

Your Place in the World
Relative Income and Global
Inequality

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Your Place in the World

Relative Income and Global Inequality

Abstract

There is abundant evidence on individual preferences for policies that reduce national inequality, but only little evidence on preferences for policies addressing global inequality. To investigate the latter, we conduct a two-year, face-to-face survey experiment on a representative sample of Germans. We measure how individuals form perceptions of their ranks in the national and global income distributions, and how those perceptions relate to their national and global policy preferences. We find that Germans systematically underestimate their true place in the world's income distribution, but that correcting those misperceptions does not affect their support for policies related to global inequality.

JEL-Codes: C830, C910, D630, D720, H230, H240.

Keywords: (global) inequality, redistribution, survey, experiment.

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Let us suppose that the great empire of China, with all its myriads of inhabitants, was suddenly swallowed up by an earthquake, and let us consider how a man of humanity in Europe [...] would be affected upon receiving intelligence of this dreadful calamity. He would, I imagine, first of all, express very strongly his sorrow for the misfortune of that unhappy people [...]. And when all this fine philosophy was over [...] he would pursue his business or his pleasure, take his repose or his diversion, with the same ease and tranquillity, as if no such accident had happened. If he was to lose his little finger tomorrow, he would not sleep tonight; but, provided he never saw them [...] the destruction of that immense multitude seems plainly an object less interesting to him, than this paltry misfortune of his own.

Adam Smith, *The Theory of Moral Sentiments*

1 Introduction

As inequality in many Western democracies has become more pronounced (Piketty, 2014; OECD, 2015; Alvaredo et al., 2018b), the debate around income redistribution has intensified. In the academic literature, this debate has focused largely on how to allocate resources between individuals from a given country. This emphasis may not be surprising, as there are multiple institutions and policy levers – such as taxes and welfare programs – that serve to redistribute resources domestically. By contrast, comparable institutions and policies are scarce at the global level. Nevertheless, the differences between the world’s poorest and most affluent citizens are staggering, and awareness about these differences is increasing as information flows more freely across the globe (OECD, 2015; Milanovic, 2015, 2016). As a result, institutions and tools for promoting global redistribution may become more important.¹ Moreover, there are many pressing policy issues that, even if not discussed expressly as tools for income redistribution, involve significant components of redistribution of resources across countries. Examples of such policy issues include pandemic response, trade wars, climate change abatement, and migration. For example, Weyl (2018) shows that migration from poor to rich countries has contributed to a large reduction in global inequality, while Milanovic (2016) points to a large reduction in global inequality due to globalization. In this paper, we take a first step toward studying individual preferences about policies that could help reduce global inequality.

To understand why some individuals support policies aimed at reducing global inequality

¹There are also programs that redistribute across countries at the regional level, for example in the European Union (e.g., Becker et al., 2013), and we see an increasing focus on and demand for foreign aid programs in rich countries. A recent example is a referendum in Zurich, Switzerland, in which about 70 percent of voters supported an initiative to increase funds for alleviating global poverty up to one percent of the city’s tax revenue in a given year (for more details see <https://ea-foundation.org/files/prospectus-1-percent-initiative.pdf> and <https://tinyurl.com/yckz56v4>).

and others do not, we conducted a two-year incentivized survey experiment in a representative sample of the German population. Following three different trains of thought in the economics literature, we focus on perceived relative income: i.e., the individual's perceived rank in the national *and* global income distributions. To the extent that individuals may misperceive their income ranks, those systematic misperceptions may translate into systematic biases in the support for policies addressing global inequality.

The first line of reasoning originates in the canonical models of income redistribution from political economy, such as Meltzer and Richard (1981) and Romer (1975). This class of models, when applied to the global arena, predict that an individual's attitudes towards policies like global redistribution should depend on their perceived rank in the global income distribution. Intuitively, these models assume that individuals are *purely selfish*; thus, people deciding whether to support redistribution primarily care about the effects of the policy on their own material well-being. As a result, we would expect individuals with a higher global income rank to be less supportive of such policies, at least to the extent that they would likely be net losers of global redistribution.²

A second perspective, originating in the behavioral economics literature, departs from the assumption that individuals are solely self-interested. A vast theoretical and experimental literature shows that people care not only about their own monetary outcomes, but also about the outcome of others and about fairness (e.g., Fehr and Schmidt, 1999; Bolton and Ockenfels, 2000; Charness and Rabin, 2002). One robust finding from this literature is that individuals are often willing to sacrifice some of their own material well-being to help those who are less fortunate than they are. In our context, these models suggest that individuals with higher global income ranks may feel more pressure to donate to the global poor. To the extent that other-regarding concerns motivate redistribution, these individuals should also favor global redistribution.

The third perspective is inspired by a literature on international trade. For example, following the logic of Stolper and Samuelson (1941), we would expect that globalization and immigration may affect individuals differently, depending on their position in the national income distribution. Due to the global abundance of low skill workers, low skill (and low income) workers from rich countries can be negatively affected by openness to trade.³ To the extent that

²For instance, in Meltzer and Richard (1981), individuals with different market skills have to vote for an income tax rate. In equilibrium, individuals rationally anticipate the disincentive effects of taxation on the labor-leisure choices of their fellow citizens and take the effect into account when voting. When applied to the national arena (i.e., individuals from a given country voting for a domestic income tax), the model predicts that preferences for redistribution will be a decreasing function of an individual's relative skill (and thus relative income). We can easily transfer this model to the global arena by assuming that the individuals are voting for a global income tax: the corresponding prediction predicts that individuals who are higher up in the global income distribution should be less supportive of global income redistribution.

³In its original form, the Stolper-Samuelson effect provides insights on the distributional effects of international trade within a given country and predicts that in a two goods and two production factor world the one factor that faces more competitive pressure from trade liberalization and globalization must end up worse off compared to others in the same country. Despite the rather restrictive assumptions of the original theorem and

globalization entails more openness to trade, individuals at the bottom of the German income distribution may be less supportive of globalization.⁴ Similarly, these individuals should be less supportive of immigration, given that immigration is disproportionately low skilled.

We designed our survey experiment with three main goals. First, we measure attitudes towards policies related to global inequality. Second, we measure individuals' perceptions of their relative positions in the national and global income distributions, respectively. Third, we study the correlational and causal effects of these relative income perceptions on the policy preferences. We embedded our survey in the German Socio-Economic Panel (SOEP), a representative longitudinal study of German households. The SOEP contains an innovation sample (SOEP-IS) allowing researchers to implement tailor-made survey experiments. The surveys are administered by trained interviewers who visit respondents in their homes each year. This offers unique advantages over other survey modes (e.g., phone and online surveys), such as the ability to interview multiple household members in private and follow-up a year later with little attrition. The design of our survey takes advantage of this structure to investigate to what extent misperceptions of relative income are robust and meaningful, or if they primarily reflect disinterest from participants and other forms of measurement error.

Our survey elicited preferences over a range of policies related to national and global inequality. We elicited the demand for both national and global redistribution and respondents' support for the creation of an international institution with a mandate to implement redistribution at the global scale. Given that immigration and globalization can have significant redistributive implications at the global scale, we asked two questions that elicited support for immigration and globalization, respectively. As some of these questions involve abstract concepts that can be difficult for respondents to think about, we took care to clearly define and explain all concepts involved such as "economic redistribution." Lastly, we measured willingness to donate money to the national poor and the global poor by asking respondents to: (i) split €50 between them and a German household at the bottom ten percent of the national income distribution, and (ii) split another €50 between them and a poor household, from Kenya or Uganda, at the bottom ten percent of the global income distribution.

Our survey also elicited respondents' perceptions about their household's position in the national and global income distributions. We used a number of measures to minimize the usual concerns with the measurement of misperceptions. For example, we offered significant rewards for accurate responses to encourage participant attention and honesty. Likewise, interviewers were present in person and could provide help in real time, minimizing the risk of

the scant empirical support, the model has significantly contributed to the debate on the distributional effects of globalization (Goldberg and Pavcnik, 2007).

⁴This resonates well with the stagnating income growth of the lower middle class in rich countries (i.e., around the 80th percentile in the global income distribution), popularized as the "elephant graph" (Lakner and Milanovic, 2016; Milanovic, 2016, but see also Alvaredo et al., 2018a for a more nuanced picture using newer data from various sources). Similarly, evidence suggests that local US and German labor markets suffered the most the more they were exposed to trade from China (Autor et al., 2013, 2016; Dauth et al., 2014).

non-response to specific survey items or misunderstandings. We also took care to minimize any social desirability bias by requiring respondents to provide responses in private, without the interviewer being able to see the tablet screen. The survey mode also guaranteed that respondents could not use the Internet to look up information or speak to other household members while completing the survey (Grewenig et al., 2020).

To study how perceptions of relative income affects policy preferences causally, we created exogenous variation by implementing an information-provision experiment (Cruces et al., 2013; Karadja et al., 2017). After eliciting prior beliefs on relative income, but before eliciting policy preferences, we randomly assigned participants to either a control group receiving no information, or to a treatment in which they received easy-to-digest information about their true position in both the national and global income distributions. The provision of information creates exogenous variation in perceptions that we can leverage to measure the causal effect of perceived income ranks. For example, take a group of individuals who underestimate their global relative incomes by ten percentage points. We would expect the individuals who are not assigned to information to continue underestimating their global relative income by ten percentage points, while individuals who are assigned to the information should adjust their perceptions upwards. The information provision thus creates a positive shock to the individual's perceived global relative income. We can then test, for example, whether respondents, in the spirit of Meltzer and Richard (1981), become less supportive of global redistribution upon learning that they were higher up in the global income distribution.

One year after the baseline survey, we conducted a follow-up survey that re-elicited respondents' perceptions about their relative incomes, again incentivized for accuracy, as well as their policy preferences. This approach allowed us to assess whether the information provided in the baseline survey had persistent effects a full year later. Moreover, the follow-up survey provides additional measurements. In particular, we conducted an information-acquisition task to measure the respondents' willingness to pay for information about their global and relative incomes, using standard incentive-compatible methods (Becker, DeGroot, and Marschak, 1964).

The first set of results documents preferences over policies related to global inequality. We find substantial variation across individuals in their preference for global redistribution, in their giving behavior and in their opinions on globalization and immigration. Preferences for global redistribution are significantly correlated to preferences for national redistribution. They also share many of the same correlates such as political orientation, and beliefs about the roles of effort and luck in economic success. Preferences for global redistribution are significantly and positively correlated to preferences for immigration and globalization, suggesting that support for those policies may respond to redistributive motives. In addition, preferences for global redistribution are significantly, albeit far from perfectly, correlated to behavior in the global giving task. This suggests that other-regarding preferences play an important role.

The second set of results measures misperceptions about relative positions in the national

and global income distributions and documents their meaningfulness. The absolute size of misperceptions about national and global relative positions are similar, with a mean absolute error of 23 percentage points for both. Both types of misperceptions are also similar in that they display a middle-class bias: German households who are rich by national standards tend to think that they are middle-class, while households who are rich by global standards tend to think that they are the global middle class. Nevertheless, there are some notable differences in the distribution of global and national misperceptions. On the one hand, respondents are, on average, correct about their national relative positions, with approximately an equal number of respondents overestimating and underestimating their positions. On the other hand, households are much more likely to underestimate their positions in the global income distribution than to overestimate it: Germans underestimate their place in the global income distribution by an average of 15 percentage points. This could be consequential: if all Germans were informed about their true place in the world's income distribution, that could increase, or decrease, their average support for global redistribution and related policies.

Several questions have been raised about the interpretation of misperceptions about important variables, such as relative income and income inequality. For example, a significant fraction of survey respondents' misperceptions may be due to their lack of attention to the survey, lack of interest in the topic, confusion about what the survey question is trying to elicit (Enke and Graeber, 2020), or experimenter-demand effects (Zizzo, 2010; de Quidt et al., 2018; Mummolo and Peterson, 2019). We take advantage of the unique features of SOEP and some methodological innovations to provide novel evidence that misperceptions are indeed meaningful. The evidence indicates that misperceptions are persistent, as individuals who overestimate their rank in one year are likely to overestimate it a year later as well. We show that misperceptions are also robust within households: if one person overestimates their rank, other members of their household are likely to overestimate it too. We also provide evidence that households are genuinely interested in learning about their relative income. Providing information to individuals affects their perceptions a year later, implying that individuals truly incorporate the information. Moreover, we find that providing one member of a household with information not only affects the perceptions of the same household member a year later, but of other household members too. This evidence suggests that individuals care enough about the information on relative income to share it voluntarily with family members in the 12 months that separated the two survey waves. Finally, using the information-acquisition experiment, we document that individuals are willing to pay non-trivial amounts for information about their global and national income ranks.

The third set of results looks at the relationship between policy preferences and perceptions of relative income. As a benchmark, we start with the relationship between national income rank and preferences for national redistribution, which has been studied before in other countries using experimental (Cruces et al., 2013; Karadja et al., 2017) and non-experimental methods

(see e.g., Fong, 2001; Alesina and La Ferrara, 2005; Alesina and Giuliano, 2011; Mollerstrom and Seim, 2014). As has been documented previously, we find that the demand for national redistribution is negatively correlated to the perceived national income rank. Moreover, and also consistent with previous work (Cruces et al., 2013; Kuziemko et al., 2015; Karadja et al., 2017; Fernandez-Albertos and Kuo, 2018; Alesina et al., 2018b; Fenton, 2020), we find a large heterogeneity by ideological orientation, with the correlation being driven almost entirely by left-of-center individuals (about a third of the sample). The results from the information-provision experiment further corroborates these findings: information about national relative income affects demand for national redistribution in the predicted direction, and only for left-of-center respondents. This evidence is consistent with the selfish motives a-la Meltzer-Richard in the national arena.

On the contrary, we do not find evidence that correcting misperceptions on global relative income has an effect on support for policies related to global inequality. If anything, we find that individuals care about their national income rank: among the left-leaning respondents, individuals who find out that they are higher up in the national income distribution lower their support for global redistribution, while right leaning respondents who learn they are higher in the national income distribution increase global giving. This suggests that the relevant reference group when thinking about policies related to global redistribution are people nationally, but not globally.

This study ties into several strands of literature. First, it is related to a literature measuring preferences for redistribution. In addition to selfish motives (Fong, 2001; Alesina and La Ferrara, 2005; Alesina and Giuliano, 2011; Mollerstrom and Seim, 2014), this literature highlights other relevant factors, such as beliefs about the relative importance of effort versus luck in generating individual economic success, and other-regarding preferences (e.g., Alesina and Giuliano, 2011; Mollerstrom and Seim, 2014; Alesina et al., 2018b; Gärtner et al., 2019). We contribute to this literature by providing, to the best of our knowledge, first evidence on the formation of preferences for global redistribution.

We also add to a growing literature on the role of misperceptions as a determinant of political opinions and policy preferences. For example, a number of studies have documented the role of misperceptions about relative income (Cruces et al., 2013; Karadja et al., 2017; Engelhardt and Wagener, 2017; Fernandez-Albertos and Kuo, 2018), wealth inequality (Norton and Ariely, 2011; Kuziemko et al., 2015; Fehr and Reichlin, 2020), income mobility (Alesina et al., 2018b; Fehr et al., 2019; Gärtner et al., 2019), and immigration (Alesina et al., 2018a; Haaland and Roth, 2019). One common concern raised in regard to this literature is that misperceptions mostly reflect measurement error, inattention, or disinterest from the survey respondent. We contribute to this literature by leveraging the setting provided by the SOEP and methodological innovations to provide unique evidence that misperceptions are meaningful.⁵

⁵Our methodological innovations could be used also in other research areas, including (but not limited to)

Our study also relates to research on international aid and migration in political science, as well as in sociology and economics. Some literature on international aid argues that such giving is driven primarily by strategic considerations of the giving nation rather than need in the recipient country (see e.g., Alesina and Dollar, 2000; Kuziemko and Werker, 2006; Dreher et al., 2009). However, there is growing interest in questions regarding public opinion about foreign aid (Kinder and Kam, 2010; Bauhr et al., 2013; Milner and Tingley, 2013; Bechtel et al., 2014; Nair, 2018; Eichenauer et al., 2018). Nair (2018) is the most closely related, as it explores the link between global relative income and support for foreign aid. There are several conceptual and methodological differences between our study and Nair (2018), however. For instance, while Nair (2018) focuses only on direct foreign aid, we study a host of policies related to global inequality. Second, while Nair (2018) focuses on information about global relative income, we provide information and elicit beliefs about both the global and national income ranks.⁶ This was ex-ante important because some economic theories suggest that national income rank, instead of global income rank, should matter for policy preferences. This feature of the design turned to be important ex-post too, as we find that national relative income, rather than global relative income, affects the demand for global redistribution.

Finally, our findings are also related to recent work on group identity and altruism. For instance, Enke et al. (2019) define moral universalism as the extent to which people exhibit the same level of altruism and trust towards strangers as towards in-group members. They provide evidence of significant heterogeneity in moral universalism across individuals. While our finding that preferences for national redistribution are correlated to preferences for global redistribution could be interpreted as evidence that moral universalism is significant for some individuals, the fact that some individuals want to redistribute domestically but not globally tells us that moral universalism does not apply to all. Other work, such as Cappelen et al. (2013) has focused on giving of students from two rich countries (Germany and Norway) to students in two of the world's poorest countries (Uganda and Tanzania). This type of international altruism has also been studied in other fields beyond economics such as political science (Nair, 2018) and sociology (Bader and Keuschnigg, 2020). In contrast to this work, we take a broader approach and focus not only on giving, but also on other aspects, such as redistribution, globalization and immigration, which are guided by economic frameworks such as Meltzer-Richard and Stolper-Samuelson.

The paper continues as follows. Section 2 outlines our research design and describes our data. Section 3 documents our first set of results related to the preferences for global redistribution and other policies. Section 4 documents the second set of results, on the misperceptions of

misperceptions about the inflation rate (Cavallo et al., 2017), housing prices (Fuster et al., 2019), and cost of living (Bottan and Perez-Truglia, 2017).

⁶If individuals learn that they are richer, on a global scale, than they previously thought, they may infer from that information that they are also richer than they thought on the national scale, and vice-versa. Measuring and providing information about both national and global relative incomes help us avoid this problem.

relative income. Section 5 presents the third set of results, about the effects of perceived relative income on policy preferences. Section 6 concludes.

2 Survey Design and Implementation

We collected data in cooperation with the German Socio-Economic Panel (SOEP) and made use of their Innovation Sample (SOEP-IS). The SOEP-IS is a longitudinal study that surveys a representative sample of the German population on a wide range of topics once a year.⁷ The surveys are conducted computer-assisted in face-to-face interviews by trained professional interviewers. We designed two tailor-made survey modules, including a randomized information treatment, and incentivized belief and outcome measures, and implemented them in two consecutive waves of the SOEP-IS. The baseline survey took place in the Fall of 2017 and a follow-up survey in the Fall of 2018. In Appendices B and C, we provide the English translations of the two original survey instruments (which were in German).

2.1 Survey Design: Baseline

The baseline survey had the following structure: i) pre-treatment questions; ii) assessment of perceived position in the income distribution; iii) randomized treatment providing truthful and accurate information about the position in the income distribution; iv) outcome measures on preferences for redistribution, support for globalization and immigration, and on behavior in an incentivized giving task (we will refer to these measures jointly as “policy preferences”).⁸

We asked all questions (except the questions on support for a global redistributive institution, globalization, and immigration) both in the national (i.e., German) context, and in the global context. In particular, we asked respondents in (ii) to state their perceived position in both the national and global income distribution. Third, we randomized whether respondents saw the national or the global question first at the individual level to ease presentation and comprehension. That means that a person who saw the national level question first in (ii) would see information about the national level first in (iii) (if randomly selected to the treatment group) and would be asked the question about national redistribution, and about giving in the national context, first in part (iv).

The pre-treatment part (i) included two questions about how respondents perceive the role of effort and luck in economic success in the national and global context (Effort vs. Luck Belief). These beliefs in the national context are typically strong predictors of various political opinions, such as individual demand for redistribution at the national level (see e.g., Piketty, 1995;

⁷The SOEP-IS draws on the same pool of questions as the SOEP and makes use of the same professional survey company (see Goebel et al. (2018) for more details on the SOEP, and Richter and Schupp (2015) for the SOEP-IS).

⁸Each survey item in our module briefly explained the subject of the question, stated the question and explained the response scale, for better comprehension.

Alesina and Angeletos, 2005; Benabou and Tirole, 2006 for seminal theoretical work, and Fong, 2001; Mollerstrom and Seim, 2014; Karadja et al., 2017; Gärtner et al., 2019 for empirical evidence). We also use these two questions as a falsification test, as we should not find treatment effects on a variable that was measured before the information treatment.

Because there is growing evidence that information effects on individual views about redistribution and policies are subject to strong heterogeneity in political orientation (e.g., Karadja et al., 2017; Alesina et al., 2018b,a; Fenton, 2020), we purposefully placed our module after the questions about political attitudes that are routinely included in the SOEP-IS. In this way, we can estimate the heterogeneity of the experimental results by political orientation without having to worry about imbalanced sub-samples and the possibility that the information treatment influences the responses on political orientation. Specifically, we use respondents' self-placement in the political left-right spectrum on a scale from far left (0) to far right (10). A sizable share of respondents (about 41 percent) chose the mid-point, while a slight majority of the remaining respondents lean left.⁹ To simplify the exposition of our results, the baseline specification splits the sample between left-of-center (0-4) respondents and center/right-of-center respondents (5-10).

Estimates of the global income distribution predominantly rely on per-capita pre-tax household income (see e.g., Milanovic, 2015, 2016). Therefore, before asking respondents for their perceptions of their relative national and global income in part (ii) of the survey module, we highlighted their absolute, per-capita pre-tax household income. We then asked them to state their position in the national and global income distributions on a scale from 0 (poorest person) to 100 (richest person). To minimize social desirability bias, we required respondents to answer these questions in private without the interviewer seeing the tablet screen. Both relative income questions were incentivized for accuracy, and respondents were informed that they would receive €20 for each assessment that was correct to the closest percentile (ensuring that it was optimal for them to answer in a way that elicited the true mode of their beliefs).

After stating the perceived rank in the national and global income distribution, respondents answered several questions unrelated to our research (these questions were, among other things, related to the respondents' civil status, their siblings, and their children, and did not vary by treatment). Subsequently, our module continued with part (iii), in which we randomized half of the respondents into a treatment providing them information about their true rank in the national and global income distributions. The information revealed how many people are poorer at the national *and* global level, based on their stated pre-tax per-capita household income, and additionally visualized this information using customized graphs to make it easier to understand and digest. See Figure 1 for a sample of the information treatment. The other half of respondents received no information.

Then, in part (iv), we measured our outcomes of interest. We first asked how much economic

⁹For the full distribution of responses, see Appendix A.1.

redistribution respondents demand at the national and global level with answers ranging from 1 (indicating no demand for redistribution) to 10 (indicating a desire for complete redistribution that equalizes post-redistribution income between citizens or people in the world). Similarly, we asked to what extent they would support the creation of an international institution with a mandate to implement global redistribution, about their preferred level of globalization, and about their view on immigration policies that would allow more people from poor countries to live and work in Germany. Again, answers to these questions ranged from 1 indicating no support, less immigration, and no globalization, respectively, to 10 indicating full support, more immigration, and complete globalization.

Importantly, as most of these questions involve abstract concepts, such as “economic redistribution,” that can be difficult for respondents to think about, not least at the global level, we took great care to define and explain all involved concepts and answer scales in a simple and comprehensible way. For example, we explain that redistribution of income at the national level means that the state reduces the income gap between citizens through taxes and transfers, and subsequently introduce the question about global redistribution by asking them to imagine that it would be possible to redistribute income around the world in a similar way as a state can redistribute income within a country. The trained interviewers also received information on how to respond to potential questions that the respondents had while taking the survey.

Among our outcome variables in part (iv) we also have two incentivized questions that cover the altruistic aspect of redistribution. To this end, we used two simple giving tasks with real stakes in a national and a global context, respectively. More precisely, respondents were asked to: a) distribute €50 between them and a poor German household; and b) distribute another €50 between them and a poor global household. Respondents made their decisions in private: interviewers were not able to see the tablet screen. German households were drawn from the bottom ten percent of the income distribution of SOEP-IS households that are not in our sample.¹⁰ To facilitate transfers to a poor global household, we used GiveDirectly, a well-established non-profit charity that provides cash transfers to poor households in Kenya and Uganda, and whose eligibility criteria ensures that recipient households belong to the bottom ten percent of the global income distribution (Haushofer and Shapiro, 2016). We randomly selected one in seven respondents and implemented their distribution decision in one randomly selected task (i.e., either the national or the global distribution decision). The money that a respondent allocated to herself was given to her immediately after completing the survey, while national recipient households received their transfers (the exact amount given by the respondent) with a cover letter explaining the transfer after the data collection for this SOEP-IS wave was completed.

¹⁰The SOEP-IS consists of several independent samples that are each representative of the German population.

2.2 Survey Design: Follow-Up

We designed a follow-up survey that we implemented in the same sample of respondents a year later. One of the purposes of this survey was to test whether the information provided to the survey participants had persistent effects a year later. As in the baseline survey, we began by collecting information on income and the number of household members. We then asked respondents to guess their rank in the national and global income distributions, rewarding accurate prediction with €10 each. This time, however, we did not provide information on the true rank in either context. Instead, after answering several SOEP-IS questions unrelated to our research, all participants answered the same questions about demand for redistribution, globalization, and immigration as in the baseline survey. In the follow-up survey, however, we did not include the incentivized distribution task.

The follow-up survey included some additional questions designed to complement the results from the baseline survey. Most importantly, we elicited respondents' willingness to pay (WTP) for information about their true rank in the national and the global income distributions. To do so, we used a list-price version of the Becker-DeGroot-Marschak method (see e.g., Andersen et al., 2006). The list presented, separately for the national and the global income distribution, five scenarios in which respondents must choose between receiving information about their true rank in the corresponding income distribution, or receiving monetary compensation. The amount of money was predetermined and ranged from €0.1 in Scenario 1 to €10 in Scenario 5, in increasing increments (€0.1, €1, €2.5, €5, and €10). We informed respondents that one of the overall five scenarios would be randomly selected and implemented.¹¹ Respondents made their decisions in private and to avoid that they pay for this information for strategic reasons, we took care to assure respondents that we would not ask any more incentivized questions about their income rank, either later in the survey, or in later waves of the survey. The survey included a few additional questions. After the elicitation of each belief on relative income, we elicited how certain respondents were about their answers on a 0-10 scale. We also asked respondents to what extent they think that the rich and poor benefit from globalization and immigration. Finally, we included a battery of four questions eliciting whether the respondent trust the government, the media, official statistics and research.

2.3 Survey Implementation

We implemented our two survey modules in the 2017 and 2018 waves of the SOEP-IS, which ran from September through December in each year. A total of 1,392 respondents took part in the baseline survey, while 1,167 participated in the follow-up survey (84 percent of the 1,392 respondents in the baseline survey). Interviews with a single household member typically

¹¹The instructions for the elicitation procedure, which we adapted from the elicitation task employed in Fuster et al. (2019), were tested for understanding with cognitive interviews.

lasted for about 60 minutes, out of which our modules comprised on average 8-10 minutes.

