Social Mobility Perceptions and Inequality Acceptance[*]

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Abstract

This paper examines how perceptions of social mobility affect distributional preferences. We conduct a randomized information intervention in a large and heterogeneous sample of Germans to manipulate beliefs about social mobility. The information treatment renders perceptions significantly more pessimistic. However, it changes neither revealed distributional preferences nor prosocial behavior toward the very poor and very rich nor support for redistribution or education spending. The large sample size allows us to rule out economically meaningful treatment effects. We provide some suggestive evidence that respondents do not link low mobility rates to the role of luck and inequality of opportunity.

Keywords: social mobility, distributional preferences, inequality, survey experiment

JEL Classification: C93, D31, H23, H24, H41

1 Introduction

Recent studies have documented a remarkable negative relationship between income inequality and social mobility between and within countries (Corak 2006, 2013; Chetty et al. 2014). Popularized by Alan Krueger (2012) as the "Great Gatsby Curve," this observation has fueled a heated debate among scholars and policymakers, as it suggests that rising inequality may reduce upward mobility (e.g. Solon 2004), which would compromise the fairness of a society. In spite of growing concerns about rising inequality and declining social mobility (Pew Research 2014), people seem to rarely agree on or increase their support for policies to reduce inequality (e.g., Kenworthy and McCall 2008; Ashok, Kuziemko, and Washington 2015; Kuziemko et al. 2015).

This paper aims to contribute to a better understanding of this disconnect between concerns about social justice and appropriate policy measures by focusing on individuals' fundamental attitudes about inequality. In particular, we examine how perceptions of social mobility affect distributional preferences in a large and heterogeneous sample of Germans. While distributional preferences generally underlie many economic decisions, they are particularly relevant for social policy preferences, including redistribution, taxation, or transfers, as any of these policies involve gains for some groups and losses for others raising concerns about fairness and efficiency.[1]

We build on a recent literature on fairness ideals highlighting the role of the source of inequality for inequality acceptance: People tend to tolerate more inequality if it is the result of effort rather than circumstances beyond their control (e.g. Konow 2000; Fong 2001; Cappelen et al. 2007; Almas, Cappelen, and Tungodden 2020). Social mobility reflects to a considerable extent such fairness-driven merit considerations, as it is an informative measure of the level of equality of opportunity in a given society (e.g., Corak 2013; Hufe, Kanbur, and Peichl 2020). If people care about fairness, and meriocratic principles in particular, learning that mobility is lower than expected should lower their acceptance of inequality. This potential link raises an important empirical question: What is the relationship between perceptions of social mobility and support for redistributive measures? When presented with information about low levels of social mobility, do people update their perceptions of inequaility of opportunity in society, and therefore become more pro-social in their behavior in general? And more specifically, do these perceptions affect pro-social behavior toward the poor and the rich, respectively?

We address these questions using a pre-registered survey experiment, comprising about 2,500 respondents in a high-quality online survey, the German Internet Panel (GIP). The GIP is representative along several observable covariates, offers tight control over who is participating,

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[1] By *distributional preferences* we mean preferences that not only take one's own income as argument but also other people's income. Although related, these preferences differ from *preferences for redistribution*, which express preferences over the degree of redistribution in a society.

includes detailed socio-economic background information on respondents, and provides a host of information on respondents' political attitudes (Blom, Gathmann, and Krieger 2015). To test the causal effect of mobility perceptions on inequality acceptance, we expose a randomly selected subsample of respondents to information about social mobility in Germany. Estimates of intergenerational earnings mobility typically locate Germany somewhere between the two extremes, Scandinavian countries and the US (Corak 2013).[2] In our study, half of the respondents receive stylized information on the share of people advancing from the bottom to the top quartile of the income distribution, and vice versa. This information reveals significant intergenerational persistence of socio-economic status in Germany. Subsequently, we measure social mobility perceptions as a respondent's belief about the dependence of economic success on parental socio-economic status (i.e., the perceived inequality of opportunity). We then elicit respondents' distributional preferences via an incentivized allocation task, the Equality-Equivalence Test (EET, see Kerschbamer 2015). We complement this outcome measure with respondents' views on two important policies to curb inequality (specifically, their support for redistribution and education expenditures).

The EET is an intuitive, theory-driven task to measure distributional preferences, which has been shown to predict voting behavior, political ideology, political attitudes towards redistribution and immigration, trust and cooperative preferences in large heterogeneous samples (Hedegaard et al. 2019; Kerschbamer and Müller 2020). The EET uses a series of distributional tasks that ask a decision-maker for binary decisions between different allocations of money for herself and some other passive recipient (another respondent in the GIP). These choices then allow us to classify the decision-maker into a well-defined set of mutually exclusive distributional types. In addition, the test delivers two measures of preference intensity (the *scores*) that we use in our analysis. These scores capture benevolence and malevolence – defined as the willingness-to-pay to increase (decrease) another person's income – in the domain of advantageous and disadvantageous inequality. Embedding this incentivized measure of distributional preferences into a population survey overcomes a common critique that survey measures of other-regarding preferences and preferences for redistribution do not capture actual behavior and are prone to experimenter demand effects. Moreover, it offers tight control over the decision context allowing us to present the exact same decision situation to each respondent avoiding concerns about context effects that typically arise with survey questions.

We also introduce a novel feature into the EET. We inform a randomly chosen subset of decision-makers about the actual relative income situation of the recipient, i.e., whether the recipient will be drawn from the bottom or top 10% of the income distribution of the GIP. This feature

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[2] Recent research shows that intergenerational elasticity, a common measure of intergenerational mobility, is similar in Germany and in the US, yet emphasizes at the same time that comparability across countries is sensitive to the choice of income measures (Schnitzlein 2016).

allows us to observe if social mobility perceptions affect pro-social behavior toward those who are most likely to have suffered or benefitted from limited social mobility. For example, while an inequality-averse individual may always want to allocate some resources to poor recipients, we are interested in whether becoming more pessimistic about social mobility further increases the willingness to distribute income to this recipient.

We present four key findings. First, informing respondents about the persistence of socio-economic status in their society has a large and significant effect on their social mobility percep-tions. As expected, treated respondents are more likely than untreated respondents to assert that economic success in adulthood depends on growing up in a poor or rich household. That is, they are more pessimistic about equality of opportunity in society. The effect size is large and compa-rable to other studies using information interventions (see e.g., Haaland, Roth, and Wohlfahrt 2020). Given this strong first-stage effect, our second set of results on the effect of mobility per-ceptions on preferences is striking. Despite the more pessimistic view on social mobility on aver-age, we find that the treatment has no effect on distributional preferences. For instance, we do not find that treated respondents become more averse to inequality than respondents in the control group. This result also holds when we control for respondents' distributional preferences meas-ured prior to our intervention and look at how different (pre-registered) socio-demographic groups adjust their preferences in response to the treatment. Because of the large sample size, we are able to rule out even small effects on distributional preferences in all specifications.[3]

Third, when we inform respondents that the recipient in the EET belongs to the top (or bottom) 10% of the income distribution, we again find no evidence that the treatment has an effect on the willingness to distribute income to this recipient. That is, there is no interaction effect be-tween the information treatment and information about the income of the recipient. Specifically, respondents become neither more benevolent toward recipients from the bottom 10% nor less benevolent toward the top 10%, despite greater pessimism about equality of opportunity com-pared to the control group. This result suggests that general mobility perceptions do not affect whether low-income recipients are considered worthy of more generosity. Fourth, consistent with our findings on distributional preferences, we also report precisely estimated null effects for re-spondents' policy preferences. That is, the treatment information has no effect on respondents' attitudes toward redistribution or on their support for education expenditures.

The lack of a measurable effect of information about the persistence of socio-economic sta-tus on distributional preferences is unlikely the result of a general insensitivity of preferences to information about recipients socio-economic status and mobility prospects. In fact, we do find that distributional preferences react to both kinds of information in certain treatment conditions.

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[3] Together with an arguably low prior on the null hypothesis, this highlights that our findings may be more informative than simply rejecting null hypotheses (see Abadie,2020, for a discussion of the informativeness of failures to reject nulls).

For example, we observe a sizeable shift toward less malevolence if decision-makers face a recipient from the bottom 10% of the income distribution as well as a shift towards less benevolence when facing a recipient from the top 10% of the income distribution.

Instead, we provide suggestive evidence that repondents do not view the treatment information as evidence of significant inequaility of opportunity. We capture mobility perceptions, or perceived inequality of opportunity, by asking to what extent respondents think that being born poor or rich impacts economic success later in life. We find no evidence that these mobility perceptions correlate with the beliefs about the role of effort and luck in economic success, suggesting that the average respondent does not consider the influence of one's parents' socio-economic status on own economic success as luck. Digging deeper on this issue, we show that the treatment information results in a sharp divide in social mobility perceptions along meritocratic principles, i.e., the view that income inequality is acceptable as long as income is earned through hard work. Respondents who do not endorse meritocratic principles become significantly more pessimistic about social mobility, while meritocratic respondents do not adjust their perceptions. This finding can explain why information about social mobility has neither an effect on distributional- nor on policy preferences. If people always oppose inequality and reject meritocratic principles, becoming more pessimistic about social mobility should not have a large effect on their overall demand for redistribution. Indeed, the data show that this group already demands more redistribtion on average. In contrast, a stronger perception that economic success depends on parental income should lead to increased support for redistribution among those who hold meritocratic beliefs; yet we find that this group does not become more pessimistic, while they at the same time believe more in the role of effort in economic success. This result potentially explains why the treatment does not change their mobility perceptions. Meritocratic respondents do not seem to interpret the persistence of socio-econimic status as evidence of significant inequaility of opportunity since they seem convinced that effort and individual merit matters most.

Our study contributes to the vast literature on the relationship between intergenerational mobility and inequality acceptance. In theory, beliefs about social mobility and beliefs about the importance of effort for economic success seem to be closely related. Thus, a cornerstone of our work is the theoretical literature linking people's beliefs about the latter to their support for redistribution. Piketty (1995) presents a model where individuals learn about the relative influence of effort and luck on income through their own mobility experience. Because of different experiences, individuals form different beliefs about the impact of luck on economic success, which in turn influences how much effort they exert and how much redistribution they demand. Once individuals are on different trajectories, heterogeneity in beliefs, effort, and support for redistribution may persist in the long-run. Bénabou and Ok (2001) show that poorer people do not necessarily support redistribution efforts because they expect to be richer in the future (and thus lend credence to the prospect of upward mobility). This prospect of upward mobility hypothesis has

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received some empirical support based on observational data (e.g. Alesina and La Ferrara 2005; Alesina and Giuliano 2010; Rainer and Siedler 2008).[4] We add to this literature rare experimental evidence on the impact of downward *and* upward mobility perceptions on distributional preferences, which form the basis of redistributive policies.

Closest to our paper is Alesina, Stantcheva and Teso (2018), who document perceptions of social mobility in France, Italy, Sweden, the UK, and the US and show that left-leaning (but not right-leaning) respondents demand more redistribution if they become more pessimistic about social mobility. We complement and extend their work along several lines, most importantly by focusing on how perceptions about equality of opportunity in society affects respondents' fundamental preferences related to inequality acceptance - their distributional preferences. Our measure of distributional preferences offers a clear interpretation and is, in contrast to survey measures on policy preferences, less prone to a mismatch of stated attitudes and actual behavior as well as less prone to context effects, such as attitudes towards government (see e.g. Hetherington 2005, Kuziemko et al. 2015; Alesina, Stantcheva, and Teso 2018). Our results suggest that policy preferences do likely not change because underlying factors such as distributional preferences in general, and pro-social attitudes toward the rich and poor in particular, are largely not responsive to information on the persistence of socio-economic status. Moreover, the rich and high-quality GIP data allow us to control for a large number of observables that might correlate with policy and distributional preferences.

We also contribute to an emerging literature that examines the importance of distributional preferences for understanding political behavior and redistributive policy proposals. A voluminous literature has indicated a strong heterogeneity in social preferences in lab populations (e.g. Andreoni and Miller 2002; Charness and Rabin 2002; Engelmann and Strobel 2004; Fisman, Kariv, and Markovits 2007; Cappelen et al. 2007; Durante et al. 2014; Bruhin et al. 2019) and in the general population (Bellemare, Kröger, and van Soest 2008; Fisman, Jakiela, Kariv, and Markovits 2015; Hedegaard et al. 2019; Kerschbamer and Müller 2020). A few papers have investigated how this heterogeneity relates to voting behavior and to political attitudes such as the support for redistributive policies (see e.g., Fisman, Jakiela, and Kariv 2017; Kerschbamer and Müller 2020; Epper, Fehr, and Senn 2020; Almas, Cappelen, and Tungodden 2020).[5] We add to this literature by studying the extent to which perceptions about social mobility shape distributional preferences. This way, we contribute to a better understanding of the origins and determinants of preferences and

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[4] For example, Rainer and Siedler (2008) present correlational evidence, using German survey data, that people demand less redistribution if they believe in opportunities for upward mobility, and vice versa. Checci and Filippin (2003) show that proposed tax rates decline with the prospect of upward mobility in a laboratory experiment.

[5] These papers show that elicited distributional preferences predict policy preferences in various domains and thus demonstrate the external validity of incentivized measures for distributional preferences.

provide new insights into what people think about inequality and what policy measures they endorse.

Finally, the study also relates to a handful of papers documenting individual misperceptions about relative income and inequality (Norton and Ariely 2011; Page and Goldstein 2016; Hauser and Norton 2017), and to recent studies using randomized information treatments to estimate how information about relative income, inequality, and inherited wealth affects inequality acceptance (Cruces, Perez-Truglia, and Tetaz 2013; Kuziemko et al. 2014; Karadja, Mollerstrom, and Seim 2017; Bastani and Waldenstrom 2019; Fehr, Mollerstrom, and Perez-Truglia 2019). Unlike these papers and most other work on the formation of social policy preferences, we concentrate on how perceived social mobility shapes a fundamental input of social policy preferences. Our results show that distributional preferences are more or less stable in response to changes in the perceptions of social mobility, which may explain why policy preferences do not change in response to "informational" shocks.

The paper proceeds as follows. Section 2 presents detailed information about the GIP and describes the survey as well as the experimental design. In Section 2.4, we describe our empirical strategy and hypotheses, which we laid out in a pre-analysis plan. In Section 3, we present our results. We first report the first-stage treatment effect on mobility perceptions. Next, we present the treatment effect on our main outcomes: respondents' distributional preferences and their support for redistributive policies. We continue in Section 4 with an analysis of the reaction of some sub-groups to the treatment. In Section 5, we explore additional mechanisms behind our results. Section 6 concludes.

2   Survey Experiment

2.1   Data Collection

We designed a survey module for the German Internet Panel (GIP). The GIP is an online panel survey maintained by the University of Mannheim and is based on a probability sample of the general German population aged 16 to 75 years.[6] The panel includes about 5,000 registered participants who are invited to take part in a bi-monthly online survey. The surveys typically include questions regarding attitudes toward political reforms, social policies, education and politics in general, and it collects and updates socio-demographic information of participants once a year.

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[6] The recruitment of survey participants was done in face-to-face interviews and thus includes people without internet access at the time of recruitment (these people received tablets with internet access to participate in the survey). See Blom, Gathmann, and Krieger (2015) for more details on the GIP.

