklund, 1990). The idea is that a welfare chauvinist does not necessarily want to reduce the overall level of redistribution, but is instead more concerned about restricting immigrants' access to social benefits. Such discussion is getting today more attention given the success of far-right and anti-immigrants political parties

¹Such mechanism has been also called anti-solidarity or taste effect (Garand, Xu and Davis, 2017; Lee, Roemer and Van der Straeten, 2006; Lee and Roemer, 2006; Senik et al., 2009).

in several European countries (Guriev and Papaioannou, Fortcoming). Indeed, some scholars have found that preferences for redistribution are changing. Some voters might support a stronger intervention of the State but they endorse a particular vision of the welfare system where policies are designed more according to principles like nativism or equity/reciprocity rather than equality and need (Burgoon and Rooduijn, 2021; Enggist and Pinggera, 2021; Ennser-Jedenastik, 2018; Rathgeb and Busemeyer, 2021).

Given the importance of immigration to explain public preferences, a strand of this literature suggests that attitudes towards migrants and preferences for redistribution are influenced by perceptions rather than by the actual number and/or the economic situation of immigrants (Alesina, Miano and Stantcheva, 2018a; Grigorieff, Roth and Ubfal, 2020; Haaland and Roth, 2020; Herda, 2010, 2015; Hopkins, Sides and Citrin, 2019; Hopkins et al., 2019; Sides and Citrin, 2007). Survey evidence shows that natives vastly overestimate the share of migrants in the population, believe that the they are much more welfare dependent than they actually are, that they are more culturally diverse than they are by overestimating the share of Muslim (Alesina et al., 2018a; Alesina and Stantcheva, 2020). Considering the role of provision of information to change opinions and beliefs, Hopkins et al. (2019) show, in seven separate survey experiments over 11 years, that correcting misperceptions about the size of immigrant populations does not increase support for immigration. However, Grigorieff et al. (2020) find that providing information not only about the size but also about the characteristics of the immigrant population affect public support for immigration. Similarly, Alesina et al. (2018a) find that simply making individuals thinking about immigration in a randomized manner lowers their support less redistribution. Moreover, their experiment shows that giving to respondent the information about the true number and origin does not affect support for redistribution unless it is given information about immigrants as hard workers.

Given the important role of perceptions of immigration, and its potential connection with perceptions of inequality to explain preferences for redistribution, we propose to analyze jointly the two phenomena. We believe that our contribution is important for two interrelated reasons. First, Western countries are experiencing both a growing level of inequality and immigration. Second, per-

ceptions and public preferences need to be understood in a multidimensional framework: Alesina, Miano and Stantcheva (2020) claim that people hold many perceptions (the share of immigrants, the share of national income going to the top 1%, or the top-income elasticity) that affect many policy views (top tax rate, level of government intervention, the number of immigrants allowed to enter in the country). The authors claim that perceptions interact with each other and that each policy view can be a function of several or all perceptions, but policy views can also interact between them. Other scholars have gone in this direction (Ballard-Rosa, Martin and Scheve, 2017; Bavetta, Donni and Marino, 2020; Bavetta, Li Donni and Marino, 2019) propose to analyze citizens' preferences for tax policies in a multidimensional framework. Despite the strict relation between inequality and immigration, very few works (Magni, 2021; Martinangeli and Windsteiger, 2019) have provided individuals bundles of information with inequality and immigration within the same framework.

Following the above arguments, we test the hypothesis that redistributive policies might be better understood by using both information on inequality and immigration perceptions. To test this, we will use a survey experiment in Italy following a burgeoning stream of literature using informational treatments to investigate self-reported redistributive preferences (Alesina et al., 2018b; Karadja et al., 2017; Kuziemko et al., 2015). In particular, we will manipulate perceptions on inequality and immigration using four informational treatments where three of them interact information on inequality with different information on immigration. In doing so, we consider the multidimensionality of perceptions. In the first treatment, we provide information on inequality by stressing differences between rich and poor (treatment 1 - inequality hypothesis). In the second treatment, we provide information on inequality as in treatment 1 but also information on the the native-immigrants composition of poverty in Italy (treatment 2 - inequality hypothesis + economic in-group bias). In treatment 3, information on inequality as in treatment 1 is interacted with information on the cultural diversity of immigrants in terms of religion and country of origin (treatment 3 - inequality hypothesis + cultural in-group bias); finally, the last treatment includes the three information on inequality, the native-immigrants composition of poverty, and the cultural diversity of immigrants (treatment 4 - inequality hypothesis + economic and cultural in-group bias). Finally,

we will also capture the multidimensionality of redistributive preferences by distinguishing between tax preferences, allocation of the public budget over different policies, support for poor benefits. We describe treatments and outcomes variables in more detail in Section 2.

2 Survey experiment

We conduct a survey experiment in Italy to evaluate the causal effect of exposure to information about inequality and immigration on preferences for redistribution.²

Italy is an interesting case for several reasons. First, recent data show that there was a strong rise in wealth concentration and inequality since the mid-1990s (Acciari, Alvaredo and Morelli, 2020). Second, immigration has also increased and anti-immigration parties have grown substantially in the last years. Third, the Five Star Movement, who has been one of the most electorally successful European populist parties³, has implemented one of the biggest redistributive program over the last years.⁴

For the design of the experiment, we rely on a national representative sample of 3500 individuals randomly allocated to 5 groups, one control and 4 treated. The latter groups are given information through short animated videos since providing information in graphical form seems to reduce misperceptions more than equivalent textual information (Meyer, Shamo and Gopher, 1999; Nyhan and Reifler, 2019; Zacks and Tversky, 1999).

