

# **Why do the rich oppose redistribution?**

## **An experiment with America's top 5%**

Alain Cohn, Lasse J. Jessen, Marko Klašnja, and Paul Smeets \*

**June 21, 2019**

### **Abstract**

Wealthy individuals have a disproportionate influence on politics and firms. We study attitudes toward redistribution of a large sample of the top 5% in the U.S. in terms of income and financial assets, and find that they prefer less redistribution than a representative sample of the bottom 95%. The differences in tax attitudes and political views can be largely attributed to differences in distributional preferences, which we measured in an experiment where choices affected the pay of workers in a real-effort task. Wealthy Americans redistribute less to the low-income worker, thus accepting more inequality than the rest of the population. The gap in distributional preferences is primarily driven by individuals who acquired wealth over their lifetime rather than those who were born into wealth. Our findings raise the possibility that wealthy individuals contribute to the persistent income inequality in the U.S.

\* Cohn: [adcohn@umich.edu](mailto:adcohn@umich.edu), School of Information, University of Michigan

Jessen: [jessen@economics.uni-kiel.de](mailto:jessen@economics.uni-kiel.de), Institute of Economics, Kiel University

Klašnja: [marko.klasnja@georgetown.edu](mailto:marko.klasnja@georgetown.edu), School of Foreign Service and Government Department, Georgetown University

Smeets: [pm.smeets@maastrichtuniversity.nl](mailto:pm.smeets@maastrichtuniversity.nl), School of Business and Economics, Maastricht University

## I. Introduction

In April 2015, Dan Price, the CEO of the Seattle-based company Gravity Payments, announced the cutting of his own \$1.1 million compensation package to help fund a minimum wage of \$70,000 for all his employees. “I think this is just what everyone deserves,” Price told his staff.<sup>1</sup> His announcement came at a time of rising public anger over the widening gap between the pay of top executives and employees. For example, the average CEO-to-worker pay ratio in the U.S. has grown from 20-to-1 in 1965 to about 312-to-1 in 2017.<sup>2</sup> The CEO’s decision to buck this trend and reduce the pay inequality in his company illustrates how wealthy individuals can shape the income distribution.<sup>3</sup>

The strong influence of the wealthy on economic inequality is not limited to the business world, but also applies to politics. For example, U.S. Congress has considerable power to shape the income and wealth distribution in society through taxation, social insurance, education finance, and labor market regulation. At the same time, most Congress members are financially well-off, with two out of three members of the House being millionaires (Eggers and Klašnja, 2019). The wealthy may be more influential even if they do not hold political office. For example, studies have shown that wealthy individuals are politically more active, and that politicians tend to be more responsive to their preferences than to the preferences of the general population when these preferences diverge (Page et al., 2013; Gilens, 2012). The political influence of the wealthy may thus be one of the reasons why the average tax rate of the top 400 earners in the U.S. has dropped from 29.2% to 21.5% between 1992 and 2008 even though their taxable income has quadrupled (Alvaredo et al., 2013).

Given that the wealthy tend to have a large and disproportionate impact on inequality in society, it is important to gain a deeper understanding of their attitudes toward redistribution. Do attitudes of the wealthy differ from those of the rest of the population, and if so, why? There is still

---

<sup>1</sup> Johnson, Gene. 2015. “Seattle CEO to cut his pay so every worker earns \$70,000.” *Associated Press*, April 16. Retrieved January 27, 2019, from <https://www.apnews.com/973c8ad36f22466b8c0f1d74092a3935>.

<sup>2</sup> Mishel, Lawrence, and Schieder, Jessica. 2018. “CEO compensation surged in 2017.” *Economic Policy Institute*, 16. Retrieved March 26, 2019, from <https://www.epi.org/publication/ceo-compensation-surged-in-2017>.

<sup>3</sup> Song et al. (2018) estimate that within-firm pay inequality contributes to about a third of the rise in earnings inequality in the U.S.

a lack of systematic evidence to answer those questions. Previous studies either relied on small or specialized samples of the rich, or they applied a relatively broad definition of the wealthy that includes more than just the top of the income and wealth distribution (Alesina and Giuliano, 2011; Norton and Ariely, 2011; Page et al., 2013; Fisman et al., 2015; Almås, Cappelen and Tungodden, 2019; Cappelen et al., 2019).

We conducted an online survey with a large sample of the top 5% of the income and wealth distribution in the U.S. (N = 465), and compare their responses with a nationally representative sample of the general population (N = 417). We collected both samples through YouGov, a leading survey company in the U.S. The samples are professionally and geographically diverse and track well the distributions of income, financial assets, and sources of wealth of the upper class and the general population from across the U.S.

We find that the top 5% are less supportive of redistribution compared to the rest of the population with regard to both the desired top income and estate tax rate. We also find that, among those who voted, the top 5% were more likely to vote for Republican candidate Donald Trump in the 2016 presidential election. Trump made several campaign promises that would lead to a reduction in redistribution, such as a major tax cut and a repeal of the planned Medicaid expansion. The latter would prevent uninsured adults and children from low-income households from having access to affordable health insurance.

The main focus of this paper is to examine why the rich have different attitudes toward redistribution.<sup>4</sup> Most of the literature emphasizes the role of beliefs about the source of income inequality as a key determinant of attitudes toward redistribution. For example, in a seminal paper, Piketty (1995) argues that the difference in attitudes toward redistribution between Europe and the U.S. is due to different collective beliefs about the relative role of luck and effort in individual achievements. Indeed, several studies show empirically that people who believe that financial well-being is one's own responsibility are less supportive of redistribution (e.g., Fong, 2001; Alesina and Giuliano, 2011; Fong and Poutvaara, 2019). Based on this evidence, one might thus

---

<sup>4</sup> In this paper, we focus on attitudes toward redistribution of government revenue, and not on redistribution through private charitable donations.

hypothesize that the wealthy are less supportive of redistributive policies because they believe more strongly in the importance of hard work for economic success. This would be consistent with recent research suggesting that successful individuals exhibit a self-attribution bias, as they are less inclined to recognize the role of luck in their achievements (e.g., Hoffmann and Post, 2014; Deffains et al., 2016).

An alternative, perhaps complementary, explanation of the difference in attitudes toward redistribution between the top 5% and bottom 95% is that the two groups have different distributional preferences. We use the term “distributional preferences” to describe people’s taste for a certain allocation of income when the self is not involved (Fisman et al., 2007). Although it is common to assume that attitudes are shaped by both beliefs and preferences, the idea that distributional preferences play a major role in shaping attitudes toward redistribution has only recently received attention (Fisman et al., 2017; Almås et al., 2019). For example, it could be that the wealthy have a higher tolerance for inequality compared to the rest of the population because of their own or their parents’ income mobility experiences (Piketty, 1995).

We therefore not only elicited participants’ beliefs about the role of hard work versus luck in economic success, but also measured their distributional preferences using an experimental task adapted from Almås et al. (2019). In this task, participants were asked to make redistribution choices that had real monetary consequences for others. To this end, we recruited a large number of workers on Amazon Mechanical Turk (MTurk) and divided them into pairs. Workers in a pair performed the same task, but they were allocated unequal earnings. Our survey respondents acted as third-party “spectators” and had the opportunity to redistribute money from the high- to the low-income worker.

Importantly, we experimentally controlled for the influence of beliefs about the source of income inequality by informing the spectators about the rule for allocating the unequal earnings. Specifically, spectators were randomly assigned to one of three conditions. In the Merit treatment, inequality in earnings between the two workers was determined by their relative performance on the task. In the Luck treatment, the initial assignment of earnings was determined by chance alone. We also implemented a third condition, the Mixed treatment, in which earnings were assigned based on workers’ relative performance, but there was also a 20% probability that a worker’s performance was downgraded (and spectators knew this). This condition more closely reflects

real-world situations of income inequality, as successes and failures are typically the result of both luck and effort.

Another important aspect of the redistribution task is that it captures distributional preferences without the confounding influence of material self-interest. Although choices in this task had real monetary consequences for the workers, they did not affect the earnings of the spectators. This is crucial when comparing groups of individuals with different financial backgrounds, as an extra dollar may mean less to a rich compared to a poor person due to diminishing marginal utility of money. Together, choices in the redistribution task provide us with a behavioral measure of distributional preferences when the source of inequality *is known*, and the treatment variation allows us to explore how distributional preferences are shaped by the source of inequality.

In addition to the gap in attitudes toward redistribution between the top 5% and bottom 95%, we report four main findings. First, the top 5% have different distributional preferences than the bottom 95%, as they accept significantly more inequality. Interestingly, the difference in inequality acceptance between the two groups is largest when the source of inequality is pure luck. When workers' earnings are based on merit alone, both the top 5% and bottom 95% redistribute relatively little and the gap in distributional preferences between the two groups is smaller. Thus, while both groups have a similar share of meritocrats (i.e., people who view inequality as fair when it is brought about by differences in effort), wealthy individuals are more likely to choose according to a libertarian fairness view (i.e., a larger share of the top 5% considers unequal earnings as fair even when the inequality is caused by luck).

Second, we do not find that differences in socio-demographic background between the rich and the general population explain the gap in preferences for inequality (e.g., the top 5% tend to be older and more highly educated). Yet, our results suggest that the personal experience of social mobility is a major driver of the difference in distributional preferences. Affluent individuals who grew up in a wealthy household have relatively similar distributional preferences as the average American. In contrast, those who climbed the income ladder have a higher tolerance for inequality. Similarly, we find that the gap in distributional preferences between the top 5% and bottom 95% is driven to a large extent by the higher share of (successful) entrepreneurs and individual investors in the wealthy sample.

Third, in addition to distributional preferences, we also examine other possible drivers of the difference in attitudes toward redistribution between the top 5% and bottom 95%, including meritocratic beliefs (i.e., beliefs about the importance of hard work versus luck for success in life), altruism, and attitudes toward government. For example, as mentioned above, it could be that the top 5% are less supportive of redistribution than the bottom 95% because they believe more strongly in the “American dream” (i.e., that anyone who works hard enough can make it to the top). Alternatively, it could also be that the top 5% are less altruistic and therefore less willing to give up part of their income to support the poor and needy (Fisman et al., 2015).<sup>5</sup> Finally, the top 5% may have less faith that the government implements redistributive policies in a fair and efficient manner (Kuziemko et al., 2015; Alesina et al., 2018). Despite their intuitive appeal, we find no evidence for any of these alternative explanations. Our data indicate that the top 5% have similar meritocratic beliefs and attitudes toward the government as the bottom 95%. Moreover, the top 5% are more altruistic than the bottom 95%, as they are more willing to give to good causes without expecting anything in return, and they also donate a larger fraction of their income to charity.

Fourth, we assess the relative importance of each of these four factors (distributional preferences, meritocratic beliefs, altruism, and trust in government) in explaining the variation in attitudes toward redistribution. Across all three measures of attitudes toward redistribution, we find that distributional preferences are equally, if not more, important than meritocratic beliefs. That is, individuals who redistribute less in the experimental task are also less in favor of increasing the top income and estate tax rate, and they were more likely to vote for Trump. In contrast, trust in government and altruism are noticeably less important drivers of attitudes toward redistribution. Focusing on the top 5%, we find that our four preference and belief measures account for more than a third of the total variation in individual attitudes toward redistribution. Regardless of which proxy we use to measure those attitudes, almost half of the variance explained is due to individual differences in distributional preferences. Moreover, once we control for distributional preferences in the full sample analysis, differences in attitudes toward redistribution between the top 5% and

---

<sup>5</sup> However, several recent studies with real rich people (as opposed to students) do not find that wealthy individuals are more selfish (Trautmann et al., 2013; Korndörfer et al., 2015; Smeets et al., 2015; Andreoni et al., 2017).

bottom 95% decline by up to 45%. Together, these results suggest that distributional preferences are an important determinant of attitudes toward redistribution, and they help explain why the top 5% are less in favor of redistribution.

Our paper contributes to several strands of the literature. First, there is a small but growing number of studies on prosocial behavior of the wealthy (e.g., Hoffman, 2011; Trautmann et al., 2013; Korndörfer et al., 2015; Smeets et al., 2015; Levin, Levitt and List, 2016; Andreoni et al., 2017). Most closely related to our paper is Fisman et al. (2015), who study social preferences of students at an elite school using modified dictator games. They find that Yale Law School students are less egalitarian and also more efficiency-oriented than the general population. In contrast to our study, Fisman et al. focus on trade-offs between a person's own payoff and the payoffs of others. Although this type of trade-off may be related to distributional choices between the payoffs of others (i.e., when the own payoff is not at stake), they are conceptually different and it is not *a priori* clear whether choices in these two types of distributional situations reflect the same underlying preferences. Moreover, while students at elite universities may end up in positions of power, they are not in those positions yet. This seems important in light of our finding that personal experience of upward social mobility may play an important role in the formation of distributional preferences.

Our paper also adds to the literature on attitudes toward redistribution (see Alesina and Giuliano, 2011, for a recent review). Several theoretical contributions argue that individual or collective beliefs about the role of effort versus luck in the creation of wealth affect people's support for redistribution (Piketty, 1995; Bénabou and Ok, 2001; Bénabou and Tirole, 2006). Consistent with this literature, we also find that beliefs about the importance of hard work for success in life are related to attitudes toward redistribution, both among the top 5% and bottom 95%. Yet, we do not find that these beliefs differ between the two groups. In contrast, we find that the top 5% have different distributional preferences compared to the bottom 95% and that these preferences are of first-order importance. This suggests that the existing view of what determines attitudes toward redistribution may be incomplete if one ignores the role of distributional preferences.