We implemented our module in wave 33 of the GIP, which was fielded in January 2018 (Blom et al. 2018). In total, 2,684 participants took part in this wave and 2,656 participants completed our module. In addition, we also rely on information from previous waves of the GIP. In particular, we draw on socio-economic details provided by participants in wave 31, and on occupational status from wave 19. We specified all variables and hypotheses in a pre-analysis plan (PAP) that we registered in the AEA RCT Registry (AEARCTR-0002764) in March 2018 before we had access to the data.

2.2 The Survey Module

Main Survey: The survey module consists of four parts (see Figure 1 for a graphical overview and Section S8 in the Supplementary Material for a transcript of the survey module). The first part contains a single question about the role of luck and effort in economic success. After briefly explaining how life outcomes can depend on luck and effort, we asked respondents to what extent these two factors determines financial success on a scale from 0 (only luck) to 10 (only effort). Beliefs about the importance of luck for economic success are tightly linked to inequality acceptance (Alesina et al. 2001; Fong 2001; Corneo and Grüner 2002; Alesina and La Ferrara 2005; Alesina and Angeletos 2005) and thus may also be related to individuals' views about intergenerational mobility. This question is followed by another unrelated survey module eliciting attitudes toward politics in general and the EU in particular to avoid pushing respondents into a particular direction before our treatment intervention.

The second part comprises our main intervention. Half of the respondents received information on the persistence of socio-economic status in Germany (the treatment group). As our intervention aimed at shifting subjects' perception of social mobility toward greater pessimism, we focused on upward mobility from the bottom to the top quartile *and* on downward mobility from the top to the bottom quartile. These two statistics are a commonly used measure of social mobility in the literature. Although this information is based on most recent evidence for Germany (see Schnitzlein 2016, and Stockhausen 2017), we presented and visualized the key information in an easy-to-digest way to facilitate understanding. That is, we first introduced the topic and explained the specific concepts of upward and downward mobility. We then stated, without referring to numbers, that the probability of being rich in adulthood is very low for children born in poor households and the probability of staying poor high. We also illustrated these relationships graphically. We present the information on downward mobility in the same way (see Section S1 in the Supplementary Material for details and screenshots).

Immediately after the intervention, we assessed the impact of the information treatment. We asked respondents to imagine 100 households that represent Germany and asked them to answer the following question: "To what extent does economic success as an adult depend on whether one has grown up in the poorest 25 households or in the richest 25 households?" on a 10-

point scale ranging from "very little (1)" to "very strong (10)". There a few things to note here. First, the question deliberately used a different wording compared to the treatment information and elicited respondents' perceived equality of opportunity in society. Second, we can directly observe how respondents process and interpret the provided information on downward and upward mobility. Third, compared to quantitative measures, this qualitative measure is less likely subject to demand effects.

Because we are not primarily interested in changes in perceptions about social mobility, we did not elicit beliefs about social mobility prior to the treatment (see also Haaland, Roth, and Wohlfahrt 2020 for a discussion of potential problems when eliciting prior beliefs). Instead, we take advantage of the longitudinal character of the GIP and that distributional preferences were already measured in a previous wave using the same instrument (see below for a more detailed explanation). This allows us to investigate intra-personal changes of distributional preferences in response to the treatment and avoids issues such consistency bias in responses and demand effects.

In the third part, we elicited the distributional preferences of all respondents using a version of the Equality Equivalence Test (Kerschbamer 2015), which we explain in more detail below. This test requires respondents to make a series of incentivized binary choices between unequal monetary allocations involving themselves and another respondent. A novel feature of our implementation of the Equality Equivalence Test (EET) is that we inform half of the respondents about the relative position of their matched recipient in the income distribution. We randomly assign 25% of decision-makers to a recipient from the top 10% of the income distribution in the GIP (*rich* treatment) and 25% of decision-makers to a recipient from the bottom 10% of the income distribution (*poor* treatment).[7] The remaining 50% of decision-makers received no information about their recipient (*neutral* treatment), except that he or she is another respondent taking part in the GIP. Informing decision-makers about recipient's socio-economic background serves two purposes. First, distributional decisions not only depend on one's own relative standing in the income distribution, but potentially also on that of recipients. Thus, this variation contributes to a more comprehensive picture of distributional preferences and is an important step forward, as most of the existing work does not include such information. Second, the two conditions with recipient information (i.e. the *rich* and *poor* treatments) help us to gain further insight into a possible mechanism behind the information treatment, as this information may weaken or strengthen the impact of mobility perceptions (see hypotheses below).

Finally, in the fourth part we elicit preferences regarding two policy measures: redistribution and educational spending. First, we explained that economic redistribution reduces income

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[7] Note that we did not disclose any information to decision makers other than saying that we will match them with a recipient from the bottom or top 10% of the income distribution, which was done after the survey ended.

disparities between citizens through taxes and transfer payments and asked respondents how much redistribution they want in society on an 11-point scale ranging from "no redistribution" to "full redistribution." Second, we are interested in respondents' views on government education expenditures, and thus ask whether the government should spend more or less on education (on a five-point scale ranging from "spend much more than now" to "much less than now"). These questions deliberatively leave some room for interpretation, and thus may cover broader aspects of inequality acceptance than our incentivized measure of distributional preferences.

Follow-up survey: To to assess the persistence of the treatment on policy preferences, and to differentiate possible priming effects from genuine learning from the information, we draw on a follow-up wave of the GIP, which took place about 4 month after our intervention. This wave included the exact same measure for education expenditures and a slightly different question on respondents' preferences for redistribution ("The government should take measures to reduce income disparities." using a five-point scale from "fully agree" to "fully disagree"). The attrition rate between the two waves is comparatively low (11 percent) and there is no differential attrition between treatments (11 percent in the control and 12 percent in the treatment group, t-test, $p = 0.48$).

2.3   The Equality-Equivalence Test

The EET (Kerschbamer 2015) is a parsimonious tool for identifying the distributional preferences of decision-makers by allowing the experimenter to infer the slope of a decision-maker's indifference curve in the self–other space.[8] The test relies on four basic assumptions on a decision-maker's preferences that ensure well-behaved indifference curves that run through an equal reference allocation r also pass through a specific area above and below the 45-degree line. Figure 2 illustrates the three areas above the 45-degree line – x_1, x_2 or x_3 – and the three areas below – y_1, y_2 or y_3. The combination of these areas above and below the 45-degree line identifies the distributional type of a decision-maker. The standard selfish type, for example, has vertical indifference curves that run through x_2 and y_2.[9] An inequality-averse decision-maker (Fehr and Schmidt, 1999) exhibits indifference curves that run through x_3 and y_3. That is, they are characterized by a positive slope (malevolence) in the domain of disadvantageous inequality (areas above the 45-degree line) and a negative slope (benevolence) in the domain of advantageous inequality (areas below the 45-degree line). Virtually all distributional types proposed in the economics literature can be represented in this way.

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[8] The self–other space is an Euclidean plane with income to *self, m,* on the x-axis and income to *other, o,* on the y-axis.

[9] Note that the test cannot exactly identify vertical indifference curves, but only with "arbitrary precision". Thus, selfishness constitutes a free test parameter. We define an individual as selfish if her indifference curves are within a 50 euro cent range of the vertical line through the equal reference allocation of (10,10).

Empirically, the EET elicits the slope of the indifference curve, that runs through an arbitrarily chosen equal reference point, in both the domain of disadvantageous and advantageous inequality (i.e. the slope above and below the 45-degree line). The core of the experimental procedure thus consists of a series of binary decisions between two allocations of money for the decision-maker, the *self*, and a passive anonymous recipient, the *other*. In each allocation decision, one unequal allocation is compared to the same fixed equal reference allocation. In our implementation of the EET, we use 10 euro to *self* and *other* (10, 10) as an equal reference allocation. We compare this allocation to three sets of allocations in the domain of disadvantageous inequality (*x-lists*) and to three sets of allocations in the domain of advantageous inequality (y-*lists*). In the three *x-lists*, payoffs to *other* are either 13, 15, or 17 euros, while the payoff to *self* was incrementally increased from 7 to 16 euros. In the *y-lists*, we fix payoffs to the *other* at 3, 5, and 7 euros and incrementally increase the payoff to *self* from 5 to 14 euros (see Figure S1 in the Supplementary Material). The order of the lists was randomized at the individual level. In the empirical analysis below, we use the average x- and the average y-score as dependent variable (as specified in the pre-analysis plan).

The switching point from the equal reference allocation to the unequal allocation indicates the interval (of income to *other*) through which the indifference curve must run. Multiple switching points are ruled out by monotonicity, i.e. a decision-maker strictly prefers more material payoffs to less material payoffs, while holding *other* material payoffs constant.[10] In addition, the switching point yields a measure of preference intensity in the sense that the earlier a decision-maker switches from equal to unequal in the *x-list (y-list)*, the more (less) benevolent she is. The *x-score* and the *y-score* summarize these intensities in the *x* and the *y-list*, respectively.[11] In both domains, a positive score implies benevolence towards the passive recipient where benevolence is defined as a willingness-to-pay to increase the payoff of *other* (i.e., a negatively-sloped indifference curve). Conversely, a negative score implies malevolence toward the recipient, i.e. the decision-maker displays a willingness-to-pay to decrease the payoff to the recipient (i.e., a positively-sloped indifference curve). Inequality averse decision-makers, for example, display a positive *y-score* and a negative *x-score*. Moreover, the higher (lower) a score, the more benevolent (malevolent) a decision-maker is.

The overwhelming majority of respondents (89%) previously completed the EET (using the same parameterization) in wave 23 in spring 2016 and were thus familiar with the test and procedures (see Kerschbamer and Müller 2020 for more details). Payments to respondents were

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[10] Consequently, we rule out inconsistencies in the experiment by design. More precisely, respondents indicate the row in which they prefer to switch for the first time. The interface then automatically highlighted all preferred allocations within that list and respondents could revise their choice and go back and forth between the different lists.

[11] In our case, the x-score (y-score) is calculated as 6.5 – row (row - 5.5) where *row* indicates the row number in which the respondent switched from the equal to the unequal allocation.

determined after the field time of wave 33 in spring 2018. We randomly selected 250 respondents for payment of their decisions in the EET. For each of these decision-makers, we first randomly drew one list and then one row in this list. We paid out the decision in this row to both the decision-maker and a recipient. Accordingly, we also randomly selected 250 respondents as recipients and matched each of them to one decision-maker. In the *rich* treatment, we drew recipients from the top 10% of the income distribution; in the poor treatment, we drew from the bottom 10%; and in the *neutral* treatment we drew recipients from all participating respondents. Selected respondents (both in the role as decision-maker or recipient) received an e-mail notification about the payment, which was directly transferred to the respondents' GIP account.

2.4   Hypotheses and Empirical Strategy

We build on a recent literature on fairness views indicating that many people share meritocratic fairness principles, i.e., they are willing to accept more inequality if it results from factors that are not beyond control (e.g. Konow 2000; Fong 2001; Cappelen et al. 2007; Almas, Cappelen, and Tungodden 2020). This suggests that beliefs about the sources of inequality in society play a crucial role for individuals' attitudes toward inequality and social policy responses. We expect that treated respondents are more likely to believe that inequality is due to unequal opportunities than due to different choices in life. As a consequence, we expect people in the treatment group to support more redistribution. Likewise, we expect that they accept less inequality to counteract the increased inequality of opportunity in society. To summarize, if people link our presented evidence of the persistence of socio-economic status to a lack of equality of opportunity, we expect to observe a shift to more malevolence in the domain of disadvantageous inequality (i.e. a decrease in the *x-score*) and to more benevolence in the advantageous domain (i.e. an increase in the *y-score*). Further, we expect that greater pessimism about social mobility leads to greater support for redistribution and educational spending.

Since the treatment information specifically mentions the likelihood of advancing from the bottom to the top quartile of the income distribution and vice versa, it may have effects on how respondents view recipients who belong to these two groups. Specifically, if a decision-maker thinks that the recipient is rich, then believing less in equality of opportunity should decrease benevolence toward the recipient. If a decision-maker thinks that the recipient is poorer, however, then we should see that believing less in equality of opportunity increases benevolence toward the recipient. To test this hypothesis, we provide information about the recipients' position in the income distribution to a subsample of respondents in the EET. Relative to the *neutral*, "no information" treatment, we expect to see an increase in both the *x-* and *y-score* when the decision-maker is matched with a poor recipient and, conversely, a decrease in both scores if the recipient is rich. Most impotantly, we expect that providing information about the persistence of socio-economic status will further amplify these effects.

The general empirical framework in which we study the effects of information about social mobility on our outcomes of interest – the *x-score*, the *y-score*, redistributive preferences, and education expenditures – takes the following form:

$$Y_i = \alpha + \beta_1 treated_i + \beta_2 R_i + \beta_3 P_i + \beta_4 (treated_i \times R_i) + \beta_5 (treated_i \times P_i) + X + \varepsilon_i \qquad (1)$$

where Y_i is one of our four main outcomes (x-score, y-score, redistribution, and education expenditures) and $treated_i$ is a binary variable indicating whether respondent i received information on social mobility. The binary variables R_i and P_i indicate whether a respondent received information on the other persons' location in the income distribution in the EET (bottom 10%/top 10%) and X is a set of standard controls (including age, gender, log income, marital status, size of household, employment status, retirement status, education, and a region indicator). We code all variables such that higher values refer to more optimistic perceptions about mobility, more benevolence, and higher support for redistribution and educational spending, respectively. To account for differential responses to our treatment, we also consider how the information treatment interacts with a set of pre-registered socio-economic characteristics and attitudes. We will discuss this in more detail in Section 4 below. As pre-specified, we use in all of specifications OLS regressions and robust standard errors. In addition to the standard discussion of statistical significance of our results, we will present the 90% confidence intervals of our estimates, which enables us to say more about the economic effect sizes.

2.5 Summary Statistics and Randomization Check

In Table 1, we present the means of the covariates specified in the pre-analysis plan (PAP) for the control and treatment groups (for more detailed summary statistics, see Table S1 in the Supplementary Material). All covariates come from the GIP core surveys that are conducted on a yearly basis and elicit the basic socio-demographic information of respondents, except respondents' assessment of the role of luck and effort in economic success, which we elicit as part of our module (wave 33). The table indicates that almost all means are balanced across the two groups. To provide a more formal verification of this observation, we run a randomization check. In column 3, we present the p-values from regressing the covariates on a treatment indicator (i.e. whether they receive information on social mobility or not). None of the p-values is statistically significant at the five-percent level. Performing an omnibus F-test to see if the coefficients are jointly different from zero ($p = 0.56$) confirms that our sample is balanced.

3 Results: From Perceptions to Preferences

We present three sets of results. First, we provide evidence that our treatment intervention has an effect on mobility perceptions of respondents ("first stage"). Evidence on this first-stage effect is

important because the exogenous manipulation of respondents' mobility perceptions is a prerequisite to causally answer our main research question. Second, and most importantly, we assess the effect of these perceptions on respondents' distributional preferences and study how these effects interact with information about the relative-income rank of their interaction partners. Third, we complement our analysis of distributional preferences with evidence from survey responses on policy preferences. Our analysis proceeds as specified in the pre-analysis plan, unless noted otherwise.