The first treatment is designed to manipulate only perceptions of inequality by proving information on the increasing gap between poor and rich people (treatment 1 - inequality hypothesis). We provide a pessimistic treatment using wealth's concentration data recently provided by Acciari et al. (2020) who rely on administrative data taken from the National Accounts balance sheets. Such

²Data will be collected by YOUGOV, an international research data and analytic group working with some of the world's most recognized universities and GDPR compliant.

³The classification of the Five Star Movement as a populist party is unanimously accepted but there is disagreement on its political position because of a mix of left-libertarian and anti-immigrant positions (Coticchia and Vignoli, 2020; Font, Graziano and Tsakatika, 2021; Mosca and Tronconi, 2019).

⁴In 2019 Italy conformed to the European partners with the introduction of the "Citizenship Income" (Reddito di cittadinanza) which is a strict mean-tested program for those who reside in Italy for the last 10 years and to have an economic situation below 9360 euros. On average, poor households receive around 540 euros each month.

treatment should impact beliefs on inequality but also the respondent's feeling of impoverishment and concern for inequality. We expect that, once people are provided information on the increased level of wealth inequality, they are more likely to increase their general level of preferences for redistribution, for higher taxation on rich people, for more social benefits to poor individuals (as predicted by the median voter theory).

The second treatment (treatment 2 - inequality hypothesis + economic ingroup bias) repeats the information of treatment 1 on inequality but adds information on the native-immigrants composition of poverty in Italy. Data are taken from the Italian National Statistical Office. The treatment highlights the fact that immigrants represent an important share of the poor living in Italy (one out of four) and that they are poorer than Italians. Although we cannot a priori say this is a pessimist treatment because it depends on individuals' priors, the framing stresses the fact that immigrants are growing among the poor living in Italy. The idea is here to test the interplay of the competition (economic in-group bias) and the inequality hypothesis. Accordingly, information on the native-immigrants composition of poverty should decrease preferences for redistribution, and we expect that this would be the case despite people are offered information on increasing inequality (which in turn should increase preferences for redistribution). Comparing outcomes in treatment 2 with those in treatment 1 and in the control group should offer the possibility to test the presence of an economic in-group bias but also to explain how people process different information (in this case on both inequality and immigration) when forming their preferences for redistribution.

The third treatment (treatment 3 - inequality hypothesis + cultural in-group bias) contains information on inequality (as in treatment 1) and diversity among the immigrant population. The latter is given by providing information on the increasing diversity in the Italian society by offering data on the country of origin and the religion of immigrants living in Italy. Data are taken from different sources (Italian National Statistical Office and ISMU Foundation). Similarly to above, we aim at investigating if cultural in-group bias might explain reduction in preferences for redistribution despite the information on inequality. The comparison between treatment 2 and 3 also sheds light on the relative importance between economic and cultural in-group bias on preferences

for redistribution. According to the literature, cultural bias is generally greater than economic one (Cappelen and Midtbø, 2016; Citrin et al., 1997; Ford, 2016; Fox, 2004; Garand et al., 2017; Gilens, 1995; Hainmueller and Hangartner, 2013; Harell et al., 2016; Larsen, 2011; Sniderman et al., 2004), but to our knowledge this has not been tested using an experimental setting.

A final treatment (treatment 4 - inequality hypothesis + economic and cultural in-group bias) will combine all the above information, about inequality, the native-immigrants composition of poverty and their cultural diversity. We aim at testing the combination of both economic and cultural ingroup bias hypotheses on preferences for redistribution when individuals also deal with information on inequality. We claim that the two hypotheses are both important to shape redistributive preferences, but their effect is strengthened by their combination, which contributes to reduce preferences for redistribution more than treatment 2 and 3 taken separately.

Full text of all treatments is provided in Section 5 along with a link to the videos.

To investigate if the treatments have the intended effects, we include several manipulation checks. In particular we rely on both subjective and factual manipulation checks. The reason is simple: while the provision of information influences the individual knowledge of a certain factual reality, it might also affect emotions, feelings and other types of perceptions. For such reason, we first include a subjective manipulation check just after the treatment by asking participants to self-positioning themselves on an economic scale ranging from 1 to 10 representing the distance between rich and poor people. We expect that people exposed to information on inequality (treatment 1) will feel impoverished and will position themselves lower in the scale with respect to the control group. While this should work for treatment 1, it might change for treatments 2, 3 and 4 since here the information on inequality interacts with information on immigration. For such reason, we also include a second subjective manipulation check after the treatment aimed at shifting the salience of the most important problems that the country must address. We propose a list of 7 problems that the respondent must rank from the most important to the least important. We believe that while we should find inequality ("difference between rich and poor") be ranked higher in all treatments with respect to the control group, we should also find that "unconditional provision of public subsidies

to the poor" ("loss of traditional values") be ranked higher in treatment 2 (3) with respect to the control group. These 3 items should also be ranked higher in the last treatment. We include two additional subjective manipulation checks after the outcomes⁵ to see if the treatments on immigration change how people see migrants in their country from an economic and cultural point of view. In particular, we ask respondents if migrants are a burden on the country's finances or contribute to them and if migrants enrich or undermine the cultural life of the country in which they live. Finally, we add a factual manipulation check at the end of the questionnaire to investigate if individuals have updated their beliefs on inequality and immigration. While in an ideal setting one should elicit prior and posterior beliefs, and then analyze if people under- or over-estimate the true facts and update their beliefs after the provision of the information, we here limit the analysis only to the collection of posterior beliefs and compare them with the control group. We will ask several questions on inequality and immigration at the end of the questionnaire so that we are sure that we are not priming the respondents before our main outcome variables.