More generally, our paper relates to the broad literature on economic inequality in society. Inequality has sharply increased over the past few decades, especially in the U.S. (e.g., Alvaredo

et al., 2017). For example, while the top 1% of U.S. households earned about 9 percent of total income in 1970, that share rose to about 22 percent by 2015, the highest level since the Great Depression.<sup>6</sup> Redistribution through higher taxes on the wealthy seems to be an obvious policy instrument to reduce the widening gap between the rich and the poor.<sup>7</sup> However, this may not be feasible if the wealthy and the general population have different policy interests, and policy makers are more responsive to the interests of the wealthy (Bartels, 2016; Gilens, 2012; Gilens and Page, 2014). We show that there is indeed a discrepancy in attitudes toward redistribution between the average citizen and the economically advantaged, and that this difference is deeply rooted in people's preferences or acceptance of inequality. Our results may therefore help to explain the modest policy response to the rise in economic inequality in the U.S., which continues to grow despite the majority of citizens preferring a more equal distribution of wealth (Norton and Ariely, 2011).

## II. Sample, Experimental Design, and Questionnaire

We conducted the survey in collaboration with YouGov, one of the leading internet survey companies. YouGov maintains a large participant pool of about 1.8 million individuals in the U.S., which allowed us to recruit a large and diverse sample of participants with high income and wealth, as well as a similarly sized representative sample of the bottom 95% of the U.S. population.<sup>8</sup> Figure A1 in the appendix presents the distributions of annual household income and gross liquid assets (i.e., wealth without real estate property) for each sample. We classify our participants as either

---

<sup>6</sup> See updated Table A3 of Piketty and Saez (2003), <http://elsa.berkeley.edu/~saez/TabFig2015prel.xls>.

<sup>7</sup> The Democratic Party has recently espoused a number of proposals that would increase the taxes on the wealthy. See, e.g., Stein, Jeff and Ingraham, Christopher. 2019. "Elizabeth Warren to propose a new 'wealth tax' on the very rich Americans, economist says." Washington Post, January 24. Retrieved April 8, 2019, from [https://www.washingtonpost.com/business/2019/01/24/elizabeth-warren-propose-new-wealth-tax-very-rich-americans-economist-says/?utm\\_term=.e30d10450999](https://www.washingtonpost.com/business/2019/01/24/elizabeth-warren-propose-new-wealth-tax-very-rich-americans-economist-says/?utm_term=.e30d10450999); Stracqualursi, Veronica. 2019. "Ocasio-Cortez suggests 70% tax for wealthy to fund climate change plan." CNN, January 4. Retrieved April 8, 2019, from <https://www.cnn.com/2019/01/04/politics/alexandria-ocasio-cortez-tax-climate-change-plan/index.html>; Strachan, Maxwell, and Peck, Emily. 2019. "Bernie Sanders Proposes 77 Percent Estate Tax for Billionaires." The Huffington Post, January 31. Retrieved April 8, 2019, from [https://www.huffpost.com/entry/bernie-sanders-estate-tax-billionaires\\_n\\_5c530ce8e4b0ca92c6de199b](https://www.huffpost.com/entry/bernie-sanders-estate-tax-billionaires_n_5c530ce8e4b0ca92c6de199b).

<sup>8</sup> We describe the sampling procedure for both the wealthy and the general population samples in section A1 of the appendix.



top 5% or bottom 95% using income and wealth thresholds based on the 2016 Survey of Consumer Finances (SCF) conducted by the U.S. Federal Reserve Board.<sup>9</sup> According to the SCF, households with an annual income above \$250,000 or gross financial assets of \$1 million or more belong to the top 5%.<sup>10</sup> The study took place between December 2016 and April 2017 with a total sample of 882 individuals (top 5%: N = 465; bottom 95%: N = 417).<sup>11</sup> Table A1 in the appendix presents descriptive statistics for each sample. Unsurprisingly, participants in our top 5% sample are older, better educated, and more likely to be male and white. As is usual in surveys administered by YouGov, participation was rewarded with “points” (worth about \$2), which the participants could collect and redeem for gift cards or merchandise.<sup>12</sup>

Our top 5% sample is one of the largest and most diverse samples of the wealthy recruited for an academic study. Previous studies typically used geographically constrained samples (e.g., high net-worth individuals from the Chicago metropolitan area, see Page et al., 2013) or they drew participants from one specific industry (e.g., Silicon Valley entrepreneurs, see Broockman et al., 2019; or, financial professionals, see Cohn et al., 2014, 2015). Other studies on the affluent have used large public opinion surveys, such as the General Social Survey (GSS) or the American National Election Studies (ANES) (Gilens, 2012; Bartels, 2016; Bertrand and Kamenica, 2018). However, these public opinion surveys typically do not include the types of questions we are interested in, and studies based on these surveys often have to apply a broader definition of the wealthy (e.g., the top third, quarter, or fifth of the income distribution) to obtain sufficiently large samples.

To get a better sense of the background characteristics of our wealthy sample, we compare it with data from population surveys, such as the Survey of Consumer Finances (SCF) and the

---

<sup>9</sup> To count as top 5%, participants needed to be either above the income or above the wealth threshold. We have information on both income and wealth for 746 subjects. In 136 cases, we only have information on either income (87) or wealth (49). In section A4.2 of the appendix, we show that the main results are robust to defining the top 5% only based on income.

<sup>10</sup> The actual threshold values from the SCF for income and wealth are \$260k and \$1.71 million, respectively. However, as we measured income and wealth using brackets, we use the brackets that contain the thresholds provided by the SCF to classify the participants into the two groups.

<sup>11</sup> We targeted a total sample size of 900 participants, but had to exclude 9 respondents who skipped the redistribution task (which provides us with a measure of distributional preferences), and another 9 respondents (from the general population) who neither reported their income nor their wealth.

<sup>12</sup> The survey was approved by the IRB board at Georgetown University (IRB# 2016-1087).

Current Population Survey (CPS). Figure A2 in the appendix shows that our sample of the top 5% has similar financial characteristics (i.e., household income, gross financial assets, liabilities, and main source of wealth) as the SCF sample.<sup>13</sup> If anything, our sample tends to have more financial assets, as shown in Panel (b) of Figure A2. This could be due to the higher share of older people in our sample who have accumulated more wealth in their retirement accounts. As a second check, we examine the breakdown by industry in which our participants work and compare it with data on the top 5% income earners from the 2016 CPS.<sup>14</sup> Table A3 in the appendix shows that the distributions are again similar across the two data sets. Finally, we also examine the geographical distribution of our top 5% sample and compare it with a map of average household income at the county level across the U.S. Figure A3 in the appendix indicates that our sample is drawn from across the U.S., and that there is indeed a higher concentration of participants in high-income areas. Overall, our top 5% sample is quite diverse and seems to be fairly representative of the wealthy in the U.S.

It is worth noting that the income and wealth information that we use to construct the two samples is self-reported. YouGov regularly asks their participants to report their current financial situation and updates that information in their database. Yet, it is well known in the surveying literature that some people are reluctant to provide accurate information about their finances due to privacy concerns, or simply because they do not know exactly how much money they currently have (e.g., Moore et al., 2000). We took several precautionary steps to address potential issues of measurement error. First, YouGov uses income and wealth brackets when asking people about their financial situation, as it has been shown that people feel more comfortable reporting financial information in this way (Juster and Smith, 1997).<sup>15</sup> Second, it has been shown that people are less inclined to give socially desirable answers in online relative to paper-based or telephone surveys, and are thus more likely to provide truthful answers (e.g., Chang and Krosnick, 2009). Third, YouGov's subject pool typically participates repeatedly in their surveys, which has also been

---

<sup>13</sup> The distributions of these financial background variables are also similar when comparing our bottom 95% sample to the overall sample in the SCF.

<sup>14</sup> To make the two data sets comparable, here we define our top 5% sample only based on income, as the CPS does not provide information about the wealth of their survey participants.

<sup>15</sup> Moreover, the survey questions asking about income and gross financial assets were designed with a pop-up for the seven highest categories that only unfolded if a participant indicated to belong to the highest initial income or wealth category. This unfolding structure has been shown to reduce income nonresponse (Yan et al., 2010).

shown to reduce measurement error (e.g., Cantor 2008). Finally, our study was embedded in a broader survey on people’s opinions about social and political affairs. As the survey started with the same financial background questions as in surveys previously administered by YouGov, we were able to validate the responses and screen out participants who provided inconsistent information across surveys before they started with our questionnaire.<sup>16</sup>

The goal of this study is to measure and explain differences in attitudes toward redistribution between the top 5% and bottom 95% (see Appendix B for a copy of the questionnaire and instructions for the experiment). We measured these attitudes in three ways. First, we asked participants whether they would prefer a higher or lower effective income tax rate for the top income bracket (which, at the time of the survey, was 33% for households earning \$467,000 and more) on a 5-point scale from “much lower” (= -2) to “much higher” (= 2). Second, we asked them the same question about the effective estate tax rate (which, at that time, was 17% for individuals with estates valued at \$5.45M or more). As a third measure, we use voting behavior in the 2016 U.S. presidential election. Specifically, we create a dummy variable for whether participants voted for Donald Trump (conditional on voting). Over the past decades, the Republican Party has grown more conservative on major issues like inequality, government-sponsored health insurance, and minimum wage, essentially arguing that redistributing wealth through government is the wrong way to fix the problem of inequality (McCarty et al., 2016). For example, the Trump administration’s tax reform plan has been projected to increase the future tax burden for middle- and low-income households.<sup>17</sup>

As potential determinants of attitudes toward redistribution, we consider four factors: (i) distributional preferences, (ii) meritocratic beliefs, (iii) altruism, and (iv) trust in government. Our

---

<sup>16</sup> To minimize the risk of misreported financial information, we only allowed those respondents in our wealthy sample to continue with the survey if their reported income and gross financial assets matched the information YouGov contained from a respondent’s most recent survey (during which YouGov recorded the same type of information). While this procedure likely excluded some respondents whose financial situation legitimately changed between the two surveys, we believe it also screened out respondents who might have been more likely to misrepresent their income and wealth. Because misreporting is more consequential for our study of the wealthy, we applied this procedure only among respondents in our wealthy sample.

<sup>17</sup> See, e.g., Gale, William. G., Gelfond, Hilary, Krupkin, Aaron, Mazur, Mark J., and Toder, Eric. 2018. “Effects of the tax cuts and jobs act: a preliminary analysis.” Washington D.C.: Tax Policy Center. Retrieved March 26, 2019, from <https://www.taxpolicycenter.org/publications/effects-tax-cuts-and-jobs-act-preliminary-analysis/full>.

main focus is on distributional preferences, which we measured in a controlled experiment adapted from Almås et al. (2019). There were two types of participants in this experiment, *spectators* and *workers*. Our survey participants were assigned the role of spectators and had to decide whether to redistribute earnings between a pair of workers who had completed the same assignment. They were randomly assigned to one of three treatments that varied the source of inequality (luck, effort, or a mix of both). Controlling the source of inequality not only helps us to distinguish distributional preferences from beliefs about the source of inequality, but it also allows us to examine potential differences in distributional preferences between the top 5% and bottom 95% across different sources of inequality.

For each spectator we recruited two workers on Amazon Mechanical Turk (MTurk), resulting in a total of 1,782 workers.<sup>18</sup> MTurk is an online platform that allows researchers and businesses to post small tasks that require human intelligence, such as categorizing data or identifying objects in photos.<sup>19</sup> The workers were offered a flat payment of \$1.00 for completing the assignment and a short questionnaire, and were told that they can earn additional money. Their assignment consisted of double-checking and correcting a digitized list of identification numbers (IDs) for a duration of 5 minutes.<sup>20</sup> After completing the assignment, we informed the workers that they will be matched with another worker and that one of them would receive an additional \$6.00, whereas the other worker would not receive any additional payment. We also explained the earnings allocation procedure, which varied across treatments (as described below). However, we did not tell them which of the two workers was assigned the additional payment to prevent possible entitlement effects (which, in turn, could affect spectators' decisions). We further explained that a third person (i.e., the spectator) will be informed about the earnings allocation rule, and will then

---

<sup>18</sup> Although we excluded 9 spectators from the analysis because they did not report their income and wealth, we nonetheless recruited workers for these spectators and paid the workers according to the spectators' decisions.

<sup>19</sup> The online labor market MTurk has become a popular platform among behavioral researchers to recruit subjects for experiments (e.g., Horton et al., 2011; Mason and Suri, 2012; Paolacci and Chandler, 2014). In recent years, MTurk has also been increasingly used in economics (e.g., Kuziemko et al., 2015; Bursztyjn et al., 2017; DellaVigna and Pope, 2017, 2018; Almås et al., 2019).

<sup>20</sup> The workers saw a copy of a handwritten list of participant IDs from a different study as well as a digitized version of that list, side-by-side (see section B3 of the appendix). They were instructed to go through that list, row by row, and type in the correct ID in case the handwritten ID did not match the digital ID. Each ID consisted of two letters followed by eight digits. We deliberately chose a tedious task in which effort rather than luck (e.g., in the form of innate intelligence) determines a worker's performance in order to have maximum control over the influence of luck.

have the opportunity to redistribute the earnings between the two workers. Finally, workers were told that they will receive their earnings for the assignment at the end of the study once all spectator decisions were collected.