3.1   First Stage: Impact of Mobility Information on Mobility Perceptions

Before we present evidence on a first-stage effect, we look at the correlates of mobility perceptions focusing on the control group, as they are not contaminated by the information treatment. To ease interpretation, we transform the variable such that higher values indicate more optimism (i.e. weaker dependence on parental income status). Table 2 displays the results of this exercise. Column 1 shows the correlations from bivariate regressions for each covariate, whereas column 2 presents the results from a multivariate regression including all covariates jointly. We observe that better educated people are much less optimistic than lower educated people and that politically right-leaning people are more optimistic about social mobility.[12] These associations hold in both bivariate and multivariate regressions and are in line with previous findings in the literature (e.g. Chambers, Swan, and Heesacker 2015; Alesina, Teso, and Stantcheva 2018). If all covariates enter simultaneously (column 2), we additionally observe a positive relationship of income and a negative relationship of age to perceived social mobility. However, we do no not find a correlation between perceived social mobility and beliefs about the role of luck and effort in economic success (luck/effort beliefs). That is, respondents who believe that luck determines economic success are as optimistic or pessimistic about social mobility as respondents who believe that effort determines success. Since we measure mobiliy perceptions as beliefs about the dependence of success on parental socio-economic status, this finding is surprising and suggests that people do not consider being born into a poor or rich household as unlucky or lucky, respectively. In other words, it casts doubt on whether people are conscious of the fact that being born rich or poor and the many of the consequences thereof are beyond someone's control. We return to this finding when discussing the treatment effects.

Next, we test whether the treatment manipulation was successful. For this purpose, we regress the answers to the question on how strongly one believes that economic success depends

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[12] Relatedly, right-leaning people more likely believe that effort is important for economic success. In the Supplementary Material we provide more detailed evidence on correlates for specific pre-registered subgroups that confirm the results presented here (see Section S5 and Figure S2). Weber (2020) presents cross-country evidence showing that perceptions of social mobility are associated with a self-serving bias about personal mobility experiences. In contrast, we find no evidence that intra- or intergenerational mobility is related to social mobility perceptions.

on being born into a household in the top or the bottom quartile of the income distribution on a treatment indicator (see Table 2, columns 3 and 4). The results show that the information treatment significantly affects the respondents' mobility perception (column 3). Treated respondents believe more strongly that economic success depends on parental background than non-treated respondents, i.e. they become more pessimistic about equality of opportunity. The magnitude of the shift in beliefs is sizable. Receiving information on mobility translates into a 0.18 standard deviation increase in pessimism, which is comparable in size to the "first stage" effect in Alesina, Stantcheva, and Teso (2018).[13] Adding covariates does not affect the coefficient estimate on perceived social mobility much (column 4) and thus confirms the associations presented in columns (1) and (2).

3.2 Social Mobility Perceptions and Preferences

We have seen that the information intervention generated a strong "first stage" effect and led to a significant shift in social mobility perceptions. We now turn to the question how these social mobility perceptions relate to preferences. In Table 3, we present correlational evidence on this question. We observe that mobility perceptions are negatively related to the support for redistribution, education expenditures as well as to the *y-score*. That is, more optimistic respondents show less support for policies aimed at reducing inequality and are less benevolent in the advantageous domain suggesting more tolerance toward inequality, in general.

3.3 Impact of Mobility Information on Distributional Preferences

We now turn to our main contribution – the question whether social mobility perceptions affect individuals' distributional preferences. We focus first on the EET without information on a recipient's income situation (*neutral* treatment). In a second step, we analyze how information about a recipient's relative income rank affects distributive choices and, in particular, how this information interacts with mobility perceptions. In this way, we are able to paint a more comprehensive picture of how perceptions of social mobility relate to distributional preferences.

No information about recipient's income rank: Figure 3 presents a scatter plot of *x-scores* and *y-scores* differentiated by treatment and control. The figure shows no apparent differences between conditions. A majority of respondents displays a negative *x-score* and a positive *y-score* in both conditions, i.e. they can be classified as inequality averse. The remaining observations are dispersed over the whole range of parameter values with small clusters around altruistic (top-right corner), spiteful (bottom-left corner) and selfish types (center).

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[13] The reported coefficient estimates of the two qualitative measures on mobility perceptions in Alesina, Stantcheva, and Teso (2018) correspond to a shift in perceptions of about 0.22 standard deviations (Table 4, columns 6 and 7). Examining 750 RCTs on education policies, Kraft (2019) proposes that 0.2 standard deviations and higher can be considered a large effect. See also Haaland, Roth, and Wohlfahrt (2020) who report effect sizes between 0.2 and 0.5 standard deviations for a selected sample of information provision experiments.

To provide rigorous support for this observation, we follow our main specification (1) and regress the individual average *x-scores* and *y-scores* on a treatment indicator (columns 1 and 3). In addition, we include a set of dummy variables indicating the different information conditions in the EET with and without a full set of individual controls. Table 4 displays the results. For both scores, the estimated coefficient of the treatment variable ("*Treated*") is not statistically different from zero at conventional significance levels. In other words, we do not find evidence that treated respondents become less averse to disadvantageous inequality (*x-score*) or more averse to advantageous inequality (*y-score*) than respondents in the control group. Adding individual controls does nothing to change this conclusion.

Moreover, taking advantage of the longitudinal character of the survey, we can corroborate this finding by controlling for the *(x,y)-scores* elicited prior to the information treatment in wave 23. We find that the information treatment does not affect the *(x,y)-scores* over time. That is, we do not find systematic within-subject changes of peoples' scores from the previous wave 23 and the current wave 33 in the treatment group (see Supplemental Material, Table S2).[14]

Because of the large sample size, we are able to rule out even small treatment effects on distributional preferences. We present 90% confidence intervals, which allows us to get upper bounds of effects sizes. For example, the 90% confidence interval when regressing the *y-score* on a treatment indicator without controls is $[-0.18, 0.26]$. Given that the *y-score* can take on values in the interval $[-4.5, 5.5]$, we can rule out effect sizes larger than 4.4% of the total range of the *y-score* $((0.18 + 0.26)/(4.5 + 5.5))$. The same number is just 3.6% for the *x-score*. Thus, we can rule out significant effect sizes for distributional preferences.

Information on recipient's income rank: To shed more light on the formation of distributional preferences and the determinants of pro-social behavior toward poor and rich respondents, we randomly informed a subset of respondents about whether the recipient in the EET belongs to the top or bottom 10% of the income distribution of participants in the GIP.

As expected, providing this additional information has an effect on respondents' distributional choices. Knowing that the recipient is from the bottom 10% of the income distribution leads to a sizable and significant shift of the *x-score* (Table 4, column 2). Given that the *x-score* is, on average, negative (–2.6), the observed positive estimate implies that respondents are less malevolent in the *poor* treatment compared to the *neutral* treatment. There is no evidence that a recipient from the top 10% of the income distribution (*rich* treatment) alters distributional choices in the domain of disadvantageous inequality. We observe the opposite pattern for the *y-score* (Table 4, column 5). While there is a significant and negative shift of the *y-score* when the recipient is from

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[14] This results also points to the intertemporal stability of distributional preferences (see, for example, Chuang and Schechter (2015), Bruhin, Fehr, and Schunk (2019), and Fisman et al. (2020) for related evidence).

the top 10%, we find no evidence that a recipient from the bottom 10% affects the decision-maker's choices. Because the *y-score* is positive on average (3.5), this finding indicates that respondents' distributional choices are less benevolent in the former case. In other words, respondents are less willing to forgo their own payoffs to increase the payoff of a "rich" recipient, which is why they switch earlier from the equal to unequal distribution. These findings illustrate the sensitivity of the distributional preference measure to the decision context, as behavior responds to the presented information in a predictable way.

Because we cross-randomize the recipient information in the EET with our main treatment, we can examine whether the main treatment intervention magnifies the changes in distributional choices reported above. The idea is that mobility perceptions determine beliefs about how likely the actual income situation of the recipient is due to unequal opportunities. If decision-makers become more pessimistc about equality of opportunity and perceive the recipient's income situation as the result of unequal opportunities, they may prefer different allocations in the EET. More precisely, the information treatment may have a larger effect on the *x-score* when the matched partner is poor and a larger (negative) effect on the *y-score* when the matched partner is rich. Yet we do not find evidence that our treatment affects the estimated coefficients, despite shifting mobility perceptions. Neither the interaction effect of the mobility information with the *rich* treatment, nor the interaction effect with the *poor* treatment results in estimates significantly different from zero (Table 4, columns 2 and 5). The confidence intervals reported in Table 4 are again small, such that we can rule out effect sizes larger than 9–11% of the total range of the scores. This means that decision-makers do not want to treat rich and poor recipients differently as perceived inequality of opportunity increases, suggesting that they do not more likely view the income gap as unfair.

3.4 Impact of Mobility Information on Policy Preferences

In addition to the incentivized measures of distributional preferences, we also ask respondents about their support for redistribution and educational spending in the main survey and a follow-up survey. The answers to these questions enable us to assess the causal effect of beliefs about social mobility on policy preferences and its persistence.

Main Survey: Table 5 presents the results. The estimates based on respondents' responses to those survey questions are precisely estimated null effects. The 90% confidence intervals for redistribution and education expenditures are $[-0.10, 0.05]$ and $[-0.06, 0.09]$, respecively. Since the former variable is coded on a 1 to 10 scale and the latter on a 0 to 4 scale, the tight confidence intervals allow us to rule out effect sizes larger than 1% and 3%, respectively, in the total range of possible answers. Thus, more pessimism about social mobility neither increases demand for redistribution nor affects attitudes toward public education spending. This observation is consistent with the

insights gained from analyzing the EET and also provides reassurance that our results on distributional preferences are unlikely driven by the lower stakes of our EET in relation to redistributive policy measures.

We further explore the robustness of these findings along two margins. First, previous research has pointed to the possibility that low trust in the government explains the missing response of policy preferences to inequality concerns (e.g. Hetherington 2005; Kuziemko et al. 2015; Alesina, Stantcheva, and Teso 2018). While we did not pre-specify this possibility, we can use information on trust in various legal and political institutions from the GIP to examine this possibility. Specifically, we use the question about how much trust they place in the federal government. Interacting this information with the information treatment reveals no evidence that trust in government plays a role in the muted response to redistribution and support for education expenditures.[15] Second, we consider the possibility that social mobility perceptions directly shape policy preferences. In the Supplementary material we use the treatment as an instrument for mobility perceptions, and show that there is no evidence for a causal effect of mobility perceptions on policy preferences (see Section S6, Table S3).

Follow-up survey: Using data from a follow-up survey, we check the persistence of our results. About 4 month after our intervention, respondents again answered questions about redistribution and education expenditures. For both measures we observe a strong correlation between main and follow-up survey (redistribution, $\rho = 0.43$ and education expenditures, $\rho = 0.54$). Columns 3 and 6 in Table 5 present the results on the impact of the treatment on the follow-up measures. Again, we see precisely estimated null effects for both preferences for redistribution and education expenditures.

4   Heterogeneous Effects of Social Mobility Perceptions

In the pre-analysis plan, we hypothesized that the treatment will have a greater impact on subpopulations who are likely more optimistic about equality of opportunity *a priori*. In the following, we analyze how these different groups of respondents react to the treatment and estimate a series of regressions of the following form:

$$Y_i = \alpha + \beta_1\ treated_i + \beta_2\ heterogeneous_i + \beta_3(treated_i \times heterogeneous_i) + \gamma X + \varepsilon_i \quad (2)$$

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[15] More precisely, we interact our treatment with an indicator for above-median trust. The corresponding coefficient estimate is 0.055 (with a standard error of 0.083) when the dependent variable is redistribution and is 0.014 (standard error of 0.081) when the dependent variable is education expenditures. We obtain similar results if we consider information on respondents' trust in parliament (Bundestag) and political parties as major actors in the passage of legislation. These findings are consistent with recent findings that political trust unlikely affects support for redistribution (Peyton, 2020).

where Y_i is one of our four main outcomes as above, $treated_i$ is a treatment dummy for our intervention and $heterogeneous_i$ corresponds to the covariate of interest (luck vs. effort, political orien-tation, income, and occupational status). Table 6 presents the results. For the sake of clarity, we present only the coefficient estimates for the covariate (β_2) and its interaction (β_3).

Luck versus Effort: People who believe more firmly in the importance of effort for economic success may oppose redistribution or higher spending on education. Indeed, in line with previous findings (Alesina et al. 2001; Fong 2001; Corneo and Grüner 2002; Alesina and La Ferrara 2005; Alesina and Angeletos 2005; Gaertner, Mollerstrom, and Seim 2017, 2019), support for redistribution in our sample is related to the view that effort determines economic success (Panel A of Table 6). The more important question, though, is whether respondents who believe more firmly in effort respond differently to information about social mobility. We find that all interaction effects displayed in Panel A of Table 6 are insignificant and confidence intervals are small ([-0.10, 0.21] for the *x-score* and [-0.26, 0.13] for the *y-score*, respectively). In the previous analysis, we have already shown that beliefs about the role of luck and effort in economic success (luck/effort beliefs) are not related to mobility perceptions. Therefore, it is perhaps not surprising to find no differential effect of the treatment when looking at people with diverse views on the determinants of economic success.

Political Orientation: Our previous analysis revealed that political orientation of respondents is positively related to mobility perceptions, i.e. right-leaning respondents hold more optimistic beliefs about social mobility (see Figure 4). Indeed, political ideology plays a key role for attitudes toward social policies (Karadja, Mollerstrom, and Seim 2017; Alesina, Stantcheva, and Teso, 2018). For example, Alesina, Stantcheva, and Teso (2018) find that left-leaning respondents show more support for redistributive measures in response to receiving information about social mobility.

To measure political orientation, we use respondents' self-assessment in the left–right spectrum and their voting intentions in the next federal election.[16] To estimate the impact of respondents' political orientation, we construct an index using the equally-weighted average of the standardized answers to each of the two questions (following the methodology in Kling, Liebman, and Katz 2007). In panel B of Table 6, we present the results for the standardized index (using the two measures separately yields similar results). Right-leaning respondents display a smaller *y-score* than left-leaning respondents. However, the treatment has no effect. The confidence intervals are tight, such that we can dismiss effect sizes larger than 4.4% (*x-score*) and 5.3% (*y-score*) of the parameter range, respectively.[17] Second, there is a strong and persistent effect of political orientation on support for redistribution and expenditures on education. Right-leaning respondents are significantly less likely to support these two policies than left-leaning respondents. However,

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[16] Respondents indicate their political orientation on 11-point Likert scale and state which party they would vote for in the next national election, which took place two month later.

[17] The confidence interval for the *x-score* is [−0.24,0.20] and for the y-*score* is [−0.45,0.09].

there is no additional effect of the treatment, and confidence intervals are small: $[-0.05, 0.14]$ for redistribution and $[-0.03, 0.16]$ for education expenditures, thus allowing us to rule out effect sizes larger than 1.9% and 3.8%.