With respect to general structure of the questionnaire, socio-demographic data are mostly collected at the beginning of the questionnaire. There is a pre-treatment section that includes questions about respondents' voting behaviors, political ideology, preferences for principles of distributive justice (equality, equity and need) as well as income. These pre-treatment variables will be also used to assess if the treatments have heterogeneous effects. Political ideology, views on distributive justice and income are indeed among the most important factors mediating the effect that inequality and immigration have on preferences for redistribution (Alesina et al., 2019, 2018b; Fehr et al., 2019; Gärtner et al., 2020).

We consider several outcome variables. We start by capturing general redistributive preferences, but we then go in deep by analyzing also preferences towards taxation, public spending and (exclusionary) support for social benefits to poor people. To capture preferences for taxation, we first show a table with the income brackets and tax rates in the Italian fiscal system and ask respondents if they believe these rates should be decreased, left the same or increased. Second, we ask them

⁵Kane and Barabas (2019) has recently shows that using manipulation checks after outcome variables does not necessarily affect the efficacy of the manipulation checks.

if they agree or not with a set of proposals that have been made to reduce inequalities by taxing the rich (a wealth tax and an inheritance tax). To capture preferences for public spending, we ask respondents how they would like to spend the total government budget among the different sectors (social security, income support program defense, schooling, health etc). Finally, we capture exclusionary redistributive preferences by asking how much they are in favor of an income support scheme that restricts or not according to citizenship. We also elicit preferences for extending public support to immigrants and in which conditions (immediately, after 1 year, after the citizenship etc etc). Since there might be some problems of desirability bias given that people are often not very likely to express their anti-immigrant attitudes, we include a list experiment that aims at capturing particularistic views of redistribution by expressing opposition towards welfare benefits for immigrants. The question is randomized within each treatment by giving respondents the opportunity to say how many things upset them between 3 or 4 things. The 4-things list includes the category "That immigrants automatically receive the same welfare benefits as Italians". To conclude, we also include a behavioral measure which asks individuals to donate part of a prize they will eventually receive through a lottery to three charities according to their aim: 1) OXFAM (organization fighting against inequality); 2) CARITAS (organization supporting poor people living in Italy); 3) ARCI (organization supporting the cultural and social integration of immigrants in Italy).

3 Hypotheses

Hypothesis 1: Subjects in T1 will be more in favor of redistributive policies, more in favor of tax policies against the rich, more in favor of policies supporting the poor than the control group.

Hypothesis 1a. The treatment effect will be weaker for rich, center-right wing voters, people endorsing fairness ideals based on equity.

Hypothesis 2: Subjects in T2 will be less in favor of redistributive policies, less in favor of policies supporting poor people, more in favor of exclusionary policies than the control and T1.

⁶We use a common question from the European social survey (ESS) that allows to discriminate between unconditional stance towards immigrant access to welfare benefits (the first two categories of the question), conditionality on the basis of welfare contributions (third category) and conditionality based upon citizenship (fourth category).

Hypothesis 2a. The treatment effect will be stronger for center-right wing voters, people endorsing fairness ideals based on equity.

Hypothesis 3: Subjects in T3 will be less in favor of redistributive policies, less in favor of policies supporting poor people, more in favor of exclusionary policies than the control, T1 and T2.

Hypothesis 3a. The treatment effect will be stronger for center-right wing voters, people endorsing fairness ideals based on equity.

Hypothesis 4: Subjects in T4 will be less in favor of redistributive policies, less in favor of policies supporting poor people, more in favor of exclusionary policies than the control, T1, T2 and T3.

Hypothesis 4a. The treatment effect will be stronger for center-right wing voters, people endorsing fairness ideals based on equity.

4 Analysis

In the first specification of interest, we investigate whether the information treatment affects the outcome variables. Specifically, we estimate the following equation:

$$Y_i = \beta_0 + \beta_1 T_i + \beta_2 X_i + \epsilon_i \tag{1}$$

where Y_i is the outcome of interest (as described in 2), T_i is an indicator for whether subject i received the treatment; X_i is a vector of controls (we also report the results of this regression without any controls) and ϵ_i is an individual-specific error term. For all the specifications, we use robust standard errors.

In the second specification of interest, we investigate whether subgroups respond differently to the information. To do so, we estimate the following equation:

$$Y_i = \beta_0 + \beta_1 T_i + \beta_2 subgroup_i + \beta_2 subgroup_i * T_i + \beta_4 X_i + \epsilon_i$$
 (2)

where $subgroup_i$ takes the value 1 if respondent i reports being a center-left/right voter, poor/rich, with specific beliefs on redistributive justice.

5 Questionnaire

5.1 Information sheet

Project title

Political preferences in Italy

Researchers and institutions involved

Riccardo Bruni, Department of Letters and Philosophy, DILEF, University of Florence, e-mail: riccardo.bruni@unifi.it

Alessandro Gioffrè, Department of Science for Economics and Business, University of Florence, e-mail: alessandro.gioffre@unifi.it

Maria Marino, Department of Applied Economics, Autonomous University of Barcelona

We are a group of researchers from the University of Florence and Universidat Autonoma de Barcelona.

Our goal is to analyze your political preferences.

No matter what your ideas are. By completing this questionnaire, you are contributing to our knowledge as a society. You might not agree with all the information provided, but you will have the opportunity to express your own views.

It is very important for the success of our research that you complete the entire survey, read the questions carefully, answer honestly. There is NO right or wrong answer.

Your participation in this study is voluntary and you can withdraw from the questionnaire at any time, or, if you have completed it, you can write to Yougov to request the deletion of your data.

Your name will never be recorded and you will be never be identified.

By participating in this survey, you are enrolled in a lottery with five prizes of 100 euros each. If you win, the prize will be paid out in the usual way.