There are some advantages of working with the SOEP that are worth emphasizing. The SOEP team undertakes various efforts to optimize data quality, for example, new survey items are pre-tested before the data collection. During the data collection, there are a number of institutional safeguards that have been developed by SOEP in over 35 years of history.¹² After the data collection, there are several routines to check data plausibility and consistency. In addition to the data quality, there are some unique features of SOEP that we take advantage of for our research design. All household members over age of 16 are interviewed in computer-assisted, face-to-face interviews performed by trained professionals. Interviews were conducted in private with each member of a household, i.e., there was no communication possible between household members during and between the interviews within a wave. For this reason, we can study the diffusion of information within the household across waves. While we only designed a module of the survey, we have access to responses to questions in all modules, including a rich set of measures of socio-economic indicators. Moreover, due to the longitudinal character of the SOEP, we can track outcomes in years before and after the baseline survey.

Appendix A.1 provides descriptive statistics for the baseline and follow-up survey. We show that, consistent with successful random assignment, the observable pre-treatment characteristics are balanced across all treatment groups. One potential concern with using data from the follow-up survey as outcome measures is that the treatment may have affected the decision to participate in the follow-up survey. This is not a significant concern here for two reasons. First, attrition is low: 16 percent of the respondents in the baseline survey did not participate in our follow-up survey one year later. Second, and most importantly, there is no significant difference in the attrition rates between individuals who were in the control group (15 percent attrition), and individuals who were in the treatment group in the baseline survey (17 percent attrition, p -value=0.247 for t-test of proportions).¹³ In addition to the low attrition rate, our study stands out relative to other information-provision studies in terms of the length of time between our baseline and follow-up surveys. For examples, Kuziemko et al. (2015) conducted their follow-up survey one month later (with a response rate of 14 percent), Cavallo et al. (2017) conducted it two months later (response rate of 36.1 percent), and Karadja et al. (2017) conducted it three months later (response rate of 80 percent), and Haaland and Roth (2019) conducted it one week later (with a response rate of 66.3 percent).

3 Policy Preferences

We start with a descriptive analysis of policy preferences from the baseline control group (i.e., individuals who did not receive any feedback from us regarding their true income rank).

¹²For more details, see Goebel et al., 2018.

¹³In Appendix A.2, we provide further evidence that attrition was random.

Looking at preferences for redistribution, Figure 2.a reveals a significant variation as to how much redistribution individuals want at both the national and the global level, and even though the two preferences are correlated (correlation coefficient 0.70, p -value < 0.001 as illustrated in Figure 2.b), the correlation is not perfect: there are some respondents who want extensive national redistribution but very little global redistribution, and vice versa.¹⁴ There is also significant variation in the extent to which respondents are supporting the idea of a global institution with a redistributive mandate (Figure 2.c). Likewise, there is significant heterogeneity in how much the respondents support globalization (Figure 2.d) and immigration (Figure 2.e).

These preference measures are unincentivized self-reports, but our survey also contained two incentivized giving tasks. In each of these two tasks respondents could split €50 between themselves and a poor household in the national context and in the global context. As opposed to the demand for redistribution measures, which captures both selfish and altruistic preferences, the giving tasks are only reflecting altruism. Figure 2.f shows that there is substantial giving among the households: the average share of giving to a poor German household is 56 percent ($M=€28.0$, $SD=14.8$) while the average share of giving to a Kenyan household is 64 percent ($M=€31.8$, $SD=15.9$). The two measures are correlated (correlation coefficient 0.74, p -value < 0.01), but again, there are some respondents who give a high share to a national poor, but a low share to a global poor and vice versa (Figure 2.g).

Table 1 documents the correlations between the different policy preferences. In general we see that they are all correlated. More specifically, we note that there is a significant positive correlation between the real-stakes donations with preferences for redistribution. That is, demanding more national redistribution is related to higher donation to the national poor and demanding more global redistribution is associated with higher giving to the global poor.¹⁵ This indicates that demand for redistribution likely has altruistic as well as selfish components, both at the national and at the global level. The magnitude of those correlations are, however, not as large as for example the positive correlation between national and global demand for redistribution, or the correlation between national and global giving.

In Table 2, we investigate the correlates of the policy preferences. In general we see that they share many correlates, which should not be surprising given that they are correlated to each other (as documented in Table 2). The odd-numbered columns from Table 2 corresponds to bivariate regressions (i.e., with independent regressions with one right-hand-side variable each), whereas the even-numbered columns report multivariate correlations (i.e., with all correlates entering the right-hand-side of the equation jointly). Columns (1) and (2) look at the extent to which our measure of demand for national redistribution are correlated with personal characteristics that have previously been shown to correlate with demand for national redistri-

¹⁴About 42 percent of respondents in the control group state exactly the same level of redistribution in the national and global arena and for 28 percent of respondents the response differs in one level.

¹⁵See Appendix A.3 for a less parametric approach.

bution (Alesina and La Ferrara, 2005; Alesina and Giuliano, 2011; Mollerstrom and Seim, 2014; Karadja et al., 2017; Gärtner et al., 2017, 2019). We mostly confirm previous findings. For example, the demand for national redistribution is higher for individuals with lower income, for individuals who believes that effort drives economic success, for left-leaning individuals, and for respondents living in East Germany. We fail to find support for some previously documented findings however. We see, for instance, no gender difference in the demand for national redistribution (in other work, women are generally found to demand more redistribution than men). Columns (3) and (4) in Table 2 display the results of the corresponding correlational analysis for demand for global redistribution. There are some differences compared to the correlates of demand for national redistribution. Most notably, there is no relation between a respondent's income and their demand for global redistribution. The fact that those to the left on the political spectrum want more redistribution remains however, as does the correlation with Effort vs. Luck Belief.¹⁶ Columns (5) and (6) show that the correlates of supporting a global institution with a redistributive mandate are largely the same as for demand for global redistribution. We note, however, that respondents located in East Germany are less supportive of such an organization than those in the West, and that German citizens are less supportive than respondents without the German citizenship.

In columns (7)–(10) of Table 2, we display the correlates of the giving decisions. There are some robust patterns and, in particular, we note that giving at both the national and the global level is increasing in education and income, whereas older respondents and East German respondents give less. Respondents who believe that individual economic success globally depends on luck also give more in both contexts, and there is a tendency that left-leaning respondents give more in both contexts as well. The last four columns of Table 2 display the correlates of respondents' support of globalization, and of generous immigration policies. We consistently see that older respondents, respondents in East Germany, and German citizens are less in favor of globalization and of generous immigration policies. We also note that higher income is associated with more positive views on globalization and immigration, respectively, while left-leaning respondents more likely favor generous immigration policies, but are only weakly supportive of globalization. People who believe that it is luck rather than effort that determines an individual's economic success in the global arena are more supportive of immigration and of globalization. Effort vs. Luck Belief at the national level, however, are uncorrelated with these preferences.

¹⁶It is also interesting to note that respondents are in wide agreement that luck plays a more important role in generating individual global economic success than in generating individual national economic success. The average answer on the Effort vs. Luck Belief scale is 4.58 (SD=1.68) for the national and 5.18 (SD=1.94) for the global context (p-value < 0.001).

4 Perceptions of Relative Income

4.1 Misperceptions

What do respondents know about their national and global relative income? On the one hand, there are reasons to expect that misperceptions for global relative income will be more substantial than those of national relative income. For example, the information about the national income distribution may be more accessible than information about the global income distribution. National newspapers may more often provide information related to the national income distribution, but rarely provide information related to the global income distribution. The same case can be made about indirect sources of information about the income distribution, such as salary discussions with social contacts, or casual observation of other people's consumption: the majority of these conversations and observations may be about a national rather than a global context. On the other hand, there are also reasons to expect lower misperceptions for global relative income than for national relative income, at least in a rich country like Germany. Even if a household had no idea whether it is poor or rich within Germany, just knowing that Germany is a rich country may be enough to infer that one is very likely at the top of the global income distribution.

Figure 3 shows the perceptions for national income rank (Figure 3.a) and global income rank (Figure 3.b). The results indicate that substantial misperceptions exist for both the global and national beliefs. Figure 4.a shows the histograms of misperceptions: i.e., the difference between prior beliefs and reality.¹⁷ Here, a positive (negative) number indicates that the respondent overestimates (underestimates) her own rank. For example, 0.3 means that the respondent believes that she is 30 percentage points higher on the relative income scale than she actually is, and a -0.1 would indicate that the respondent's relative income position is in fact ten percentage points higher than she believes.¹⁸ A visual inspection of Figure 4.a indicates a much smaller average bias for national than for global rank, and it is indeed the case that the average bias for national rank is close to zero ($M=-0.01$, $SD=0.29$). Moreover, there are roughly the same number of people overestimating their national rank as there are people underestimating it. This is not true for global rank: respondents underestimate their relative position in the global

¹⁷In Appendix A.4, we also show the distribution of the gap between the information provided to the individuals and the prior beliefs.

¹⁸One potential concern is that misperceptions may be partly due to the fact that individuals do not know their absolute, rather than relative, income. There are two pieces of evidence indicating that this is not a significant source for concern. First, Karadja et al. (2017), who can match self-reported absolute income is highly correlated to the actual absolute income (as measure in the government's administrative data). Second, in our own data we find that household members are highly consistent with each other in their perceptions of absolute income. More precisely, we find that just 11.4 percent of the overall variation in perceived absolute income corresponds to the within-household variation (these results exclude 3 outliers in perceived absolute income). In comparison, 10.8 percent of the overall variation in the perceived number of household members corresponds to the within-household variation.

income distribution by an average of 15 percentage points ($SD=0.26$, p -value < 0.001 for a paired t -test of differences in means). Despite these different average errors in national and global relative income perceptions, we observe quite pronounced individual biases that are similar in magnitude at the national and global levels. We compare the accuracy of national and global relative income perceptions using the mean absolute error, and find that these are very similar for national and global beliefs (23 percentage points in both cases). In other words, at the individual level, Germans are as (in)accurate about their national income rank as they are about their global income rank.

Figure 4.b shows the relationship between the national and the global biases. They are significantly (albeit not perfectly) correlated: the correlation coefficient is 0.61 (p -value < 0.001), implying that if a respondent overestimates her position relative to other Germans chances are that she will also overestimate her income globally. This, in turn, may imply that respondents are, to some extent, extrapolating their beliefs about their national relative position to the global arena.¹⁹

We assess if the misperceptions are consistent with the middle-class bias that would be expected under assortativity neglect. That is, the poor interact disproportionately with poor people and thus end up overestimating their relative income; while the rich interact disproportionately with rich people and thus end up underestimating their relative income.²⁰ The results are presented in Figure 5.a for national relative income and Figure 5.b for global relative income. Figure 5.a shows that, consistent with prior evidence (Cruces et al., 2013), there is a middle-class bias in the perceptions about national relative income. Households below the median income overestimate their relative income while households above the median income underestimate their relative income. Figure 5.b shows that a middle-class bias may also exist for the belief about global relative income. However, since the vast majority of German households are placed in the top two deciles of the global income distribution, there is not sufficient data to provide a sharp test of the middle-class bias at the global level.

The results presented so far indicate substantial misperceptions about national and global relative income. However, this kind of data on misperceptions come with certain challenges due to their self-reported nature. For instance, some respondents may not be paying attention to the question, or may be uninformed simply because they do not care about the topic. In the next sections, we take advantage of our unique data and specific features of SOEP to address these concerns.

¹⁹Moreover, the two types of biases have similar correlates (results presented in Appendix A.5).

²⁰Frick et al. (2019) formalize how this assortativity neglect may arise more generally. Theoretically, a middle-class bias may also lead to more inequality, in particular, if the middle class can redistribute resources to themselves and are richer than the poor (Acemoglu et al., 2015).

4.2 Consistency Across Household Members and Over Time

We start by noting that misperceptions exist in our data even though we provided significant rewards for the respondents to correctly state their national and global position in the relative income distribution. The incentives should, at least to some extent, reduce the concerns about measurement error as we are giving people an incentive to pay attention, and to think harder than they would under non-incentivized conditions.

Next, we show that the misperceptions are robust across household members and over time. The data from the follow-up survey help us to assess the consistency (or lack thereof) of misperceptions. If biases are pure measurement error, there should be no correlation between the bias in one wave of the survey and the next. On the other hand, if individuals are truly biased, their misperceptions should be correlated over time. Focusing on the control group, Figure 6 shows that the persistence is significant: for national ranks, for each one percentage-point bias in the baseline survey, a respondent is biased in the same direction by 0.4 percentage points in the follow-up survey (p -value < 0.001). Results are similar in magnitude for global rank (correlation is 0.28, p -value < 0.001). The existence of such a persistence is even more remarkable given that there are some factors working against it – in particular, individuals are changing their absolute income over time, which often causes their true position to change as well.²¹

We further document that misperceptions are quite consistent between household members. If misperceptions reflect real, meaningful biases, we should expect them to be correlated across members of the same household. Indeed, we find that misperceptions are highly correlated between household members: a minority (41.8 percent) of the overall variance in misperceptions of national rank corresponds to the within-household variance.²² As a benchmark, we can reproduce this exercise for a factual question for which we would expect household members to be almost perfectly consistent with each other: the number of household members. We find that perceptions about the household size are highly correlated between household members: just 10.8 percent of the overall variance corresponds to the within-household variance.²³ In sum, members of the same household are largely consistent with each other regarding their misperceptions of income rank, although not as consistent as they are regarding the perceived household size.

²¹For details, see Appendix A.6.

²²We follow the strategy from Chetty et al. (2011), by estimating a regression of the variable of interest (in this case, the misperception of national income rank) on a constant and household-level random-effects. With the regression estimates we can compute the parameter $1 - \rho$, which corresponds to the within-household variance as a share of the overall variance. The results are roughly similar for the global misperceptions: 58.2 percent of the overall variance corresponds to within-household variance.

²³There are some small inconsistencies between household members in their perceptions of household size. These inconsistencies may be due to lack of attention, typos, or due to gray areas: e.g., one spouse includes a child currently at college as a member of the household while the other spouse does not.

4.3 Persistence of Learning

Providing information on the respondent’s income rank could have spurious effects. A first concern has to do with experimenter-demand effect: subjects may react to the information just because they feel social pressure from the experimenter (Zizzo, 2010). While this is a valid concern, recent evidence suggests that the magnitude of experimenter demand effects is small (de Quidt et al., 2018; Mummolo and Peterson, 2019). Moreover, we took some precautions to try to minimize the scope of experimenter-demand effect. Most importantly, despite the survey being conducted face-to-face with the interviewer visiting people in their homes, the subjects received the information and answered questions related to relative income in private: the surveyor handed them a tablet and then turned around to give privacy to the respondent. A second concern has to do with anchoring. For example, Cavallo et al. (2017) shows that providing individuals with fictitious information on prices had an effect on their subsequent inflation expectations even though the individuals were explicitly told that the information was fictitious and thus were expected to ignore it.

If the reaction to the information was due to spurious reasons such as experimenter demand or anchoring, we would not expect the effects of providing information to be long-lasting. Thus, as in other studies, we measure the long-term effects of the information (see e.g., Kuziemko et al., 2015; Cavallo et al., 2017; Karadja et al., 2017; Haaland and Roth, 2019; Haaland et al., 2020). Let $r_{i,nat}^{prior}$ denote the perceived national rank in the baseline survey (i.e., the prior belief, before receiving information) and $r_{i,nat}^{signal}$ denote the signal that was given as feedback if the individual was in the treatment group. Consequently, $r_{i,nat}^{signal} - r_{i,nat}^{prior}$ is the misperception about the national rank. Let T_i be an indicator variable indicating whether the individual received relative-income information in the baseline survey. The regression specification is the following:

$$r_{i,nat}^{t+1} = \alpha_{nat} \cdot (r_{i,nat}^{signal} - r_{i,nat}^{prior}) \cdot T_i + \beta_1 \cdot (r_{i,nat}^{signal} - r_{i,nat}^{prior}) + X_i \beta_2 + \varepsilon_i. \quad (1)$$

The dependent variable, $r_{i,nat}^{t+1}$ is the perceived national rank in the follow-up survey, and X_i is a set of control variables such as the respondent’s demographic characteristics.²⁴ The coefficient α_{nat} tells us the rate of pass-through between the information given, and subsequent beliefs (and we use an analogous specification for global relative income). For example, a coefficient of 0.1 would indicate that for each percentage point shock in information given, the posterior belief a year later is higher by 0.1 percentage points. Note that we should not expect a perfect pass-through rate (i.e., $\alpha_{nat} = 1$). In theory, Bayesian individuals would form posterior beliefs by taking a weighted average between the signal provided to them and their prior beliefs. Empirically, even when beliefs are re-elicited immediately (which is not the case here, but has been done in other work), the pass-through rate tends to be closer to 0.5, and falls signifi-

²⁴See the table notes for a list of the full set of control variables.

cantly over a few months (see e.g., Cavallo et al., 2017; Bottan and Perez-Truglia, 2017; Fuster et al., 2019). Moreover, we expect a limited pass-through in this context as a respondent's actual relative income can change from one year to the other, so what she learned about her relative income one year ago may only be of limited help when she assesses her current income rank.

The results on the pass-through rate are presented in Table 3. Column (1) suggests a pass-through coefficient of 0.145 at the national level: i.e., for each percentage point that the treatment corrected a respondent's misperception about national relative income, a year later she reports beliefs that have moved 0.145 percentage points closer to accurate beliefs. This suggests that the respondents have at least some interest in the information – as they otherwise would not be likely to remember the information provided to them a year later. In column (3) we reproduce the analysis, but focusing on perceptions of global income rank instead of national income rank. The pass-through estimate for global relative income (0.124, from column 3) is similar as that of the national relative income (0.145, from column 1).

Columns (5) and (7) of Table 3 present the results from a falsification test, in which the dependent variable is the belief in the baseline survey (i.e., before they or the other household members actually received the information). We should expect no effect on this prior belief, which is also what we find: this “placebo” rate of pass-through is in both cases close to zero, statistically insignificant and precisely estimated.²⁵

As complementary evidence, we can also use data on the certainty of beliefs a year later. In the follow-up survey, we ask respondents to state how confident they are in their answers about their position in the income distributions. Figure 7.a shows that, on average, individuals are aware that they do not know their position in the income distributions well: only about 4 percent of respondents report to be 90-100 percent certain about their national relative position assessment; and only 8 percent of respondents report this level of certainty about their global income rank assessment. Moreover, Figure 7.b shows the relationship between respondents' confidence in their answer and their accuracy. We see evidence of self-awareness, in particular in the case of global rank: e.g., the misperception is around 32 percentage points for those who are completely uncertain or only 10 percent sure, whereas it is around 12 percentiles for those who report to be 90-100 percent sure.

Finally, if an individual truly learned from the information, we would expect her to feel more certain about her answer when assessing her income rank a year later. The results in Table 4, for national rank (column (1)) and global rank (column (3)) confirm this conjecture. The evidence suggests that receiving information about one's true income rank increased belief certainty in national rank by 0.420 (p-value = 0.002) and in global rank by 0.602 (p-value < 0.001) in the follow-up one year later.

²⁵The 90%-CI for national ranks is [-0.027, 0.054] and for global ranks it is [-0.065, 0.016]. Moreover, Appendix A.2 provides an additional robustness check, using attrition to the follow-up survey as the dependent variable, to show that the findings are not driven by selective attrition.

4.4 Information Diffusion within the Household

Due to the fact that we randomized the information treatment at the individual level, sometimes an individual received information about the household’s true relative rank in the national and the global income distributions, while other members of the same household did not. We exploit this feature to measure intra-household information diffusion. If individuals take the time to discuss the information they receive with other household members, they presumably find it interesting and/or useful.

Let T_i^{peer} take the value 1 if the individual did not receive the information but another member of her household did, and 0 otherwise (i.e., if the individual received the information or if none of the household members received the information).²⁶ We can extend the specification from equation (1) to accommodate for information spillovers within the household:

$$r_{i,nat}^{t+1} = \alpha_{nat} \cdot (r_{i,nat}^{signal} - r_{i,nat}^{prior}) \cdot T_i + \alpha_{nat}^{peer} \cdot (r_{i,nat}^{signal} - r_{i,nat}^{prior}) \cdot T_i^{peer} + \beta_1 \cdot (r_{i,nat}^{signal} - r_{i,nat}^{prior}) + X_i \beta_2 + \varepsilon_i \quad (2)$$

The coefficient α_{nat}^{peer} tells us the rate of pass-through between the information we gave to a respondent’s household peer(s) to her own beliefs one year later – any sharing of information among household members must take place after the baseline survey, as each interview was conducted in private and communication between household members was not permitted.²⁷ The results for perceptions of national income rank are presented in column (2) of Table 3, and suggest that there is significant diffusion of information within households. The coefficient of 0.174 implies that for each percentage point shock in information given to another member of a respondent’s household, her posterior belief a year later is higher by 0.174 percentage points. Moreover, accounting for this spillover of information is important for correctly understanding the long-term effects on beliefs: once we control for potential peer information, the pass-through of own information to own beliefs rises from 0.145 in column (1) to 0.199 in column (2). The comparisons between the pass-through for own information versus peer information suggests that 87 percent ($= \frac{0.174}{0.199}$) of the information travels to other people in the household. This is a high degree of information diffusion. We reproduce the analysis for the global rank in column (4). The rate of pass-through is somewhat lower (0.109) but still marginally statistically significant (p-value = 0.081). The comparisons between the pass-through for own information

²⁶This is a common definition in the study of spillovers, based on the assumption that if the individual receives the treatment directly then it should not matter whether his or her peers received the treatment or not. We provide direct evidence in support of this specification in Appendix A.7.

²⁷See the table notes for a list of the full set of control variables. One important control is the number of household respondents: as a member of a larger household faces a higher probability that another household member will be randomly assigned to the treatment. In other words, assignment to the peer treatment is only random after conditioning on the number of respondents who could have been assigned to the information.

versus peer information suggest that 67 percent ($= \frac{0.109}{0.163}$) of the information about global income rank makes its way to other members of the household. We can conduct the same falsification test as discussed above, where the dependent variable is the belief in the baseline survey (i.e., before anyone received the information). These results are presented in columns (6) and (8) of Table 3. As expected, all the coefficients are close to zero, statistically insignificant and precisely estimated.²⁸

Columns (2) and (4) of Table 4 explore the effects of information diffusion to other members of the household on the certainty of beliefs a year later. If a respondent obtained information from another household member, we would expect her to feel more certain when answering the question about income rank a year later. The results are presented for national and global rank, in columns (2) and (4), respectively. The evidence is mixed: the household peer treatment increased belief certainty in national rank by just 0.146 and this effect is statistically insignificant. However, given that this point estimate is not precisely estimated (90%-CI: -0.207, 0.499), we cannot rule out large positive effects. For global rank, the evidence is clearer: the household peer treatment increased own belief certainty by 0.523, which is not only statistically significant (p-value = 0.023) but also almost as large in magnitude as the effect of own treatment (with a corresponding coefficient of 0.800, reported in column (4) too).

4.5 Demand for Information

If individuals cared about their relative income, they should be willing to pay to receive this information. To test this hypothesis, we exploit the information-acquisition experiment included in the follow-up survey. We start by looking at whether the responses people gave are consistent across scenarios: i.e., whether their demand curves are downward-sloping. Around five percent of respondents provided inconsistent responses in at least one of the two WTP questions.²⁹ This level of consistency is at the lower end of the range of other studies using similar methods to elicit the WTP for information.³⁰

The distribution of WTP is shown in Figure 8.a. This figure uses data from respondents in the control group only: since they did not receive information in the baseline survey, the interpretation of the findings is more straightforward for this group.³¹ We find significant demand

²⁸The 90%-CI for information on national relative income provided to another household member is [-0.100, 0.012] and for global relative income [-0.043, 0.079].

²⁹For example, they chose €5 instead of information, but then chose information instead of €10. Those who reported inconsistent responses to one piece of information, e.g., national rank, were almost always inconsistent in the other piece of information, i.e., about global rank. This suggests these individuals were not paying attention or they had trouble understanding the instructions.

³⁰For instance, the share of inconsistent respondents was about 2 percent in Allcott and Kessler (2019), 5 percent in Fuster et al. (2019), and 15 percent in Cullen and Perez-Truglia (2018).

³¹Note that individuals may still be willing to acquire information even if they received feedback in the baseline survey. Even if the income distribution is stable over time, a household's per capita income can change from year to year. As a result, whatever information on relative income a household received a year before may no longer

for information on relative income: we estimate the mean WTP in the control group using an interval regression model and find that this is €5.75 (SE 0.33) for national rank and €5.76 (SE 0.34) for global rank.³² Figure 8.b shows the relationship between the WTP for national vs. global rank. The two are highly correlated, but not perfectly so: some respondents are more interested in acquiring information about their national than their global rank, and vice versa.

Given that the maximum WTP is €10, the average WTP seems fairly high, also taking into account that the information provided is in principle something respondents could find out online by themselves. In that sense, this WTP is giving a lower bound on how much respondents care about the information, as many who are interested in acquiring the information are probably deciding whether to pay for it in the survey, or to search for it on their own later. We can also compare the median WTP in our study with the results from other papers that elicit WTP for information using similar methods. We find that individuals value information on their national and global income rank more than they value, for example travel information (\$0.40, Khattak et al., 2003), food certification information (\$0.80, Angulo et al., 2005), home energy reports (\$3, Allcott and Kessler, 2019) and future national home prices (\$4.16, Fuster et al., 2019).³³

5 The Effects of Perceived Relative Income on Policy Preferences

We now turn to the question of how perceived relative income affects policy preferences. Previous work has shown a significant polarization along political orientation with respect to information on relative income, income inequality, and social mobility (e.g., Karadja et al., 2017; Kuziemko et al., 2015; Fenton, 2020; Alesina et al., 2018b). Karadja et al. (2017), for instance, document that individuals to the left and to the right of center on the political spectrum react differently to information about relative income. To account for this heterogeneity in political orientation, we split the sample into left-of-center respondents and center/right-of-center respondents.³⁴ To ease the comparison of results across outcomes, we standardize the dependent

be relevant if the household has a different income. Likewise, even if the household's income was the same as in the previous year, households may have forgotten the information given to them a year prior, in which case they would be willing to pay to see it again. Indeed, the evidence on the persistence of learning presented in Section 4.3 suggests that, one year later, most households in the treatment group may have forgotten a lot of the information given to them.

³²This model assumes that the latent WTP is normally distributed. The constant in this model can be interpreted as the mean WTP under the implicit assumption that WTP can take negative values; if instead we were to assume that the WTP must be non-negative, then the mean would be even higher.

³³In contrast, the information about income rank is not as valuable as the information about peer salaries, reported in Cullen and Perez-Truglia (2018). That information, however, is not available online and is also potentially profitable from the perspective of career choice and salary negotiations.

³⁴The results are similar if we analyze center (5 in the 0-10 scale) separately from right-of-center (6-10). Results reported in Appendix A.8.

variables throughout this section by subtracting the control group mean from each observation and then dividing by the control group standard deviation.