Income: To see whether poor and rich respondents react differently to our treatment, we interact the treatment with a dummy variable for the bottom 25% and the top 25% of the income distribution in the sample (see Panel C in Table 6). Poor respondents (bottom 25%) display a significantly lower *x-score* and a significantly higher *y-score* compared to the top 75% respondents. The treatment increases the *x-score* (i.e. it induces less malevolence in the domain of disadvantageous inequality) and decreases the *y-score* (i.e. it induces less benevolence in the domain of advantageous inequality). On the other hand, rich respondents (top 25%) are less malevolent in the domain of disadvantageous inequality than the bottom 75%. Yet, the treatment has no effect on either score, even though the shift in mobility perceptions is among the largest we observe in our sample (see Figure S2). Moreover, the poor support more redistribution, while the rich support less, although there is no correlation with the support for education expenditures. We observe no treatment effect here, neither for redistribution, nor for education spending.

Occupational status: We hypothesized that occupational groups who have received more education are, on average, more optimistic about mobility and thus react more strongly to our treatment.[18] We categorize occupational status into six groups: semi-skilled workers (the reference group), skilled workers, employees, executives, self-employed and professionals, and others (e.g. soldiers, apprenticeship, and unpaid family workers). Panel D in Table 6 displays the results. There is no evidence for a relationship between occupational status, our treatment and distributional preferences.

In contrast to distributional preferences, occupational status correlates with policy preferences. We observe that self-employed, professional, and executive employees significantly reduce their support for redistribution relative to semiskilled workers. Yet again, the interaction effects with our information treatment turn out to be either statistically or economically insignificant. However, we do find evidence that the treatment increases support for education expenditures across all occupations, albeit only significantly for skilled workers and executive employees.

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[18] There is little scientifically reliable evidence about mobility perceptions in the German population. A 2013 public opinion poll by the Allensbach Institute, an opinion and marketing research institute, indicates that about 50% of respondents think that the likelihood of a working-class child moving upward in the social hierarchy is "very good." Respondents with professional and university degrees display a more optimistic view than unskilled and skilled workers. In our sample however, education and mobility perceptions are negatively correlated (see Table 2).

5 Exploring Potential Mechanisms

A concern about our findings is that the missing link between information on social mobility and distributional preferences is due to an abstract measure of distributional preferences or a general insensitivity of preferences to information about economic and social circumstances. However, there are several reasons to believe that this is not the case in our context. First, we document that distributional preferences are an important component of social policy preferences such as respondents' demand for redistribution and attitudes toward equality of opportunity as well as respondents' political orientation (see Table S4 in the Supplementary Material). Second, we provide evidence that the specific decision context can have an impact on distributional preferences. We observe that not only information about the recipient's real income rank (see Section 3.3, Table 4) but also information about social mobility for low-income respondents (Panel C, Table 6) shifts distributional preferences in predictable ways. Together, this suggests that information can have a bearing on distributional preferences, even if measured with relatively small stakes.

Deviating from our pre-analysis plan, but building on our finding that social mobility perceptions and luck/effort beliefs are not correlated and that greater pessimism about mobility does not affect the perceived fairness of being rich or poor, we here provide suggestive evidence that the absent treatment effect may be explained by meritocratic considerations. Recall that our measure of social mobility perceptions captures how a respondent perceives the impact of parental income on own economic success, i.e. the extent of inequality of opportunity. As argued before (in Section 2.4), the hypothesis that these mobility perceptions shape distributional preferences and demand for redistribution rests on the assumption that people care about the source of inequality. In other words, we particularly expect that a change in social mobility perceptions shifts preferences of respondents who distinguish between inequality due to hard work and inequality due to factors beyond someone's control – such as parental income.

In the following analysis, we draw on a question from a previous wave of the GIP and classify respondents who fully endorse a statement that income differences due to (hard) work are fair as meritocratic (about 35 percent of respondents), whereas others are classified as non-meritocratic.[19] Looking at the bottom-left panel of Figure S2 reveals that the treatment shifts only social mobility perceptions of respondents classified as non-meritocratic, but not of those with a meritocratic fairness ideal. In Table S5, we report the results from regressing the indicator for a

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[19] The question from a previous wave of the GIP elicits approval to the following statement: "It is fair that you keep what you have earned through work, even if that means that some are richer than others." Note that our classification as meritocratic may also include people who always tolerate inequality irrespective of its source. However, work by Cappelen et al. (2007) suggests that this type is the least common among the different fairness ideals. Similarly, non-meritocratic respondents include people who do not tolerate inequality regardless of its source.

meritocratic fairness ideal on mobility perceptions and outcomes. Column 1 provides statistical support for the observation from Figure S2 and shows that the differential response to the treatment between people with a meritocratic and a non-meritocratic fairness ideal is significant. In addition, the magnitude of the coefficient estimate indicates that meritocratic people do not respond at all to the information intervention, even though they are not more pessimistic about social mobility than others a priori. Therefore, it is not surprising to see that the distributional preferences and demand for redistribution do not change in response to the information about the persistence of socio-economic status with one exception: We see a lower *y-score* for meritocratic people if the other person belongs to the top 10% of the income distribution (Table S5, column 7), i.e., they display a lower willingness to pay to increase the payoff of the other person in the domain of advantageous inequality if this person is rich.

One hypothesis why social mobility perceptions of meritocratic people do not change is that these people interpret the information on the persistence of socio-economic status as evidence of differences in individual effort, rather than differences in oppportunities. Indeed, we observe that meritocratic fairness ideals are related to the beliefs about the role of luck and effort in economic success (see bottom panel of Figure S3).[20] That is, those with meritocratic fairness ideals attribute success and failure to hard work and believe in a greater importance of effort in general. This suggests that meritocratic people do not attribute the presented information on the persistence of socio-economic status to the (bad) luck of being born poor or rich. Instead, the explorative evidence is consistent with a merit-based interpretation: Meritocratic respondents seem to interpret the information as evidence that those born into rich households have exerted more effort or made better choices than those growing up in poor households.[21] This fact may explain why their assessment of the dependence of economic success on parental income (i.e., our measure of mobilty percpetions) does not change and why we find no treatment effects except for a small subsample of respondents.

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[20] Note that our luck/effort belief measure is akin to locus of control (Rotter 1966), an important and stable personality trait that is largely unaffected by important life time events (Cobb-Clark and Schurer 2013). Locus of control describes the extent to which people believe they can control their own life (internal locus of control) or that outside factors such as luck and fate, determine their life (external locus of control). This trait is positively associated with luck/effort beliefs and meritocratic fairness ideals. Respondents with more internal control beliefs more likely believe in the role of effort in economic success ($\rho = 0.23, p = 0.01$) and more likely believe in merit ($\rho = 0.13, p = 0.01$) lending further credence to the observed relationships.
[21] Piketty (1995) argues that such systematic differences in the provision of effort can exist in equilibrium and Fehr and Vollmann (2020) provide empirical evidence.

6 Conclusion

In this paper, we presented evidence that question the importance of beliefs about social mobility as a determinant of redistributive preferences. We documented a sizable shift in perceptions regarding social mobility in response to information about the persistence of socio-economis status, indicating that respondents were generally overoptimistic about equality of opportunity, on average. Using this shift in perceptions, we presented strong evidence that more pessimistic beliefs about social mobility neither affect distributional preferences in general nor pro-social attitudes toward respondents at the tails of the income distribution in particular; both of which are fundamental inputs for redistributive policies. Taking our results at face value, the evidence we presented here for Germany seems to fit the empirical observations from the "Great Gatsby Curve." If people do not support more redistribution in response to a negative shock to social mobility, it is less surprising that inequality and mobility are negatively correlated.

We complemented this result with evidence on the effect of mobility perceptions on policy preferences, such as redistribution and education expenses. Again, these measures confirm that mobility perceptions do not move preferences: There is no measurable effect of more pessimistic beliefs about social mobility on policy preferences. Exploring the heterogeneous effects of the treatment, we found consistent support for these results. Moreover, we provide suggestive evidence that the lack of an effect is related to a disconnent between people's mobility perceptions and their beliefs about the role of luck. In particular, meritocratic respondents do not link the persistence of socio-economic status to luck, i.e., they do not interpret the information about low mobility as a signal that there is (more) inequality of opportunity.

Our results suggest that the disagreement between people's increasing concerns about inequality and appropriate policy measures stems from the underlying fundamentals. Indeed, our results confirm the common view that preferences are slow-moving component of decision-making. Negative information on the fairness of a society is not sufficient to instate an immediate response of preferences, or even of charitable behavior toward the poor despite its sizable impact on mobility perceptions.

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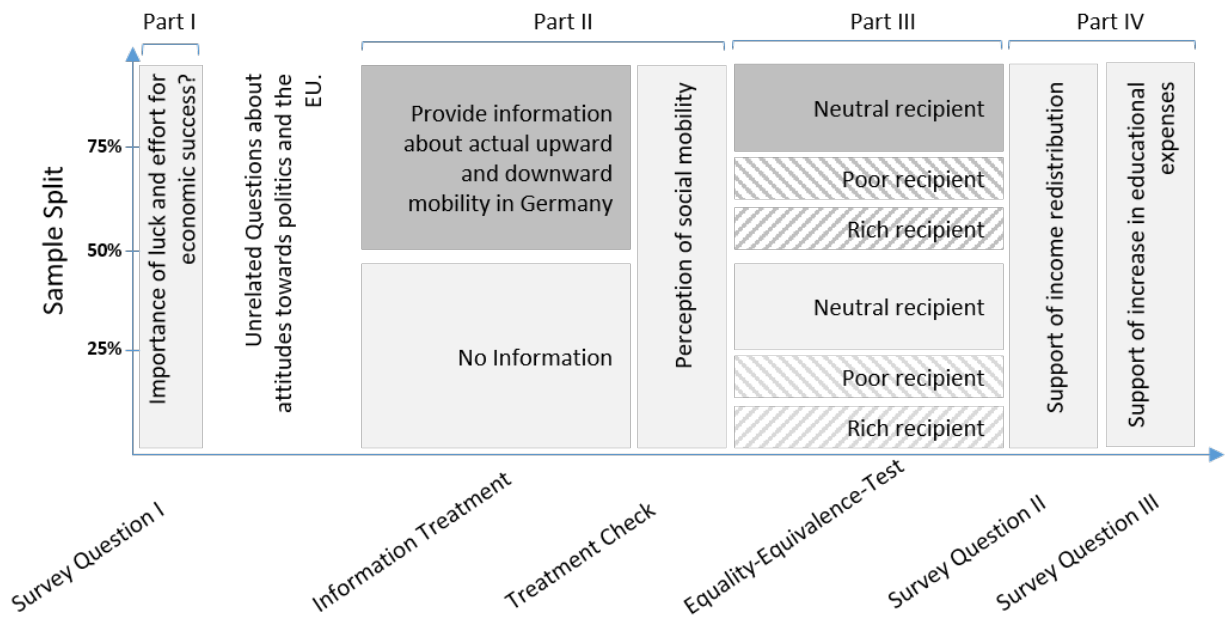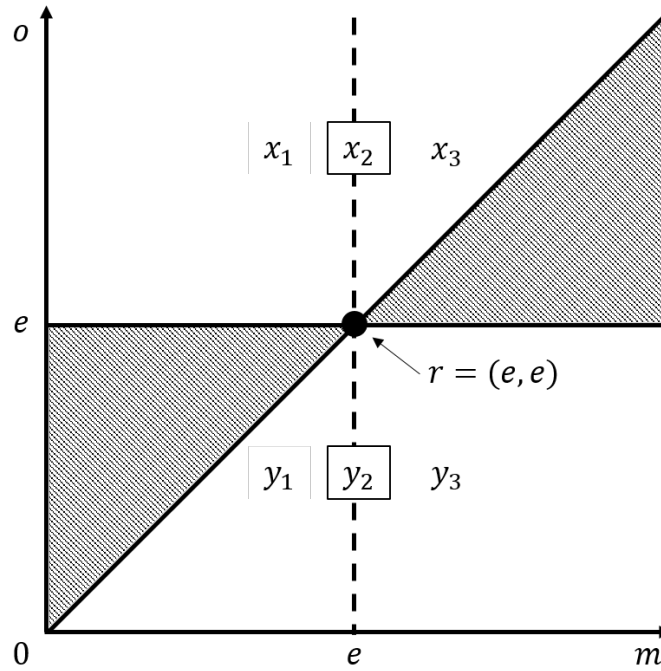
Figures and Tables

Figure 1: Experimental Setup

Figure 2: Domains of Inequality and Identification of Distributional Types

Notes: The figure is reproduced from Kerschbamer (2015). "m" denotes the income to self, "o" denotes the income to other, and r=(e,e) denotes the reference allocation. The domain of disadvantageous (advantageous) inequality is above (below) the 45-degree and the 3 times 3 combinations of (x1,x2,x3) – possible behavioral motives in the domain of disadvantageous inequality - and (y1,y2,y3) – behavioral motives in the domain of advantageous inequality – result in the 9 different distributional types. For example, the standard selfish type has vertical indifferences curves that run through area x_2 and y_2, wheras an inequality-averse decision-maker exhibits indifference curves that run through area x_3 and y_3.

Figure 3: Jittered Scatter Plot of (x, y) Scores Separated by Control and Treatment
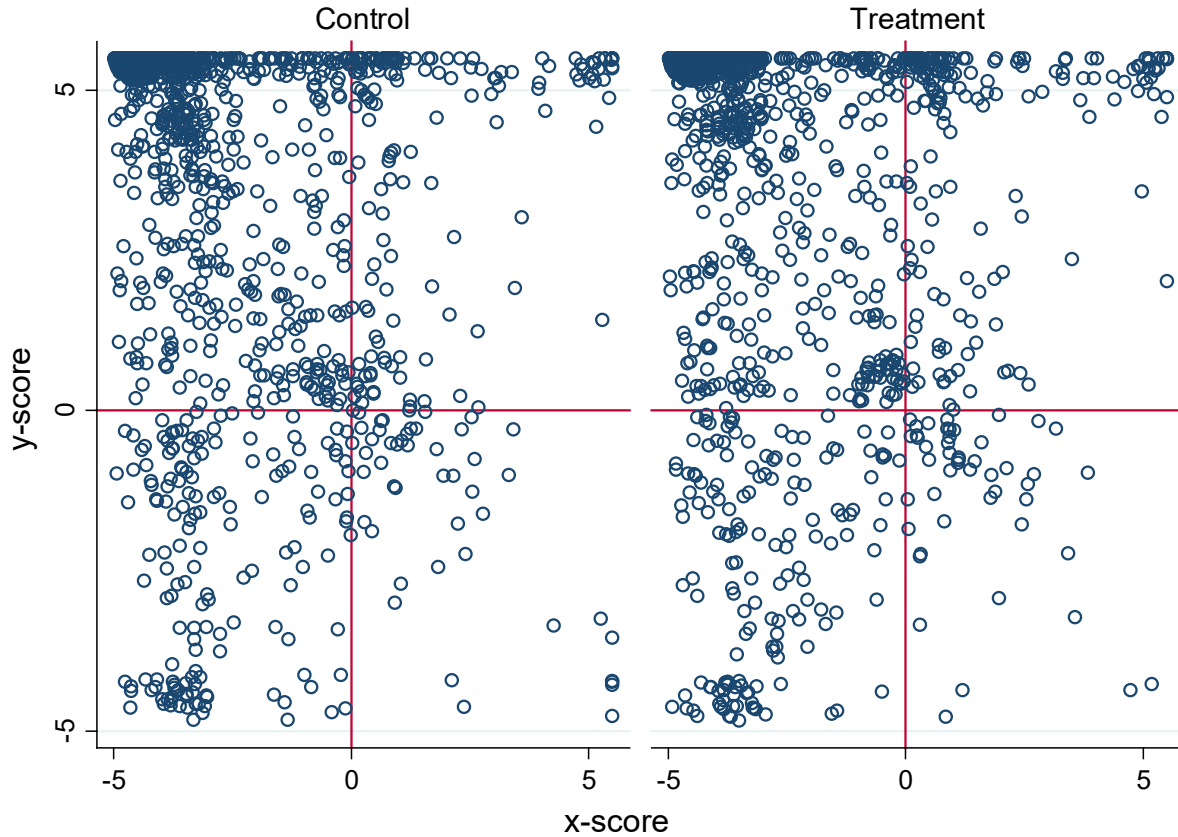
Notes: The y-score measures behavior in the domain of advantegous inequality, the x-score measures behavior in the domain of disadvantegous inequality. Positive scores imply benevolence, which is greater the higher the score. Negative scores imply malevolence, which is greater the lower the score. A score of zero implies selfishness. Inequality averse decision-makers are, for example, characterized by a positive y-score and a negative x-score (i.e., they cluster in top-left quadrant). Equality averse types cluster in the bottom-right quadrant, altruistic types in the top-right quadrant, and spiteful types in the bottom-left quadrant. Maximin preferences are charactized by a positive y-score and a zero x-score.