This survey should take (on average) about 10 minutes to complete.

If you have any questions regarding this research, you can contact the principal investigators of this study:

Maria Marino, Department of Applied Economics, Autonomous University of Barcelona, e-mail: maria.marino@uab.cat

Riccardo Bruni, Department of Letters and Philosophy, DILEF, e-mail: riccardo.bruni@unifi.it

If you have any concerns, complaints or questions about this study or your rights as a research participant, you can contact:

The Department of Letters and Philosophy, DILEF, e-mail: segr-dip@letterefilosofia.unifi.it; tel: +39 055 2756200. Any critical issues, not otherwise resolvable, will be addressed to the Director of the Department.

The Data Protection Officer (DPO) of the Autonomous University of Barcelona by phone (+34 935812774) or by email (proteccio.dades@uab.cat).

5.2 Informed consent

I have read the information provided above.

I know that participation in the study is purely voluntary and data are anonymized.

I know I can withdraw from the survey at any time without consequences.

I was told how to ask for additional information and make a complaint.

(If you are 18 years old or older, you are an Italian citizen, agree with the statements above, and freely consent to participate in the study, please click on the I AGREE button to begin the survey.)

(I AGREE/I DISAGREE)

5.3 Demographics

- 1. Which is your marital status? (Single; Married; Living together with a partner; Legally separated or divorced; Widowed)
- Which region were you born? (Abruzzo, Basilicata, Calabria, Campania, Emilia Romagna, Friuli Venezia Giulia, Lazio, Liguria, Lombardia, Marche, Molise, Piemonte, Puglia, Sardegna, Sicilia, Toscana, Trentino Alto Adige, Umbria, Valle d'Aosta, Veneto, I was born abroad)
- 3. How would you define the place where you live? (The center of a large city, The suburb of a large city, Farm/rural area, Small town/village)
- 4. Which of the following categories best describes your highest educational level? (Primary education; Upper secondary education; University degree; Master program or PhD program)
- 5. What is your current employment status? (Full-time employee; Part-time employee; Self-employed or small business owner; Unemployed and looking for work; Housewife; Student; Not currently working and not looking for work; Retiree)
- 6. (If Full-time employee; Part-time employee; Self-employed or small business owner) Are you employed in one of the following sectors? Check the one that applies. If you have multiple jobs, check the one that describes your main occupation. (Construction; Real estate activities; Business services; Finance and insurance; Trade and transport; Manufacturing, raw material extraction; public utilities; Information and communication; Culture, leisure and other services; Agriculture, forestry and fishing; Public administration; education; health and social work activities; other (specify))
- 7. (If Unemployed and looking for work; Not currently working and not looking for work; Retiree)
 Even if you are not currently working, what sector did your latest occupation fall under?
 Check the one that applies. (Construction; Real estate activities; Business services; Finance and insurance; Trade and transport; Manufacturing, raw material extraction; public utilities;

Information and communication; Culture, leisure and other services; Agriculture, forestry and fishing; Public administration; education; health and social work activities; other (specify))

Before proceeding to the next set of questions, we want to ask for your feedback about the responses you provided so far. In your honest opinion, should we use your responses, or should we discard your responses since you did not devote your full attention to the questions so far? (Yes, I have devoted full attention to the questions so far and I think you should use my responses for your study; No, I have not devoted full attention to the questions so far and I think you should not use my responses for your study.)

- 8. On a scale from 0 to 10, how much do you agree/disagree with these statements, where 0 corresponds to Disagree completely and 10 to Agree completely? -A society is fair when income and wealth are equally distributed among all people. (Disagree completely 0-10 Agree completely) -A society is fair when hard-working people earn more than others. (Disagree completely 0-10 Agree completely) -A society is fair when it takes care of those who are poor and in need regardless of what they give back to society. (Disagree completely 0-10 Agree completely)
- 9. How much is approximately your monthly income after tax? We refer to the overall income from work or business, any other income such as rents, dividends and government transfers (unemployment allowance, citizenship income, etc.)? Remember that the survey is anonymized. (Specify) or I prefer to not say
- 10. In politics, people often talk about left and right. Where would you place your political preferences? (Left, Center left, center, center right, right)
- 11. Which political party did you vote for in the last general election (in 2018)? (Partito Democratico, Civica Popolare Lorenzin, +Europa, Forza Italia, Lega Nord, Fratelli d'Italia, Movimento Cinque Stelle, Liberi e uguali, Potere al popolo (Rifondazione comunista), other (please indicate which party); I did not vote)
- 12. Which political party today do you feel closest to? (Partito Democratico, Italia Viva, +Eu-

ropa, Azione, Forza Italia, Lega, Fratelli d'Italia, Movimento Cinque Stelle, Sinistra Italiana, of a large city; none)

13. On a scale from 0 to 10, what is the degree of trust that you personally place in the following institutions, where 0 corresponds to an absolute lack of trust and 10 to full trust? - Parliament- Government - Political parties (absolute lack of trust 0-10 full trust)

5.4 Attention check

In questionnaires like ours, sometimes there are subjects who do not carefully read the questions. This means that there are a lot of answers which compromise the results of research studies. To show that you read our questions carefully, please choose turquoise as your answer in the next question. What's your favorite colour? (Red, Yellow, Blue, Orange, Green, Viola, Turquoise, Black, White)

5.5 Treatment

Recently some studies have been carried out that allow us to better understand our country. We summarize some of these results through short animated videos. In some videos, with wealth we refer to real estate assets, deposits, savings and stocks and bonds.

5.5.1 Treatment 1

T1.