Before presenting the experimental results, we explore the raw correlations between respondents' relative income perceptions on the one hand, and their policy preferences on the other hand. The results are presented in Table 5, and are based only on individuals in the baseline survey control group. Table 5.a displays the results for all control group respondents. It is apparent that perceived global rank is not related to demand for redistribution, neither at the national nor at the global level, nor to giving and to the support for more globalization and generous immigration policies. Perceived national rank is, however, related to demand for national, but not global redistribution. Similarly, behavior in the two giving tasks is significantly associated with perceived relative income in the German income distribution, with those who perceive themselves to be higher up in the income distribution giving more to the national and global poor. Support for globalization and for generous immigration policies are also positively related to relative income perceptions at the national level, although the relationship is weaker and only marginally significant for the support for globalization.

In Table 5.b and 5.c we look at heterogeneous effects of political orientation. In line with the previous literature, we find significant heterogeneity. While demand for both national and global redistribution are significantly correlated with a respondents' perceived national (but not global) income rank for those with political opinions to the left-of-center, neither correlation is significant for center/right-of-center respondents. Left-of-center respondents also display a positive association between perceived relative global income and support for a redistributive global institution (also with national relative income), and they are more willing to give to the poorest 10 percent both nationally and globally, if they are higher up in the global income distribution. For center/right-of-center respondents correlation coefficients are generally smaller in magnitude, except that higher perceived national relative income is significantly related to national and global giving, and support for globalization and immigration.

Next, we use our information experiment to investigate the causal relation between relative income and policy preferences. We use the following specification, which is based on the same intuition from equation (1):

$$Y_i = \alpha_{nat} \cdot \left(r_{i,nat}^{signal} - r_{i,nat}^{prior} \right) \cdot T_i + \alpha_{glob} \cdot \left(r_{i,glob}^{signal} - r_{i,glob}^{prior} \right) \cdot T_i + \beta_1 \cdot \left(r_{i,nat}^{signal} - r_{i,nat}^{prior} \right) + \beta_2 \cdot \left(r_{i,glob}^{signal} - r_{i,glob}^{prior} \right) + X_i \beta_3 + \varepsilon_i, \quad (3)$$

where $r_{i,nat}^{signal} - r_{i,nat}^{prior}$ is the misperception about the national rank as before and T_i is the treatment indicator variable, indicating whether the individual was treated with information about her actual relative income, or not. The two key parameters are α_{nat} and α_{glob} , where $\frac{\alpha_{nat}}{100}$ shows the causal effect of a respondent receiving information implying that her national rank

is 1 percentage point higher than she previously thought.³⁵ Correspondingly, $\frac{\alpha_{glob}}{100}$ shows the causal effect of a respondent being told that her global rank is 1 percentage point higher than she believed it to be. The variables $r_{i,nat}^{signal} - r_{i,nat}^{prior}$ and $r_{i,glob}^{signal} - r_{i,glob}^{prior}$ control for the non-random variation in prior misperceptions: i.e., they guarantee that α_{nat} and α_{glob} are identified by random variation in information provision.³⁶ X_i is a set of demographic controls, as indicated in the table notes. Note that the experimental estimates from this regression correspond to intention-to-treat effects, because of potential non-compliance: when individuals are provided with information, they may not incorporate that information fully into their beliefs, for example because they do not trust it or because they are not paying attention to the survey. Even when beliefs are re-elicited immediately after the information provision, which is not the case here but has been done in other work, the pass-through from information to posterior beliefs tends to be closer to 0.5.³⁷ If this is the case here, then the treatment-on-the-treated effects could be twice as large as the intention-to-treat estimates that we report below.

The experimental results are presented in Table 6. The results roughly line up with the raw correlations for left-of-center and center/right-of-center respondents shown in Table 5.³⁸ Table 6.a presents the average treatment effects and indicate that preferences for redistribution (national and global), and support for a global redistributive organization, decrease with perceived national relative income, but the magnitude is small and statistically insignificant. The effects of perceived global relative income are even smaller. The relation between national relative income and behavior in the respective giving tasks are positive, but statistically insignificant. The effect of global relative income in both giving tasks is close to zero. Similarly, the signs of the estimates for support for globalization and immigration are generally the same as for the raw correlations, but again the estimates are statistically insignificant.

Table 6.b shows that the effects on demand for redistribution are large and significant for the

³⁵This baseline specification assumes that there is a linear relationship between policy preferences and the income ranks. In Appendix A.9 we use binned scatterplots to show that this linear approximation is reasonable, and also that the results are not driven by outliers. Moreover, we use histograms to provide an even less parametric look at the data.

³⁶In the baseline specification, the perceptions of national *and* global ranks are included simultaneously in the regression. In Appendix A.9 we show that the results are robust under an alternative specification that includes of national *or* global ranks separately.

³⁷For instance, Bottan and Perez-Truglia (2020) estimates that the average subject forms home price expectations by assigning a weight of 0.445 to the signal and the remaining weight of 0.555 to their prior beliefs (the difference in slopes from Figure A.5). Cavallo et al. (2017) shows that, when forming inflation expectations, the average Argentine respondent assigns a weight of 0.432 to the signal provided to them (coefficient α -statistics reported in Panel B, column (1) of Table 1). And Nathan et al. (2020) shows that, when forming beliefs about the average tax rate, the average subject a weight of 0.459 to the signal (the difference in slopes from Figure A.5).

³⁸In Appendix A.9 we provide a falsification test of the information intervention, by showing that there are no “effects” on the two survey outcomes measured pre-treatment (the belief in the importance of effort versus luck for individual economic success both at the national the global level). In Appendix A.10, we present results for the average effects of receiving information (i.e., regardless of whether the feedback was above or below the prior belief), and in Appendix A.11, we present the effects on the redistributive preferences and support for globalization and immigration elicited in the follow-up survey.

left-leaning respondents: teaching left-of-center respondents that their national income rank is 10 percentage points higher than they previously believed decreases their support for national redistribution by around 0.079 standard deviations, while the effects of national rank on global redistribution are slightly higher in magnitude (0.092 standard deviations). Similarly, receiving information that one has a higher relative income in Germany than previously believed, causally decreases support for a redistributive global institution among the left-of-center. The coefficient for this outcome (-1.041, p-value = 0.025) is similar in magnitude and statistical significance as the coefficient on the main outcome on global redistribution (-0.921, p-value = 0.020). The point estimates for the support for globalization and immigration outcomes (-0.509 and -0.471) are also negative although somewhat smaller in magnitude than the other coefficients and statistically insignificant. In contrast, we find no evidence that information about global rank has an effect on any of the outcomes for people to the left on the political spectrum.

For the center/right-of-center sample (Table 6.c), we find that most effects are close to zero and statistically insignificant: this is true for the demand for national redistribution (90%-CI: -0.394, 0.577) and global redistribution (90%-CI: -0.379, 0.612), and for the support for a global, redistributive organization (90%-CI: -0.376, 0.575). The confidence intervals suggest that we can rule out effects that are less than half of the effect sizes for left-of-center respondents. There are larger effect sizes for national giving (0.498) and global giving (0.454) however: when we only look at right-of-center respondents, we see that those who learned that they are 10 percentage points higher in the national income distribution than they previously thought increase their giving to a poor household in Germany by 0.081 standard deviations (p-value = 0.063) and to a poor household in Kenya by 0.105 standard deviations (p-value = 0.028).³⁹ The effect on support for generous immigration policies is close to zero and statistically insignificant (90%-CI: -0.484, 0.474), whereas the point estimate of the effect on support for globalization is positive, but not statistically significant (90%-CI: -0.243, 0.793). Again, we see no evidence that information about global rank has an effect on any of the outcomes: the point estimates and standard errors are smaller than the corresponding values for information on national rank.

It could be tempting to ascribe the negative relation between national relative income and demand for global redistribution to a Stolper-Samuelson effect, as this framework would predict that national, rather than global, relative income is what matters for opinions on global policies, such as trade, globalization and immigration. However, as we see no evidence of an effect of information on relative national income on support for globalization (or for more generous immigration policies) in the hypothesized positive direction, it seems unlikely that a Stolper-Samuelson inspired framework holds much explanatory power.⁴⁰ We thus rather see

³⁹Results reported in Appendix A.8.

⁴⁰While the Stolper-Samuelson framework does not seem to explain the effects of relative income, we find that it can explain other features of policy preferences. Appendix A.12 present results from four questions included

the negative link between national relative income and the demand for global redistribution as suggestive of a reference group effect. When thinking about policies to reduce global inequality, it seems to matter more where one stands in the national income distribution than in the global income distribution.

The observation of a Meltzer-Richard style effect for demand for redistribution that is driven by the left-of-center respondents may be explained by the fact that demand for redistribution captures both selfish and altruistic preferences, and the different role these play across the political spectrum. For right-of-center respondents there are indications that higher national relative income is related both correlational and causally to more giving to poor Germans and Kenyans, which could counter-act the effect of relative income on the part of redistributive preferences which reflects selfish rather than altruistic concerns. For respondents to the left there is scant evidence of such an altruism component, and instead we see them reducing their demand for redistribution, both at the national and the global level, in reaction to learning that they are richer than they thought at the national level. Therefore, we not only document significant heterogeneity (based on political leanings) of an information treatment effect on policy preferences, but are also able to partly explain why this heterogeneity arises.

6 Conclusions

Economic inequality is extremely prevalent in the world, on both national and global scales. National inequality has received abundant attention from researchers. As a result, significant knowledge has accumulated on patterns of national inequality and on individual preferences for national redistribution. However, this is not the case for global inequality. In this paper, we take first steps toward filling this gap in the literature. Using a two-year survey in a representative sample of German households, we begin by investigating the correlates of: (i) preferences for global (in addition to national) redistribution; (ii) attitudes toward globalization and immigration (that can arguably contribute to decreases in global inequality); and (iii) willingness to give to the global poor.

While the aforementioned preferences conceivably depend on many factors, we investigate the importance of perceived relative income. We document substantial misperceptions about national and global relative income, which are similar in absolute magnitude. However, while the share of people over- and underestimating national relative income averages out in the population, a vast majority of Germans underestimate their global relative income. Thanks to some methodological innovations, we provide unique evidence that these misperceptions are meaningful and robust and do not reflect mere disinterest on the part of respondents. For example,

in the follow-up survey on how globalization and immigration affect the poor and the rich. Consistent with the Stolper-Samuelson framework, most people believe that the poor are typically worse off as a result of globalization and immigration while the rich are better off.

we show that providing information to individuals affects the perceptions of those same individuals a year later, and affects the perceptions of other members of the individuals' household. We further show that individuals are willing to pay non-trivial amounts for information about their global and national income ranks.

Our survey incorporated an incentivized experiment in which treated respondents received information about their true income ranks, both nationally and globally. This enabled us to study the causal effect of perceived national and global relative income on policy preferences. Consistent with previous work, we find that perceived rank in the national income distribution is a significant negative determinant of demand for national redistribution, at least among left-wing respondents. On the contrary, we find no evidence that perceived rank in the global income distribution affects support for global redistribution, donations to the global poor, globalization or immigration. If anything, when thinking about these policy preferences, it matters more how one compares to other people nationally than to others around the globe.

We studied preferences for policies addressing global inequality among people in one of the richest countries in the world. The vast majority of citizens would thus be net contributors to global redistribution. Our results indicate that poorer Germans may fail to realize that more extensive global redistribution would redistribute their income to other parts of the world where people are even poorer. Similarly, if migration from poor to rich countries continues to increase and issues about globalization and disintegration of markets (e.g., Brexit) intensify, we will likely see more economic pressure on the lower part of the income distribution in rich countries. Indeed, evidence suggests that globalization and immigration has contributed to the income growth of a "global middle class" (e.g., Milanovic, 2016; Weyl, 2018), but this has possibly come at the expense of the lower middle class in rich countries (Autor et al., 2013; Dauth et al., 2014; Autor et al., 2016; Lakner and Milanovic, 2016). While some commentators have suggested to compensate the losers of globalization and immigration at the national level, our results indicate that this is not a sustainable solution, as demand for national redistribution is decreasing in perceived relative income. The findings of our study also highlight the complexity of the question of how to best address issues of global inequality as none of the frameworks that guided our analysis cover the whole picture. Clearly, the present study is an early step in the process of better understanding the drivers of demand for global redistribution and further research is therefore needed in both developed and developing countries to fully understand how individuals form opinions on policies that address global inequality.

References

ACEMOGLU, D., S. NAIDU, P. RESTREPO, AND J. A. ROBINSON (2015): "Democracy, Redistribution, and Inequality," in *Handbook of Income Distribution*, Elsevier, vol. 2, 1885–1966.

- ALESINA, A. AND G. M. ANGELETOS (2005): "Fairness and redistribution: US vs Europe," *American Economic Review*, 95, 913–935.
- ALESINA, A. AND D. DOLLAR (2000): "Who gives foreign aid to whom and why?" *Journal of Economic Growth*, 5, 33–63.
- ALESINA, A. AND P. GIULIANO (2011): "Preferences for redistribution," in *Handbook of Social Economics*, Elsevier, vol. 1, 93–131.
- ALESINA, A. AND E. LA FERRARA (2005): "Preferences for redistribution in the land of opportunities," *Journal of Public Economics*, 89, 897–931.
- ALESINA, A., A. MIANO, AND S. STANTCHEVA (2018a): "Immigration and Redistribution," *NBER Working Paper No. 24733*.
- ALESINA, A., S. STANTCHEVA, AND E. TESO (2018b): "Intergenerational mobility and preferences for redistribution," *American Economic Review*, 108, 521–54.
- ALLCOTT, H. AND J. B. KESSLER (2019): "The welfare effects of nudges: A case study of energy use social comparisons," *American Economic Journal: Applied Economics*, 11, 236–76.
- ALVAREDO, F., L. CHANCEL, T. PIKETTY, E. SAEZ, AND G. ZUCMAN (2018a): "The elephant curve of global inequality and growth," in *AEA Papers and Proceedings*, vol. 108, 103–08.
- (2018b): *World inequality report 2018*, Belknap Press.
- ANDERSEN, S., G. W. HARRISON, M. I. LAU, AND E. E. RUTSTRÖM (2006): "Elicitation using multiple price list formats," *Experimental Economics*, 9, 383–405.
- ANGULO, A. M., J. M. GIL, AND L. TAMBURRO (2005): "Food safety and consumers' willingness to pay for labelled beef in Spain," *Journal of Food Products Marketing*, 11, 89–105.
- AUTOR, D. H., D. DORN, AND G. H. HANSON (2013): "The China Syndrome: Local Labor Market Effects of Import Competition in the United States," *American Economic Review*, 103, 2121–68.
- (2016): "The China shock: Learning from labor-market adjustment to large changes in trade," *Annual Review of Economics*, 8, 205–240.
- BADER, F. AND M. KEUSCHNIGG (2020): "Bounded Solidarity in Cross-National Encounters: Individuals Share More with Others from Poor Countries but Trust Them Less," *Sociological Science*, 7, 415–432.
- BAUHR, M., N. CHARRON, AND N. NASIRITOUSI (2013): "Does corruption cause aid fatigue? Public opinion and the aid-corruption paradox," *International Studies Quarterly*, 57, 568–579.
- BECHTEL, M. M., J. HAINMUELLER, AND Y. MARGALIT (2014): "Preferences for International Redistribution: The Divide over the Eurozone Bailouts," *American Journal of Political Science*, 58, 835–856.

- BECKER, G. M., M. H. DEGROOT, AND J. MARSCHAK (1964): "Measuring utility by a single-response sequential method," *Behavioral science*, 9, 226–232.
- BECKER, S. O., P. H. EGGER, AND M. VON EHRLICH (2013): "Absorptive Capacity and the Growth and Investment Effects of Regional Transfers: A Regression Discontinuity Design with Heterogeneous Treatment Effects," *American Economic Journal: Economic Policy*, 5, 29–77.
- BENABOU, R. AND J. TIROLE (2006): "Belief in a just world and redistributive politics," *Quarterly Journal of Economics*, 121, 699–746.
- BOLTON, G. E. AND A. OCKENFELS (2000): "ERC: A theory of equity, reciprocity, and competition," *American Economic Review*, 90, 166–193.
- BOTTAN, N. AND R. PEREZ-TRUGLIA (2017): "Choosing Your Pond: Location Choices and Relative Income," *NBER Working Paper No. 23615*.
- (2020): "Betting on the House: Subjective Expectations and Market Choices," *NBER Working Paper No. 27412*.
- CAPPELEN, A. W., K. O. MOENE, E. SÅŽRENSEN, AND B. TUNGODDEN (2013): "Needs Versus Entitlements: An International Fairness Experiment," *Journal of the European Economic Association*, 11, 574–598.
- CAVALLO, A., G. CRUCES, AND R. PEREZ-TRUGLIA (2017): "Inflation expectations, learning, and supermarket prices: Evidence from survey experiments," *American Economic Journal: Macroeconomics*, 9, 1–35.
- CHARNESS, G. AND M. RABIN (2002): "Understanding social preferences with simple tests," *The Quarterly Journal of Economics*, 117, 817–869.
- CHETTY, R., J. N. FRIEDMAN, N. HILGER, E. SAEZ, D. W. SCHANZENBACH, AND D. YAGAN (2011): "How Does Your Kindergarten Classroom Affect Your Earnings? Evidence from Project Star," *The Quarterly Journal of Economics*, 126, 1593–1660.
- CRUCES, G., R. PEREZ-TRUGLIA, AND M. TETAZ (2013): "Biased perceptions of income distribution and preferences for redistribution: Evidence from a survey experiment," *Journal of Public Economics*, 98, 100–112.
- CULLEN, Z. AND R. PEREZ-TRUGLIA (2018): "How Much Does your Boss Make? The Effects of Salary Comparisons," *NBER Working Paper No. 24841*.
- DAUTH, W., S. FINDEISEN, AND J. SUEDEKUM (2014): "The Rise of the East and the Far East: German Labor Markets and Trade Integration," *Journal of the European Economic Association*, 12, 1643–1675.
- DE QUIDT, J., J. HAUSHOFER, AND C. ROTH (2018): "Measuring and Bounding Experimenter Demand," *American Economic Review*, 108, 3266–3302.

- DREHER, A., J.-E. STURM, AND J. R. VREELAND (2009): "Development aid and international politics: Does membership on the UN Security Council influence World Bank decisions?" *Journal of Development Economics*, 88, 1–18.
- EICHENAUER, V. Z., A. FUCHS, AND L. BRÜCKNER (2018): "The effects of trade, aid, and investment on China's image in developing countries," *University of Heidelberg Department of Economics Discussion Paper Series*.
- ENGELHARDT, C. AND A. WAGENER (2017): "What do Germans think and know about income inequality? A survey experiment," *Socio-Economic Review*, 16, 743–767.
- ENKE, B. AND T. GRAEBER (2020): "Cognitive Uncertainty," *Working Paper*.
- ENKE, B., R. RODRIGUEZ-PADILLA, AND F. ZIMMERMANN (2019): "Moral Universalism and the Structure of Ideology," *mimeo*.
- FEHR, D., D. MULLER, AND M. PREUSS (2019): "Social Mobility Perceptions and Inequality Acceptance," *mimeo*.
- FEHR, D. AND Y. REICHLIN (2020): "Wealth Inequality, Personality and Risk Taking," *mimeo*.
- FEHR, E. AND K. M. SCHMIDT (1999): "A theory of fairness, competition, and cooperation," *Quarterly Journal of Economics*, 114, 817–868.
- FENTON, G. (2020): "How Elastic are Preferences for Redistribution? New Results on Partisan Polarization," *Working Paper*.
- FERNANDEZ-ALBERTOS, J. AND A. KUO (2018): "Income Perception, Information, and Progressive Taxation: Evidence from a Survey Experiment," *Political Science Research and Methods*, 6, 83–110.
- FONG, C. (2001): "Social preferences, self interest and the demand for redistribution," *Journal of Public Economics*, 82, 225–246.
- FRICK, M., R. IJIMA, AND I. YUHTA (2019): "Dispersed Behavior and Perceptions in Assortative Societies," *Cowles Foundation Discussion Paper*.
- FUSTER, A., R. PEREZ-TRUGLIA, M. WIEDERHOLT, AND B. ZAFAR (2019): "Expectations with Endogenous Information Acquisition: An Experimental Investigation," *NBER Working Paper No. 24767*.
- GÄRTNER, M., J. MOLLERSTROM, AND D. SEIM (2017): "Individual risk preferences and the demand for redistribution," *Journal of Public Economics*, 153, 49–55.
- (2019): "Income Mobility, Luck/Effort Beliefs, and the Demand for Redistribution: Perceptions and Reality," *mimeo*.
- GOEBEL, J., M. M. GRABKA, S. LIEBIG, M. KROH, D. RICHTER, C. SCHRÖDER, AND J. SCHUPP (2018): "The German Socio-Economic Panel (SOEP)," *Jahrbücher für Nationalökonomie und Statistik*.

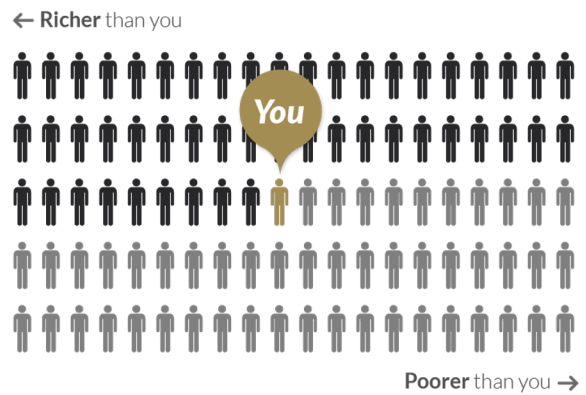
- GOLDBERG, P. K. AND N. PAVCNIK (2007): "Distributional effects of globalization in developing countries," *Journal of Economic Literature*, 45, 39–82.
- GREWENIG, E., P. LERGETPORER, K. WERNER, AND L. WOESSMANN (2020): "Incentives, search engines, and the elicitation of subjective beliefs: Evidence from representative online survey experiments," *Journal of Econometrics*.
- HAALAND, I. AND C. ROTH (2019): "Labor Market Concerns and Support for Immigration," *mimeo*.
- HAALAND, I., C. ROTH, AND J. WOHLFART (2020): "Designing information provision experiments," .
- HAUSHOFER, J. AND J. SHAPIRO (2016): "The short-term impact of unconditional cash transfers to the poor: experimental evidence from Kenya," *The Quarterly Journal of Economics*, 131, 1973–2042.
- KARADJA, M., J. MOLLERSTROM, AND D. SEIM (2017): "Richer (and holier) than thou? The effect of relative income improvements on demand for redistribution," *Review of Economics and Statistics*, 99, 201–212.
- KHATTAK, A. J., Y. YIM, AND L. S. PROKOPY (2003): "Willingness to pay for travel information," *Transportation Research Part C: Emerging Technologies*, 11, 137–159.
- KINDER, D. R. AND C. D. KAM (2010): *Us against them: Ethnocentric foundations of American opinion*, University of Chicago Press.
- KUZIEMKO, I., M. I. NORTON, E. SAEZ, AND S. STANTCHEVA (2015): "How elastic are preferences for redistribution? Evidence from randomized survey experiments," *American Economic Review*, 105, 1478–1508.
- KUZIEMKO, I. AND E. WERKER (2006): "How much is a seat on the Security Council worth? Foreign aid and bribery at the United Nations," *Journal of Political Economy*, 114, 905–930.
- LAKNER, C. AND B. MILANOVIC (2016): "Global income distribution: from the fall of the Berlin Wall to the Great Recession," *The World Bank Economic Review*, 30, 203–232.
- MELTZER, A. AND S. RICHARD (1981): "A rational theory of the size of government," *Journal of Political Economy*, 89, 914–927.
- MILANOVIC, B. (2015): "Global inequality of opportunity: How much of our income is determined by where we live?" *Review of Economics and Statistics*, 97, 452–460.
- (2016): *Global inequality: A new approach for the age of globalization*, Harvard University Press.
- MILNER, H. V. AND D. TINGLEY (2013): "Public opinion and foreign aid: A review essay," *International Interactions*, 39, 389–401.
- MOLLERSTROM, J. AND D. SEIM (2014): "Cognitive ability and the demand for redistribution," *PloS one*, 9, e109955.

- MUMMOLO, J. AND E. PETERSON (2019): "Demand Effects in Survey Experiments: An Empirical Assessment," *American Political Science Review*, 113, 517–529.
- NAIR, G. (2018): "Misperceptions of relative affluence and support for international redistribution," *The Journal of Politics*, 80, 815–830.
- NATHAN, B., R. PEREZ-TRUGLIA, AND A. ZENTNER (2020): "My Taxes are Too Darn High: Tax Protests as Revealed Preferences for Taxation," *NBER Working Paper No. 27816*.
- NORTON, M. AND D. ARIELY (2011): "Building a better America—one wealth quintile at a time," *Perspectives on Psychological Science*, 6, 9–12.
- OECD (2015): *In it together: Why less inequality benefits all*, Paris: OECD Publishing.
- PIKETTY, T. (1995): "Social mobility and redistributive politics," *Quarterly Journal of Economics*, 110, 551–584.
- (2014): *Capital in the twenty-first century*, Belknap Press.
- RICHTER, D. AND J. SCHUPP (2015): "The SOEP Innovation Sample (SOEP IS)," *Schmollers Jahrbuch*, 135, 389–399.
- ROMER, T. (1975): "Individual welfare, majority voting, and the properties of a linear income tax," *Journal of Public Economics*, 4, 163–185.
- STOLPER, W. F. AND P. A. SAMUELSON (1941): "Protection and real wages," *The Review of Economic Studies*, 9, 58–73.
- WEYL, G. (2018): "The Openness-equality Trade-off in Global Redistribution," *The Economic Journal*, 128, F1–F36.
- ZIZZO, D. J. (2010): "Experimenter demand effects in economic experiments," *Experimental Economics*, 13, 75–98.