In a between-subjects design, we randomly assigned the spectators to one of three treatments that varied the allocation rule for workers' initial earnings.<sup>21</sup> In the "Luck" treatment, workers' initial earnings were determined by chance. A random draw selected one of the two workers to receive the payoff of \$6.00 for the assignment. The other worker earned nothing for the assignment (but both workers still got to keep the participation fee of \$1.00). We made it clear to the spectators that \$6.00 is a considerable amount of money for these workers.<sup>22</sup> In the "Merit" treatment, the worker in the pair who performed better on the assignment earned \$6.00, and the other worker received no additional payment for the assignment. Individual performance was determined as the total number of corrected mistakes in the ID list.<sup>23</sup> However, we did not reveal the workers' actual performance to the spectators, only who performed better. The "Mixed" treatment is a mixture of the other two treatments. We told the spectators that there was a 20% probability that a worker's performance was set to zero, and that they will be informed which worker in the pair has the higher performance after the random negative shock. This treatment represents a situation where both luck and effort determine income, and it therefore more closely mimics real-world situations of inequality.<sup>24</sup>

The spectators' task was to choose whether to redistribute the earnings between the two workers. They could choose not to redistribute at all, i.e., choose the income distribution (\$6, \$0), or to redistribute any whole dollar amount from the high- to the low-income worker, yielding the following possible income distributions: (\$5, \$1), (\$4, \$2), (\$3, \$3), (\$2, \$4), (\$1, \$5), or (\$0,

---

<sup>21</sup> Table A2 in the appendix provides randomization checks for each sample. We find no significant differences in background characteristics across conditions.

<sup>22</sup> The stakes are indeed nontrivial compared to what workers typically make on MTurk. According to a recent survey of workers, the average hourly wage on MTurk is about \$3 (Hara et al., 2018). Given that it took 5 minutes to complete the assignment, our workers were paid an extrapolated hourly wage of \$36 in expectation.

<sup>23</sup> We used a point system to determine workers' performance. Specifically, we assigned one point for each entry that the workers changed correctly. Overall, we created a set of eight participant ID lists, which were randomly assigned to each pair of workers. Each list contained the same number of incorrect entries.

<sup>24</sup> The Mixed treatment mimics situations of bad luck, such as when people get seriously ill and cannot perform at their best.

\$6).<sup>25</sup> We use these redistribution choices as a proxy for spectators' distributional preferences. In other words, a spectator who does not redistribute any money is more inequality accepting than, for example, someone who decides to redistribute so that both workers earn the same. Our approach to measuring distributional preferences has two key advantages compared to other distribution experiments, such as the commonly used dictator game. First, it allows for a clean comparison of the distributional preferences of groups with different levels of wealth because choices in the redistribution task have no monetary consequences for the spectators. Thus, the possibility that an extra \$1 means less to a wealthy than a poor person due to diminishing marginal utility of wealth cannot explain potential differences in redistribution choices. Second, the spectators' task does not involve a tradeoff between self and other, meaning that individual differences in material self-interest cannot account for differences in redistribution choices. Thus, our task allows us to measure "pure" distributional preferences without the possible confound of self-interest.

To measure altruism (i.e., the opposite of self-interest), we use an experimentally validated survey question developed by Falk et al. (2018). Accordingly, we asked participants "In general, how willing are you to give to good causes without expecting anything in return?" using an 11-point Likert scale ranging from "completely unwilling" (= 0) to "very willing" (= 10). As an alternative measure of altruism, we use the share of income donated to charity in the previous year. Specifically, we asked the participants to report the dollar amounts they donated to several types of charitable causes and then divided the total by their income.<sup>26</sup>

Our measure of meritocratic beliefs derives from the question "How important do you think is [hard work, being lucky] for getting ahead in life" measured on a 7-point Likert scale ranging from "not at all important" (= 0) to "very important" (= 6). We subtract the answers to the question

---

<sup>25</sup> Only 15 participants (i.e., less than 2% of the sample) decided to redistribute more than half to the low-income worker.

<sup>26</sup> As participants reported their income using brackets, we use the midpoints of the income brackets to calculate the share of income donated. The results remain qualitatively the same if we instead use a more conservative estimate by taking the upper bound of the income brackets.

about “being lucky” from the question about “hard work” to construct our measure of meritocratic beliefs.<sup>27</sup>

To measure participants’ trust in government, we asked them “How much of the time do you think you can trust the federal government in Washington D.C. to do what is right?” using the answer categories “never” (= 0), “only some of the time” (= 1), “most of the time” (= 2), and “just about always” (= 3).<sup>28</sup>

Finally, we asked the participants a series of questions about their socio-demographic background, including age, gender, ethnicity, education, religious affiliation, and importance of religion. We also measured their social mobility by asking them to indicate the percentile (on a scale from 1 to 100) of household income they see themselves in, both at present and when they grew up. The difference between the two provides us with a measure of individual income mobility. Furthermore, we asked participants to state the main source of their wealth and categorized those who answered “income from own business” or “financial investments” as participants with self-made wealth. This indicator serves as an alternative measure of social mobility.

### **III. Results**

This section presents the results of our study. We first examine whether the top 5% have different attitudes toward redistribution compared to the bottom 95%. We then examine possible drivers of the difference in attitudes toward redistribution between the two groups. Our main focus is on distributional preferences, but we also investigate other determinants of attitudes toward redistribution suggested by the literature, including meritocratic beliefs, altruism, and trust in

---

<sup>27</sup> The question about the importance of luck versus effort in getting ahead in life was drawn from the Social Inequality Module surveys (1987, 1992, 1999, 2009) of the International Social Survey Programme (ISSP).

<sup>28</sup> The question about trust in government is drawn from the American National Elections Studies surveys (most recently, the 2016 ANES features this question).

government. Finally, we check the robustness of the results with regard to sample definition and attentiveness to the survey questions.

## **A. Attitudes toward Redistribution**

Do the top 5% have different attitudes toward redistribution than the bottom 95%? Panel (a) of Figure 1 shows that while the bottom 95% prefer to keep the effective income tax rate for the top income bracket as is, the top 5% want to decrease that tax rate. On a scale from -2 (much lower) to 2 (much higher), the average response is -0.37 for the top 5% and 0.11 for the bottom 95% ( $p < 0.001$ , rank-sum test).<sup>29</sup> The top 5% also want a larger decrease in the estate tax rate than the bottom 95%. Panel (b) of Figure 1 shows that the average response is -0.71 for the top 5% and -0.28 for the bottom 95% on the same 5-point scale as for the top income tax question ( $p < 0.001$ , rank-sum test).

In addition to these tax attitudes, we also examine differences in voting behavior in the 2016 U.S. presidential election. While Democratic nominee Hillary Clinton promised major wealth redistribution through government revenue, Republican candidate Donald Trump represented a party that is less supportive of government redistribution, and in his campaign speeches there is no mention of policies that would increase transfers or access to public goods. Thus, voting for Trump can be interpreted as lower support for redistribution. Panel (c) of Figure 1 shows that among those who voted, 47% of the top 5% voted for Trump, whereas 37% of the bottom 95% voted for him

---

<sup>29</sup> Our key results often involve multiple-hypothesis testing because of multiple outcome variables, treatments, explanatory variables, and samples. An important concern therefore is whether some of our key conclusions may be an artifact of such multiple comparisons (i.e., that some of our statistically significant results arise by chance). However, all of our key results are robust to multiple-testing adjustment. We use the false discovery rate (FDR) procedure, which is a common approach to correct for multiple hypotheses testing (Benjamini and Hochberg, 1995; see also ). The FDR procedure ensures that in the presence of multiple tests the share of Type I errors remains no more than the desired target rate (e.g., 5% with the commonly used significance threshold of 0.05). Table A6 in the appendix shows that our results remain uniformly significant at that significance level with the FDR adjustment.



( $p = 0.004$ , rank-sum test).<sup>30</sup> For comparison, the difference between the top 5% and the bottom 95% is similar in magnitude as the often-cited gender gap in the 2016 presidential voting.<sup>31</sup>

Overall, we find considerable differences between the top 5% and the bottom 95% in attitudes toward redistributive policies and voting behavior, with a greater tendency among the wealthy to oppose redistribution through taxation and to support a presidential candidate who appeared to be less supportive of redistributive policies. If anything, these attitudinal differences between the top 5% and bottom 95% are even larger when we control for individual differences in socio-demographic characteristics (see Table A4 in the appendix).

**Result 1:** *The top 5% are less supportive of redistribution through taxation and were more likely to vote for Republican candidate Trump in the 2016 presidential election compared to the bottom 95%.*

## **B. Distributional Preferences**

We now examine possible reasons for the difference in attitudes toward redistribution between the top 5% and bottom 95%. We begin with participants' distributional preferences, which we measured in the redistribution task. Do the top 5% accept more inequality than the rest of the population? If so, does it depend on the source of inequality? Figure 2 shows the average percentage of income that the spectators redistribute from the high- to the low-income worker by treatment. A spectator who wants to equalize earnings between the two workers will redistribute 50% of the high-income worker's earnings. We find that in the Merit treatment, where earnings are assigned based on workers' relative performance, the top 5% tend to redistribute less than the bottom 95%; yet, the difference is rather small and not significant (23.8% vs. 26.3%,  $p = 0.234$ ,

---

<sup>30</sup> 1.3% of the top 5% and 17.2% of the bottom 95% reported that they did not vote in the presidential election.

<sup>31</sup> According to an exit poll that is routinely conducted on Election Day by Edison Research, women were 11 percentage points less likely to vote for Trump in the 2016 election compared to men (see Center for American Women and Politics. 2016. "Presidential exit poll." Rutgers Eagleton Institute of Politics. Retrieved March 26, 2019, from [https://www.cawp.rutgers.edu/facts/voters/womens\\_vote\\_watch](https://www.cawp.rutgers.edu/facts/voters/womens_vote_watch)). In our study, we find a gender difference in presidential voting of 15 and 9 percentage points for the top 5% and bottom 95%, respectively.

rank-sum test). However, as shown in Figure 3, only half as many spectators among the top 5% choose to equalize workers' earnings compared to the bottom 95% (9.0% vs. 17.8%,  $p = 0.025$ , Chi-square test).

How do the two groups allocate earnings within pairs of workers if the source of inequality involves both luck and effort? Figure 2 indicates that the Mixed treatment widens the gap in distributional preferences between the top 5% and bottom 95%. The top 5% redistribute significantly less than the rest of the population (27.4% vs. 32.9%,  $p = 0.027$ , rank-sum test). Figure 3 shows that the share of spectators who implements full equality also tends to be smaller among the top 5% compared to the bottom 95% (27.5% vs. 37.8%,  $p = 0.073$ , Chi-square test). Thus, adding an element of luck when assigning initial earnings increases the gap in inequality acceptance between the wealthy and the general population.

The gap in distributional preferences between the top 5% and bottom 95% is largest when the initial allocation of earnings is entirely determined by chance, as shown in Figure 2. In the Luck treatment, the top 5% redistribute 36.5% of the earnings to the low-income worker, whereas the bottom 95% redistribute 42.6% of the earnings ( $p = 0.008$ , rank-sum test). Figure 3 shows that there is also a lower share of spectators among the top 5% who completely eliminates inequality between workers (70.2% vs. 80.1%,  $p = 0.044$ , Chi-square test).

We further examine the extent to which the gap in distributional preferences between the top 5% and bottom 95% varies depending on the source of inequality. To this end, we estimate the following OLS regression model:

$$y_i = \beta_0 + \beta_1 Top5_i + \beta_2 Mixed_i + \beta_3 Merit_i + \beta_4 Top5_i \cdot Mixed_i + \beta_5 Top5_i \cdot Merit_i + \epsilon_i, \quad (1)$$

where  $y_i$  is the share of earnings that spectator  $i$  redistributes to the low-income worker,  $Top5_i$  is an indicator for the top 5%,  $Mixed_i$  and  $Merit_i$  are indicators for treatments Mixed and Merit, respectively, and  $\epsilon_i$  is the idiosyncratic error term (thus, the reference group is the bottom 95% sample in the Luck treatment). To assess the treatment variation in the gap in redistribution

between the top 5% and bottom 95%, we include interaction terms between the top 5% and treatment indicators.

Table 1 reports the estimation results, without and with interaction terms (columns 1 and 2, respectively). Column (1) indicates that across all three conditions, the top 5% redistribute 4.7 percentage points less to the low-income worker relative to the bottom 95% ( $p < 0.001$ , t-test). Post-redistribution inequality is generally higher in the Mixed and Merit treatments relative to the Luck treatment, with spectators redistributing 9.3 and 14.4 percentage points less in those conditions ( $p < 0.001$  in both cases, t-tests). The difference between the Mixed and the Merit treatment is also significant ( $p = 0.002$ , t-test). Column (2), which includes the interaction terms, shows that the difference in redistribution choices between the top 5% and bottom 95% gets smaller when initial earnings are assigned based on merit or a combination of merit and luck. However, none of the interaction terms reaches statistical significance at conventional levels ( $p = 0.859$  and  $0.248$ , t-tests), meaning that we cannot reject the null hypothesis that the gap between the two groups is the same across conditions.<sup>32</sup> Thus, regardless of the source of inequality, wealthy spectators redistribute less than the general population, meaning that they generally have a greater tolerance for inequality.

Given that we observe redistribution choices under different sources of inequality, we can characterize the prevalence of different fairness types in the two samples. We follow Almås et al. (2019) in defining three distinct types. The share of *egalitarians* is determined by the fraction of spectators who implements full equality in the Merit treatment. The share of *libertarians* is given by the fraction of spectators who does not redistribute any income to the unlucky worker in the Luck treatment. The share of *meritocrats* is determined by the fraction of spectators who allocates more income to the better performing worker in the Merit treatment minus the fraction of spectators who allocates more income to the lucky worker in the Luck treatment. According to these definitions of fairness types, we can classify 93.3% of the top 5%, and 90.4% of the bottom 95%.

---

<sup>32</sup> The somewhat smaller difference in redistribution choices between the two groups in the Merit treatment may also be for mechanical reasons (i.e., a floor effect), as spectators generally redistribute less in that treatment compared to the other two treatment conditions.

Figure 4 shows that there are about half as many egalitarians among the top 5% compared to the bottom 95% (9.0% vs. 17.8%,  $p = 0.025$ , Chi-square test). In contrast, the share of libertarians is more than twice as large in the top 5% relative to the bottom 95% sample (25.1% vs. 12.1%,  $p = 0.004$ , Chi-square test). Meritocrats, which make up the largest group in both samples, are similarly represented among the top 5% and bottom 95% (59.1% vs. 60.5%,  $p = 0.825$ , Chi-square test). Thus, we do not find that the top 5% are more meritocratic than the bottom 95%. The difference in redistribution choices between the two groups is driven by the unequal proportion of “extreme” types, i.e., those who consider inequality as unfair even when it is the result of productivity differences (egalitarian fairness view), and those who view inequality as fair even when the source of inequality is pure luck (libertarian fairness view).

Can the observed difference in distributional preferences between the top 5% and bottom 95% simply be traced back to differences in their socio-demographic background? For example, there is a higher share of male participants in our top 5% sample. If men are generally more inequality accepting than women, this could explain why the top 5% redistribute less than the bottom 95%. We examine this possibility in Table 2 where we report the results of our baseline regression model (without interaction terms) while controlling for a set of socio-demographic background characteristics (i.e., age, gender, ethnicity, education, religious affiliation, and importance of religion). For ease of comparison, column (1) reproduces the baseline results without control variables. Column (2) indeed shows that men redistribute less than women ( $p = 0.007$ , t-test).<sup>33</sup> However, the gap in redistribution choices between the top 5% and bottom 95% does not decrease compared to its estimate without control variables (see column 1). In fact, the estimated gap tends to be even larger when adding socio-demographic controls, but the difference to the baseline model is not significant ( $p = 0.214$ , Chi-square test). Thus, the difference in gender ratio across our two samples, as well as differences in other background characteristics, do not account for the observed gap in distributional preferences between the wealthy and the rest of the population.

---

<sup>33</sup> We also find a correlation between religion and redistribution. Protestants redistribute less ( $p = 0.016$ , t-test), and participants with a religion other than protestant or catholic redistribute more ( $p = 0.034$ , t-test) than those without any religious affiliation. Importance of religion is also negatively correlated with redistribution ( $p = 0.062$ ).

**Result 2:** *The top 5% are more inequality accepting than the bottom 95%. This gap in distributional preferences is not explained by differences in participants' socio-demographic background.*

### *Social Mobility*

We next explore the role of social mobility in distributional preferences. Previous studies typically focused on how beliefs about social mobility affect attitudes toward redistribution (e.g., Alesina and La Ferrara, 2005; Alesina et al., 2018). Here we examine how the personal experience of social mobility affects those attitudes via the preference channel.<sup>34</sup> Column (3) of Table 2 indicates that spectators who grew up in a relatively poor household but became high-income earners later in life redistribute significantly less to the low-income worker ( $p = 0.016$ , t-test). For example, moving up the income ladder by 4 deciles corresponds to about half of the gap in redistribution between the top 5% and bottom 95%. Similarly, column (4) shows that those who built their own wealth through a business or from making good investments are significantly less willing to redistribute income than others ( $p = 0.020$ , t-test). Moreover, when we control for individual social mobility (either by using our measure of income mobility or the dummy variable for entrepreneurs and investors), the gap in redistribution between the top 5% and bottom 95% shrinks by 32.2% to 38.5%.<sup>35</sup> These results are robust to controlling for participants' socio-demographic background, as shown in columns (5) and (6) of Table 2. Thus, while background characteristics like age and gender do not explain the gap in distributional preferences between the top 5% and bottom 95%, we find suggestive evidence that the gap is driven by different personal experiences of social mobility.

---

<sup>34</sup> While nonstandard, there is mounting evidence suggesting that personal experiences shape people's attitudes and preferences. For example, Alesina and Fuchs-Schundeln (2007) show that living under a Communist regime affects people's political preferences. Giuliano and Spilimbergo (2014) find that individuals who grew up during a recession support more redistribution.

<sup>35</sup> We use the Blinder-Oaxaca decomposition method to calculate the percentage of the redistribution gap explained by social mobility. This method is widely used to study mean outcome differences between groups, such as the gender gap in earnings (Blinder 1973; Oaxaca 1973).

**Result 3.** *Individuals who climbed the income ladder redistribute significantly less than those born into wealth. This partly accounts for the gap in distributional preferences between the top 5% and bottom 95%.*

### **C. Meritocratic Beliefs, Altruism, and Trust in Government**

#### *Meritocratic Beliefs*

Much of the literature on the determinants of attitudes toward redistribution emphasizes the role of meritocratic beliefs, i.e., the extent to which people think success in life is determined by hard work as opposed to luck (e.g. Piketty, 1995; Fong, 2001; Bénabou and Tirole, 2006; Fong and Poutvaara, 2019). Wealthy individuals may have a stronger belief that success is primarily the result of hard work because many of them have learned that hard work pays off, either directly through personal experience or indirectly through their parents and friends. Thus, they may be more inclined to blame poor people for their own poverty and think that it is unfair to take resources away from hard-working people.

Yet, we do not find that the top 5% have stronger meritocratic beliefs compared to the rest of the population. Figure 5 shows that the top 5% and bottom 95% think similarly about the role of hard work versus luck in getting ahead in life (a positive score means that hard work is viewed as more important than luck). Both groups believe that hard work is more important than luck with an average score of 1.75 for the top 5% and 1.78 for the bottom 95% ( $p = 0.837$ , rank-sum test). This is consistent with recent research showing that people in the U.S. continue to believe in the “American dream” of self-made upward mobility (Davidai and Gilovich 2015), despite the fact that it has become increasingly difficult to move up the income ladder (Chetty et al. 2017). Thus, beliefs about the source of inequality cannot explain the gap in attitudes toward redistribution between the top 5% and bottom 95%.

#### *Altruism*

A commonly held belief is that rich people are less altruistic than the general population. Thus, it could be that the top 5% favor less redistribution because they care less about others (and more about themselves) compared to the bottom 95%.<sup>36</sup> We measured altruism in two ways: (i) an experimentally validated survey question (Falk et al., 2018) and (ii) the self-reported share of income donated to charity.<sup>37</sup> Panel (a) of Figure 6, which is based on the preference survey measure, suggests that the top 5% are not less altruistic. In fact, the top 5% report being more willing to give to good causes without expecting anything in return compared to the bottom 95% (8.8 vs. 8.1,  $p < 0.001$ , rank-sum test). Similarly, we find that the top 5% donate a larger fraction of their income to charity than the bottom 95%, as shown in Panel (b). While the bottom 95% give about 4.3% of their income to charity, the top 5% donate about 6.5% ( $p < 0.001$ , rank-sum test). One limitation of both measures is that they are based on self-reports. Thus, it is possible that some participants responded strategically in order to appear more generous than they actually are. Yet, our results are in line with recent studies that use more objective measures of altruism and also fail to find that richer people are more selfish than the general population (Hoffman, 2011; Korndörfer et al., 2015; Smeets et al., 2015; Andreoni et al., 2017). Moreover, the wealthiest 10% of donors give 90% of charitable dollars in the U.S. (Levin et al., 2016). Thus, differences in altruism cannot account for the gap in attitudes toward redistribution between the wealthy and the rest of the population.

### *Trust in Government*

Finally, it could be that the top 5% are less in favor of redistribution because they trust the government less. For example, the wealthy may be more skeptical of the government's ability to redistribute in an efficient way (Kuziemko et al., 2015; Alesina et al., 2018). As a result, they

---

<sup>36</sup> This might be exacerbated by the fact that high-income earners bear the largest tax burden. According to the Pew Research Center, individuals with incomes of \$200,000 or more paid over half (58.8%) of federal income taxes in 2015, but they accounted for only 4.5% of all returns filed. Desilver, Drew. 2017. "A closer look at who does (and doesn't) pay U.S. income tax." PEW Research Center, October 6. Retrieved April 8, 2019, from <https://www.pewresearch.org/fact-tank/2017/10/06/a-closer-look-at-who-does-and-doesnt-pay-u-s-income-tax/>.

<sup>37</sup> There are several outliers in our data, such as retired people with low income but large donations and large assets. To address the outliers, we winsorize the donation data by replacing extreme values with the 1<sup>st</sup> and 99<sup>th</sup> percentiles, respectively.

might prefer to decide by themselves how to support poor families rather than letting the government “waste” their tax money with inefficient policies. To explore this possible channel, we examine our participants’ level of trust in government. Figure 7 shows that the top 5% trust the government to a similar degree as the bottom 95%. Trust in the U.S. government is generally low, with average scores of 0.96 for the top 5% and 0.98 for the bottom 95% ( $p = 0.868$ , rank-sum test). According to the response options, this means that the average person thinks one can trust the government “only some of the time.” While trust in government is generally low, which has been documented in other studies as well (e.g., Kuziemko et al., 2015), we do not find that the top 5% differ from the bottom 95%. Thus, variation in trust in government cannot explain why the wealthy are less in favor of redistribution.

**Result 4:** *Compared to the bottom 95%, the top 5% are more altruistic, hold similar beliefs about meritocracy, and trust the government to a similar degree. Thus, none of these variables can explain the gap in attitudes toward redistribution.*

#### **D. Predicting Attitudes toward Redistribution**

How important is each of the four factors (i.e., distributional preferences, meritocratic beliefs, altruism, and trust in government) in determining attitudes toward redistribution? We explore the predictive power of these variables in two steps. First, we investigate the strength of each factor’s relationship with attitudes toward redistribution while controlling for the other candidate variables. We do this separately for the top 5% and bottom 95% as the relationships between the four factors and redistribution attitudes might differ between the two groups. Second, we use dominance analysis to assess the relative contribution of each factor in explaining variance in attitudes toward redistribution.

To examine the relationship between our preference and belief measures and attitudes toward redistribution, we estimate OLS regressions of the following type:

$$y_i = \beta_0 + \beta_1 P_i + \beta_2 B_i + \beta_3 T_i + \beta_4 A_i + \epsilon_i, \quad (2)$$



where  $y_i$  is participant  $i$ 's attitude toward redistribution (i.e., attitudes toward the income and estate tax rate, voting for Trump),  $P_i$  is the participant's *distributional preferences* as measured in the redistribution task,  $B_i$  measures the participant's meritocratic *beliefs*,  $T_i$  is the participant's level of *trust* in the government, and  $A_i$  represents the level of *altruism* as measured by the experimentally-validated survey question. Since the amount redistributed in the experimental task varies across treatments (i.e., sources of inequality), we normalize our proxy for distributional preferences by subtracting the treatment-specific average across both groups.

Table 3 presents the estimation results, separately for each sample and each of the three measures of attitudes toward redistribution. Overall, we find that distributional preferences are strongly related to redistribution attitudes, both for the top 5% and bottom 95%. For example, focusing on the top 5%, column (1) shows that increasing the share of income redistributed in the experiment by 0.5 is associated with a 1.04 points increase in support for a higher top income tax rate ( $p = 0.001$ , t-test). While this relationship is significantly weaker for the bottom 95% ( $p = 0.012$ , Chi-square test), as shown in column (2), their distributional preferences and attitudes toward the top income tax rate are nonetheless significantly related ( $p = 0.008$ , t-test). We obtain similar results regarding attitudes toward the estate tax rate and voting behavior, as shown in columns (3) to (6) of Table 3.

Meritocratic beliefs are also strongly related to attitudes toward redistribution, again both for the top 5% and bottom 95%. For example, column (1) of Table 3 shows that a one point increase in meritocratic beliefs among the top 5% is associated with a 0.18 points decrease in their support for a higher top income tax rate ( $p < 0.001$ , t-test). For the bottom 95%, the corresponding coefficient is again smaller but nonetheless significant ( $p = 0.009$ , t-test), as shown in column (2). Altruism and trust in government also generally predict attitudes toward redistribution, but the relationships are again weaker for the bottom 95%. This is to be expected given that those with lower incomes pay taxes at lower rates, meaning that they have to give up a smaller share of their income. Together, our four belief and preference measures almost consistently predict people's attitudes toward redistribution, regardless of whether those attitudes relate to tax policies or political preferences.

How much of the variation in attitudes toward redistribution do our four variables capture? We perform a dominance analysis to assess the relative importance of each of these variables (see,

e.g., Budescu, 1993). Dominance analysis is an algorithmic approach to determining the relative contribution of predictors in explaining the variance captured by a regression model (i.e., the R-squared).<sup>38</sup> The algorithm performs a pairwise comparison of the R-squared with and without the inclusion of a predictor of interest for all the possible models that contain some subset of the other predictors. The average marginal improvement in the R-squared when the predictor is included yields a statistic, which is then normalized so that the sum of each predictor's statistics adds up to 100%.

Table 4 presents the results of the dominance analysis separately for the top 5% in Panel (a) and the bottom 95% in Panel (b). For the top 5%, distributional preferences are at the top or in second place in terms of variance explained for all three measures of attitudes toward redistribution. For example, when predicting attitudes of the top 5% toward the top income tax rate, their distributional preferences account for 42% of the variance explained. Their meritocratic beliefs play a similarly important role and capture 39% of the variance explained. These numbers are even more impressive considering that our four predictors together are able to explain 32% of the total variation in attitudes toward the top income tax rate. In contrast, altruism and trust in government capture only 6% and 13%, respectively, of the variance explained. The results are similar for the top 5%'s attitudes toward the estate tax rate and voting behavior, as shown in columns (2) and (3) of Table 4. Together, the top 5%'s distributional preferences and meritocratic beliefs combined account for 77% to 81% of the variance explained by the four factors, and are, thus, by far the most important predictors of their attitudes toward redistribution among the set of factors considered.

Applying dominance analysis to the bottom 95% data yields a similar picture. Distributional preferences and meritocratic beliefs are again consistently the two most important predictors of attitudes toward redistribution. These two variables together capture between 72% and 93% of the variance explained by the four factors. However, unlike for the top 5%, the preferences and beliefs

---

<sup>38</sup> An alternative approach for determining the importance of variables is to compare the size of standardized coefficients. However, this approach can be more sensitive to model specification than the algorithm-based variance decomposition methods like dominance analysis. Moreover, standardized coefficients depend on the observed range of the regressors, which may vary for data- and sample-related issues rather than substantive reasons (Grömping, 2015).

of the bottom 95% explain only between 6% and 15% of the total variation in their attitudes toward redistribution. This is consistent with the previous analysis where we find weaker relationships between our preference and belief measures and attitudes toward redistribution for the bottom 95%.

Up to this point, we have established that (i) distributional preferences are highly predictive of attitudes toward redistribution, both for the top 5% and bottom 95%, and (ii) that the top 5% have a higher tolerance for inequality than the bottom 95%. We now examine the extent to which the gap in distributional preferences explains differences in attitudes toward redistribution between the top 5% and bottom 95%. To this end, we regress each of our measures of attitudes toward redistribution on a dummy for the top 5%, and compare how the magnitude of this coefficient changes when we control for distributional preferences. As a reference, we do the same exercise for the other three predictors (i.e., meritocratic beliefs, altruism, and trust in government). Figure 8 summarizes this analysis (the complete analysis can be found in Table A5 in the appendix). We find that distributional preferences account for between 20% and 45% of the gap in attitudes toward redistribution between the top 5% and bottom 95% (all p-values are significant at the 1% level, Chi-square tests). In contrast, controlling for the other three belief and preference measures does not reduce the gap in attitudes toward redistribution, neither with regard to attitudes toward the top income and estate tax rate nor for vote choice. Thus, only distributional preferences account (at least partly) for the observed gap in attitudes toward redistribution between the top 5% and bottom 95%.

**Result 5:** *Distributional preferences are equally, if not more, important than meritocratic beliefs in determining people's attitudes toward redistribution. In contrast, altruism and trust in government play only a minor role. Moreover, differences in distributional preferences explain a significant portion of the gap in attitudes toward redistribution between the top 5% and bottom 95%.*

## **E. Robustness Checks**

We check the robustness of our results in three ways. First, we explore whether the results hold for the very top of the income and wealth distribution. Second, we examine the sensitivity of the results with regard to how we categorize the top 5%. Third, we test whether the results are driven

by particularly fast survey respondents as a way to account for differences in attention to the survey questions.

### *Top 1 %*

Much of the scholarly and media attention in debates about inequality and the influence of the elite has focused on the top 1% (e.g., Alvaredo et al., 2013; Mankiw, 2013; see also the “We are the 99%” slogan of the Occupy Wall Street movement). Yet, there is no academic consensus on where to draw the line between top income earners and wealth holders, respectively, and the rest of the population. The thresholds used previously in the literature on inequality vary between the top 10% and the top 0.01%. We opted for the top 5% to obtain a sufficiently large sample of the wealthy. But are the results similar for the very top of the income and wealth distribution? To find out, we repeat the main analyses with the top 1% and compare the results to the top 2-5% as well as the bottom 95%. About half of the participants in our top 5% sample (222 out of 465 participants) also belong to the top 1%.<sup>39</sup>

Overall, we find that the differences to the general population tend to be even larger for the top 1% than for the top 2-5%. For example, as shown in Panels (a) and (b) of Figure A4 in the appendix, the top 1% show significantly less support for increasing the top income tax rate (-0.55 vs. -0.21,  $p = 0.006$ , rank-sum test) and the estate tax rate (-0.87 vs. -0.56,  $p = 0.018$ , rank-sum test) than the top 2-5%. The top 1% were also more likely to vote for Trump, as shown in Panel (c) of this figure, though the difference to the top 2-5% is not significant (51% vs. 44%,  $p = 0.138$ , rank-sum test). All comparisons between the top 1% and bottom 95% regarding attitudes toward redistribution are significant (the highest p-value is 0.001, rank-sum tests). We also observe larger differences in redistribution choices between the top 1% and bottom 95% than between the top 2-5% and bottom 95%, as shown in Figure A5 in the appendix. The top 1% generally redistribute less than the other two groups, but the differences to the top 2-5% are not significant (the lowest p-value is 0.097, rank-sum tests). The differences to the bottom 95% are significant for the Luck

---

<sup>39</sup> In our data, a respondent qualifies to be in the top 1% with household income of \$750,000 or more, or gross liquid assets of \$5 million or more. Given the binned nature of our income and wealth variables, these values are closest to the cutoff values obtained from the 2016 Survey of Consumer Finances, which are \$865,000 for household income and \$8.19 million for gross liquid assets.

and Mixed treatments ( $p = 0.005$  and  $0.008$ , rank-sum tests), but not for the Merit treatment, which is the condition where we generally observe the lowest amount of redistribution ( $p = 0.281$ , rank-sum test). One should keep in mind, however, that the sample sizes are smaller compared to the original samples. The results regarding meritocratic beliefs, altruism, and trust in government are also similar to the previous results and are available upon request. One notable difference is that while the top 2-5% donate only a slightly higher share of their income to charity than the bottom 95% (4.5% vs. 4.3%,  $p < 0.001$ , rank-sum test), the top 1% donate almost twice as much of their income as the top 2-5% (8.7% vs. 4.5%,  $p = 0.038$ , rank-sum test). This suggests that the difference in donations between the top 5% and bottom 95% is largely driven by the wealthiest people among the top 5%. Together, we tend to find larger differences when focusing on the top 1% rather than the top 5%, meaning that the results for the top 5% can be considered as lower bound estimates of the differences between the wealthy and the general population.

### *Categorizing the Wealthy Only Based on Income*

We previously categorized the wealthy based on both their income and wealth. In particular, we assigned participants to the top 5% if either their income, liquid assets, or both surpassed the relevant thresholds. Here we present the results with the top 5% being classified only based on income. We do this for two reasons. First, while both income inequality and wealth concentration have received attention in the literature (e.g., Saez and Zucman, 2016; Piketty et al., 2017), much of the discussion about economic inequality in the U.S. relates to income rather than wealth. Second, in our data individuals with greater assets are older and more often retired than the high-income earners.<sup>40</sup> To the extent that non-retired and younger individuals with top incomes have busier schedules and are thus less inclined to answer a survey (or do so less carefully), we want to check whether the results hold when focusing on top income earners only. Of the 465 participants in our top 5% sample, almost all (93%) have enough liquid assets to be placed in the top 5% based

---

<sup>40</sup> 26% of respondents in the top 5% in terms of income are retired as opposed to 45% among respondents belonging to the top 5% in terms of liquid assets. The average age of high-income earners is 60 versus 64 years for the group with large assets. These differences are partly driven by the fact that our measure of gross financial assets includes retirement accounts.

on assets alone. In contrast, only 61% have enough income to be classified as top 5% based on income alone.

Overall, we find that the results are largely consistent with our main results when we split the sample only by income. Panels (a) and (b) of Figure A6 in the appendix show that high-income earners are less supportive of increasing the top income tax rate (-0.43 vs. -0.03,  $p < 0.001$ , rank-sum test) and the estate tax rate (-0.74 vs. -0.43,  $p = 0.002$ , rank-sum test) than the rest of the population. Interestingly, they were not more likely to vote for candidate Trump in the 2016 presidential election, as shown in Panel (c) of this figure (42% vs. 43%,  $p = 0.856$ , rank-sum test). The results from the redistribution task also mirror our previous findings, as shown in Figure A7 in the appendix. The top earners generally redistribute less than the bottom 95%, with the largest difference occurring in the Luck treatment ( $p = 0.002$ , rank sum test). The results about meritocratic beliefs, altruism, and trust in government are also similar to the previous results and are available upon request. Together, these findings suggest that the previous results are not driven by wealthy participants with incomes below the top 5% threshold.

### *Excluding Fast Responders*

In any survey or experiment, researchers have limited control over the degree of carefulness with which participants read the questions and instructions. We implemented several procedures aimed at improving the quality of the data (see section II) but the issue remains a possible source of bias, especially if it varies across the two samples. For example, it is possible that the top 5% paid less attention to the survey questions than the bottom 95% as they presumably have a higher opportunity cost of time. One way to check for this potential issue is to exclude participants with particularly short survey completion times.

We do find a significant difference in the median response time between the top 5% and the bottom 95%; however, it is the top 5% who spent *more* time filling out the survey than the bottom 95% (19.42 vs. 17.33 minutes,  $p = 0.002$ , rank-sum test). They also took more time to complete

the redistribution task (1.75 vs. 1.68 minutes,  $p = 0.056$ , rank-sum test).<sup>41</sup> Thus, we do not find evidence that the top 5% paid less attention to the survey questions and redistribution task. We nonetheless examine whether fast respondents drive the differences in attitudes and preferences between the top 5% and bottom 95%. To this end, we rerun our main analyses but exclude the 10% fastest respondents with regard to the entire survey. The results remain essentially the same, as shown in section A4.3 of the appendix.<sup>42</sup> The top 5% have more negative attitudes toward redistribution, and they redistribute less in the experimental task, especially in the Luck treatment. The results regarding meritocratic beliefs, altruism, and trust in government are similar to the unrestricted sample and are available upon request. Thus, our main results do not seem to be driven by differences between the wealthy and the general population in terms of attentiveness to the survey questions.

#### **IV. Conclusion**

We study attitudes toward redistribution of wealthy Americans and compare them with those of a representative sample of the bottom 95% of the U.S. population. Our results show that the top 5% of the income and wealth distribution are less supportive of redistribution than the rest of the population. We explore several possible mechanisms for this difference in attitudes and find that it can be explained, at least partly, by differences in distributional preferences between the two groups. We measured distributional preferences in a controlled experiment where participants could redistribute earnings between two workers who performed the same task but were compensated differently. The results of the experiment show that wealthy individuals accept more inequality than the rest of the population as they redistribute less money from the high- to the low-income worker.

The gap in distributional preferences between the wealthy and the rest of the population can have important consequences for the functioning of societies. Wealthy individuals are more likely

---

<sup>41</sup> Due to a technical problem, the time stamps for the experimental part have not been recorded for about 10% of the total sample.

<sup>42</sup> This is also true when we exclude the fastest 10% respondents with regard to the redistribution task. The results are available upon request.

to occupy positions where they can exert influence over the income and wealth distribution in society. For example, political decision makers are typically better-off financially than the people they represent. Wealthy individuals can also exercise power indirectly by making significant contributions to political campaigns, or by leveraging their social connections with policy makers, business leaders, and the media. The mismatch in distributional preferences between the economic elite and the general public coupled with the disproportionate power of the well-off can undermine the principle of a fair, representative democracy. Indeed, recent research in political science suggests that when average citizens' policy preferences and the preferences of the relatively wealthy diverge, legislation tends to line up better with the preferences of the well-off (Gilens and Page, 2014). Thus, the documented preference gaps and representational inequality between the wealthy and the general population can have substantial repercussions across a wide range of policy issues.

We find that the gap in distributional preferences between the wealthy and the general population is largest when the source of inequality is pure luck. In contrast, we observe no difference in beliefs about the importance of hard work versus luck for success in life. This is consistent with recent studies suggesting that even economically disadvantaged people believe in the American dream despite the decreasing social mobility (e.g., Davidai and Gilovich, 2015; Chetty et al., 2017). The fact that wealthy individuals are particularly reluctant to redistribute when earnings are determined by chance alone suggests that it may be difficult to change their voting behavior on policy issues related to social insurance and other forms of public assistance. The basic idea of public assistance programs is to help people in need who may have had bad luck. Yet, our study suggests that even if one could fully convince the wealthy that welfare recipients became poor because of bad luck, it may not be enough to increase their support for policies like social security and medicare.

Finally, our results indicate that the gap in distributional preferences is mainly driven by individuals who climbed the income ladder. In our study, the self-made rich are most tolerant of inequality. In contrast, the preferences of individuals who were born rich correspond more closely to the preferences of the general population. This finding matters for policy interventions aimed at closing the gap in economically relevant skills and personality between children from different socioeconomic backgrounds. For example, in a recent study, Rao (2019) examined a policy change



in India that required elite private schools to offer free tuition to children from poor households. He finds that the presence of poor children in the classroom makes rich children more egalitarian, which suggests that socialization in school influences distributional preferences. Relatedly, Cappelen et al. (in press) find that attending preschool makes children more egalitarian in their fairness views, even several years after the intervention. Yet, the long-term success of early-childhood programs may be limited if, as our study suggests, the experience of upward social mobility is an important driver of distributional preferences during adulthood. Thus, even if one could ensure that political leaders grow up in a similar social environment as the people they represent, as is the case in Sweden (Dal Bó et al., 2017), it does not imply that they will have similar attitudes toward redistribution compared to the rest of the population. We hope that future research will investigate more deeply the interplay between childhood environments and experiences of social mobility later in life to better understand the formation of social preferences.

## References

- Alesina, A., and Fuchs-Schündeln, N. (2007). Goodbye Lenin (or not?): The effect of communism on people's preferences. *American Economic Review*, 97(4):1507-1528.
- Alesina, A. and Giuliano, P. (2011). Preferences for redistribution. In *Handbook of Social Economics*, 93–131. Elsevier.
- Alesina, A. and La Ferrara, E. (2005). Preferences for redistribution in the land of opportunities. *Journal of Public Economics*, 89(5-6):897–931.
- Alesina, A., Stantcheva, S., and Teso, E. (2018). Intergenerational mobility and preferences for redistribution. *American Economic Review*, 108(2):521–54.
- Almås, I., Cappelen, A., and Tungodden, B. (2019). Cutthroat capitalism versus cuddly socialism: Are americans more meritocratic and efficiency-seeking than scandinavians? *Journal of Political Economy*, forthcoming
- Alvaredo, F., Atkinson, A. B., Piketty, T., and Saez, E. (2013). The top 1 percent in international and historical perspective. *Journal of Economic Perspectives*, 27(3):3–20.
- Alvaredo, F., Chancel, L., Piketty, T., Saez, E., and Zucman, G. (2017). Global inequality dynamics: New findings from WID. world. *American Economic Review*, 107(5):404–09.
- Andreoni, J., Nikiforakis, N., and Stoop, J. (2017). Are the rich more selfish than the poor, or do they just have more money? a natural field experiment. National Bureau of Economic Research Working Paper No. 23229.
- Bartels, L. M. (2016). *Unequal democracy: The political economy of the new gilded age*. Princeton University Press.
- Bénabou, R. and Ok, E. A. (2001). Social mobility and the demand for redistribution: the poun hypothesis. *The Quarterly Journal of Economics*, 116(2):447–487.
- Bénabou, R. and Tirole, J. (2006). Belief in a just world and redistributive politics. *The Quarterly Journal of Economics*, 121(2):699–746.
- Benjamini, Y. and Hochberg, Y. (1995). Controlling the false discovery rate: a practical and powerful approach to multiple testing. *Journal of the Royal Statistical Society: Series B (Methodological)*, 57(1):289–300.

- Bertrand, M. and Kamenica, E. (2018). Coming apart? cultural distances in the united states over time. National Bureau of Economic Research Working Paper No. 24771.
- Blinder, A. S. (1973). Wage discrimination: reduced form and structural estimates. *Journal of Human Resources*, 8(4):436–455.
- Broockman, D. E., Ferenstein, G., and Malhotra, N. (2019). Predispositions and the political behavior of american economic elites: Evidence from technology entrepreneurs. *American Journal of Political Science*, 63(1):212–233.
- Budescu, D. V. (1993). Dominance analysis: a new approach to the problem of relative importance of predictors in multiple regression. *Psychological Bulletin*, 114(3):542.
- Bursztyn, L., Egorov, G., and Fiorin, S. (2017). From extreme to mainstream: How social norms unravel. *NBER Working Paper No. 23415*.
- Cantor, D. (2008). “A Review and Summary of Studies on Panel Conditioning.” In *Handbook of Longitudinal Research: Design, Measurement, and Analysis*, edited by Menard Scott, 123–38. Burlington, MA: Academic Press.
- Cappelen, A., List, J.A., Samek, A., and Tungodden, B. (in press) The Effect of Early Education on Social Preferences. *Journal of Political Economy*, forthcoming
- Cappelen, A., Mollerstrom, J., Reme, B.A., and Tungodden, B. (2019) A Meritocratic Origin of Egalitarian Behavior. *Working paper*
- Chang, L. and Krosnick, J. A. (2009). National surveys via rdd telephone interviewing versus the internet: Comparing sample representativeness and response quality. *Public Opinion Quarterly*, 73(4):641–678.
- Chetty, R., Grusky, D., Hell, M., Hendren, N., Manduca, R., and Narang, J. (2017). The fading american dream: Trends in absolute income mobility since 1940. *Science*, 356(6336):398–406.
- Cohn, A., Engelmann, J., Fehr, E., and Maréchal, M. A. (2015). Evidence for countercyclical risk aversion: An experiment with financial professionals. *American Economic Review*, 105(2):860–85.
- Cohn, A., Fehr, E., and Maréchal, M. A. (2014). Business culture and dishonesty in the banking industry. *Nature*, 516(7529):86.

- Dal Bó, E., Finan, F., Folke, O., Persson, T., and Rickne, J. (2017). Who becomes a politician? *The Quarterly Journal of Economics*, 132(4):1877–1914.
- Davidai, S. and Gilovich, T. (2015). Building a more mobile america - one income quintile at a time. *Perspectives on Psychological Science*, 10(1):60–71.
- Deffains, B., Espinosa, R., and Thöni, C. (2016). Political self-serving bias and redistribution. *Journal of Public Economics*, 134:67–74.
- DellaVigna, S., and Pope, D. (2017). What motivates effort? Evidence and expert forecasts. *Review of Economic Studies*, 85.2: 1029–1069.
- DellaVigna, S., and Pope, D. (2018). Predicting experimental results: who knows what? *Journal of Political Economy*, 126.6: 2410–2456.
- Eggers, A. C. and Klašnja, M. (2019). Wealth, fundraising and voting in the U.S. congress. Georgetown University Working Paper.
- Falk, A., Becker, A., Dohmen, T., Enke, B., Huffman, D., and Sunde, U. (2018). Global evidence on economic preferences. *The Quarterly Journal of Economics*, 133(4):1645–1692.
- Fisman, R., Jakiela, P., and Kariv, S. (2017). Distributional preferences and political behavior. *Journal of Public Economics*, 155:1–10.
- Fisman, R., Jakiela, P., Kariv, S., and Markovits, D. (2015). The distributional preferences of an elite. *Science*, 349(6254):aab0096.
- Fisman, R., Kariv, S., and Markovits, D. (2007). Individual preferences for giving. *American Economic Review*, 97(5):1858–1876.
- Fong, C. (2001). Social preferences, self-interest, and the demand for redistribution. *Journal of Public Economics*, 82(2):225–246.
- Fong, C. and Poutvaara, P. (2019) Redistributive politics with target-specific beliefs. *Working paper*
- Gilens, M. (2012). *Affluence and influence: Economic inequality and political power in America*. Princeton University Press.
- Gilens, M. and Page, B. I. (2014). Testing theories of american politics: Elites, interest groups, and average citizens. *Perspectives on Politics*, 12(3):564–581.

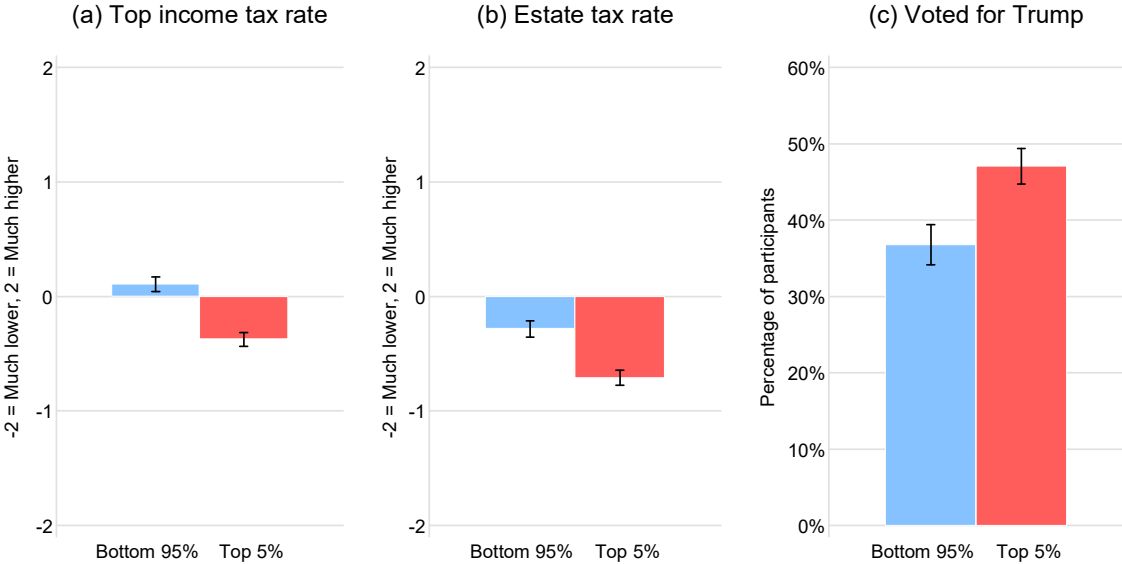
- Grömping, U. (2015). Variable importance in regression models. *Wiley Interdisciplinary Reviews: Computational Statistics*, 7(2):137–152.
- Giuliano, P., and Spilimbergo, A. (2014). Growing up in a Recession. *Review of Economic Studies*, 81(2), 787-817.
- Hara, K., Adams, A., Milland, K., Savage, S., Callison-Burch, C., and Bigham, J. P. (2018). A data-driven analysis of workers' earnings on amazon mechanical turk. In *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems*, 449. ACM.
- Hoffman, M. (2011). Does higher income make you more altruistic? Evidence from the holocaust. *Review of Economics and Statistics*, 93(3):876–887.
- Hoffmann, A. O. and Post, T. (2014). Self-attribution bias in consumer financial decision-making: How investment returns affect individuals' belief in skill. *Journal of Behavioral and Experimental Economics*, 52:23–28.
- Horton, J. J., Rand, D. G., and Zeckhauser, R. J. (2011). The online laboratory: Conducting experiments in a real labor market. *Experimental Economics*, 14(3):399–425.
- Juster, F. T. and Smith, J. P. (1997). Improving the quality of economic data: Lessons from the hrs and ahead. *Journal of the American Statistical Association*, 92(440):1268–1278.
- Korndörfer, M., Egloff, B., and Schmukle, S. C. (2015). A large scale test of the effect of social class on prosocial behavior. *PloS one*, 10(7):e0133193.
- Kuziemko, I., Norton, M. I., Saez, E., and Stantcheva, S. (2015). How elastic are preferences for redistribution? evidence from randomized survey experiments. *American Economic Review*, 105(4):1478–1508.
- Levin, T., Levitt, S.D. and List, J.A. (2016) A Glimpse into the World of High Capacity Givers: Experimental Evidence from a University Capital Campaign. *NBER working paper*
- List, J.A. Shaikh, A.M. and Xu, Y. (2016) Multiple Hypothesis Testing in Experimental Economics. *Experimental Economics*, 1-21
- Mankiw, N. G. (2013). Defending the one percent. *Journal of Economic Perspectives*, 27(3):21–34.
- Mason, W. and Suri, S. (2012). Conducting behavioral research on Amazon's Mechanical Turk. *Behavior Research Methods*, 44(1):1–23.

- McCarty, N., Poole, K. T., and Rosenthal, H. (2016). *Polarized America: The dance of ideology and unequal riches*. MIT Press.
- Moore, J. C., Stinson, L. L., and Welniak Jr, E. J. (2000). Income measurement error in surveys: A review. *Journal of Official Statistics*, 16(4):331–361.
- Norton, M. I. and Ariely, D. (2011). Building a better america - one wealth quintile at a time. *Perspectives on Psychological Science*, 6(1):9–12.
- Oaxaca, R. (1973). Male-female wage differentials in urban labor markets. *International Economic Review*, 14(3):693–709.
- Page, B. I., Bartels, L. M., and Seawright, J. (2013). Democracy and the policy preferences of wealthy americans. *Perspectives on Politics*, 11(1):51–73.
- Paolacci, G. and Chandler, J. (2014). Inside the turk: Understanding mechanical turk as a participant pool. *Current Directions in Psychological Science*, 23(3):184–188.
- Piketty, T. (1995). Social mobility and redistributive politics. *The Quarterly Journal of Economics*, 110(3):551–584.
- Piketty, T. and Saez, E. (2003). Income inequality in the united states, 1913–1998. *The Quarterly Journal of Economics*, 118(1):1–41.
- Piketty, T., Saez, E., and Zucman, G. (2017). Distributional national accounts: methods and estimates for the united states. *The Quarterly Journal of Economics*, 133(2):553–609.
- Rao, G. (2019). Familiarity does not breed contempt: Generosity, discrimination, and diversity in delhi schools. *American Economic Review*, 109(3):774–809.
- Saez, E. and Zucman, G. (2016). Wealth inequality in the united states since 1913: Evidence from capitalized income tax data. *The Quarterly Journal of Economics*, 131(2):519–578.
- Smeets, P., Bauer, R., and Gneezy, U. (2015). Giving behavior of millionaires. *Proceedings of the National Academy of Sciences*, 112(34):10641–10644.
- Song, J., Price, D. J., Guvenen, F., Bloom, N., and von Wachter, T. (2018). Firming Up Inequality. *The Quarterly Journal of Economics*, 134(1):1–50.
- Trautmann, S. T., van de Kuilen, G., and Zeckhauser, R. J. (2013). Social class and (un) ethical behavior: A framework, with evidence from a large population sample. *Perspectives on Psychological Science*, 8(5):487–497.

Yan, T., Curtin, R., and Jans, M. (2010). Trends in income nonresponse over two decades. *Journal of Official Statistics*, 26(1):145.

# Figures and Tables

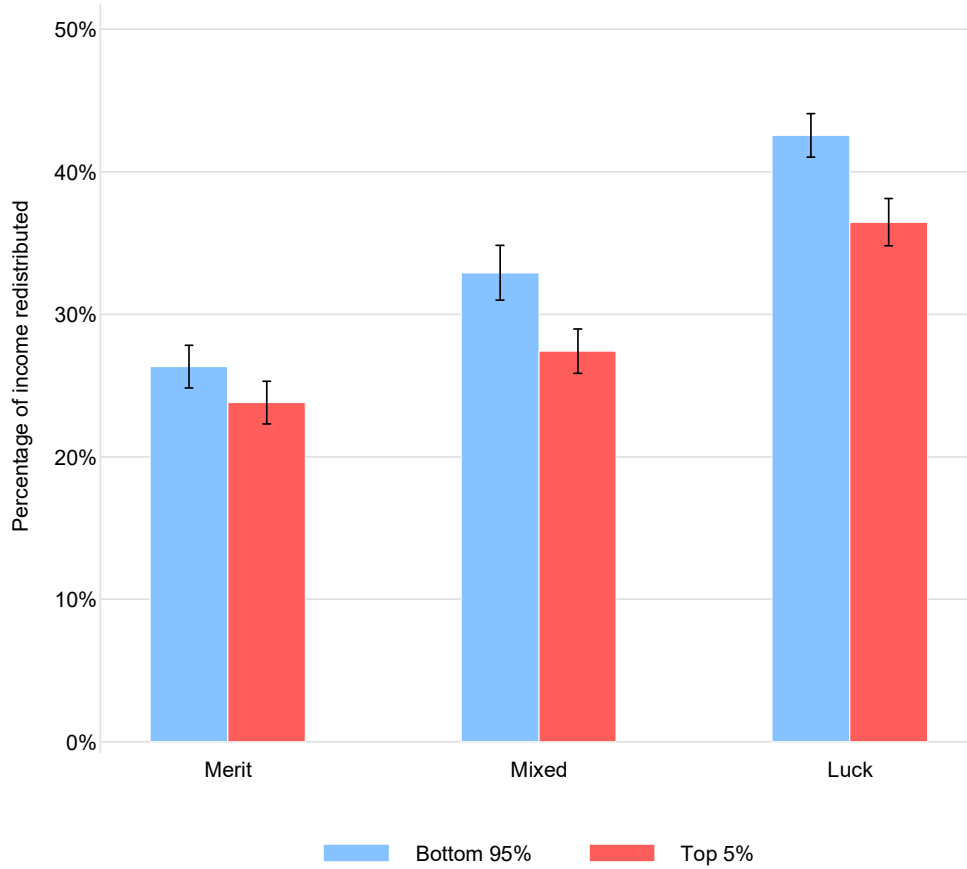
**Figure 1: Attitudes toward Redistribution**



**Notes:** Attitudes toward redistribution among the top 5% (red) and bottom 95% (blue) regarding (a) the top income tax rate, (b) the estate tax rate, and (c) voting behavior in the 2016 presidential election. For tax attitudes, participants were asked whether they preferred a higher or lower tax rate on a 5-point scale from “much lower” (= -2) to “much higher” (= 2). The percentage of participants who voted for candidate Trump is conditional on voting. The p-values for the comparisons of the top 5% and bottom 95% are < 0.001 for top income and estate tax rate attitudes, and 0.004 for voting behavior (rank-sum tests). Error bars indicate s.e.m.

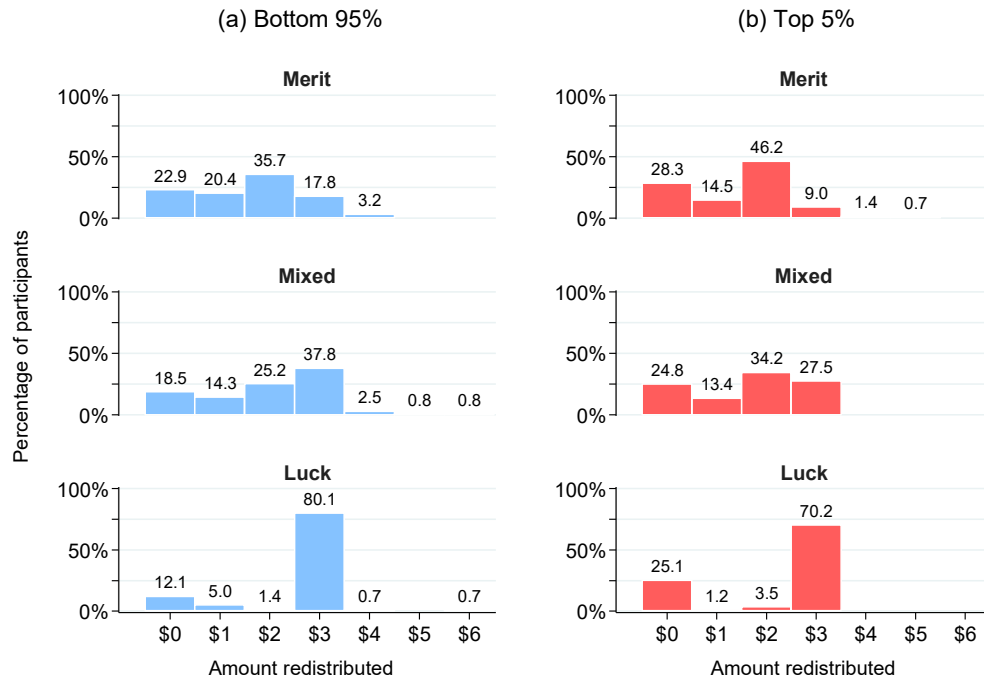


**Figure 2: Redistribution Choices in the Experiment**



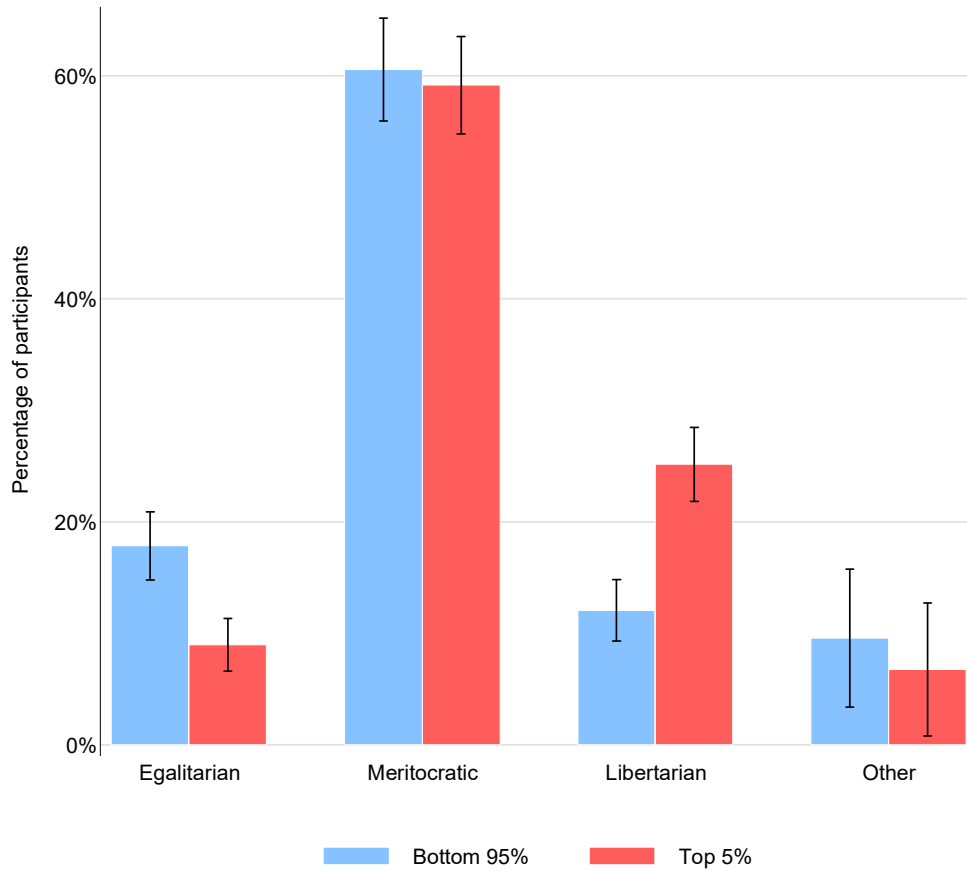
**Notes:** Percentage of income redistributed from the high- to the low-income worker by treatment conditions for the top 5% (red) and bottom 95% (blue). In the Merit treatment, earnings were assigned based on workers' relative performance on the task. In the Mixed treatment, earnings were determined based on their relative performance but there was also an element of chance. In the Luck treatment, earnings were assigned purely based on chance. The p-values for the comparisons of the top 5% and bottom 95% are 0.234 in the Merit treatment, 0.027 in the Mixed treatment, and 0.008 in the Luck treatment (rank-sum tests). Error bars indicate s.e.m.

**Figure 3: Distributions of Redistribution Choices in the Experiment**



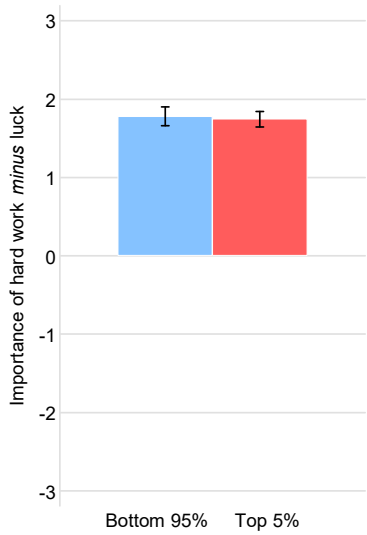
**Notes:** Distributions of amount redistributed (in U.S. dollars) from the high- to the low-income worker by treatment condition for the bottom 95% (panel (a), blue bars) and the top 5% (panel (b), red bars). The numbers on top of the bars indicate the exact percentages.

**Figure 4: Fairness Types among the Top 5% and Bottom 95%**



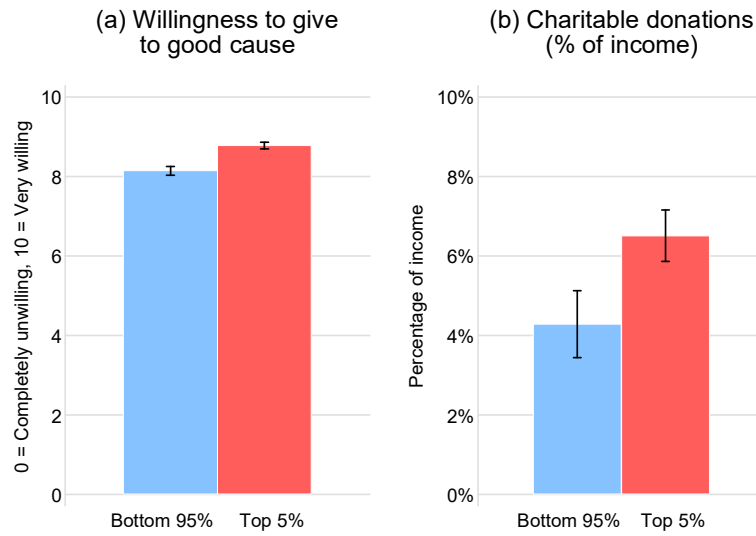
**Notes:** Percentage of different fairness types among the top 5% and bottom 95%. Egalitarians are spectators who implement full equality in the Merit treatment. Libertarians are spectators who do not redistribute any income to the low-income worker in the Luck treatment. The percentage of meritocrats is determined by the share of spectators who allocates more income to the better performing worker in the Merit treatment minus the share of spectators who allocates more income to the low-income worker in the Luck treatment. The remaining participants fall into the category “other.” The p-values for the comparisons of the top 5% and bottom 95% are 0.025 for egalitarian, 0.825 for meritocratic, 0.004 for libertarian, and 0.748 for other types (chi-square tests). Error bars indicate s.e.m.

**Figure 5: Meritocratic Beliefs**



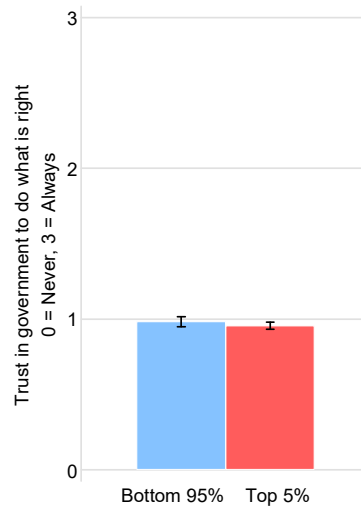
**Notes:** Meritocratic beliefs among the top 5% and bottom 95%. Participants were asked about the importance of hard work and luck for getting ahead in life on a scale from “not at all important” (= 0) to “very important” (= 6). The difference between the two answers yields our measure of meritocratic beliefs. The p-value for the comparison of the top 5% and bottom 95% is 0.837 (rank-sum test). Error bars indicate s.e.m.

**Figure 6: Altruism**



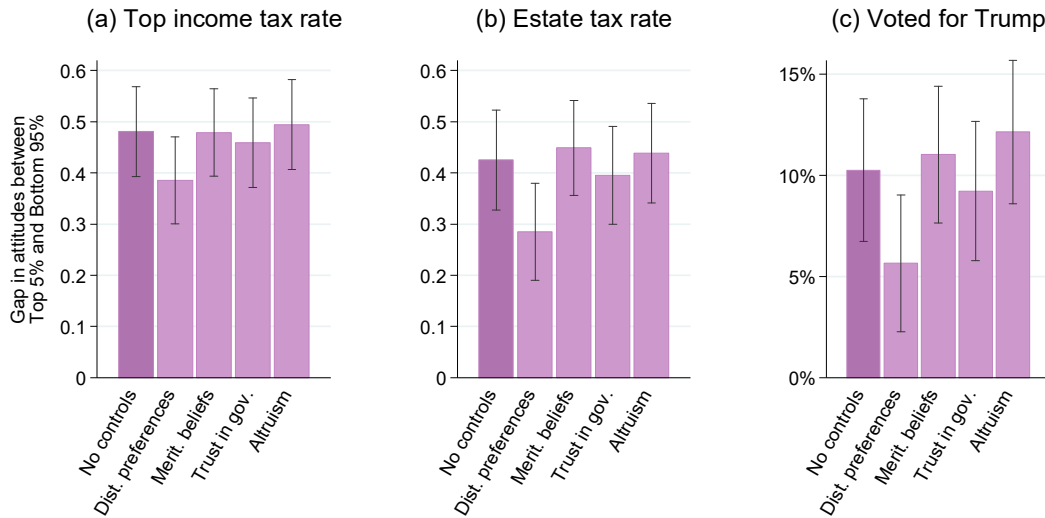
**Notes:** Altruism among the top 5 % and bottom 95%. For panel (a), participants were asked how willing they are to give to good causes without expecting anything in return on an 11-point scale from “completely unwilling” (= 0) to “very willing” (= 10). Panel (b) shows charitable donations as a share of household income (using the midpoint of each income bin). To account for outliers, we winsorized the charitable donation measure at the 1<sup>st</sup> and 99<sup>th</sup> percentiles. The p-values for the comparisons of the top 5% and bottom 95% are < 0.001 for both indicators of altruism (rank-sum tests). Error bars indicate s.e.m.

**Figure 7: Trust in Government**



**Notes:** Trust in government among the top 5% and bottom 95%. Respondents were asked how much of the time they think they can trust the federal government to do what is right, from “never” (= 0) to “just about always” (= 3). The p-value for the comparison of the top 5% and bottom 95% is 0.868 (rank-sum test). Error bars indicate s.e.m.

**Figure 8: Explaining the Gap in Attitudes toward Redistribution**



**Notes:** Extent to which the gap in attitudes toward redistribution between top 5% and bottom 95% is explained by differences in distributional preferences, meritocratic beliefs, trust in government, and altruism. Panel (a) presents the results for top income tax rate attitudes, panel (b) for estate tax rate attitudes, and panel (c) for vote choice in the 2016 presidential election. The left-most bar in each panel shows the gap in attitudes between the top 5% and bottom 95% in the baseline regression model without predictors. The remaining bars show the same gap, but when the regression model accounts for individual differences in each factor indicated on the horizontal axis. Panels (a) and (b) show the absolute value of the gap in tax attitudes. The complete results can be found in Table A5. Error bars are based on robust standard errors.

**Table 1: Estimates of Redistribution Choices**

Dependent variable:	Percentage of income redistributed	
	(1)	(2)
Top 5%	-0.047*** (0.013)	-0.061*** (0.023)
Mixed	-0.093*** (0.017)	-0.096*** (0.025)
Merit	-0.144*** (0.015)	-0.162*** (0.021)
Top 5% X Mixed		0.006 (0.033)
Top 5% X Merit		0.036 (0.031)
Constant	0.418*** (0.013)	0.426*** (0.015)
Observations	882	882
Adjusted $R^2$	0.096	0.095

**Notes:** The table reports the results of OLS regressions of redistribution choices on treatment conditions. The dependent variable is the percentage of income redistributed from the high- to the low-income worker in the experimental task. “Top 5%” is an indicator variable for the wealthy sample. “Mixed” and “Merit” are treatment indicators. Column (2) includes interaction terms between the top 5% and the treatment indicators to measure differential responses to the treatment conditions. Robust standard errors in parentheses; \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .



**Table 2: Estimates of Redistribution Choices with Background Controls**

Dependent variable:	Percentage of income redistributed					
	Baseline	Socio-demographic	Income mobility	Self-made wealth	Socio-demographic and income mobility	Socio-demographic and self-made wealth
	(1)	(2)	(3)	(4)	(5)	(6)
Top 5%	-0.047*** (0.013)	-0.064*** (0.019)	-0.030** (0.015)	-0.028** (0.014)	-0.052*** (0.020)	-0.056*** (0.019)
Mixed	-0.093*** (0.017)	-0.095*** (0.016)	-0.096*** (0.017)	-0.102*** (0.017)	-0.098*** (0.016)	-0.104*** (0.016)
Merit	-0.144*** (0.015)	-0.144*** (0.015)	-0.150*** (0.016)	-0.156*** (0.016)	-0.150*** (0.015)	-0.157*** (0.015)
Age		-0.000 (0.000)			-0.000 (0.000)	0.000 (0.000)
Male		-0.038*** (0.014)			-0.037*** (0.014)	-0.045*** (0.014)
White		0.026 (0.020)			0.024 (0.020)	0.032 (0.020)
College (undergraduate)		0.020 (0.018)			0.018 (0.018)	0.031* (0.018)
College (graduate or higher)		0.031 (0.020)			0.031 (0.020)	0.045** (0.020)
Protestant		-0.049** (0.020)			-0.046** (0.020)	-0.052** (0.020)
Catholic		-0.035 (0.022)			-0.031 (0.022)	-0.041* (0.022)
Other religion		0.042** (0.020)			0.040** (0.020)	0.033* (0.020)
Importance of religion		-0.013* (0.007)			-0.015** (0.007)	-0.015** (0.007)
Income mobility (in deciles)			-0.006** (0.003)		-0.005* (0.003)	
Self-made wealth				-0.040** (0.017)		-0.033** (0.017)
Constant	0.418*** (0.013)	0.456*** (0.030)	0.422*** (0.013)	0.420*** (0.013)	0.467*** (0.030)	0.444*** (0.030)
Percentage of top 5% gap explained by social mobility	-	-	38.5%	32.2%	28.1%	26.8%
Observations	882	880	872	806	870	805
Adjusted R <sup>2</sup>	0.096	0.139	0.106	0.117	0.148	0.169

**Notes:** The table reports the results of OLS regressions of redistribution choices on treatment conditions and individual background variables. The dependent variable is the percentage of income redistributed from the high- to the low-income worker in the experimental task. “Top 5%” is an indicator variable for the wealthy sample. “Mixed” and “Merit” are treatment indicators. “Age” is measured in years. “Male” is an indicator for male participants. “White” is an indicator for White people. “College (undergraduate)” is an indicator for participants who obtained an associate or bachelor degree. “College (graduate or higher)” is an indicator for participants who obtained a graduate or postgraduate degree. “Protestant,” “Catholic,” and “Other religion” are indicator variables for religion. “Importance of religion” is measured on a 4-point scale from “not at all important” (= 0) to “very important” (= 3). “Income mobility” refers to the change in household income on the income scale (in deciles) when growing up relative to the present. “Self-made wealth” is an indicator for participants who built their wealth through an own company or financial investments. These two variables are our measures of social mobility. Column (1) is the baseline model without controls, and column (2) adds socio-demographic controls. Columns (3) and (4) control for social mobility. Columns (5) and (6) control for both socio-demographic variables and either of our social mobility measures. At the bottom, we report the percentage of the top 5% gap in redistribution choices that is explained by either of our social mobility measures. We use the Blinder-Oaxaca decomposition method, as it accounts for the variation in the number of observations across model specifications (Blinder, 1973; Oaxaca, 1973). The number of observations varies across specifications because of item nonresponse in the survey. Robust standard errors in parentheses; \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

**Table 3: Predicting Attitudes toward Redistribution**

Dependent variable:	Top income tax rate		Estate tax rate		Voted for Trump	
	Top 5% (1)	Bottom 95% (2)	Top 5% (4)	Bottom 95% (5)	Top 5% (7)	Bottom 95% (8)
Distributional preferences	2.074*** (0.270)	0.956*** (0.358)	2.064*** (0.286)	1.554*** (0.350)	-0.855*** (0.103)	-0.478*** (0.147)
Meritocratic beliefs	-0.183*** (0.025)	-0.080*** (0.030)	-0.219*** (0.027)	-0.111*** (0.031)	0.074*** (0.009)	0.038*** (0.011)
Trust in government	0.351*** (0.104)	0.047 (0.105)	0.435*** (0.106)	0.326*** (0.102)	-0.175*** (0.036)	-0.104*** (0.039)
Altruism	0.078*** (0.030)	-0.018 (0.031)	0.083*** (0.029)	-0.056* (0.033)	-0.040*** (0.010)	-0.010 (0.011)
Constant	-1.019*** (0.288)	0.318 (0.273)	-1.417*** (0.287)	0.013 (0.307)	0.832*** (0.102)	0.486*** (0.099)
Observations	448	356	444	346	446	324
Adjusted $R^2$	0.317	0.050	0.327	0.143	0.379	0.099

**Notes:** The table reports the results of OLS regressions of attitudes toward redistribution on our beliefs and preference measures, separately for the top 5% and bottom 95%. The dependent variable in columns (1) and (2) is top income tax rate attitudes. The dependent variable in columns (3) and (4) is estate tax rate attitudes. Both are measured on a 5-point scale from “much lower” (= -2) to “much higher” (= 2). The dependent variable in columns (5) and (6) is voting behavior in the 2016 presidential election. This variable takes on a value of 1 if participants voted for Trump (and 0 if they voted for a different candidate). “Distributional preferences” is the share of income redistributed from the high- to the low-income worker in the experimental task normalized by treatment averages. “Meritocratic beliefs” is the difference in importance of hard work and luck for success in life, each measured on a 7-point scale from “not at all important” (= 0) to “very important” (= 6). “Trust in government” is the extent to which people think one can trust the government to do what is right measured on a 4-point scale from “never” (= 0) to “just about always” (= 3). “Altruism” measures people’s willingness to give to good causes without expecting anything in return on an 11-point scale from “completely unwilling” (= 0) to “very willing” (= 10). Robust standard errors in parentheses; \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

**Table 4: Dominance Analysis**

<b>(a) Top 5%</b>						
Rank	<b>Top income tax rate</b>		<b>Estate tax rate</b>		<b>Voted for Trump</b>	
	(1)		(2)		(3)	
1	Distributional preferences	42%	Meritocratic beliefs	44%	Distributional preferences	41%
2	Meritocratic beliefs	39%	Distributional preferences	37%	Meritocratic beliefs	36%
3	Trust in government	13%	Trust in government	15%	Trust in government	16%
4	Altruism	6%	Altruism	5%	Altruism	7%
Total variance explained		32%		33%		38%

<b>(b) Bottom 95%</b>						
Rank	<b>Top income tax rate</b>		<b>Estate tax rate</b>		<b>Voted for Trump</b>	
	(1)		(2)		(3)	
1	Meritocratic beliefs	49%	Distributional preferences	37%	Distributional preferences	39%
2	Distributional preferences	44%	Meritocratic beliefs	35%	Meritocratic beliefs	38%
3	Altruism	5%	Trust in government	20%	Trust in government	22%
4	Trust in government	3%	Altruism	9%	Altruism	1%
Total variance explained		6%		15%		11%

**Notes:** The table reports the results of a dominance analysis for the top 5% (panel a) and bottom 95% (panel b). This procedure estimates the relative contribution of our beliefs and preference measures in explaining variation in attitudes toward redistribution. Column (1) examines attitudes toward the top income tax rate, column (2) focuses on attitudes toward the estate tax rate, and column (3) looks at voting behavior in the 2016 presidential election. For each outcome variable the beliefs and preference measures are ranked by the size of their relative contribution of the variance explained with numbers adding up to 100%. The bottom rows show the percentage of total variance explained by all four beliefs and preference measures combined.