Text of T1: In Italy the poor are getting poorer and the rich are getting richer. We sort individuals living in Italy based on their wealth, from the poorest to the richest. The poorest 50 percent of the population saw their wealth reduced, from 12 to 3 percent of total wealth. The richest 10 percent of the population increased their wealth from 44 to 56 percent of total wealth.

5.5.2 Treatment 2

Recently some studies have been carried out that allow us to better understand our country. We summarize some of these results through short animated videos. In some videos, with wealth we refer to real estate assets, deposits, savings and stocks and bonds. By immigrants we mean those people who were not born in Italy, but moved here legally at some point in their life and are currently residing here. We only consider regular immigrants, NOT irregular ones.

(random order)

T1.

T2.

Text of T1: As Above

Text of T2: In Italy, within the poor, we find an ever-increasing number of immigrants. If we consider the absolute poor, that is, those who are unable to meet basic needs, 27 percent of the total are immigrants. If we then analyze the incidence of poverty, while out of 100 Italians, 6 are affected by poverty, out of 100 immigrants, 30 are affected by it.

5.5.3 Treatment 3

Recently some studies have been carried out that allow us to better understand our country. We summarize some of these results through short animated videos. In some videos, with wealth we refer to real estate assets, deposits, savings and stocks and bonds. By immigrants we mean those people who were not born in Italy, but moved here legally at some point in their life and are currently residing here. We only consider regular immigrants, NOT irregular ones.

(random order)

T1.

Т3.

Text of T1: As Above

Text of T3: In Italy, cultural diversity is growing. If we consider where the immigrants come from, 50 percent of them come from Africa, Asia, North and South America, the rest come from Europe. If we then analyze religion, 80 percent of immigrants are Muslims, Orthodox Christians, Buddhists or of other religions, the rest are Catholics.

5.5.4 Treatment 4

Recently some studies have been carried out that allow us to better understand our country. We summarize some of these results through short animated videos. In some videos, with wealth we refer to real estate assets, deposits, savings and stocks and bonds. By immigrants we mean those people who were not born in Italy, but moved here legally at some point in their life and are currently residing here. We only consider regular immigrants, NOT irregular ones.

(random order)

T1.

T2.

T3.

Text of T1, T2, T3: As Above

5.6 Subjective Manipulation Check – Pre-outcome

14. In our society there are groups which are rich and groups which are poor. Below is a scale that runs from the rich to the poor. Where would you put yourself on this scale? With wealth we refer to real estate assets, deposits, savings and stocks and bonds. (bottom 1-10 top scale - horizontal scale)

15. Below we list some of the most important problems that Italy has to face today. Which do you think are the most important? Rank them from most important to least important. (poor investment in school and university, climate change, differences between rich and poor, corruption, loss of traditional values, universal and unconditional provision of public subsidies to the poor, bureaucracy, sexism)

5.7 Outcome Variables

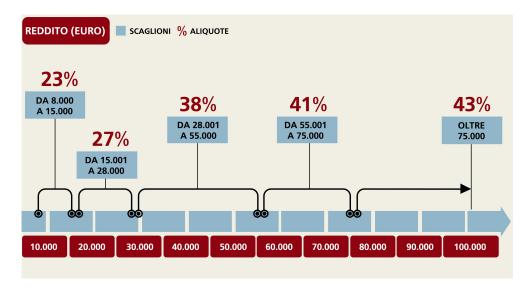
In the next questions, we will ask you your opinion on how government raises and spends money on various policies. Remember that there are no right or wrong answer. We only want to know your opinion.

5.7.1 Preferences for redistribution policies

To what extent do you agree with the following statements?

- 16. How much do you agree/disagree that the government should increase taxes on the rich and spend more on benefits for the poor. (Disagree completely 0-10 Agree completely)
- 17. As you probably know, income tax rates in Italy are paid on the respective income brackets.

 The Figure shows the tax rates with the relative income brackets. For each of them, tell if you would decrease, leave as it is or increased.



Reddito imponibile	ALIQUOTA	TAX PREFERENCE
8.000-15.000	23	[Decreased/Left as is/Increased]
15.001-28.000	27	[Decreased/Left as is/Increased]
28.001-55.000	38	[Decreased/Left as is/Increased]
55.001-75.000	41	[Decreased/Left as is/Increased]
beyond 75.000	43	[Decreased/Left as is/Increased]

(random order of the next two questions)

- 18. Apart from income taxes, the public budget can be increased by taxing the wealth (properties, estate and assets). A recent proposal aims at taxing wealth above 50 million euros with a tax rate of 2%. How much do you agree/disagree with this proposal? (Disagree completely 0-10 Agree completely)
- 19. Apart from income taxes, the public budget can be increased by imposing a tax on the transfer of wealth from a deceased person to his or her heirs. A recent proposal aims at increasing the actual rate up to 20% for wealth above 5 millions (top 1% percent of the population). How much do you agree/disagree with this proposal? (Disagree completely 0-10 Agree completely)
- 20. Once raised, taxes can be used to finance public spending. Suppose that you are the person deciding on the Italian public spending for the next year. You can choose how you want to divide the budget (in percent) between the following 7 categories:

Please enter the percent of the budget you would assign to each spending category (the total

must sum to 100).

- 1) Defense and National Security (e.g., costs of the Defense department and the costs of supporting security operations in foreign countries, maintain public order in the national territory)
- 2) Public Infrastructure (e.g., transport infrastructure like roads, bridges and airports, and water infrastructure)
- 3) Spending on Schooling and Higher Education
- 4) Old-age pensions and disability pensions, which provide economic support to the elderly and disabled
- 5) Support for the unemployed
- 6) Support to poor people (for example subsidies to meet food and health costs and the payment of bill)
- 7) Public Spending on Health

[Slider with continuous percentage choices 0%-100% for each of the above categories]

21. How much do you agree or disagree with the following government policies? (Providing to Italian citizens living in absolute poverty an income support of 540 Euro per month for food, health and bills-related expenses?) (Providing to people residing in Italy and living in absolute poverty an income support of 540 Euro per month for food, health and bills-related expenses?) (Disagree completely 0-10 Agree completely)

(The following question include a randomization within the 5 groups)

22. Here are 3 (4) things that may upset people. We want you to indicate how many of these upset you. We are not interested in which ones, only in how many of them.