Figure 1: Screenshot of a Sample of the Information Treatment

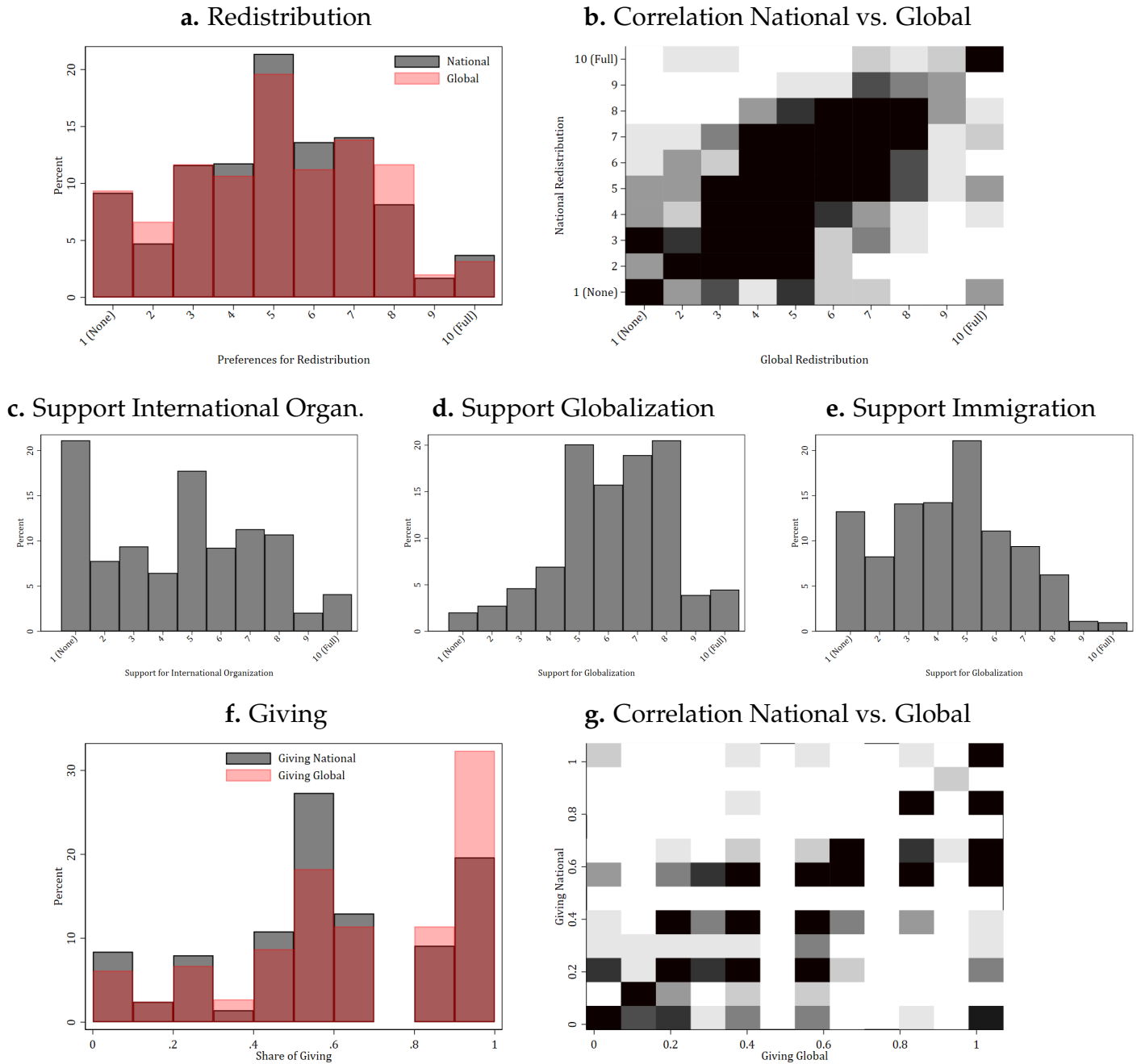
We would now like to give you information about the distribution of per-capita gross household income in Germany and worldwide. This information is based on representative and independently collected data from scientifically well-recognized institutions, such as the Panel Study *“Living in Germany”*, the *World Bank*, and the *Luxembourg Income Study Center*.

In Germany, 50% of people are poorer than you, which means they have a lower per capita gross household income than you.



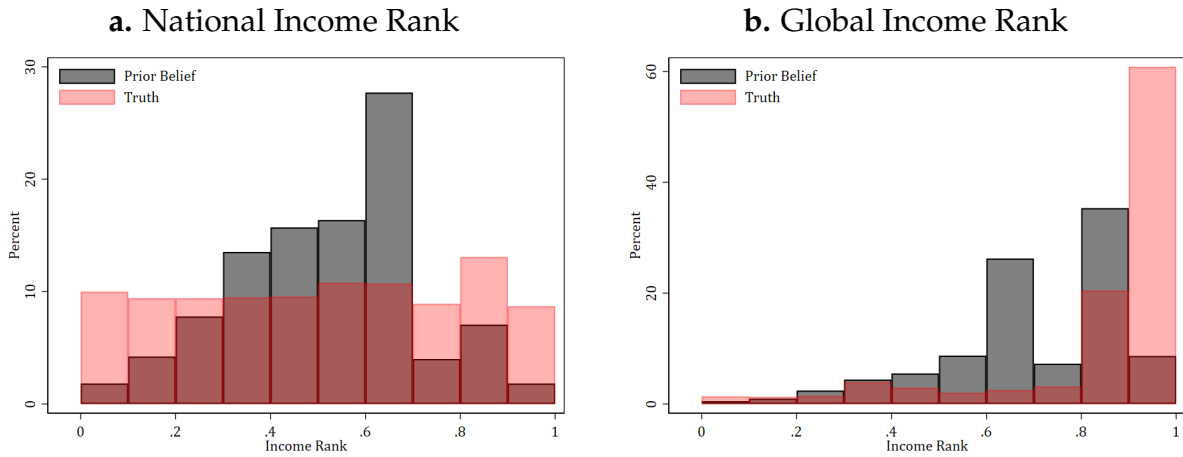
Notes: Visualization of the information treatment providing information about actual relative income at the national level (information about actual global relative income was presented analogously). Respondents received first some general information on the data sources and then learned the share of people in Germany with less per-capita gross household income. The information was illustrated using customized graphs that indicated the relative position to make it easier to understand and digest.

Figure 2: Distribution of Outcomes



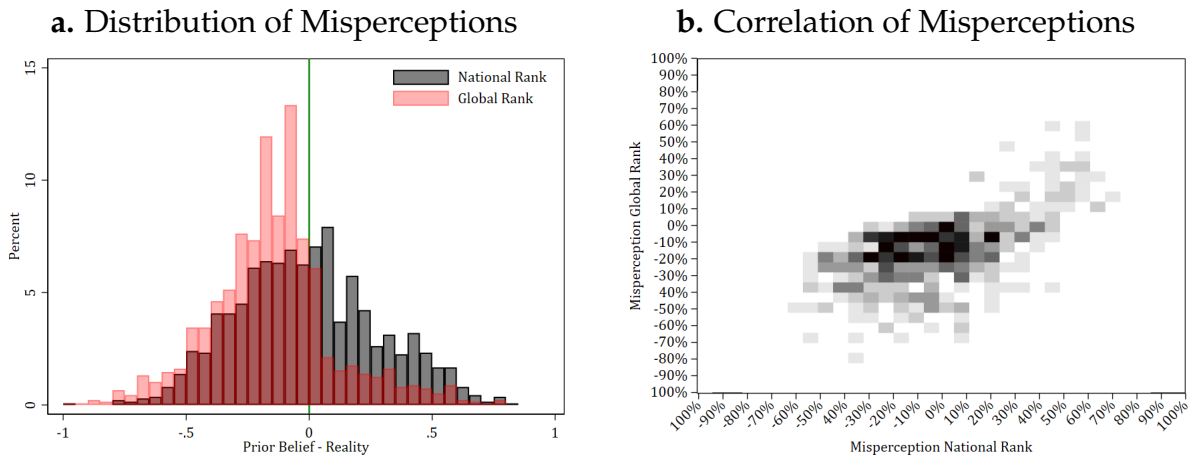
Notes: Distribution of preferences for national redistribution (gray) and global redistribution (red) in (a.) and their correlation in (b.) with darker areas indicating more responses in this area. Distribution of support for an international organization with a mandate to redistribute in (c.), support for globalization in (d.), and support for immigration in (e.), respectively. Distribution of the share of national giving (gray) and global giving (red) in (f.) and their correlation in (g.) with darker areas indicating more responses in this area. All panels use data from baseline survey control group.

Figure 3: Prior Beliefs about Income Rank vs. True Income Rank



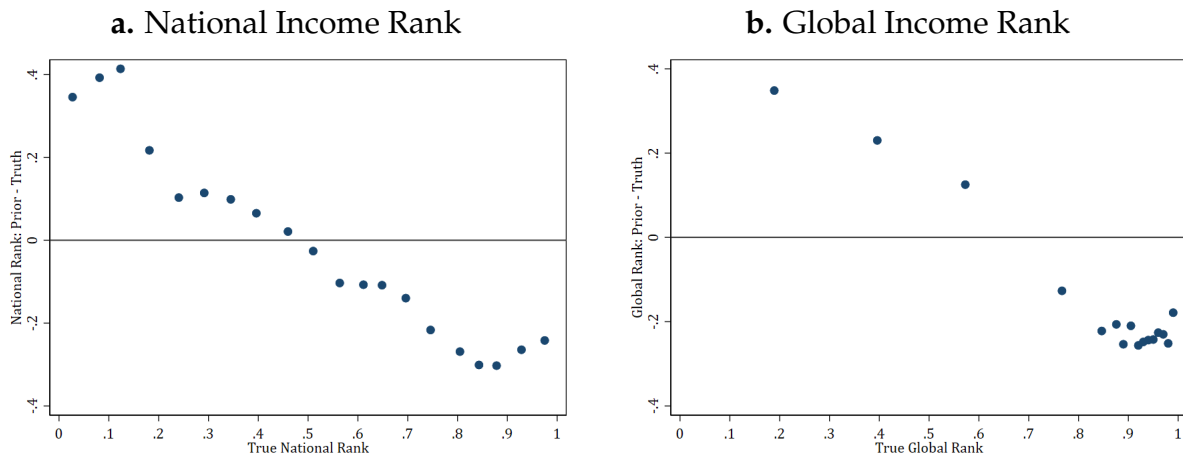
Notes: Distribution of prior beliefs about own income rank (gray) and the true income rank (red) at the national level (a.) and global level (b.). Data from baseline survey.

Figure 4: Misperceptions



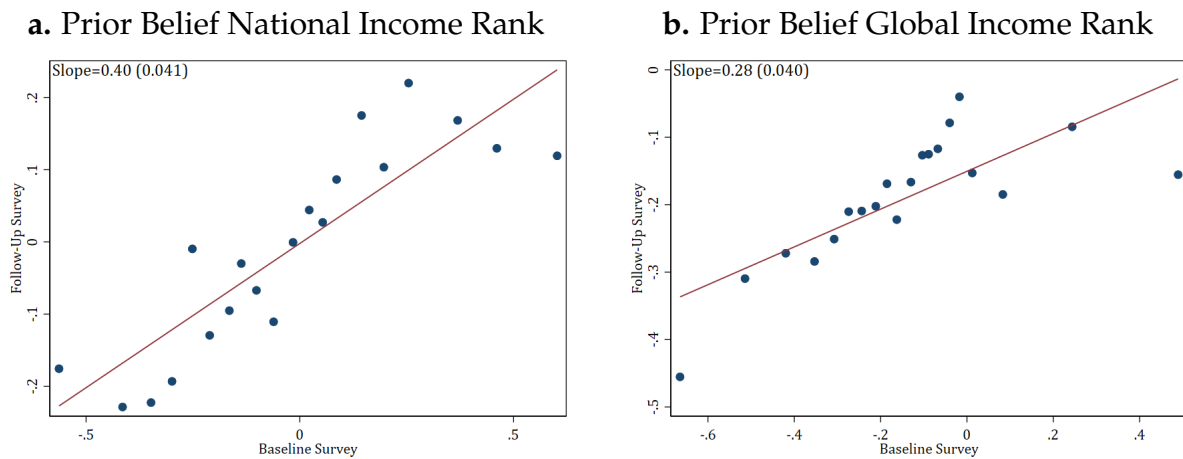
Notes: Distribution of misperceptions about income rank at the national level (gray) and global level (red) in (a.) and their correlation in (b.) with darker areas indicating more responses in this area. Misperceptions are calculated as difference between prior beliefs about income rank and true income rank. Positive (negative) differences correspond to overestimation (underestimation) of own income rank. Data from baseline survey.

Figure 5: Middle-Class Bias



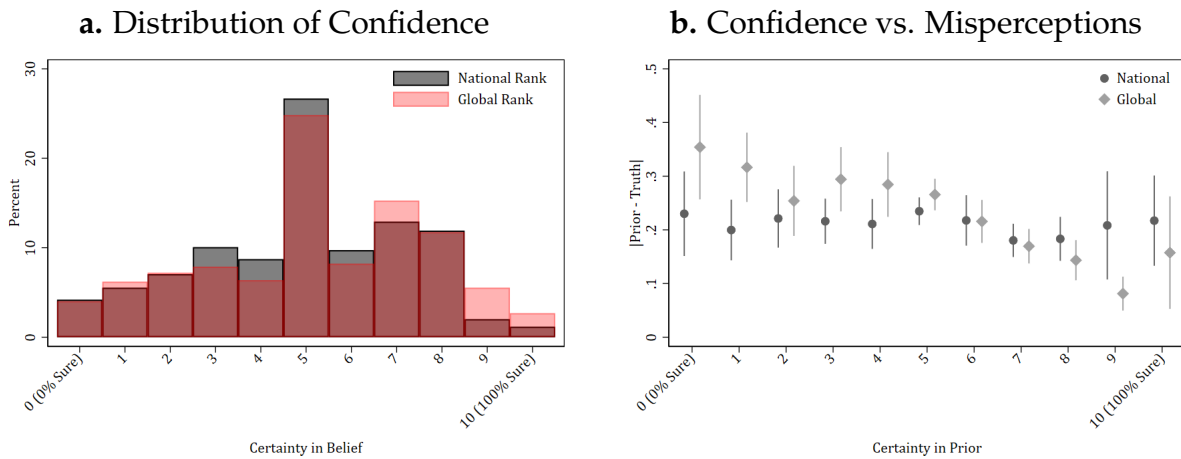
Notes: Binned scatterplots with 20 equally-sized bins showing the relationship between true income rank (x-axis) and misperceptions at the national level (y-axis) in (a.) and at the global level (y-axis) in (b.). Data from the baseline survey.

Figure 6: Year-over-year Persistence of Misperceptions



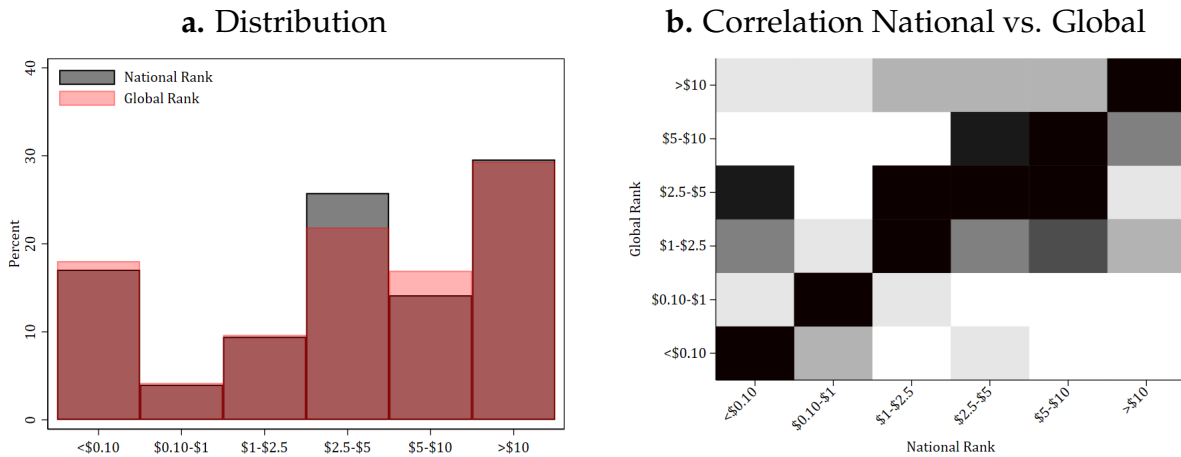
Notes: Binned scatterplots with 20 equally-sized bins showing the persistence of misperceptions between the baseline and the follow-up survey (one year later) for prior belief national income rank in (a.) and prior belief global income rank in (b.). Misperceptions are calculated as difference between prior beliefs about income rank and true income rank. Data from baseline and follow-up survey (control group only).

Figure 7: Confidence in Beliefs about Income Rank



Notes: Distribution of reported confidence in beliefs about national income rank (gray) and global income rank (red) in follow-up survey in (a.) and coefficient plots of relationship between confidence and misperceptions for both national and global income rank in (b.). Misperceptions are calculated as difference between prior beliefs about income rank and true income rank. Data from follow-up survey (control group only).

Figure 8: WTP for Information on True Income Rank



Notes: Distribution of willingness to pay (WTP) for information on true national income rank (gray) and global income rank (red) in (a.) and their correlation in (b.) with darker areas indicating more responses in this area. Data from follow-up survey (control group only), excluding the 5 percent of the respondents who provided inconsistent answers.

Table 1: Pairwise Correlation between Redistribution Preferences, Giving, and Support for Immigration and Globalization

(1)

| | Nat. Redist. | Glob. Redist. | Sup. Int. Org. | Giving Nat. | Giving Glob. | Sup. Global. | Sup. Immig. |
|----------------------------|--------------|---------------|----------------|-------------|--------------|--------------|-------------|
| National Redistribution | 1 | | | | | | |
| Global Redistribution | 0.695*** | 1 | | | | | |
| Support International Org. | 0.540*** | 0.586*** | 1 | | | | |
| Share Giving National | 0.079*** | 0.111*** | 0.145*** | 1 | | | |
| Share Giving Global | 0.056** | 0.118*** | 0.153*** | 0.749*** | 1 | | |
| Support Globalization | 0.122*** | 0.166*** | 0.205*** | 0.201*** | 0.187*** | 1 | |
| Support Immigration | 0.158*** | 0.263*** | 0.297*** | 0.283*** | 0.279*** | 0.323*** | 1 |

Notes: ***p-value < 0.01, **p-value < 0.05, *p-value < 0.1. Pairwise correlations between the various policy preferences. All variables are measured on a 1–10 scale with 1 indicating “no redistribution/no support” and 10 indicating “full redistribution/support,” except “Giving National/Global,” which is the share of giving and thus measured on a scale from 0 to 1. Data from the baseline survey.

Table 2: Correlates of Policy Preferences

| | National Redistribution | | | Global redistribution | | | Support Int. Org. | | | Giving National | | | Giving Global | | | Support Globalization | | | Support Immigration | | |
|--|-------------------------|----------------------|----------------------|-----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|---------------------|----------------------|----------------------|--|-----------------------|--|--|---------------------|--|--|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | | | | | | | |
| Age | -0.008* (0.005) | -0.003 (0.004) | -0.016*** (0.005) | -0.011** (0.005) | -0.014** (0.005) | -0.010* (0.006) | -0.001* (0.001) | -0.001 (0.001) | -0.002*** (0.001) | -0.002*** (0.001) | -0.013*** (0.004) | -0.006 (0.004) | -0.018*** (0.004) | -0.011** (0.004) | | | | | | | |
| Female (=1) | -0.047 (0.173) | -0.023 (0.172) | -0.065 (0.179) | -0.118 (0.181) | -0.090 (0.207) | -0.062 (0.209) | 0.028 (0.023) | 0.038 (0.023) | 0.072*** (0.024) | 0.084*** (0.024) | -0.383** (0.151) | -0.356** (0.151) | -0.036 (0.165) | 0.053 (0.158) | | | | | | | |
| Education: upper secondary (=1) | -0.085 (0.177) | -0.128 (0.254) | -0.239 (0.185) | -0.408 (0.270) | -0.370* (0.216) | -0.027 (0.293) | -0.057** (0.023) | 0.044 (0.033) | -0.076*** (0.024) | 0.035 (0.033) | -0.125 (0.153) | -0.105 (0.220) | -0.580*** (0.169) | -0.121 (0.248) | | | | | | | |
| Education: college & more (=1) | -0.076 (0.198) | -0.263 (0.304) | -0.075 (0.213) | -0.625* (0.323) | 0.325 (0.262) | 0.042 (0.355) | 0.129*** (0.027) | 0.113*** (0.039) | 0.138*** (0.028) | 0.122*** (0.040) | 0.196 (0.169) | -0.130 (0.266) | 0.704*** (0.194) | 0.324 (0.290) | | | | | | | |
| Monthly net income (log) | -0.459** (0.197) | -0.645*** (0.217) | 0.013 (0.199) | -0.149 (0.216) | 0.409* (0.225) | 0.132 (0.239) | 0.190*** (0.024) | 0.137*** (0.028) | 0.207*** (0.025) | 0.143*** (0.029) | 0.748*** (0.154) | 0.620*** (0.182) | 0.824*** (0.182) | 0.362* (0.193) | | | | | | | |
| Unemployed (=1) | 0.456 (0.453) | 0.080 (0.431) | 0.522 (0.423) | 0.626 (0.436) | -0.099 (0.559) | 0.283 (0.565) | -0.114* (0.065) | 0.031 (0.066) | -0.142** (0.065) | -0.012 (0.072) | -0.401 (0.322) | -0.245 (0.432) | -0.078 (0.432) | 0.631 (0.446) | | | | | | | |
| East Germany (=1) | 0.527*** (0.203) | 0.378* (0.201) | -0.028 (0.208) | 0.000 (0.214) | -0.843*** (0.241) | -0.745*** (0.257) | -0.114*** (0.026) | -0.098*** (0.026) | -0.119*** (0.030) | -0.102*** (0.029) | -0.465** (0.184) | -0.347* (0.183) | -1.184*** (0.185) | -1.139*** (0.196) | | | | | | | |
| German citizenship (=1) | -0.697* (0.362) | -0.539 (0.366) | -0.786** (0.371) | -0.539 (0.391) | -1.151*** (0.426) | -0.972** (0.409) | -0.014 (0.046) | -0.042 (0.043) | -0.012 (0.046) | -0.034 (0.039) | -0.540* (0.303) | -0.513 (0.311) | -0.874*** (0.325) | -0.627** (0.314) | | | | | | | |
| Political orientation: left-of-center (=1) | 1.014*** (0.170) | 0.989*** (0.173) | 1.117*** (0.181) | 1.081*** (0.192) | 1.260*** (0.215) | 1.156*** (0.223) | 0.059** (0.024) | 0.028 (0.024) | 0.070*** (0.026) | 0.030 (0.025) | 0.295* (0.152) | 0.099 (0.154) | 1.039*** (0.170) | 0.923*** (0.168) | | | | | | | |
| Effort vs. Luck Belief (National) | 0.174*** (0.054) | 0.084 (0.063) | 0.086 (0.056) | 0.015 (0.071) | 0.100 (0.065) | 0.056 (0.076) | 0.012* (0.007) | -0.001 (0.008) | 0.011 (0.007) | -0.004 (0.009) | -0.030 (0.048) | -0.108* (0.055) | 0.031 (0.053) | -0.061 (0.061) | | | | | | | |
| Effort vs. Luck Belief (Global) | 0.174*** (0.047) | 0.110* (0.058) | 0.121** (0.050) | 0.063 (0.065) | 0.128** (0.055) | 0.029 (0.064) | 0.026*** (0.006) | 0.017** (0.007) | 0.025*** (0.006) | 0.016** (0.007) | 0.075* (0.040) | 0.091* (0.048) | 0.138*** (0.044) | 0.096* (0.052) | | | | | | | |
| Risk aversion | -0.041 (0.038) | -0.037 (0.038) | -0.079* (0.041) | -0.092** (0.042) | -0.050 (0.049) | -0.065 (0.050) | -0.004 (0.005) | -0.003 (0.005) | -0.006 (0.005) | -0.004 (0.005) | 0.011 (0.034) | 0.002 (0.035) | -0.037 (0.038) | -0.037 (0.036) | | | | | | | |
| Observations | | 657 | | 655 | | 645 | | 663 | | 662 | | 656 | | 661 | | | | | | | |

Notes: ***p-value < 0.01, **p-value < 0.05, *p-value < 0.1. OLS regressions with robust standard errors in parentheses using data from the baseline control group. Uneven-numbered columns display coefficients from separate regressions for each control, while even-numbered columns report multivariate regressions including all listed controls at once. All dependent variables are measured on a 1–10 scale with 1 indicating “no redistribution/ support,” except “Giving National/Global,” which is the share of giving and thus measured on a scale from 0 to 1. All controls are defined as binary variables (except Age, Monthly net income, Effort vs. Luck Belief, and Risk aversion). “Effort vs. Luck Belief (National/Global)” is measured on a 1–10 scale with higher numbers indicating a stronger belief that luck determines economic success and “Risk aversion” is measured on a 0–10 scale with higher numbers indicating less risk aversion.

Table 3: Effects of Information Provision on Beliefs about Income Rank One Year Later

| | Prior Belief in Follow-Up Survey | | | | Prior Belief in Baseline Survey | | | |
|--|----------------------------------|---------------------|---------------------|---------------------|---------------------------------|-------------------|-------------------|-------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| | National | National | Global | Global | National | National | Global | Global |
| National Rank: Treat*(Feedback - Prior) | 0.145*** (0.039) | 0.199*** (0.043) | | | 0.013 (0.025) | -0.001 (0.029) | | |
| National Rank: Peer Treatment*(Feedback - Prior) | | 0.174*** (0.055) | | | | -0.044 (0.034) | | |
| Global Rank: Treat*(Feedback - Prior) | | | 0.124*** (0.042) | 0.163*** (0.046) | | | -0.025 (0.025) | -0.018 (0.027) |
| Global Rank: Peer Treatment*(Feedback - Prior) | | | | 0.109* (0.062) | | | | 0.018 (0.037) |
| Observations | 1,150 | 1,150 | 1,135 | 1,135 | 1,150 | 1,150 | 1,135 | 1,135 |

Notes: ***p-value < 0.01, **p-value < 0.1, *p-value < 0.1. OLS regressions estimating the effect of information provision on beliefs about income rank one year later using data from the follow-up survey (columns 1-4) and from the baseline survey (columns 5-8). Standard errors clustered at the household level in parentheses. The dependent variables are the perceived income rank in the national and global income distribution (prior beliefs). "Peer Treatment" takes the value 1 if the respondent did not receive the information but another member of her household and 0 otherwise (i.e., if the respondent received the information or if none of the household members received the information). The control variables used in the analysis are the respondent's income, the number of household members, the prior belief about the income rank, the change in the true income rank in between the two surveys, a set of dummies for the number of survey respondents in the household, and the following demographic characteristics: age and dummies for gender, education, disability, unemployment, retirement, self-employment, political party and East Germany.

Table 4: Effects of Information Provision on Belief Certainty One Year Later

| | Certainty in Follow-Up Survey | | | |
|----------------|-------------------------------|---------------------|---------------------|---------------------|
| | (1) National | (2) National | (3) Global | (4) Global |
| Treatment | 0.420*** (0.136) | 0.475*** (0.169) | 0.602*** (0.144) | 0.800*** (0.178) |
| Peer Treatment | | 0.146 (0.215) | | 0.523** (0.230) |
| Observations | 1,152 | 1,152 | 1,138 | 1,138 |

Notes: ***p-value < 0.01, **p-value < 0.1, *p-value < 0.1. OLS regressions estimating the effect of information provision on confidence about prior beliefs on income rank one year later using data from the follow-up survey. Standard errors clustered at the household level in parentheses. The dependent variable is the confidence in stated prior beliefs on income rank (at the national and global level) measured on a 1–10 scale emulating steps of 10 percent. “Treatment” is an indicator for treatment information on relative income and “Peer Treatment” takes the value 1 if the respondent did not receive the information but another member of her household and 0 otherwise (i.e., if the respondent received the information or if none of the household members received the information). The control variables used in the analysis are the respondent’s income, the number of household members, the prior belief about the income rank, the change in the true income rank in between the two surveys, a set of dummies for the number of survey respondents in the household, and the following demographic characteristics: age and dummies for gender, education, disability, unemployment, retirement, self-employment, political party and East Germany.