Table 1: Randomization Check

	Control	Treatment	*p-value*
	(1)	(2)	(3)
Age	51.06 (15.74)	50.98 (15.02)	*0.90*
Female=1	0.50 (0.50)	0.48 (0.50)	*0.36*
Education *No degree=1/Highest degree=5*	3.68 (1.17)	3.75 (1.16)	*0.10*
Married=1	0.55 (0.50)	0.58 (0.49)	*0.10*
Monthly Income (log)	7.32 (0.8)	7.35 (0.86)	*0.27*
Retired=1	0.23 (0.42)	0.21 (0.41)	*0.27*
Unemployed=1	0.02 (0.14)	0.02 (0.14)	*0.89*
Household Size	2.42 (1.08)	2.49 (1.09)	*0.11*
East Germany=1	0.21 (0.41)	0.19 (0.40)	*0.21*
Political Orientation: *"Left=1/Right=11"*	5.56 (1.95)	5.60 (1.94)	*0.54*
Economic Success *"Luck=1/Effort=11" Beliefs*	6.09 (1.94)	6.09 (1.91)	*0.99*
Locus of Control (LoC) *"Internal LoC=1/External LoC=5"*	2.18 (0.61)	2.17 (0.62)	*0.52*
Prob>F			*0.31*

Notes: Mean of covariates and standard deviations in parentheses. Columns (1) and (2) display the mean (% share) of the listed covariates in the treatment and control group. Column (3) shows the p-values of the coefficients of separate OLS regressions, in which the treatment indicator (information on social mobility) is regressed on the respective covariate. Education is a categorical variable, where 1 indicates no degree and 5 indicates highest degree (i.e., university qualification). Political Orientation is measured on a 1–11 scale with higher values indicating more conservative political views. Economic Success is measured on a 1–11 scale with higher values indicating a stronger belief that effort is important for economic success. Locus of Control is an equally-weighted index of four questions on a 1–5 scale where higher values indicate a more external locus of control (i.e. a belief that life is determined by outside factors such as luck and fate).
Prob>F is the p-value of an F-test for joint significance of all covariates.

Table 2: Correlates of Mobility Perceptions and First-Stage Effects

	Mobility Perceptions			
	(1)	(2)	(3)	(4)
Treated			-0.177***	-0.164***
			(0.039)	(0.041)
Age	-0.001	-0.006*		-0.006***
	(0.002)	(0.003)		(0.002)
Female	-0.007	0.066		0.082*
	(0.055)	(0.063)		(0.045)
Education	-0.108***	-0.010***		-0.086***
	(0.024)	(0.029)		(0.020)
Married	0.029	0.145		0.127***
	(0.055)	(0.069)		(0.049)
Monthly Income (log)	0.043	0.097**		0.051*
	(0.035)	(0.044)		(0.028)
Retired	0.005	0.040		0.100
	(0.064)	(0.092)		(0.067)
Unemployed	0.157	0.323		0.337*
	(0.186)	(0.269)		(0.177)
Household Size	-0.003	-0.027		-0.025
	(0.027)	(0.033)		(0.022)
East Germany	-0.046	0.027		0.056
	(0.064)	(0.070)		(0.052)
Political Orientation *"Left/Right" (z-score)*	0.085***	0.070**		0.102***
	(0.028)	(0.030)		(0.022)
Economic Success: *Luck/Effort Beliefs (z-score)*	0.033	0.003		0.007
	(0.029)	(0.033)		(0.025)
Locus of Control *(z-score)*	-0.022	-0.007		-0.049
	(0.030)	(0.033)		(0.036)
R²		0.03	0.01	0.04
N		1,111	2,661	2,241

Notes: ***p<0.01, **p<0.05, *p<0.1
OLS regressions. Robust standard errors in parentheses. The dependent variable is Mobility Perceptions ("How does economic success depend on being born into poor or rich household?") measured on a 1–10 scale. The variable is normalized to zero mean and unit variance and higher values indicate more optimism (i.e. weaker dependence on parental income). The first two columns report correlates from bivariate regressions (column 1) and a multivariate regression (column 2) using data from the control group only. Column 3 and 4 includes all data. Education is a categorical variable, where 1 indicates no degree and 5 indicates highest degree (i.e., university qualification). Political Orientation is measured on a 1–11 scale with higher values indicating more conservative political views. Economic Success: Luck/Effort Beliefs are measured on a 1–11 scale with higher values indicating a stronger belief that effort is important for economic success. Locus of Control is an equally-weighted index of four questions on a 1–5 scale where higher values indicate a more external locus of control (i.e. a belief that life is determined by outside factors such as luck and fate).

<div align="center">

Table 3: Correlation Mobility Perceptions and Outcomes

</div>

	Redistribution	Education Expenditure.	x-score	y-score
Mobility Perception	-0.090***	-0.139***	-0.009	-0.124**
	(0.021)	(0.022)	(0.047)	(0.063)
Rich			0.120	-0.464***
			(0.110)	(0.145)
Poor			0.468***	-0.152
			(0.121)	(0.148)
Constant	1.475***	-0.998***	-2.148***	3.827***
	(0.229)	(0.226)	(0.554)	(0.630)
Covariates	Yes	Yes	Yes	Yes
R²	0.008	0.025	0.009	0.006
N	2,641	2,648	2,583	2,583

Notes: ***p<0.01, **p<0.05, *p<0.1

OLS regressions with robust standard errors in parentheses. Redistribution (Education Expenditure) is the z-score of the stated demand for redistribution of income (demand for more spending on education), where higher values imply a higher demand (higher spending). The x-score (y-score) measures benevolence in the disadvantageous (advantageous) domain of inequality, where higher values mean more benevolence. Mobility Perceptions ("How does economic success depend on being born into poor or rich household?") measured on a 1–10 scale. The variable is normalized to zero mean and unit variance and higher values indicate more optimism (i.e. weaker dependence on parental income). Rich and Poor are dummies equaling 1 if a respondent received information about the relative income of the other person in the EET (i.e. that the person is among the richest 10% or poorest 10% poorest in the sample, respectively). Controls include log income, gender, age, education level, East Germany dummy, retirement status, employment status, number of household members, and marital status.

Table 4: Treatment Effect on Distributional Preferences

	x-score			y-score		
	(1)	(2)	(3)	(4)	(5)	(6)
Treated	0.02	0.013	0.02	0.041	0.015	-0.036
	(0.09)	(0.12)	(0.12)	(0.11)	(0.15)	(0.16)
	[-0.13,0.17]			[-0.18, 0.26]		
Rich		0.164	0.179		-0.489**	-0.605***
		(0.15)	(0.15)		(0.20)	(0.2)
Poor		0.459***	0.464***		-0.016	-0.187
		(0.17)	(0.17)		(0.20)	(0.21)
Treated x Rich		-0.049	-0.12		0.182	0.272
		(0.22)	(0.22)		(0.28)	(0.29)
		[-0.48,0.38]	[-0.37,0.73]			
Treated x Poor		0.070	0.008		-0.079	0.063
		(0.25)	(0.24)		(0.29)	(0.3)
		[-0.41,0.55]	[-0.64,0.48]			
Constant	-2.583***	-2.737***	-2.504***	3.476***	3.602***	4.117***
	(0.07)	(0.09)	(0.59)	(0.08)	(0.11)	(0.6)
Covariates	No	No	Yes	No	No	Yes
R²	0.000	0.007	0.086	0.000	0.004	0.014
N	2,583	2,583	2,443	2,583	2,583	2,443

***Notes**: ***p<0.01, **p<0.05, *p<0.1*

OLS regressions with robust standard errors in parentheses and 90% confidence intervals in brackets. The x-score (y-score) measures benevolence in the disadvantageous (advantageous) domain of inequality, where higher values mean more benevolence. Treated indicates whether a respondent received information on the persistence of socio-economic status (i.e., downward and upward mobility in society). Rich and Poor are dummies equaling 1 if a respondent received information about the relative income of the other person in the EET (i.e. that the person is among the richest 10% or poorest 10% poorest in the sample, respectively). Controls include log income, gender, age, education level, East Germany dummy, retirement status, employment status, number of household members, and marital status.

<div align="center">**Table 5:** Treatment Effect on Policy Preferences</div>

	Redistribution			Education Expenditure		
	Main		Follow-up	Main survey		Follow-up
	(1)	(2)	(3)	(4)	(5)	(6)
Treated	-0.022	-0.013	-0.008	0.018	0.008	-0.013
	(0.04)	(0.04)	(0.041)	(0.04)	(0.04)	(0.041)
	[-0.10,0.05]		[-0.09, 0.07]	[-0.06,0.09]		[-0.09, 0.07]
Constant	0.011	1.272***	0.003	-0.009	-1.185***	0.003
	(0.03)	(0.21)	(0.029)	(0.03)	(0.21)	(0.029)
Covariates	No	Yes	No	No	Yes	No
R²	0.000	0.036	0.000	0.000	0.045	0.000
N	2,641	2,491	2,362	2,649	2,498	2,362

Notes: ***p<0.01, **p<0.05, *p<0.1

OLS regressions with robust standard errors in parentheses and 90% confidence intervals in brackets. Redistribution (Education Expenditure) is the z-score of the stated demand for redistribution of income (demand for more spending on education), where higher values imply a higher demand (higher spending). Treated indicates whether a respondent received information on the persistence of socio-economic status (i.e., downward and upward mobility in society). Controls include log income, gender, age, education level, East Germany dummy, retirement status, employment status, number of household members and marital status. The follow-up survey was conducted about 4 month after the main survey.

Table 6: Heterogeneous Treatment Effects

	x-score		y-score		Redistribution		Education	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
A: Economic Success: Luck/Effort Beliefs								
Treated x Luck/Effort	0.131	0.053	-0.099	-0.061	-0.043	-0.035	-0.004	-0.014
	(0.09)	(0.09)	(0.12)	(0.12)	(0.04)	(0.04)	(0.04)	(0.04)
Luck/Effort	-0.109	-0.232	-0.061	-0.093	-0.159***	-0.15***	-0.008	-0.009
	(0.07)	(0.07)	(0.08)	(0.08)	(0.03)	(0.03)	(0.03)	(0.03)
Covariates	No	Yes	No	Yes	No	Yes	No	Yes
R^2	0.008	0.086	0.005	0.016	0.033	0.063	0	0.045
N	2,581	2,441	2,581	2,441	2,639	2,489	2,645	2,495
B: Political Ideology								
Treated x Political Orient. (Left/Right)x	0.010	-0.018	-0.099	-0.113	0.002	0.008	0. 022	0.016
	(0.097)	(0.095)	(0.116)	(0.118)	(0.043)	(0.039)	(0.042)	(0.043)
Political Orient. (Left/Right)	0.056	0.054	-0.181**	-0.144*	-0.214***	-0.217***	-0.165***	-0.154***
	(0.070)	(0.067)	(0.079)	(0.081)	(0.031)	(0.031)	(0.029)	(0.030)
Covariates	No	Yes	No	Yes	No	Yes	No	Yes
R^2	0.01	0.07	0.01	0.02	0.05	0.08	0.02	0.06
N	2,502	2,419	2,502	2,419	2,555	2,416	2,560	2,421
C: Income								
Treated x Low income	0.403*	0.381*	-0.461*	-0.406	-0.116	-0.086	-0.039	-0.001
	(0.222)	(0.214)	(0.263)	(0.264)	(0.095)	(0.096)	(0.096)	(0.095)
Low income	-0.307**	-0.273*	0.526***	0.410**	0.229***	0.193***	-0.111*	-0.024
	(0.150)	(0.153)	(0.179)	(0.190)	(0.067)	(0.071)	(0.067)	(0.071)
Ref. group: top-75%								
R^2	0.010	0.087	0.007	0.014	0.006	0.027	0.003	0.044
N	2,497	2,443	2,497	2,443	2549	2491	2555	2498
Treated x High income	-0.048	-0.068	0.183	0.186	-0.009	-0.009	0.111	0.113
	(0.225)	(0.219)	(0.263)	(0.265)	(0.086)	(0.087)	(0.089)	(0.088)
High income	0.447***	0.313*	-0.131	-0.064	-0.342***	-0.365***	0.102	-0.001
	(0.165)	(0.173)	(0.195)	(0.207)	(0.062)	(0.068)	(0.066)	(0.070)
Ref. group: bottom-75%								
Covariates	No	Yes	No	Yes	No	Yes	No	Yes
R^2	0.014	0.088	0.004	0.013	0.025	0.045	0.007	0.046
N	2,497	2,443	2,497	2,443	2549	2491	2555	2498

Continued

Table 6: Heterogeneous Treatment Effects (*continued*)

	x-score		y-score		Redistribution		Education	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
D: Occupational Status								
Treated x Skilled workers	-0.142	-0.373	0.443	0.458	0.008	0.066	0.431*	0.485**
	(0.53)	(0.54)	(0.72)	(0.74)	(0.26)	(0.26)	(0.25)	(0.25)
Skilled Workers	0.137	0.128	-0.593	-0.293	-0.210	-0.232	-0.244	-0.370**
	(0.40)	(0.42)	(0.48)	(0.50)	(0.17)	(0.17)	(0.16)	(0.17)
Treated x Employee.	0.371	0.242	-0.515	-0.681	-0.128	-0.159	0.237	0.262
	(0.45)	(0.46)	(0.62)	(0.63)	(0.22)	(0.22)	(0.21)	(0.21)
Employee	0.192	0.125	0.338	0.462	-0.249*	-0.194	-0.056	-0.073
	(0.35)	(0.37)	(0.39)	(0.41)	(0.14)	(0.14)	(0.13)	(0.13)
Treated x Executive Employee	0.531	0.418	-0.218	-0.353	-0.066	-0.087	0.395*	0.433**
	(0.47)	(0.47)	(0.63)	(0.64)	(0.23)	(0.22)	(0.21)	(0.21)
Executive Employee	0.418	0.359	-0.099	0.160	-0.376***	-0.252*	0.064	-0.022
	(0.36)	(0.38)	(0.40)	(0.43)	(0.14)	(0.15)	(0.13)	(0.14)
Treated x Self-employed/Professional	0.741	0.573	-0.567	-0.826	-0.073	-0.037	0.313	0.366
	(0.55)	(0.55)	(0.73)	(0.74)	(0.26)	(0.26)	(0.25)	(0.25)
Self-employed/Professional	0.211	0.266	0.033	0.363	-0.470***	-0.410**	0.053	-0.044
	(0.42)	(0.43)	(0.49)	(0.51)	(0.16)	(0.17)	(0.16)	(0.16)
Treated x Others	0.924	0.717	-0.940	-0.997	-0.016	-0.057	0.247	0.358
	(0.67)	(0.68)	(0.87)	(0.91)	(0.32)	(0.33)	(0.32)	(0.32
Others	0.017	-0.512	0.271	0.208	-0.220	-0.251	-0.175	-0.223
	(0.47)	(0.50)	(0.58)	(0.64)	(0.21)	(0.22)	(0.19)	(0.20)
Covariates	No	Yes	No	Yes	No	Yes	No	Yes
R²	0.015	0.072	0.008	0.015	0.012	0.042	0.015	0.033
N	2,256	2,185	2,256	2,185	2,304	2,228	2,310	2,233

Notes: ****p<0.01; **p<0.05; *p<0.1*

OLS regressions with robust standard errors in parentheses. The x-score (y-score) measures benevolence in the disadvantageous (advantageous) domain of inequality, where higher values mean more benevolence. Redistribution (Education Expenditure) is the z-score of the stated demand for redistribution of income (demand for more spending on education), where higher values imply a higher demand (higher spending). Panels A to D show the coefficient estimates for the covariate of interest and its interaction with the information treatment. **Panel A***: Luck/Effort is the z-score of answer to the question about the role of luck and effort in determining economic success. Higher values imply a higher role of effort.* **Panel B:** *Political Orient. (Left/Right) is the self-reported location in the political left–right spectrum. Higher values indicate more right-leaning political values.* **Panel C:** *Low (High) income is an indicator for respondents in bottom (top) quartile of the income distribution of the sample.* **Panel D***: Skilled workers, Employees, Executive Employees, Self-employed and Professionals, Others are indicators for a respondent's occupation. Omitted category: semiskilled workers. Regressions on the (x,y)-score include indicators for the treatment variation in the EET (i.e. the information about the relative position in the income distribution of the other person). Controls include gender, age, number of household members, log income (except panel C) and education (except panel D), as well as indicators for East Germany, retirement status, employment status, and marital status.*

Supplementary Material: For Online Publication Only

Social Mobility Perceptions and Inequality Acceptance

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S1: Treatment Intervention

Intro Treatment

Nun zu einem anderen Thema.

In vor Kurzem veröffentlichten wissenschaftlichen Studien sind Forscher der Frage nachgegangen, welcher Zusammenhang zwischen dem Einkommen der Eltern und dem Einkommen ihrer Kinder, wenn diese erwachsen sind, besteht.

< Zurück	Weiter >

In recently published scientific studies, researchers have explored the question of the relationship between parents' income and their children's income when they are adults.

Dabei geht es hauptsächlich um zwei Fragen. Zum einen wie hoch die Wahrscheinlichkeit ist, dass ein Kind aus einem reichen Haushalt im Erwachsenenalter einem armen Haushalt angehört. Zum anderen wie hoch die Wahrscheinlichkeit eines Kindes aus einem armen Haushalt ist, im Erwachsenenalter einem reichen Haushalt anzugehören. Was bedeutet hier arm und reich? Wenn wir alle Haushalte in Deutschland vom niedrigsten bis zum höchsten Einkommen aneinanderreihen würden, dann wäre ein Haushalt arm, wenn er zu den 25 Prozent der Haushalte mit dem niedrigsten Einkommen gehört. Umgekehrt wäre ein Haushalt reich, wenn er zu den 25 Prozent der Haushalte mit dem höchsten Einkommen gehört.

< Zurück	Weiter >

There are two main questions at stake here. The first is the probability that a child from a rich household will belong to a poor household in adulthood. The second is the probability that a child from a poor household will belong to a rich household in adulthood. What do poor and rich mean here? If we were to line up all households in Germany from the lowest to the highest income, a household would be poor if it belonged to the 25 percent of households with the lowest income.

Conversely, a household would be rich if it belonged to the 25 percent of households with the highest income.

Treatment Information

Für die Studien wurden beispielsweise die aktuellsten Daten einer unabhängigen, wissenschaftlichen Umfrage von über 12.000 Privathaushalten in Deutschland, die seit 1984 jährlich mit den gleichen Personen und Familien durchgeführt wird, herangezogen.

Die Daten zeigen, dass die erwartete Wahrscheinlichkeit, mit der ein Kind aus einem armen Haushalt als Erwachsene/-r reich ist, sehr gering ist. Hingegen ist die Wahrscheinlichkeit für ein Kind aus einem armen Haushalt, auch als Erwachsene/-r arm zu sein, sehr groß. Die folgende Grafik veranschaulicht diese Zusammenhänge.

The studies used the most recent data from an independent, scientific survey of more than 12,000 private households in Germany, which has been conducted annually with the same individuals and families since 1984.

The data show that the expected probability of a child from a poor household being rich as an adult is very low. By contrast, the probability of a child from a poor household also being poor as an adult is very high. The following graph illustrates these relationships.

Illustration from Original Survey: *Illustration translated into English:*

Conversely, the expected probability of a child from a rich household being poor as an adult is very low. By contrast, the probability that a child from a rich household will also be rich as an adult is very high. The following chart illustrates these relationships.
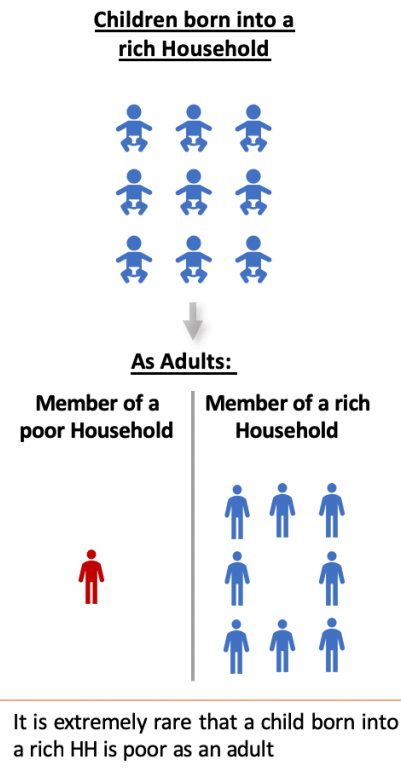
Illustration from Original Survey: Illustration translated into English

Kinder aus einem reichen Haushalt

Als Erwachsene:

Teil eines armen Haushalts   Teil eines reichen Haushalts

Es ist extrem selten, dass ein Kind aus einem reichen Haushalt als Erwachsener arm ist!

Children born into a rich Household

As Adults:

Member of a poor Household   Member of a rich Household

It is extremely rare that a child born into a rich HH is poor as an adult

Manipulation Check

Imagine 100 households that together represent the population of Germany.

What do you think? To what extent does economic success as an adult (e.g., attaining a high level of education or an above-average income) depend on whether you grew up in one of the 25 poorest or one of the 25 richest households? [very little (0) – very much (10)]

S2: Parameters of the EET

Figure S1: Parameterization of the EET.
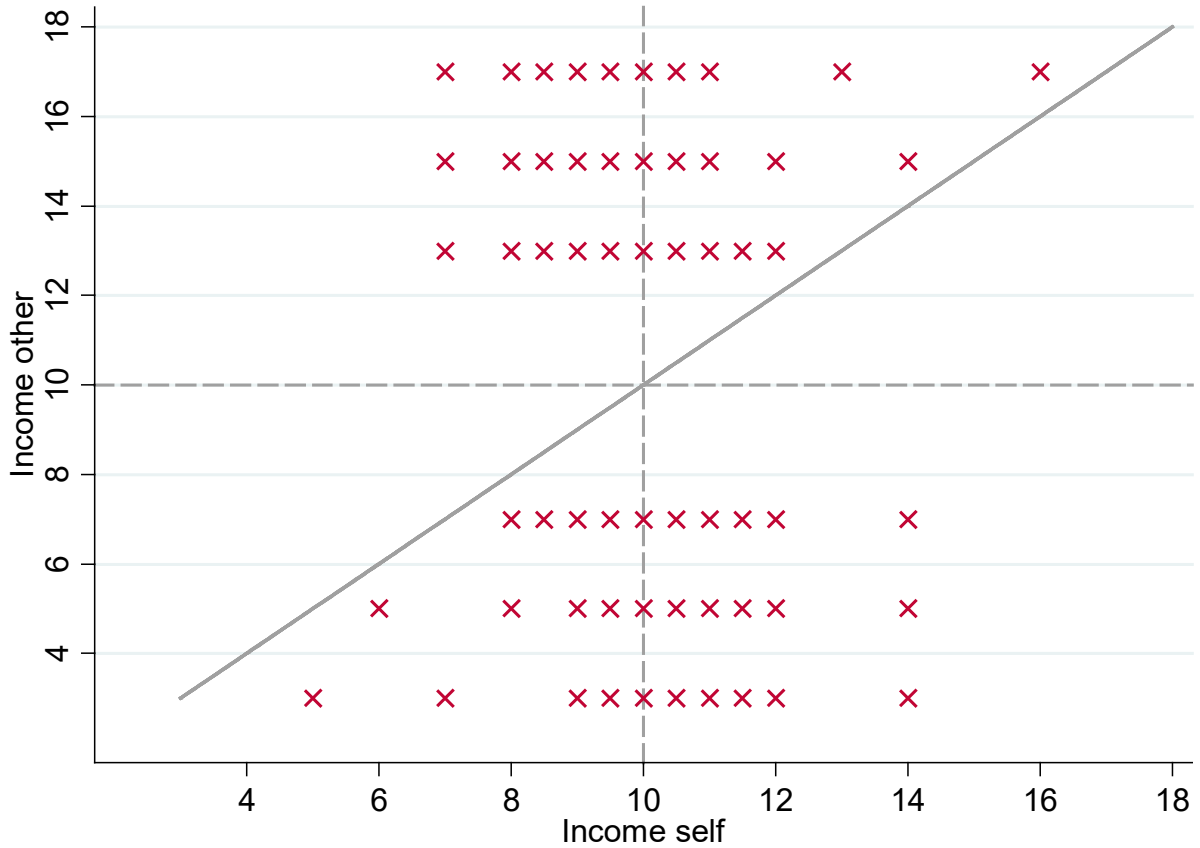
Notes: The reference allocation is 10,10. Points below (above) the 45-degree line are allocations in the advantageous (disadvantageous) domain. Each list keeps the income of Other fixed at x Euro, with $x \in \{3, 5, 7, 13, 15, 17\}$ and varies the income of Self.

S3: Summary Statistics

Table S1: Summary Statistics

	All	Control	Treatment
		(1)	(2)
Age	51.02	51.06	50.98
	(15.38)	(15.74)	(15.02)
Female=1	0.49	0.50	0.48
	(0.50)	(0.50)	(0.50)
Education	3.72	3.68	3.75
No degree=1/Highest degree=5	(1.18)	(1.17)	(1.16)
Married=1	0.56	0.55	0.58
	(0.50)	(0.50)	(0.49)
Monthly Income (log)	7.34	7.32	7.35
	(0.83)	(0.8)	(0.86)
Retired=1	0.22	0.23	0.21
	(0.42)	(0.42)	(0.41)
Unemployed=1	0.02	0.02	0.02
	(0.14)	(0.14)	(0.14)
Household Size	2.46	2.42	2.49
	(1.09)	(1.08)	(1.09)
East Germany=1	0.20	0.21	0.19
	(0.40)	(0.41)	(0.40)
Political Orientation:	5.58	5.56	5.60
"Left=1/Right=11"	(1.95)	(1.95)	(1.94)
Economic Success	6.09	6.09	6.09
"Luck=1/Effort=11" Beliefs	(1.92)	(1.94)	(1.91)
Locus of Control (LoC)	2.17	2.18	2.17
"Internal LoC=1/External LoC=5"	(0.62)	(0.61)	(0.62)

Notes: Mean of covariates and standard deviations in parentheses. Columns (1) and (2) display the mean (% share) of the listed covariates in the treatment and control group. Column (3) shows the p-values of the coefficients of separate OLS regressions, in which the treatment indicator (information on social mobility) is regressed on the respective covariate. Education is a categorical variable, where 1 indicates no degree and 5 indicates highest degree (i.e., university qualification). Political Orientation is measured on a 1–11 scale with higher values indicating more conservative political views. Economic Success is measured on a 1–11 scale with higher values indicating a stronger belief that effort is important for economic success. Locus of Control is an equally-weighted index of four questions on a 1–5 scale where higher values indicate a more external locus of control (i.e. a belief that life is determined by outside factors such as luck and fate).
Prob>F is the p-value of an F-test for joint significance of all covariates.

S4: *Difference-in-Difference Estimates – Distributional Preferences*

Table S2: Difference-in-Difference Estimates for Distributional Preferences

	x-score		y-score	
EET wave 33	0.114	0.138	0.191*	0.138
	(0.077)	(0.078)	(0.109)	(0.111)
Treated x EET wave 33	-0.113	-0.133	0.072	0.131
	(0.109)	(0.111)	(0.153)	(0.156)
Treated	0.134	0.139	-0.074	-0.137
	(0.097)	(0.097)	(0.128)	(0.130)
Constant	-2.695***	-2.046***	3.278***	3.186***
	(0.068)	(0.507)	(0.092)	(0.552)
Covariates	No	Yes	No	Yes
R^2	0.01	0.07	0.01	0.01
N	4,584	4,354	4,584	4,354

*Notes: ***p<0.01, **p<0.05, *p<0.1*

OLS regressions with standard errors clustered at the individual level in parentheses. The x-score (y-score) measures benevolence in the disadvantageous (advantageous) domain of inequality, where higher values mean more benevolence. "EET wave 33" is an indicator variable for participating in the EET in wave 33. "Treated x EET wave 33" indicates whether a respondent received information in wave 33 and "Treated" is an indicator for participation in the EET in wave 23 (and being in the treatment group in wave 33). Controls include log income, gender, age, education level, East Germany dummy, retirement status, employment status, number of household members and marital status.

S5: Heterogeneity in Mobility Perceptions

In Section 3.1, we presented the correlates of mobility perceptions. Here, we provide additional evidence on specific subgroups. We hypothesized in our pre-analysis plan that our treatment will have a greater impact on subgroups who are more optimistic. Figure S2 displays the mobility perceptions for the different groups by treatment status. We first consider only the control group and note that right leaning and less educated respondents are the most optimistic. Accordingly, we observe the strongest disparities in perceptions in the control group along political orientation (left- and right-leaning) and education (successful qualification to attend university versus no qualification to attend university). Comparing perceptions across control and treatment group reveals that treated respondents have in all cases more pessimistic perceptions than non-treated respondents. Again, we observe the largest gap in perceptions along political orientation and education. Interestingly, perceptions do not differ much for beliefs about the role of luck and effort in economic success ("luck/effort beliefs") in both control and treatment group. Moreover, the gap between treated and non-treated respondents who believe to a greater extent in luck and who largely believe in effort is very similar. This is confirmed by looking at a respondent's locus of control, which reveals a remarkably similar picture to luck/effort beliefs. Locus of control describes the extent to which people believe they can control their own life or that outside factors such as luck and fate, determine their life (Rotter 1966). It is considered a key personal trait and thus provides a psychological underpinning to the missing link between luck/effort beliefs and mobility perceptions. In the bottom-right panel, we show mobility perceptions of respondents with and without a meritocractic fairness ideal (i.e., they find inequalities arising through own effort as fair). The figure shows that respondents with non-meritocratic beliefs who receive information on the persistence of socio-economic status become substantially more pessimistic than all other groups. Together, this suggests that respondents do not view the persistence of socio-economic status as a matter of luck.

Figure S2: Mobility Perception of Specific Subgroups across Treatment Status.
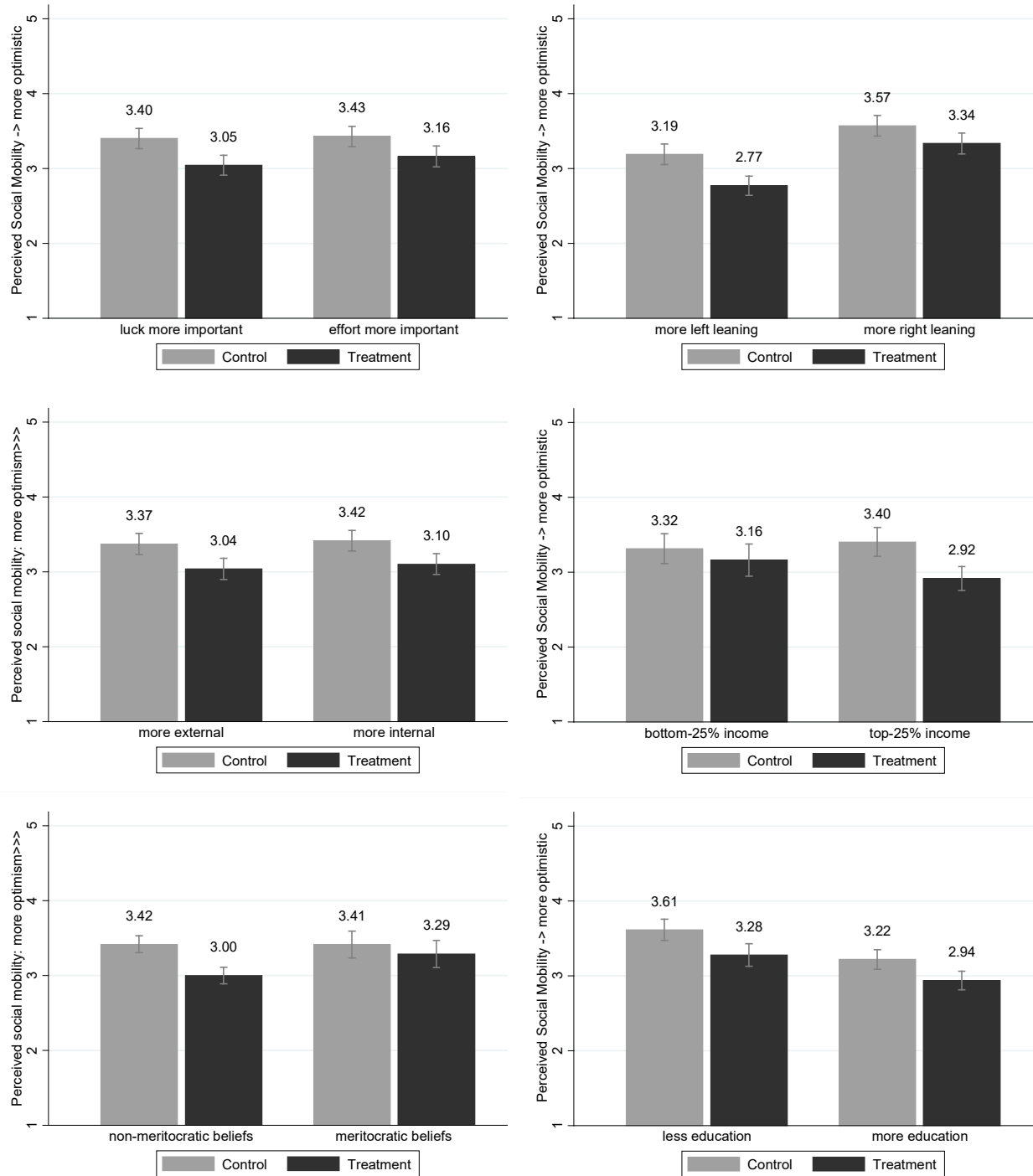
Notes: Groups are defined as follows: Left-column: "Luck (Effort) more important" indicates respondents below (at or above) the median response (6) to question about the importance of luck and effort for economic success (scale 1–10),)."more internal (external)" is the median split (2) of the locus-of-control index (index from 1–5), and "meritocratic beliefs" indicates full endorsement of meritocratic fairness ideal. Right-column: "More left-leaning (right-leaning)" indicates respondents below (at or above) the median response (6) on the self-assessment in the left-right political spectrum (scale 1–10), "bottom (top) 25% income" indicate respondents in the bottom 25% (top 25%) of the income distribution in our sample, and "less (more) education" indicates respondents with no qualification for university (with qualification for university).

S6: Relation between Mobility Perceptions and Preferences

The previous analysis revealed that our treatment had a significant impact on mobility perceptions (see Table 2). These mobility perceptions are significantly related to support for redistribution, education expenditures as well as to the *y-score* (see Table S3). That is, more optimistic respondents show less support for policies aimed at reducing inequality and are less benevolent in the advantageous domain (and more malevolent in the disadvantageous domain) suggesting more tolerance toward inequality, in general.

Using the information treatment as an instrument for mobility perceptions, we can estimate the causal effect of mobility perceptions on outcomes. Note that we have to assume that the treatment is uncorrelated with the error term, i.e. that the only effect of the treatment on outcomes is through perceptions, as we have hypothesized. Our results indicate that there is no causal effect of mobility perceptions on distributional and policy preferences. All estimates are insignificant (see Panel B in Table S3).

<p style="text-align:center">Table S3: Mobility Perceptions</p>

Panel A: OLS Estimates

	Mobility Perception	Redistribution	Education Exp.	x-score	y-score
Treated	-0.177***				
	(0.039)				
Mobility Perception		-0.054***	-0.088***	-0.019	-0.085*
		(0.01)	(0.01)	(0.04)	(0.05)
Rich				-0.031	-0.372
				(0.17)	(0.23)
Poor				0.665***	-0.098
				(0.19)	(0.23)
*Mobility*Rich*				0.074	-0.008
				(0.06)	(0.08)
*Mobility*Poor*				-0.077	0.018
				(0.06)	(0.08)
Constant	0.088***	0.122***	0.198***	-2.689***	3.798***
	(0.027)	(0.03)	(0.03)	(0.10)	(0.13)
R^2	0.008	0.008	0.025	0.009	0.006
F-statistic	21.0	--	--	--	--
N	2,661	2,641	2,648	2,583	2,583

Panel B: 2SLS Estimates

		Redistribution	Education Exp.	x-score	y-score
Mobility Perception		0.068	-0.058	-0.042	-0.047
		(0.12)	(0.12)	(0.39)	(0.48)
Rich				-0.209	0.897
				(1.56)	(2.00)
Poor				0.994	-0.623
				(1.76)	(2.05)
*Mobility*Rich*				0.154	-0.573
				(0.69)	(0.89)
*Mobility*Poor*				-0.222	0.251
				(0.78)	(0.90)
Constant		-0.156	0.130	-2.635***	3.715***
		(0.28)	(0.28)	(0.89)	(1.09)
N		2,641	2,648	2,583	2,583

*Notes: ***p<0.01, **p<0.05, *p<0.1*

Panel A presents the first stage in column 1 and the OLS estimates of the relationship between outcomes and mobility perceptions in columns 2–5. Panel B shows the 2SLS estimates using the random assignment to the information treatment as an instrument for mobility perceptions. Specifications do not include covariates.

S7: Exploring Potential Mechanisms

Table S4: Correlates of Distributional Preferences: Political Orientation, Redistribution and Equality of Opportunity

	Mobility Perceptions	x-score	y-score	Mobility Perceptions	x-score	y-score	Mobility Perceptions	x-score	y-score
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Political Orientation	0.052***	0.043*	-0.100***						
(Left/Right)	(0.011)	(0.025)	(0.031)						
Redistribution				-0.191***	-0.318***	0.441***			
				(0.046)	(0.106)	(0.133)			
Equality of							0.129***	0.335***	-0.341***
Opportunity							(0.044)	(0.099)	(0.130)
Rich		0.091	-0.489***		0.047	-0.437***		0.034	-0.414***
		(0.110)	(0.147)		(0.115)	(0.154)		(0.115)	(0.154)
Poor		0.437***	-0.127		0.460***	-0.135		0.461***	-0.139
		(0.122)	(0.150)		(0.128)	(0.157)		(0.128)	(0.157)
Constant	0.008	-2.422***	4.191***	0.656***	-1.924***	3.749***	0.502**	-2.140***	4.087***
	(0.238)	(0.586)	(0.670)	(0.241)	(0.575)	(0.671)	(0.238)	(0.572)	(0.666)
N	2,433	2,372	2,372	2,262	2,205	2,205	2,262	2,205	2,205
R²	0.03	0.09	0.02	0.03	0.09	0.02	0.03	0.09	0.02

*Notes: ***p<0.01, **p<0.05, *p<0.1*

OLS regressions with robust standard errors in parentheses. "Mobility Perceptions" ("How does economic success depend on being born into poor or rich household?") is measured on a 1–10 scale. The variable is normalized to zero mean and unit variance and higher values indicate more optimism (i.e. weaker dependence on parental income). The x-score (y-score) measures benevolence in the disadvantageous (advantageous) domain of inequality, where higher values mean more benevolence. "Political Orientation (Left/Right)" is the self-reported location in the political left–right spectrum. Higher values indicate more right-leaning political values. "Redistribution" is an indicator for respondents saying income inequality should be reduced and "Equality of Opportunity" is an indicator for respondents saying that everyone should have equal chances to achieve a good income (both questions from wave 24). Rich and Poor are dummies equaling 1 if a respondent received information about the relative income of the other person in the EET (i.e. that the person is among the richest 10% or poorest 10% poorest in the sample, respectively). Controls include log income, gender, age, education level, East Germany dummy, retirement status, employment status, number of household members, and marital status.

	Mobility Perception	Neutral	x-score Poor	Rich	Neutral	y-score Poor	Rich	redistribution	education
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Treated	-0.225***	0.003	0.219	-0.292	0.103	0.259	0.769**	0.026	0.015
	(0.046)	(0.160)	(0.263)	(0.215)	(0.193)	(0.314)	(0.298)	(0.046)	(0.049)
Merit	-0.042	-0.089	0.202	-0.122	0.088	-0.348	0.594	-0.448***	-0.011
	(0.061)	(0.180)	(0.314)	(0.287)	(0.236)	(0.385)	(0.361)	(0.061)	(0.061)
Treated x Merit	0.187**	-0.039	-0.521	0.467	-0.431	-0.502	-1.542***	-0.072	-0.004
	(0.087)	(0.251)	(0.430)	(0.392)	(0.330)	(0.534)	(0.511)	(0.084)	(0.084)
Constant	0.455**	-1.132	-3.542***	-2.006*	4.095***	3.637***	2.369*	1.511***	-1.036***
	(0.228)	(0.701)	(1.266)	(1.152)	(0.872)	(1.403)	(1.246)	(0.222)	(0.230)
N	2472	1215	596	595	1215	596	595	2454	2461
R²	0.03	0.08	0.14	0.08	0.01	0.04	0.03	0.09	0.04

Notes: ****p<0.01, **p<0.05, *p<0.1*

OLS regressions with robust standard errors in parentheses. "Mobility Perceptions" ("How does economic success depend on being born into poor or rich house-hold?") is measured on a 1–10 scale. The variable is normalized to zero mean and unit variance and higher values indicate more optimism (i.e. weaker dependence on parental income). The x-score (y-score) measures benevolence in the disadvantageous (advantageous) domain of inequality, where higher values mean more benevolence. Redistribution (Education Expenditure) is the z-score of the stated demand for redistribution of income (demand for more spending on education), where higher values imply a higher demand (higher spending). Neutral indicates subsample which received no information about relative income rank of the other person in the EET. Poor (Rich) indicates subsample which received information that the other person belongs to the bottom 10% (top 10%) of the income distribution in the EET. Treated indicates whether a respondent received information on the persistence of socio-economic status (i.e., downward and upward mobility in society). "Merit" is an indicator for respondents endorsing a meritocratic fairness ideal (i.e., they agree with statement that income earned through hard work should not be redistributed), question taken from wave 24. Controls include log income, gender, age, education level, East Germany dummy, retirement status, employment status, number of household members, and marital status.

Figure S3: Correlations: Luck/Effort Beliefs, Locus of Control, and Meritocratic Fairness Ideals
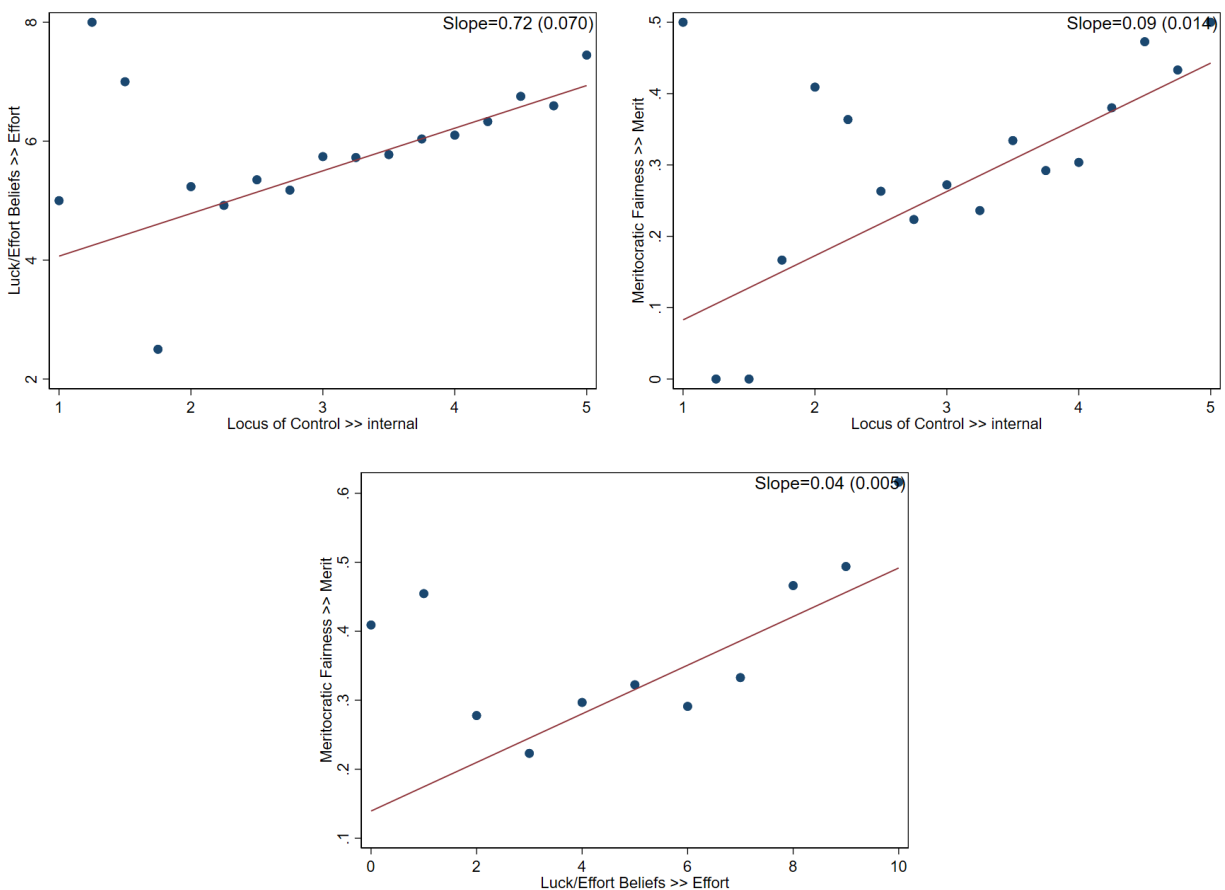
Notes: The figure shows binned scatterplots for Luck/Effort Beliefs and Locus of Control (LoC) (left top panel), Meritocratic Fairness ("Merit") and LoC (right top panel), and Meritocratic Fairness nad Luck/Effort Beliefs (bottom panel). Slope is the coefficient from regressing y on x with standard errors in parentheses.

S8: Survey Instrument

The codebook for wave 33 of the GIP is available here:

https://doi.org/10.4232/1.13155 and https://search.gesis.org/research_data/ZA6953

In the following we present screenshots (and a translation) of the questions in our survey module, the treatment intervention and the EET.

Luck – Effort

> Wie finanziell erfolgreich eine Person im Leben ist, kann zum einen von Umständen abhängen, auf die man selbst keinen Einfluss hat, wie zum Beispiel Glück. Oder zum anderen von Umständen abhängen, die man selbst beeinflussen kann, wie zum Beispiel persönliche Anstrengung.
>
> **Inwiefern ist, Ihrer Meinung nach, Glück oder Anstrengung dafür ausschlaggebend, ob jemand in Deutschland viel Geld verdient?**

How financially successful a person is in life can depend on circumstances beyond one's control, such as luck. Or, on the other hand, it can depend on circumstances that one can influence oneself, such as personal effort.

In your opinion, to what extent does luck or effort determine whether someone earns a lot of money in Germany? [only luck (0) – only effort (10)]

Intro Treatment

> Nun zu einem anderen Thema.
>
> In vor Kurzem veröffentlichten wissenschaftlichen Studien sind Forscher der Frage nachgegangen, welcher Zusammenhang zwischen dem Einkommen der Eltern und dem Einkommen ihrer Kinder, wenn diese erwachsen sind, besteht.
>
> < Zurück   Weiter >

In recently published scientific studies, researchers have explored the question of the relationship between parents' income and their children's income when they are adults.

> Dabei geht es hauptsächlich um zwei Fragen. Zum einen wie hoch die Wahrscheinlichkeit ist, dass ein Kind aus einem reichen Haushalt im Erwachsenenalter einem armen Haushalt angehört. Zum anderen wie hoch die Wahrscheinlichkeit eines Kindes aus einem armen Haushalt ist, im Erwachsenenalter einem reichen Haushalt anzugehören. Was bedeutet hier arm und reich? Wenn wir alle Haushalte in Deutschland vom niedrigsten bis zum höchsten Einkommen aneinanderreihen würden, dann wäre ein Haushalt arm, wenn er zu den 25 Prozent der Haushalte mit dem niedrigsten Einkommen gehört. Umgekehrt wäre ein Haushalt reich, wenn er zu den 25 Prozent der Haushalte mit dem höchsten Einkommen gehört.
>
> < Zurück   Weiter >

There are two main questions at stake here. The first is the probability that a child from a rich household will belong to a poor household in adulthood. The second is the probability that a child

from a poor household will belong to a rich household in adulthood. What do poor and rich mean here? If we were to line up all households in Germany from the lowest to the highest income, a household would be poor if it belonged to the 25 percent of households with the lowest income. Conversely, a household would be rich if it belonged to the 25 percent of households with the highest income.

Treatment Information

Für die Studien wurden beispielsweise die aktuellsten Daten einer unabhängigen, wissenschaftlichen Umfrage von über 12.000 Privathaushalten in Deutschland, die seit 1984 jährlich mit den gleichen Personen und Familien durchgeführt wird, herangezogen.

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The studies used the most recent data from an independent, scientific survey of more than 12,000 private households in Germany, which has been conducted annually with the same individuals and families since 1984.

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Illustration from Original Survey: *Illustration translated into English:*

Conversely, the expected probability of a child from a rich household being poor as an adult is very low. By contrast, the probability that a child from a rich household will also be rich as an adult is very high. The following chart illustrates these relationships.

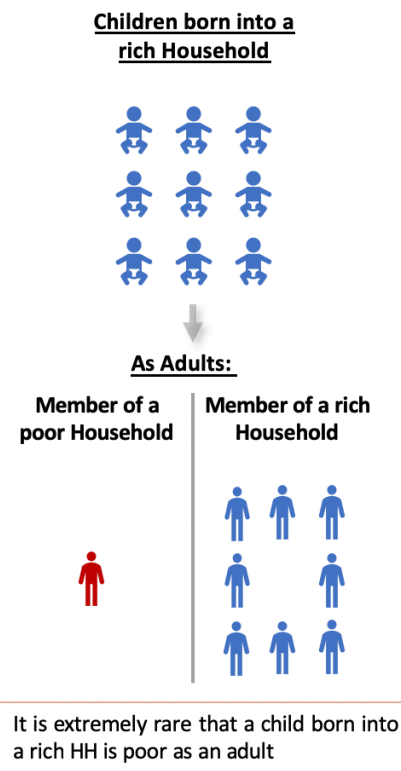Illustration from Original Survey: Illustration translated into English

Kinder aus einem reichen Haushalt

Als Erwachsene:

Teil eines armen Haushalts   Teil eines reichen Haushalts

Es ist extrem selten, dass ein Kind aus einem reichen Haushalt als Erwachsener arm ist!

Children born into a rich Household

As Adults:

Member of a poor Household   Member of a rich Household

It is extremely rare that a child born into a rich HH is poor as an adult

Manipulation Check

Imagine 100 households that together represent the population of Germany.

What do you think? To what extent does economic success as an adult (e.g., attaining a high level of education or an above-average income) depend on whether you grew up in one of the 25 poorest or one of the 25 richest households? [very little (0) – very much (10)]

Instructions for Equality-Equivalence Test

Dear participant of "Gesellschaft im Wandel",

In the following, we would like to ask you to distribute money between you and another anonymous participant of "Gesellschaft im Wandel". [if expAE33040 = 1: The other participant is selected from the group of participants whose income is among the 10 percent of the highest incomes of all participants.] [if expAE33040 = 2: The other participant is selected from the group of participants whose income is among the 10 percent of the lowest incomes of all participants.] We will call the other randomly chosen participant your recipient. The distributional decisions concern real money; some randomly chosen decisions will actually be paid to the participants.

You will now successively see six tables. The two left columns in the table always show a distribution where you and your recipient are getting the same amount of money. The two right columns in the table always show a distribution where your recipient always receives the same amount of money, while your amount of money increases from one row to the next. All in all, this implies that the distribution on the left hand side always stays the same, whereas the one on the right hand side becomes more favorable for you, because you receive more money the further you go down in the table.

We would thus expect that participants prefer the left distribution at the beginning and then want to switch to the right distribution at some point. However, there might be participants who always prefer one distribution over the other. We want you to indicate in which row you would like to switch from the left distribution to the right distribution, i.e. from which row onwards you prefer the right distribution. On the following page, we will explain these tables with an example.

Later, the computer will randomly select exactly 250 participants from among all participants who have filled out all 6 tables, and will in turn randomly pay out one row from each table. The participant's decision in this row then determines whether the left or right distribution is paid

out with real money. In addition, this decision is assigned to another participant in this survey and this participant receives the amount of the other player. The money will be credited to the participants' study accounts. No participant can be selected more than once. We are expecting around 3000 participants in this survey.

To sum up: In this part of the survey, you are taking decisions in tables in which you are asked to indicate the row in which you for the first time prefer the right over the left distribution. [if expAE33040 = 1: You know about your recipient that their income is among the 10 percent of the highest incomes of all participants.] [if expAE33040 = 2: You know about your recipient that their income is among the 10 percent of the lowest incomes of all participants.] In addition to a chance to earn money in the role of an active participant, you also have a chance to earn money as a passive recipient.

Example:

You can see in this table that you and the recipient both receive 20 euros in each row in the left distribution. In the right distribution, your amount of money increases from row to row while the passive recipient always receives 15 euros.

You are now supposed to choose the row in which you for the first time prefer the right over the left distribution. For example, if you for the first time prefer the right over the left distribution in the penultimate row, meaning you would rather receive 22 euro and the recipient 15 euros (right distribution) than both of you receiving 20 euros (left distribution) and you preferred the left distribution in all prior rows, then you should indicate the penultimate row as the one where you first preferred the right distribution over the left one.

We would now like to ask you to choose the row in which you would like to change from the left to the right distribution. In order to do so, please click on the row that you choose. After you have marked the row, the rest of the table will be completed automatically. For example, if you mark the first row, this implies that you always prefer the right distribution over the left one. Please control your decision one more time before you click on Continue.

Please select the row from which you prefer the right distribution over the left distribution. All numbers are in euro.

	Verteilung: **Links**		Verteilung: **Rechts**	
	Sie erhalten:	Ihr Mitspieler erhält:	Sie erhalten:	Ihr Mitspieler erhält:
○	20	20	16	15
○	20	20	18	15
○	20	20	20	15
○	20	20	22	15
○	20	20	24	15
○	Ich bevorzuge immer die linke Verteilung.			

< Zurück   Weiter >

Choice lists for advantageous domain (*y-score*)

The two left columns ("Verteilung Links") show the equal reference allocation (10 Euro for self, 10 Euro for the other participant). The two right columns ("Verteilung Rechts") show the unequal allocations. In the advantageous domain the payoff of the other participant is fixed (e.g., 3 Euro as in the screenshot below) and the payoff for self increases (from 5 Euro to 14 Euro in the screenshot below). Respondents had to indicate in which row the want to switch from the equal allocation ("Verteilung Links") to the unequal allocation ("Verteilung Rechts").

Gesellschaft im Wandel — Hilfe

Bitte wählen Sie die Zeile aus, ab der Sie die rechte Verteilung gegenüber der linken Verteilung bevorzugen. Alle Zahlen sind Eurobeträge.

	Verteilung: **Links**		Verteilung: **Rechts**	
	Sie erhalten:	Ihr Mitspieler erhält:	Sie erhalten:	Ihr Mitspieler erhält:
○	10	10	5	3
○	10	10	7	3
○	10	10	9	3
○	10	10	9,50	3
○	10	10	10	3
○	10	10	10,50	3
○	10	10	11	3
○	10	10	11,50	3
○	10	10	12	3
○	10	10	14	3
○	Ich bevorzuge immer die linke Verteilung.			

< Zurück   Weiter >

Bitte wählen Sie die Zeile aus, ab der Sie die rechte Verteilung gegenüber der linken Verteilung bevorzugen. Alle Zahlen sind Eurobeträge.

	Verteilung: **Links**		Verteilung: **Rechts**	
	Sie erhalten:	Ihr Mitspieler erhält:	Sie erhalten:	Ihr Mitspieler erhält:
○	10	10	6	5
○	10	10	8	5
○	10	10	9	5
○	10	10	9,50	5
○	10	10	10	5
○	10	10	10,50	5
○	10	10	11	5
○	10	10	11,50	5
○	10	10	12	5
○	10	10	14	5
○	Ich bevorzuge immer die linke Verteilung.			

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Gesellschaft im Wandel

Bitte wählen Sie die Zeile aus, ab der Sie die rechte Verteilung gegenüber der linken Verteilung bevorzugen. Alle Zahlen sind Eurobeträge.

	Verteilung: **Links**		Verteilung: **Rechts**	
	Sie erhalten:	Ihr Mitspieler erhält:	Sie erhalten:	Ihr Mitspieler erhält:
○	10	10	8	7
○	10	10	8,50	7
○	10	10	9	7
○	10	10	9,50	7
○	10	10	10	7
○	10	10	10,50	7
○	10	10	11	7
○	10	10	11,50	7
○	10	10	12	7
○	10	10	14	7
○	Ich bevorzuge immer die linke Verteilung.			

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Choice lists for disadvantageous domain (*x-score*)

The two left columns ("Verteilung Links") show the equal reference allocation (10 Euro for self, 10 Euro for the other participant). The two right columns ("Verteilung Rechts") show the unequal allocations. Again, in the disadvantageous domain the payoff of the other participant is fixed (e.g., 13 Euro as in the screenshot below) and the payoff for self increases (from 7 Euro to 12 Euro in the screenshot below). Respondents had to indicate in which row the want to switch from the equal allocation ("Verteilung Links") to the unequal allocation ("Verteilung Rechts").

Bitte wählen Sie die Zeile aus, ab der Sie die rechte Verteilung gegenüber der linken Verteilung bevorzugen. Alle Zahlen sind Eurobeträge.

	Verteilung: **Links**		Verteilung: **Rechts**	
	Sie erhalten:	Ihr Mitspieler erhält:	Sie erhalten:	Ihr Mitspieler erhält:
○	10	10	7	15
○	10	10	8	15
○	10	10	8,50	15
○	10	10	9	15
○	10	10	9,50	15
○	10	10	10	15
○	10	10	10,50	15
○	10	10	11	15
○	10	10	12	15
○	10	10	14	15
○	Ich bevorzuge immer die linke Verteilung.			

< Zurück	Weiter >

Gesellschaft im Wandel

Bitte wählen Sie die Zeile aus, ab der Sie die rechte Verteilung gegenüber der linken Verteilung bevorzugen. Alle Zahlen sind Eurobeträge.

	Verteilung: **Links**		Verteilung: **Rechts**	
	Sie erhalten:	Ihr Mitspieler erhält:	Sie erhalten:	Ihr Mitspieler erhält:
○	10	10	7	17
○	10	10	8	17
○	10	10	8,50	17
○	10	10	9	17
○	10	10	9,50	17
○	10	10	10	17
○	10	10	10,50	17
○	10	10	11	17
○	10	10	13	17
○	10	10	16	17
○	Ich bevorzuge immer die linke Verteilung.			

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Redistribution

Redistribution of income means that the state reduces income differences between citizens through taxes and transfer payments.

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

No redistribution (1) means that the state does not intervene in the distribution of income. Full redistribution (10) means that everyone earns the same income after redistribution. [scale 1-10]

Education Policy

Should the federal government spend more or less money on the education system than it currently does?

Keep in mind that higher spending must be financed, among other things, through taxes, i.e. ultimately through deductions from wages.

[Spend much more than at present (1), spend a little more than at present (2), spend the same as at the moment (3), spend a little less than at present (4). spend much less than at present (5)]