

Personal Income Mobility, Luck vs Effort Beliefs, and the Demand for Redistribution: Perceptions and Reality

Manja Gärtner[†]

Johanna Mollerstrom[‡]

David Seim[§]

Abstract: We match experimental survey data to administrative data in Sweden and investigate the relationship between personal (intragenerational) income mobility, luck/effort beliefs, and redistributive preferences. First, we document that Swedes underestimate their income mobility. Second, we find that while both perceived and actual past mobility are negatively correlated with demand for redistribution, the former correlation is stronger. Third, in our experiment, some respondents are treated with information that implies a positive income mobility shock. We show that this strengthens beliefs in effort, rather than luck, generating economic outcomes.

Key words: redistribution, inequality, income mobility, survey, experiment

JEL: C91, C93, D63, D81, H23

[†] DIW Berlin, Germany, and Division of Economics, Department of Management and Engineering, Linköping University, Sweden.

[‡] Department of Economics and the Interdisciplinary Center of Economic Science, George Mason University, Fairfax, VA. Research Institute for Industrial Economics (IFN), Stockholm, Sweden.

[§] Department of Economics, Stockholm University, Sweden, and CEPR.

We are grateful to the Ragnar Söderberg Foundation, the Swedish Royal Academy of Sciences, and the Lab for Economics Applications and Policy at Harvard University for financial support. For their very helpful comments and suggestions, we thank Dietmar Fehr, Mounir Karadja, Yannick Reichlin, Stefanie Stantcheva, David Strömberg, and seminar participants at the ASSA session on inequality and the demand for redistribution in Philadelphia 2018, and at the Institute of Labor Economics (IZA) in Bonn, the Directorate General for Economic and Financial Affairs, European Union, Brussels, the Center for European Economic Research, Mannheim, the WZB in Berlin and at the University of Regensburg. Declarations of interest: none.

1. Introduction

Increasing economic inequality in many developed countries has spurred a debate about redistribution of economic resources. As a result, a continuous stream of research has sought to understand why individuals and countries differ in redistributive preferences. Nevertheless, we still lack a comprehensive understanding of these differences.

In this paper, we provide novel evidence on how preferences for redistribution are formed. The laboratory is Sweden, where we collect survey and experimental data for a representative sample of the adult population. In addition, we link the survey data to administrative records at the individual level, thereby creating a rich data set that avoids issues arising from self-reported data, such as imperfect recollection. The matched data provide a fruitful setting for answering questions about the formation of redistribution preferences, beliefs about the income-generating process, and how such preferences and beliefs relate to income mobility. Our primary focus is personal (intragenerational) mobility, i.e., mobility within a given individual's life over time. Our data contain information about individuals' actual historical movements in the income distribution, as well as their perceptions of these fluctuations.

We make three contributions. First, we document that close to 80 percent of Swedes misperceive their own income mobility—predominantly in the negative direction. Approximately a quarter of the Swedes in our sample are optimists who overestimate their mobility over the past ten years. However, over half are pessimists who underestimate their actual movements in the income distribution during the same time period. Many Swedes even misestimate the direction of their personal mobility experience. One of our robustness checks indicates that this finding is not an artifact of the relatively long time span of ten years: mobility measures over a five-year window show similar misperceptions, albeit with slightly different compositions of optimists and pessimists. We also investigate whether the misperceptions stem from people contemplating

mobility within their birth cohort rather than the whole population (while we ask for the latter, it can be argued that people would still think about the former). We document that this is not the case.

Our second contribution contrasts the predictive power of perceived versus actual personal mobility. Regressing preferences for redistribution on perceived mobility delivers a point estimate three times larger than that of actual mobility. Moreover, the difference is statistically significant. This indicates that the attenuation from measurement error in self-assessed mobility is outweighed by the importance of those perceptions. We further investigate the relationship between perceived and actual personal mobility and individual beliefs about the respective importance of luck and effort for economic success (“luck/effort beliefs”). While this relationship is weaker than the relationship between mobility and redistributive preferences, we find a stronger correlation for perceived than for actual mobility.

Third, we provide causal estimates from an experiment where the treatment group is subject to an intervention that provides an instant (truthful) positive mobility shock. This treatment strengthens respondents’ beliefs in the role of effort, with the reaction driven entirely by those who already believe that effort, rather than luck, primarily drives individual economic success.

Our work relates to several strands of the literature on demand for redistribution, income mobility, and belief formation. Romer (1975) and Meltzer and Richard (1981) initiated the quest to understand how citizens form their preferences for redistribution. They suggest that relative affluence is key: richer individuals benefit less from redistribution and consequently should demand less of it. Empirical work partly supports such predictions (see e.g. Alesina and Giuliano, 2010). However, as empirical studies have accumulated, it has also become clear that the answer to why people do, or do not, support extensive redistribution is more complex. Indeed, individuals have been found to deviate from pure self-interest and care about the consumption of others (e.g. Fehr and Schmidt, 1999; Bolton and Ockenfels, 2000). Moreover, other personal characteristics

are associated with individuals' demand for redistribution through channels other than income. These include gender (e.g. Alesina and LaFerrara, 2005; Alesina and Guiliano, 2010), cognitive ability (Mollerstrom and Seim, 2014), and risk aversion (Gärtner et al., 2017). Additionally, it has been well-documented that people who believe more in the importance of effort in generating individual income are generally less supportive of redistribution (see e.g. Fong, 2001 and Lefgren et al., 2016 and references therein).

Our work is further connected to the recent literature that critically evaluates the assumption that people hold correct beliefs about key facts about society and their own position in it: Norton and Ariely (2011) show that Americans vastly underestimate the current level of inequality in society. Cruces et al. (2013), Karadja et al. (2017) and Engelhardt and Wagener (2018) document that Argentinians, Swedes and Germans, respectively, fail by a wide margin to assess their relative position in the income distribution accurately.¹ Hvidberg et al (2021) investigates relative income perceptions in the Danish population. They find that while Danes hold significant misperceptions about their exact percentile position in the income distribution, they seem well-informed about their relative rank. Kuziemko et al. (2015) consider an American sample and document extensive misinformation about inequality and economic growth. Alesina et al. (2018) consider beliefs about intergenerational mobility. They show that misperceptions about this type of mobility are widespread and that Americans are more optimistic than Europeans about intergenerational social mobility (see also Alesina et al., 2001; Alesina and Glaeser, 2004). Among these, Alesina et al. (2018) is closest to this paper, even though they focus on intergenerational (as opposed to personal) mobility and on investigating the differences across the Atlantic. Additionally, their analysis does

¹ The survey data used in this paper has been previously used in other papers to investigate distinctly different questions regarding the demand for redistribution. Karadja et al. (2017) is one of these papers, as is Mollerstrom and Seim (2014), Gärtner et al. (2017) and Gärtner et al. (2023).

not rely on administrative data. Their information treatment also presents general facts about mobility in society and not, as in our case, individualized information.²

Piketty (1995) and Benabou and Tirole (2006) study the income-generating process. They link income mobility, beliefs about the relative importance of luck and effort for individual economic success (*luck/effort beliefs*), and demand for redistribution. These two papers provide us important theoretical guidance as they suggest explanations for the existence of multiple equilibria where some individuals and countries place greater belief in the importance of effort and demand less redistribution, while others simultaneously believe in luck and demand extensive redistribution.

Piketty (1995) develops a rational-learning model in which voters vary in their views on redistributive taxation. The reason is that voters estimate the incentive costs differently. In this model, voters use their personal mobility experiences to learn about the true incentive costs of redistributive taxation, i.e., to form correct luck/effort beliefs. The voters start out sharing an abstract principle of justice that dictates that hard work, as opposed to luck, should be rewarded. Over time, as voters use their own (partly stochastic) mobility experience to learn about the relative importance of luck and effort (and transmit what they have learned to the next generation), multiple equilibria come into existence.

Benabou and Tirole (2006)'s model for understanding heterogeneous preferences for redistribution instead focuses on collective beliefs and motivated cognitions. In contrast to Piketty, they allow for the possibility that individuals maintain and transfer luck/effort beliefs for strategic

² Cohn et al. (2021) are primarily interested in understanding the redistributive preferences for the top 5% of the US income distribution. Their work is, however, interesting also in the light of our focus on intragenerational mobility, as they find personal experience of social mobility to be a key driver of the gap in inequality acceptance between individuals who have acquired wealth over their lifetime and those who were born into wealth. See Haaland et al. (2023) and Marino et al. (2023) for overviews of information provision experiments in economics, and Belingieri et al. (2023) for recent evidence of relative income misperceptions in the 27 EU countries.

reasons. A key ingredient in this model is imperfect willpower, which leads individuals to strive to motivate themselves, and their children, toward exercising more effort. Here, maintaining overly optimistic beliefs about the payoff of effort can be valuable. This is particularly true if enough people hold this view and they are a pivotal voting bloc – this is the “American equilibrium,” characterized by a belief in effort and a relatively laissez-faire public policy. In contrast, the “European equilibrium” features strong beliefs in the importance of luck and in a more extensive welfare state.

Piketty (1995) and Benabou and Tirole (2006) aim to understand cross-country differences. This we cannot do, as our data only represent one country. However, our rich microdata allow us to test other central assumptions and results from these two papers. Our first finding—that Swedes systematically misestimate their own personal past income mobility—implies that the assumption that individuals correctly assess their mobility from true experiences does not always hold empirically.

The second finding—a correlation between income mobility on the one hand and redistributive preferences and luck/effort beliefs on the other hand—is in line with Piketty’s model, which predicts a negative relationship between mobility experience and both redistributive preferences and the belief in luck. Our third finding from the information experiment tends to indicate that the link between mobility and luck/effort beliefs is at least partly causal. This indicates that people do seem to use information about their own income mobility to shape luck/effort beliefs, as Piketty (1995) suggests. Moreover, we find that the information primarily affects those who already believed, prior to the receiving the information treatment, that the primary driver of economic success is effort rather than luck, which also aligns with the Piketty’s (1995) predictions.

The remainder of the paper is organized as follows. Section 2 introduces our empirical strategy and our data set, and Section 3 presents our results. Section 4 concludes.

2. Data

In collaboration with Statistics Sweden, we sent a survey to a representative sample of the Swedish population aged 18 and above.³ The survey was sent to $N = 4,500$ people and 1,565 people responded. While the survey was sent to a representative sample of the population, the distribution of respondents is not random (older respondents are, for example, overrepresented). However, all results presented here are robust to reweighting observations to match the population (the weighted analysis is available in Online Appendix B). The survey was sent by mail in May 2011, and up to three reminders were sent to non-respondents. The fact that the survey was filled out at home, with no interviewer present, alliviates the potential concern of social desirability bias impacting responses.

For our analysis, we impose two sets of sample restrictions. In the first set of restrictions, we exclude 281 respondents who failed to answer all questions needed for the analysis. In the second set of restrictions, we follow the praxis in the income mobility literature and focus on the working-age population. This implies excluding those who had retired, i.e., were 65 years or older at the time of the survey (304 respondents), and those who were younger than 18 at the beginning of the mobility time span that we consider, i.e., ten years before the survey (228 people). We employ both sample restrictions in the analysis (see also Table A1 in Appendix A). However, for the causal test in Section 4.3 we employ only the first sample restriction to avoid discarding data in this smaller sample (results are robust to using both restrictions as shown in Appendix C).

The survey responses are matched to administrative data from the Swedish Income and Tax register and the Swedish longitudinal integration database for health insurance and labor market

³ All materials and methods for data collection were approved by the Harvard University Committee on the Use of Human Subjects (#F – 21619-101) All survey instruments are available in Online Appendix F.

studies (LISA), all at the individual level. Summary Statistics are presented in Table A2 in the Online Appendix.

3.1 Key variables

We measure **demand for redistribution** as the answer to the question “How much economic redistribution do you want in society?” on a 10-point scale from “No redistribution” to “Full redistribution. On average, the individuals in our sample rate their demand for redistribution at 5.17 ($SD=2.29$; when only imposing the first set of sample restrictions we have $M=5.20$, $SD=2.34$). For the analysis, we standardize the variable to have mean zero and standard deviation one.

We use the following question to measure individuals’ beliefs about **luck/effort beliefs**: “Is it mostly effort or luck that matters for how well an individual does economically in life?” Answers were given on a scale from 1 (only luck) to 10 (only effort). On average, individuals believe that economic success is based more on effort than on luck ($M=6.40$, $SD=1.71$; when only imposing the first set of sample restrictions we have $M=6.45$, $SD=1.75$).⁴

We measure **income mobility** as the change in an individual’s income rank in the population over a certain number of years. In the main analysis, we investigate mobility over a ten-year horizon. (We use the analysis of mobility during the last five years as a robustness check, see Online Appendix D.) Income is defined as the individual’s annual taxable income and is retrieved from administrative records. When asking the respondents questions related to their income, we made clear that we are referring to taxable income, and reminded respondents about its definition. For example, some benefits (among them unemployment insurance payments and the basic pension)

⁴ When we state that a respondent is «primarily believing in luck» («primarily believing in effort»), it means that they answered the luck/effort question with a number 1-5 (6-10).

are taxable in Sweden, and such benefits are hence included in the taxable income, whereas non-taxable benefits are excluded.

In the survey, we ask respondents to state their perceived percentile location in the income distribution for the calendar year immediately before the survey. Individuals also indicate beliefs about their decile position in the income distribution at the time of the survey (t), five years before ($t-5$) and ten years before ($t-10$). We define perceived income mobility as the difference between one's current percentile position and the mid-point of the decile position five and ten years ago, respectively (note that this mobility measure is signed, so that a positive sign indicates upward mobility and a negative sign indicates downward mobility).

We use administrative records to observe the respondents' annual taxable income history. Using these, we measure the actual location (percentile or decile) of each individual at these points in time (t , $t-5$ and $t-10$). To create a basis for comparison for the mobility of our sample, we start by considering the actual number of percentiles that all Swedes (i.e., not only the survey respondents) aged 28-64 years old in 2010, moved along the income distribution of the adult Swedish population in the last ten years ($N = 4,202,882$). On average, these individuals moved up by 8.89 percentage points during the last ten years (in the full adult-population average mobility is zero by construction, but the working-age population are generally moving up the ranks as they age). Individuals in our sample (employing both sets of restrictions to focus on the working-age population) also moved up during the last ten years, but significantly more so on average than the total population ($M=15.81$, $SD=31.90$; $t=7.636$, $p<0.001$ when comparing with $M=8.89$). Employing population weights (age, gender, income, and geographical region) makes the distribution of mobility in our sample more similar to the population distribution ($M=12.62$,

$SD=28.72$, one-sided Kolmogorov-Smirnov test on whether sample is drawn from the population distribution: $D=0.128$, $p<0.001$).⁵

In designing the survey, we faced the decision of whether to focus on income mobility within the adult population (adult-population-ranks) or within those of the same, or similar, age (within-cohort ranks). We chose the former, as this is arguably more relevant measure for attitudes towards income redistribution (as such redistribution takes place within the entire society, not just within a particular cohort). However, our results are robust to controlling for age fixed-effects. As a robustness check, we also estimate our main equations under the assumption that individuals mistakenly respond to our questions about their positions in the income distribution of the population with their position in the income distribution of their age cohort. We show that none of our results seem driven by respondents making this mistake. In particular, it does not appear that the large misperceptions about one's income mobility are due to respondents confusing mobility in the population with mobility within their cohort (see Online Appendix B).⁶

4. Results

4.1 Assessing own income mobility

As discussed in the Introduction, the literature on preferences for redistribution generally assumes that people have correct information and perceptions of the key facts used in the formation of redistributive preferences. Individuals are modeled as assessing their own mobility and then using

⁵ Figures A1-A4 in Online Appendix A illustrate the full distribution of answers to the questions discussed in this section. Figure A5 provides a check for the percentile mobility measure by showing a close correlation with the individuals' perceived location in the decile measure.

⁶ In addition, mobility measures are difficult to interpret when one or more of the income variables take the value zero. However, in our sample this is not a big concern. In our working population sample, only 4.25 (0.44) percent have no income in at least one (all) of the three years and all results are robust to excluding these respondents (c.f. Appendix C).

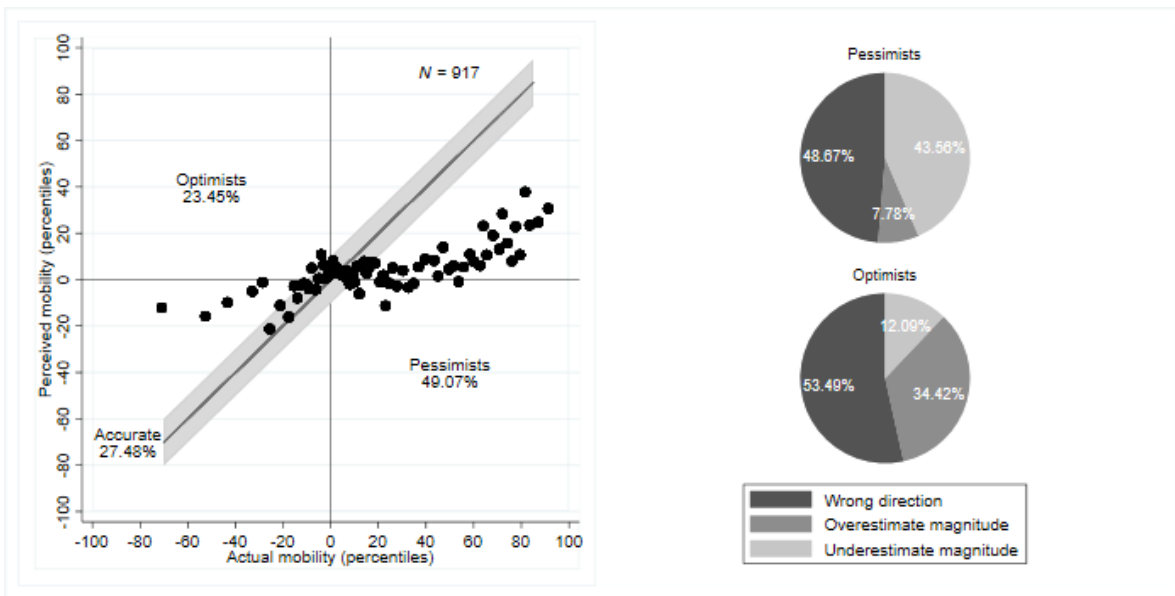
this knowledge to form luck/effort beliefs (which, in turn, influence preferences for redistribution). Here, we investigate if the assumption about correct perceptions holds empirically.