Table 5: Correlation between Prior Beliefs about Income Rank and Policy Preferences

| | | All | | | | | | |
|----------------------------|--|------------------------|----------------------|---------------------|---------------------|---------------------|--------------------|--------------------|
| | | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| | | Nat. Redist. | Glob. Redist. | Sup. Int. Org | Giving Nat. | Giving Glob. | Sup. Global. | Sup. Immig. |
| a. | | | | | | | | |
| Prior Belief National Rank | | -0.520** (0.240) | -0.142 (0.232) | -0.012 (0.225) | 0.942*** (0.222) | 0.780*** (0.235) | 0.417* (0.246) | 0.462** (0.232) |
| Prior Belief Global Rank | | 0.117 (0.232) | 0.124 (0.230) | 0.257 (0.231) | 0.161 (0.211) | 0.172 (0.227) | -0.110 (0.256) | -0.128 (0.247) |
| Observations | | 683 | 679 | 667 | 689 | 688 | 680 | 687 |
| b. | | | | | | | | |
| | | Left-of-center | | | | | | |
| | | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| | | Nat. Redist. | Glob. Redist. | Sup. Int. Org | Giving Nat. | Giving Glob. | Sup. Global. | Sup. Immig. |
| Prior Belief National Rank | | -0.935*** (0.354) | -0.972*** (0.352) | -0.814** (0.394) | 0.532 (0.394) | 0.233 (0.399) | -0.248 (0.403) | -0.007 (0.371) |
| Prior Belief Global Rank | | 0.591 (0.367) | 0.615 (0.385) | 1.171*** (0.401) | 1.179*** (0.348) | 1.526*** (0.408) | 0.729* (0.419) | 0.445 (0.460) |
| Observations | | 235 | 235 | 232 | 238 | 238 | 235 | 234 |
| c. | | | | | | | | |
| | | Center/Right-of-center | | | | | | |
| | | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| | | Nat. Redist. | Glob. Redist. | Sup. Int. Org | Giving Nat. | Giving Glob. | Sup. Global. | Sup. Immig. |
| Prior Belief National Rank | | -0.497 (0.309) | 0.129 (0.299) | 0.204 (0.265) | 1.033*** (0.265) | 0.916*** (0.279) | 0.683** (0.303) | 0.505* (0.293) |
| Prior Belief Global Rank | | -0.131 (0.276) | -0.111 (0.274) | -0.189 (0.261) | -0.331 (0.252) | -0.480* (0.257) | -0.505* (0.303) | -0.419 (0.285) |
| Observations | | 448 | 444 | 435 | 451 | 450 | 445 | 453 |

Notes: ***p-value < 0.01, **p-value < 0.05, *p-value < 0.1. OLS regressions with standard errors clustered at the household level in parentheses using data from the baseline survey control group. All dependent variables are standardized by subtracting the control group mean from each observation and then dividing by the control group standard deviation. Prior Belief National (Global) Rank is the perceived relative rank in the national (global) income distribution. Panel (a) uses data for all respondents in the baseline survey control group, panel (b) displays results for left-of-center respondents and panel (c) displays results for center/right-of-center respondents. Left-of-center is defined as *below the median response of 5* on the self-assessment scale (0-10) for political orientation from left to right, whereas center/right-of-center subsumes respondents *at or above the median (5)* on this scale. Analysis does not include control variables.

Table 6: Experimental Results: Effects of Information Provision on Policy Preferences

| All | | | | | | | |
|---|--------------------|---------------------|---------------------|-------------------|-------------------|-------------------|-------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| | Nat. Redist. | Glob. Redist. | Sup. Int. Org | Giving Nat. | Giving Glob. | Sup. Global. | Sup. Immig. |
| National Rank: Treat*(Feedback - Prior) | -0.184 (0.250) | -0.218 (0.245) | -0.295 (0.246) | 0.320 (0.234) | 0.208 (0.246) | 0.026 (0.266) | -0.123 (0.243) |
| Global Rank: Treat*(Feedback - Prior) | -0.004 (0.262) | 0.107 (0.246) | 0.164 (0.241) | 0.045 (0.239) | 0.007 (0.246) | -0.256 (0.258) | 0.092 (0.241) |
| Observations | 1350 | 1341 | 1325 | 1357 | 1357 | 1345 | 1358 |
| b. | | | | | | | |
| Left-of-center | | | | | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| | Nat. Redist. | Glob. Redist. | Sup. Int. Org | Giving Nat. | Giving Glob. | Sup. Global. | Sup. Immig. |
| National Rank: Treat*(Feedback - Prior) | -0.786* (0.462) | -0.921** (0.393) | -1.041** (0.461) | -0.076 (0.447) | -0.278 (0.454) | -0.509 (0.474) | -0.471 (0.410) |
| Global Rank: Treat*(Feedback - Prior) | 0.168 (0.500) | 0.139 (0.446) | 0.559 (0.471) | 0.566 (0.443) | 0.470 (0.463) | -0.101 (0.513) | 0.698 (0.461) |
| Observations | 454 | 452 | 447 | 458 | 457 | 454 | 454 |
| c. | | | | | | | |
| Center/Right-of-center | | | | | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| | Nat. Redist. | Glob. Redist. | Sup. Int. Org | Giving Nat. | Giving Glob. | Sup. Global. | Sup. Immig. |
| National Rank: Treat*(Feedback - Prior) | 0.092 (0.295) | 0.116 (0.301) | 0.100 (0.289) | 0.498* (0.279) | 0.454 (0.299) | 0.275 (0.315) | -0.005 (0.291) |
| Global Rank: Treat*(Feedback - Prior) | -0.007 (0.298) | 0.163 (0.286) | 0.051 (0.277) | -0.131 (0.278) | -0.156 (0.286) | -0.333 (0.282) | -0.032 (0.267) |
| Observations | 896 | 889 | 878 | 899 | 900 | 891 | 904 |

Notes: ***p-value < 0.01, **p-value < 0.05, *p-value < 0.1. OLS regressions estimating the effect of information provision on policy preferences using data from the baseline survey. Standard errors clustered at the household level in parentheses. All dependent variables are standardized by subtracting the control group mean from each observation and then dividing by the control group standard deviation. Panel (a) uses data for all respondents, panel (b) displays results for left-of-center respondents, and panel (c) displays results for center/right-of-center respondents. Left-of-center is defined as *below the median response of 5* on the self-assessment scale (0-10) for political orientation from left to right, whereas center/right-of-center subsumes respondents *at or above the median (5)* on this scale. The control variables used in the analysis are the prior beliefs about the national and global income rank, and the following demographic characteristics: age and dummies for gender, education, disability, unemployment, retirement, self-employment, political party and East Germany.

Online Appendix: For Online Publication Only

A Additional Results

A.1 Descriptive Statistics

Table A.1 and A.2 show the summary statistics for the baseline and follow-up survey, respectively. In Table A.3, we show that the treatment and control groups are balanced on observable characteristics. Since we will consider heterogeneity by left-of-center and center/right-of-center individuals, the table also shows the balance within each of those groups. We see in Table A.3 that the observable characteristics are in general balanced over our samples. Only for one pre-treatment characteristic, self-employed, we see a t-statistic slightly above 1.96. While this is well below what we would expect when conducting a total of 39 tests, we nevertheless are conservative in our analysis and include this characteristic in the set of control variables in the regression analysis (in addition to self-employed this set includes age and gender of the respondent, and indicator variables for education, disability, unemployment, retirement, party affiliation, and East Germany).

Next, we present the distribution of responses for some of the key variables used in the analysis. Figure A.1 shows the distribution of responses to the question on political views. The majority of respondents places themselves in the middle (about 41 percent), which is also the median response, and the rest is subdivided into left-of-center (about 35 percent) and right-to-center (about 24 percent). Thus, it is natural to categorize respondents into three groups: left-of-center respondents (responses 0-4), center respondents (5), and right-of-center respondents (6-10). Figure A.2 shows the distribution of responses for the belief on the role of effort vs. luck.

Next, we compare the distribution of responses in the baseline vs. the follow-up survey. Figure A.3 presents the distribution of prior beliefs on the income ranks at the national and global level in the baseline survey (A.3a.) and follow-up survey (A.3c.). Figures A.4a. and b. show the distribution of prior beliefs on national income ranks in the baseline and follow-up survey separated by treatment status, and analogously A.4c. and d. shows the same for prior beliefs on global income ranks. Figure A.5 presents the distribution of responses of all policy preferences in the baseline and follow-up survey using data from the control group in both surveys.

A.2 Test for Selective Attrition

In part of the analysis, we measure the effects of treatment on the outcomes from the follow-up survey. One potential concern is that the treatment may have affected the decision to participate in the follow-up survey. Tables A.4 and A.5 provide further assurances that the attrition was

random. In Table A.4, we examine whether treatment status predicts participation in the follow-up survey. Column (1) shows that this is not the case. As it is possible that some household members are treated, while others are not, we also control for “peer” treatment. The results are displayed in column (2) and indicates that neither affects participation in the follow-up survey. In columns (3) and (4) we present a similar analysis investigating how direct treatment effects or peer treatment effects influence the follow-up survey response rate. Again, the coefficient estimates are small and all insignificant. In Table A.5 we repeat this exercise for treatment effects, but also look at left-of-center and center/right-of-center respondents. The results are very similar to what we have seen in Table A.4.

A.3 Correlation Between Giving and Preferences for Redistribution

Figure A.6 provides a less parametric view of the correlation between the real-stakes donations with preferences for redistribution, through a binned scatterplot. Figure A.6.a shows that there is a significant positive correlation between the demand for national redistribution and the donations to the German poor, and Figure A.6.b shows the significant positive correlation between the demand for global redistribution and the donations to the Kenyan poor.

A.4 Feedback Provided to Subjects

After conducting the survey, it is straightforward to compute the respondent’s national income rank: it is the proportion of households who reported a lower household income in that same question. At the time of providing feedback and calculating the rewards for the belief elicitation task, however, that data was not available for us (i.e., because it was being collected). For those steps, then, we used an “ex-ante” estimate of the distribution of gross household income. Ideally, we would compute the individual’s feedback using the distribution of responses to our question about gross household income from a previous year. However, this question on gross household income was not collected by SOEP-IS in any year prior to our baseline survey. Instead, we used a variable on gross household income computed by SOEP for the calendar years 2014 and then extrapolated to the year 2015 with a simple adjustment for the German inflation rate and the growth in GDP per capita. This income variable is not based on the same question about the gross household income we used in our module. Instead, it was constructed by SOEP based on a battery of different questions.⁴¹

⁴¹This outcome represents the combined income before taxes and government transfers of all individuals in the household 16 years of age and older. This variable is the sum of total family income from labor earnings, asset flows, private retirement income and private transfers. Labor earnings include wages and salary from all employment including training, self-employment income, and bonuses, overtime, and profit-sharing. Asset flows include income from interest, dividends, and rent. Private transfers include payments from individuals outside of the household including alimony and child support payments.

Figure A.7 gives a sense of how accurate our ex-ante feedback was (compared to the actual rank that we were able to compute after collecting all the survey responses about income). Given that this feedback is constructed with data from a different source, it is natural that there will be some discrepancies between our ex-ante feedback and our ex-post estimates. Additionally, we would expect our calculations to be somewhat off purely from sampling variation. Figure A.7 illustrates that our feedback was not perfect, but still quite accurate. In any case, note that for the analysis of the information-provision experiment, we do not need to assume that the feedback was perfectly accurate.

A.5 Correlates of Misperceptions

In Table A.6 we present correlations between misperceptions and a set of control variables using data from the baseline control group only (i.e., individuals who did not receive any feedback from us regarding their true income rank). In uneven-numbered columns each control variable enters a bivariate regression with national bias (defined as the difference of prior belief and true income rank) and global bias (defined analogously) as well as the absolute national and global bias as the dependent variable. In even-numbered columns all controls enter the regression simultaneously. National and global misperceptions are negatively related to income and there is some indication that left-of-center respondents are better calibrated as well. Higher education in the form of a college degree is negatively related to national bias but positively relative to global bias.

In the follow-up survey, we also added some control questions at the end. Specifically, we asked respondents to what extent they trust the government, media, science, and official statistics, and whether they actively looked for information on the income distribution (and if so, where they looked). If a respondent was in the treatment group in the previous wave, we also asked them whether they shared information about their income rank within their household. Figure A.8 shows the correlation between misperceptions and respondents' trust in government, media, science, and official statistics using data from control group in the follow-up survey.

A.6 Income Ranks Over Time

In Figure A.9 we show that individuals' actual relative income often changes from one year to the other, which implies that whatever one learned about their relative income one year ago may not be directly relevant to assess ones current income rank. This pattern is more pronounced for national than global income ranks.

A.7 Information Diffusion within the Household

The baseline specification from equation (2) assumes that when the individual receives the treatment directly, it should not matter whether his or her peers received the treatment or not. We can provide a direct test of that assumption. For that, we estimate a modified version of equation (2):

$$r_{i,nat}^{t+1} = \alpha_{nat} \cdot (r_{i,nat}^{signal} - r_{i,nat}^{prior}) \cdot T_i + \alpha_{nat}^{peer} \cdot (r_{i,nat}^{signal} - r_{i,nat}^{prior}) \cdot T_i^{peer} + \beta_1 \cdot (r_{i,nat}^{signal} - r_{i,nat}^{prior}) + X_i \beta_2 + \varepsilon_i$$

First, we recode T_i^{peer} such that it takes the value 1 if one of the other household members received the information and 0 otherwise (i.e., it takes the value 1 even if the individual received the information directly, as long as one of the other household members received it too). Second, we estimate separate regressions for individuals in the treatment and control groups (i.e., for individuals who received the information directly and individuals who received the information indirectly). The results are presented in Table A.7. Columns (1) and (2) show that individuals who did not receive the information directly seem to be learning from their peers. The results from columns (3) and (4) indicate that, for individuals who received the information directly, it does not matter whether their peers received the information or not. In other words, this is direct evidence in support for the baseline definition of T_i^{peer} in equation (2).

A.8 Alternative Definition of Political Orientation

For ease of presentation, we only distinguished between left-of-center respondents and center/right-of-center respondents in our main analysis. In this section, we show that our results are unaffected when we use the alternative categorization of political orientation suggested by the distribution of responses as outlined in Section A.1. That is, we categorize respondents into three groups: left-of-center respondents, center, and right-of-center respondents. Note that left-of-center is defined as in our main analysis and that we now only look at center (defined as the median response to the self-assessment on the political left-right spectrum) and right-of-center (defined as above median responses) separately. The results on the effects of information provision on policy preferences are displayed in Table A.8 and largely confirm our results presented in the main text (Table 6) with one notable exception. While we see only a weak effect of information about national income rank on giving for center/right-of-center respondents in Table 6.c, this effect is more pronounced if we look at right-of-center respondents separately (Table A.8.c). We observe that more conservative respondents increase their national *and* global giving upon learning that they are richer than thought at the national level, suggesting that other-regarding preferences play a role here.

A.9 Robustness of Effects of Information on Preferences and Opinions

First, we explore the robustness of our main specification from equation (3) of Section 5. The baseline specification is demanding in that it simultaneously includes in the regression two variables that are significantly correlated: perceptions of national and global relative income. In Table A.9, we present an alternative specification, which only includes perceptions of national *or* global ranks. The results from this less demanding specification are not only robust, but also more precisely estimated. This specification is, however, by construction biased, as it omits a variable that is correlated with the regressor of interest, and thus it is not our preferred specification.

Second, we verify that our results are not driven by outliers, and that assuming a linear relationship is reasonable. Using binned scatterplots and the same specification as before (with perception of national income rank only) confirms that this is case. Figure A.10.a depicts this relation for the left-of-center respondents and Figure A.10.b shows this for center/right-of-center respondents.

Third, we can also look at how our treatment affects demand for redistribution dependent on respondents' misperceptions. For some respondents learning their true income position is positive news (i.e., they learn they are richer than they previously thought), neutral news, or negative news (i.e., they learn they are poorer than they thought). Figure A.11 presents this exercise. A.11.a focuses on left-leaning respondents and shows that for those who underestimated their relative income, the "news" that their income is higher than previously thought decreased their preferences for redistribution (i.e., the whole distribution shifts to the left, non-parametric p-value = 0.023). Figure A.11.b shows that for those who had a roughly accurate prior belief (i.e., +/- 10 pp of the truth) the information provision was "no news" and, as expected, the preferences for redistribution does not change (i.e., the whole distribution looks the same in treatment and control, non-parametric p-value = 0.127). Figure A.11.c shows that for those who overestimated their relative income, the "news" that their income is lower than previously thought increased their preferences for redistribution (i.e., the whole distribution shifts to the right, non-parametric p-value = 0.173). Figure A.11.d-e shows the results for center/right-of-center individuals. It is clear that there are no significant effects for center/right-of-center individuals. Finally, we provide a falsification test of our information intervention. Specifically, we test whether the treatment had an effect on a variable that is related to demand for redistribution and that we elicit before the treatment. For this purpose, we use the two questions about the respondent's belief in the importance of effort versus luck for individual economic success both at the national and the global level. Despite that these variables are related to demand for redistribution (see Table 2), we expect no treatment effect as they were measured before the information-provision. The results in Table A.10 confirm this expectation: none of the key coefficients are statistically significant, and furthermore the point estimates tend to be close to

zero, and the statistical precision is comparable to that from Table 6.

A.10 Average Treatment Effects of Information

Table A.11 shows the average effect of providing information on the main outcomes. This may be relevant for policy-makers if they are considering disseminating unbiased information about the national and global relative income. We find that the provision of information had average effects close to zero, statistically insignificant, and precisely estimated. This is perfectly consistent with the reported evidence: We find that only feedback about national rank matters. However, we barely changed the beliefs of the individuals on average, because there was roughly as much underestimation as overestimation.

A.11 Treatment Effects on Follow-Up Outcomes

Because we reassessed all our outcome measures in the follow-up survey, we can examine the effect of the information-provision experiment on policy preferences a year later. Table A.12 presents the results from estimating equation (3). Although we have seen a quite remarkable belief persistence, most point estimates are small. This may be not surprising as the pass-through rates one year later are far from perfect (see discussion in Section 4.3). In addition, many things have changed in the year since the individual received the feedback, including that an individual's position in the income distribution may have changed. As a result, we would expect the point estimates to be significantly smaller a year later. The results from Table A.12 indicate that the point estimates are not really stable, and mostly imprecisely estimated. We cannot rule out that there are no effects one year later, but we cannot rule out either that the effects one year later were substantial – indeed, we cannot even rule out that the long-term effects are as large as the short-term effects.

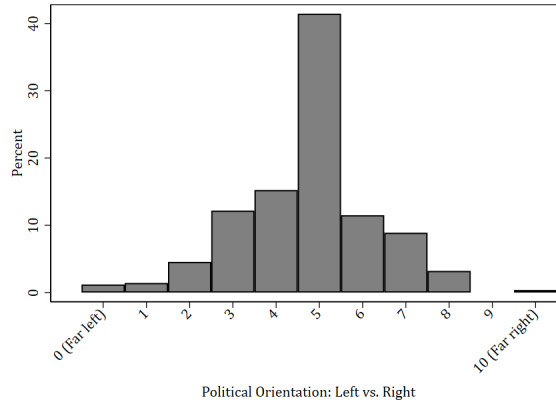
One concern with the baseline specification for this analysis is that the control group was contaminated due to the spillovers. In other words, while some of the respondents were randomly selected not to receive information, some of their household members may have received the information and thus respondents could have been exposed to the information anyways. This would create an attenuation bias in the results reported in Table A.12. We can control for those spillovers using an specification that includes the interactions between the peer-treatment and the gap in prior beliefs, as in equation (2). Recall that the indicator for “peer treatment” takes the value 1 if the respondent did not receive the information but another member of her household and 0 otherwise (i.e., if the respondent received the information or if none of the household members received the information). The results from this alternative specification are presented in Table A.13 and roughly similar to those reported in the baseline specification from Table A.12.

A.12 Additional Evidence on Support for Globalization and Immigration

In the follow-up survey, we also asked whether the poor (rich) will benefit from globalization and immigration. More precisely, after asking about the support for globalization, we asked the following two questions: “Do you think that poor (rich) people in Germany are disadvantaged by globalization or that they benefit from it?” with answers ranging from 1 (very disadvantaged) to 10 (benefit greatly). Similarly, after asking about support for more immigration from poor countries, we asked “Do you think that poor (rich) people in Germany will be disadvantaged by or that they will benefit from more immigration from people from poorer countries?” again on a scale from 1 (very disadvantaged) to 10 (benefit greatly). In Figure A.12.a, we show the distribution of responses to the questions about the beneficiaries of globalization. As one would expect, respondents believe that the poor are disadvantaged by more globalization while the rich profit from it. Figure A.12.b shows that responses are negatively correlated ($\rho=-0.20$). Those who think that the poor are disadvantaged by globalization also tend to think that the rich more likely benefit. Figure A.12.c shows distribution of responses to the questions about the beneficiaries of immigration. We observe a similar pattern as before: respondents think the poor are disadvantaged and the rich benefit. Figure A.12.d shows again that responses are negatively correlated, albeit only weakly ($\rho=-0.08$).

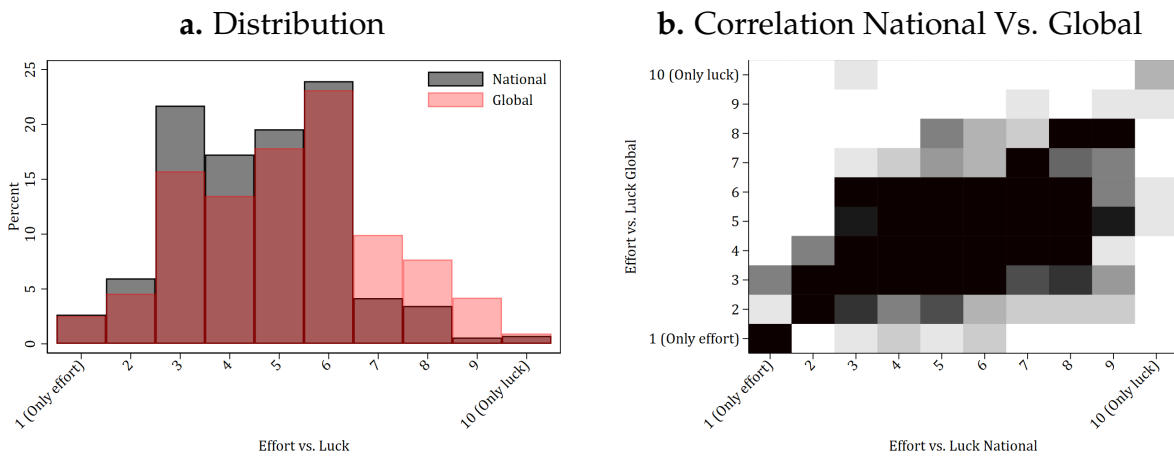
Next, we show how these questions correlate with respondents’ support for globalization and immigration. Figure A.13.a shows a positive correlation between support for globalization ($\rho=0.42$), i.e., respondents who believe that the poor are disadvantaged by globalization also tend to display less support for globalization, and vice versa. The picture is less clear on the relationship between support for globalization and the question whether the rich benefit from it (Figure A.13.b), as most respondents believe that the rich will benefit. We observe a similar picture for support for immigration and the questions who will benefit from more immigration. Figure A.13.c shows a strong association between support for immigration and the question whether the poor benefit from it ($\rho=0.55$), while the association is near zero for the support for immigration and the rich (Figure A.13.d). These correlations are consistent with a Stolper-Samuelson-effect that would predict that people at the lower end of the income distribution face more economic pressure due to more trade openness and immigration and thus would be disadvantaged by it.

Figure A.1: Distribution of Political Orientation



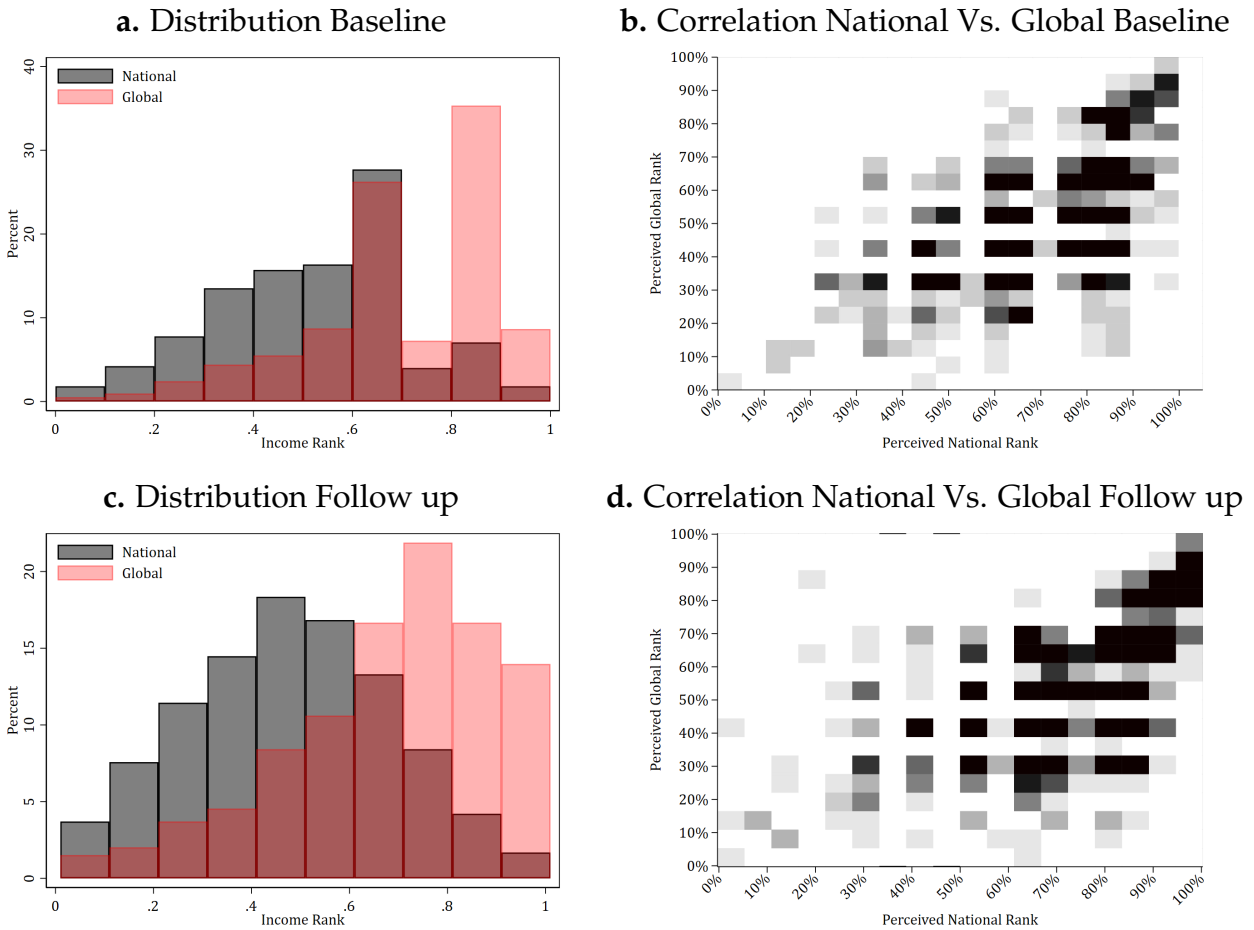
Notes: Distribution of political orientation measured on a scale from 0 (far left) to 10 (far right). Question asked in the baseline survey *before* the treatment and includes data from all respondents. Median response is 5.