Pay excise taxes on petrol.

Football players earning tens of millions.

That we have to pay a broadcasting license fee.

(That immigrants automatically receive the same welfare benefits as Italians).

- 23. In your opinion, when should immigrants be granted the right to social benefits / services in Italy? (Immediately on arrival; after living in Italy for a year, whether or not they have worked; Only after they have worked and paid taxes for at least a year; once they have become a Italian citizen; they should never get the same rights)
- 24. By participating in our survey, you could be drawn as the winner of one of five prizes of 100 euros each. We would like to know if, in case you won, you would be willing to donate part or all of your 100 euros to a good cause. Below you will find 3 charities. You can enter how many euros of your winning you would like to donate to each of them. If you are one of the winners, you will be paid, in addition to the normal fee for participating in the survey, 100 euros minus the amount you donated to charity. We will pay the desired donation amount directly to the charity of your choice. Enter how much of your 100 euros you want to donate to each charity: 1) OXFAM (charity fighting against the difference of wealth between the rich and the poor) 2) CARITAS (charity supporting poor people living in Italy, both Italians and immigrants) 3) ARCI (charity supporting the cultural and social integration of immigrants in Italy). (slider 0-100 for each charity)

5.8 Subjective Manipulation Check – Post-outcome

- 25. Would you say that Italy's cultural life is generally undermined or enriched by people coming to live in Italy from other countries? Italy's cultural life is undermined (0) Italy's cultural life is enriched (10)
- 26. Would you say that migrants are generally a burden on our country's finances or that they contribute to them? Immigrants are a burden on country's finances (0) Immigrants contribute to the country's finances

5.9 Final questions

(Control group) Finally, we will ask you a series of questions to find out the information you have on some issues concerning our country.

(treated grouped T1, T2, T3, T4) Finally, we will ask you a series of questions to find out the information you have on some issues concerning our country. To some of them, you should already know the answer.

Consider the total wealth of Italians, that is, real estate assets, deposits, savings and stocks and bonds. Then sort the individuals living in Italy according to their wealth, from poorest to richest so that we can consider 10 percent of the richest and 50 percent of the poorest.

- 27. According to your best estimate, which is the percentage of wealth that the richest 10% of the population owns today? (slider 0-100)
- 28. According to your best estimate, which is the percentage of wealth that the poorest 50% of the population owns today? (slider 0-100)
 - Now think about regular immigrants, that is, those who were not born in Italy, but who moved here legally and currently reside there.
- 29. According to your best estimate, what is the percentage of immigrants out of the total of the absolute poor in Italy, that is, those who are unable to meet basic needs (food, clothing, housing)? (slider 0-100)
- 30. According to your best estimate, out of 100 immigrants, how many are absolute poor? (slider 0-100)
- 31. According to your best estimate, out of 100 Italians, how many are absolute poor? (slider 0-100)
- 32. According to your best estimate, which percentage of the immigrants out of the total of the immigrants come from Europe? (slider 0-100)

- 33. According to your best estimate, which percentage of the immigrants out of the total of the immigrants is catholic? (slider 0-100)
- 34. According to your best estimate, what was the purpose of this study? (open space)
- 35. Do you feel that this survey was biased? (yes, no, I do not know)

References

- Acciari, P., Alvaredo, F., Morelli, S., 2020. The concentration of personal wealth in italy 1995–2016, in: Measuring and Understanding the Distribution and Intra/Inter-Generational Mobility of Income and Wealth. University of Chicago Press.
- Aldama, A., Bicchieri, C., Freundt, J., Mellers, B., Peters, E., 2021. How perceptions of autonomy relate to beliefs about inequality and fairness. Plos one 16, e0244387.
- Alesina, A., Baqir, R., Easterly, W., 1999. Public goods and ethnic divisions. The Quarterly journal of economics 114, 1243–1284.
- Alesina, A., Giuliano, P., 2011. Preferences for redistribution, in: Handbook of social economics. Elsevier. volume 1, pp. 93–131.
- Alesina, A., Glaeser, E., Glaeser, E.L., 2004. Fighting poverty in the US and Europe: A world of difference. Oxford University Press.
- Alesina, A., Miano, A., Stantcheva, S., 2018a. Immigration and redistribution. Technical Report. National Bureau of Economic Research.
- Alesina, A., Miano, A., Stantcheva, S., 2020. The polarization of reality, in: AEA Papers and Proceedings, pp. 324–28.
- Alesina, A., Murard, E., Rapoport, H., 2019. Immigration and preferences for redistribution in Europe. Technical Report. National Bureau of Economic Research.

- Alesina, A., Stantcheva, S., 2020. Diversity, immigration, and redistribution, in: AEA Papers and Proceedings, pp. 329–34.
- Alesina, A., Stantcheva, S., Teso, E., 2018b. Intergenerational mobility and preferences for redistribution. American Economic Review 108, 521–54.
- Andersen, J.G., Bjørklund, T., 1990. Structural changes and new cleavages: The progress parties in Denmark and Norway. Acta Sociologica 33, 195–217.
- Ashok, V., Kuziemko, I., Washington, E., 2015. Support for redistribution in an age of rising inequality: New stylized facts and some tentative explanations. Brookings Papers on Economic Activity, 367–405URL: http://www.jstor.org/stable/43684107.
- Ballard-Rosa, C., Martin, L., Scheve, K., 2017. The structure of American income tax policy preferences. The Journal of Politics 79, 1–16.
- Bavetta, S., Donni, P.L., Marino, M., 2020. How consistent are perceptions of inequality? Journal of Economic Psychology 78, 102267.
- Bavetta, S., Li Donni, P., Marino, M., 2019. An empirical analysis of the determinants of perceived inequality. Review of Income and Wealth 65, 264–292.
- Bowles, S., Gintis, H., et al., 2000. Reciprocity, self-interest, and the welfare state. Nordic Journal of Political Economy 26, 33–53.
- Bublitz, E., 2017. Misperceptions of income distributions: Cross-country evidence from a randomized survey experiment. Technical Report. LIS Working Paper Series.
- Burgoon, B., Rooduijn, M., 2021. "Immigrationization" of welfare politics? Anti-immigration and welfare attitudes in context. West European Politics 44, 177–203.
- Bussolo, M., Ferrer-i Carbonell, A., Giolbas, A., Torre, I., 2019. I perceive therefore i demand: The formation of inequality perceptions and demand for redistribution. Review of Income and Wealth.

- Cappelen, C., Midtbø, T., 2016. Intra-EU labour migration and support for the Norwegian welfare state. European Sociological Review 32, 691–703.
- Cavaillé, C., Trump, K.S., 2015. The two facets of social policy preferences. The Journal of Politics 77, 146–160.
- Chambers, J.R., Swan, L.K., Heesacker, M., 2015. Perceptions of us social mobility are divided (and distorted) along ideological lines. Psychological science 26, 413–423.
- Citrin, J., Green, D.P., Muste, C., Wong, C., 1997. Public opinion toward immigration reform: The role of economic motivations. The Journal of Politics 59, 858–881.
- Coticchia, F., Vignoli, V., 2020. Populist parties and foreign policy: The case of Italy's five star movement. The British Journal of Politics and International Relations 22, 523–541.
- Cruces, G., Perez-Truglia, R., Tetaz, M., 2013. Biased perceptions of income distribution and preferences for redistribution: Evidence from a survey experiment. Journal of Public Economics 98, 100–112.
- Dahlberg, M., Edmark, K., Lundqvist, H., 2012. Ethnic diversity and preferences for redistribution. Journal of Political Economy 120, 41–76.
- Davidai, S., Gilovich, T., 2015. Building a more mobile America—one income quintile at a time. Perspectives on Psychological Science 10, 60–71.
- Eger, M.A., 2010. Even in Sweden: the effect of immigration on support for welfare state spending. European Sociological Review 26, 203–217.
- Eger, M.A., Breznau, N., 2017. Immigration and the welfare state: A cross-regional analysis of European welfare attitudes. International Journal of Comparative Sociology 58, 440–463.
- Elsner, B., Concannon, J., 2020. Immigration and redistribution. IZA Discussion Paper .
- Enggist, M., Pinggera, M., 2021. Radical right parties and their welfare state stances—not so blurry after all? West European Politics, 1–22.

- Ennser-Jedenastik, L., 2018. Welfare chauvinism in populist radical right platforms: The role of redistributive justice principles. Social Policy & Administration 52, 293–314.
- Fehr, D., Mollerstrom, J., Perez-Truglia, R., 2019. Your place in the world: The demand for national and global redistribution. NBER working paper.
- Fehr, D., Müller, D., Preuss, M., et al., 2020. Social mobility perceptions and inequality acceptance.

 Research platform Empirical and Experimental Economics, University of Innsbruck.
- Fehr, D., Vollmann, M., 2020. Misperceiving economic success: Experimental evidence on meritocratic beliefs and inequality acceptance. Technical Report. AWI Discussion Paper Series.
- Finseraas, H., 2008. Immigration and preferences for redistribution: an empirical analysis of european survey data. Comparative European Politics 6, 407–431.
- Font, N., Graziano, P., Tsakatika, M., 2021. Varieties of inclusionary populism? Syriza, Podemos and the Five-star movement. Government and Opposition 56, 163–183.
- Ford, R., 2016. Who should we help? An experimental test of discrimination in the British welfare state. Political Studies 64, 630–650.
- Fox, C., 2004. The changing color of welfare? How whites' attitudes toward latinos influence support for welfare. American Journal of Sociology 110, 580–625.
- Garand, J.C., Xu, P., Davis, B.C., 2017. Immigration attitudes and support for the welfare state in the American mass public. American Journal of Political Science 61, 146–162.
- Gärtner, M., Mollerstrom, J., Seim, D., 2020. Income Mobility, Luck/Effort Beliefs, and the Demand for Redistribution: Perceptions and Reality. Technical Report.
- Gilens, M., 1995. Racial attitudes and opposition to welfare. The Journal of Politics 57, 994-1014.
- Gimpelson, V., Treisman, D., 2018. Misperceiving inequality. Economics & Politics 30, 27-54.
- Goldschmidt, T., Rydgren, J., 2018. Social distance, immigrant integration, and welfare chauvinism in Sweden. WZB Discussion Paper No. SP VI 2018-102.

- Gorodzeisky, A., 2013. Mechanisms of exclusion: Attitudes toward allocation of social rights to out-group population. Ethnic and Racial Studies 36, 795–817.
- Grigorieff, A., Roth, C., Ubfal, D., 2020. Does information change attitudes toward immigrants? Demography 57, 1117–1143.
- Guriev, S., Papaioannou, E., Fortcoming. The political economy of populism. Journal of Economic Literature .
- Haaland, I., Roth, C., 2020. Labor market concerns and support for immigration. Journal of Public Economics 191, 104256.
- Hainmueller, J., Hangartner, D., 2013. Who gets a Swiss passport? A natural experiment in immigrant discrimination. American political science review 107, 159–187.
- Harell, A., Soroka, S., Iyengar, S., 2016. Race, prejudice and attitudes toward redistribution: A comparative experimental approach. European Journal of Political Research 55, 723–744.
- Herda, D., 2010. How many immigrants? Foreign-born population innumeracy in Europe. Public opinion quarterly 74, 674–695.
- Herda, D., 2015. Beyond innumeracy: Heuristic decision-making and qualitative misperceptions about immigrants in Finland. Ethnic and Racial Studies 38, 1627–1645.
- Hjorth, F., 2016. Who benefits? Welfare chauvinism and national stereotypes. European Union Politics 17, 3–24.
- Hopkins, D.J., Sides, J., Citrin, J., 2019. The muted consequences of correct information about immigration. The Journal of Politics 81, 315–320.
- Houle, C., 2017. Inequality, ethnic diversity, and redistribution. The Journal of Economic Inequality 15, 1–23.
- Hoy, C., Mager, F., et al., 2021. Why are relatively poor people not more supportive of redistribution? Evidence from a survey experiment across 10 countries. American Economic Journal: Economic Policy (Forthcoming).

- Kane, J.V., Barabas, J., 2019. No harm in checking: Using factual manipulation checks to assess attentiveness in experiments. American Journal of Political Science 63, 234–249.
- Karadja, M., Mollerstrom, J., Seim, D., 2017. Richer (and holier) than thou? The effect of relative income improvements on demand for redistribution. Review of Economics and Statistics 99, 201–212.
- Kraus, M.W., Rucker, J.M., Richeson, J.A., 2017. Americans misperceive racial economic equality. Proceedings of the National Academy of Sciences 114, 10324–10331.
- Kuziemko, I., Norton, M.I., Saez, E., Stantcheva, S., 2015. How elastic are preferences for redistribution? Evidence from randomized survey experiments. American Economic Review 105, 1478–1508.
- Larsen, C.A., 2011. Ethnic heterogeneity and public support for welfare: is the american experience replicated in Britain, Sweden and Denmark? Scandinavian Political Studies 34, 332–353.
- Lee, W., Roemer, J., Van der Straeten, K., 2006. Racism, xenophobia, and redistribution. Journal of the European Economic Association 4, 446–454.
- Lee, W., Roemer, J.E., 2006. Racism and redistribution in the United States: A solution to the problem of American exceptionalism. Journal of public Economics 90, 1027–1052.
- Luttmer, E.F., 2001. Group loyalty and the taste for redistribution. Journal of political Economy 109, 500–528.
- Magni, G., 2021. Economic inequality, immigrants and selective solidarity: From perceived lack of opportunity to in-group favoritism. British Journal of Political Science 51, 1357–1380.
- Magni-Berton, R., 2014. Immigration, redistribution, and universal suffrage. Public Choice 160, 391–409.
- Martinangeli, A.F., Windsteiger, L., 2019. Immigration vs. poverty: Causal impact on demand for redistribution in a survey experiment.

- Meltzer, A.H., Richard, S.F., 1981. A rational theory of the size of government. Journal of political Economy 89, 914–927.
- Meyer, J., Shamo, M.K., Gopher, D., 1999. Information structure and the relative efficacy of tables and graphs. Human Factors 41, 570–587.
- Mijs, J.J., 2021. The paradox of inequality: Income inequality and belief in meritocracy go hand in hand. Socio-Economic Review 19, 7–35.
- Mijs, J.J., Hoy, C., 2021. How information about inequality impacts belief in meritocracy: Evidence from a randomized survey experiment in Australia, Indonesia and Mexico. Social Problems.
- Mosca, L., Tronconi, F., 2019. Beyond left and right: the eclectic populism of the Five-star movement. West European Politics 42, 1258–1283.
- Niehues, J., 2014. Subjective perceptions of inequality and redistributive preferences: An international comparison. IW-TRENDS Discussion Papers 2. Cologne Institute for Economic Research.
- Norton, M.I., Ariely, D., 2011. Building a better America—One wealth quintile at a time. Perspectives on Psychological Science 6, 9–12.
- Nyhan, B., Reifler, J., 2019. The roles of information deficits and identity threat in the prevalence of misperceptions. Journal of Elections, Public Opinion and Parties 29, 222–244.
- Pellicer, M., Piraino, P., Wegner, E., 2019. Perceptions of inevitability and demand for redistribution: Evidence from a survey experiment. Journal of Economic Behavior & Organization 159, 274–288.
- Rathgeb, P., Busemeyer, M.R., 2021. How to study the populist radical right and the welfare state? West European Politics, 1–23.
- Razin, A., Sadka, E., Swagel, P., 2002. Tax burden and migration: a political economy theory and evidence. Journal of Public Economics 85, 167–190.
- Schmidt-Catran, A.W., Spies, D.C., 2016. Immigration and welfare support in Germany. American Sociological Review 81, 242–261.

- Senik, C., Stichnoth, H., 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.
- Settele, S., 2019. How do beliefs about the gender wage gap affect the demand for public policy? Available at SSRN 3382325.
- Sides, J., Citrin, J., 2007. European opinion about immigration: The role of identities, interests and information. British journal of political science, 477–504.
- Sniderman, P.M., Hagendoorn, L., Prior, M., 2004. Predisposing factors and situational triggers: Exclusionary reactions to immigrant minorities. American political science review 98, 35–49.
- Zacks, J., Tversky, B., 1999. Bars and lines: A study of graphic communication. Memory & cognition 27, 1073–1079.