The left panel of Figure 1 shows the relationship between perceived and actual mobility in the population income distribution non-parametrically. We divide actual income rank mobility in our sample into equally-sized bins and plot average perceived mobility against average actual mobility within each bin. We see that perceived and actual mobility are positively correlated ($\beta=0.322$, $p<0.001$, using standardized measures). On average, however, individuals significantly underestimate their mobility over the last ten years by more than one decile (3.77 percentiles ($SD = 20.92$) vs. 16.62 percentiles ($SD = 32.12$), $t=-12.082$, $p<0.001$).⁷ We divide (mis)perceptions of income rank mobility into three groups: *accurate*, *pessimistic* or *optimistic*. We define an individual as being accurate if they misestimated their mobility by less than ten percentiles in either direction; meanwhile, a pessimist underestimates their actual upward mobility or overestimates their downward mobility, and an optimist overestimates their upward mobility or underestimates their downward mobility.⁸ The pessimists constitute the largest group by a wide margin.

⁷ Mean true mobility estimates reported here differ slightly from those reported in Section 3. There, we estimate actual mobility in percentiles from administrative data, while we here compare actual mobility to perceived mobility, for which we know only the perceived income decile (but not the percentile) ten years ago. To ensure comparability we therefore use here the mid-point of the actual income decile ten years ago when estimating actual income mobility.

⁸ Increasing (decreasing) the interval in which an individual is considered to have accurate mobility beliefs by definition lowers (raises) the share of individuals that are categorized as being mistaken. Figure A6 in Online Appendix A shows that the patterns we observe are robust to defining accuracy as misestimation of mobility by less than five and less than 20 percent in either direction, respectively.

Figure 1: Accuracy of beliefs about income mobility



Notes: Left: Due to ties in the data, the actual income mobility in 2010 individuals can be assigned to a maximum of 74 unique bins. Pessimists (optimists) can be found in the area below (above) the accurate region. Right: Wrong direction – Pessimists believe they have moved down (not moved) while they actually did not move or moved up (moved up); Optimists believe they have moved up (not moved) while they actually did not move or moved down (moved down). Overestimate magnitude – Individuals correctly predict the direction of mobility but believe they have moved more percentiles. Underestimate magnitude – Individuals correctly predict direction of mobility but believe they have moved fewer percentiles.

About a quarter (27.48 percent) of individuals accurately estimate their mobility in the last ten years (on average they believe that they moved up 3.19 percentiles, while they actually moved up 2.95 percentiles, $t=0.692$, $p=0.490$). About half of individuals (49.07 percent) are pessimists, and on average believe they have moved down, while they actually moved up (-1.60 vs. 37.24, $t=-39.393$, $p<0.001$). The remaining quarter (23.45 percent) are optimists. They believe, on average, that they moved up, while they actually moved down (15.69 vs. -10.53, $t=21.156$, $p<0.001$).⁹

The pie charts to the right in Figure 1 depict the type of errors made. About half of individuals who misperceive their own mobility are mistaken about the direction of their movement (48.67 percent of pessimists and 53.49 percent of optimists; in being mistaken about the direction, we

⁹ We find no significant difference in the share of accurate predictions across the five-year and the ten-year mobility horizon. However, we find slightly different compositions of pessimists and optimists in the five- and ten-year mobility horizons. See Appendix D for details.

include those who believe that they have moved even though they have not, and vice versa). We find that a majority of pessimists who judge the direction of their mobility correctly underestimate their upward mobility (as opposed to overestimating downward mobility). On average, they believe they have moved up 18.40 percentiles, while they actually moved up 58.31 percentiles ($t=-31.334$, $p<0.001$, $n=196$). In contrast, the majority of optimists who judge the direction of their mobility correctly overestimate the magnitude of their mobility: They believe they have moved up 25.58 percentiles on average, while they actually moved up 6.45 percentiles ($t=17.530$, $p<0.001$, $n=74$).

Another way to investigate individual misperceptions of income rank mobility is to break them down into wrong assessments of the current or the historic income rank, or a combination of both. Similarly, an accurate mobility evaluation could represent biased beliefs about both the current and historical location. We decompose the mobility results into misestimations of the current and the previous position in the income distribution. We find that, on average, individuals significantly underestimate their position in the income distribution over both horizons. They are, however, somewhat better at assessing their position ten years before the survey than they are at assessing their current position (ten years ago: 40.38 vs. 47.55, $t=-7.056$, $p<0.001$, current position: 44.15 vs. 64.17, $t=-27.672$, $p<0.001$. The difference in difference is statistically significant, $\beta=-12.845$, $SE=1.054$, $p<0.001$).¹⁰

To summarize, we conclude that Swedes seem unable to correctly estimate their personal mobility, indicating that assuming this can potentially lead models astray. Further, the errors (at least among the Swedes) are biased towards underestimating the magnitude of mobility in general, and towards being more pessimistic than actual mobility warrants.¹¹

¹⁰ In Online Appendix E, we explore heterogeneity in mobility assessments. Our results show no robustly significant differences in how well individuals assess their mobility across gender, age or educational levels. Figures A7-A8 in Online Appendix A illustrates graphically the overall distributions of perceived and actual income mobility.

¹¹ In Online Appendix B, we show that our results are robust to using a smoothed measure of actual mobility (i.e., where income is averaged over multiple years for both the start and the end of the interval over which mobility is

4.2. The correlations between income mobility, luck/effort beliefs and redistributive preferences

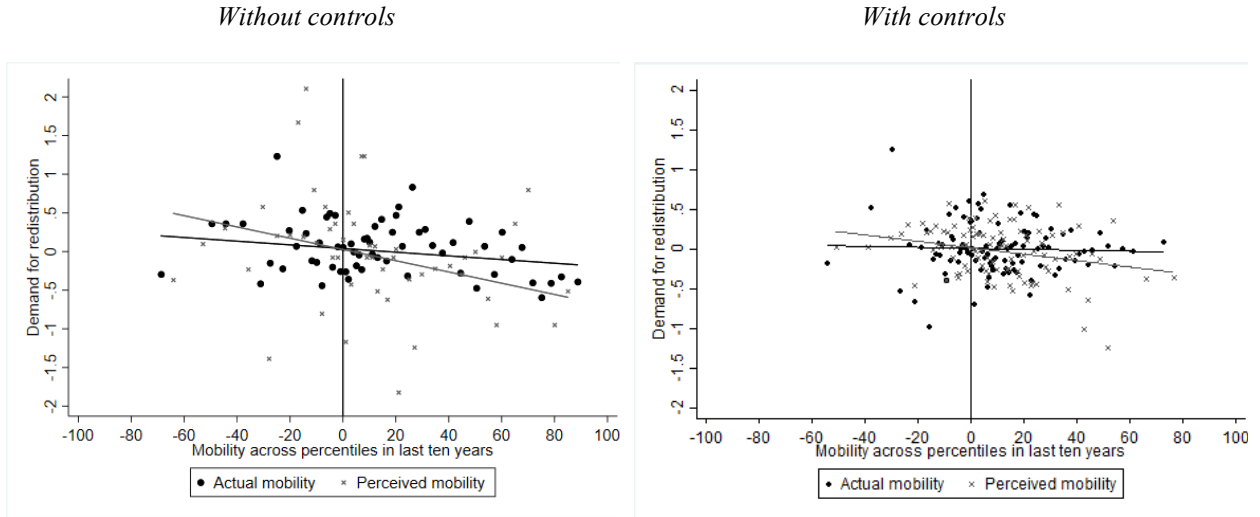
We next use our data to investigate to what extent our data exhibit correlations that are in line with individuals using their income mobility to form luck/effort beliefs that are as accurate as possible, and then utilizing these beliefs in forming their redistributive preferences.

Figure 2A plots the average demand for redistribution for equal-sized bins of income mobility experience against demand for redistribution. A higher income mobility in the past ten years (both perceived and actual) is associated with a lower demand for redistribution. The correlation coefficient for perceived mobility ($\beta=-0.0073$, $p<0.001$) without controls is about three times larger than the one for actual mobility ($\beta=-0.0024$, $p=0.026$). The difference between the coefficients is significant ($p=0.003$), indicating that the correlation is indeed significantly stronger for perceived than for actual mobility. Accordingly, moving up one standard deviation in perceived (actual) income mobility, decreases the demand for redistribution by about 15 percent (eight percent) of a standard deviation in that variable. This effect size is comparable to that of our effort/luck-beliefs (about 14 percent reported in Table 1, Column 4) and risk aversion (Gärtner et al. 2017 report seven percent) on the demand for redistribution in our data, and previously reported effects of income and education on the demand for redistribution (for example, Alesina and Guiliano 2010 report ten percent and 13 percent, respectively). Table 1 (specifications (1)-(3)) shows that this result is robust, and even stronger, when adding controls.

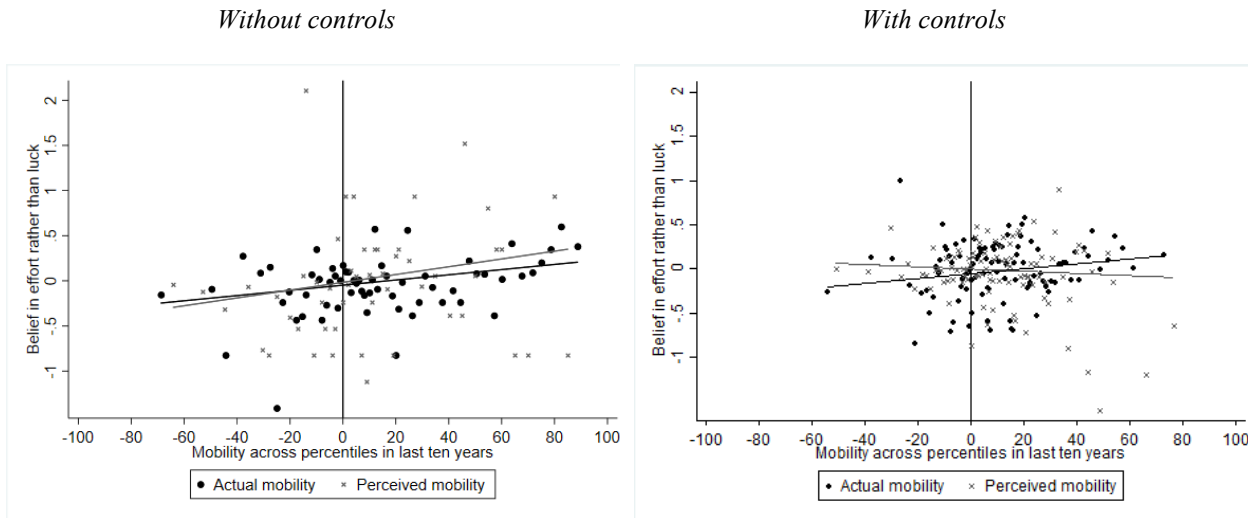
measured). It can be hypothesized that the natural variation in people's annual income may mean that perceived mobility is a less accurate predictor of actual mobility than if a smoothed actual mobility measure is used; however, in this part of the Online Appendix we show that this is not the case. We thus conclude that our main results regarding perceptions of mobility, e.g., the large share of people holding pessimistic views, does not seem to be due to the non-smoothed measure of actual mobility used as our main specification.

Figure 2: Perceived and actual income mobility and their relation to demand for redistribution and beliefs about the role of luck and effort

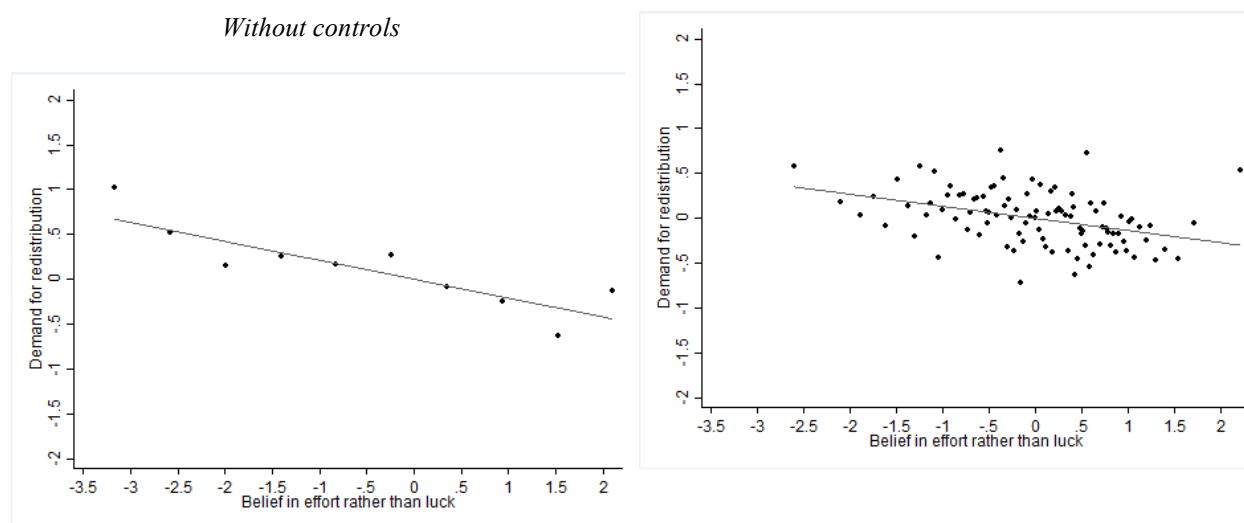
A: Mobility and demand for redistribution



B: Mobility and luck/effort beliefs



C: Luck/effort beliefs and demand for redistribution



Notes: The graphs depict equal size bins and regression lines. All regressions with controls include standard control variables, i.e., gender, age, marital status, number of children in household, education levels, unemployment, fixed effects for actual income percentiles today, fixed effects for perceived income percentiles today and fixed effects for wealth quantiles. The graphs depict the maximum number of distinct, equal size bins, which are created after residualizing the variable for demand for redistribution and the variable for luck/effort beliefs with the given set of control variables, and regression lines.

Turning to the relationship between income mobility and luck/effort beliefs in Figure 2B, we see that the relationship without controls is significantly positive for both perceived and actual mobility ($\beta=0.0043$, $p=0.014$ and $\beta=0.0029$, $p=0.004$, respectively), i.e., higher income mobility is associated with a stronger belief in the importance of effort. But while the correlation coefficient for perceived mobility is 50% larger than the correlation coefficient for actual mobility, the difference is not significant ($p=0.409$).¹² In fact, the correlation between perceived mobility and luck/effort beliefs is zero when controls are added ($\beta=-0.0022$, $p=0.408$; actual mobility: $\beta=0.0036$, $p=0.030$).

Finally, Figure 2C shows the expected negative relationship between belief in effort (rather than luck) and the demand for redistribution, both without controls ($\beta=-0.211$, $p<0.001$) and with

¹² Additional results, including the regressions with interaction terms, are available in the Appendix Part B. Note also that our data confirm what has been documented by others, namely that there is a negative correlation between beliefs in effort and the demand for redistribution (specification 4 of Table 1).

controls ($\beta=-0.135$, $p=0.001$). We conclude that there is indeed an association between income mobility on the one hand and demand for redistribution and luck/effort beliefs on the other hand (with some evidence that, for the relationship between mobility and the demand for redistribution, the relationship is stronger for perceived than for actual mobility). This follows the predictions made in, for example, Piketty (1995), but is the mechanism the one outlined there? If people do indeed use their income mobility to update their luck/effort beliefs, and in turn use these beliefs to form opinions on redistribution, we would expect luck/effort beliefs to mediate the effect of mobility on demand for redistribution. Table 1 shows the changes in the effects of mobility experience on the demand for redistribution when additionally controlling for luck/effort-beliefs. We find that including luck/effort-beliefs in Column (5) further decreases the already small effect of actual mobility on the demand for redistribution ($X^2=4.38$, $p=0.036$). The effect of perceived mobility experience on the demand for redistribution does not decrease and is not significantly affected by including a control for luck/effort-beliefs (comparing Columns (2) and (6), $X^2=0.80$, $p=0.370$). We also find no significant effects of including mobility experience on the effect of luck/effort-beliefs on the demand for redistribution (Columns (4) and (7): $X^2=0.79$, $p=0.375$). We thus conclude that luck/effort beliefs does not seem to mediate the effects of mobility experience on the demand for redistribution.

Table 1: Mediation analysis

<i>Dependent variable: Demand for redistribution (standardized)</i>							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Actual percentiles moved	-0.000827 (0.00174)		-0.000121 (0.00176)		-0.000330 (0.00173)		0.000439 (0.00175)
Perception of percentiles moved		-0.00701*** (0.00249)	-0.00698*** (0.00252)			-0.00731*** (0.00242)	-0.00741*** (0.00246)
Belief in effort rather than luck (standardized)				-0.135*** (0.0405)	-0.134*** (0.0406)	-0.139*** (0.0404)	-0.140*** (0.0404)
Standard controls incl.	yes	yes	yes	yes	yes	yes	yes
Constant	-0.253 (0.573)	-0.279 (0.553)	-0.269 (0.572)	-0.376 (0.567)	-0.346 (0.586)	-0.327 (0.563)	-0.366 (0.583)
Observations	900	900	900	900	900	900	900
<i>Adj. R</i> ²	0.055	0.066	0.065	0.072	0.071	0.084	0.082

Notes: OLS regressions. Robust standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Demand for redistribution is standardized to take mean zero and standard deviation one. Standard control variables include gender, age, marital status, number of children in household, education levels, unemployment, fixed effects for actual income percentiles today, fixed effects for perceived income percentiles today and fixed effects for wealth quantiles.

4.3 The causal link between income mobility and luck/effort beliefs

Three months after the first survey, a second survey was sent to all individuals who replied to the first. Individuals were randomly assigned to a treatment that revealed their true current position in the income distribution (individuals in the control group received no information, and were not aware that other respondents were shown information). 1,231 individuals answered the second survey and 49.47% of them were in the treatment group. After excluding individuals whose self-reported income deviates from their actual annual income, we end up with 883 individuals who participated in both surveys.¹³ This second survey was shorter than the first, but key questions about demand for redistribution and luck/effort beliefs were asked again.¹⁴

¹³ See Table A1 for our first set of sample restrictions. Additionally, we omitted subjects with a missing values for the demand for redistribution and luck/effort-beliefs in the second survey.

¹⁴ All instruments used in the second survey can be found in Online Appendix F.

In Karadja et al. (2017), data from the second survey are used to answer a different, but related, question about perceived relative income rank and demand for redistribution. We follow the procedures outlined there, and in Cruces et al. (2015), and focus on individuals who underestimate their current rank by more than ten percentiles ($n=744$, or 87.66 percent of people in this sample underestimate their income rank by at least 1 percentile and $n = 632$ or 71.57 percent by more than ten percentiles). We take individuals' beliefs about their past income rank as given (these were elicited in the first survey) and utilize the fact that individuals who learn that their current income rank is higher than they previously thought are exposed to an instant positive income mobility shock. Our objective is to understand if mobility causally impact luck/effort beliefs, and this treatment allows us to do so.

We perform a series of balance tests comparing variable means in the first survey across the treatment and control groups. Importantly, there is no statistically significant difference in the luck/effort-variable elicited in the first survey across treatments among the individuals in our sample (untreated vs. treated: 6.57 vs. 6.46, $t=0.753$, $p=0.452$, $n=632$). There is also no significant difference in actual and perceived mobility experience in the last ten years across treatments (actual: 15.89 vs. 16.27, $t=-0.158$, $p=0.875$; perceived: 1.21 vs. 1.65, $t=-0.282$, $p=0.778$). On average, individuals in the information treatment learn that their position in the income distribution is 25.59 percentiles higher than they thought in the first survey ($SD = 9.45$, $Min = 11$, $Max = 66$). Given that these individuals believe they have moved 1.65 percentiles during the last ten years on average, the treatment magnitude is substantial.

We next analyze how respondents change their luck/effort beliefs between the first and the second survey. Comparing the difference across treatment groups, we find that the information treatment has an effect in the expected direction (untreated vs. treated: -0.21 vs. 0.09, $t=-1.952$.

$p=0.051$), i.e. the information treatment causes an increase in the view that effort determines economic success.¹⁵

We would expect individuals to react differently to experiencing positive mobility, depending on the beliefs they already hold about the respective role of luck and effort. More specifically, as discussed by Piketty (1995), we would expect a confirmatory bias, in the sense that those who primarily believe in effort before treatment should strengthen their beliefs about the role of effort, while luck-believers should not necessarily be affected. We investigate this by splitting the sample according to individuals' pre-treatment beliefs luck or effort being the primary driver of individual economic success. Among those who believe primarily in effort, the treatment has a significant and positive effect on the change in the luck/effort variable (-0.78 vs. -0.39, $t=-2.493$, $p=0.013$). Meanwhile, it has no effect on those who believe primarily in luck (1.06 vs. 1.12, $t=-0.210$, $p=0.834$). Results are robust to using both sample restrictions (i.e., looking only at the working-age population) as shown in Appendix C.

We also perform a mediation analysis similar to the one conducted in Table 1 for the experimental data. This can be found in Table A3 in Online Appendix A. As in Table 1, we find no evidence of luck/effort beliefs mediating a change in redistributive preferences.

We conclude that there is a causal relationship between our information treatment that causes an instant positive income mobility shock on the one hand, and luck/effort beliefs on the other, and that the treatment effect is driven by those who primarily believe in effort pre-treatment.

¹⁵ There is no significant effect of the treatment among those who overestimate their income rank by more than ten percentiles on changes in the luck/effort-score which is unsurprising given the small number of observations (44 subjects overestimated by more than ten percentiles, untreated vs. treated: 0.60 vs. 0.33, $t=0.385$, $p=0.702$). There is also no significant effect for those who accurately estimated their position in the income distribution (207 subjects estimated income rank correctly within an interval of +/- 10 percentiles, untreated vs. treated: -0.16 vs. -0.21, $t=0.222$, $p=0.825$).

5. Conclusions

We use experimental survey data from Sweden, linked to administrative data, to investigate the relationship between income mobility, luck/effort beliefs and demand for redistribution.

First, we use data on individuals' actual and perceived movements in the income distribution to document that misperceptions of income mobility are widespread. The average Swede in our sample has moved up in the ranks, but underestimates this experience.

Second, we find that perceptions matter more than reality. Namely, while both measures of income mobility (perceived and actual) are correlated with individual luck/effort beliefs and with redistributive preferences, perceived mobility seems more predictive than actual mobility.

Third, we conduct an experiment where a randomly selected treatment group receives information, providing a (truthful) instant positive income mobility shock. The treatment group reacts to this shock by strengthening their beliefs in the role of effort. This reaction is driven by those who, prior to treatment, already believed primarily in effort.

To summarize, mobility misperceptions are common and impact the demand for redistribution. This implies that political outcomes could be different if beliefs were correct. Also, given the strong asymmetry of misperceptions and the heterogeneity in behavioral responses to information, it appears that the gains from overcoming biases in beliefs are not symmetric across the political landscape. Such asymmetries are important to account for when attempting to understand the potential consequences of correcting for informational frictions.

References

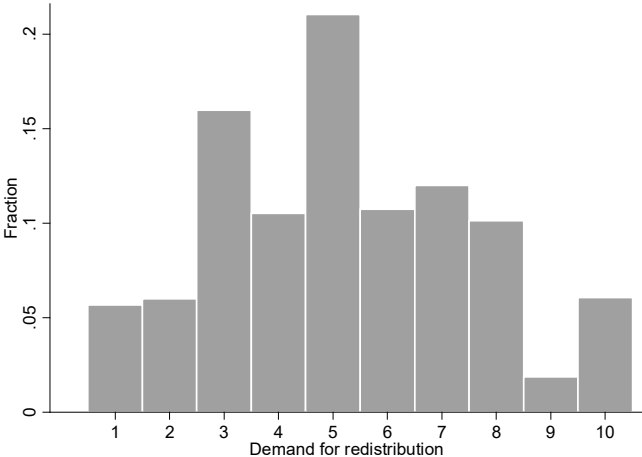
- Alesina, Alberto, and Edward L. Glaeser. 2004. "Fighting Poverty in the US and Europe: A World of Difference." Rodolfo DeBenedetti Lectures. Oxford and New York: *Oxford University Press*.
- Alesina, Alberto, and George-Marios Angeletos. 2005. "Fairness and redistribution." *The American Economic Review*, 95(4):960–980.
- Alesina, Alberto, Edward Glaeser and Bruce Sacerdote. 2001. "Why Doesn't the United States Have a European-Style Welfare State?" *Brookings Paper on Economics Activity* (Fall 2001): 187-278.
- Alesina, Alberto and Eliana La Ferrara. 2005. "Preferences For Redistribution In The Land Of Opportunities," *Journal of Public Economics*, 2005, v89(5-6,Jun), 897-931.
- Alesina, Alberto, and Paola Giuliano. 2010. "The Power of the Family." *Journal of Economic Growth* 15: 93-125.
- Alesina, Alberto, Stefanie Stantcheva, and Edoardo Teso. 2018. "Intergenerational Mobility and Preferences for Redistribution." *American Economic Review*, 108 (2): 521-54.
- Benabou, Roland, and Jean Tirole. 2006. "Belief in a just world and redistributive politics." *The Quarterly Journal of Economics*, 121(2):699–746.
- Berlingieri, F., B. d'Hombres, C. Mauri, J. Mollerstrom, E. Stepanova. Income position bias: New evidence from the EU. Mimeo, George Mason University, 2023
- Bolton, Gary E, and Axel Ockenfels. 2000. "ERC: A Theory of Equity, Reciprocity, and Competition." *The American Economic Review* 90, no. 1 (2000): 166-93.
- Cohn, Alain, Lasse J. Jessen, Marko Klasnja, and Paul Smeets (2021). Why Do the Rich Oppose Redistribution? An Experiment with America's Top 5% (June 16, 2021). SSRN Working paper 3395213.

- Cruces, Guillermo, Perez-Truglia, Ricardo and Martín Tetaz. 2013. "Biased perceptions of income distribution and preferences for redistribution: Evidence from a survey experiment." *Journal of Public Economics*. 98. 100-112.
- C. Engelhardt and A. Wagener. What do Germans think and know about income inequality? A survey experiment. *Socio-Economic Review*, 16(4):743–767, 2018.
- Fehr, Ernst and Klaus M. Schmidt. 1999. "A Theory of Fairness, Competition, and Cooperation". *The Quarterly Journal of Economics*, 114, issue 3, p. 817-868.
- Fong, Christina. 2001. "Social preferences, self-interest, and the demand for redistribution". *Journal of Public Economics*, 2001, vol. 82, issue 2, 225-246.
- Gärtner, Manja, Johanna Mollerstrom, and David Seim. 2017. "Individual risk preferences and the demand for redistribution." *Journal of Public Economics*, Elsevier, vol. 153(C), pages 49-55.
- Gärtner, Manja, Johanna Mollerstrom, and David Seim. 2023. "Intergenerational Transmission of Luck versus Effort Beliefs." *Economics Letters* (in press).
- Haaland, I, C. Roth, and J. Wohlfart. Designing information provision experiments. *Journal of Economic Literature*, 61(1): 3-40, 2023.
- Hvidberg, Kristoffer B, Claus Kreiner, and Stefanie Stantcheva. 2021. Social Position and Fairness Views. NBER, working paper 28099.
- Karadja, Mounir, Johanna Mollerstrom, and David Seim. 2017. "Richer (and Holier) Than Thou? The Effect of Relative Income Improvements on Demand for Redistribution". *The Review of Economics and Statistics*, 99, issue 2, p. 201-212.
- Kuziemko, Ilyana, Michael I. Norton, Emmanuel Saez, and Stefanie Stantcheva. 2015. "How Elastic Are Preferences for Redistribution? Evidence from Randomized Survey Experiments." *American Economic Review*, 105 (4): 1478-1508.

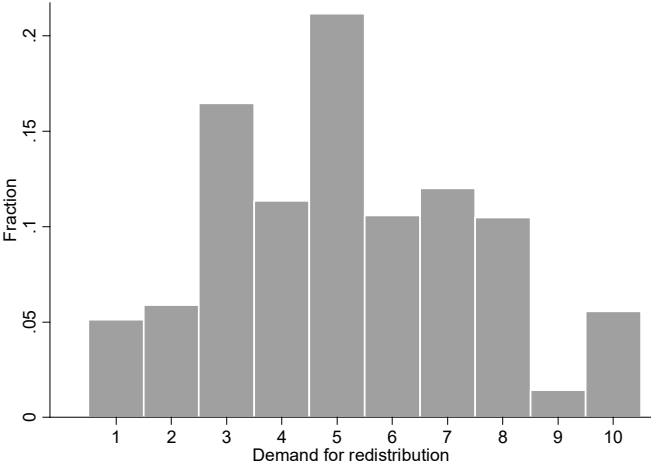
- Lefgren, Lars J, David P. Sims, and Olga B. Stoddard. 2016. "Effort, luck, and voting for redistribution." *Journal of Public Economics*, 143: 89-97.
- Marino, Maria, Roberto Iacono, Johanna Mollerstrom. 2023. "(Mis-)Perceptions, Information, and Political Polarization." III Working Paper (90). International Inequalities Institute, London School of Economics and Political Science, London, UK.
- Meltzer, Allan H., and Scott F. Richard. 1981. "A Rational Theory of the Size of Government." *Journal of Political Economy* 89, no. 5 (1981): 914-27.
- Mollerstrom, Johanna, and David Seim. 2014. "Cognitive Ability and the Demand for Redistribution". *PLOS ONE* 9(10): e109955. <https://doi.org/10.1371/journal.pone.0109955>.
- Norton, Michael I., and Dan Ariely. 2011. "Building a Better America—One Wealth Quintile at a Time." *Perspectives on Psychological Science* 6, no. 1 (January 2011): 9–12.
- Piketty, Thomas. 1995. "Social mobility and redistributive politics." *The Quarterly Journal of Economics*, 110(3):551–584.
- Romer, Thomas. 1975. "Individual welfare, majority voting, and the properties of a linear income tax". *Journal of Public Economics*, 1975, vol. 4, issue 2, 163-185.

Online Appendix A: Additional Analysis

Figure A1: Demand for redistribution measure
a. All data (Sample restrictions I, $N = 1,284$)

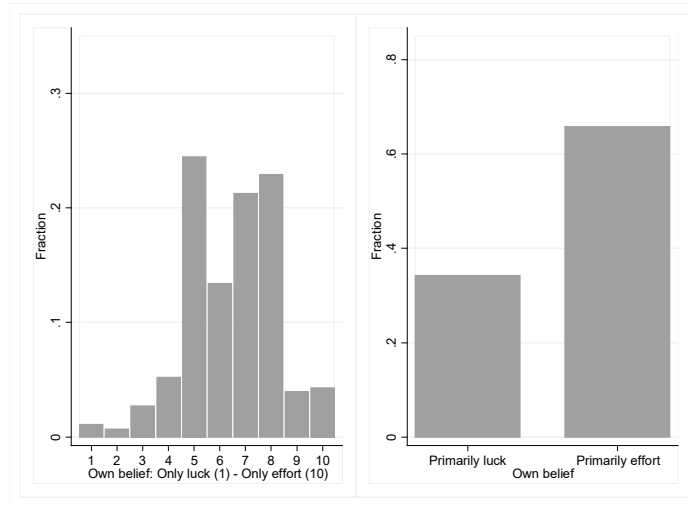


b. Working-age population (Sample restrictions I + II, $N = 917$)



Notes: Demand for redistribution is measured on a scale from 1 «No redistribution» to 10 «Full redistribution».

Figure A2: Distributions of measures of beliefs about whether effort or luck determine economic success
 a. All data (Sample restrictions I, $N = 1,284$)



b. Working-age population (Sample restrictions I + II, $N = 917$)

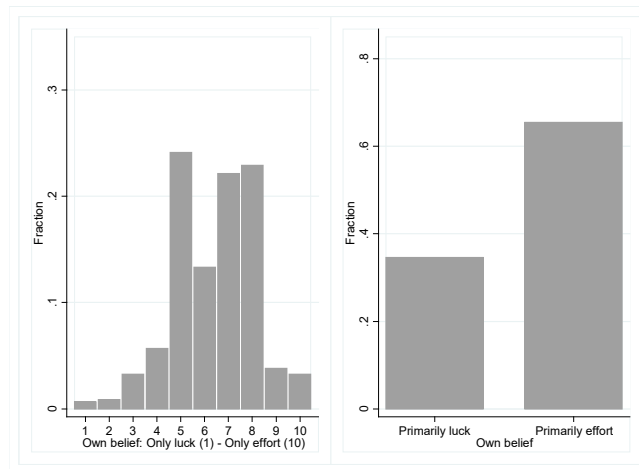


Figure A3: Distribution of actual and perceived position in income distribution (sample restrictions I + II)

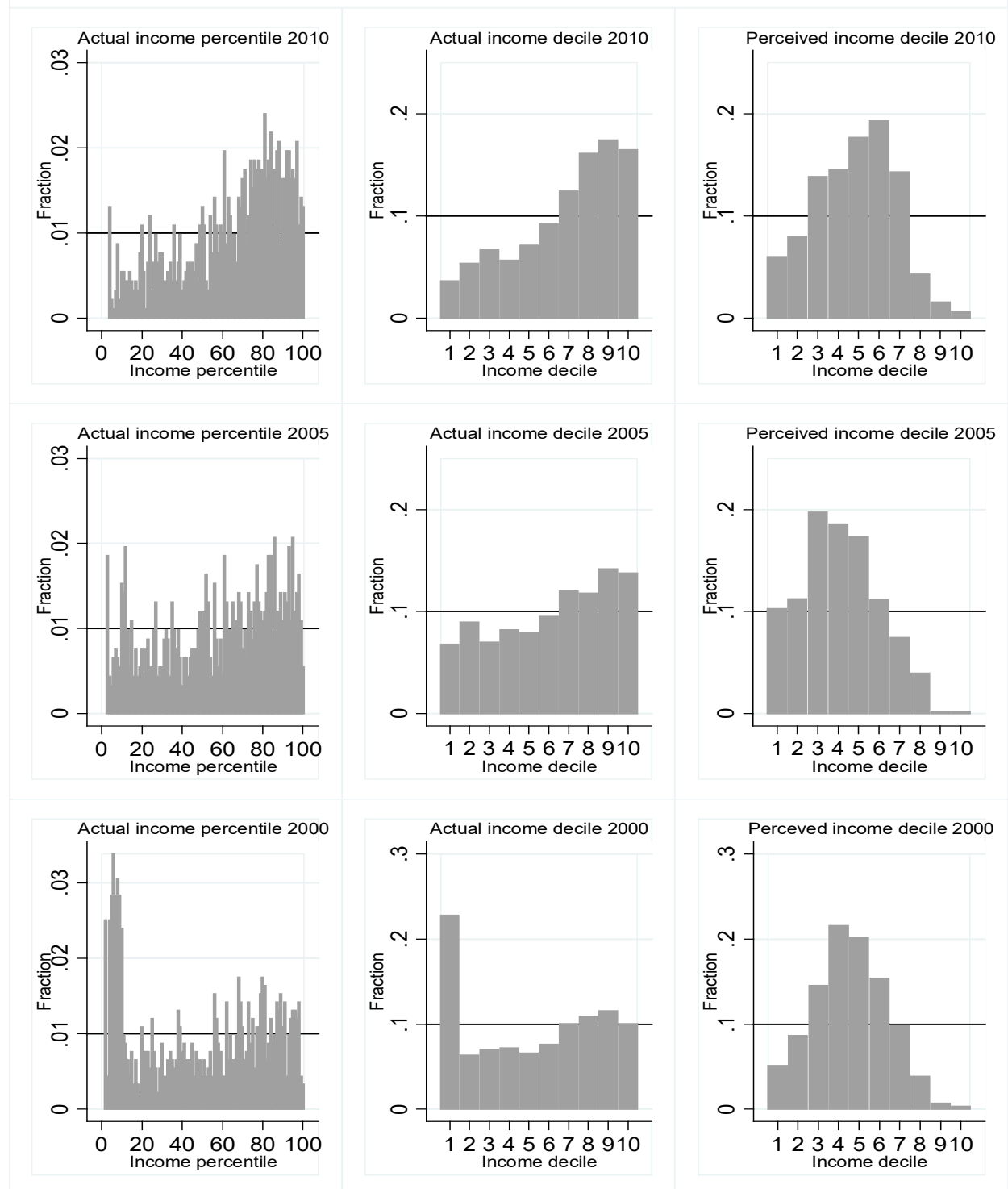
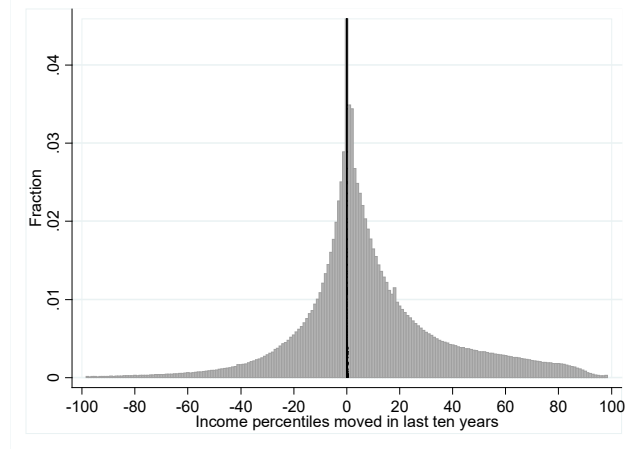
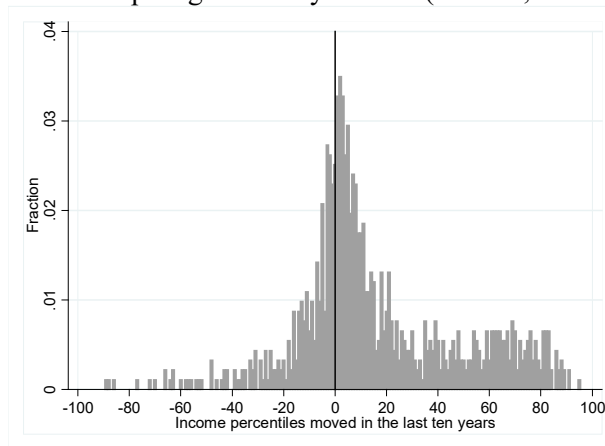


Figure A4: Income mobility in past ten years

a. Population ages 28-64 years old (in 2010, $N = 4,202,882$)



b. Sample ages 28-64 years old (in 2010, $N = 917$)



c. Sample with population weights

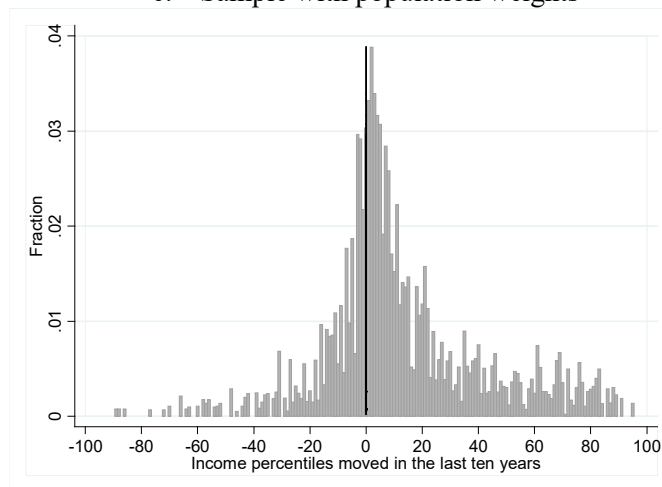


Figure A5: Measures of perceived position in income distribution in deciles and percentiles ($\beta = 8.307, p < 0.001, N = 917$)

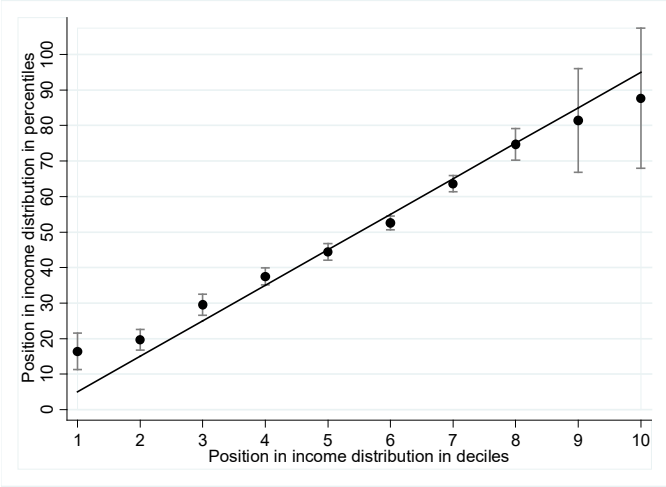
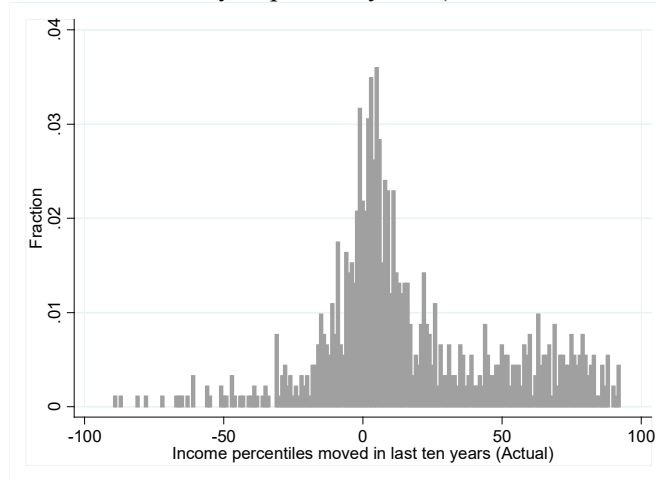
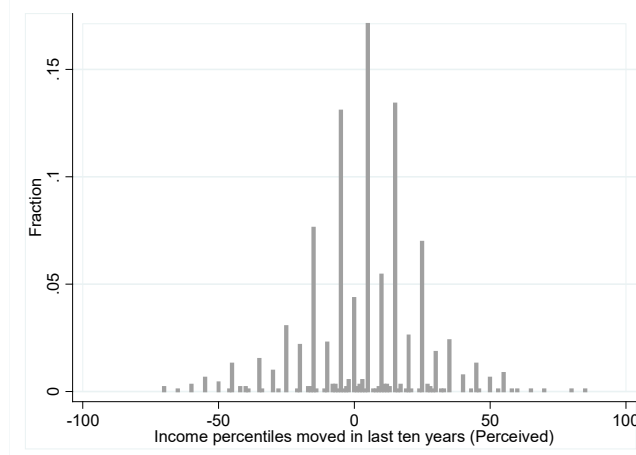


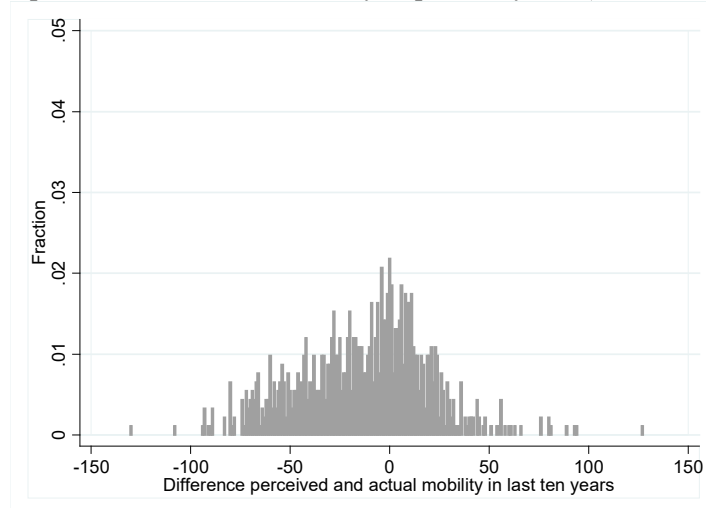
Figure A6: Income mobility in sample measured in percentiles
a. Actual mobility in past ten years ($M = 16.62$, $SD = 32.12$)



b. Perceived mobility in past ten years ($M = 3.77$, $SD = 20.92$)

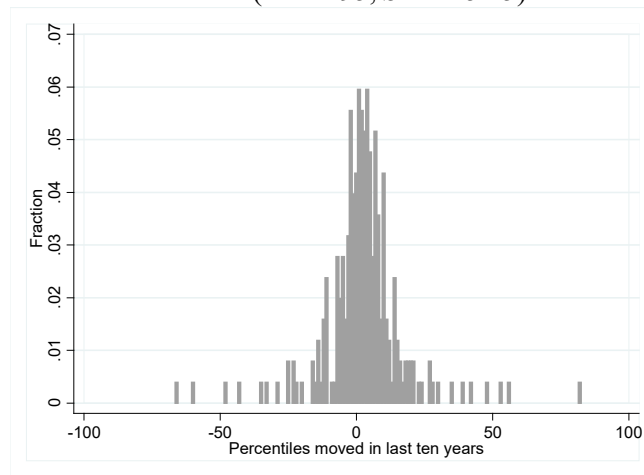


c) Differences between perceived and actual mobility in past ten years ($M = -12.85$, $SD = 32.19$)

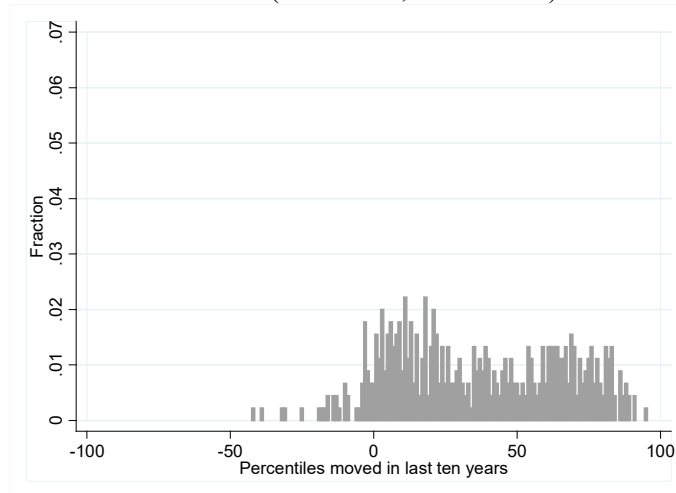


Notes: All mobility measures here use the mid-point of the past position in the income distribution in deciles.

Figure A7: Distributions of actual income mobility in last ten years across misestimation types
a. Accurate ($M = 2.95, SD = 15.15$)



b. Pessimists ($M = 37.24, SD = 29.72$)



c. Optimists ($M = -10.53, SD = 20.99$)

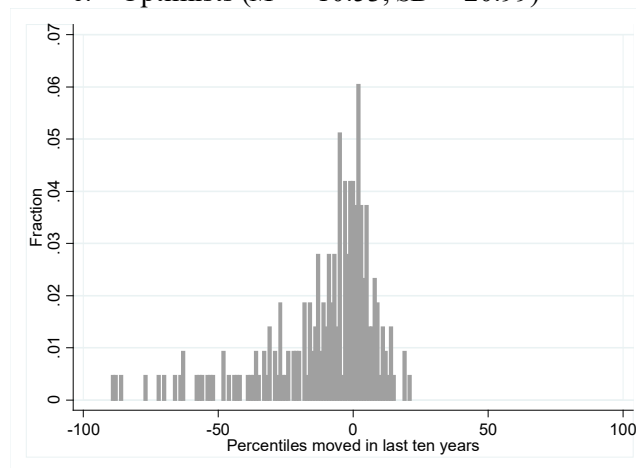
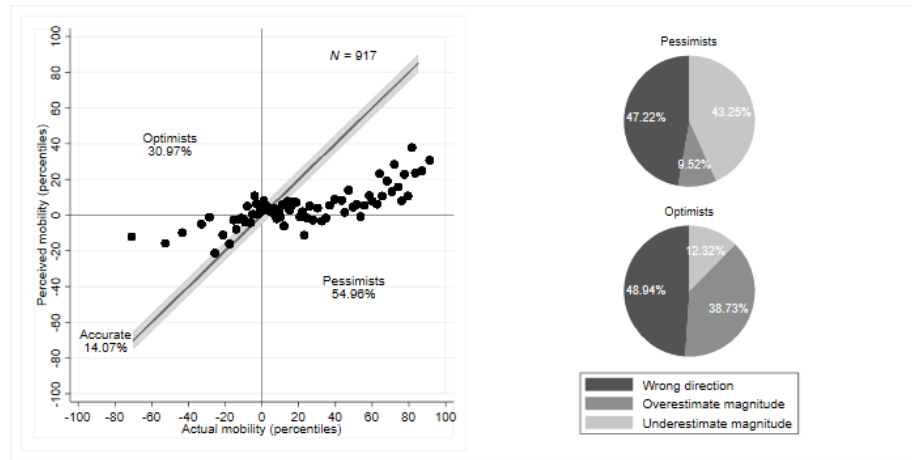
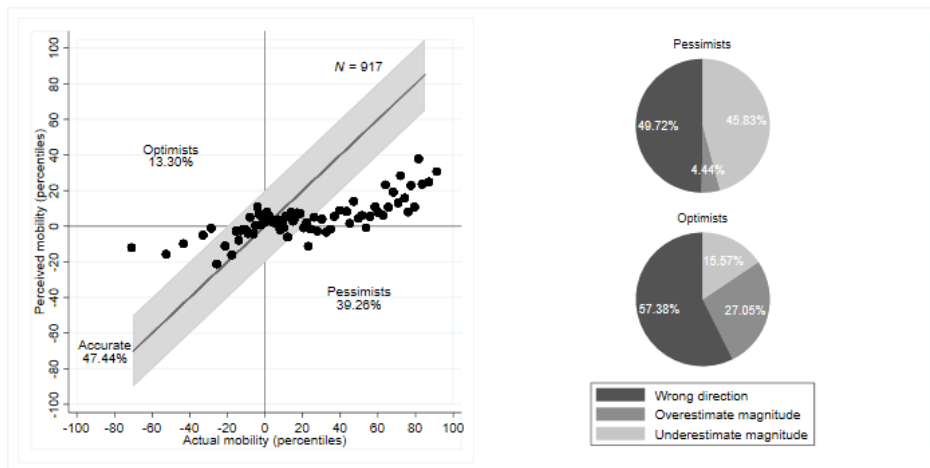


Figure A8: Accuracy of income mobility beliefs in past ten years using different cut offs
 a. Accurate if misestimation by less than 5 percent in either direction



b. Accurate if misestimation by less than 20 percent in either direction



Notes: Left: Data is shown across equally-sized bins. Pessimists (optimists) can be found in the area below (above) the accurate region. Right: Wrong direction – Pessimists believe to have moved down (not moved) while they actually did not move or moved up (moved up); Optimists believe to have moved up (not moved) while they actually did not move or moved down (moved down). Overestimate magnitude – Individuals correctly predict the direction of mobility but believe to have moved more percentiles. Underestimate magnitude – Individuals correctly predict direction of mobility but believe to have moved fewer percentiles.

Table A1: Sample restrictions due to missing values and age restrictions

Variable	Number of individuals	Percentage of total sample
<i>Sample restrictions I: Missing values</i>		
Demand for redistribution	16	1.02
Perceived position in income distribution		
- Today (percentile)	77	4.92
- Today (decile)	36	2.30
- 5 years ago	136	8.69
- 10 years ago	131	8.37
Actual individual income		
- Today	1	0.06
- 5 years ago	30	1.92
- 10 years ago	56	3.58
Luck vs. effort		
- General	22	1.41
- Teach children	24	1.53
- Population	31	1.98
Total (Restrictions I)	281	17.96
<i>Sample restrictions II: Working-age population</i>		
Younger than 18 ten years ago	228	14.57
Age 65 or above at time of survey	304	19.42
Total (Restrictions I + II)	648	41.41

Notes: The table shows the number individuals excluded from the sample due to missing values in a variable and their frequency. Individuals that believe to be in an income percentile above 100 are included in the sample restrictions on the perceived position in the income distribution. All measures are taken from our survey, except for the individual income variables, which are based on administrative data.

Table A2: Summary statistics

Sample restrictions I

	<i>Mean</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Female	0.484	0.500	0	1
Age	48.81	15.44	18	75
Children in household (indicator)	0.397	0.489	0	1
Primary education	0.130	0.336	0	1
High school	0.437	0.496	0	1
Tertiary education level	0.434	0.496	0	1
Labor and capital income in 2010 (in 1000 SEK)	312.0	218.3	0	3042.9
Labor and capital income in 2005 (in 1000 SEK)	236.7	168.9	0	2149.8
Labor and capital income in 2000 (in 1000 SEK)	188.2	311.3	0	9462.8
Actual income percentile in 2010	60.61	26.88	4	100
Actual income percentile in 2005	54.20	29.76	3	100
Actual income percentile in 2000	48.06	32.99	2	100
Population share with lower income (belief)	40.87	22.75	0	100
Decile in income distribution: today (belief)	4.572	1.998	1	10
Decile in income distribution: 5 years ago (belief)	4.114	2.004	1	10
Decile in income distribution: 10 years ago (belief)	4.410	1.864	1	10
Preference for redistribution	5.198	2.340	1	10
Success: effort/luck	6.448	1.748	1	10
Success: effort/luck (binary)	0.658	0.475	0	1
Teach children: effort/luck	7.381	1.598	1	10
Teach children: effort/luck (binary)	0.847	0.361	0	1
Belief about population: effort/luck	5.598	1.877	1	10
Belief about population: effort/luck (binary)	0.462	0.499	0	1
Observations	1,284			

Sample restrictions I+II

	<i>Mean</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Female	0.498	0.500	0	1
Age	45.27	11.57	28	64
Children in household (indicator)	0.487	0.500	0	1
Primary education	0.0951	0.293	0	1
High school	0.416	0.493	0	1
Tertiary education level	0.489	0.500	0	1
Labor and capital income in 2010 (in 1000 SEK)	332.5	226.9	0	3042.9
Labor and capital income in 2005 (in 1000 SEK)	249.7	168.9	0	2149.8
Labor and capital income in 2000 (in 1000 SEK)	187.3	336.3	0	9462.8
Actual income percentile in 2010	64.17	26.09	4	100
Actual income percentile in 2005	57.16	28.71	3	100
Actual income percentile in 2000	48.36	32.09	2	100
Population share with lower income (belief)	44.15	22.02	0	100
Decile in income distribution: today (belief)	4.799	1.973	1	10
Decile in income distribution: 5 years ago (belief)	4.070	1.901	1	10
Decile in income distribution: 10 years ago (belief)	4.538	1.805	1	10
Preference for redistribution	5.170	2.290	1	10
Success: effort/luck	6.405	1.706	1	10
Success: effort/luck (binary)	0.654	0.476	0	1
Teach children: effort/luck	7.389	1.538	1	10
Teach children: effort/luck (binary)	0.854	0.353	0	1
Belief about population: effort/luck	5.599	1.804	1	10
Belief about population: effort/luck (binary)	0.457	0.498	0	1
Observations	917			

Table A3: Mediation analysis based on experiment

<i>Dependent variable: Demand for redistribution in second survey</i>						
	Luck-believers only			Effort-believers only		
	(1)	(2)	(3)	(4)	(5)	(6)
Treated	-0.0202 (0.299)		-0.00954 (0.295)	-0.260 (0.194)		-0.212 (0.196)
Change in luck/effort beliefs		-0.176** (0.0857)	-0.176** (0.0857)		-0.130** (0.0608)	-0.123** (0.0616)
Constant	5.343*** (0.211)	5.525*** (0.167)	5.530*** (0.230)	4.964*** (0.133)	4.760*** (0.102)	4.868*** (0.141)
Observations	198	198	198	434	434	434
<i>Adj. R</i> ²	-0.005	0.024	0.019	0.002	0.009	0.009

Notes: OLS regressions. Robust standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

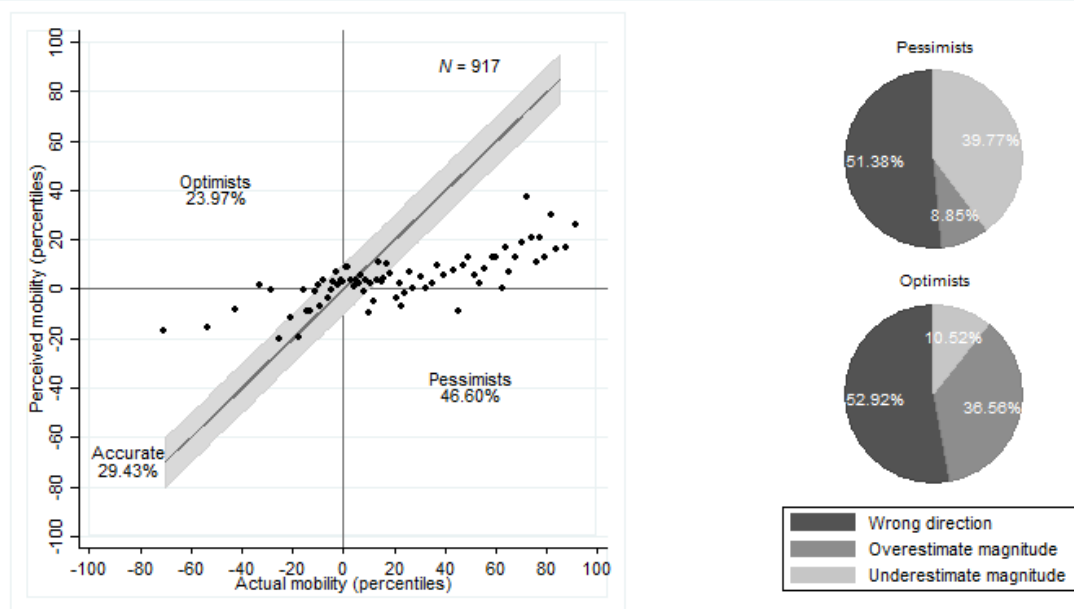
In Table A3 we find no significant effects overall of the treatment on demand for redistribution, but the effect is sizable for effort-believers (Specifications 1 and 4). Controlling also for changes in luck/effort beliefs in decreases the treatment effect size among effort-believers by 18 percent but the change in effect size is not significantly different from zero (Specification 4 vs. 6: $\chi^2 = 2.35$, $p = 0.125$; luck-believers, specification 1 vs. 3: $\chi^2 = 0.04$, $p = 0.832$).

Online Appendix B: Robustness to additional specifications

B1: Main results including population weights

We check the robustness of our main results to including population weights based on age, gender and region. Figure B1 shows the comparison of perceived and actual mobility using population weights. The correlation between perceived and actual mobility (left panel) is only slightly smaller when using population weights ($\beta = 0.302, p < 0.001$; compared to $\beta = 0.322$ in main analysis). Pessimists remain the largest group (46.60 percent vs. 49.07 percent in main analysis, $X^2 = 1.156, p = 0.282$), while about a quarter of individuals are optimists (23.97 percent vs. 23.45 percent in main analysis, $X^2 = 0.075, p = 0.784$). Looking at the types of errors made (right panel), we see that, as in the main analysis, around half of pessimists and optimists are mistaken about the direction of their mobility (pessimists: 51.38 percent vs. 48.67 percent in main analysis, $X^2 = 0.704, p = 0.401$; optimists: 52.92 percent vs. 53.49 percent in main analysis, $X^2 = 0.007, p = 0.934$). The majority of the remaining pessimists underestimate the magnitude of their mobility (39.77 percent vs. 43.56 percent in main analysis, $X^2 = 1.246, p = 0.264$), while the majority of the remaining optimists overestimate their mobility (36.56 percent vs. 34.42 percent in main analysis, $X^2 = 0.256, p = 0.613$).

Figure B1: Accuracy of beliefs about income mobility with population weights



Notes: Left: Due to ties in the data, the actual income mobility in 2010 individuals can be assigned to a maximum of 74 unique bins. Pessimists (optimists) can be found in the area below (above) the accurate region. Right: Wrong direction – Pessimists believe to have moved down (not moved) while they actually did not move or moved up (moved up); Optimists believe to have moved up (not moved) while they actually did not move or moved down (moved down). Overestimate magnitude – Individuals correctly predict the direction of mobility but believe to have moved more percentiles. Underestimate magnitude – Individuals correctly predict direction of mobility but believe to have moved fewer percentiles.

Also when using population weights, perceived mobility is more strongly correlated with the demand for redistribution than actual mobility ($\beta = -0.0059, p = 0.004$ vs. $\beta = -0.0020, p = 0.124$; difference: $p = 0.077$; see also Columns (1)-(3) of Table B1 for the results using control variables).

Table B1 further shows that, also when using population weights, the correlation coefficients between demand for redistribution and mobility are largely unaffected when additionally controlling for luck/effort-beliefs (comparing columns (1) and (5), $X^2 = 1.50, p = 0.220$; comparing columns (2) and (6), $X^2 < 0.01, p = 0.958$).

Table B1: Mediation analysis using population weights

<i>Dependent variable: Demand for redistribution (standardized)</i>							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Actual percentiles moved	-0.000579 (0.00179)		-0.000202 (0.00183)		-0.0000591 (0.00176)		0.000461 (0.00180)
Perception of percentiles moved		-0.00384 (0.00265)	-0.00379 (0.00273)			-0.00492* (0.00254)	-0.00503* (0.00261)
Belief in effort rather than luck (standardized)				-0.189*** (0.0410)	-0.189*** (0.0411)	-0.195*** (0.0409)	-0.196*** (0.0410)
Standard controls incl.	yes	yes	yes	yes	yes	yes	yes
Constant	0.117 (0.313)	0.0536 (0.293)	0.0655 (0.314)	-0.0552 (0.292)	-0.0518 (0.309)	-0.0982 (0.291)	-0.126 (0.310)
Observations	900	900	900	900	900	900	900
<i>Adj. R</i> ²	0.046	0.050	0.048	0.081	0.079	0.085	0.084

Notes: OLS regressions with population weights. Robust standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Demand for redistribution is standardized to take mean zero and standard deviation one. Standard control variables include gender, age, marital status, number of children in household, education levels, unemployment, a linear measure of the actual income percentile today, a linear measure of perceived actual income today and fixed effects for wealth quantiles.

In the main analysis, we test the causal effect of mobility on effort beliefs using an experiment (section 4.3). Also when applying population weights, we find a positive and marginally-significant effect of the information treatment on the change in luck/effort-beliefs ($\beta = 0.281$, $p = 0.088$). Splitting the sample depending on individuals' pre-treatment beliefs about it being primarily luck or primarily effort that determines individual economic success, we confirm a significant and positive effect treatment effect among those who believe primarily in effort ($\beta = 0.341$, $p = 0.048$), while there is no significant treatment effect among those that believe primarily in luck ($\beta = 0.113$, $p = 0.708$).

Next we look at the robustness of key results in the transmission of luck/-effort beliefs (section 3.4) to using population weights. Own beliefs and what one would teach children remain positively and significantly correlated ($\beta = 0.466$, $p < 0.001$ vs. $\beta = 0.470$ in main analysis) and individuals on average report teaching their children that effort is more important than they themselves believe (difference in means: $M = 0.90$, $p < 0.001$ vs. $M = 0.93$ in main analysis). Splitting the sample across those who believe that the average person in society believes primarily in the importance of luck (the "European equilibrium") and those who believe that the average person primarily believes in effort (the "American equilibrium"), we find that the correlation between own beliefs and views on teaching is weakly-significantly larger for individuals in the European equilibrium than in the American equilibrium (European vs. American equilibrium: $\beta = -0.131$, $p = 0.090$ vs. $\beta = -0.153$ in main analysis).

B2: Main results including age fixed effects

We test whether our results on the relation between the demand for redistribution and the mobility measures, as well as the mediation analysis, are robust to including age fixed effects in the regressions. Also when controlling for age fixed effects, the effect of the perceived income mobility experience on the demand for redistribution is significantly larger than that of actual mobility ($\beta = -0.0068$, $p < 0.001$ vs. $\beta = -0.0021$, $p = 0.126$; difference: $p = 0.003$). Table B2 shows that when additionally controlling for standard controls, the effect of the actual number of percentiles moved is not significantly different from zero, while the perceived number of income percentiles moved has a significant and negative effect on the demand for redistribution (Columns 1-3). Further, controlling for luck/effort-beliefs leaves the coefficient sizes unaffected (comparing columns (1) and (5), $X^2 = 0.87$, $p = 0.352$; comparing columns (2) and (6), $X^2 = 1.92$, $p = 0.166$).

Table B2: Mediation analysis including age fixed effects

<i>Dependent variable: Demand for redistribution (standardized)</i>							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Actual percentiles moved	0.000158 (0.00191)		0.000667 (0.00191)		0.000393 (0.00188)		0.000956 (0.00188)
Perception of percentiles moved		-0.00648** (0.00256)	-0.00658** (0.00257)			-0.00701*** (0.00247)	-0.00715*** (0.00249)
Belief in effort rather than luck (standardized)				-0.151*** (0.0402)	-0.151*** (0.0401)	-0.157*** (0.0400)	-0.157*** (0.0399)
Standard controls incl.	yes	yes	yes	yes	yes	yes	yes
Age fixed effects incl.	yes	yes	yes	yes	yes	yes	yes
Constant	-0.0338 (0.568)	-0.00156 (0.551)	-0.0445 (0.567)	-0.0372 (0.566)	-0.0628 (0.581)	-0.0139 (0.565)	-0.0755 (0.578)
Observations	900	900	900	900	900	900	900
Adj. R ²	-0.0338	-0.00156	-0.0445	-0.0372	-0.0628	-0.0139	-0.0755

Notes: OLS regressions. Robust standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Demand for redistribution is standardized to take mean zero and standard deviation one. All regressions include age fixed effects. Standard control variables include gender, age, marital status, number of children in household, education levels, unemployment, fixed effects for actual income percentiles today, fixed effects for perceived income percentiles today and fixed effects for wealth quantiles.

B3: Interaction terms**Table B3: Income mobility, luck/effort beliefs and the demand for redistribution**

<i>Dependent variables</i>	<i>Demand for redistribution</i>			<i>Belief in effort rather than luck</i>		
	(1)	(2)	(3)	(4)	(5)	(6)
Actual percentiles moved	-0.00238** (0.00107)			0.00287*** (0.000984)		
Perception of percentiles moved		-0.00728*** (0.00165)			0.00432** (0.00175)	
Percentiles moved			-0.00238** (0.00107)			0.00287*** (0.000984)
Perception (indicator)			-0.0121 (0.0178)			0.0315* (0.0162)
Percentiles moved X Perception			-0.00490*** (0.00166)			0.00144 (0.00175)
Constant	0.0395 (0.0386)	0.0274 (0.0338)	0.0395 (0.0386)	-0.0478 (0.0372)	-0.0163 (0.0340)	-0.0478 (0.0372)
Observations	917	917	917	917	917	917
Adjusted R ²	0.005	0.022	0.013	0.007	0.007	0.007

Notes: OLS regressions. Robust standard errors in parentheses. Standard errors in regression models (3) and (6) are clustered on the individual level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Demand for redistribution and luck/effort belief variables are standardized to take mean zero and standard deviation one.

Table B3 reports OLS regressions with interaction terms as reported in the analysis related to Figure 2. Columns (1) and (2) show that the correlation coefficient for perceived mobility ($\beta = -0.0073$, $p < 0.001$) is about three times larger than the one for actual mobility ($\beta = -0.0024$, $p = 0.026$), while column (3) shows that the difference in differences is significant ($p = 0.003$). Columns (4) and (5) show that the correlation coefficient for perceived mobility ($\beta = 0.0043$, $p = 0.014$) is almost twice as large as the correlation coefficient for actual mobility ($\beta = 0.0029$, $p = 0.004$, respectively), but the difference is not significantly different from zero (column 5; $p = 0.409$).

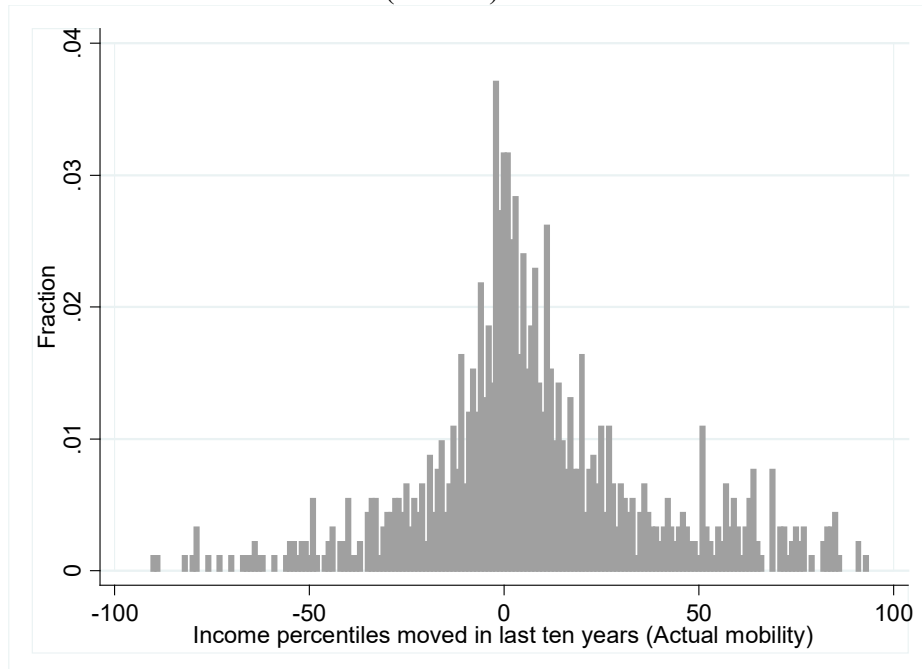
B4: Main results assuming that participants falsely report position in income distribution of their age cohort

In our survey, we ask participants to assess their position in the income distribution of the Swedish adult population at different points in time. Their answers are used to construct a measure of subjective income mobility. If, instead, participants answer these questions relative to the distribution of income among their peers, then our measures of perceived mobility picks up within-cohort mobility rather than mobility across the population. Here we present our main results treating the questions about individual positions in the income distribution of the population as if participants actually assessed their position relative to their peers in their age cohort.

We measure the perceived and objective income mobility of each individual. Our new measure of perceived income mobility can be interpreted as an individual's assessment of their income mobility in the last ten years relative to other individuals born in the same year. Objective income mobility, which we estimate using administrative records, now measures the actual movement across the income distribution of individuals in the population of the same age, i.e. as within-cohort rank mobility. As in our main analysis, the following results are based on the working-age population ages 28-64 years old.

Figure B2 shows the distribution of the actual percentiles moved in the past ten years within-cohort ($M = 7.43$, $SD = 29.79$). As in our analysis of mobility across the population, actual within-cohort income mobility is higher in our sample than in the population, where rank mobility is zero overall and for every age by construction ($t = 7.552$, $p < 0.001$). Mobility across the population and within-cohort mobility are highly correlated in our working-age population sample ($\rho = 0.878$). However, the average number of percentiles moved in the past ten years is significantly higher when considering mobility across the population rather than within age-cohort (16.62 vs. 7.43, $t = -17.995$, $p < 0.001$).

Figure B2: Objective within-cohort income mobility in past ten years in sample ages 28-64 years old ($N = 917$)



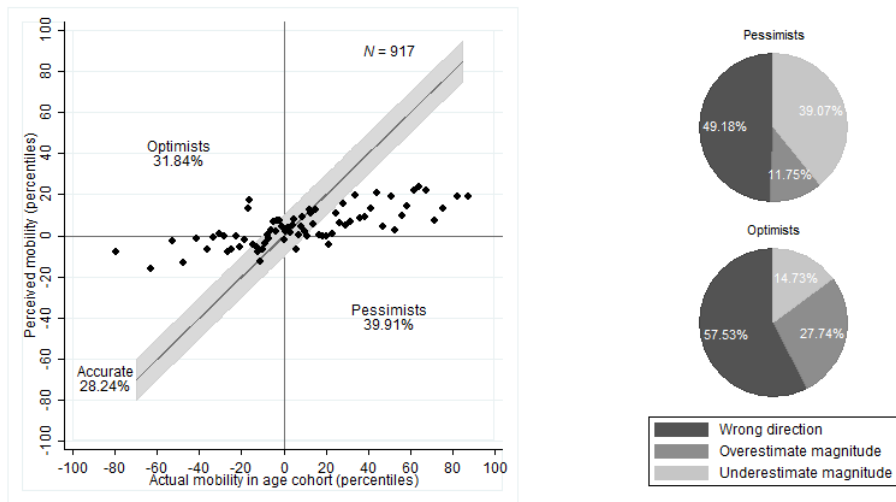
The left panel of Figure B3 shows the relation between perceived and actual within-cohort mobility. We see that perceived and actual within-cohort income mobility are positively correlated ($\beta = 0.282$, $p < 0.001$, standardized). The correlation coefficient is significantly *smaller* than the coefficient estimated for income mobility within in the population in the main analysis ($\beta = 0.282$ vs. $\beta = 0.322$, $p = 0.028$). As in the main analysis, individuals significantly underestimate their actual mobility on average, i.e. individuals underestimate their own income mobility also when assuming that they mistakenly reported their within-

cohort positions in the income distribution (3.77 percentage points vs. 7.43 percentage points, $t = -3.550$, $p < 0.001$).

We find a similar share of accurate assessments as in the main analysis, (28.24 percent vs. 27.48 percent, $\chi^2 = 0.133$, $p = 0.715$). Pessimists constitute the largest group of mistestimations of income mobility also when looking at within-cohort ranks, however, the share of pessimists is significantly smaller than in the main analysis (39.91 percent vs. 49.07 percent, $\chi^2 = 15.578$, $p < 0.001$). Accordingly, the share of optimists is significantly larger when looking at within-cohort rather than population-wide mobility (31.84 percent vs. 23.45 percent, $\chi^2 = 16.162$, $p < 0.001$). The right-hand side of Figure B3 shows that, as in the main analysis, the largest shares of pessimists and optimists estimate their mobility to be in the wrong direction, followed by individuals under- or overestimating their mobility, respectively.

Breaking down the misestimation of within-cohort rank mobility into wrong assessments of the current or the past position in the income distribution also shows a similar pattern as in the main analysis: Individuals significantly misestimate their position at both points in time but are somewhat better at assessing their position ten years ago (ten years ago: 40.38 vs. 50.61, $t = -18.094$, $p < 0.001$, current position: 44.15 vs. 58.03, $t = -10.969$, $p < 0.001$, difference-in-difference: $\beta = -3.658$, $SE = 1.031$, $p < 0.001$).

Figure B3: Accuracy of beliefs about within-cohort income mobility in past ten years



Notes: Left: Data is shown across equally-sized bins. Pessimists (optimists) can be found in the area below (above) the accurate region. Right: Wrong direction – Pessimists believe to have moved down (not moved) while they actually did not move or moved up (moved up); Optimists believe to have moved up (not moved) while they actually did not move or moved down (moved down). Overestimate magnitude – Individuals correctly predict the direction of mobility but believe to have moved more percentiles. Underestimate magnitude – Individuals correctly predict direction of mobility but believe to have moved fewer percentiles.

As in the main analysis, also when using the within-cohort mobility experience we find that the demand for redistribution is significantly and negatively associated with higher income mobility and that the correlation coefficient for perceived mobility ($\beta = -0.0073$, $p < 0.001$) is significantly larger than that for actual mobility ($\beta = -0.0028$, $p = 0.016$; difference: $p = 0.012$). Columns (1)-(3) of Table B4 confirm the result when control variables are added.

Also the relation between mobility experience and luck/effort beliefs resembles the findings in the main analysis. Both perceived and actual mobility ($\beta = 0.0043$, $p = 0.014$ and $\beta = 0.0039$, $p < 0.001$, respectively) are significantly and positively associated with a strong belief in the importance of effort, however, the coefficients are not significantly different from each other ($p = 0.799$; with controls: perceived: $\beta = -0.0022$, $p = 0.408$ vs. actual: $\beta = 0.026$, $p = 0.084$).

Table B4 shows that the coefficient for the association between actual mobility and the demand for redistribution is weakly-significantly smaller when also controlling for luck/effort-beliefs (comparing columns (1) and (5): $\chi^2 = 3.13$, $p = 0.077$), and that the coefficient for perceived mobility does not significantly change (comparing columns (2) and (6): $\chi^2 = 0.80$, $p = 0.370$). The coefficient for the luck/effort

variable is not significantly affected by including the mobility experience variables (comparing columns (4) and (7): $\chi^2 = 0.94, p = 0.332$). Thus, as in the main analysis, we can conclude that luck/effort-beliefs do not seem to mediate the effect of mobility experience on the demand for redistribution.

Table B4: Mediation analysis when assuming within-cohort rank mobility

<i>Dependent variable: Demand for redistribution (standardized)</i>							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Actual percentiles moved	-0.000394 (0.00161)		0.000134 (0.00162)		-0.0000385 (0.00160)		0.000530 (0.00161)
Perception of percentiles moved		-0.00701*** (0.00249)	-0.00703*** (0.00251)			-0.00731*** (0.00242)	-0.00741*** (0.00244)
Belief in effort rather than luck (standardized)				-0.135*** (0.0405)	-0.135*** (0.0406)	-0.139*** (0.0404)	-0.140*** (0.0404)
Standard controls incl.	yes	yes	yes	yes	yes	yes	yes
Constant	-0.311 (0.559)	-0.279 (0.553)	-0.284 (0.558)	-0.376 (0.567)	-0.374 (0.572)	-0.327 (0.563)	-0.348 (0.569)
Observations	900	900	900	900	900	900	900
<i>Adj. R</i> ²	0.055	0.066	0.065	0.072	0.071	0.084	0.082

Notes: OLS regressions. Robust standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Demand for redistribution is standardized to take mean zero and standard deviation one. Standard control variables include gender, age, marital status, number of children in household, education levels, unemployment, fixed effects for actual income percentiles today, fixed effects for perceived income percentiles today and fixed effects for wealth quantiles.

B5: Main results using smoothed measure of actual mobility

Variation in people's annual income may cause perceived mobility to be a less accurate predictor of actual mobility as actual mobility is suspect to noise in the sense that it differs depending on which exact years are chosen as the start and end dates. To test the robustness of our results to using a multi-year average of annual income, we re-estimate our measure of actual income mobility using the average of individual annual income over $t-1$ and t . Figure B4 below shows the difference between the measure of actual mobility based on the smoothed two-year average and the measure of actual mobility based on non-smoothed annual data. Using the smoothed measure, individuals in our sample ($N=911$, we lose six individuals due to missing values in the income variables) move up 1.19 percentiles ($SD = 10.01$) more than in the non-smoothed measure used in the main analysis.

Next, we show the relation between perceived and actual mobility in the population income distribution using the smoother measure for income. This graph compares to Fig. 1 in the main analysis. Also here, perceived and actual mobility are positively correlated ($\beta=0.303, p<0.001$, using standardized measures), which is a smaller correlation coefficient than using the specification in the main analysis (diff: $\beta=-0.024, p=0.046$). Also with the smoother measure of income, individuals underestimate their mobility on average and slightly more than in the main analysis (the mean difference is $M = -13.88$ compared to $M = -12.85$ using annual income data). The share of individuals that correctly estimate their income mobility is slightly smaller and not significantly different from the share in the main analysis (26.45% vs. 27.66%, $t=-1.026, p=0.305$). Also the share of pessimists who underestimated their mobility is slightly larger when using the smoother income measure (50.60% vs. 48.96%, $t=1.808, p=0.071$). We hence conclude that our main results regarding perceptions of mobility, e.g. the large share of people holding pessimistic views, does not seem to be due to the non-smoothed measure of actual mobility used in the main text.

Figure B4: Difference between smoothed and annual actual mobility

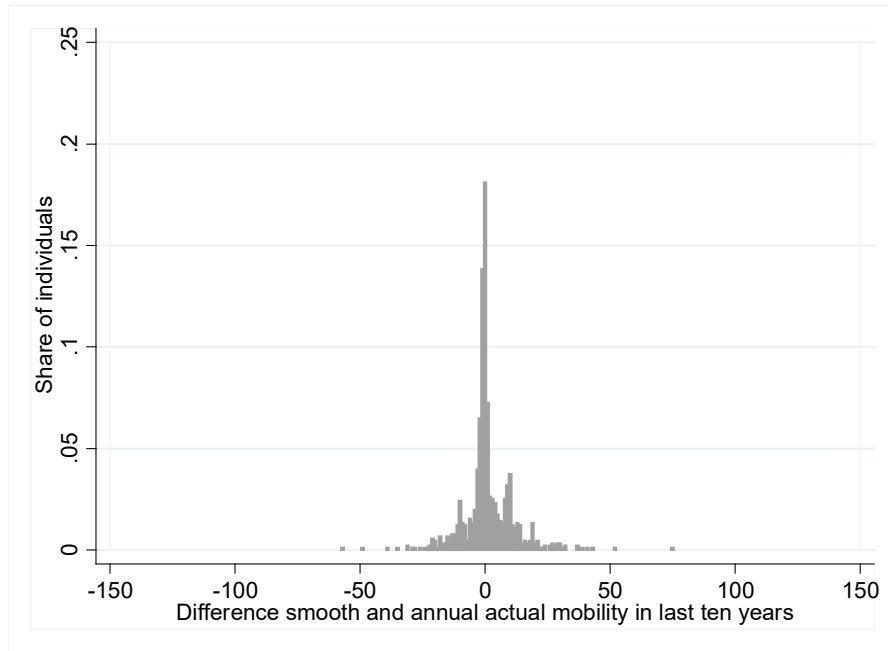
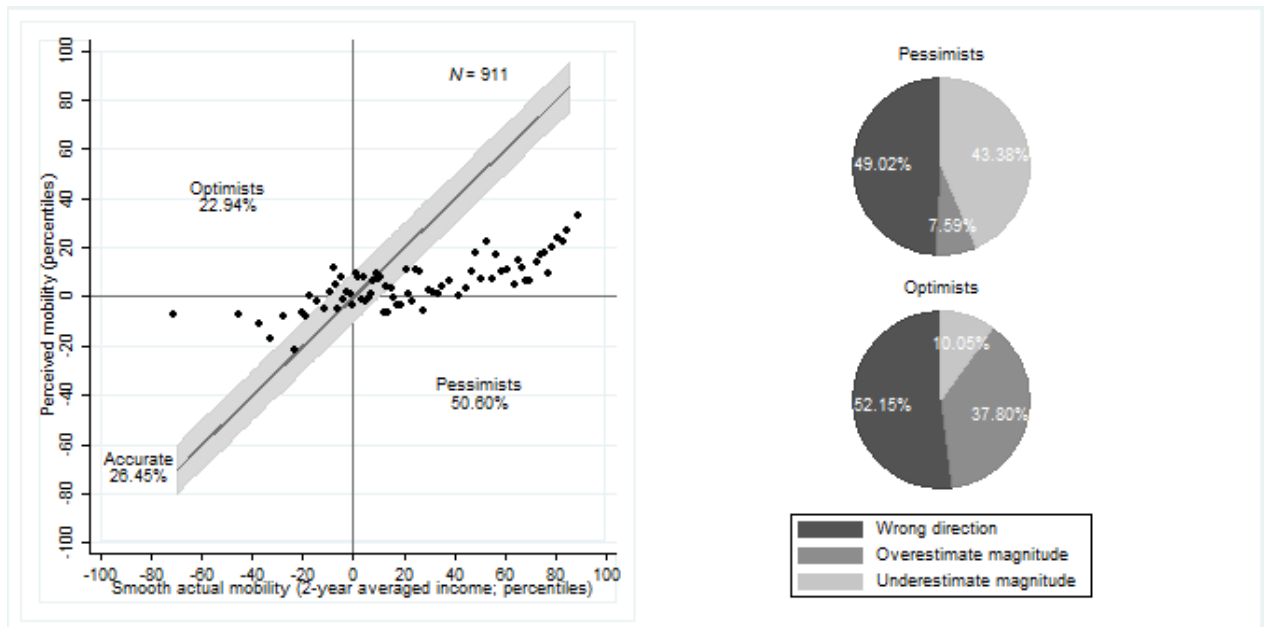


Figure B5: Accuracy of beliefs about income mobility with smoothed measure of actual mobility



Online Appendix C: Robustness to varying sample restrictions

C1: Results of sections 4.3 using sample restrictions I+II

We present the results of sections 4.3 (causal evidence) using the set of sample restrictions I + II, instead of sample restrictions I (see Table A1 for descriptions of the sample restrictions). Thus, we test the robustness of these results to restricting the sample to a working-age population.

The causal link between income mobility and luck/effort beliefs. Applying our second set of sample restrictions to the experimental data, we have a sample of 636 individuals (rather than 883 individuals, as in the main analysis) who participated in both surveys. Of these, 474 individuals, or 74.53 percent, underestimate their current income rank by more than 10 percentiles.

Comparing the change in luck/effort beliefs from the first to the second survey across treatment groups, we find that the information treatment has a significant effect among the working-age population (untreated vs. treated: -0.27 vs. 0.08, $t=-2.109$, $p=0.036$), that is somewhat larger than in the main analysis (untreated vs. treated: -0.21 vs. 0.09, $t=-1.952$, $p=0.051$). As in the main analysis, we find that the treatment has a significant and positive effect on the change in the luck/effort variable among those who believe primarily in effort (-0.84 vs. -0.35, $t=-2.702$, $p=0.007$), while it has no effect among those who believe primarily in luck (1.06 vs. 0.96, $t=0.308$, $p=0.759$).

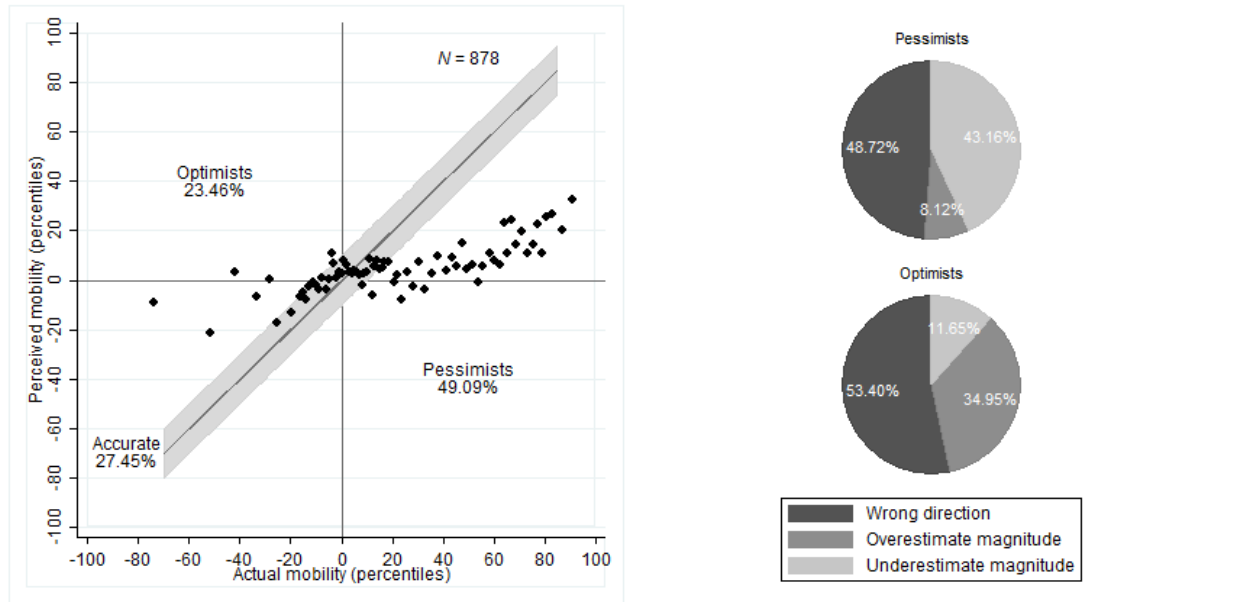
C2: Excluding subjects with zero income

We check the robustness of the results of sections 4.1 and 4.2 to excluding subjects with zero income. In our working population sample, only 39 individuals, or 4.25 percent, have zero income in at least one of the three years ($n = 12$ in 2010, $n = 17$ in 2005 and $n = 23$ in 2000). Only four individuals, or 0.44 percent, have an income of zero in all of the three years.

The individuals with zero income in at least one of the three years moved up fewer, but not significantly fewer, percentiles than the remainder of the sample on average (actual: 12.54 vs. 16.80, $t= 0.810$, $p = 0.418$; perceived: 1.51 vs. 3.87, $t = 0.689$, $p = 0.491$). However, due to the small number of individuals with zero income, excluding them does not affect average levels significantly (actual: 16.80 vs. 16.12, $p = 0.466$; perceived: 3.87 vs. 3.77, $p = 0.550$) and the perceived number of percentiles moved remains significantly smaller than the actual number of percentiles moved (3.87 vs. 16.80, $t = -11.900$, $p < 0.001$, $n = 878$).

Figure C1 shows the main results of section 3.1 excluding individuals with zero income in at least one of the years. All estimates are very similar to those in Figure 1. A majority of individuals are pessimists (49.09 percent vs. 49.07 percent in main analysis), and about one quarter are accurate (27.45 percent vs. 27.48 percent) or optimists (23.46 percent vs. 23.45 percent), respectively. Looking at the type of errors, the largest share of pessimists and optimists misjudge the direction of their mobility (pessimists: 48.72 percent vs. 48.67 percent in main analysis; optimists: 53.40 percent vs. 53.49 percent).

Figure C1: Accuracy of beliefs about income mobility excluding subjects with zero income



Notes: Left: Data is shown across equally-sized bins. Pessimists (optimists) can be found in the area below (above) the accurate region. Right: Wrong direction – Pessimists believe to have moved down (not moved) while they actually did not move or moved up (moved up); Optimists believe to have moved up (not moved) while they actually did not move or moved down (moved down). Overestimate magnitude – Individuals correctly predict the direction of mobility but believe to have moved more percentiles. Underestimate magnitude – Individuals correctly predict direction of mobility but believe to have moved fewer percentiles.

Next, we look at the relation between income mobility experience and the demand for redistribution and luck/effort-beliefs, respectively, when excluding subjects with zero income in one of the three years. In line with the main analysis, the correlation coefficient for perceived mobility ($\beta = -0.0072$, $p < 0.001$) is about three times larger and significantly larger than the one for actual mobility ($\beta = -0.0019$, $p = 0.084$; difference: $p = 0.002$; see also columns (1) and (2) of Table C1 for results when controlling for standard socioeconomic variables). Also in line with the main analysis, we find that the correlation coefficient for perceived mobility is almost twice as large as the correlation coefficient for actual mobility, the difference is not significant ($\beta = 0.0048$, $p = 0.007$ and $\beta = 0.0028$, $p = 0.006$, respectively; difference: $p = 0.264$).

Table C1 shows the results of our mediation analysis when excluding subjects with zero income in one for the three years. The results are in line with the main analysis reported in Table 1. Including luck/effort-beliefs in column (5) reverses the sign of the already small effect of actual mobility on the demand for redistribution ($X^2 = 3.46$, $p = 0.063$). The effect of perceived mobility experience on the demand for redistribution is not significantly affected when including a control for luck/effort-beliefs (comparing columns (2) and (6), $X^2 = 0.67$, $p = 0.413$). We also find no significant effects of including mobility experience on the effect of luck/effort-beliefs on the demand for redistribution (columns (4) and (7): $X^2 = 1.10$, $p = 0.294$).

Table C1: Mediation analysis excluding subjects with zero income

<i>Dependent variable: Demand for redistribution (standardized)</i>							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Actual percentiles moved	-0.0000613 (0.00186)		0.000613 (0.00186)		0.000406 (0.00183)		0.00113 (0.00184)
Perception of percentiles moved		-0.00705*** (0.00254)	-0.00717*** (0.00257)			-0.00734*** (0.00247)	-0.00756*** (0.00251)
Belief in effort rather than luck (standardized)				-0.140*** (0.0419)	-0.141*** (0.0420)	-0.144*** (0.0417)	-0.146*** (0.0419)
Standard controls incl. Constant	yes -1.873*** (0.716)	yes -2.101*** (0.704)	yes -2.125*** (0.719)	yes -2.223*** (0.719)	yes -2.238*** (0.731)	yes -2.467*** (0.715)	yes -2.516*** (0.735)
Observations	862	862	862	862	862	862	862
<i>Adj. R</i> ²	0.039	0.050	0.049	0.058	0.056	0.069	0.068

*Notes: OLS regressions. Robust standard errors in parentheses. * p < 0.1, ** p < 0.05, *** p < 0.01. Demand for redistribution is standardized to take mean zero and standard deviation one. Standard control variables include gender, age, marital status, number of children in household, education levels, unemployment, fixed effects for actual income percentiles today, fixed effects for perceived income percentiles today and fixed effects for wealth quantiles.*

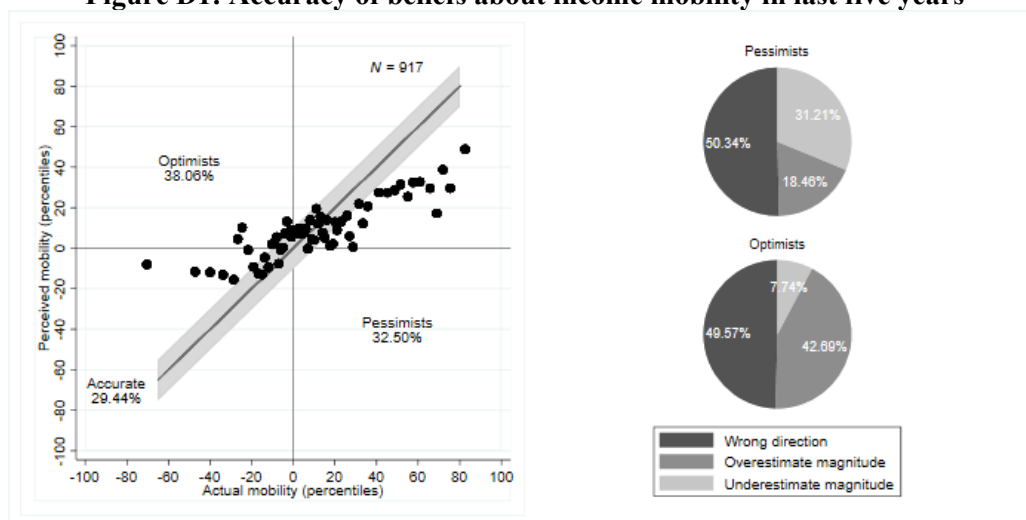
Online Appendix D: Mobility in past five years

We present our main results using a variable for income mobility over the last five, instead of ten, years. The left panel of Figure D1 shows the relation between perceived and actual mobility in the last five years non-parametrically. The two measures of mobility are somewhat but not significantly stronger correlated in the last five years than over the last ten years ($\beta = 0.375, p < 0.001$; difference: $\beta = 0.052, p = 0.142$). There is no significant difference between perceived and actual mobility in the last five years on average (8.45 vs. 7.35 percentiles, $t = 1.179, p = 0.239$). This suggests that individuals on average are better at predicting their mobility over the five-year than the ten-year horizon. However, this is not due to a significantly larger share of accurate predictions (29.44 percent vs. 27.48 percent, $X^2 = 0.868, p = 0.352$). Rather, there are significantly fewer pessimists (32.50 percent vs. 49.07 percent, $X^2 = 52.162, p < 0.001$) and significantly more optimists (38.06 percent vs. 23.45 percent, $X^2 = 45.976, p < 0.001$) in the five-year mobility horizon than the ten-year mobility horizon.

The right panel of Figure D1 shows a similar pattern of the type of errors made for the five-year mobility horizon as for the ten-year horizon. As for the ten-year horizon, we find that about half of the individuals who are misperceiving their own mobility are mistaken about the direction of their movement (50.34 percent of pessimists and 49.57 percent of optimists). A majority of the pessimists that judged the direction of their mobility correctly underestimate their upward mobility, while the majority of optimists who judged the direction of their mobility correctly overestimate the magnitude of their mobility.

Our decomposition of whether misperceptions of income rank mobility is either due to wrong assessments of the current or the historic income rank, or a combination of both, showed that individuals are better in estimating somewhat better at assessing their position ten years before the survey than they are at assessing their current position. In contrast, individuals are somewhat worse at assessing their position five years ago than today (five years ago: 35.70 vs. 56.82, $t = -23.084, p < 0.001$, current position: 44.15 vs. 64.17, $t = -27.672, p < 0.001$. difference-in-difference: $\beta = -8.111, SE = 0.832, p < 0.001$).

Figure D1: Accuracy of beliefs about income mobility in last five years



Notes: Left: Data is shown across equally-sized bins. Pessimists (optimists) can be found in the area below (above) the accurate region. Right: Pessimists (optimists) can be found in the area below (above) the accurate region. Right: Wrong direction – Pessimists believe to have moved down (not moved) while they actually did not move or moved up (moved up); Optimists believe to have moved up (not moved) while they actually did not move or moved down (moved down). Overestimate magnitude – Individuals correctly predict the direction of mobility but believe to have moved more percentiles. Underestimate magnitude – Individuals correctly predict direction of mobility but believe to have moved fewer percentiles.

Using the five-year mobility horizon, the correlation coefficient for perceived mobility ($\beta = -0.0081, p < 0.001$) is significantly larger than the one for actual mobility ($\beta = -0.0003, p = 0.831$; difference: $p <$

0.001; see Table D1 (specifications (1)-(3)) for the results when adding controls). Also in line with the main analysis, we find that the correlation coefficient for perceived mobility and a stronger belief in the importance of effort is larger, but not significantly larger, than that for actual mobility ($\beta = 0.0041$, $p = 0.003$; $\beta = 0.0023$, $p = 0.061$, respectively; difference: $p = 0.230$).

Table D1 shows the results of our mediation analysis using the five-year mobility horizon. Also here we find no significant changes in the effects of mobility experience on the demand for redistribution when additionally controlling for luck/effort-beliefs (comparing columns (1) and (5), $X^2 = 2.04$, $p = 0.153$; comparing columns (2) and (6): $X^2 = 0.88$, $p = 0.349$).

Table D1: Mediation analysis using the five-year income mobility horizon

<i>Dependent variable: Demand for redistribution (standardized)</i>							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Actual percentiles moved	0.00170 (0.00182)		0.00404** (0.00184)		0.00204 (0.00182)		0.00449** (0.00184)
Perception of percentiles moved		-0.0108*** (0.00212)	-0.0120*** (0.00218)			-0.0111*** (0.00207)	-0.0124*** (0.00214)
Belief in effort rather than luck (standardized)				-0.135*** (0.0405)	-0.137*** (0.0405)	-0.141*** (0.0403)	-0.147*** (0.0402)
Standard controls incl.	yes	yes	yes	yes	yes	yes	yes
Constant	-0.385 (0.561)	-0.171 (0.552)	-0.291 (0.552)	-0.376 (0.567)	-0.445 (0.572)	-0.218 (0.564)	-0.353 (0.562)
Observations	900	900	900	900	900	900	900
Adj. R ²	0.056	0.088	0.093	0.072	0.073	0.106	0.113

Notes: OLS regressions. Robust standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Demand for redistribution is standardized to take mean zero and standard deviation one. Standard control variables include gender, age, marital status, number of children in household, education levels, unemployment, fixed effects for actual income percentiles today, fixed effects for perceived income percentiles today and fixed effects for wealth quantiles.

Online Appendix E: Heterogeneity in mobility assessments

In this section, we explore socioeconomic differences in income mobility assessments across gender, age and educational levels. The information on educational levels is missing for two individuals, which have not previously been excluded, and they are dropped when analyzing differences across educational levels. Looking at the actual income mobility in the last ten years, we find that men moved up somewhat more than women (17.64 percentiles vs. 13.96 percentiles, $t = 1.748$, $p = 0.081$), individuals below median age (45 years) in our sample moved up significantly more than individuals aged equal to or above median age (29.66 percentiles vs. 3.41 percentiles, $t = 13.640$, $p < 0.001$), and individuals with tertiary education move up significantly more than individuals with primary or secondary education level (9.50 percentiles vs. 22.44 percentiles, $t = -6.254$, $p < 0.001$).

Figure E1 shows the relation between perceived and actual (now using the mid-point of the actual income decile ten years ago) mobility across these socioeconomic groups using equal-sized bin for each group. Table E1, shows OLS regressions of the share of accurate beliefs on socioeconomic variables and controlling for mobility and past income decile fixed effects.

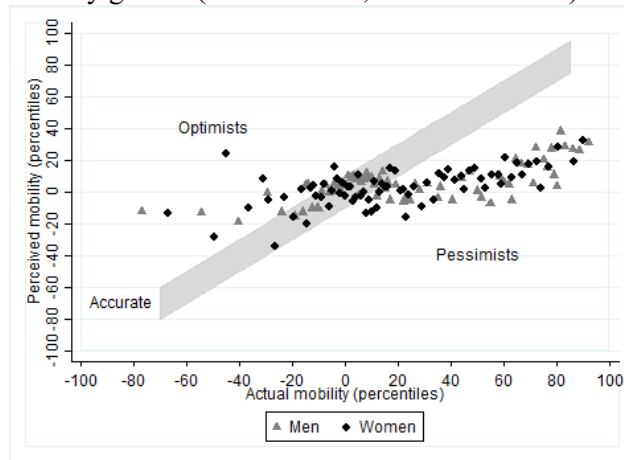
Figure E1a shows the relations for men and women. Both men and women significantly underestimate their mobility in the last ten years (men: 5.56 percentiles vs. 18.49 percentiles, $t = -8.280$, $p < 0.001$; women: 1.97 percentiles vs. 14.73 percentiles, $t = -8.837$, $p < 0.001$). There is no significant difference in the average number of percentiles with which men and women misestimate their mobility (12.93 percentiles vs. 12.76 percentiles, difference-in-difference = 0.171 percentiles, $p = 0.936$). Row 1 of Table E1 confirms that women and men are equally likely to have accurate beliefs about their mobility.

Figure E1b shows the relations for age groups split by the median of our sample. Both age groups significantly underestimate their mobility (ages 28-44: 7.19 percentiles vs 30.42 percentiles, $t = -13.675$, $p < 0.001$, ages 45-64: 0.71 percentiles vs. 4.26 percentiles, $t = -3.033$, $p = 0.003$). The absolute difference in misjudgment is significantly larger for younger than for older individuals (23.23 percentiles vs. 3.56 percentiles, difference-in-difference = 19.67, $p < 0.001$). We see that older individuals, compared to younger individuals, have less variance in their actual mobility ($SD = 35.98$ vs. $SD = 21.80$, variance ratio test: $f = 2.724$, $p < 0.001$) and their perceived mobility ($SD = 22.21$ vs. $SD = 19.20$, variance ratio test: $f = 1.338$, $p = 0.002$). Accordingly, older individuals are significantly more likely to be accurate in the assessment of their mobility (17.55 percent vs. 36.36 percent, $t = -6.509$, $p < 0.001$). However, this effect is not robust to controlling for fixed effects, as shown in Table E1.

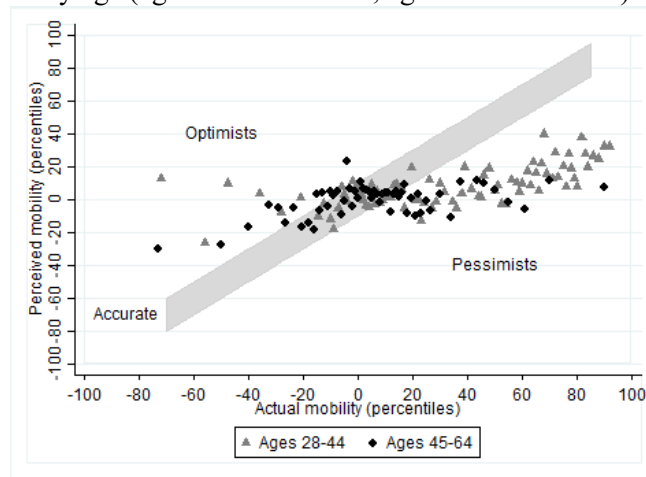
Figure E1c shows the relations across educational levels. Both groups significantly underestimate their mobility (primary or secondary education: -0.79 percentiles vs. 10.10 percentiles, $t = -7.396$, $p < 0.001$, tertiary education: 8.54 percentiles vs. 23.48 percentiles, $t = -9.708$, $p < 0.001$). The absolute judgment error of individuals with primary or secondary education is weakly significantly smaller than of individuals with tertiary education (10.89 percentiles vs. 14.93 percentiles, difference-in-difference = -4.04, $p = 0.058$). Table E1 shows that there is no significant difference in the likelihood to judge their mobility accurately across individuals with higher education and lower education when controlling for other characteristics (column 1), and for mobility and income decile fixed effects (columns 2 and 3).

Figure E1: Accuracy of income mobility beliefs across socioeconomic characteristics

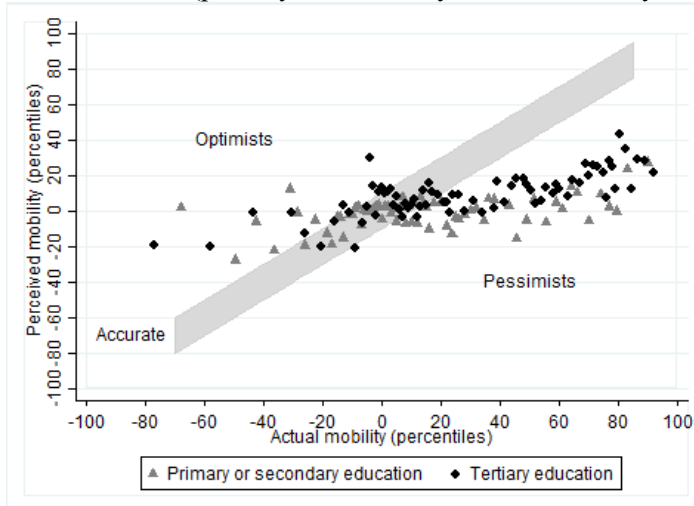
a. By gender (men: $n = 460$, women: $n = 457$)



b. By age (ages 28-44: $n = 433$, ages 45-64: $n = 484$)



c. By educational level (primary or secondary: $n = 468$, tertiary: $n = 447$)



Notes: Data is shown across equally-sized bins. Pessimists (optimists) can be found in the area below (above) the accurate region.

Table E1: Heterogeneity in mobility misestimation (last ten years)

<i>Dependent variable: Accurate (Indicator)</i>			
	(1)	(2)	(3)
Female	-0.00938 (0.0291)	-0.0165 (0.0283)	-0.0207 (0.0302)
Age (≥ 45 years)	0.186*** (0.0289)	0.0488 (0.0323)	0.0157 (0.0343)
Tertiary education	-0.0155 (0.0294)	0.0156 (0.0287)	0.00969 (0.0303)
Fixed effects: deciles moved	no	yes	yes
Fixed effects: Income percentile today	no	no	yes
Constant	0.187*** (0.0282)	-0.0400 (0.0377)	0.361 (0.235)
Observations	915	915	915
<i>Adj. R</i> ²	0.042	0.145	0.161

Notes: OLS regressions. Robust standard errors in parentheses, * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Online Appendix F: Survey Instruments

Main Survey. Part 1: Background Information

Which year were you born?

Year:

Are you a man or a woman?

- 1 Man
2 Woman

Which is your main occupation right now?

NB! One alternative only.

- 1 Employed in the public sector
2 Employed in the private sector
3 Own business
4 Unemployed
5 Student
6 Retired
7 Other

Which is/was your main profession?

If you do not work right now, please state the profession you have had for the longest period of time. Please answer in as much detail as possible.

For example, instead of assistant write sales assistant. Please use capital letters!

Your profession:

- 1 No profession.

Are you an active member of any of the following organizations?

	Yes	No
	1	2
a. Church	<input type="checkbox"/>	<input type="checkbox"/>
b. Sports	<input type="checkbox"/>	<input type="checkbox"/>
c. Art- or Music	<input type="checkbox"/>	<input type="checkbox"/>
d. Trade Union	<input type="checkbox"/>	<input type="checkbox"/>
e. Political party	<input type="checkbox"/>	<input type="checkbox"/>
f. Environmental	<input type="checkbox"/>	<input type="checkbox"/>
g. Charity	<input type="checkbox"/>	<input type="checkbox"/>
h. Consumer	<input type="checkbox"/>	<input type="checkbox"/>
i. Other	<input type="checkbox"/>	<input type="checkbox"/>

Which is your main source of news and how often do you use it?

	Every day	Every week	Every month	Seldom/never
	1	2	3	4
a. Newspapers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. News on radio/TV	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Printed magazines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Other radio/TV programs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Internet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Friends and colleagues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

To what extent do you agree with the following statements?

- a. **I am interested in politics**
- Disagree completely 1 2 3 4 5 6 7 8 9 10 Agree completely
-
- b. **I often discuss politics with family and friends**
- Disagree completely 1 2 3 4 5 6 7 8 9 10 Agree completely
-

Which party would you vote for if there were to be an election today?

The parties are listed alphabetically

- | | |
|--|---|
| 01 <input type="checkbox"/> Centerpartiet | 08 <input type="checkbox"/> Sverigedemokraterna |
| 02 <input type="checkbox"/> Feministiskt initiativ | 09 <input type="checkbox"/> Vänsterpartiet |
| 03 <input type="checkbox"/> Folkpartiet | 10 <input type="checkbox"/> Other party |
| 04 <input type="checkbox"/> Kristdemokraterna | 11 <input type="checkbox"/> Would leave a blank vote |
| 05 <input type="checkbox"/> Miljöpartiet | 12 <input type="checkbox"/> Would not vote |
| 06 <input type="checkbox"/> Moderaterna | 13 <input type="checkbox"/> Don't know / Don't want to answer |
| 07 <input type="checkbox"/> Socialdemokraterna | |

Part 2: Economic Redistribution

Now follows some statements and questions about economic redistribution. Convey your opinion in each question by marking the alternative that is most correct for you!

Economic redistribution means that the state, through taxes and subsidies, makes the income in society more equal between citizens than what would have been the case without these taxes and subsidies. The **Public Sector** means the activities of all cities, regions and the state.

a. How much economic redistribution do you want in society?

No redistribution means that the state doesn't influence the income distribution at all. Full redistribution means that everyone earns the same amount after taxes and subsidies.

No redistribution. 1 2 3 4 5 6 7 8 9 10
 Full redistribution

b. If we were to ask question 9a to all Swedes aged 18 years or older, what do you think that the average answer would be?

No redistribution. 1 2 3 4 5 6 7 8 9 10
 Full redistribution.

To what extent do you agree with the following statements?

a. I prefer the system of economic redistribution that means that I get the highest possible income after taxes and subsidies.

Disagree completely 1 2 3 4 5 6 7 8 9 10
 Agree completely

b. The state is responsible for making sure that the welfare of all citizens is above a certain minimum level.

Disagree completely 1 2 3 4 5 6 7 8 9 10
 Agree completely

c. I have a positive attitude to economic redistribution because I care about other people's standard of living.

1 2 3 4 5 6 7 8 9 10

Disagree completely Agree completely

- d. **I have a positive attitude to economic redistribution because I believe that it is good for me economically.**

Disagree completely Agree completely

- e. **I have a positive attitude to economic redistribution because I feel that it gives safety if something unexpected were to happen.**

Disagree completely Agree completely

- f. **I have a positive attitude to economic redistribution because I believe that it creates a more fair society.**

Disagree completely Agree completely

- g. **I have a positive attitude to economic redistribution because I believe that it is good for me in some non-economic way.**

Example: if those with the lowest income get a higher income through redistribution it may reduce crime which is positive for me.

Disagree completely Agree completely

Would you like to change the income taxes that we have in Sweden today, and if so in what way?

- 1 Lower taxes
2 No change
3 Higher taxes

If the income taxes were to increase in Sweden, would you change your amount of work?

- 1 Yes, I would work more
2 No, I would work as much as I do now
3 Yes, I would work less

How would you like to change the economic redistribution in Sweden?

- 1 Less redistribution
2 No change
3 More redistribution

Do you think that you are a "winner" or a "loser" from the economic redistribution in Sweden?
A "winner" is someone who uses services and gets subsidies from the public sector with a higher economic value than what he/she pays through taxes.

"Loser" Neither "Winner"

	1	2	3
a. This year	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. During your whole life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Part 3: Income currently and historically

Imagine that we divide all yearly incomes of Swedes on a scale between 1 and 10 so that 1 is the lowest income and 10 is the highest.

The income we refer to is the total yearly income which contains income from labor and capital before tax. Pensions before tax are also in this category. Subsidies like public unemployment payment are not part of the total yearly income.

a. **Where do you think that your income last year (i.e. 2010) would be on this scale?**

Individual 1 (lowest income) 1 2 3 4 5 6 7 8 9 10 Individual 10 (highest income)

b. **Where do you think that your income TEN YEARS AGO would be on the scale?**

Imagine that we use a scale that represents the incomes of Swedes 10 years ago. Leave the question blank if you were less than 18 years old 10 years ago.

Individual 1 (lowest income) 1 2 3 4 5 6 7 8 9 10 Individual 10 (highest income)

c. **Where do you think that your income FIVE YEARS AGO would be on the scale?**

Imagine that we use a scale that represents the incomes of Swedes 10 years ago. Leave the question blank if you were less than 18 years old 5 years ago.

Individual 1 (lowest income) 1 2 3 4 5 6 7 8 9 10 Individual 10 (highest income)

d. **Where do you think that your income IN FIVE YEARS would be on the scale?**

Imagine that we use a scale that represents the incomes of Swedes 5 years from now.

Individual 1 (lowest income) 1 2 3 4 5 6 7 8 9 10 Individual 10 (highest income)

e. **Where do you think that your income IN TEN YEARS would be on the scale?**

Imagine that we use a scale that represents the incomes of Swedes 5 years from now.

Individual 1 (lowest income) 1 2 3 4 5 6 7 8 9 10 Individual 10 (highest income)

How many percent of the Swedish population (18 years or older) do you think have a total yearly income which is lower than yours?

The income we refer to is the total yearly income which contains income from labor and capital before tax. Pensions before tax are also in this category. Subsidies like public unemployment payment are not part of the total yearly income.

I believe that percent have a lower income than I do.

Approximately how large was your income during 2010?

Yearly income is defined as in question 16. If your monthly salary is 18000 and you didn't have any other income your yearly income was 216000.

My yearly income was SEK in 2010.

a. Are you married or living with a partner?

1 Yes

2 No → Go to question 19

b. If you are married or living with a partner, approximately how big was your partners total income before tax during 2010?

Yearly income is defined as in question 16. If you don't know the answer, please try to estimate it.

My partner's yearly income was SEK 2010.

What do you think was the average yearly income for Swedes aged 18 years or older during 2010?

Yearly income is defined as in question 16.

I believe that the average yearly income was SEK 2010.

How would you classify yourself in terms of class?

Please do not tick more than one alternative per question.

		"Working class" 1	"Lower middle class" 2	"Middle class" 3	"Upper middle class" 4	"Upper class" 5
a.	When you grew up	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b.	10 years ago	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c.	5 years ago	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d.	Currently	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e.	In 5 years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f.	In 10 years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

To what extent do you agree with the following statements?

Disagree completely 1 2 3 4 5 6 7 8 9 10 Agree completely

a.	If you are currently in a certain income group you will not belong to a different group in the future.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b.	Business and industries should be owned by the public sector.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c.	Competition between individuals is good, e.g. in school or in working life.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d.	Competition between businesses is good.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e.	When born, all individuals have the same possibility to become economically successful.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f.	One can only become rich at the expense of others.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

a. Is it mostly effort or luck that matters for how well an individual does economically in life?
Luck can for example mean having contacts.

	1	2	3	4	5	6	7	8	9	10	
Only luck	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Only effort

b. If we were to ask question 22a to all Swedes aged 18 and older, what do you think that the average answer would be?

	1	2	3	4	5	6	7	8	9	10	
Only luck	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Only effort

a. For your well-being, how dependent do you feel that you are on the public sector?

	1	2	3	4	5	6	7	8	9	10	
Not at all dependent	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Very dependent

b. If we were to ask question 23a to all Swedes aged 18 and older, what do you think the average answer would be?

	1	2	3	4	5	6	7	8	9	10	
Not at all dependent	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Very dependent

Do you believe that you are more or less dependent on the public sector than the average Swede?

1 Less dependent
 2 As dependent as the average Swede
 3 More dependent

How many percentages of the public sector budget do you believe are used for health care, school and care for the elderly?

0-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91-100%
1	2	3	4	5	6	7	8	9	10
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

To what extent do you agree with the following statements?

		Disagree completely					Agree completely				
		1	2	3	4	5	6	7	8	9	10
a.	Changes in income taxes influence how much people choose to work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b.	The state is efficient when redistributing money (no money is lost on the way)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c.	The public sector in Sweden spends money on the right things	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d.	People working in the public sector are generally doing a good job.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

What do you teach your children about the relative importance of luck and effort for economic success?
If you don't have children yourself, answer what you think that those with children should do.

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

Part 4: Some final questions

Below we will ask you a few questions where you can choose between getting a sum of money for sure or to take part in a lottery where you have a 50% chance of winning 3000 SEK and a 50% chance of not winning anything. We vary the alternative that you can get for sure but the lottery stays the same. Please note that all choices are hypothetical!

Tick the first square if you want the certain alternative and the second square if you want the lottery. Choose one alternative in each row.

	Certain alternative 1	Lottery 2
a.	500 SEK for sure <input type="checkbox"/>	50% chance of SEK 3000 <input type="checkbox"/>
b.	1000 SEK for sure <input type="checkbox"/>	50% chance of SEK 3000 <input type="checkbox"/>
c.	1200 SEK for sure <input type="checkbox"/>	50% chance of SEK 3000 <input type="checkbox"/>
d.	1400 SEK for sure <input type="checkbox"/>	50% chance of SEK 3000 <input type="checkbox"/>
e.	1600 SEK for sure <input type="checkbox"/>	50% chance of SEK 3000 <input type="checkbox"/>
f.	1800 SEK for sure <input type="checkbox"/>	50% chance of SEK 3000 <input type="checkbox"/>

- g. 2000 SEK for sure 50% chance of SEK 3000
- h. 2500 SEK for sure 50% chance of SEK 3000

In general, are you a person who is willing or unwilling to take risks?

Mark your answer below.

Not willing to take risks 1 2 3 4 5 6 7 8 9 10 Very willing to take risks

If you could choose, would you then prefer...

- | | Money today | Money in 12 months |
|--|--------------------------|--------------------------|
| | 1 | 2 |
| a. ...1000 SEK today or 1000 SEK in 12 months? | <input type="checkbox"/> | <input type="checkbox"/> |
| b. ...1000 SEK today or 1170 SEK in 12 months? | <input type="checkbox"/> | <input type="checkbox"/> |
| c. ...1000 SEK today or 1340 SEK in 12 months? | <input type="checkbox"/> | <input type="checkbox"/> |
| d. ...1000 SEK today or 1510 SEK in 12 months? | <input type="checkbox"/> | <input type="checkbox"/> |
| e. ...1000 SEK today or 1680 SEK in 12 months? | <input type="checkbox"/> | <input type="checkbox"/> |
| f. ...1000 SEK today or 1850 SEK in 12 months? | <input type="checkbox"/> | <input type="checkbox"/> |
| g. ...1000 SEK today or 2170 SEK in 12 months? | <input type="checkbox"/> | <input type="checkbox"/> |

To what extent is the following statement true for you? I often postpone boring things, for example paying bills, and instead do something that is more fun.

Not true at all 1 2 3 4 5 6 7 8 9 10 Completely true

Indicate your willingness to give money to charities.

Not willing to give. 1 2 3 4 5 6 7 8 9 10 Very willing to give.

a. If you were to win SEK 10 000, would you give anything to a charity?

1 Yes

2 No → Go to question 34

b. How much of the SEK 10 000 would you give to charity?

I would give SEK.

To what extent are the following statements true for you?

- a. **I always assume that other people have good intentions, if I don't get clear signals that this is not the case.**

Not true at all. 1 2 3 4 5 6 7 8 9 10
 Completely true.

- b. **If someone has helped me before, I go out of my way to help them.**

Not true at all. 1 2 3 4 5 6 7 8 9 10
 Completely true.

Thank you for answering the survey!

Follow-Up Survey

Some statements and questions below concern economic redistribution. Economic redistribution means that the state, through taxes and subsidies, make the income in society more equal between the citizens that what would have been the case without these taxes and subsidies. The Public Sector means the activities that all cities, regions and the state represent.

<p>How much economic redistribution do you want in society? <i>No redistribution means that the state doesn't influence the income distribution at all. Full redistribution means that everyone earns the same amount after taxes and subsidies.</i></p>											
No redistribution.	1	2	3	4	5	6	7	8	9	10	Full redistribution.
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<p>To what extent do you agree with the following statements?</p>											
<p>a. I prefer the system of economic redistribution that means that I get the highest possible income after taxes and subsidies.</p>											
Disagree completely.	1	2	3	4	5	6	7	8	9	10	Agree completely.
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<p>b. The state is responsible for making sure that the welfare of all citizens is above a certain minimum level.</p>											
Disagree completely.	1	2	3	4	5	6	7	8	9	10	Agree completely.
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<p>c. Extensive economic redistribution leads to a less efficient society.</p>											
Disagree completely.	1	2	3	4	5	6	7	8	9	10	Agree completely.
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<p>How would you like to change the economic redistribution in Sweden?</p>											
<p>1 <input type="checkbox"/> Less redistribution</p>											
<p>2 <input type="checkbox"/> No change</p>											
<p>3 <input type="checkbox"/> More redistribution</p>											
<p>For your well-being, how dependent do you feel that you are on the public sector?</p>											
Not at all dependent	1	2	3	4	5	6	7	8	9	10	Very dependent
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<p>Would you like to change the income taxes that we have in Sweden today, and if so in what way? I would like all individuals' income taxes to...</p>											
<p>1 <input type="checkbox"/> ...decrease with more than 5 percentages points.</p>											
<p>2 <input type="checkbox"/> ...decrease with 5 percentages points.</p>											
<p>3 <input type="checkbox"/> ...decrease with 3 percentages points.</p>											
<p>4 <input type="checkbox"/> ...decrease with 1 percentages point.</p>											
<p>5 <input type="checkbox"/> ...not change at all.</p>											
<p>6 <input type="checkbox"/> ...increase with 1 percentages point.</p>											
<p>7 <input type="checkbox"/> ...increase with 3 percentages points.</p>											
<p>8 <input type="checkbox"/> ...increase with 5 percentages points.</p>											
<p>9 <input type="checkbox"/> ...increase with more than 5 percentages points.</p>											

Do you believe that you are more or less dependent on the public sector than the average Swede?

1 Less dependent
2 As dependent as the average Swede.
3 More dependent.

a. If you would win SEK 10 000, would you give anything to a charity?

1 Yes
2 No → Go to question 8.

b. How much of the SEK 10 000 would you give to charity?
I would give kronor

Which party would you vote for if there would be an election today?
The parties are listed alphabetically

1 <input type="checkbox"/> Centerpartiet	08 <input type="checkbox"/> Sverigedemokraterna
2 <input type="checkbox"/> Feministiskt initiativ	09 <input type="checkbox"/> Vänsterpartiet
3 <input type="checkbox"/> Folkpartiet	10 <input type="checkbox"/> Other party
4 <input type="checkbox"/> Kristdemokraterna	11 <input type="checkbox"/> Would leave a blank vote
5 <input type="checkbox"/> Miljöpartiet	12 <input type="checkbox"/> Would not vote
6 <input type="checkbox"/> Moderaterna	13 <input type="checkbox"/> Don't know / Don't want to answer
7 <input type="checkbox"/> Socialdemokraterna	

a. Would you like to change how you balance time at work and free time in your life?

1 Yes
2 No → Go to question 9.

b. Which change would you like to make?

1 Work more
2 Have more free time

Indicate your willingness to give money to charities.

Not willing to give. 1 2 3 4 5 6 7 8 9 10 Very willing to give.

Is it mostly effort or luck that matters for how well an individual does economically in life?
Luck can for example mean having contacts.

Only luck 1 2 3 4 5 6 7 8 9 10 Only effort

Through which sources do you prefer to get news and other societal information. Mark all answers that are true for you.

1 TV
2 Radio
3 Newspapers
4 Internet
5 Annan källa

Approximately how large was your income during 2011?

The income we refer to is the total yearly income which contains income from labor and capital before tax. Pensions before tax are also in this category. Subsidies like public unemployment payment are not part of the total yearly income. If your monthly salary is 18000 and you didn't have any other income your yearly income was 216000.

My yearly income was

kronor 2011.

Thank you for answering the survey!