Figure A.2: Effort vs. Luck



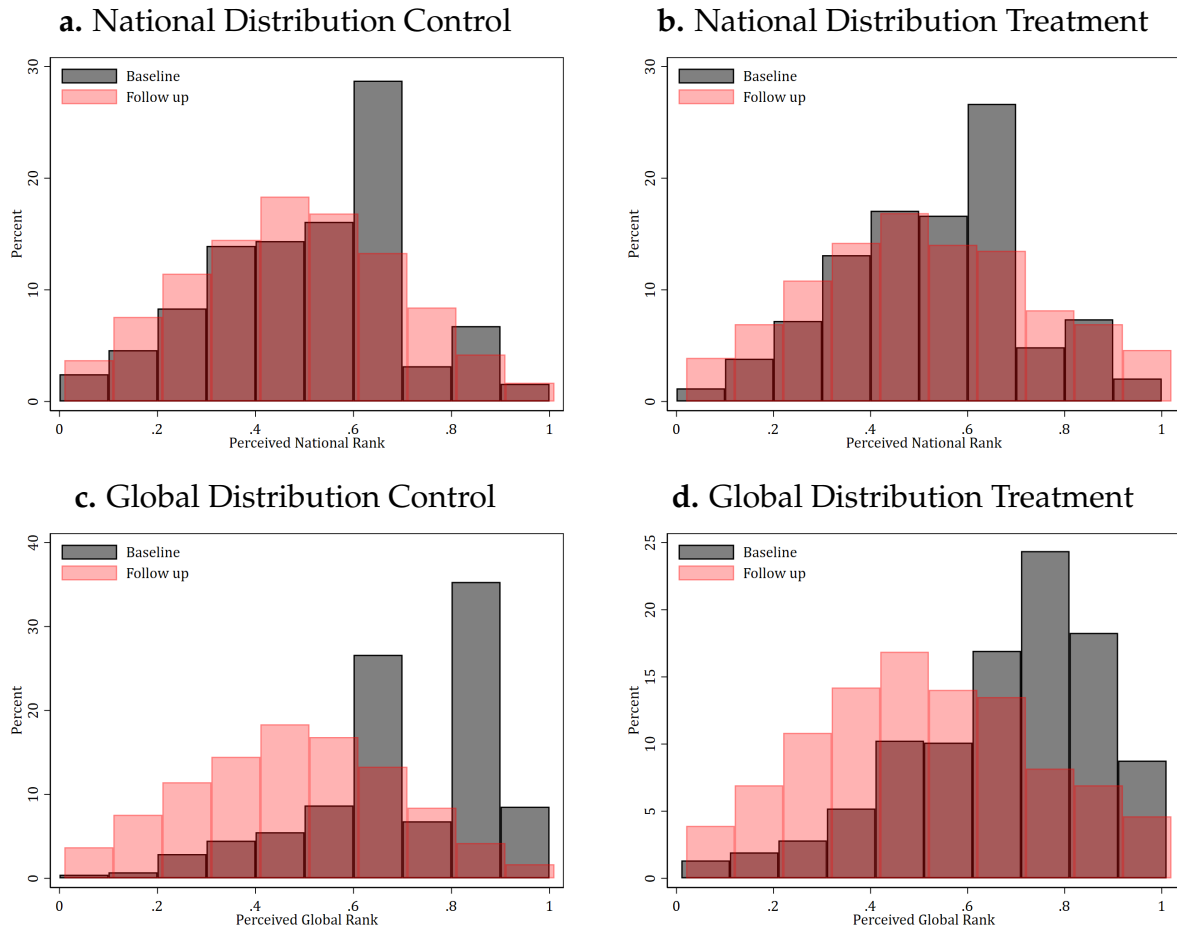
Notes: Distribution of Effort vs. Luck beliefs at national level (gray) and global level (red) in (a.) and their correlation in (b.) with darker areas indicating more responses in this area. Effort vs. Luck beliefs were elicited *before* the treatment in the baseline survey. Data from all respondents in the baseline survey.

Figure A.3: Perceived National and Global Income Ranks



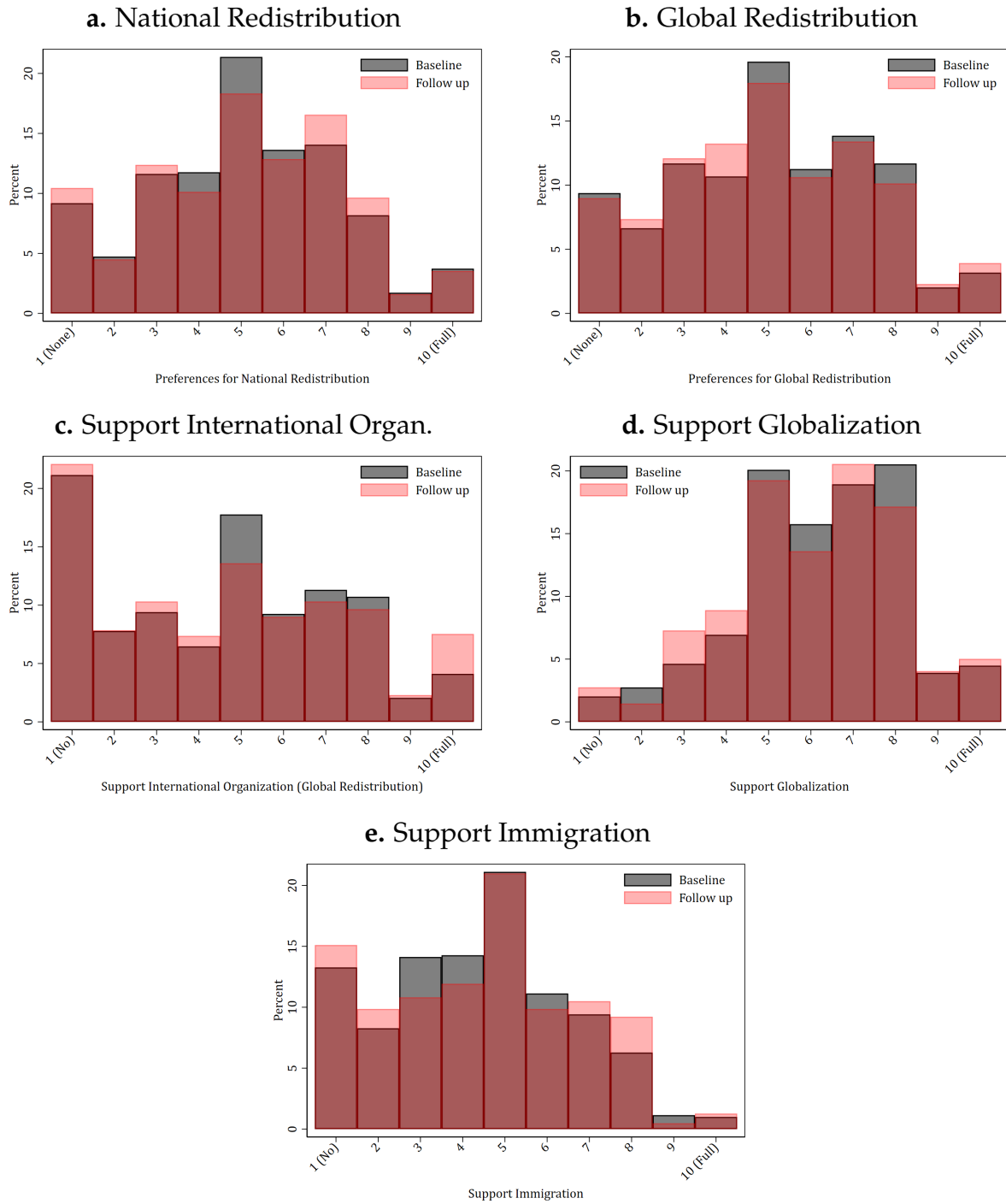
Notes: Distribution of prior beliefs about national income rank (gray) and global income rank (red) in the baseline survey in (a.) and their correlation in (b.) with darker areas indicating more responses in this area. Distribution of prior beliefs about national income rank (gray) and global income rank (red) in the follow-up survey *control group* in (c.) and their correlation in (d.) with darker areas indicating more responses in this area. In the baseline survey beliefs were elicited *before* the treatment and in the follow-up survey *one year after* the treatment.

Figure A.4: Perceived National and Global Income Ranks over Time



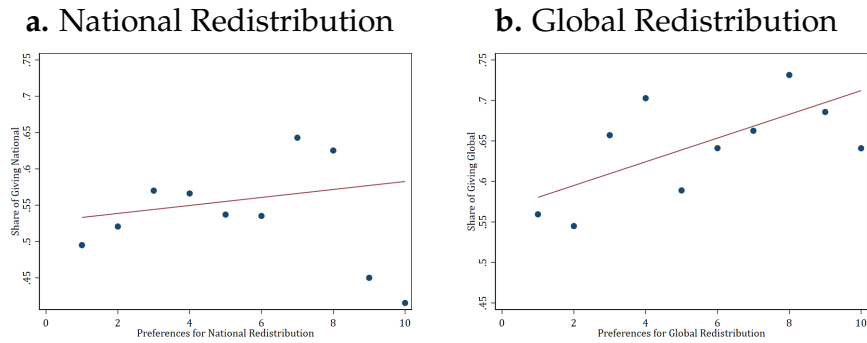
Notes: Distribution of prior beliefs about national income rank in the baseline control (gray) and follow-up control group (red) in (a.) and distribution of prior beliefs about national income rank in the baseline treatment (gray) and follow-up treatment group (red) in (b.). Distribution of prior beliefs about global income rank in the baseline control (gray) and follow-up control group (red) in (c.) and distribution of prior beliefs about global income rank in the baseline treatment (gray) and follow-up treatment group (red) in (d.).

Figure A.5: Policy Preferences – Baseline and Follow-up Survey



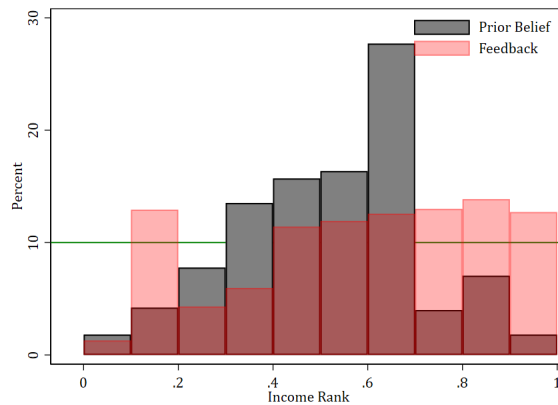
Notes: Distribution of preferences for national redistribution (a.), of preferences for global redistribution (b.), of the support for an international organization with a mandate to redistribute globally (c.), of the support for globalization (d.), and of the support for immigration (e.) in the baseline control (gray) and follow-up control group (red).

Figure A.6: Preferences for Redistribution vs. Giving in Distributional Tasks



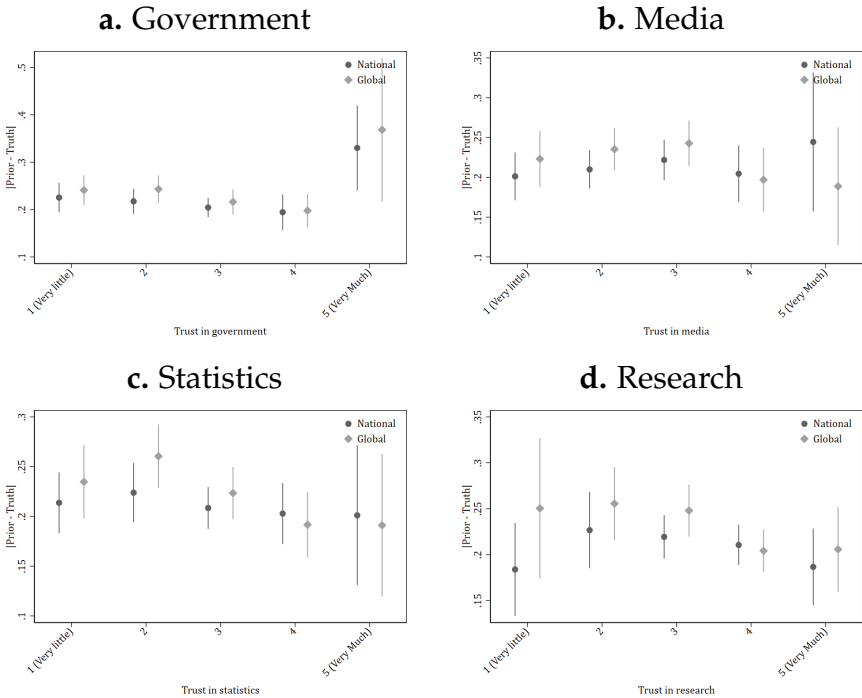
Notes: Binned scatterplots with 10 equally-sized bins showing the relationship between preference for national redistribution and share of giving to a poor German household (a.) and the relationship between preference for global redistribution and share of giving to a poor global household (b.). Data from baseline survey control group.

Figure A.7: Prior Beliefs about National Income Rank vs. Feedback



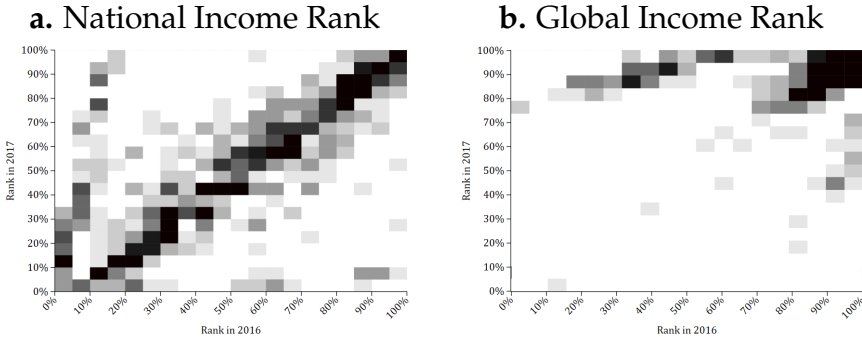
Notes: Distribution of prior beliefs about own income rank and the information provided (baseline survey). The feedback in the baseline survey was calculated prior to collecting the survey data using data for gross household income in the calendar year 2014 from the SOEP and “extrapolating” it to 2016 by adjusting for the inflation rate and the growth in GDP per capita. The green horizontal line indicates the true feedback, which should be uniform over the interval.

Figure A.8: Relationship Between Misperceptions of Income Rank and Trust in Institutions



Notes: Coefficient plots from OLS regressions of misperceptions about relative income on trust in government (a.), media (b.), statistics (c.), and research (d.) using data from the follow-up control group. Standard errors clustered at the household level.

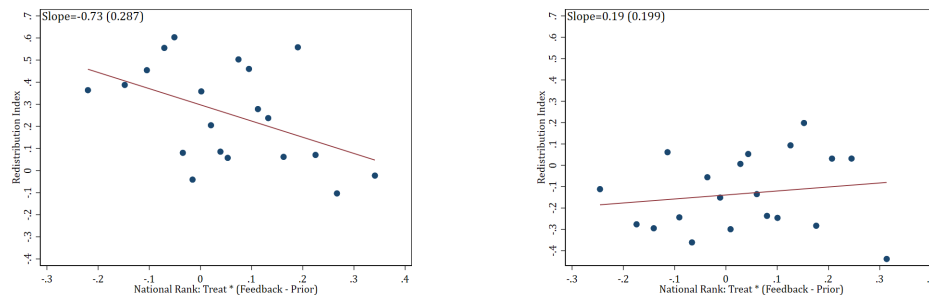
Figure A.9: Persistence of Income Rank Year-Over-Year



Notes: Correlation between true income rank in the year of the baseline survey and in the year of the follow-up survey for national income rank (a.) and global income rank (b.).

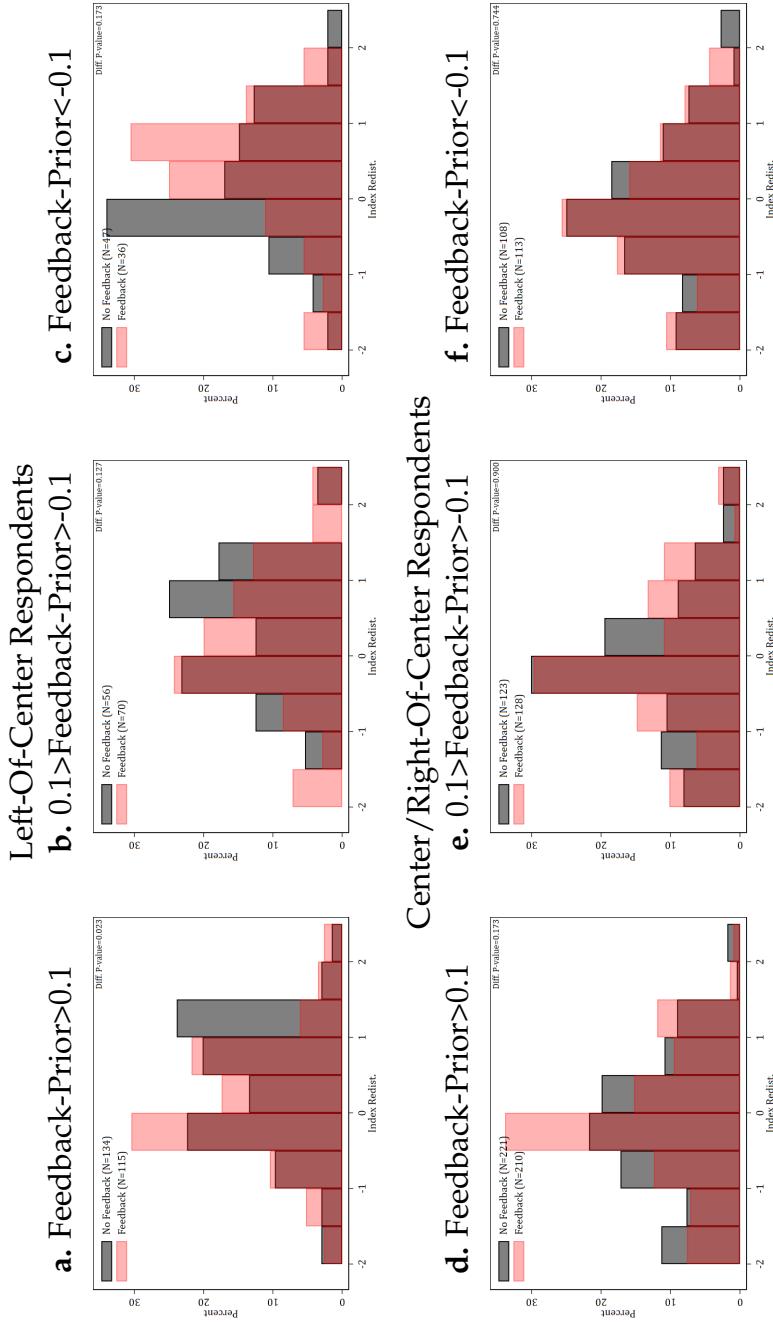
Figure A.10: Effects of Information Provision on Preferences for Redistribution

a. Left-of-Center Respondents **b. Center/Right-of-Center Respondents**



Notes: Binned scatterplots with 20 equally-sized bins showing the effect of information on true national income rank on preferences for redistribution (defined as equally-weighted index of preferences for national and global redistribution) for left-of-center respondents (a.) and center/right-of-center respondents (b.). Left-of-center is defined as *below the median response of 5* on the self-assessment scale (0-10) for political orientation from left to right, whereas center/right-of-center subsumes respondents *at or above the median (5)* on this scale. The control variables used in the analysis are the prior beliefs about the national income rank, and the following demographic characteristics: age and dummies for gender, education, disability, unemployment, retirement, self-employment, political party and East Germany. Data from baseline survey.

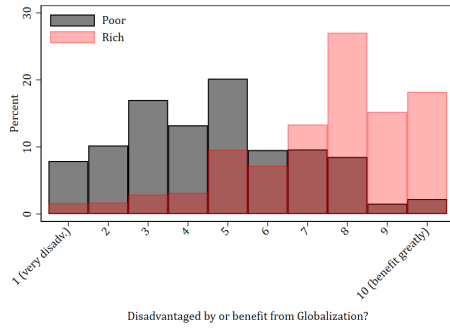
Figure A.11: Histogram-Version of the Effects of Information Provision



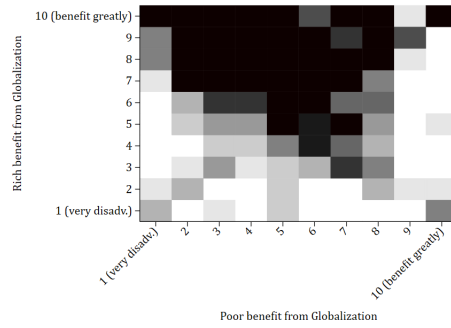
Notes: Histograms showing the effect of information on true income rank on preferences for redistribution (defined as equally-weighted index of preferences for national and global redistribution) broken down into positive, neutral, and negative “news.” Positive (negative) news means that a respondent underestimated (overestimated) their true rank by more than 10 percentage points, while neutral means that a respondent misperceives their true rank by at most 10 percentage points. Results for left-of-center respondents are displayed in (a.)–(c.), and for center/ right-of-center respondents in (d.)–(e.).

Figure A.12: Beneficiaries of Globalization and Immigration

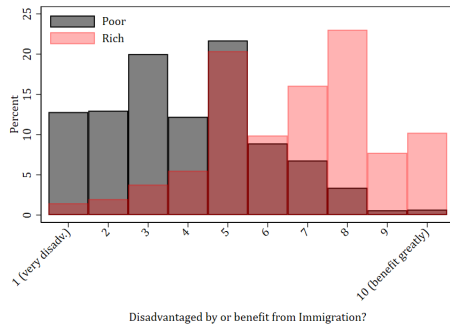
a. Distribution Globalization



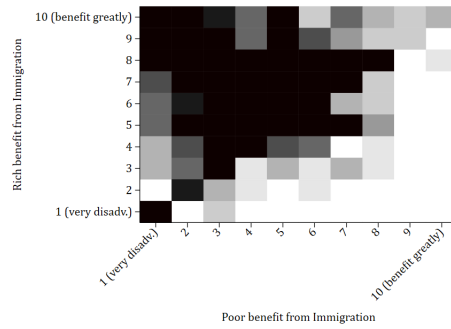
b. Correlations



c. Distribution Immigration

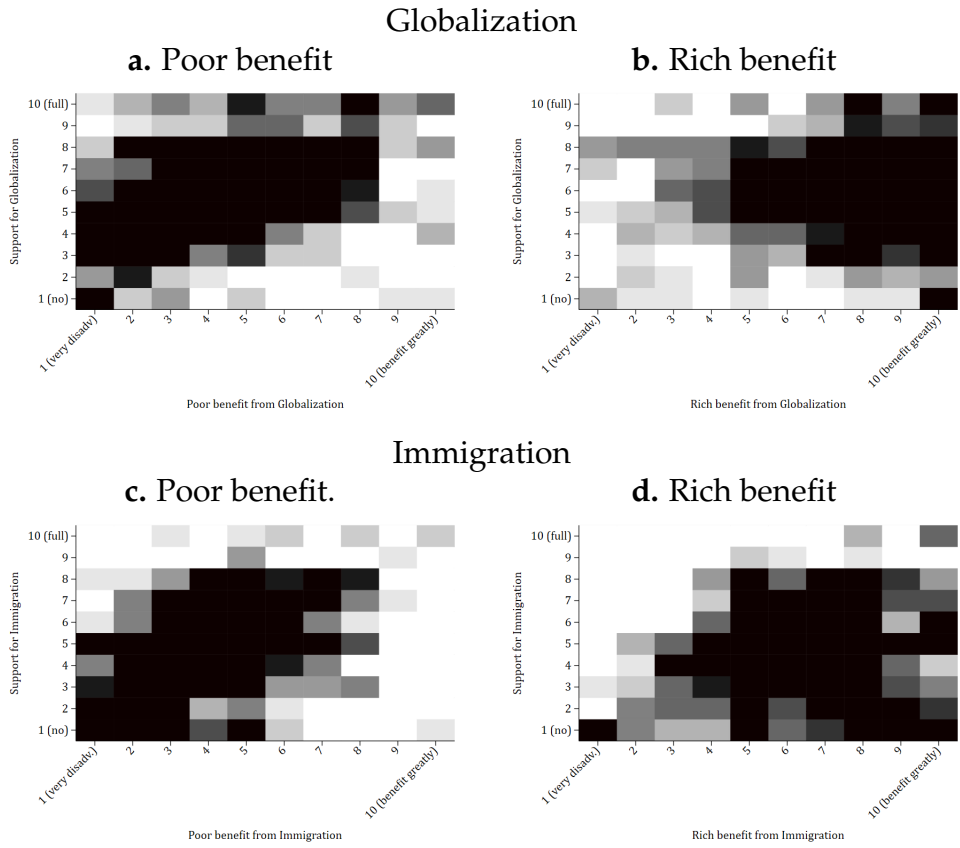


d. Correlations



Notes: Distribution of beneficiaries of globalization: poor (gray) and rich (red) in (a.) and their correlation in (b.) with darker areas indicating more responses in this area. Distribution of beneficiaries of immigration: poor (gray) and rich (red) in (c.) and their correlation in (d.) with darker areas indicating more responses in this area. Data from the follow-up survey.

Figure A.13: Relationship Between Support for Globalization and Immigration and Beneficiaries



Notes: Correlations of support for globalization with opinion about beneficiaries of globalization: poor (a.) and rich (b.) and correlations of support for immigration with opinion about beneficiaries of immigration: poor (c.) and rich (d.). Darker areas indicate more responses in this area. Data from follow-up survey.

Table A.1: Summary Statistics – Baseline Survey

| | Pre-Treatment | | | | | | | | | |
|-----------------------------------|----------------|-------|-----|-----|-----|-----------------|-------|-----|-----|-----|
| | Control Group | | | | | Treatment Group | | | | |
| | mean | sd | p25 | p50 | p75 | mean | sd | p25 | p50 | p75 |
| Political Orientation | 4.72 | 1.54 | 4 | 5 | 5 | 4.80 | 1.54 | 4 | 5 | 6 |
| Effort vs. Luck Belief (National) | 4.59 | 1.69 | 3 | 5 | 6 | 4.60 | 1.67 | 3 | 5 | 6 |
| Effort vs. Luck Belief (Global) | 5.20 | 1.97 | 4 | 5 | 6 | 5.17 | 1.92 | 4 | 5 | 6 |
| HH Gross Income (EUR 1,000s) | 43.64 | 50.78 | 18 | 35 | 58 | 43.54 | 59.66 | 17 | 35 | 55 |
| No. of Household Members | 2.34 | 1.19 | 2 | 2 | 3 | 2.28 | 1.25 | 1 | 2 | 3 |
| Prior Belief National Rank | 0.49 | 0.21 | 0 | 1 | 1 | 0.50 | 0.20 | 0 | 1 | 1 |
| Prior Belief Global Rank | 0.69 | 0.20 | 1 | 1 | 1 | 0.70 | 0.20 | 1 | 1 | 1 |
| Observations | 705 | | | | | 687 | | | | |
| | Post-Treatment | | | | | | | | | |
| | Control Group | | | | | Treatment Group | | | | |
| | mean | sd | p25 | p50 | p75 | mean | sd | p25 | p50 | p75 |
| National Redistribution | 5.06 | 2.26 | 3 | 5 | 7 | 4.99 | 2.25 | 3 | 5 | 7 |
| Global Redistribution | 5.06 | 2.35 | 3 | 5 | 7 | 5.14 | 2.32 | 4 | 5 | 7 |
| Support Internat. Organization | 4.60 | 2.69 | 2 | 5 | 7 | 4.50 | 2.64 | 2 | 5 | 6 |
| Giving National | 27.70 | 15.14 | 20 | 25 | 40 | 28.49 | 14.52 | 20 | 25 | 40 |
| Giving Global | 31.88 | 16.04 | 20 | 30 | 50 | 31.79 | 15.77 | 20 | 30 | 50 |
| Support Globalization | 6.21 | 1.97 | 5 | 6 | 8 | 5.94 | 1.92 | 5 | 6 | 7 |
| Support Immigration | 4.38 | 2.16 | 3 | 5 | 6 | 4.36 | 2.05 | 3 | 5 | 6 |
| Observations | 705 | | | | | 687 | | | | |

Notes: Summary statistics for pre-treatment and post-treatment variables separated by treatment status in the baseline survey. Political Orientation is respondents' self-placement on a scale from far left (0) to far right (10). Effort vs. Luck Belief (National/Global) indicates to what extent a respondent thinks that economic success is due to effort (1) or luck (10). Prior Belief National (Global) Rank is the perceived relative rank in the national (global) income distribution ranging from 0-100. National and Global Redistribution indicate respondents' preferences for national and global redistribution ranging from 1 (no redistribution) to 10 (complete redistribution). Support Internat. Organization is respondents' willingness to support introduction of an international organization with a mandate to redistribute resources between countries ranging from 1 (no support) to 10 (full support). Support Globalization measures support for globalization ranging from 1 (no globalization) to 10 (complete globalization) and Support Immigration measures support for immigration of more poor people ranging from 1 (much less people) to 10 (much more people). Giving National/Global indicates the sum of money (between €0 and €50) transferred to a poor German household (drawn from the bottom-10 percent of the German pre-tax household income distribution) and a poor Kenyan household (from the bottom-10 percent of the Global pre-tax household income distribution).

Table A.2: Summary Statistics – Follow-up Survey

| | Control Group | | | | | Treatment Group | | | | |
|--------------------------------|---------------|-------|-----|-----|-----|-----------------|-------|-----|-----|-----|
| | mean | sd | p25 | p50 | p75 | mean | sd | p25 | p50 | p75 |
| HH Gross Income (EUR 1,000s) | 43.64 | 50.78 | 18 | 35 | 58 | 43.54 | 59.66 | 17 | 35 | 55 |
| No. of Household Members | 2.26 | 1.14 | 2 | 2 | 3 | 2.23 | 1.20 | 1 | 2 | 3 |
| Prior Belief National Rank | 0.51 | 0.21 | 0 | 1 | 1 | 0.53 | 0.23 | 0 | 1 | 1 |
| Prior Belief Global Rank | 0.70 | 0.21 | 1 | 1 | 1 | 0.72 | 0.21 | 1 | 1 | 1 |
| Certainty Prior Nat. Rank | 4.92 | 2.32 | 3 | 5 | 7 | 5.40 | 2.47 | 4 | 5 | 7 |
| Certainty Prior Glob. Rank | 5.21 | 2.51 | 3 | 5 | 7 | 5.79 | 2.53 | 5 | 6 | 8 |
| National Redistribution | 5.09 | 2.34 | 3 | 5 | 7 | 5.10 | 2.32 | 3 | 5 | 7 |
| Global Redistribution | 5.01 | 2.37 | 3 | 5 | 7 | 5.05 | 2.33 | 3 | 5 | 7 |
| Support Internat. Organization | 4.65 | 2.87 | 2 | 5 | 7 | 4.72 | 2.85 | 2 | 5 | 7 |
| Support Globalization | 6.09 | 2.05 | 5 | 6 | 8 | 5.90 | 2.05 | 5 | 6 | 7 |
| Poor benefit Globaliz. | 4.62 | 2.19 | 3 | 5 | 6 | 4.63 | 2.25 | 3 | 5 | 6 |
| Rich benefit Globaliz. | 7.55 | 2.08 | 7 | 8 | 9 | 7.37 | 2.18 | 6 | 8 | 9 |
| Support Immigration | 4.43 | 2.30 | 3 | 5 | 6 | 4.41 | 2.14 | 3 | 4 | 6 |
| Poor benefit Immigrat. | 3.97 | 2.00 | 2 | 4 | 5 | 3.95 | 2.00 | 2 | 4 | 5 |
| Rich benefit Immigrat. | 6.66 | 2.16 | 5 | 7 | 8 | 6.71 | 2.02 | 5 | 7 | 8 |
| Observations | 705 | | | | | 687 | | | | |

Notes: Summary statistics for variables in the follow-up survey separated by treatment status. Prior Belief National (Global) Rank is the perceived relative rank in the national (global) income distribution ranging from 0-100. Certainty Prior Nat. (Glob.) Rank indicates respondents' confidence with their prior-belief statement measured in 10 percent steps (from 0 to 100 percent). National and Global Redistribution indicate respondents' preferences for national and global redistribution ranging from 1 (no redistribution) to 10 (complete redistribution). Support Internat. Organization is respondents' willingness to support introduction of an international organization with a mandate to redistribute resources between countries ranging from 1 (no support) to 10 (full support). Support Globalization measures support for globalization ranging from 1 (no globalization) to 10 (complete globalization) and Poor/Rich benefit Globaliz. indicates whether respondents think that poor/rich are disadvantaged by (1) or benefit from globalization (10). Support Immigration measures support for immigration of more poor people ranging from 1 (much less people) to 10 (much more people). Poor/Rich benefit Immigrat. indicates whether respondents think that poor/rich are disadvantaged by (1) or benefit from immigration (10).

Table A.3: Randomization Balance

| | All | | | Left-of-center | | | Center/Right-of-center | | |
|---------------------------------|-----------------|-----------------|----------------|-----------------|-----------------|----------------|------------------------|-----------------|----------------|
| | (1) Treat | (2) Control | (3) P-value | (4) Treat | (5) Control | (6) P-value | (7) Treat | (8) Control | (9) P-value |
| HH Gross Income (EUR 1,000s) | 43.64 (1.91) | 43.54 (2.28) | 0.97 | 52.40 (3.45) | 45.61 (2.52) | 0.12 | 39.09 (2.26) | 42.54 (3.14) | 0.37 |
| No. of Household Members | 2.34 (0.04) | 2.28 (0.05) | 0.35 | 2.37 (0.07) | 2.35 (0.09) | 0.90 | 2.32 (0.06) | 2.24 (0.06) | 0.31 |
| Female (=1) | 0.54 (0.02) | 0.55 (0.02) | 0.79 | 0.54 (0.03) | 0.58 (0.03) | 0.42 | 0.55 (0.02) | 0.54 (0.02) | 0.82 |
| Age | 54.58 (0.71) | 56.44 (0.69) | 0.06 | 52.67 (1.20) | 55.51 (1.20) | 0.09 | 55.58 (0.87) | 56.88 (0.84) | 0.28 |
| Education: upper secondary (=1) | 0.63 (0.02) | 0.60 (0.02) | 0.23 | 0.56 (0.03) | 0.54 (0.03) | 0.67 | 0.66 (0.02) | 0.62 (0.02) | 0.20 |
| Education: college (=1) | 0.22 (0.02) | 0.23 (0.02) | 0.61 | 0.33 (0.03) | 0.31 (0.03) | 0.70 | 0.16 (0.02) | 0.19 (0.02) | 0.24 |
| Disabled (=1) | 0.13 (0.01) | 0.15 (0.01) | 0.18 | 0.12 (0.02) | 0.11 (0.02) | 0.90 | 0.14 (0.02) | 0.17 (0.02) | 0.11 |
| Unemployed (=1) | 0.03 (0.01) | 0.04 (0.01) | 0.70 | 0.02 (0.01) | 0.02 (0.01) | 0.91 | 0.04 (0.01) | 0.05 (0.01) | 0.75 |
| Self employed (=1) | 0.07 (0.01) | 0.05 (0.01) | 0.21 | 0.08 (0.02) | 0.04 (0.01) | 0.05 | 0.06 (0.01) | 0.06 (0.01) | 0.88 |
| Retired (=1) | 0.34 (0.02) | 0.35 (0.02) | 0.72 | 0.32 (0.03) | 0.31 (0.03) | 0.92 | 0.36 (0.02) | 0.37 (0.02) | 0.65 |
| SPD Supporter (=1) | 0.13 (0.01) | 0.16 (0.01) | 0.14 | 0.22 (0.03) | 0.25 (0.03) | 0.35 | 0.09 (0.01) | 0.11 (0.01) | 0.16 |
| CDU/CSU Supporter (=1) | 0.22 (0.02) | 0.24 (0.02) | 0.30 | 0.10 (0.02) | 0.09 (0.02) | 0.71 | 0.28 (0.02) | 0.31 (0.02) | 0.26 |
| East Germany (=1) | 0.23 (0.02) | 0.23 (0.02) | 0.99 | 0.25 (0.03) | 0.27 (0.03) | 0.76 | 0.22 (0.02) | 0.22 (0.02) | 0.86 |
| Joint F-Test | | | 0.22 | | | 0.15 | | | 0.58 |
| Observations | 705 | 687 | | 241 | 222 | | 464 | 465 | |

Notes: Control variables: mean and standard deviation (in parentheses), separated for treatment and control in the baseline survey. P-value is from testing for difference between treatment and control. Joint F-test reports the p-value from an F-test based on regressing treatment status on all controls. Columns 1–3 includes data for all respondents, columns 4–6 includes data for left-of-center, and columns 7–9 includes data for center/right-of-center respondents. All control variables are defined as binary variables except household income, number of household members, and age.

Table A.4: Effects of Information Provision on Response Rate to the Follow-Up Survey (Selective Attrition)

| | Responded to Follow-Up Survey | | | |
|--|-------------------------------|-------------------|-------------------|-------------------|
| | (1) | (2) | (3) | (4) |
| Treatment | -0.033 (0.020) | -0.026 (0.026) | | |
| Peer Treatment | | 0.018 (0.031) | | |
| National Rank: Treat*(Feedback - Prior) | | | -0.004 (0.096) | -0.033 (0.113) |
| National Rank: Peer Treatment*(Feedback - Prior) | | | | -0.092 (0.141) |
| Global Rank: Treat*(Feedback - Prior) | | | -0.142 (0.098) | -0.140 (0.117) |
| Global Rank: Peer Treatment*(Feedback - Prior) | | | | 0.009 (0.128) |
| Observations | 1,364 | 1,364 | 1,364 | 1,364 |

Notes: ***p-value < 0.01, **p-value < 0.05, *p-value < 0.1. OLS regressions with standard errors clustered at the household level in parentheses using data from both surveys. The dependent variable is an indicator whether a respondent took part in the follow-up survey one year later. Analysis conditional on number of household members and household gross income.

Table A.5: Effects of Information Provision on Response Rate to the Follow-Up Survey (Treatment Effect on Attrition)

| | Responded to Follow-Up Survey | | |
|---|-------------------------------|-----------------------|-------------------------------|
| | (1) All | (2) Left-of-center | (3) Center/Right-of-center |
| National Rank: Treat*(Feedback - Prior) | 0.002 (0.095) | -0.244 (0.183) | 0.111 (0.113) |
| Global Rank: Treat*(Feedback - Prior) | -0.122 (0.100) | 0.024 (0.213) | -0.178 (0.111) |
| P-value (i)=(ii) | 0.496 | 0.474 | 0.159 |
| Observations | 1,364 | 458 | 906 |

Notes: ***p-value < 0.01, **p-value < 0.05, *p-value < 0.1. OLS regressions estimating the effect of treatment status on participation in the follow-up survey using data from baseline survey. Standard errors clustered at the household level in parentheses. The dependent variable is an indicator whether a respondent took part in the follow-up survey one year later. Left-of-center is defined as below the median response of 5 on the self-assessment scale (0-10) for political orientation from left to right, whereas center/right-of-center subsumes respondents at or above the median (5) on this scale. The control variables used in the analysis are the prior beliefs about the national and global income rank, and the following demographic characteristics: age and dummies for gender, education, disability, unemployment, retirement, self-employment, political party and East Germany.

Table A.6: Correlates of Misperceptions about Income Rank

| | National bias | | National absolute bias | | Global bias | | Global absolute bias | |
|--|----------------------|----------------------|------------------------|---------------------|----------------------|----------------------|----------------------|----------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Age | -0.001** (0.000) | -0.001*** (0.000) | -0.000 (0.000) | -0.000 (0.000) | -0.000 (0.000) | -0.000 (0.000) | 0.000 (0.000) | 0.000 (0.000) |
| Female (=1) | 0.000 (0.016) | -0.011 (0.015) | -0.002 (0.009) | 0.000 (0.009) | -0.042*** (0.014) | -0.039*** (0.014) | 0.040*** (0.010) | 0.033*** (0.010) |
| Education: upper secondary (=1) | 0.007 (0.016) | -0.039* (0.021) | 0.007 (0.010) | 0.009 (0.014) | -0.035** (0.014) | -0.005 (0.022) | 0.045*** (0.010) | 0.002 (0.015) |
| Education: college & more (=1) | -0.082*** (0.018) | -0.047* (0.027) | 0.000 (0.011) | -0.003 (0.017) | 0.044*** (0.014) | 0.060** (0.024) | -0.080*** (0.011) | -0.061*** (0.017) |
| Monthly net income (log) | -0.179*** (0.016) | -0.171*** (0.019) | 0.035*** (0.011) | 0.039*** (0.012) | -0.034** (0.017) | -0.057*** (0.018) | -0.052*** (0.011) | -0.028** (0.013) |
| Unemployed (=1) | 0.157*** (0.036) | 0.010 (0.041) | -0.019 (0.026) | 0.005 (0.028) | 0.053 (0.045) | 0.022 (0.047) | 0.032 (0.027) | -0.001 (0.028) |
| Political orientation: left-of-center (=1) | -0.046*** (0.016) | -0.026* (0.016) | -0.018* (0.010) | -0.021** (0.010) | -0.005 (0.014) | -0.005 (0.014) | -0.028*** (0.010) | -0.017 (0.010) |
| East Germany (=1) | 0.017 (0.018) | -0.010 (0.018) | -0.010 (0.011) | -0.002 (0.011) | -0.019 (0.017) | -0.033* (0.017) | 0.017 (0.012) | 0.016 (0.012) |
| German citizenship (=1) | -0.030 (0.033) | 0.010 (0.030) | -0.001 (0.018) | -0.006 (0.018) | -0.001 (0.029) | 0.015 (0.030) | 0.014 (0.021) | 0.013 (0.022) |
| Observations | | 1,375 | | 1,375 | | 1,364 | | 1,364 |

Notes: ***p-value < 0.01, **p-value < 0.05, *p-value < 0.1. OLS regressions with robust standard errors in parentheses using data from baseline survey. The dependent variable is national bias (defined as the difference of prior belief and true income rank, columns 1–2), national absolute bias (columns 3–4), global bias (defined analogously, columns 5–6), and global absolute bias (columns 7–8). Uneven-numbered columns display coefficients from separate regressions for each control, while even-numbered columns report multivariate regressions including all controls at once. All controls are defined as binary variables (except age and monthly net income).

Table A.7: Alternative Specification: Effects of Information Provision on Beliefs about Income Rank One Year Later

| | Control | | Treatment | |
|--|--------------------|------------------|-------------------|-------------------|
| | (1) National | (2) Global | (3) National | (4) Global |
| National Rank: Peer Treatment*(Feedback - Prior) | 0.130** (0.058) | | -0.024 (0.062) | |
| Global Rank: Peer Treatment*(Feedback - Prior) | | 0.103 (0.065) | | -0.082 (0.073) |
| Observations | 591 | 588 | 559 | 547 |

Notes: ***p-value < 0.01, **p-value < 0.05, *p-value < 0.1. OLS regressions estimating the effect of information provision on beliefs about income rank one year later. Standard errors clustered at the household level in parentheses. The dependent variable is the prior belief on relative national income rank and relative global income rank in the follow-up survey. Peer Treatment takes the value 1 if one of the other household members received the information and 0 otherwise (i.e., it takes the value 1 even if the individual received the information directly, as long as one of the other household members received it too). We estimate separate regressions for individuals in the control group (columns 1–2) and treatment group (columns 3–4). The control variables used in the analysis are the prior beliefs about the national and global income rank, a set of dummies for the number of household members, and the following demographic characteristics: age and dummies for gender, education, disability, unemployment, retirement, self-employment, political party and East Germany.

Table A.8: Robustness: Effects of Information Provision on Policy Preferences by Political Orientation

| | | Left-of-center | | | | | | |
|---|--|--------------------|---------------------|---------------------|-------------------|--------------------|-------------------|-------------------|
| | | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| | | Nat. Redist. | Glob. Redist. | Sup. Int. Org. | Giving Nat. | Giving Glob. | Sup. Global. | Sup. Immig. |
| National Rank: Treat*(Feedback - Prior) | | -0.786* (0.462) | -0.921** (0.393) | -1.041** (0.461) | -0.076 (0.447) | -0.278 (0.454) | -0.509 (0.474) | -0.471 (0.410) |
| Global Rank: Treat*(Feedback - Prior) | | 0.168 (0.500) | 0.139 (0.446) | 0.559 (0.471) | 0.566 (0.443) | 0.470 (0.463) | -0.101 (0.513) | 0.698 (0.461) |
| Observations | | 454 | 452 | 447 | 458 | 457 | 454 | 454 |
| | | Center | | | | | | |
| | | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| | | Nat. Redist. | Glob. Redist. | Sup. Int. Org. | Giving Nat. | Giving Glob. | Sup. Global. | Sup. Immig. |
| National Rank: Treat*(Feedback - Prior) | | -0.278 (0.434) | -0.247 (0.404) | -0.021 (0.366) | 0.353 (0.367) | 0.085 (0.380) | -0.107 (0.376) | -0.022 (0.364) |
| Global Rank: Treat*(Feedback - Prior) | | 0.466 (0.449) | 0.545 (0.394) | 0.198 (0.360) | -0.464 (0.378) | -0.131 (0.393) | -0.431 (0.376) | -0.153 (0.347) |
| Observations | | 539 | 536 | 531 | 538 | 539 | 538 | 542 |
| | | Right-of-center | | | | | | |
| | | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| | | Nat. Redist. | Glob. Redist. | Sup. Int. Org. | Giving Nat. | Giving Glob. | Sup. Global. | Sup. Immig. |
| National Rank: Treat*(Feedback - Prior) | | 0.555 (0.425) | 0.594 (0.487) | 0.279 (0.485) | 0.811* (0.434) | 1.049** (0.475) | 0.759 (0.559) | 0.073 (0.471) |
| Global Rank: Treat*(Feedback - Prior) | | -0.593 (0.376) | -0.302 (0.433) | -0.158 (0.436) | 0.224 (0.409) | -0.229 (0.432) | -0.156 (0.444) | 0.025 (0.406) |
| Observations | | 357 | 353 | 347 | 361 | 361 | 353 | 362 |

Notes: ***p-value < 0.01, **p-value < 0.05, *p-value < 0.1. OLS regressions estimating the effect of information provision on policy preferences using data from the baseline survey. Standard errors clustered at the household level in parentheses. All dependent variables are standardized by subtracting the control group mean from each observation and then dividing by the control group standard deviation. Panel (a) uses data for all respondents, panel (b) displays results for left-of-center respondents, and panel (c) displays results for center/right-of-center respondents. Left-of-center is defined as *below the median response of 5* on the self-assessment scale (0-10) for political orientation from left to right, whereas center/right-of-center subsumes respondents *at or above the median (5)* on this scale. The control variables used in the analysis are the prior beliefs about the national and global income rank, and the following demographic characteristics: age and dummies for gender, education, disability, unemployment, retirement, self-employment, political party and East Germany.

Table A.9: Robustness: Effects of Information Provision on Policy Preferences

| | All | | | | | |
|---|-------------------|-------------------|---------------------|------------------------|------------------|------------------|
| | Left-of-center | | | Center/Right-of-center | | |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| | Nat. Redist. | Glob. Redist. | Nat. Redist. | Glob. Redist. | Nat. Redist. | Glob. Redist. |
| National Rank: Treat*(Feedback - Prior) | -0.179 (0.179) | -0.142 (0.185) | -0.658** (0.324) | -0.788** (0.308) | 0.124 (0.213) | 0.256 (0.225) |
| Observations | 1360 | 1350 | 458 | 455 | 902 | 895 |
| | All | | | | | |
| | Left-of-center | | | Center/Right-of-center | | |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| | Nat. Redist. | Glob. Redist. | Nat. Redist. | Glob. Redist. | Nat. Redist. | Glob. Redist. |
| Global Rank: Treat*(Feedback - Prior) | -0.126 (0.186) | -0.042 (0.186) | -0.403 (0.355) | -0.525 (0.344) | 0.062 (0.212) | 0.258 (0.212) |
| Observations | 1350 | 1341 | 454 | 452 | 896 | 889 |

Notes: ***p-value < 0.01, **p-value < 0.05, *p-value < 0.1. OLS regressions estimating the effect of information provision on preferences for national and global redistribution using data from the baseline survey. Standard errors clustered at the household level in parentheses. All dependent variables are standardized by subtracting the control group mean from each observation and then dividing by the control group standard deviation. (a.) displays the results from a specification that only considers national rank information and (b.) presents the results only considering global rank information. Columns 1–2 use data for all respondents, columns 3–4 display results for left-of-center respondents, and columns 5–6 display results for center/right-of-center respondents. Left-of-center is defined as below the median response of 5 on the self-assessment scale (0–10) for political orientation from left to right, whereas center/right-of-center subsumes respondents at or above the median (5) on this scale. The control variables used in the analysis are the prior beliefs about the national (in a.) and global income rank (in b.), and the following demographic characteristics: age and dummies for gender, education, disability, unemployment, retirement, self-employment, political party and East Germany.

Table A.10: Falsification Test: Effects of Information Provision on Pre-Treatment Outcomes

| | All | | | | | |
|---|-------------------|-------------------|------------------------|-------------------|-------------------|-------------------|
| | Left-of-center | | Center/Right-of-center | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| | Eff./Luck Nat. | Eff./Luck Glob. | Eff./Luck Nat. | Eff./Luck Glob. | Eff./Luck Nat. | Eff./Luck Glob. |
| National Rank: Treat*(Feedback - Prior) | -0.090 (0.248) | 0.067 (0.244) | -0.594 (0.479) | -0.012 (0.460) | 0.082 (0.289) | 0.100 (0.290) |
| Global Rank: Treat*(Feedback - Prior) | 0.048 (0.256) | -0.110 (0.259) | 0.578 (0.462) | -0.139 (0.456) | -0.142 (0.290) | -0.071 (0.300) |
| Observations | 1,364 | 1,354 | 458 | 456 | 906 | 898 |

Notes: ***p-value < 0.01, **p-value < 0.05, *p-value < 0.1. OLS regressions estimating the effect of information provision on national Effort vs. Luck Beliefs (Eff./Luck Nat.) and global Effort vs. Luck Beliefs (Eff./Luck Glob.) using data from the baseline survey. Standard errors clustered at the household level in parentheses. The dependent variables “Eff./Luck Nat.” and “Eff./Luck Glob.” are measured pre-treatment in the baseline survey and are standardized by subtracting the control group mean from each observation and then dividing by the control group standard deviation. Columns 1–2 use data for all respondents, columns 3–4 display results for left-of-center respondents and columns 5–6 display results for center/right-of-center respondents. Left-of-center is defined as below the median response of 5 on the self-assessment scale (0–10) for political orientation from left to right, whereas center/right-of-center subsumes respondents at or above the median (5) on this scale. The control variables used in the analysis are the prior beliefs about the national and global income rank, and the following demographic characteristics: age and dummies for gender, education, disability, unemployment, retirement, self-employment, political party and East Germany.

Table A.11: Average Effects of Information Provision on Policy Preferences

| All | | | | | | |
|------------------------|-------------------|-------------------|-------------------|------------------|-------------------|---------------------|
| | (1) | (2) | (3) | (4) | (5) | (7) |
| | Nat. Redist. | Glob. Redist. | Sup. Int. Org | Giving Nat. | Giving Glob. | Sup. Immig. |
| Treatment | -0.025 (0.053) | 0.044 (0.054) | -0.031 (0.054) | 0.046 (0.050) | -0.005 (0.051) | -0.132** (0.054) |
| Observations | 1,376 | 1,366 | 1,348 | 1,384 | 1,384 | 1,386 |
| Left-of-center | | | | | | |
| | (1) | (2) | (3) | (4) | (5) | (7) |
| | Nat. Redist. | Glob. Redist. | Sup. Int. Org | Giving Nat. | Giving Glob. | Sup. Immig. |
| Treatment | -0.100 (0.088) | -0.036 (0.086) | -0.043 (0.096) | 0.099 (0.085) | -0.025 (0.087) | -0.152 (0.092) |
| Observations | 459 | 456 | 451 | 463 | 462 | 458 |
| Center/Right-of-center | | | | | | |
| | (1) | (2) | (3) | (4) | (5) | (7) |
| | Nat. Redist. | Glob. Redist. | Sup. Int. Org | Giving Nat. | Giving Glob. | Sup. Immig. |
| Treatment | 0.032 (0.064) | 0.105 (0.066) | -0.002 (0.064) | 0.039 (0.063) | 0.020 (0.063) | -0.114* (0.067) |
| Observations | 917 | 910 | 897 | 921 | 922 | 927 |

Notes: ***p-value < 0.01, **p-value < 0.05, *p-value < 0.1. OLS regressions estimating the effect of information provision on policy preferences using data from the baseline survey. Standard errors clustered at the household level in parentheses. All dependent variables are standardized by subtracting the control group mean from each observation and then dividing by the control group standard deviation. Treatment is an indicator variable for receiving information about the true income rank. (a.) uses data for all respondents, (b.) displays results for left-of-center respondents, and (c.) displays results for center/right-of-center respondents. Left-of-center is defined as below the median response of 5 on the self-assessment scale (0-10) for political orientation from left to right, whereas center/right-of-center subsumes respondents at or above the median (5) on this scale. The control variables used in the analysis are the prior beliefs about the national and global income rank, and the following demographic characteristics: age and dummies for gender, education, disability, unemployment, retirement, self-employment, political party and East Germany.

Table A.12: Effects of Information Provision on Policy Preferences One Year Later

| | Left-of-center | | | | | Center/Right-of-center | | | | |
|---|---------------------|----------------------|----------------------|---------------------|--------------------|------------------------|----------------------|----------------------|---------------------|---------------------|
| | (1) Nat. Redist. | (2) Glob. Redist. | (3) Sup. Int. Org | (4) Sup. Global. | (5) Sup. Immig. | (6) Nat. Redist. | (7) Glob. Redist. | (8) Sup. Int. Org | (9) Sup. Global. | (10) Sup. Immig. |
| National Rank: Treat*(Feedback - Prior) | 0.039 (0.492) | -0.511 (0.506) | -1.514*** (0.517) | -1.120** (0.513) | -0.682 (0.461) | -0.342 (0.351) | -0.218 (0.334) | 0.731** (0.345) | 0.260 (0.348) | -0.001 (0.336) |
| Global Rank: Treat*(Feedback - Prior) | -0.137 (0.503) | 0.348 (0.504) | 0.858 (0.526) | 0.521 (0.558) | 0.734 (0.494) | 0.743** (0.351) | 0.505 (0.316) | -0.294 (0.351) | -0.393 (0.298) | 0.148 (0.295) |
| Observations | 396 | 390 | 393 | 396 | 399 | 771 | 758 | 750 | 762 | 782 |

Notes: ***p-value < 0.01, **p-value < 0.05, *p-value < 0.1. OLS regressions estimating the effect of information provision on policy preferences using data from the follow-up survey. Standard errors clustered at the household level in parentheses. All dependent variables are standardized by subtracting the control group mean from each observation and then dividing by the control group standard deviation. Columns 1–5 display results for left-of-center respondents and columns 6–10 display results for center/right-of-center respondents. Left-of-center is defined as below the median or above the median (5) on the self-assessment scale (0-10) for political orientation from left to right, whereas center/right-of-center subsumes respondents at and the following demographic characteristics: age and dummies for gender, education, disability, unemployment, retirement, self-employment, political party and East Germany.

Table A.13: Alternative Specification: Effects of Information Provision on Policy Preferences One Year Later

| | Left-of-center | | | | | Center/Right-of-center | | | | |
|--|---------------------|----------------------|----------------------|---------------------|--------------------|------------------------|----------------------|----------------------|---------------------|---------------------|
| | (1) Nat. Redist. | (2) Glob. Redist. | (3) Sup. Int. Org | (4) Sup. Global. | (5) Sup. Immig. | (6) Nat. Redist. | (7) Glob. Redist. | (8) Sup. Int. Org | (9) Sup. Global. | (10) Sup. Immig. |
| National Rank: Treat*(Feedback - Prior) | -0.237 (0.581) | -0.106 (0.524) | -1.394** (0.615) | -0.596 (0.581) | -0.576 (0.503) | -0.178 (0.400) | -0.273 (0.394) | 0.885** (0.404) | 0.193 (0.404) | -0.297 (0.378) |
| National Rank: Peer Treatment*(Feedback - Prior) | -1.163* (0.678) | 0.404 (0.659) | 0.019 (0.693) | 1.404** (0.635) | 0.359 (0.577) | 0.714 (0.519) | -0.009 (0.480) | 0.428 (0.504) | -0.032 (0.478) | -0.601 (0.498) |
| Global Rank: Treat*(Feedback - Prior) | -0.061 (0.649) | -0.378 (0.573) | 0.607 (0.652) | 0.036 (0.622) | 0.685 (0.573) | 0.678* (0.382) | 0.585 (0.376) | -0.591 (0.434) | -0.505 (0.369) | 0.232 (0.375) |
| Global Rank: Peer Treatment*(Feedback - Prior) | 0.601 (0.743) | -1.227* (0.726) | -0.544 (0.768) | -1.170 (0.734) | 0.047 (0.636) | -0.200 (0.506) | 0.176 (0.495) | -0.720 (0.520) | -0.286 (0.459) | 0.197 (0.437) |
| Observations | 396 | 390 | 393 | 396 | 399 | 771 | 758 | 750 | 762 | 782 |

Notes: ***p-value < 0.01, **p-value < 0.05, *p-value < 0.1. OLS regressions estimating the effect of information provision on policy preferences using data from the follow-up survey. The regressions control for information spillovers between the baseline and follow-up survey. Peer Treatment takes the value 1 if the respondent did not receive the information but another member of her household and 0 otherwise (i.e., if the respondent received the information or if none of the household members received the information). Standard errors clustered at the household level in parentheses. All dependent variables are standardized by subtracting the control group mean from each observation and then dividing by the control group standard deviation. Columns 1–5 display results for left-of-center respondents and columns 6–10 display results for center/right-of-center respondents. Left-of-center is defined as below the median response of 5 on the self-assessment scale (0–10) for political orientation from left to right, whereas center/right-of-center subsumes respondents at or above the median (5) on this scale. The control variables used in the analysis are the prior beliefs about the national and global income rank, a set of dummies for the number of household members, and the following demographic characteristics: age and dummies for gender, education, disability, unemployment, retirement, self-employment, political party and East Germany.

B Survey Instrument: Baseline

BASELINE SURVEY

The documentation of the SOEP-IS can be found here: <https://doi.org/10.5684/soep.is.2018>

The full survey instruments are publicly available and can be found through the link above or directly here:

https://www.diw.de/documents/publikationen/73/diw_01.c.789423.de/diw_ssp0866.pdf

The following questions should only be heard by the participant and no other household members.

Q132 - ISP1: Earning Money: Luck vs Effort - Intro

Text

How well an individual succeeds economically in life can depend both on things that are within a person's control, such as personal effort, and on things that are not within a person's control, such as luck.

Q133 - ISP2A: Luck vs. Effort - Germany

Left-right matrix

Number of rows: 1

Would you say that it is mostly luck or effort that matters for how well an individual in Germany does economically in life?

Please answer according to the following scale.
 1 means only luck matters.
 10 means only effort matters.
 With the steps in between, you can rate your opinion.

Normal

| | 1 Only luck matters | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 Only effort matters |
|---|------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|---------------------------------|
| X | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Q134 - ISP2B: Luck vs. Effort - World

Left-right matrix

Number of rows: 1

Would you say that it is mostly luck or effort that matters for how well an individual in the world does economically in life?

Please answer according to the following scale.
 1 means only luck matters.
 10 means only effort matters.
 With the steps in between, you can rate your opinion.

Normal

| | 1 Only luck matters | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 Only effort matters |
|---|------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|---------------------------------|
| X | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Q135 - ISP3: Gross Income

Numeric

Max = 99999999

As a basis for our next module "Income distribution", I would now like to know from you, how high the gross income, ie the income before tax deductions, of your household in 2016 was. Income includes wages or salaries, self-employment income, capital income, pension payments, and other private payments such as alimonies. If you are not sure, please estimate as accurately as possible.

Q136 - ISP4: How many household members

Numeric

Max = 30

How many people (adults and children under 18), including you, lived in your household in 2016?

Q137 - ISP5: Income Rank - Intro

Text

You indicated before that your gross household income in 2016 was EUR [XX] and your household had [Y] members. This means that the per-capita gross income in your household in 2016 was EUR [XXX]. We will now ask a few more questions about this per-capita gross household income.

We are interested in your assessment of how your per capita gross household income relates to the income of other people. Please give the most accurate and truthful assessment. You can earn money for the accuracy of your assessment. For each of the following two questions you will receive 20 Euros at the end of the survey if you are correct with your assessment. If you are not correct with your assessment, you will not receive any money.

Please click "Continue" and give the laptop to the participant.

Q139 - ISP6A: Income Rank - Germany

Numeric

Max = 100

What is the proportion of people in **Germany** who had a lower per-capita gross household income in 2016 than you?

--> Please enter your answer in percent. 0 percent means that you are the poorest person in Germany. 100 percent means that you are the richest person in Germany. With the values in between, you can scale your assessment.

Q140 - ISP6B: Income Rank - World **Numeric**

Max = 100

What is the proportion of people **in the World** who had a lower per-capita gross household income in 2016 than you?

--> Please enter your answer in percent. 0 percent means that you are the poorest person in the World. 100 percent means that you are the richest person in the World. With the values in between, you can scale your assessment.

Please give the laptop back to the interviewer.

[...QUESTIONS FROM A DIFFERENT MODULE...]

PB Q147 - PPOL6: Left-Right **Matrix**

Number of rows: 1 | Number of columns: 11

In politics, people often talk about "left" and "right" when it comes to identifying different political attitudes. When you think of your own political views, where would you classify these views?

Please answer according to the following scale.
 The value 0 means: far left, the value 10 means: far right.
 The values between 0 and 10 allow you to rate your opinion.

Rows: Normal | Columns: Normal

Rendered as Dynamic Grid

| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | Far left | | | | | | | | | | Far right |
| | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

[...QUESTIONS FROM A DIFFERENT MODULE...]

Ask only if Q26901 – ISP_treat_split, 1

Q269 - ISP8: Rank Information - Intro **Text**

We would now like to give you information about the distribution of per-capita gross household income in Germany and worldwide. This information is based on representative and independently collected data from scientifically well-recognized institutions, such as the Panel Study ‘‘Living in Germany’’, the World Bank, and the Luxembourg Income Study Center.

Ask only if Q26901 – ISP_treat_split, 1

Q270 - ISP9A: Rank Information Germany **Text**

In Germany, X% of people are poorer than you, which means they have a lower per capita gross household income than you.

Graphical Illustration

Ask only if Q26901 – ISP_treat_split, 1

Q271 - ISP9B: Rank Information World **Text**

Worldwide, X% of people are poorer than you, which means they have a lower per capita gross household income than you.

Graphical Illustration

Q272 - ISP10: Redistribution – Intro **Text**

Now we will talk about redistribution. **Redistribution of income** means that the state reduces the income gap between citizens through taxes and transfers.

Q273 - ISP11A: Redistribution - Germany **Matrix**

Number of rows: 1 | Number of columns: 10

How much redistribution of income do you want between citizens in Germany?

No redistribution means that the state does not intervene in the distribution of income. Complete redistribution means that everyone earns the same amount after redistribution has been done.

Please answer according to the following scale.
The value 1 means: no redistribution,
the value 10 means: complete redistribution.
With the steps in between, you can scale your assessment.

Rows: Normal | Columns: Normal

Rendered as Dynamic Grid

| | 1 No redistribution | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 Complete redistribution |
|---|---------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------------------------|
| X | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Q274 - ISP11B: Redistribution - World**Matrix****Number of rows: 1 | Number of columns: 10**

Now imagine that it would be possible to redistribute income around the world in a similar way as a state can redistribute income within a country.

How much redistribution of income do you want between citizens in the world?

No redistribution means that the global distribution of income is not affected. Complete redistribution means that everyone in the world earns the same income after redistribution has taken place.

Please answer according to the following scale.
 The value 1 means: no redistribution,
 the value 10 means: complete redistribution.
 With the steps in between, you can scale your assessment.

Rows: Normal | Columns: Normal**Rendered as Dynamic Grid**

| | 1 No redistribution | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 Complete redistribution |
|---|---------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------------------------|
| X | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Q275 - ISP12: International Redistribution**Matrix****Number of rows: 1 | Number of columns: 10**

Would you support the creation of an international organization (similar to the United Nations) that can redistribute income or resources between countries?

1 means: definitely not support.
 10 means: definitely support.
 With the values in between, you can rate your opinion.

Rows: Normal | Columns: Normal**Rendered as Dynamic Grid**

| | 1 definitely not support | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 definitely support |
|---|-----------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------------|
| . | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Q276 - ISP13: Experiment - Intro **Text**

We now want to set you two tasks where you can again earn money. In each of the two tasks you have to decide how you want to divide a certain amount of money between yourself and another household. At the end, every 7th respondent is selected and actually paid in one of the two tasks according to their decision. The determination of whether your decision will be paid will be made at the end of this module. The actual payment will be made at the end of the survey.

Q277 - ISP14A: Intro Distribution 50 Euro Germany **Text**

You are paired with another household in Germany, which also participates in the "Life in Germany Innovation Survey" (but does not participate in these interviews). This household is one of the poorest 10 percent of households in Germany. You now have 50 euros available and can divide this amount in any way between you and the other household.

If this task is selected for payment, you will receive the amount you keep after the interview. The amount that you allocated to the other household will be transferred in full (without transaction costs) by Kantar Public at the end of the field time. In full means that your allocated amount arrives 1:1 at the other household.

Please make your decision in private.

Please hand over the laptop to the respondent.

Q278 - ISP14AX: Decision 50 Euro Germany **Numeric**

Max = 50

How much of the 50 euros do you keep for yourself and how much do you give the other household?

| | | | |
|---------------------------|----|---------------------------|----|
| I keep __€ ISP14A1 | -1 | I give __€ ISP14A2 | -1 |
|---------------------------|----|---------------------------|----|

Q279 - ISP14A3: Message **Text**

Thank you for your decision. Please click on "Next" and hand over the laptop again to the interviewer.

Q280 - ISP14B: Intro Distribution World **Text**

You are paired with another household in Kenya or Uganda. This is one of the poorest 10 percent households worldwide. You now have 50 euros available and can divide this amount in any way between you and the other household.

If this task is selected for payment, you will receive the amount you keep at the end of the survey. The amount that you allocate to the other household will be forwarded to the selected household directly and completely (without transaction costs) by the University of Heidelberg at the end of field time via a non-profit organization. In full means that your allocated amount arrives 1:1 at the other household.

Please make your decision in private.

Please hand over the laptop to the respondent.
On Demand: Please hand over the information sheet for GiveDirectly.

Q281 - ISP14BX: Decision 50 Euro World **Numeric**

Max = 50

How much of the 50 euros do you keep for yourself and how much do you give the other household?

| | |
|---|---|
| I keep __€ ISP14B1 -1 | I give __€ - ISP14B2 -1 |
|---|---|

Q282 - ISP14B3: Message **Text**

Thank you for your decision. Please click on "Next" and hand over the laptop again to the interviewer.

Q283 - ISP15: Globalization **Matrix**

Number of rows: 1 | Number of columns: 10

Now, I want to talk with you about "globalization." Globalization means that local, regional and national economies are growing closer together. This happens, among other things, through technological progress, but also through the removal of trade barriers.

What level of globalization do you want?

No globalization means that countries are completely isolated and no trade with other countries takes place. Complete globalization means that there are no barriers to trade and barriers to the movement of persons, goods and capital.

Please answer according to the following scale.
 A 1 means no globalization,
 a 10 means complete globalization.
 With the steps in between you can graduate your judgment.

Rows: Normal | Columns: Normal

Rendered as Dynamic Grid

| | | | | | | | | | | |
|---|--------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|---------------------------------|
| | 1 no globalization | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 Complete globalization |
| X | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Q284 - ISP16: Immigration **Matrix**

Number of rows: 1 | Number of columns: 10

Should Germany, in your opinion, allow more or less people from poorer countries to come to Germany and work and live here?

Please answer according to the following scale.
 A 1 means: much less people,
 a 10 means: many more people.
 With the steps in between, you can rate your opinion.

Rows: Normal | Columns: Normal

Rendered as Dynamic Grid

| | | | | | | | | | | |
|---|-----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------------|
| | 1 Much less people | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 Much more people |
| X | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

C Survey Instrument: Follow-Up

FOLLOW-UP SURVEY

The documentation of the SOEP-IS can be found here: <https://doi.org/10.5684/soep.is.2018>

The full survey instruments are publicly available and can be found through the link above or directly here:

https://www.diw.de/documents/publikationen/73/diw_01.c.798098.de/diw_ssp0890.pdf

The following questions should only be heard by the participant and no other household members.

Q253 - ISP3: Gross Income

Numeric

Max = 99999999

As a basis for our next module "Income distribution", I would now like to know from you, how high the gross income, ie the income before tax deductions, of your household in 2017 was. Income includes wages or salaries, self-employment income, capital income, pension payments, and other private payments such as alimonies. If you are not sure, please estimate as accurately as possible.

Q254 - ISP4: How many household members

Numeric

Max = 30

How many people (adults and children under 18), including you, lived in your household in 2017?

Q255 - ISP5: Income Rank – Intro

Text

You indicated before that your gross household income in 2017 was EUR [XX] and your household had [Y] members. This means that the per-capita gross income in your household in 2017 was EUR [XXX]. We will now ask a few more questions about this per-capita gross household income.

We are interested in your assessment of the relationship between your per-capita gross household income and the incomes of other people's households. Please give the most accurate and truthful assessment. You can earn money for the accuracy of your assessment. For each of the following two questions, you will receive 20 euros at the end of the survey if you are correct in your assessment. If you are wrong in your assessment, you will not receive any money.

Please click "Continue" and give the laptop to the participant.

Q257 - ISP6A: Income Rank - Germany

Numeric

Max = 100

What is the proportion of people in **Germany** who had a lower per-capita gross household income in 2017 than you?

--> Please enter your answer in percent.
0 percent means that you are the poorest person in Germany.
100 percent means that you are the richest person in Germany.
With the values in between, you can scale your assessment.

Q258 - ISP6A_1: Income Rank – Germany Certainty

Left-right matrix

Answer not required | Not back | Number of rows: 1

How sure are you with your answer?

Please answer according to the following scale, where the value 0% means "not certain" and the value 100% means "very certain". With the steps in between, you can scale your assessment.

Rows: Normal | Columns: NormalRendered as Dynamic Grid

| | 0% Not certain | 10% | 20% | 30% | 40% | 50% | 60% | 70% | 80% | 90% | 100% Very certain |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-------------------------|
| X | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Q259 - ISP6B: Income Rank - World

Numeric

Max = 100What is the proportion of people **in the World** who had a lower per-capita gross household income in 2017 than you?

--> Please enter your answer in percent. 0 percent means that you are the poorest person in the World. 100 percent means that you are the richest person in the World. With the values in between, you can scale your assessment.

Q260 - ISP6A_1: Income Rank – World Certainty

Left-right matrix

Answer not required | Not back | Number of rows: 1

How sure are you with your answer?

Please answer according to the following scale, where the value 0% means "not certain" and the value 100% means "very certain". With the steps in between, you can scale your assessment.

Rows: Normal | Columns: NormalRendered as Dynamic Grid

| | 0% Not certain | 10% | 20% | 30% | 40% | 50% | 60% | 70% | 80% | 90% | 100% Very certain |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-------------------------|
| X | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Thank you for your information! Please return the laptop to your interviewer.

[...QUESTIONS FROM A DIFFERENT MODULE...]

Q414 - ISP10: Redistribution – Intro **Text**

Now we will talk about redistribution. **Redistribution of income** means that the state reduces the income gap between citizens through taxes and transfers.

Q415 - ISP11A: Redistribution – Germany **Matrix**

Number of rows: 1 | Number of columns: 10

How much redistribution of income do you want between citizens in Germany?

No redistribution means that the state does not intervene in the distribution of income. Complete redistribution means that everyone earns the same amount after redistribution has been done.

Please answer according to the following scale.
The value 1 means: no redistribution,
the value 10 means: complete redistribution.
With the steps in between, you can scale your assessment.

Rows: Normal | Columns: Normal

Rendered as Dynamic Grid

| | 1 No redistribution | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 Complete redistribution |
|---|---------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------------------------|
| X | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Q416 - ISP11B: Redistribution - World **Matrix**

Number of rows: 1 | Number of columns: 10

Now imagine that it would be possible to redistribute income around the world in a similar way as a state can redistribute income within a country.

How much redistribution of income do you want between citizens in the world?

No redistribution means that the global distribution of income is not affected. Complete redistribution means that everyone in the world earns the same income after redistribution has taken place.

Please answer according to the following scale.
The value 1 means: no redistribution,
the value 10 means: complete redistribution.
With the steps in between, you can scale your assessment.

Rows: Normal | Columns: Normal

Rendered as Dynamic Grid

| | 1 No redistribution | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 Complete redistribution |
|---|---------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------------------------|
| X | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Q417 - ISP12: International Redistribution **Matrix**

Number of rows: 1 | Number of columns: 10

Would you support the creation of an international organization (similar to the United Nations) that can redistribute income or resources between countries?

Please answer according to the following scale.
 1 means: definitely not support.
 10 means: definitely support.
 With the values in between, you can rate your opinion.

Rows: Normal | Columns: Normal

Rendered as Dynamic Grid

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | definitely not support | | | | | | | | | definitely support |
| . | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Q283 - ISP15: Globalization **Matrix**

Number of rows: 1 | Number of columns: 10

Now, I want to talk with you about "globalization." Globalization means that local, regional and national economies are growing together more globally. This happens, among other things, through technological progress, but also through the removal of trade barriers.

What level of globalization do you want?

No globalization means that countries are completely isolated and no trade with other countries takes place. Complete globalization means that there are no barriers to trade and barriers to the movement of persons, goods and capital.

Please answer according to the following scale.
 A 1 means no globalization,
 a 10 means complete globalization.
 With the steps in between you can graduate your judgment.

Rows: Normal | Columns: Normal

Rendered as Dynamic Grid

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|
| | No globalization | | | | | | | | | Complete globalization |
| X | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Q420 - ISP15a: Globalization Poor People **Matrix**

[Not back](#) | [Number of rows: 1](#) | [Number of columns: 11](#)

Do you think that **poor people** in Germany are disadvantaged by globalization or that they benefit from it?

Please answer according to the following scale:
 1 means "very disadvantaged",
 10 means "benefit greatly".
 With the steps in between, you can scale your assessment.

[Rows: Normal](#) | [Columns: Normal](#)

[Rendered as Dynamic Grid](#)

| | 1 Very disadvantaged | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 Benefit greatly |
|-----|----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| ... | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Q420 - ISP15b: Globalization Rich People **Matrix**

[Not back](#) | [Number of rows: 1](#) | [Number of columns: 11](#)

Do you think that **rich people** in Germany are disadvantaged by globalization or that they benefit from it?

Please answer according to the following scale:
 1 means "very disadvantaged",
 10 means "benefit greatly".
 With the steps in between, you can scale your assessment.

[Rows: Normal](#) | [Columns: Normal](#)

[Rendered as Dynamic Grid](#)

| | 1 Very disadvantaged | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 Benefit greatly |
|-----|----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| ... | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Q421 - ISP16: Immigration **Matrix**

[Number of rows: 1](#) | [Number of columns: 10](#)

Should Germany, in your opinion, allow more or less people from poorer countries to come to Germany and work and live here?

Please answer according to the following scale.
 A 1 means: much less people,
 a 10 means: many more people.
 With the steps in between, you can rate your opinion.

[Rows: Normal](#) | [Columns: Normal](#)

[Rendered as Dynamic Grid](#)

| | 1 Much less people | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 Much more people |
|---|-----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------------|
| X | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Q422 - ISP16a: Immigration Poor People **Matrix**

[Not back](#) | [Number of rows: 1](#) | [Number of columns: 11](#)

Do you think that **poor people** in Germany will be disadvantaged or that they will benefit from more immigration from people from poorer countries?

Please answer according to the following scale:
 1 means "very disadvantaged",
 10 means "benefit greatly".
 With the steps in between, you can scale your assessment.

[Rows: Normal](#) | [Columns: Normal](#)

[Rendered as Dynamic Grid](#)

| | | | | | | | | | | |
|-----|----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 1 Very disadvantaged | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 Benefit greatly |
| ... | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Q422 - ISP16a: Immigration Rich People **Matrix**

[Not back](#) | [Number of rows: 1](#) | [Number of columns: 11](#)

Do you think that **rich people** in Germany will be disadvantaged or that they will benefit from more immigration from people from poorer countries?

Please answer according to the following scale:
 1 means "very disadvantaged",
 10 means "benefit greatly".
 With the steps in between, you can scale your assessment.

[Rows: Normal](#) | [Columns: Normal](#)

[Rendered as Dynamic Grid](#)

| | | | | | | | | | | |
|-----|----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 1 Very disadvantaged | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 Benefit greatly |
| ... | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Q424 - ISPEXP00: Intro WTP**Text****Not back**

Based on your per-capita gross income in the amount of [XX], you have estimated before that [X% of the German population] and [Y% of the world population] have a lower per-capita gross household income than you. We have now calculated how many Germans and how many people in the world actually have a lower per-capita gross household income than you, using the latest official data. That is, we have calculated what rank you actually occupy in the respective distribution of income. We now want to know how much this information is worth to you.

Below we present you with 10 situations. In every situation you can choose between the information about your rank in the distribution of income OR receiving extra money at the end of the survey. The amount of money that you will be offered in these scenarios is predetermined, and goes from 0.1 euro to 10 euros. For instance, in Scenario 1, you will need to choose between seeing information about your income rank or receiving 0.1 euro.

In the end, the computer will randomly pick one of the 10 situations and your decision in this situation will be implemented. In other words, if you have chosen the information in the chosen situation, you will receive information about how many Germans or how many people in the world actually have a lower per-capita gross household income than you. If you have chosen the amount of money, you will receive this amount at the end of the questionnaire.

INTERVIEWER: Please read the introductory text and then hand over the laptop to the respondent.

Q425 - ISPEXP01: WTP Germany**Matrix****Not back | Number of rows: 5 | Number of columns: 3**

In the following five situations, you will have the opportunity to buy information about your income rank in **Germany**.

Would you like to ...

In the end, the computer randomly selects one situation and your decision in this situation will be implemented. If you have decided on the information, you will then receive this information afterwards and if you have decided on the amount of money, you will receive it at the end of this survey.

Rows: Normal | Columns: Normal**Rendered as Dynamic Grid**

| | Money | Information | n/a <i>*Position fixed</i> <i>*Exclusive</i> |
|---|-----------------------|-----------------------|--|
| receive 10 cent OR the information about your income rank? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| receive 1 euro OR the information about your income rank? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| receive 2.5 euro OR the information about your income rank? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| receive 5 euro OR the information about your income rank? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| receive 10 euro OR the information about your income rank? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Q426 - ISPEXP02: WTP World**Matrix****Not back | Number of rows: 5 | Number of columns: 3**

In the following five situations, you will have the opportunity to buy information about your income rank in the **world**.

Would you like to ...

In the end, the computer randomly selects one situation and your decision in this situation will be implemented. If you have decided on the information, you will then receive this information afterwards and if you have decided on the amount of money, you will receive it at the end of this survey.

Rows: Normal | Columns: Normal**Rendered as Dynamic Grid**

| | Money | Information | n/a <i>*Position fixed</i> <i>*Exclusive</i> |
|---|-----------------------|-----------------------|--|
| receive 10 cent OR the information about your income rank? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| receive 1 euro OR the information about your income rank? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| receive 2.5 euro OR the information about your income rank? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| receive 5 euro OR the information about your income rank? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| receive 10 euro OR the information about your income rank? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Q427 - ISPEXPBefr: Message**Text**

Thank you for your decision. Please click on "Next" and hand over the laptop again to the interviewer.

[...QUESTIONS FROM A DIFFERENT MODULE...]

Not back | Number of rows: 4 | Number of columns: 7

We have just talked about different assessments and until when you think they are still acceptable or not. Now we are concerned with the extent to which you generally trust certain institutions or other things that are important for our society.

Please answer according to the following scale: 1 means "very little", 5 means "very much". With the steps in between, you can scale your assessment.

Rows: Normal | Columns: Normal**Rendered as Dynamic Grid**

| | 1 Very little | 2 | 3 | 4 | 5 Very much | Don't know <i>*Position fixed *Exclusive</i> | n/a <i>*Position fixed *Exclusive</i> |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--|--|
| How much trust do you have that the government is doing the right things? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| How much trust do you have that the media (e.g., newspapers, TV, radio) will report completely, accurately and fairly on news? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| How much trust do you have in government official statistics, such as unemployment, crime, immigration, economic growth, or inflation? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| How much trust do you have that research produces knowledge that advances our society? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |