KIEL INSTITUTE FOR THE WORLD ECONOMY

KIEL WORKING PAPER

Why do Preferences for Redistribution Differ Across Countries?

An Experimental Analysis

No. 2230 July 2022

Gianluca Grimalda, Francesco Farina, Anna Conte and Ulrich Schmidt

Kiel Institute for the World Economy
ISSN 1862–1155

Leibniz Association

FIRST DRAFT: JULY 2022 THIS DRAFT: JANUARY 2023

ABSTRACT

WHY DO PREFERENCES FOR REDISTRIBUTION DIFFER ACROSS COUNTRIES? AN EXPERIMENTAL ANALYSIS

Gianluca Grimalda, Francesco Farina, Anna Conte and Ulrich Schmidt

We test for different theories purporting to explain cross-country differences in income redistribution through standardized experimental choices. US Americans and Italians demand less redistribution than Norwegians and Germans, regardless of whether self-interest is relevant. Those earning (or expecting to earn) below-median incomes behave as "libertarians" more frequently in the US and Italy than in Germany and Norway. Above-the-median earners behave similarly across countries. Higher overconfidence by US Americans and Italians further reduces their demand for redistribution under uncertainty. The "Prospect of Upward Mobility" hypothesis holds similarly in all countries. US Americans do not reward individual merit more than others.

Keywords: Income Redistribution; Inequality; Experiment; Merit; Overconfidence; Prospects of Upward Mobility; Cross-country research

JEL classification: C92; D63; H23, O57

Gianluca Grimalda
Kiel Institute for the World Economy
Kiellinie 66
D-24105 Kiel, Germany
Email:
gianluca.grimalda@ifw-kiel.de
www.ifw-kiel.de

Francesco Farina
CIMEO, Sapienza University of Rome, Italy
Via del Castro Laurenziano 9, 00161 Roma, Italy
Email:
fr.f.farina@gmail.com
www.uniroma1.it

Anna Conte
Sapienza University of Rome, Department of Statistical Sciences,
Viale Regina Elena, 295,
I-00161 Rome, Italy
Email:
anna.conte@uniroma1.it
www.uniroma1.it

Ulrich Schmidt
Kiel Institute for the World Economy
Kiellinie 66
D-24105 Kiel, Germany
Email:
ulrich.schmidt@ifw-kiel.de
www.ifw-kiel.de

Why do Preferences for Redistribution Differ Across Countries? An Experimental Analysis

Gianluca Grimalda[a,*], Francesco Farina[b,†], Anna Conte[c,‡], Ulrich Schmidt[a,§]

[a] *Kiel Institute for the World Economy, Germany*

[b] *CIMEO, Sapienza University of Rome, Italy*

[c] *Department of Statistical Sciences, Sapienza University of Rome, Italy*

October 29, 2022

Abstract

We test for different theories purporting to explain cross-country differences in income redistribution through standardized experimental choices. US Americans and Italians demand less redistribution than Norwegians and Germans, regardless of whether self-interest is relevant. Those earning (or expecting to earn) below-median incomes behave as "libertarians" more frequently in the US and Italy than in Germany and Norway. Above-the-median earners behave similarly across countries. Higher overconfidence by US Americans and Italians further reduces their demand for redistribution under uncertainty. The "Prospect of Upward Mobility" hypothesis holds similarly in all countries. US Americans do not reward individual merit more than others.

Keywords: Income Redistribution; Inequality; Experiment; Merit; Overconfidence; Prospects of Upward Mobility; Cross-country research
JEL Classification: C92, D63, H23, O57

Acknowledgments: We are greatly indebted to Marc van Boening, Shane O'Higgins, Jo Thore Lind, Craig Parks, Luca Stanca, Stefan Traub, Martin Kocher, who kindly made their laboratories available for our experiments at no charge. We are particularly grateful to Fulvio Castellacci, who provided support at the Norwegian Institute of International Affairs (NUPI) during fieldwork in Oslo. We are grateful to Abigail Barr, Michael Berlemann, Maria Bigoni, Marco Casari, Conchita D'Ambrosio, Michalis Drouvelis, Andrea Fazio, Massimo Finocchiaro Castro, Marc Fleurbaey, Alessia Fulvimari, Simon Gächter, Diego Gambetta, Benedikt Herrmann, Lasse Jessen, Thomas Lux, Maria Marino, Julija Michailova, Peter Moffatt, Louis Putterman, Tommaso Reggiani, Sigrid Suetens, Stefan Traub, Bertil Tungodden, Gari Walkowitz, Rick Wilson, for valuable comments. We thank Lukas Baumann, Kenneth Birkeli, Giacomo Degli Antoni, Francesco Lo Magistro, Fabian Paetzel, David Pipke, Sunniva Pettersen Eidsvoll, Mariagrazia Ranzini, Maria Rizzo for great research assistance. We also thank participants in the 6th IMEBE International Meeting on Experimental & Behavioral Economics (Bilbao), the 5th Nordic Behavioral and Experimental Economics Conference (Helsinki), the Centre for the Study of Equality, Social Organization and Performance (ESOP) workshop (Oslo), the "Equality in Crisis" worshop (Rome), the International Economic Association Sixteenth World Congress (Beijing), the Workshop "Cooperation among strangers" (Bertinoro), the XIth meeting of the Society for Social Choice and Welfare (New Delhi), the 8th Alhambra Experimental Workshop (Rome), the 4th ACCER Workshop on Cross-Cultural Experimental Economics Research (Duisburg), the 7th International Conference of the French Association of Experimental Economics (Cergy), the 2016 European meeting of the Economic Science Association (Bergen), and seminars at Oslo University, Helmut Schmidt University (Hamburg), Fundación Universitaria Konrad Lorenz (Bogotá), University of Tilburg, University of Cologne, University

[*] *Email*: gianluca.grimalda@ifw-kiel.de (*corresponding author*)
[†] *Email*: fr.f.farina@gmail.com
[‡] *Email*: anna.conte@uniroma1.it
[§] *Email*: ulrich.schmidt@ifw-kiel.de

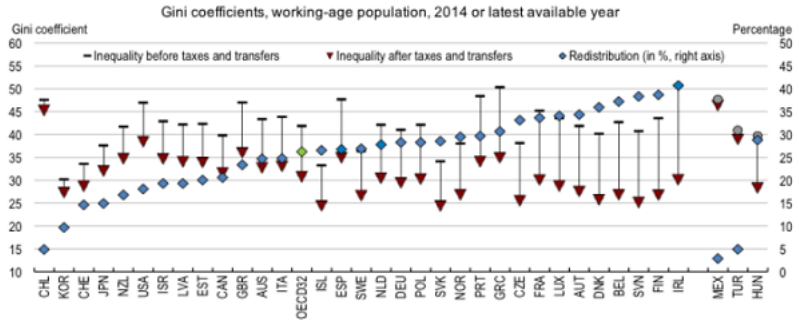
of Bremen, University of Sichuan, the European Commission Directorate-General for Employment, Social Affairs and Inclusion (EMPL), Unversity of Tomsk. Financial support from the European Commission (Grant 029093 CITIZENS-2004-2.2.2), LUISS University, IN+ at the Instituto Superior Tecnico (Lisbon), Universitat Jaume I of Castellón, and Kiel Institute for the World Economy is gratefully acknowledged. All errors are our sole responsibility.

Declarations: Data and analyses reproduction codes are available at this repository: [link]. The authors declare no conflict of interest.

1 Introduction

Developed countries vastly differ in the amount of redistribution operated by their governments (Alesina and Glaeser, 2004). Redistribution, measured by the percentage difference in the Gini index before and after tax-and-transfer, ranges from about 5% in Chile to 40% in Ireland (Figure 1; Causa and Hermansen (2018)). The resulting levels of income inequality after redistribution are substantially different across countries. In democracies, the levels of redistribution must be related to citizens' preferences. Although several theories have been put forward to account for preferences for redistribution, our knowledge of how such theories can account for cross-country differences in redistribution is still scant. Part of the reason is that most cross-country empirical analysis draws on surveys, where preferences for redistribution are measured in relation to a specific country's income distribution. Preferences measurement is then inevitably confounded with (often wrong) beliefs on the actual level of income inequality in the respondent's country, making international comparison impossible (Osberg and Smeeding, 2006; Norton and Ariely, 2011). Experiments where groups of people redistribute earnings among themselves offer a better identification strategy. The standardization of choices puts individuals from different countries in front of identical redistributive situations, which are independent from beliefs over real-life income distribution. This makes meaningful international comparison possible. A pioneering experimental study by Almås et al. (2020) (ACT henceforth) compares preferences for redistribution in the US and Norway, finding significant differences in preferences for redistribution, with Norwegians being overall less willing to tolerate inequality than US citizens.

The goal of the present study is to advance our knowledge of whether and why preferences for redistribution differ across a set of Western countries, using experimental methods. We focus on the US, Italy, Germany, and Norway, countries which are each representative of one of the four different models of welfare state according to the pioneering classification by Esping-Andersen (1990) (see Supplementary Online Materials - SOM henceforth -, Section S1.1, for a description of such models). Almås et al. (2020) explore preferences for redistribution when individual self-interest is not at stake in conditions of certainty (because redistribution does not affect the decision-



Source: Causa and Hermansen (2018: Figure 10b)

FIGURE 1
Gini index before and after tax-and-transfer for OECD countries

maker). Instead, our experimental decisions permit the analysis of preferences for redistribution both when self-interest is at stake and when it is not, and when individuals are either certain or uncertain of their position on the earnings scale. We can thus analyze whether people who are fair when their self-interest is not at stake remain so when redistribution may be costly to them. Moreover, like ACT, we assign initial earnings either through luck or individual merit, considering four different sources of inequality. Combining information from experimental decisions and expectations of one's earnings enables us to assess the relevance of various prominent theories of the determinants of preference for redistribution.

The basic assumption in the literature is that individual self-interest determines the demand for redistribution. According to the classic contributions by Romer (1975) and Meltzer and Richard (1981), self-interested rational individuals should demand the amount of redistribution necessary to maximize their post-tax-and-transfer earnings. With democracy and political competition, the median voter in the income distribution will determine the actual tax rate. This will be positive because the distribution of income is right-skewed, and all individuals with below-average productivity benefit from redistribution. Uncertainty over one's future income can, however, change this prediction. According to the "Prospect of Upward Mobility" (POUM) hypothesis, below-median earners may demand a lower than optimal income tax rate if they believe that they, or their children, will earn above the median in the future (Putterman et al., 1998; Bénabou and Ok, 2001). Self-interested demand for redistribution under income uncertainty is also affected by self-confidence and optimism (Moore and Healy, 2008; Niederle and Vesterlund, 2007), with more self-confident individuals demanding less redistribution. Moreover, redistribution has a social insurance component against the risk of low future earnings (Varian, 1980; Sinn, 1996). More

risk-averse individuals will then demand a higher tax rate to insure themselves (Traub et al., 2005; Schildberg-Hörisch, 2010). Both survey (Corneo and Gruner, 2002) and experimental studies (Esarey et al., 2012a,b, Durante, Putterman and Weele, 2014, DPW henceforth) confirm that self-interest, self-confidence, and risk aversion are relevant factors of preferences for redistribution.

Nevertheless, although cross-national surveys find that demand for redistribution is higher among the poor than among the rich, such a difference is much lower than what is predicted by the median voter theorem (Fong, 2001; Dimick et al., 2016; Hoy and Mager, 2021). It has been argued that many individuals must be motivated by social (or other-regarding) preferences in addition to self-interest (Fehr and Schmidt, 1999; Fong, 2001; Cappelen et al., 2007; Alesina and Giuliano, 2009). Individuals may have a distaste for inequality embedded into their preferences (Thurow, 1971; Pauly, 1973; Bolton and Ockenfels, 2000; Karni et al., 2008), and they may prefer to pay some money to reduce inequality in their groups (Corneo and Fong, 2008; DPW). Aversion to inequality is arguably stronger for below-median earners than above-median earners (Fehr and Schmidt, 1999), and spiteful individuals will prefer to increase inequality when they are ahead on the earnings scale (Abbink and Sadrieh, 2009).

Concern for outcomes is not all that matters. It has been theorized (Roemer, 1998) and demonstrated empirically (Bolton et al., 2005; Karni et al., 2008; Trautmann, 2009; Krawczyk, 2010; Grimalda et al., 2016; Akbaş et al., 2019, DPW, ACT) that individuals are also sensitive to the procedures determining outcomes. Generally speaking, people are more willing to equalize income differences when these are the results of circumstances beyond their control - such as luck - than when they are the results of factors under their control - such as how hard one decides to work (Konow, 2000, 2003; Croson and Konow, 2009). In other words, individuals are less willing to redistribute when incomes result from choices or behaviors for which individuals are to be held responsible. There exists, however, a gray area where it is not clear whether individuals should be held responsible or not. Do footballers deserve the huge earnings from their incredible talent in juggling a ball? Is an individual deserving the returns stemming from their parents' wealth? Individuals may indeed differ on where they place their "responsibility cut" (Roemer and Trannoy, 2015; Andre, 2021), that is, which individual factors and characteristics are worthy of compensation and which are not. According to the meritocratic view, individuals are entitled to the returns stemming from both their talents and skills, but not to those due to luck, such as their family's wealth. Libertarians shift the responsibility cut even further and argue that individuals are also entitled to the outcomes of luck, as long as they did not infringe others' property rights (Nozick,

1974). Toward the opposite side of the responsibility spectrum, the Rawlsian view holds individuals not responsible for their talents because these are ultimately the result of a random allocation of genes and abilities in a "lottery of birth" (Rawls, 1971). Accordingly, income differences due to individual talents or family wealth should be fully compensated, but not those due to individual effort. An even more extreme view is that individuals should not even be held responsible for their effort choices – because these are ultimately inherited through the social environment in which an individual was brought up or are the results of physiological characteristics for which individuals should not be held responsible (Cohen, 1989). This latter view leads to full egalitarianism. Experimental studies have found social preferences to be heterogeneous, with shares of libertarians, egalitarians, and meritocrats being sizable across different samples (Cappelen et al., 2007, ACT). ACT find that the portion of meritocrats is similar in Norway and the US, while libertarians are more numerous in the US, and egalitarians are more sizable in Norway, than in the other country. Other factors affecting the perception of one's responsibility have been investigated, including risk management (Dworkin, 2002; Cappelen et al., 2013; Mollerstrom et al., 2015) and the self-serving bias in assessing one's merit in acquiring high earnings (Baron and Hershey, 1988; Gurdal et al., 2013; Deffains et al., 2016; Cohn et al., 2019; Cassar and Klein, 2019; Brownback and Kuhn, 2019).

Our study analyzes the above factors in experimental decisions and assesses their relevance in explaining cross-country differences. The basic design of our experimental choices is adapted from DPW. While pre-redistribution earnings inequality in DPW reproduced real-life income inequality in the US, participants from the four countries in this study were faced with identical settings for their decisions. Groups of 21 participants were assigned initial earnings from a discrete uniform distribution and were asked to state which level of proportional redistribution they wanted for their group. One randomly drawn decision was implemented and determined final earnings. Participants made four experimental choices, in which one's choice only affected others, i.e., the "spectator" decision, or affected others *and* self, i.e., the "stakeholder" decision. Stakeholder decisions also varied the degree of uncertainty over one's initial earnings, which could be either high, low, or absent. We also varied the procedures to assign initial earnings to see where individuals place their "responsibility cut". Earnings were determined according to: (A) an unbiased random procedure; (B) a biased random procedure awarding higher chances of achieving high earnings to participants coming from more affluent areas; (C) a test of ability in abstract reasoning; (D) an effort-based task (see SOM: Sections S2.2 and S4 for experimental procedures and excerpts of the tasks).

We find a clear clustering of the four countries, with Norwegian and German participants

demanding significantly more redistribution than Italian and US participants. The distance in decisions between the two clusters is, however, smaller in stakeholder decisions under uncertainty. Differences between the two clusters are mainly driven by the decisions of participants who knew they would earn below-median incomes or *expected* to earn below the median (the "poor" in the experiment). Many US and Italian below-median earners acted as "libertarians"; namely, they let the "rich" keep their earnings. Conversely, many Germans and Norwegians below-the-median earners demanded complete - or close to complete - redistribution. On the contrary, high-earners' choices were remarkably similar across countries in conceding little redistribution to low-earners. The structural estimation of fairness types confirms these results finding a larger proportion of "pure" libertarians in the US and Italy than in Germany and Norway. This result suggests that cross-country differences in redistribution in real life may depend on how much the poor consider the rich to be entitled to keep their earnings, rather than on differences in solidarity by the rich towards the poor.

Another variable affecting redistribution in the two clusters is overconfidence (see section 3.4.2).[1] While the elasticity of demand for redistribution to overconfidence does not appear to differ across countries, US Americans and Italians are significantly more overconfident than Norwegians and Germans. This factor significantly reduces their demand for redistribution in choices under uncertainty. We find support for the POUM hypothesis in each country but at similar levels. As expected, risk aversion increases demand for redistribution. However, contrary to our hypotheses, we find lower risk aversion in Norway than in both US and Italy. Finally, we do not find evidence that US Americans reward individual merit more than others. While US Americans do reward individual merit in the spectator decision, the distinction between luck and merit becomes irrelevant when self-interest is at stake. Conversely, Italians and Germans reward individual merit throughout the four decisions.

A limitation of our study is that we used the "convenience" samples of university students rather than stratified adult samples. Nevertheless, the differences in demand for redistribution between Norwegians and US Americans observed in ACT appear close in quantitative terms to those observed in our study (see Section 2.3.1). Moreover, a study by Grimalda and Pipke (2021), conducted with stratified adult samples of the US, Italian, and German populations, find very similar patterns for preferences for redistribution to those found in the present study. We further discuss the generalizability of results from student samples in Section 5. Another innovation

[1] Gender differences in overconfidence and how such differences affect preferences for redistribution have been analyzed in Buser et al. (2020), combining this dataset and that from DPW.

with respect to cross-country experiments is that in each country, except Norway[2], we run our experiments in two locations from areas that could be deemed *a priori* broadly different in cultural terms. This approach enables us to gauge both within-country and between-country behavioral variability in preferences for redistribution (see Section 4.3.3).[3]

Our study is related to the body of literature focusing on the reasons why high-income and low-income earners could vote against their self-interest. Such literature emphasizes the control of the media by the rich (Benabou, 2005), the impact of inequality on criminality (Dimick et al., 2016), the rich preferences for redistribution being affected by upward mobility (Cohn et al., 2019), and class solidarity (Ghiglino et al., 2021).[4] Our study proposes an explanation based on social preferences and points to the possibility that social preferences by low-earners, rather than those by high-earners, significantly differ across Western countries. Our study complements the account that beliefs over economic mobility affect cross-country differences in demand for redistribution. According to such an account, a larger portion of US citizens than European citizens believe that opportunities are widely available to climb up the economic ladder, and such beliefs significantly affect their demand for redistribution (Corneo and Gruner, 2002; Alesina and Glaeser, 2004; Alesina and Angeletos, 2005; Alesina and La Ferrara, 2005; Bénabou and Tirole, 2006; Alesina et al., 2018; Rey-Biel et al., 2018a). We collect a measure of beliefs on the determinants of economic success in our post-experiment questionnaire, but we find that such beliefs have no significant impact on predicting experimental choices (see section 4.3.2). This result supports the view that our experiment measures preferences for redistribution in a context "uncontaminated" by beliefs over real-life inequality of opportunity.[5]

Our study also adds to the literature examining individuals' reactions to being revealed the actual level of inequality in their country or their actual position in the income distribution (Cruces et al., 2013; Kuziemko et al., 2015; Hoy and Mager, 2021; Fehr et al., 2021). A surprising finding in this literature is that, generally, individuals' demand for redistribution changes little after

[2]Given the relatively low population size and cultural variability within Norway, we believed that the replication in another location was unwarranted

[3]See Ferraro and Cummings (2007) for another experiment conducted in more than one location within a country to study cultural differences.

[4]Benabou (2005) argues that the rate of redistribution may be distorted by rich voters' political power. Their control of the media may sway poor voters to vote for a lower tax rate than the one maximizing their incomes. Dimick et al. (2016) point out that rich voters may concede redistribution to reduce criminality thus safeguarding their high incomes. Cohn et al. (2019) show that people in the top 5% of the income distribution implement lower redistribution than the rest of population when acting as spectators, particularly those who experienced upward mobility rather than having inherited wealth. Ghiglino et al. (2021) argue that high-income earners are characterized by high in-group altruism and low universal solidarity, while low-income earners' redistributive demand is thwarted by ethnic fragmentation. The upshot is a lower redistribution rate than those that a median voter would demand.

[5]We analyze the interplay between beliefs over determinants of social mobility, preferences for redistribution, and *real-life* demand for redistribution in a companion paper.

having been revealed that inequality is greater than what one thought or that the individual is poorer than what she believed (Ciani et al., 2021). It has been posited that people with low incomes may experience last-place aversion (Kuziemko et al., 2014), anchor their demand for redistribution to their position on the income scale (Hoy and Mager, 2021; Fisman et al., 2021), or that trust in government mediates this effect (Kuziemko et al., 2015). Our study suggests that social preferences by individuals with low earnings may make them particularly lenient in accepting inequality, although large differences across countries exist.

The paper is structured as follows. Section 2 illustrates the experimental design and the hypotheses to be tested. Section 3 illustrates our empirical strategy. Section 4 reports the main results. Section 5 discusses results, and Section 6 concludes.

2 Experiment design

2.1 The basic redistribution decision

We conducted 58 sessions involving 21 participants each. Participants made four experimental decisions on how to redistribute earnings in their group. All four decisions had in common the following basic characteristics:

- *Initial earnings* – Initial earnings were assigned to each participant from a discrete uniform distribution ranging from a minimum of 1 token up to a maximum of 21 tokens. Every one of the 21 earning levels from 1 to 21 was assigned to a different participant. The monetary value of each token was adjusted in each location to equalize Purchasing Power Parity (see SOM: section S2.1 for details). For instance, it was \$1.30 in Washington State, so that initial earnings may have ranged from \$1.30 up to \$27.30. Unlike DPW, we used the same uniform earnings distribution in every country. We call initial earnings y_{it}^{P}, where i denotes the individual, $t = \{1, \ldots, 4\}$ the round of the decision, and P stands for Pre-tax earnings.

- *Tax rate* (τ henceforth) – Every participant proposed a tax rate. The tax rate was applied linearly to all initial earnings, and the revenues were redistributed equally among participants. Tax rates could vary from the two extremes of 0% (no redistribution) to 100% (full redistribution). Any integer from 0 to 100 was a feasible choice. We call $T = \{0, 1, \ldots, 100\}$ the set of possible individual decisions for each τ_t, $t = \{1, \ldots, 4\}$.

- *Final earnings* – One τ among the 21 proposed by participants was randomly selected and

applied to everyone's initial earnings. This determined everyone's final earnings. The person whose τ was randomly drawn was called the "decisive individual". Every participant had the same probability of being selected as the decisive individual.

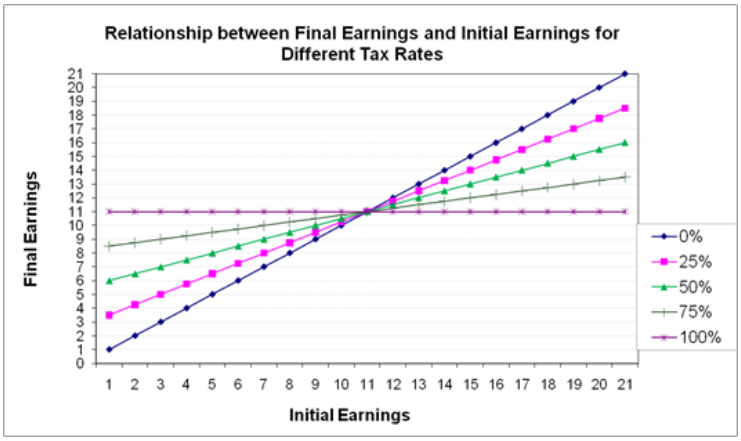


FIGURE 2
Relationship between final earnings and initial earnings for different tax rates

Figure 2 plots the relationship between initial and final earnings for some tax rates. If τ was equal to zero, then final earnings would equal initial earnings. If τ was equal to 100%, then final earnings would equal 11 tokens for everyone. For intermediate levels of τ, some earnings redistribution from above-median earners to below-median earners would occur.

Since there was no cost of redistribution,[6] the formula linking initial and final earnings for each participant boils down to:

$$y_{it} = y_{it}^{P}\left(1 - \tau_t^*\right) + 11\tau^* \tag{1}$$

where τ_t^* is the randomly selected tax rate and y_{it} are final earnings for individual i in period t={1,...4}. That is, final earnings are a convex combination of initial earnings and median earnings, with weights given by τ_t^* (see also Appendix: Section A.1 and equation (A.1)).

2.2 Initial earnings

Similarly to DPW, we used four different methods to assign initial earnings in a between-subject design. In the "Random" treatment, initial earnings were assigned randomly through a computer-run unbiased lottery. Participants were told that they would be assigned one lottery ticket each,

[6]Both ACT and Stantcheva (2021) find little concerns for the efficiency costs of redistribution in adult samples of the US and Norwegian populations.

consisting in one number from 1 to 21. Each participant had an even probability to be assigned one number, with each number being assigned to one participant. The number received determined one's initial earnings.

In the "Origin" treatment, the assignment of initial earnings was still random, but the lottery was biased in favor of the individuals from relatively wealthiest families. On the basis of the participant's family ZIP-Code, which was collected during the registration to the experiment, participants were assigned to either a group labeled "Group A", comprising participants whose families resided in the ten relatively wealthiest areas among the session's participants, or to the "Group B" comprising all the remaining eleven participants. We used estimates of average per capita income per ZIP-code areas, or analogous measures, to rank participants' ZIP-code areas. The lottery was similar to that used in the Random treatment, but this time the ten participants from Group A were assigned two lottery tickets, whereas participants in Group B were assigned one lottery ticket. This entailed that participants in Group A had twice as high a probability as participants in Group B to be assigned above-median initial earnings. The assignment to either Group A or Group B was kept hidden to participants.

In the two other treatments, initial earnings were based on individuals' relative performance in a set of ten tasks. Participants were ranked according to the number of tasks solved correctly, and according to the time taken to complete the tasks in case of ties. Each participant was assigned the level of initial earnings corresponding to her ranking. The highest ranked individual was assigned 21 tokens, while the lowest ranked participant was assigned one token.

In the "Effort" treatment, the tasks were meant to reward hard work and mechanical effort. These tasks were taken from Azar (2009) and consisted in identifying one letter lying at a certain line and column within a jumbled script running over several pages. The Effort treatment tasks were introduced as being "extremely simple and not requiring specific skills or ability", but rather "concentration and some effort". Conversely, the "Ability" treatment tapped into a set of abilities that may be regarded as involving "natural talents" rather than mechanical effort. The tasks were modelled on Raven's IQ test and were introduced as requiring "ability in abstract reasoning".[7]

This set of four treatments enables us to test where individuals place their "responsibility cut", that is, which factors they deem as worth compensating and which factors they hold individuals responsible for. We lay out our hypotheses in section 3.4.3. We refer to Random and Origin as

[7]The Raven tests that were used in the Ability treatment tap into so-called fluid intelligence. That is the ability to reason, solve novel problems, and see patterns or relations among items (Diamond, 2013). Although fluid intelligence may in part be trained (Jaeggi et al., 2008) and be the result of environmental factors (Nisbett et al., 2012), a long tradition in cognitive psychology sees fluid intelligence as an innate trait that underscores an individual's inherent capacity to reason and solve abstract problems.

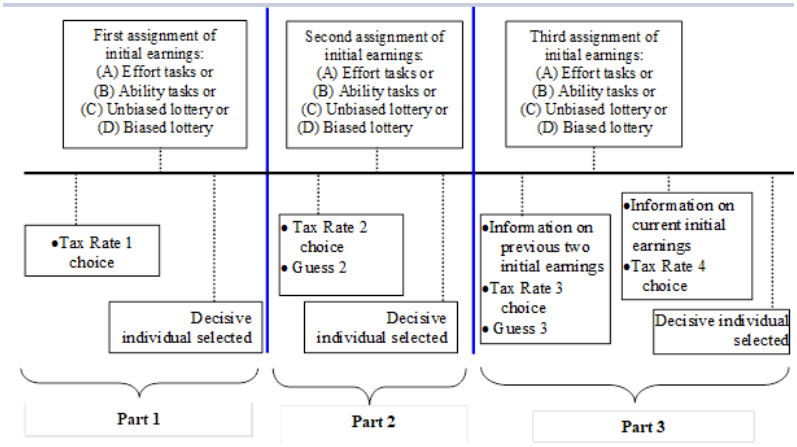


FIGURE 3
TIMING OF EXPERIMENTAL DECISIONS

belonging to the Luck treatments: Luck = {Random; Origin}. We refer to Ability and Effort as Merit treatments: Merit = {Effort; Ability}. We call $\Gamma = \{Luck; Merit\}$ the set of four treatments.

2.3 The four redistributive decisions

The timing of the four decisions is reported in Figure 3. We label the four experimental decisions D_t, $t = \{1 \dots 4\}$. The first three decisions were made under uncertainty over one's initial earnings, while initial earnings were revealed to participants in D_4.

2.3.1 Decision 1: The disinterested spectator

After having explained the general characteristics of the stage game, as described in Section 2.1, participants were instructed that the decisive individual would have earned *as a matter of course* 11 tokens in D_1 regardless of her actual initial earnings. For all other participants, final earnings were instead determined according to Equation (1). It was pointed out to participants that 11 tokens are the median position in the earnings scale (see Figure 2). Given that the median earner is unaffected by τ_1, the decisive individual's choice of τ_1 could only affect others' final earnings, but left unchanged her own final earnings. D_1 is then equivalent to a "disinterested spectator" decision (DPW, ACT) in which self-interest is irrelevant and only social preferences matter(see Section 3.1).

After having explained the basic characteristics of D_1, a comprehension check was administered.

Participants then chose τ_1. Afterward, the task and the lotteries determining initial earnings in each of the treatments (see Section 2.2) took place. The outcome of such tasks and lotteries was *not* communicated to participants, so that they remained ignorant of their initial earnings. At the end of this part, the decisive individual was randomly selected (but her identity was not revealed).

2.3.2 Decision 2: Behind a "thick" veil of ignorance

The only difference between D_2 and D_1 was that the decisive individual's final earnings were not fixed to 11 tokens, but were determined according to equation (1) as for any other participant. That is, the decisive individual's tax rate would be applied to her own earnings as well as to any other group member's earnings. Self-interest was then a relevant motivation in D_2. Maximization of expected payoffs prescribes to demand a lower τ_2, the higher the expected earnings (see Section 3.1). Self-interest should also matter with respect to risk aversion and ambiguity aversion. More risk-averse or ambiguity-averse (Ellsberg, 1961) individuals should demand a higher tax rate to protect themselves against the possibility of ending up with low earnings. Social preferences should also matter in D_2.

The timing for D_2 was similar to D_1. After participants answered a second set of comprehension questions on the new set of instructions, they chose τ_2. They were then asked to state their expectations over their initial earnings in D_2 without any monetary incentivization. Afterward, a second round of tasks and lotteries was run to determine initial earnings. Even in D_2, the outcome of such tasks and lotteries was not revealed, so that participants ignored their initial earnings. At the end of this part, the decisive individual was randomly selected (and again her identity was not revealed). We refer to D_2 as a choice behind a "thick" "Veil of Ignorance" (VoI) [8] (as opposed to the "thin" veil of the next decision) because participants decided over the final distribution of earnings without knowing their actual position in the earnings scale.

2.3.3 Decision 3: Behind a "thin" veil of ignorance

The only difference between D_3 and D_2 lied in that *before* making their decision over τ_3, individuals were informed of their initial earnings $y^P_{i,1}$ and $y^P_{i,2}$ assigned in D_1 and D_2. Arguably, this piece of information was important in the Merit treatments, because it was tantamount to receiving a

[8] Rawls's (1971) original formulation of a VoI involved a thought experiment in which individuals ignored their preferences, their abilities, and their position in society. Rawls argued that this situation of ignorance was instrumental to ensure the morality of the ensuing decision. Clearly this hypothetical situation cannot be reproduced in an experiment, as participants are well aware of their preferences, abilities, and position in society. However, the experimental literature, somewhat loosely, normally refers to a choice where an individual does not know her relative earnings compared to the rest of the group as one taken from behind a VoI.

signal over one's level of ability relative to others'. In the Origin treatment, too, individuals could use this information to infer whether they were part of the advantaged or the disadvantaged group (see Section 2.2).

After choosing τ_3, individuals were asked to state their expected initial earnings for D_3. Afterward, a third round of tasks and lotteries took place. We refer to D_3 as being taken behind a "thin" VoI, as opposed to the "tick" VoI of D_2, because participants had more information in D_3 than D_2 on their own relative capacity in the Merit treatments, or the probability of belonging to the advantaged group in the Origin treatment. In other words, the choice was still made under uncertainty in D_3, but participants should have been better able to form a more precise expectation of their initial earnings than in D_2. D_3 was adapted from Esarey et al. (2012a) and permits a test of the POUM hypothesis (see Section 3.4.2).

2.3.4 Decision 4: Beyond the veil of ignorance

D_4 was modeled upon DPW's third decision and involved a surprise revision of τ_3. Without having received prior notice, participants were informed of their actual initial earnings $y^P_{i,3}$ just acquired after the third round of tasks and lotteries. Individuals could choose between leaving their previous choice of τ_3 unaltered or modifying it. We call this decision τ_4. Participants were informed that τ_4 would be applied to everyone's earnings instead of τ_3 in the last part of the experiment. 49.5% of participants revised their previous decision.

We refer to D_4 as being taken from *beyond* the VoI because people were informed of their actual position in the earnings scale. D_4 permits a clean assessment of whether individuals acted consistently with their self-interest, because payoff maximization implied demanding either $\tau_4 = 100\%$ or $\tau_4 = 0\%$ depending on whether an individual was below or above the median position in the earnings scale.

After having chosen τ_4, a decisive individual was randomly selected for the last part of the experiment. Another random draw occurred to select which of the three parts of the experiment would determine participants' payoffs. We consider D_3 and D_4 as forming the third part of the experiment. Random draws were made by participants drawing a card from a deck of numbered cards. The outcome of such random draws was never revealed to participants. Each session lasted on average 90 minutes.

2.3.5 Risk and ambiguity aversion measures

At the end of the four experimental decisions, we run two monetarily-incentivized tasks to measure risk aversion and ambiguity aversion. Participants were given three decisions in each of the two tasks in which they had to choose between a lottery and a sum of money with certainty. The lottery was the same across all decisions, while the sum of money varied across decisions in order to elicit different degrees of risk and ambiguity aversion (see SOM: Section S2.3, for more details).

2.4 Locations of the experiment

We targeted samples of 168 university students from the following universities: Bicocca (Milan, Northern Italy), Fisciano (Salerno, Southern Italy), Washington State (Pullmann, WA, North West of the USA), Mississippi (Oxford, MS, South East of the USA), Oslo (Norway), Bremen (North-West Germany) and Munich (South-East Germany). The two locations within the US, Italy and Germany were chosen to guarantee what appeared *a priori* a substantial degree of within-country cultural variability. Using information from a screening questionnaire, we preferentially invited to the experiment national citizens of the country where the research was conducted whose parents resided either in the region (for Italy) or in the state (in the US and Germany) where the university was located, or surrounding regions/states. Students who stated in the post-experiment questionnaire that their family's area of residence was not in the target regions or states have been expunged from the analysis.[9] In this way, differences in behavior from the two locations within the same country can be thought of as being partly determined by the cultural differences from the two areas. The analysis of questionnaire answers to questions enquiring about participants' cultural norms and values confirms the existence of relevant cultural differences between the two locations sampled within a country (SOM: Section S1.2 and Table S1).

Following Roth et al. (1991) and Buchan et al. (2009), we implemented standard controls to ensure between-country (as well as within-country) comparability. These are reported in SOM: Section S2.1. All experiments were conducted with z-tree (Fischbacher, 2007). Experiment protocol and instructions are reported in the SOM, Sections S2.2, S2.3 and S4.

[9]Participants could come from regions/states outside the desired target areas for different reasons. In some cases, students stated a residential area for their families that was different from the one stated in the signing-up questionnaire. In case of low signing-up rate from the desired areas, or insufficient show-up to achieve 21 participants per session, we admitted to sessions students whose families resided in areas outside the target areas. Due to technical problems with the recruitment system at the University of Mississippi (MS), the initial four sessions had a particularly low-turnout from students satisfying the residence criterion. Two extra sessions were then later conducted at the University of Mississippi.

3 Theoretical background and hypotheses

3.1 The utility function

We assume that preferences are described by the following utility function, which draws on Alesina and Giuliano (2009), Cappelen et al. (2007, 2010) and DPW:

$$U_i(\tau) = \alpha \{E_i[\tilde{y}_i(\tau)] - \rho\varphi(\tau)\} + \beta_i \left\{ -\left[I(\tau) - I_{ij}^*\right]^2 \right\} \tag{2}$$

Utility depends on self-interest and social preferences, represented by the first and second term of Eq. (2), respectively. $\alpha > 0$ is a scale parameter for self-interest and $\tilde{y}_i(\tau)$ is individual i's final earnings, with the tilde denoting uncertainty over the final outcome. In the same fashion as DPW, we assume that agents' utility depends on the expected value and the riskiness of $\tilde{y}_i(\tau)$, $E_i[\tilde{y}_i(\tau)]$ and $\varphi(\tau)$, respectively. We take the squared range of $\tilde{y}_i(\tau)$ as a measure of its riskiness.[10] ρ is the sensitiveness of the self-interested component of the utility function to the dispersion of $\tilde{y}_i(\tau)$. In other words, we assume that an individual's utility depends positively on the expected final earnings, and negatively - or positively - on their riskiness, depending on whether $\rho > 0$ or $\rho < 0$. Both expected value and riskiness of $\tilde{y}_i(\tau)$ depend on the tax rate $\tau \in T$. A higher τ increases or decreases $E_i[\tilde{y}_i(\tau)]$, depending on whether the individual expects to be below or above the median earnings, respectively, and decreases $\varphi(\tau)$ with certainty. Essentially, in the specifics of our experiment, ρ plays the role of an individual's risk aversion. Risk-averse (risk-loving) individuals prefer the "lottery" that causes final earnings to have a smaller (larger) dispersion. Therefore, we take $\rho > 0$ and $\rho < 0$ to identify risk-averse individuals and risk-loving individuals, respectively, while $\rho = 0$ identifies risk-neutral individuals.

In the fairness component of the utility function, $\beta_i \geq 0$ represents the importance that individual i attaches to fairness. This is modeled as a quadratic loss function having as arguments the actual level of inequality in the group $I(\tau)$, which is a function of τ, and individual i's desired level of inequality I_{ij}^* in treatment $j \in \Gamma$. We assume that the desired I_{ij}^* may differ across treatments to take into account individuals' preferences over the procedures that determine earnings. As argued in Section 2.2, we conjecture that in treatments where the perceived individual responsibility is higher, inequality will be more tolerated and thus I_{ij}^* will be higher.

In the Appendix, Section A.1, we derive the following optimal rule, after maximizing Eq. (2)

[10] DPW take the standard deviation of $\tilde{y}_i(\tau)$ as a riskiness measure. For analytical tractability, we take an algebraically simpler measure of riskiness. Our hypotheses, introduced in the next section, would not change if we took the standard deviation instead.

with respect to τ:

$$\hat{\tau}_{ij} = \begin{cases} \begin{cases} 100 & \text{if } E_i\left(\tilde{y}_i^P\right) < 11 \\ 100\left(\frac{11+\rho-E_i\left(\tilde{y}_i^P\right)}{\rho}\right) & \text{if } 11 < E_i\left(\tilde{y}_i^P\right) < 11+\rho \quad \text{if } \beta_i = 0 \\ 0 & \text{if } E_i\left(\tilde{y}_i^P\right) \geq 11+\rho \end{cases} \\ \\ 100\left(\frac{\alpha(11-E_i\left(\tilde{y}_i^P\right)+\rho)+2\beta_i(1-I_{ij}^*)}{\alpha\rho+2\beta_i}\right) \qquad \text{if } \beta_i > 0 \end{cases} \tag{3}$$

$E_i\left(\tilde{y}_i^P\right)$ is the expected value for pre-tax earnings level. Eq. (3) has two components. If $\beta_i = 0$, the individual is only motivated by self-interest. Since our risk task does not discriminate between risk neutral and risk loving individuals (Section 4.3.2 and SOM: Section S2.3), we only specify (3) for $\rho \geq 0$.[11] If $\rho > 0$, the individual will demand either $\hat{\tau} = 0$ or $\hat{\tau} = 100$ depending on whether she expects her initial earnings to be above the median level, augmented by ρ, or below the median level. In the intermediate condition when $11 < E_i\left(\tilde{y}_i^P\right) < 11 + \rho$, the individual demands $\hat{\tau} > 0$ even if she expects to earn above 11 tokens. This can be seen as a form of insurance against risk. If $\rho = 0$, the individual is risk-neutral and the interior solution disappears. This solution is reminiscent of Romer (1975) and Meltzer and Richard (1981).[12] When $\beta_i > 0$, the optimal choice encompasses both fairness and self-interested motivations, their relative weight being captured by α and β_i, respectively. Generally, self-interest becomes stronger the farther away expected initial earnings are from the median position. Risk aversion increases $\hat{\tau}_{ij}$. When $\beta_i \to \infty$, fairness considerations trump self-interest, and $\hat{\tau}$ brings about the desired I_{ij}^*.

The reasoning above fully applies to D_2 and D_3, when self-interest, risk, and fairness simultaneously affect an individual's choice. Self-interest is by construction absent in D_1, so this case implies $\alpha = 0$. If $\beta_i > 0$, then individuals should straightforwardly reveal their I_{ij}^* in D_1. If $\beta_i = 0$, then (3) is indeterminate and the individual will randomly select τ_1 in this decision. Risk is by construction absent in D_4, therefore $\rho = 0$ in Eq. (3) and the optimal solution can either be $\hat{\tau} = 0$ or $\hat{\tau} = 100$ if $\beta_i = 0$, while an internal solution is possible if $\beta_i > 0$. In $t = \{2, 3, 4\}$, the individual will in general balance self-interest with fairness.

[11] The generalization to $\rho < 0$ is straightforward and the optimal solution would be symmetric to Eq. (3).

[12] In the model by Meltzer and Richard (1981), the existence of efficiency losses in the redistribution scheme prevents below-the-median income earners to demand full equalization of post-tax incomes.

3.2 Fairness types

3.3 Fairness types

In accordance with ACT, we define the following fairness types depending on the desired level of inequality I^*_{ij}:

$$\textbf{Egalitarian fairness-type:} \qquad I^*_{iL} = I^*_{iM} = 0 \tag{4}$$

$$\textbf{Meritocratic fairness-type:} \qquad I^*_{iL} = 0; I^*_{iM} = \gamma \tag{5}$$

$$\textbf{Libertarian fairness-type:} \qquad I^*_{iL} = I^*_{iM} = 1 \tag{6}$$

The indexes L and M identify the Luck and Merit treatments, respectively. Egalitarians' and Libertarians' ideal inequality levels are 0 or 1, respectively, in both Merit and Luck treatments, where $I^*_{ij} = 0$ corresponds to full earnings equality and $I^*_{ij} = 1$ denotes the maximum possible level of inequality in the experiment, when no redistribution takes place. Differently, $\gamma \in (0, 1)$ is a merit premium that a Meritocrat assigns to the more deserving individuals in the Merit treatments. As ACT, we model Meritocrats as behaving like Egalitarians in the Luck treatment while demanding a strictly positive level of inequality in the Merit treatment. The higher γ, the higher the merit premium to better-performing people in the Merit treatments.[13] Table A.1 in the Appendix reports the optimal values of τ for each fairness type and each decision (see Section A.2). This is obtained by plugging conditions (4)–(6) into (3).

Our approach enables us to distinguish, for each type, whether a fairness type is "impure" or "pure". An "impure" type is someone who deviates from her fairness ideal, as revealed in D_1, and follows her self-interest when self-interest is at stake. A "pure" fairness type is someone for whom fairness considerations are strong enough to deviate from self-interest in D_t, $t = \{2, 3, 4\}$ (see Section 3.1). Our econometric model assigns participants to the "pure" or "impure" types depending on whether the estimated value of β_i is greater than, or equal to zero, respectively. In the rest of the analysis we group the three "impure" types together into a general "selfish" type category.[14] Consequently, our analysis of fairness types in Section 4.2 will consider the following

[13] This approach does not assign different types to people behaving differently in the two treatments *within* the Luck and Merit treatments. Since the differences between the Effort and Ability treatments on one hand, and the Origin and Random treatments on the other hand, are statistically insignificant (see Section 4.3.1), the structural estimation would have failed to identify different types in the two treatment pairs.

[14] As illustrated in Section A.3, the category of selfish types actually comprises another "sub-type". Our empirical strategy preliminarily assigns participants who consistently choose either $\tau = 0$ or $\tau = 100$ in accordance with their self-interest to the category of "unwavering" selfish. Our mixed proportion model then identifies those who are "close" to the corner solution when this is in their self-interest as "Wavering" selfish. Those participants are what we classify as "impure" and who receive β_i=0 in our estimation. Our group of selfish, then, includes both unwavering

four types: selfish, pure egalitarian, pure meritocratic and pure libertarian. Clearly, the decisions by many participants will not fully fit the "ideal" types described in Eq. (4)–(6). Every assignment to a type is probabilistic, thus subject to an error term. Our structural estimation approach estimates population-level distribution of fairness types (mixing proportions), on which we test the null hypothesis that the distributions of types in different locations come from from the same distribution, against the alternative that they do not.

3.4 Hypotheses

3.4.1 Basic propensity to redistribute

The political science literature drawing on Esping-Andersen (1990) posits that different welfare states regimes shape individual preferences and attitudes differently. The highest the level of decommodification, the highest the propensity to redistribute (Dallinger, 2010; Jaeger, 2005) (SOM: Section S1.1). It can be argued that propensities to redistribute should be lowest in liberal regimes like the US, while propensity to redistribute should be highest in social democratic regimes such as Norway. In conservative regimes like Germany people should hold intermediate levels of willingness to redistribute. Italy is seen as clustering with Germany in this respect (Jaeger, 2005). This leads to the following:

Hypothesis 1.

$$\overline{\tau}_{NOR} > \overline{\tau}_{GER} = \overline{\tau}_{ITA} > \overline{\tau}_{US}$$

where $\overline{\tau}$ is the mean of τ.

3.4.2 Prospect of upward mobility, overconfidence, optimism, and risk aversion

D_3 was constructed to include all the elements necessary to test the POUM hypothesis. Individuals have information on their past level of relative ability (or luck), but are still faced by uncertainty over their future earnings (see Section 2.3). We introduce the variable s - where s stands for *signal* - as the arithmetic mean of y_1^P and y_2^P, whose values are revealed to participants at the beginning

and wavering selfish. The estimates for wavering and unwavering selfish can be inferred from Appendix: Table A.2.

of Part 3:

$$s = \frac{\left(y_1^P + y_2^P\right)}{2} \tag{7}$$

s is then a measure of a participant's ability in Merit treatments, and past levels of luck in the Luck treatments.[15] We then define the dummy variable $POUM_i$ identifying those participants who received information indicating that their previous initial earnings lied on average below the median and who expected to have initial earnings above the median in D_3:

$$POUM_i = \mathbb{1}\left(s_i < 11 \cap E_i\left(\tilde{y}_3^P\right) > 11\right) \tag{8}$$

Here, $\mathbb{1}$ is the indicator function taking the value 1 when the content of the argument is satisfied, 0 otherwise. Consistently with the POUM hypothesis, we restrict our analysis to those receiving a signal $s_i < 11$ only.

Overconfidence is also relevant for preferences for redistribution. Overconfidence can be defined as the psychological tendency to over-estimate one's own abilities or prospects of success. We measure overconfidence by the difference in the expectation of one's ranking and one's actual ranking in the Merit condition, and the difference between one's expectation of the lottery outcome and 11 tokens in the Luck condition. Since there is a one-to-one relationship between one's ranking and one's initial earnings, we can express overconfidence in terms of $y_{t_i}^P$:[16]

$$O_{t_i} = \begin{cases} E_i\left(\tilde{y}_{ct_i}^P\right) - y_{ct_i}^P & \text{if} \quad c = \{Ability, Effort\} \\ E_i\left(\tilde{y}_{ct_i}^P\right) - 11 & \text{if} \quad c = \{Random, Origin\} \end{cases}, \qquad t_i = \{2, 3\} \tag{9}$$

We expect that, *ceteris paribus*, more overconfident individuals will demand less redistribution. This hypothesis is related to the $POUM$ hypothesis, but is more general because it is not restricted to below-median earners.

Another individual disposition that may affect preferences for redistribution is risk aversion.

[15] Other weighted functions of y_1^P and y_2^P are possible, in particular some attaching a larger weight to y_2^P than y_1^P. The results would nevertheless be qualitatively the same.

[16] Given that final outcomes are random in the Luck condition, it would obviously be incorrect to use the actual outcome realization as "anchoring" for O_{t_i}. We therefore use the expected outcome of 11 tokens. A better term for O_d in the Luck condition may be *optimism* rather than *overconfidence*, because the term optimism better captures the excess of one's expectation in the context of random events. In this sense, one might argue that individuals who believe their families lie in the upper (lower) wealth bracket should link their expectation to this belief, thus making 11 not the correct term in the formula. However, it is unclear which other value should be used as "anchoring" in the O_d formula in the Origin treatment. Another index for O_d where y_d^t replaces 11 for the Origin treatment yields qualitatively similar results to the formula for O_d given in expression (9).

We argued that redistribution has a social insurance component (see Section 1 and SOM: Section S2.3). Hence, we can expect that more risk-averse individuals will have a higher propensity to demand higher redistribution to insure themselves against the risk of low earnings.

Cross-country comparative research is scarce, so we do not have firm grounding for our hypotheses. On the basis of existing empirical studies and intuition from cultural or sociological studies, we can tentatively conjecture that US people have higher POUM, higher overconfidence and higher risk tolerance than Europeans, which may reverberate into lower propensity to redistribute. We therefore put forward the following set of hypotheses:

Hypothesis 2a. *US participants have higher POUM than European participants, or their demand for redistribution is more elastic to the POUM, and for this reason demand lower redistribution.*

Hypothesis 2b. *US participants have higher overconfidence than European participants, or their demand for redistribution has different elasticity to overconfidence than Europeans, and this explains their lower demand for redistribution.*

Hypothesis 2c. *US participants have lower risk aversion than European participants, or their demand for redistribution has different elasticity to risk aversion than Europeans, and this explains their lower demand for redistribution.*

3.4.3 Individual responsibility and reward of merit

A basic aspect of theories of fairness is that individuals are to be held accountable for factors under one's control and compensated for circumstances beyond their control (Putterman et al., 1998; Konow, 2003; Roemer, 2009). Since Luck treatments assign initial earnings on the basis of random factors that are clearly outside one's control, while Merit treatments reward characteristics for which individuals are to be held, to some degrees, responsible, we expect redistribution to be higher in Luck treatments than in Merit treatments. Moreover, according to the "lottery of birth" argument (Rawls (1971), see Section 1), redistribution should be lower in the Effort treatment than in the Ability treatment, because the type of mechanical effort required in the Effort treatment taps into characteristics that are under individual control to a larger extent than the

more "natural", untrainable, talents required in the Ability treatment (see Section 2.2). Likewise, it may be argued that the way initial earnings are assigned is more unfair in the Origin than in the Random treatment, because real-life inequality affects the former but not the latter treatment.[17] In other words, the difference in redistribution between the Origin and the Random treatments should capture the propensity to compensate individuals for their families' disadvantaged economic background relative to the general propensity to compensate individuals for their being unlucky in an unbiased lottery.

We therefore posit the following relationship between $\overline{\tau}$ across the four treatments for all decisions:

Hypothesis 3.

$$\overline{\tau}^{EFFORT} < \overline{\tau}^{ABILITY} << \overline{\tau}^{RANDOM} < \overline{\tau}^{ORIGIN}$$

Although we expect each country to satisfy Hypothesis 3, we also expect countries to do so to different degrees. In particular, a popular view in political science (Lipset, 1996) argues that meritocratic values are more widespread in the US compared to other countries. This distinctive cultural trait may be a legacy of the diffusion of a strong work ethic since the beginning of the migration from Europe, which is even nowadays embedded in the so-called "American dream" ethos – i.e. the idea that thanks to individual effort a child can achieve better economic outcomes than his or her parents. Likewise, according to the well-known Weberian argument, (Weber, 1904), a protestant ethic, diffused both in Norway and Germany,[18] may be more conducive to reward individual merit than a Catholic one, widespread in Italy. We therefore posit:

Hypothesis 4.

$$\overline{\tau}^{LUCK}_{US} - \overline{\tau}^{MERIT}_{US} > \overline{\tau}^{LUCK}_{NOR} - \overline{\tau}^{MERIT}_{NOR} = \overline{\tau}^{LUCK}_{GER} - \overline{\tau}^{MERIT}_{GER} > \overline{\tau}^{LUCK}_{ITA} - \overline{\tau}^{MERIT}_{ITA}$$

[17] Interestingly, Kosse et al. (2020) find higher prosociality in children from higher socio-economic status than in families from low socio-economic status, suggesting that pro-sociality is transmitted across generations. Dohmen et al. (2012) find evidence of inter-generational transmission of trust and risk attitudes.

[18] Although a large portion of German citizens are Catholic, the cross-cultural analysis of cultural values by Inglehart and Welzel (2005) assigns Germany to the Protestant block rather than the Catholic one (see SOM: Figure S13). In general, a country tends to be assimilated to the cultural area typical of the religious group that is predominant in a country.

We expect a larger proportion of participants assigned to the meritocratic type in the US than in the other countries and redistribution rates larger in the Luck than Merit treatments over the four decisions.

4 Results

We provide descriptive statistics and econometric analysis of the four decisions in Section 4.1. We carry out the structural estimation of the fairness types in Section 4.2. We provide further analyses of the meritocratic hypothesis, of the attitudinal variables and of location effects in Section 4.3.

4.1 Descriptive and econometric analysis

Descriptive statistics and histograms for each of the four decisions per country and condition are provided in the SOM: Figure S5 and Table S2. Since we do not find significant differences between the two Merit treatments and between the two Luck treatments (see Section 4.3.1), our graphical analysis merges the two pairs of treatments and reports statistics for the Merit and Luck conditions. Figure S5a brings out that the distributions tend to be bimodal and polarized onto $\tau_1 = 0$ and $\tau_1 = 100$. The mode is in every decision $\tau_1 = 0$ for Merit treatments in the US and Italy and is always $\tau_1 = 100$ for Luck treatments in all countries except for the US. Figure 4 displays the distribution of τ_t, $t = \{1, \ldots, 4\}$ broken down by country (see SOM: Figure S6 for the breakdown by country and Merit/Luck conditions).

4.1.1 General model for the econometric analysis

We estimate a set of four different multivariate regressions with τ_t, $t\,\{1, \ldots, 4\}$, as a dependent variable.

$$\tau_{it} = a + \sum_j b_j \Gamma_{ij} + \sum_j c_j COUNTRY_{ij} + \sum_j d_j DEMO_{ij} + \sum_j e_j CULT_{ij} + \varepsilon_{it} \qquad (10)$$

The model includes as covariates treatment dummies Γ_{ij}, with Effort as residual category. Our key variables of interest are dummies identifying countries, with the US the residual category. The model also includes demographic and other individual controls – labelled $DEMO_{ij}$ in Equation (10). These include gender, ethnicity, the score in the comprehension test, and various measures of the socio-economic status (SES) of the participant's family.[19] $CULT_{ij}$ is a set of attitudinal,

[19] We do not include household's net income in the specification, due to low self-reporting. In the SOM: Section

personality and ideological traits, which can, somewhat loosely, be referred to as *cultural* characteristics. They include a participant's belief that success in life is under one's control, or that respecting civic norms is important, political orientation, measures of risk and ambiguity aversion. $CULT_{ij}$ also includes the measure of self-interest, given by the expectation of initial earnings $E_i\left(\tilde{y}_i^P\right)$ in D_2 and D_3 and by the actual initial earnings $y_{i,4}^P$ in D_4 (see Section 3.1). The full set of covariates is given in the SOM: Section S3.1.

We use Tobit regressions censored at 0 and 100 to address the possibility that, if allowed, some participants would have chosen a tax rate lower than 0% or higher than 100%. Standard errors are robust to heteroschedasticity and clustered at the session level.[20] For each τ_t, $t = \{1, \ldots, 4\}$, we estimate two models, one omitting the vector of variables $CULT_{ij}$ and the other including it. In this way, we can investigate how much the country differences in preferences for redistribution are moderated by cultural differences across countries. In the model fitted for τ_4, we introduce interaction terms to analyze separately high-earners and low-earners' decisions. The results for a subset of independent variables are reported in Table 1, while the full regression results are reported in the SOM: Table S3.

4.1.2 Decision 1: The disinterested spectator

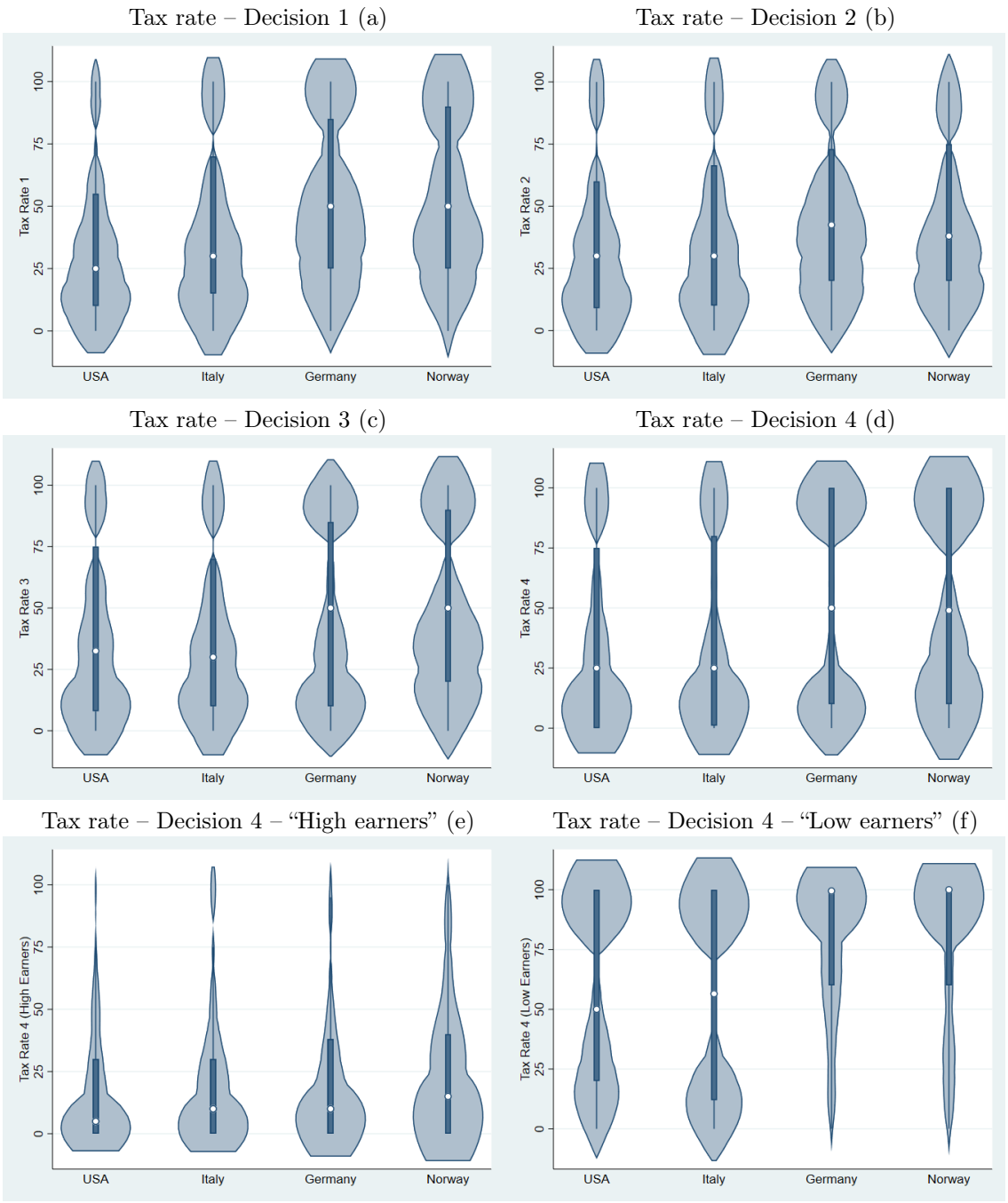
As shown in Figure 4a, redistribution tends to be higher in Norway and Germany - where median τ_1 equals 50 in both countries - than in Italy - where the median τ_1 is 30 - and in the US - where median τ_1 is 25. Table 2a reports the results of pairwise t-tests over the null hypothesis that the coefficient for one country dummy in the regression of Table 1, column (1), is equal to the coefficient for another country.[21] The tests fail to reject the null hypothesis of equality of coefficients between the US and Italy (p-value = 0.18) and between Germany and Norway (p-value = 0.81). In all other pairwise tests, the null is instead rejected at p-value < 0.001 for US vs. Germany and US vs. Norway, and p-value = 0.013 for Italy vs. Germany and p-value = 0.014 for Italy vs. Norway. These results suggest that basic preferences for redistribution – when self-interest is not relevant – are similar in the two clusters formed by the US and Italy at the lower end of the redistribution spectrum, and Germany and Norway at the higher end.

These results are in line with those of ACT with respect to Norway and the US. A direct

S3.8 and Tables S28 and S29, we report results of additional Tobit regressions including Household Income as a covariate, after inputting missing observations. Household Income has the expected sign but is only weakly significant in some of the regressions. The main results of the paper in terms of country differences in redistribution are virtually unaffected by controlling for Household Income.

[20] Clustering at the level where the randomization of the treatment occurs is suggested by Abadie et al. (2017).

[21] Results of these pairwise tests are qualitatively identical to the results of non-parametric WMN tests run on the null that the observations in two different countries come from the same distribution.



Note: Plots include a white point indicating the median of the distribution, a box for the interquartile range (from 25th percentile up to 75th), and spikes extending to the upper- and lower-adjacent values. Overlaid with this box plot is the estimated k-density.

FIGURE 4
VIOLIN PLOTS OF TAX RATES BY COUNTRY

comparison between our experiment and ACT is impossible because of the differences in the experimental settings.[22] However, an indirect comparison can be carried out computing the measure

[22] ACT used groups of two people where money could be fully transferred from player to player. Another

TABLE 1
TOBIT REGRESSIONS OF TAX CHOICE (0–100) PER DECISION

DEPENDENT VAR.: TAX RATE	Decision 1		Decision 2		Decision 3		Decision 4			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
ITALY	5.15	4.25	-1.88	-2.73	0.20	-0.52	5.39	3.86	-2.97	-1.92
	(3.80)	(3.59)	(4.30)	(3.60)	(5.38)	(4.62)	(6.16)	(5.59)	(8.02)	(7.84)
GERMANY	15.88***	12.37***	10.00**	1.07	4.37	-3.41	17.14***	8.25	25.84***	19.24**
	(4.03)	(3.78)	(4.57)	(3.81)	(6.82)	(6.57)	(6.26)	(6.24)	(7.61)	(7.86)
NORWAY	16.94***	13.68***	8.82***	1.77	9.40*	-0.13	22.48***	14.27**	33.14***	29.93***
	(4.10)	(4.28)	(3.34)	(3.79)	(4.90)	(5.32)	(6.63)	(6.67)	(8.20)	(8.95)
ABILITY	1.91	1.71	1.39	-0.09	1.67	-0.52	-15.28***	-14.31***	-15.86***	-14.38***
	(3.06)	(3.15)	(3.89)	(3.46)	(5.31)	(5.57)	(5.34)	(5.26)	(5.04)	(5.26)
RANDOM	17.29***	17.17***	19.79***	15.65***	20.69***	18.77***	3.43	3.64	3.26	3.64
	(4.03)	(4.04)	(3.66)	(3.26)	(5.00)	(4.56)	(4.62)	(4.01)	(3.98)	(4.00)
ORIGIN	16.42***	16.70***	15.06***	12.48***	10.68**	8.28*	7.11	6.25	5.49	6.28
	(3.03)	(3.03)	(2.84)	(2.56)	(5.12)	(4.66)	(4.76)	(4.56)	(4.41)	(4.51)
Risk Aversion		15.82***		18.35***		16.34***		8.69*		11.41**
		(4.20)		(3.94)		(4.87)		(5.03)		(4.96)
Expected / Actual Initial Earnings				-2.53***		-3.64***		-6.22***		-3.62***
				(0.32)		(0.41)		(0.37)		(0.58)
US_X_HighEarner_4									-65.38***	-27.32***
									(6.29)	(9.33)
ITALY_X_HighEarner_4									-52.89***	-15.59
									(9.39)	(11.37)
GERMANY_X_HighEarner_4									-88.05***	-49.72***
									(7.71)	(10.07)
NORWAY_X_HighEarner_4									-92.12***	-57.13***
									(5.08)	(8.43)
Constant	-0.24	-6.45	18.79*	43.48***	18.57	59.04***	26.82	75.23***	50.21***	61.76***
	(12.25)	(13.51)	(11.26)	(12.99)	(15.05)	(17.25)	(17.66)	(21.38)	(19.00)	(20.75)
Demographic controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cultural controls	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
Observations	1,172	1,164	1,172	1,164	1,172	1,164	1,172	1,164	1,172	1,164
Uncensored obs.	837	832	813	808	740	736	620	615	620	615
Left-censored obs.	130	129	178	177	211	210	265	263	265	263
Right-censored obs.	205	203	181	179	221	218	287	286	287	286
Chi2	232.9	408.0	137.0	568.3	110.1	413.2	127.7	790.2	1,071	1,604

Note: Decision 1 (disinterested decision maker); Decision 2 (involved decision maker with uncertainty); Decision 3 (involved decision maker with uncertainty and signal); Decision 4 (involved decision-maker without uncertainty). Robust standard errors clustered at session level are reported in brackets. Data are censored at 0 and 100. *, **, *** indicate p-value $< 0.1, 0.05, 0.01$, respectively.
See SOM: Table S3 for full regression output.

of implemented inequality that ACT use as dependent variable.[23] ACT find that average implemented inequality is 20 points lower in Norway than in the US, the difference being statistically significant. In our experiment, average implemented inequality is 16 points lower in Norway than the US and this difference is also statistically significant. In spite of the differences in the protocol and in the samples, therefore, the results from our experiment and ACT seem comparable in magnitude.

Table 1, column (2), adds $CULT_{ij}$ to the model of equation (10). Country dummy coefficients in column (2) are somewhat smaller in comparison with those in column (1). This means that country differences are partly moderated by cultural and attitudinal variables. Nonetheless, differences between countries continue to be statistically significant following the same pattern as described above (SOM: Table S4a).

difference between ACT and our setting is that seven redistributive options were possible in ACT while 101 were possible in our experiment.

[23] ACT propose the following formula for implemented inequality:

$$\frac{|\, Top\ Income - Bottom\ Income \,|}{Total\ Income}$$

This formula can be adapted to our experiment considering the top and the bottom earners only, after having been rescaled within the [0,1] interval as in ACT.

Result 1. *As spectators, that is, when choices affected others' but not one's own earnings, US and Italian participants demanded significantly less redistribution than German and Norwegian participants. Such a clustering is robust to including demographic and attitudinal characteristics.*

TABLE 2
Pairwise tests of equality of country dummy coefficients; Decision 1-4

Decision 1 (a)

	US	ITA	GER
ITA	-5.15		
	(3.79)		
	0.18		
GER	-15.88***	-10.73**	
	(4.03)	(4.30)	
	<0.001	*0.013*	
NOR	-16.94***	-11.79**	-1.06
	(4.10)	(4.80)	(4.42)
	<0.001	*0.014*	*0.81*

Decision 2 (b)

	US	ITA	GER
ITA	1.88		
	(4.30)		
	0.66		
GER	-10.00**	-11.88***	
	(4.57)	(4.25)	
	0.029	*0.005*	
NOR	-8.82***	-10.70***	1.18
	(3.33)	(3.91)	(4.08)
	0.008	*0.006*	*0.77*

Decision 3 (c)

	US	ITA	GER
ITA	-0.20		
	(5.38)		
	0.97		
GER	-4.37	-4.16	
	(6.82)	(6.92)	
	0.52	*0.55*	
NOR	9.40*	-9.20*	-5.03
	(4.90)	(5.12)	(5.66)
	0.055	*0.073*	*0.37*

Decision 4 (d)

	US	ITA	GER
ITA	-5.40		
	(6.16)		
	0.38		
GER	-17.14***	-11.75**	
	(6.26)	(5.75)	
	0.006	*0.041*	
NOR	-22.48***	-17.08**	-5.34
	(6.63)	(7.14)	(6.82)
	0.001	*0.017*	*0.43*

Decision 4 – High Earners (e)

	US	ITA	GER
ITA	-9.52		
	(7.46)		
	0.20		
GER	-3.17	6.34	
	(7.26)	(8.26)	
	0.66	*0.44*	
NOR	-6.40	3.11	-3.23
	(6.19)	(7.89)	(7.18)
	0.30	*0.69*	*0.65*

Decision 4 – Low Earners (f)

	US	ITA	GER
ITA	2.97		
	(8.02)		
	0.71		
GER	-25.84***	-28.82***	
	(7.61)	(7.31)	
	0.001	*<0.001*	
NOR	-33.14***	-36.12***	-7.30
	(8.20)	(8.31)	(7.57)
	<0.001	*<0.001*	*0.36*

Note: Each panel reports differences in country dummy coefficients for pairs of countries, robust standard errors (in brackets), and $p-$value for the test of equality of coefficients (in italics) derived from Table 1. In particular, Panels a,b,c,d of Table 2 are based on regressions in columns 1,3,5,7 of Table 1. Panels e and f of Table 2 are based on regressions in column 9 of Table 1.
Coefficients are expressed as the difference between the country coefficient in the column entry and the row entry. For instance, the negative sign of the coefficient in the US-Italy cell in Panel a means that τ_1 was on average lower in Italy than in the US. *, **, *** indicate p-value $< 0.1, 0.05, 0.01$, respectively.

4.1.3 Decision 2: The involved decision-maker with uncertainty

In D_2, self-interest mattered for participants because the proposed tax rate would have been applied not only to others but also to the proposer. While the difference between τ_1 and τ_2 was statistically insignificant in the US, τ_2 was significantly lower than τ_1 in the other three countries. The drop in mean τ was 2.2 tokens in Italy (Two-tailed Sign Rank - SR henceforth - test: p-value = 0.053), 5 tokens in Germany (SR: p-value = 0.0028) and 8 tokens in Norway (SR: p-value = 0.0002; see Figure 4b). Over the whole sample, the drop in τ was significant both in the Merit condition (SR: p-value = 0.0049) and Luck (SR: p-value = 0.0044) condition (see also Table 3, column 3). Such a drop in τ is consistent with Norwegian, German and, weakly so, Italian participants seeking *more* risk in D_2 than in D_1. This result is consistent with Germans and, especially, Norwegians resulting as significantly *less* risk averse than Italians and US participants in our measure of risk aversion (see Section 4.3.2).

We fit the same Tobit models used for D_1 to analyze country differences. In the model without $CULT_{ij}$ (Table 1, column 3), country dummy coefficients tend to be smaller than in D_1. Nonetheless, pairwise tests on country coefficients differences show the same clustering observed for D_1. There is no statistically significant difference between the US and Italy (p-value = 0.66), nor between Germany and Norway (p-value = 0.77). The null is instead rejected at p-value < 0.01 for US vs. Norway, Italy vs. Germany, and Italy vs. Germany, and at p-value < 0.05 for US vs. Germany (see Table 2b).

The differences in country dummy coefficients disappear in the specification including $CULT_{ij}$ (SOM: Table S4a-b). This suggests that cultural and attitudinal variables moderate country-level differences in τ_2 but not in τ_1. Country-level differences are somehow more predictable when self-interest is at stake.

> **Result 2.** *When self-interest matters in preferences for redistribution under uncertainty over one's initial earnings, Germans and Norwegians decrease their demand for redistribution in comparison to D_1, thus reducing the size of country differences but maintaining their statistical significance. We find the same clustering of countries observed in D_1.*

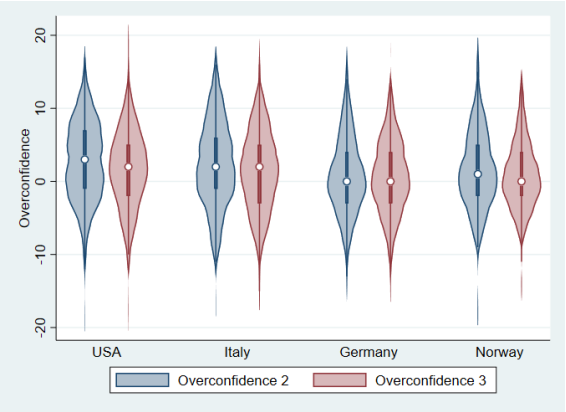
4.1.4 Decision 3: The involved decision-maker with uncertainty and signal

D_3 is identical to D_2 except for participants receiving information on their initial earnings in D_1 and D_2 before making their decision over τ_3. Choices were more polarized than in previous decisions, with more participants choosing either $\tau_3 = 0$ or $\tau_3 = 100$ (Figure 4c and SOM: Figure S5c). τ_3 was on average 2.4 tokens higher than τ_2 overall (SR: p-value $= 0.016; N = 1189$), 3.7 tokens higher in the Merit condition (SR: p-value $= 0.08; N = 600$) and 1.1 tokens higher in the Luck condition (SR: p-value $= 0.09; N = 589$).[24]

The effect of $POUM_i$ (see equation 8) is strongly significant ($\hat{b} = -35.8$, p-value < 0.001) and sizable in a tobit model adapted to equation (10) (SOM: Table S5, column 1). Individuals expecting to receive initial earnings above the median proposed a τ_3 on average 36 points lower than individuals expecting to earn below or at the same level as the median. The POUM effect is not moderated by the expectation of initial earnings. If we introduce $E_i\left(\tilde{y}_3^P\right)$ - the expectation of initial earnings in D_3 - as a covariate in the regression, the effect of $POUM_i$ remains strongly significant (p-value < 0.001) although the coefficient drops by 9 points (SOM: Table S5, column 2). We would expect that the higher $E_i\left(\tilde{y}_3^P\right)$, the lower τ_3 for those believing in upward mobility. Nevertheless, an interaction term between $POUM_i$ and $E_i\left(\tilde{y}_3^P\right)$ is not statistically significant (p-value $= 0.54$; SOM: Table S5, column 3). Hence, what matters for those believing in upward mobility seems to be the mere fact that they are going to earn above the median, but not how much more than the median they will earn. We tested whether POUM has differential effects across countries, but our analyses failed to find significant differences (SOM: Table S5, columns 7-8 and Tables S6a-b). Moreover, the share of individuals believing in upward mobility does not significantly differ across countries (KW: $z(3) = 1.60$; p-value $= 0.66$; $N = 1189$). We further analyze the POUM effect across treatments and provide descriptive statistics in SOM: Section S3.3. We conclude:

> **Result 3.** *We find support for Hypothesis 2a, as individuals whose average initial earnings in D_1 and D_2 were below the median and who expected to earn above the median in D_3 demanded significantly less redistribution than other below-median earners. The effect applies to both the Luck and the Merit condition, is independent of the magnitude of the expectation and is not different across countries.*

[24] The increase was sizable in particular in the US in the Merit condition ($\tau_3 - \tau_2 = 4.4$; SR: p-value $= 0.04$, $N = 195$), and in Norway in both Merit ($\tau_3 - \tau_2 = 7.0$; SR: p-value $= 0.02$, $N = 83$) and Luck (SR: $\tau_3 - \tau_2 = 1.8$; p-value $= 0.09$, $N = 82$) condition.



Note: See note to Figure 4

FIGURE 5
VIOLIN PLOTS OF OVERCONFIDENCE BY COUNTRY AND DECISION

Another variable that may affect τ_3 - as well as τ_2 - is overconfidence (see expression 9). Overconfidence is sizable aggregating over countries and treatments, as SR tests significantly reject the hypothesis that $O_t = 0$ ($SR : p < 0.0001$; $N = 1189$ for both D_2 and D_3; See SOM: Table S7). US participants show the highest levels of overconfidence, followed by Italy, Norway and Germany's participants (See Figure 5). Overconfidence is overall lower in D_3 than D_2 (SR: $z = 4.562$, p-value < 0.0001; $N = 1189$), the result being driven by the Merit condition (SR: p-value $= 0.0025$; $N = 600$), rather than the Luck condition (SR: p-value $= 0.30$; $N = 589$). This reduction follows different patterns across countries. While overconfidence becomes insignificant in D_3 in Germany and Norway in both the Merit and Luck condition, it remains strongly significant at the 1% level in both Italy and the US (SOM: Table S7). Moreover, participants stated that they were significantly more certain of their prediction in D_3 than in D_2 (SR test: $z = -7.172$, p-value < 0.0001)). Arguably, receiving a signal on their previous earning assignments led participants to reduce their overconfidence levels and thus to increase their τ.

Countries cluster on overconfidence in the same way as what observed for τ_1 and τ_2, with US and Italian participants showing significantly higher levels of overconfidence than Norwegian and German participants (SOM: Table S8).[25]

Econometric analysis shows that O_3 is a highly significant predictor of τ_3 ($\hat{b} = -1.92, t = -5.12, p$-value < 0.001; SOM: Table S9, column 1). The impact of O_3 appears sizeable, as a maximally *over*confident individual would demand a τ_3 70 points lower than a maximally *un-*

[25]The null hypothesis of equality of population between pairs of countres is rejected at p-value < 0.001 for both US vs. Germany and US vs. Norway for both O_2 and O_3. It is rejected at p-value < 0.001 and p-value $= 0.028$ for Italy vs. Germany in O_2 and O_3, respectively. It is rejected at p-value $= 0.054$ and p-value $= 0.0099$ for Italy vs. Norway in O_2 and O_3, respectively

*der*confident individual. The effect of O_3 is significantly higher in the Luck than the Merit condition (p-value = 0.008; SOM: Table S9, column 3), although this result may be due to the different anchoring used in the two sets of treatments (see Section 3.4.2). Finally, we do not find significant differences in the impact of O_3 on τ_3 across countries (SOM: Table S10). Nonetheless, the fact that significantly more overconfident people are located in the US and Italy than in Germany and Norway can explain a substantial part of the different demand for redistribution across countries. According to our estimates, differences in overconfidence between the US (the country with the highest level of overconfidence) and Germany (the country with the lowest level of overconfidence) result, on average, in 2.09 fewer tokens of τ_3 in the US than Germany. This is about 25% of the difference in overall demand for redistribution between the two countries. We conclude:

Result 4. *US and Italy's participants are significantly more overconfident than Germany and Norway's participants. The higher overconfidence, the lower demand for redistribution, the effect being strongly significant. The elasticity of demand for redistribution on overconfidence is not significantly different across countries. Nevertheless, the fact that US American and Italian participants are significantly more overconfident than German and Norwegian participants can account for around a quarter of the difference in demand for redistribution in D_3, partially supporting Hypothesis 2b.*

It is worth noting that O_3 is highly correlated with both $POUM$ (in the region where $s < 11$) ($\rho = 0.59$) and with initial earnings expectation ($\rho = 0.65$). It is therefore difficult to separate their effects. We analyze the effect of earnings expectations of demand for redistribution in the SOM: Section S3.2 and Table S11.

As for overall country differences in demand for redistribution, Table 2c shows that country differences are greatly reduced in comparison to D_1 and D_2. The only (weakly) statistically significant differences are between the US vs. Norway and Italy vs. Norway. Such differences are no longer significant after including cultural variables (SOM: Table S4c). We conclude:

Result 5. *Country differences all but disappear in D_3, as only Norwegian participants demand (weakly significant) higher τ_3 than US Americans and Italians.*

4.1.5 Decision 4: Involved decision-maker with earnings certainty

D_4 was the only decision in which participants were informed of their actual amount of initial earnings before making their decision on τ. Polarization of choices reached here the highest level over the four decisions (Figure 4d and Table 2d). We label people whose initial earnings were above 11 tokens as "high-earners", and all others as "low-earners". Since "low-earners' include both those earning below the median and those earning the median level (11 tokens), we further label "strict low-earners" those earning less than 11 tokens. Overall, 39.1% of high-earners proposed $\tau_4 = 0$, while 43.9% of strict low-earners proposed $\tau_4 = 100$. This entails that 41.4% of our sample acted consistently with maximizing their self-interest in D_4.[26] Consistently with DPW, we find a large difference in τ_4 between high-earners and strict low-earners. The former demanded on average 43 percentage points less redistribution than the latter, the difference being strongly significant (p-value $< 0.001 in each country$); Table 1, column 9).[27]

Econometric analysis confirms the clustering of countries observed in D_1 and D_2, with no statistically significant difference between the US and Italy's samples, nor between Germany and Norway's samples, and significant differences in all other comparisons. The differences between the US and Italy at one hand, and Germany and Norway at the other hand of the spectrum, are higher in D_4 than in the other decisions (Table 2d).

We conclude:

> **Result 6.** *When uncertainty is removed over one's initial earnings, 40% of participants act consistently with final earnings maximization and cross-country differences reach the highest level. We find the same clustering observed in D_1 and D_2: US Americans and Italians demand significantly less redistribution than Germans and Norwegians. Overall, Hypothesis 1 is partially contradicted, as Italians systematically cluster with US Americans and Norwegians cluster with Germans throughout the four decisions.*

We also analyze cross-country differences for high-earners and low-earners separately. High-earners' decisions appear more homogeneous across countries than low-earners' ones. The median

[26] This value is remarkably lower than what found in DPW, where 65.8% chose consistently with maximizing their payoffs. This difference may be explained by the higher inequality in initial earnings distribution in DPW compared to our study.

[27] The 55 median earners demanded on average $\tau_4 = 48.4$, thus being marginally closer to strict low-earners' average demanded tax rate ($\tau_4 = 65.2$), than to high-earners' one ($\tau_4 = 22.2$).

τ_4 had a 10 percentage point spread for high-earners - ranging from $\tau_4 = 5\%$ (in the US) to $\tau_4 = 15\%$ (in Norway) - while the spread was of 50 percentage points for low-earners - ranging from $\tau_4 = 50\%$ in the US to $\tau_4 = 100\%$ in Norway (Figure 4e-f). Such a spread was larger in the Merit treatments - where it ranged from a median $\tau_4 = 30\%$ in Italy up to $\tau_4 = 100\%$ in Norway, than in the Luck treatments - where median $\tau_4 = 40\%$ in the US and $\tau_4 = 100\%$ in Norway (SOM: Figure S6e-f). Overall, as many as 62% of Norwegian strict low-earners, and 50% of German strict low-earners, demanded full earnings equalization, while this percentage dropped to 37% in the US and 36% in Italy.

We fit an econometric model interacting country dummies with the High-earners dummy (Table 1, column 9 and 10) and perform a series of Wald tests on the null hypotheses that country dummy coefficients are equal to each other across pairs of countries. We do this separately for high-earners and low-earners. We find no statistically significant difference in decisions over τ_4 across countries for high-earners in any pairwise comparison (Table 2, panel e). On the contrary, cross-country differences for low-earners in D_4 are the largest observed throughout the four decisions, with Norwegian and German participants demanding significantly higher redistribution than US and Italian participants. The null of equality of country coefficients is always rejected at p-value < 0.01 for low-earners' decisions in all comparisons between the US and Italy on the one hand, and Germany and Norway at the other hand. The null cannot instead be rejected neither for Italian and US American low-earners (p-value $= 0.71$) nor for German and Norwegian low-earners (p-value $= 0.36$; Table 2, panel f).[28] Country differences between low-earners are partially moderated by the inclusion of personality and attitudinal controls (Table 1, column 10), of which actual or expected earnings have the largest impact (p-value < 0.001).

The results above suggest that aggregate cross-country differences in D_4 were driven by low-earners' differences in behavior rather than high-earners' ones. We find a similar, albeit weaker, tendency in D_2 and D_3. Given that participants did not know their initial earnings in D_2 and D_3, it is impossible to identify which action would maximize individual payoffs *ex post*. Nonetheless, we can use expectations of initial earnings to infer which action would maximize participants' payoffs *ex ante*. We label *prospective* high-earners and strict *prospective* low-earners in D_2 and D_3 those *expecting* to earn above and below the median earnings, respectively. Even in D_2 and D_3, the spread of decisions is larger for prospective low-earners than prospective high-earners (SOM: Figure S7). The country median tax rates differ at most by 5 points for prospective high-earners in

[28] Similar results are obtained with non-parametric tests. A KW test fails to reject the null of equality of distribution over the four countries for high-earners ($\chi^2 = 3.23$, p-value $= 0.33$, $N = 571$), while it soundly rejects the null for low-earners ($\chi^2 = 38.14$, p-value $= 0.0001$, $N = 563$).

both D_2 and D_3, while they differ by 20 and 16 points, respectively, in D_3 and D_2, for prospective low-earners.[29]

We merge the last three decisions and analyze tax rates $\tau_t, t = \{2, .., 4\}$ jointly through a random effect panel Tobit regression with each participant as the cross-sectional unit, decision fixed effects and heteroschedasticity-robust standard errors clustered at the individual level:

$$\tau_{it} = a + \sum_j b_j \Gamma_{ij} + \sum_j c_j COUNTRY_{ij} + \sum_j d_j DEMO_{ij} + \sum_j e_j CULT_{ij} + \sum_j f_j D_{ij} + \nu_i + \varepsilon_{it} \quad (11)$$

This model has the same set of covariates as the model in equation (10) and adds the individual-specific error term ν_i and decision fixed effects D_{ij}. We interact country dummies with dummies identifying actual or prospective high-earners (simply referred to as "high-earners" in the following) across the three decisions (Table 3, columns 1-2). The results are in line with those observed for D_4. The null of equality of decisions across countries is never rejected for high-earners (Table 4a), while it is always rejected for all pairwise tests between the US and Italy at one hand, and Germany and Norway at the other hand, for low-earners. Once again, the null is not rejected for low-earners in pairwise tests between Italy and the US, or Germany and Norway (Table 4b). Cultural and individual characteristics partially moderate these effects (Table 3, column 2). Similar patterns can be found analyzing D_2 separately, where no cross-country difference emerges for prospective high-earners, while German and Norwegian low-earners demanded more redistribution than Italian and US Americans low-earners - albeit statistically insignificantly so for Norwegian low-earners (SOM: Tables S22 and S23a-b). No significant difference emerges across countries neither for low and high-earners in D_3, consistently with what found in section 4.1.4 (SOM: Tables S22 and S23c-d).[30].

Overall, cross-country differences in demand for redistribution in stakeholders' decisions appear to be driven by how much low-earners "allowed" high-earners to maintain their initial earnings. Those having (or expecting to have) low initial earnings felt significantly more entitled to demand

[29] In D_3, decisions range from $\tau_3 = 20$ in Italy to $\tau_3 = 25$ in the other three countries for prospective high-earners. They range from $\tau_3 = 50$ in Italy to $\tau_3 = 70$ for prospective low-earners. As for D_2, they range from $\tau_2 = 30$ in Norway to $\tau_3 = 25$ in the other three countries for prospective high-earners. Decisions range from $\tau_2 = 44$ in the US to $\tau_2 = 60$ in Germany for prospective low-earners.

[30] Substantially similar results hold using non-parametric tests. In D_2, a KW test fails to reject the null of equality of distribution over the four countries for prospective high-earners ($\chi^2 = 1.41$, p-value $= 0.70$, $N = 710$), while it rejects the null for prospective low-earners ($\chi^2 = 12.07$, p-value $= 0.0071$, $N = 329$). A KW test once again fails to reject the null of equality of distribution over the four countries for prospective high earners in D_3 ($\chi^2 = 1.56$, p-value $= 0.67$, $N = 644$), while the null of equality of distribution across countries for prospective low-earners is at the margins of significance ($\chi^2 = 6.24$, p-value $= 0.10$, $N = 407$)

TABLE 3
PANEL TOBIT REGRESSION OF TAX RATE

DEP. VARIABLE: TAX RATE	Decisions 2-4		Decisions 1-4			
	(1)	(2)	(3)	(4)	(5)	(6)
ITALY	-2.00	-1.65	2.06	1.83		
	(5.31)	(5.25)	(4.01)	(3.96)		
GERMANY	13.90***	8.93*	11.81***	7.12*		
	(5.03)	(5.04)	(3.83)	(3.90)		
NORWAY	14.35**	10.84*	13.99***	9.40**		
	(5.93)	(5.87)	(4.19)	(4.22)		
US_X_HighEarner	-38.75***	-12.16***				
	(3.86)	(4.63)				
ITA_X_HighEarner	-36.64***	-9.49**				
	(4.28)	(4.82)				
GER_X_HighEarner	-53.25***	-27.29***				
	(3.69)	(4.42)				
NOR_X_HighEarner	-49.88***	-24.86***				
	(6.12)	(6.35)				
ABILITY	-4.73	-4.84	-1.96	-1.69	-1.94	-1.53
	(3.41)	(3.36)	(3.50)	(3.45)	(3.49)	(3.43)
RANDOM	8.85**	10.21***	15.78***	15.77***	15.76***	15.75***
	(3.55)	(3.46)	(3.56)	(3.47)	(3.54)	(3.44)
ORIGIN	7.05**	7.87**	12.59***	13.04***	12.23***	12.76***
	(3.41)	(3.29)	(3.41)	(3.28)	(3.38)	(3.25)
Expected / Actual Initial Earnings		-2.90***				
		(0.36)				
Father_edu_1	-5.78	-7.23*	-5.46	-6.93*	-5.89	-7.65*
	(4.07)	(3.97)	(4.02)	(3.88)	(4.08)	(3.93)
Father_edu_2	-5.64	-6.93*	-7.31*	-8.59**	-8.22*	-9.70**
	(4.21)	(4.12)	(4.31)	(4.21)	(4.37)	(4.27)
Father_edu_3	-7.41*	-9.19**	-6.06	-7.97*	-6.79	-9.05**
	(4.31)	(4.20)	(4.34)	(4.20)	(4.43)	(4.28)
Risk Aversion		13.78***		17.15***		17.09***
		(3.69)		(3.76)		(3.74)
Beliefs of Success Determinants		-3.21		-2.98		-2.92
		(2.43)		(2.41)		(2.42)
Left		4.58		5.89**		6.65**
		(2.93)		(2.96)		(3.00)
Right		-8.22**		-10.14**		-10.42***
		(4.01)		(3.95)		(3.94)
Decision 2			-5.00***	-5.03***	-4.99***	-5.02***
			(1.21)	(1.22)	(1.21)	(1.22)
Decision 3	0.21	-0.32	-2.48*	-2.56*	-2.48*	-2.57*
	(1.43)	(1.40)	(1.49)	(1.48)	(1.49)	(1.49)
Decision 4	-2.47	-4.34**	-2.69	-2.60	-2.68	-2.59
	(1.73)	(1.73)	(1.93)	(1.94)	(1.93)	(1.94)
USA_2					13.06***	12.01***
					(4.58)	(4.63)
ITA_1					8.10	6.35
					(5.23)	(5.23)
ITA_2					8.54	8.80*
					(5.26)	(5.27)
GER_1					16.28***	9.99**
					(4.99)	(5.07)
GER_2					20.46***	17.68***
					(4.98)	(5.19)
NOR					20.08***	15.59***
					(4.60)	(4.74)
Constant	47.13***	57.16***	18.10*	5.76	13.76	2.72
	(10.50)	(12.03)	(10.10)	(11.34)	(10.20)	(11.31)
Demographic controls	Yes	Yes	Yes	Yes	Yes	Yes
Cultural controls	No	Yes	No	Yes	No	Yes
Observations	3,516	3,492	4,688	4,656	4,688	4,656
Uncensored obs.	2,713	2,159	3,010	2,991	3,010	2,991
Left-censored obs.	654	650	784	779	784	779
Right-censored obs.	689	683	894	886	894	886
chi2	495.0	588.8	107.9	177.6	119.5	194.6

Note: See SOM: Table S13 for full output. Robust standard errors clustered at individual level in parentheses. *, **, *** indicate p-value $< 0.1, 0.05, 0.01$, respectively.

redistribution in Germany and Norway, while low-earners were seemingly much more lenient in letting the rich "get away" with high earnings in the US and Italy.

We conclude:

TABLE 4
Pairwise tests on equality of country dummy coefficients; Decision 2-4 in pooled Tobit regression

Decisions 2-4 (a)

High-earners

	US	ITA	GER
ITA	0.10		
	(4.44)		
	0.98		
GER	0.60	0.70	
	(4.25)	(4.45)	
	0.89	*0.88*	
NOR	-3.22	-3.12	-3.82
	(5.09)	(5.71)	(5.33)
	0.53	*0.59*	*0.47*

Decisions 2-4 (b)

Low-earners

	US	ITA	GER
ITA	-2.00		
	(5.31)		
	0.71		
GER	-13.90***	-15.91***	
	(5.03)	(5.15)	
	0.006	*0.002*	
NOR	-14.35**	-16.36**	-0.45
	(5.93)	(6.33)	(5.97)
	0.015	*0.010*	*0.94*

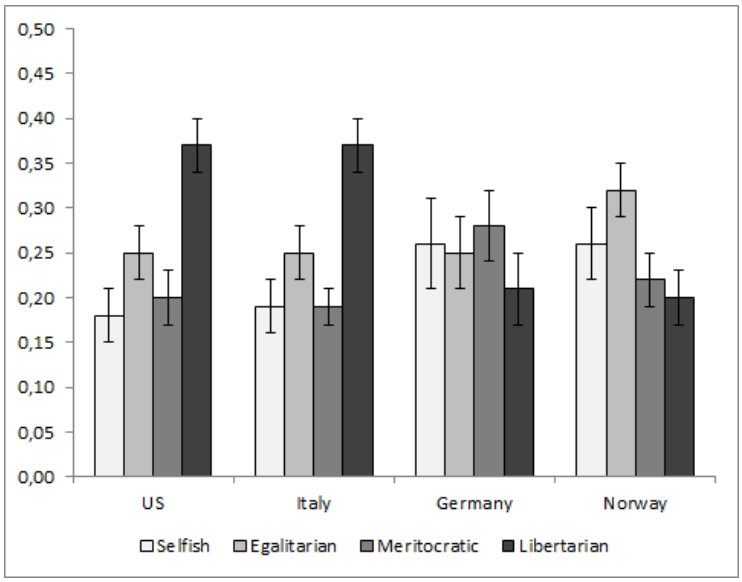
Note: See note to Table 2. Tests in Panels a and b are derived from Table 3, column 1 and 2, respectively. *, **, *** indicate p-value $< 0.1, 0.05, 0.01$, respectively.

Result 7. *Participants either knowing that their initial earnings are above the median in D_4, or expecting to earn above the median in D_2 and D_3, do not behave significantly differently across countries. On the contrary, prospective or actual low-earners tend to behave significantly differently across countries, with German and Norwegian low-earners demanding significantly more redistribution than US American and Italian low-earners.*

4.2 Structural estimation of fairness types

We derive the econometric model to estimate fairness types and provide further details on our approach in the Appendix, Section A.3. The model is estimated using observations from all treatments and decisions. We use the method of Maximum Simulated Likelihood. A mixture model approach, applied to repeated observations per participant and combined with information about pre-tax earning levels enables us to separate participants into four types. Each individual is assigned a probability distribution of falling into each type. These probabilities are then integrated within each country to estimate the mixing proportions, that is the proportions of the population who are of each type, along with the other parameters of the model.

Figure 6 represents type proportions by country from estimation results reported in Table A.2. Differently from ACT, we are able to estimate the proportion of selfish participants, that is, those



Note: Capped spikes represent 95% confidence intervals.

FIGURE 6
ESTIMATED TYPES BY COUNTRY

who do not show other-regarding concerns when self-interest is at stake. The share of selfish (or of "impure" fairness types, see Section 3.3 and Table A.1) is virtually the same in Italy (18%) and in the US (19%) and is less, albeit not statistically significantly, than in Germany and Norway (26%) (SOM: Table S24b). The reason why we find such differences in the proportion of selfish participants is a significantly larger number of low-earners - actual or perspective (Section 4.1.5) - demanding full earnings equalization in Germany and Norway than in Italy and the US (SOM: Section 3.4, Figure S10 and Table S12a). On the other hand, the number of low-earners who demand zero redistribution is significantly higher in Italy than in all the other three countries (SOM: Table S12b).

A key result of ACT was that the percentage of meritocrats was similar in the US and Norway, while libertarians were more widespread in the US and egalitarians more widespread in Norway than in the other country. We find the same result for pure libertarians, as the frequency for this type is strongly significantly higher in the US than both Norway (p-value = 0.0010) and Germany (p-value < 0.0001). Likewise, libertarians are more frequent in Italy than both Norway (p-value = 0.0018) and Germany (p-value < 0.0001). On the other hand, the hypothesis that the frequency of libertarians is the same cannot be rejected for the US and Italy (p-value = 0.90), nor for Germany and Norway (p-value = 0.75; See SOM: Table S24 for details on tests). The

null hypothesis of equality of shares for the other three types is not rejected for all the pairwise between-country comparisons, except for a significantly higher share of meritocrats in Norway than in the US (p-value = 0.045), a weakly significant higher share of meritocrats in Norway than in Italy (p-value = 0.09), and a weakly significant higher share of egalitarians in Germany than the US (p-value = 0.08; see SOM: Table S24 for all pairwise tests).

Finally, a joint test on the hypothesis that the overall distribution of types is the same between pairs of countries yields the same clustering observed above. Such a test fails to reject the null of equality of distribution both between the US and Italy (p-value = 0.99) and between Germany and Norway (p-value = 0.37). The null is instead rejected for all other pairwise tests between US and Germany (p-value = 0.0003), US and Norway (p-value = 0.0057), Italy and Germany (p-value = 0.0007) and Italy and Norway (p-value = 0.011; Table S24a). We conclude:

> **Result 8.** *Our structural estimation of fairness types yields a strongly significantly higher proportion of pure libertarians in the US and Italy than Germany and Norway. No systematic difference emerges between countries for other types, if not occasionally. Considering the overall distribution of types, we find the same clustering observed above. The hypothesis of equality of distribution cannot be rejected between the US and Italy on the one hand, and between Germany and Norway on the other hand, but it can be rejected for all other pairwise tests between countries.*

As for the other parameters of the model, ρ turns out as being significantly larger than zero in $t = 2, 3$, implying a substantial tendency to risk aversion (Tables A.2).[31] This result entails that a substantial fraction of participants did indeed use the tax rate as a social insurance mechanism against the risk of low earnings (see Equation (3). The estimate of γ (see Equation (5)) - entails that Meritocratic individuals reduced τ by 64% in the Merit treatments as opposed to the Luck treatments, thus implying a substantial propensity to reward individual merit.

4.3 Further analyses

4.3.1 Where do people lay the responsibility cut?

Hypothesis 3 predicts that redistribution should increase across the four treatments of our experiments, with redistribution being lowest in the Effort treatment and highest in the Origin treatment.

[31] ρ has been estimated using the decision in the risk task -see Section 2.3.5.

We first focus on differences within the two treatments comprising the Luck and Merit conditions. We use a Tobit panel regression as described in equation 11 but now extended to $\tau_t, t\,\{1,\ldots,4\}$ (Table 3, columns 3-4). Aggregating across countries, we find no significant difference neither between the Effort and Ability treatments ($\hat{b} = 1.95$, p-value $= 0.58$), nor between the Random and Origin treatment ($\hat{b} = 3.19$, p-value $= 0.36$), the sign being opposite to Hypothesis 3 in both cases. The same result holds, with some rare exceptions, also within each country and for each decision (SOM: Section S3.5.1). Hence, it seems that participants did not attach any particular relevance to the source of individual merit being effort rather than ability, nor to being faced with a less fair random process in the allocation of initial earnings. In fact, participants seemed to be more accepting of inequality when the random process was biased due to differences in real-life wealth.

We test for Hypothesis 4 on differences in reward of merit using the panel tobit model as of equation (11). Overall, redistribution is estimated to be 15.2 percentage points higher in the Luck than the Merit condition, the difference being statistically significant (p-value < 0.001: SOM: Table S14, column 1; SOM: Figure S6), supporting Hypothesis 3. Even in our experiment, individuals attached higher deservedness to individual merit than individual luck. Reward of merit does not differ significantly across countries (SOM: Table S15e-f). Contrary to Hypothesis 4, therefore, we do not find evidence that US people are more inclined to reward individual merit than other countries. In fact, propensity to reward merit is lowest in the US than all countries and does not significantly differ from zero ($\hat{b} = 6.54$, p-value $= 0.20$). Propensity to reward individual merit is statistically significant in both Germany ($\hat{b} = 16.68$, p-value $= 0.001$) and Italy ($\hat{b} = 15.66$, p-value $= 0.003$), but not in Norway ($\hat{b} = 11.40$, p-value $= 0.11$; SOM: Table S14, column 2).

In both Norway and the US, reward of merit is significantly different from zero in both D_1 and D_2, but drops out of significance in D_3 and gets close to 0 in D_4 (SOM: Tables S17, S18 and S21). Reward of merit is instead fairly constant and significantly different from zero in all decisions in Germany and Italy (SOM: Tables S17, S19 and S20). We can presume that participants in the US and Norway became less sensitive to merit as it became clear which choice would have maximized their payoffs. Looking at individual treatments (SOM: Tables S14, columns 4-5 and Table S16), each pairing between a Merit treatment and a Luck treatment is associated with significantly lower redistribution in the former than in the latter in both Italy and Germany. In the US and Norway, on the other hand, this is the case only in one out of four pairings.

We conclude:

Result 9. *Demand for redistribution is overall significantly higher in the Luck than Merit condition, thus signaling propensity to reward individual merit. Nevertheless, no significant difference was found between the two treatments within Merit and Luck conditions, thus partially contradicting Hypothesis 3. No significant difference emerged across countries in propensity to reward individual merit, thus contradicting Hypothesis 4. In fact, US participants were the least inclined to reward individual merit in the four countries. The hypothesis of equality of coefficients in Merit and Luck treatments pooling the four decisions was not rejected in either the US or Norway, while it was rejected in both Germany and Italy.*

4.3.2 Analysis of risk aversion and other cultural measures

Hypothesis 2c posits lower risk aversion in the US compared to European countries, leading to lower demand for redistribution. Nevertheless, US participants did not show lower risk aversion than others in our post-experimental measure of risk aversion (Section 2.3.5 and SOM: Section S2.3). In fact, Norwegians displayed significantly lower risk aversion than both US Americans (p-value = 0.015) and Italians (p-value = 0.0074), while Germans showed higher risk tolerance than both US Americans and Italians, albeit statistically insignificantly so (see SOM: Table S27 for all pairwise tests and Figure S9a). The risk aversion measure is a highly significant predictor of demand for redistribution, with the expected positive sign ($\hat{b} = 17.2; p\text{-value} < 0.001$) in the pooled model of equation 11. As expected, the risk aversion scale is a highly significant predictor of demand for redistribution in both D_2 and D_3 (Table 1, column 4,6), where decisions are taken in condition of uncertainty, thus confirming that demand for redistribution has an insurance component. The risk-aversion scale is instead only a weakly significant predictor of τ_4 (p-value = 0.084; see Table 1, column 8), confirming that risk aversion is less relevant when uncertainty is removed. Interestingly, risk aversion is also a strongly significant predictor of τ_1 (p-value < 0.001; Table 1, column 2). The results concerning τ_1 and τ_4 may be accounted for by the idea that participants motivated by social preferences in either D_1 or D_4 desired to extend to others the same demand for social insurance that they demanded for themselves in D_2 and D_3. In other words, the higher the participant's own risk-aversion, the higher their belief that others are also risk-averse and desire social insurance, thus leading to higher τ_1 and (weakly significantly) τ_4 (Schildberg-Hörisch, 2010).

As for other individual-level variables, ambiguity aversion follows the same pattern as risk aversion, with Norwegians and Germans making less ambiguity averse choices than US Americans and Italians in our task (see Section 2.3.5; SOM: Figure S9b). Contrary to our expectations, ambiguity aversion is not a significant predictor of τ_t neither in the pooled model ($\hat{b} = -0.14$, p-value $= 0.96$; SOM: Table S14, column 3) nor in individual decisions (SOM: Table S3). It is noteworthy that the belief that economic success is under an individual's control is not a significant predictor of redistribution in the pooled model ($\hat{b} = -2.98$, p-value $= 0.22$; SOM: Table S13, column 4), thus supporting the idea that beliefs on real-life opportunities to climb up the economic ladder did not significantly affect our experimental decisions. This result supports the view that our experiment measures "pure" preferences for redistribution unaffected by real-life beliefs on opportunities of success. Political orientation has the expected impact on redistribution (Alesina et al., 2020). Participants locating their political preferences to the right of a 10-point Likert scale of political orientation (SOM: Section S3.1) are estimated as demanding a τ 16.0 percentage points lower than people locating their preferences to the left of the scale (p-value $= 0.001$). We report the analysis of the relationship between household income and redistribution preferences, after inputting missing values, in SOM: Section S3.8. Another proxy for socio-economic status, i.e., father's education, is a significant predictor of redistribution. Participants whose father attained up to primary or secondary school are estimated as demanding more redistribution than all the three higher levels of education attainment - namely, high school ($\hat{b} = 6.92$, p-value $= 0.075$), undergraduate degree ($\hat{b} = 8.59$, p-value $= 0.041$) and postgraduate degree ($\hat{b} = 7.97$, p-value $= 0.057$). No significant impact emerges for mothers' education. This result suggests that participants from lower socio-economic strata tended to demand more redistribution, in line with the literature (Corneo and Gruner, 2002; Alesina and Glaeser, 2004; Dimick et al., 2016; Alesina et al., 2018). The analysis of other individual-level variables is reported in SOM: Section S3.6. We conclude:

Result 10. *Contrary to hypothesis 2c, US Americans do not display lower risk aversion than Europeans. Overall, risk aversion and other attitudinal variables, such as political orientation and a measure of socio-economic status, are significant predictor of redistribution with the expected sign. Beliefs on real-life opportunities to succeed in life do not significantly correlate significantly with redistribution decisions.*

4.3.3 Location effects

We use the pooled tobit regression with location dummies replacing country dummies in equation (11) (Table 3, column 5-6). We find significant within-country differences only in the US. Participants from Washington state - labelled USA_2 - are estimated as demanding on average across the four decisions 13.1 percentage points more redistribution than participants from Mississippi - labelled USA_1. This difference is strongly significant (p-value = 0.004) and is not moderated by political orientation (Table 3, column 6). We do not find significant differences within Italy ($\hat{b} = -0.44$; p-value = 0.94) nor within Germany ($\hat{b} = -4.18$; p-value = 0.37). We do not observe significant differences between the two German locations and the Norwegian location - also looking at individual decisions (see Table 3, columns 5-6, and SOM: Figure S8). Except for the significant difference within the US, we also do not find significant differences between Italian and US locations. It is however noteworthy that while we cannot reject the null that demand for redistribution in USA_2 is different from German and Norway's locations[32], the null is always rejected for USA_1 vis-a-vis German and Norwegian locations.[33] Conversely, the null is always rejected in pairwise tests between each of the two Italian locations and both Munich (GER_2) and Oslo (NOR), while it falls short of statistical significance in pairwise tests between each Italian location and Bremen (GER_1) (SOM: Table S25a-b). We conclude:

> **Result 11.** *We find significant polarization within the US, as redistribution rates in Washington State (USA_2) are significantly higher than in Mississippi (USA_1). Conversely, we find no significant difference within Italy and Germany. Redistribution is significantly lower in USA_1 than German and Norwegian locations, is significantly lower in Italian locations than GER_2 and NOR, but is not statistically different in USA_2 than German and Norwegian locations.*

We analyse the distribution of types by location in SOM: Section S3.7, Figure S11 and Tables S25c-g. Such an analysis finds a higher concentration of pure libertarian types in Salerno (ITA_1) and Mississippi (USA_1) than in all other locations, as well as a lower concentration of selfish types in ITA_2 than in all other locations - except for Bremen (GER_1). We find no difference

[32] $\hat{b} = -3.22$; p-value = 0.53 for USA_2 vs. GER_1; $\hat{b} = -7.40$; p-value = 0.14 for USA_2 vs. GER_2; $\hat{b} = -7.02$; p-value = 0.16 for USA_2 vs. NOR)

[33] $\hat{b} = -16.3$; p-value = 0.001 for USA_1 vs. GER_1; $\hat{b} = -20.5$; p-value < 0.001 for USA_1 vs. GER_2; $\hat{b} = -20.1$; p-value < 0.001 for USA_1 vs. NOR)

in types between German and Norwegian locations. Differences between the US/Italy cluster and the Germany/Norway cluster are generally larger for USA_1 and ITA_1 than for USA_2 and ITA_2. Moreover, the null of equality of the distribution of the four types across location pairs is not rejected both within the US (p-value = 0.18) and Germany (p-value = 0.15) while it is rejected within Italy (p-value = 0.004; see SOM: Table S26 for all pairwise tests across locations).

5 Discussion

Experiments are normally evaluated in terms of internal and external validity. As for internal validity, a reason for concern is that results after D_1 may be affected by the repeated nature of the decisions and the lack of randomization. Participants may have anchored later decisions to D_1 to be consistent throughout decisions (Trautmann and Wakker, 2010; Andreoni et al., 2020), to avoid "cognitive dissonance" (Festinger, 1957), or may have acted less prosocially after prosocial decisions because of "moral licensing" (Merritt et al., 2010). These motivations would introduce noise and loss of experimental control in decisions after D_1. On the other hand, a within-participant approach was necessary to carry out the structural analysis of our utility function. Other aspects of our design, such as revealing previous initial earnings in D_3, or the "surprise" decision in D_4, required a fixed order of the decisions rather than randomization. The choice of running D_4 as a "surprise" revision of D_3 was justified by the need to limit the overall duration of the session to less than two hours and was analogous to DPW's last decision. A tobit model with repeated measures shows that τ_1 is highly significant in predicting the next three $\tau_t, t = \{2, 3, 4\}$ ($\hat{b} = 0.86$, p-value < 0.001). The size of the coefficient suggests that, if anything, participants showed consistency across decisions rather than moral licensing. Including τ_1 as a covariate in the regressions of models (10) is, however, inappropriate because this is tantamount to predicting the difference between $\tau_t, t = \{2, 3, 4\}$ and τ_1, which is not the goal of our analysis. Moreover, it is *a priori* unclear why ordering effects should differ across countries. Gawronski et al. (2008) find that cognitive dissonance tends to be a universal characteristic across countries, while Blanken et al. (2015) do not even search for cultural effects in their meta-analysis of moral licensing. Therefore, although we acknowledge that we cannot fully control for order effects on decisions, keeping decisions in a fixed order was a necessary characteristic of our design, and country differences in such order effects have not been clearly demonstrated.

Another possible reason for concern is the possibility of experimenter effects due to the lead experimenter's accent coming across as local (in Northern Italy), non-local (in Southern Italy),

foreign (in the US), foreign in a non-native language (in Norway), or due to the change of the lead experimenter (in Germany; see SOM: Section S2.1 and S2.2 for details). Effects due to differences in regional accent among participants in experiments have been documented (Heblich et al., 2015), but we are not aware of analyses of experimenter accent effects. While some cross-cultural research deployed different experimenters with local accent within the same country (Bigoni et al., 2016) or across different countries (Buchan et al., 2009; Roth et al., 1991), this approach may, in turn, introduce other kinds of experimenter effects due to, e.g., the experimenter's gender or demeanor (Rosenthal, 2009). In fact, we are unaware of a broadly recognized best practice concerning experimenter effects in cross-cultural research. The post-experiment questionnaire in Norway had some questions to evaluate the extent of an experimenter effect due to language, as the experiment was conducted in English (SOM: Section S4). The vast majority of participants (80%) answered that they had had "no problems" with the experiment being administered in English, while 20% reported "a few problems", and only one participant reported "many problems" with the use of a foreign language. Another question asked whether the participant's choice was affected by the experiment not being conducted in Norwegian. Only 4% of participants answered affirmatively. Among them, only one participant stated that he had detected the international character of the research and would have acted differently had the research been run in Norway only. Another check on whether language had any effect entails examining comprehension levels of the experimental decision. We had two identical comprehension checks in all countries (SOM: Sections S2.2 and S3.1) and we recorded the number of mistakes at the first attempt to answer (SOM: Figure S12). Were language effects relevant, one would conjecture that comprehension was higher in Italy than the US, and higher in the US than in Norway. Conversely, the comprehension score in Italy (89.5% of correct answers on the first attempt) was close to the score in the US (88.1%) and the null of equality of distribution is not rejected ($z = -0.14; p\text{-value} = 0.89, N = 694$). Conversely, comprehension scores in Norway (92.4%) were significantly higher than those both in the US ($z = 2.56; p\text{-value} = 0.010, N = 539$) and Italy ($z = -2.52$; p-value=0.012, $N = 485$). Overall, comprehension scores in Germany (96.2%) were significantly higher than in all other countries ($p$value< 0.001 in each pairwise comparison). In conclusion, language effects seem at most marginal in sample effects in comprehension. The fact that comprehension score is included as a regressor in all econometric analyses should ensure the robustness of our results to possible language effects.

As for the external validity of our study, a clear limitation is the use of university student sam-

ples rather than adult samples of the population. Most studies suggest that university samples provide a lower bound for prosocial preferences observed either in non-student samples (Bellemare and Kröger, 2007; Falk et al., 2013; Anderson et al., 2013) or stratified adult samples (Cappelen et al., 2015), while some studies find no difference (Exadaktylos et al., 2013). It is, however, difficult to predict how the use of an adult sample rather than a university student sample would affect the overall redistribution rate in our experiment. Adults' higher prosociality than university students may have induced adult participants expecting to earn above the average in the experiment to concede higher redistribution to those earning below average. Conversely, a larger number of prosocial participants expecting to earn below average may have reduced demand for redistribution. Moreover, Snowberg and Yariv (2021) found that correlations across a broad range of experimental variables have a similar magnitude in university students' samples and adult samples selected to be representative of the national demographics. In fact, less noise and fewer cognitive errors are found in student samples than in adult samples. This result suggests that students' samples may be more reliable than nationally representative samples for both hypothesis testing and inference. Accordingly, Gächter (2010) argues that student samples are ideal for conducting cross-country comparative research because the high level of students' cognitive abilities permits the test of economic theories in a way that would not be possible with the general population. These considerations, arguably, apply to our study because the level of sophistication of the four decisions in our experiment, and the thorough comprehension check that had to be passed to access the decision stage, would have been unfeasible with non-student samples. Finally, we note that the difference in implemented inequality in Norway and the US seem to match those observed in ACT in representative samples of the Norwegian and US populations. There are also clear similarities between the results in our study and those in DPW, who found no significant difference between their university student sample and a group of adults (see section 4.1.2).

Most cross-cultural research on inequality contrasts an "American" equilibrium with a "European" equilibrium (Alesina and Angeletos, 2005; Bénabou and Tirole, 2006). Our findings suggest that Europe is more heterogeneous than one could think, with Italian participants clustering with US participants rather than Northern Europeans. One could conjecture that this result may be due to the combination of the biases reviewed above or that it may not generalize due to the samples not being representative either geographically or in terms of age and social stratification. Nevertheless, Grimalda and Pipke (2021) find that Italians' redistributive preferences are closer to US Americans' than Germans' even with representative adult samples, using a non-incentivized

redistribution task drawn from Alesina et al. (2018). Rey-Biel et al. (2018a) also find that their Spanish sample – arguably culturally similar to our Italian sample (Inglehart and Welzel, 2005) hold basic preferences for redistribution that are aligned to their US sample.

A first element to make sense of our results is that the juxtaposition of an American (meaning Northern American) and a European equilibrium is, in fact, rather coarse. The levels of redistribution and final inequality in Italy lie at an intermediate level between those of Germany and Norway at one end and the US at the other end. In particular, the final Gini index for income distribution in Italy is as distant from the Gini index in the US as that for Norway (Figure 1 and SOM: Section S1).[34] Europeans also differ in terms of their attitudes toward the welfare state. Boeri et al. (2001) inquire about preferences over the welfare state in Italy, Germany, France, and Spain, using stratified adult samples of the populations. 42.8% of Italians demand "less tax and transfers" in their country, a share which appears significantly higher than in Germany (where only 26.9% of respondents answer in the same way) as well as France (35.0%) and Spain (15.9%). Italians are also those least satisfied with the current size of the welfare state,[35] while about the same share of respondents demand more tax and transfers in Italy and Germany.[36] Even if these attitudes were collected more than ten years before our experiment and were expressed in reference to the situation in one's own country, they are indicative of a lower desire for redistribution by Italians compared to Germans. Overall, Europe does appear far from being homogeneous in terms of redistribution and preferences for inequality in reality.

Even so, Italians act more closely to US participants in our experiment than what should be the case looking at existing levels of country-level income inequality. A second relevant aspect to make sense of this result is that the preferences for redistribution measured in our experiment are, arguably, not the only component of demand for redistribution *in real life*. As forcefully argued by Alesina and Glaeser (2004), Alesina and Angeletos (2005), and Bénabou and Tirole (2006), beliefs on economic mobility are also important determinants of real-life demand for redistribution. If individuals believe that their society grants everyone opportunity for economic success, then demand for redistribution will be lower because individuals are to be held largely responsible for such outcomes (Konow, 2003). Conversely, if initial opportunities are not distributed evenly, the de-

[34]More precisely, redistribution is lowest in the US (18%), followed by Italy (25%), Germany (29%), and Norway (30%). The resulting inequality in disposable income in 2013 followed the reverse ranking, the Gini index being 39% in the US, 33% in Italy, 29% in Germany, and 26% in Norway, in 2013.

[35]The share of respondents answering that they want to maintain the current levels of tax and transfers is the lowest in Italy (39.7%) and highest in Germany (59.1%) across the four countries, while it is 51.2% and 53.2% in France and Spain, respectively.

[36]The share of respondents answering that they want to increase taxes and transfers levels is highest in Spain (30.9%), followed by Italy (17.4%), Germany (14.0%), and France (13.8%).

mand for redistribution will be higher because final outcomes fall outside individual responsibility. Since more US Americans than Europeans believe that economic success results from individual hard work and talent rather than luck or factors beyond one's control, such beliefs result in a lower propensity to redistribute in the US than in Europe. A comprehensive model should then include *both* "basic" preferences for redistribution - where "basic" means that beliefs over economic success should be held constant- *and* beliefs over economic mobility as determinants of real-life demand for redistribution. By construction, our experimental situation granted equal opportunities for success to every individual,[37] assuming that participants believed that researchers did not apply deception and did not cheat on the way participants were assigned initial positions on the earnings scale. We claim, therefore, that the present experiment measures "basic" preferences for redistribution, independently of one's beliefs over determinants of success in life. Our claim is corroborated by the fact that the "Beliefs of Success Determinants" variable, which measures the extent to which participants believe that economic success is under individual control in real life, does not have predictive power over τ_t in our pooled econometric model (see Section 4.3.2). Therefore, the fact that Italians seem to demand more redistribution in real-life than US Americans may be accounted for by more pessimistic beliefs over economic mobility in real life. We study this topic in a companion paper.

The final element to make sense of our results concerns the ultimate reason why basic preferences for redistribution differ across countries in the way we observed. Throughout our analyses, we have tested the impact of an extensive range of cultural indicators, such as individualism/collectivism, relevance of civic norms, belief in "progressive" rather than "conservative" values, political orientation, trust in others, and religious faith. In past research (Inglehart and Welzel, 2005; Herrmann et al., 2008), such variables predicted prosociality and cultural evolution. We have also used indicators of individual preferences concerning overconfidence, risk aversion, and ambiguity aversion. Nevertheless, this host of indicators at most moderated, but did not eliminate, country differences in preferences for redistribution. The moderation effect was largest in decisions under uncertainty and smallest in the last decision, where self-interest was dominant. This result suggests that when self-interest is at stake, culture matters less. One possibility is that such culture and ideological traits were only imprecisely estimated in our experiment because a proper estimation would have required a larger set of items than the ones we used. Another possibility is

[37] One could argue that this argument does not apply to the Origin treatment, where people from wealthier areas were advantaged in the assignment of initial earnings. Nevertheless, we find that preferences for redistribution in this treatment are on a par with the Random treatment, suggesting that participants saw the two treatments as equally (un)fair.

that other cultural traits, not included in our questionnaire, matter to explain cross-country differences. Past research suggests that so-called generalized morality, that is, the propensity to apply norms of cooperation universally rather than locally to families and clans, is important to explain differences in economic outcomes (Tabellini, 2008; Platteau, 2015; Schulz et al., 2019; Enke, 2019). Nevertheless, the four countries investigated in our study do not differ substantially on the measure of generalized morality used by Tabellini (2008). Another widely used classification of culture is due to Inglehart and Welzel (2005), who identify six main cultural areas worldwide across the Traditional vs. Secular dimension and the Self-survival vs. Self-expression dimension. The cultural "distance" emerging from the cultural map for the 2010-2014 period shows, however, differences inconsistent with our results (SOM: Figure S13). Even if Germany and Norway both belong to the "Protestant Europe" group, Germany appears closer to Italy, which is part of the "Catholic Europe" group, than Norway. Italy is no closer to the US, belonging to "English-speaking" group, than to Germany. Cultural differences inconsistent with the differences observed in our study can also be inferred from the analysis of Hofstede's six cultural dimensions (SOM: Figure S14).

It does not seem easy, therefore, to explain the national differences observed in our study in terms of the cultural traits reviewed above. A more promising avenue may be to look at differences in more specific institutional characteristics of the various systems. In his last book, Thomas Piketty (2020) attributes considerable importance to the system of co-determination in the management of privately-owned companies typical of the *Rhenish* and *Scandinavian* models of capitalism. In both Germany and Norway, between a third and a half of both seats and voting rights on the board of directors in private companies (larger than some given levels) are assigned to workers' representatives. This institutional arrangement is entirely absent in countries outside the *Rhenish* and *Scandinavian* models of capitalism. In both the US and Italy, in particular, shareholders elect the entire board of directors according to the principle "one share, one vote." Piketty (2020) argues that the co-determination system empowers unions representative to co-direct a company's long-term strategic goals. Perhaps more importantly, *"The presence of workers on boards of directors has also helped to limit wage inequality and in particular to control the vertiginous growth of executive pay seen in some other countries"* (Piketty, 2020, page 499). Although this is, of course, a purely speculative *ad hoc* rationalization of our results, one could conjecture that this management system, together with its ramification for labor market organization and centralized bargaining, ends up shaping preferences for redistribution in a more egalitarian way in Northern European countries than in other countries. [38]

[38] To be more precise, countries that can be ascribed to the *Rhenish* and *Scandinavian* capitalism model on the

Another unexpected result of our experiment, contradicting Hypothesis 4, is that US Americans do not reward individual merit more than people from other countries. In fact, our structural estimation of the utility function confirms that the number of "meritocrats" is no larger in the US compared to other countries, and our econometric analysis shows higher responsiveness to the Luck treatments relative to the Merit treatment in Germany and Italy. Firstly, we should say that willingness to reward individual merit is only one aspect of meritocracy. Another important characteristic of "meritocracy" is the belief that hard work, or factors under one's control, are necessary to achieve economic success. Under this second approach, US Americans appear *more* meritocratic than others. US Americans score overwhelmingly higher than participants from other countries in our Beliefs of Success index ($z = 6.74$, p-value < 0.0001), measuring how much people believe economic success to be under individual control. One way to interpret these results is to consider that two types of libertarianism exist. In the US, participants are libertarian with respect to both luck and merit. Having had a fair chance to achieve success is sufficient to consider the "winner" of the lottery entitled to keep its prize. In Italy, on the contrary, people are libertarian primarily with respect to merit but less with respect to luck. As a result, they demand more redistribution when luck determines individual economic success. This result also bears on the ongoing debate on the relationship between meritocracy and tolerance of inequality. Some scholars have conjectured that meritocracy in the US is, in fact, a "myth" because, in particular, access to high education is highly skewed toward high-income strata (Chetty et al., 2014; Frank, 2016; Markovits, 2020; Mijs, 2021).

Nevertheless, such a myth is instrumental in building a consensus over the idea that high-income earners deserve their position in the income ranking, thus ultimately leading people to accept inequality. Our results suggest that, at least in the US, believing in such a myth may actually be unnecessary to tolerate inequality. Believing that one had a fair chance of achieving high earnings seems to suffice for people to accept relatively high levels of inequality. Clearly, identifying in empirical terms what people believe is a "fair chance" of success in real life is of utmost importance.

While the substantial difference in preference for redistribution when earnings are determined by merit rather than luck is entirely in line with Hypothesis 4, we found no difference *within* such treatments. These results hold despite initial earnings having been assigned, arguably, more unfairly in the Origin treatment than in the Random treatment (see Section 2.2). To be sure,

grounds of their use of co-determination in company management are Germany - which introduced the system in the '50s-, followed by Sweden, Norway, Denmark, and Austria (Piketty, 2020, page 501).

we cannot rule out that the construal of the treatment did not have the intended effects, for instance because participants failed to link average differences in housing values with differences in background wealth. An alternative explanation is that individuals considered the procedures characterizing the two treatments equally (un)fair. This account would entail that the initial "lottery" assigning individuals to a family with either high or low wealth is perceived to be akin to a fair lottery assigning initial allocations. As a result, participants demanded no additional redistribution in the Origin than the Random treatment. We also failed to find significant differences between the Ability and the Effort treatment, despite philosophical analyses suggesting that individuals should be held more responsible for their effort choices than their talents. Once again, we cannot rule out that the treatment did not have the intended effects, for instance, because people perceive ability in abstract reasoning tests as the result of accumulated effort rather than the result of individual talent. An alternative explanation is that individuals do indeed perceive effort and talent as equally valid reasons for legitimizing entitlement. This result supports the meritocratic view that individuals are entitled to keep all the returns from their work and talents and stands against the Rawlsian view that talents are the results of the lottery of birth, thus making the returns stemming from talents undeserved.

Another limitation of our study is the relatively limited number of countries involved. It is an open question whether our results would generalize to other countries that were either culturally similar or culturally distant from the current set. Some insights, albeit speculative, can be derived from existing experimental studies. Gächter et al. (2010) finds that countries belonging to the same cultural area indeed behave similarly in cooperation games with punishment. Cultural areas are classified according to Inglehart and Welzel (2005). Moreover, Rey-Biel et al. (2018b) finds no significant differences in preferences for redistribution in Spain (a country culturally close to Italy) and the US, in analogy to what we find for Italy and the US. As for culturally distant countries, Grimalda and Pipke (2021) finds that the demand for redistribution in the Japanese sample lies in between that of the US and German samples. Moreover, redistribution demand by participants from Slovenia - a post-communist country - are on a par with demand by Germans. Finally, He et al. (2019) find few differences in demand for redistribution between Chinese university students and US ones, using the same design as DPW. This analysis, thus, tentatively suggests that our sample captures a relatively broad spectrum in demand for redistribution across cultures worldwide. Clearly, more research is needed to further appraise this point.

6 Conclusions

The goal of this study has been to test experimentally in four Western countries the effectiveness of various theories seeking to explain preferences for redistribution. We found support for several of them. In particular, self-interest, risk aversion, the prospect of upward mobility, and overconfidence are all relevant factors that affect preferences for redistribution. All these factors, except overconfidence, are evenly distributed across countries, and they similarly affect the elasticity of demand for redistribution. While elasticity of demand for redistribution to overconfidence is also similar across countries, we found a higher share of overconfident people in the US and Italy compared to Germany and Norway. Overconfidence is thus a first factor differentiating demand for redistribution across countries.

A second factor is social preferences. Germans and Norwegians demand significantly higher redistribution than Italians and US Americans in the "spectator" choice, where self-interest is by construction irrelevant and social preferences are the only determinant of individual choices. The same clustering holds when self-interest matters to individual decisions both under uncertainty and without uncertainty. The polarization between these two clusters is lowest when choices are made under uncertainty and is highest when uncertainty is removed and self-interest matters. Consistently with this clustering, our structural estimation finds a significantly larger share of libertarians in the US and Italy compared to Germany and Norway.

It is noteworthy that we found no significant difference in demand for redistribution across the four countries among those having – or expecting to have - above-the-median initial earnings. What makes a difference across countries is the behavior of those having – or expecting to have - below-median initial earnings. Here we find a clear difference between Germans and Norwegians, where many individuals act as "selfish egalitarians", and the US and Italy, where fewer individuals act this way. Selfish egalitarians demand full earning equalization as their initial earnings are – or are expected to be – below the median. Our study suggests a psychological mechanism to explain cross-country differences in demand for redistribution based on the idea that the degree to which low-earners perceive high-earners to be entitled to their high earnings is a crucial factor. We stress that what we find is a psychological mechanism rather than a sociological one. The assignment to the high-earning and low-earning initial positions was, for its largest part, randomized in our experiment, as proven by the low correlation between real-life household income and initial earnings in our experiment (Pearson $r = -0.0002$). Our finding signals, therefore, that psychological attitudes tend to be similar across countries when individuals are placed at the top of the income

scale and are much more diversified when people are placed at the bottom of the scale. This result adds to the finding by Alesina et al. (2004), who found that while higher inequality was associated with lower happiness for people on low incomes in Europe, happiness by the poor in the US was not related to income inequality.[39]

This mechanism may also be relevant in reality for "real" low-income earners. Gethin et al. (2022) show that, over the last decades, the 90% with the lowest income have progressively moved away from voting for left-wing parties compared to the 10% with the highest income. This pattern may be related to ethnic antagonism having become predominant over economic antagonism in low-income voters' minds in the same period (Lee et al., 2006). This evidence comes from the US and France but is likely to extend to other Western countries. Mahler et al. (2014) find a positive "income skew' - namely, higher voting turnouts for high-income voters than for low-income ones - in each of the 14 Western countries analyzed. Such an income skew is highly variable across countries. The US have the second-highest income skew, with only 46.5% of voters in the bottom quintile of the income distribution turning out to vote in the 2004 elections, compared to 67.9% and 69.4% in Germany and Norway, respectively. Importantly, Mahler et al. (2014) find that lower electoral turnout by low-income voters is directly associated with higher inequality and lower poverty reduction in their sample. Moreover, voter turnout rates have been historically lower for the bottom 50% of the income distribution than for the top 50% in the US and have been increasing since the '90s in the European countries for which we have data. The turnout rate by income class is now virtually the same in the US, France and the UK, and we can guess that similar patterns hold for other European countries, too. Hence, low-income voters do not seem to behave according to their direct economic interests in elections, either through abstention of through increasingly voting for political parties other than left-wing ones.

Our study also found that participants have different preferences for rewarding merit rather than luck across countries, but such preferences do not follow the traditional hypothesis attributing the largest concern for individual merit to US Americans. In fact, Italy and Germany are the countries where participants in our experiment tolerate significantly more inequality when these are generated by merit rather than luck. US Americans do reward merit when acting as spectators. However, as soon as their self-interest becomes relevant, the distinction between merit and luck becomes irrelevant to them. This disposition may be another reason why the idea of meritocracy may be a "myth" in the US than those already suggested (Frank, 2016). In addition to people

[39] Alesina et al. (2004) also find, nonetheless, that the rich's happiness was more sensitive to inequality in the US than in Europe. This result may be related to higher fear of crime rates, as Dimick et al. (2016) proposed.

holding unrealistically optimistic beliefs over the chances of poor people making it to the top of the income distribution (Alesina et al., 2018), we find that US Americans may hold luck as being equally relevant as merit as an entitlement for high earners to keep their allocation. Getting a lottery ticket, and losing the draw, seems to US Americans as relevant for preferences for redistribution as turning out on the losing side of a merit-based tournament.

Overall, our study shows that preferences for redistribution are more complex than what is entailed by the narrative of an "American" and a "European" equilibrium. Europe is far from homogeneous, as Italians consistently align with US Americans both in terms of preferences for redistribution and on other individual traits, such as overconfidence and risk aversion. Differences between countries are maximal when uncertainty is removed but decrease under uncertainty or when self-interest is irrelevant. Differences exist even within countries, particularly within the US, where people from the North-West of the US turn out to be significantly closer to Europe than people from the South-East of the US. The psychological bases to reward merit also seem to follow different patterns than what is expected based on current theory. Despite this complexity, we do observe a consistent clustering between two poles of redistribution - tendentially libertarian at one end and egalitarian at the other end. This result seems to be determined mainly by the willingness of people at the bottom end of the distribution to let rich people "get away with" their high earnings. We believe this seemingly robust clustering could provide the bases for further theoretical and empirical work.

References

Abadie, A., Athey, S., Imbens, G. W., and Wooldridge, J. (2017). When should you adjust standard errors for clustering? NBER Working Papers 24003, National Bureau of Economic Research.

Abbink, K. and Sadrieh, A. (2009). The pleasure of being nasty. *Economics Letters*, 105(3):306–308.

Akbaş, M., Ariely, D., and Yuksel, S. (2019). When is inequality fair? an experiment on the effect of procedural justice and agency. *Journal of Economic Behavior & Organization*, 161:114–127.

Alesina, A. and Angeletos, G.-M. (2005). Fairness and redistribution. *American Economic Review*, 95(4):960–980.

Alesina, A. and Giuliano, P. (2009). Preferences for redistribution. NBER Working Papers 14825, National Bureau of Economic Research, Inc.

Alesina, A. and Glaeser, E. L. (2004). *Fighting Poverty in the US and Europe: A World of Difference*. Oxford University Press.

Alesina, A. and La Ferrara, E. (2005). Ethnic diversity and economic performance. *Journal of Economic Literature*, 43(3):762–800.

Alesina, A., Miano, A., and Stantcheva, S. (2020). The polarization of reality. In *AEA Papers and Proceedings*, volume 110, pages 324–28.

Alesina, A., Stantcheva, S., and Teso, E. (2018). Intergenerational mobility and preferences for redistribution. *American Economic Review*, 108(2):521–554.

Alesina, A., Tella, R. D., and MacCulloch, R. (2004). Inequality and happiness: are europeans and americans different? *Journal of Public Economics*, 88(9-10):2009–2042.

Almås, I., Cappelen, A. W., and Tungodden, B. (2020). Cutthroat Capitalism versus Cuddly Socialism: Are Americans More Meritocratic and Efficiency-Seeking than Scandinavians? *Journal of Political Economy*, 128(5):1753–1788.

Anderson, J., Burks, S., Carpenter, J., Götte, L., Maurer, K., Nosenzo, D., Potter, R., Rocha, K., and Rustichini, A. (2013). Self-selection and variations in the laboratory measurement of other-regarding preferences across subject pools: evidence from one college student and two adult samples. *Experimental Economics*, 16(2):170–189.

Andre, P. (2021). Shallow meritocracy: An experiment on fairness views. *Available at SSRN 3916303*.

Andreoni, J., Aydin, D., Barton, B., Bernheim, B. D., and Naecker, J. (2020). When fair isn't fair: Understanding choice reversals involving social preferences. *Journal of Political Economy*, 128(5):1673–1711.

Azar, O. H. (2009). Does relative thinking exist in mixed compensation schemes? Working paper, Ben-Gurion University of the Negev.

Baron, J. and Hershey, J. C. (1988). Outcome bias in decision evaluation. *Journal of personality and social psychology*, 54(4):569.

Bellemare, C. and Kröger, S. (2007). On representative social capital. *European Economic Review*, 51(1):183–202.

Benabou, R. (2005). Inequality, Technology and the Social Contract. In Aghion, P. and Durlauf, S., editors, *Handbook of Economic Growth*, volume 1 of *Handbook of Economic Growth*, chapter 25, pages 1595–1638. Elsevier.

Bénabou, R. and Ok, E. A. (2001). Social Mobility and the Demand for Redistribution: The Poum Hypothesis. *The Quarterly Journal of Economics*, 116(2):447–487.

Bénabou, R. and Tirole, J. (2006). Incentives and prosocial behavior. *American Economic Review*, 96(5):1652–1678.

Bigoni, M., Bortolotti, S., Casari, M., Gambetta, D., and Pancotto, F. (2016). Amoral familism, social capital, or trust? the behavioural foundations of the italian north-south divide. *The Economic Journal*, 126(594):1318–1341.

Blanken, I., van de Ven, N., and Zeelenberg, M. (2015). A meta-analytic review of moral licensing. *Personality and Social Psychology Bulletin*, 41(4):540–558. PMID: 25716992.

Boeri, T., Borsch-Supan, A., and Tabellini, G. (2001). Would you like to shrink the welfare state? a survey of european citizens. *Economic Policy*, 16(32):8–0.

Bolton, G. E., Brandts, J., and Ockenfels, A. (2005). Fair procedures: Evidence from games involving lotteries. *The Economic Journal*, 115(506):1054–1076.

Bolton, G. E. and Ockenfels, A. (2000). Erc: A theory of equity, reciprocity, and competition. *The American Economic Review*, 90(1):166–193.

Brownback, A. and Kuhn, M. A. (2019). Understanding outcome bias. *Games and Economic Behavior*, 117:342–360.

Buchan, N. R., Grimalda, G., Wilson, R., Brewer, M., Fatas, E., and Foddy, M. (2009). Globalization and human cooperation. *Proceedings of the National Academy of Sciences*, 106(11):4138–4142.

Buser, T., Grimalda, G., Putterman, L., and van der Weele, J. (2020). Overconfidence and gender gaps in redistributive preferences: Cross-country experimental evidence. *Journal of Economic Behavior & Organization*, 178:267–286.

Cappelen, A. W., Hole, A. D., Sørensen, E. Ø., and Tungodden, B. (2007). The pluralism of fairness ideals: An experimental approach. *American Economic Review*, 97(3):818–827.

Cappelen, A. W., Konow, J., Sørensen, E. Ø., and Tungodden, B. (2013). Just luck: An experimental study of risk-taking and fairness. *American Economic Review*, 103(4):1398–1413.

Cappelen, A. W., Nygaard, K., Sørensen, E. Ø., and Tungodden, B. (2015). Social preferences in the lab: A comparison of students and a representative population. *The Scandinavian Journal of Economics*, 117(4):1306–1326.

Cappelen, A. W., Sørensen, E. Ø., and Tungodden, B. (2010). Responsibility for what? fairness and individual responsibility. *European Economic Review*, 54(3):429 – 441.

Cassar, L. and Klein, A. H. (2019). A matter of perspective: How failure shapes distributive preferences. *Management Science*, 65(11):5050–5064.

Causa, O. and Hermansen, M. (2018). Income redistribution through taxes and transfers across oecd countries. LIS Working papers 729, LIS Cross-National Data Center in Luxembourg.

Chetty, R., Hendren, N., Kline, P., and Saez, E. (2014). Where is the land of opportunity? the geography of intergenerational mobility in the united states. *The Quarterly Journal of Economics*, 129(4):1553–1624.

Ciani, E., Fréget, L., and Manfredi, T. (2021). Learning about inequality and demand for redistribution. *OECD Papers on Well-being and Inequalities*, 02.

Cohen, G. A. (1989). On the currency of egalitarian justice. *Ethics*, 99(4):906–944.

Cohn, A., Jessen, L. J., Klasnja, M., and Smeets, P. (2019). Why do the rich oppose redistribution? an experiment with america's top 5%. *SSRN Electronic Journal*.

Conte, A. and Moffatt, P. G. (2014). The econometric modelling of social preferences. *Theory and Decision*, 76(1):119–145.

Corneo, G. and Fong, C. M. (2008). What's the monetary value of distributive justice. *Journal of Public Economics*, 92(1-2):289–308.

Corneo, G. and Gruner, H. P. (2002). Individual preferences for political redistribution. *Journal of Public Economics*, 83(1):83–107.

Croson, R. and Konow, J. (2009). Social preferences and moral biases. *Journal of Economic Behavior & Organization*, 69(3):201–212.

Cruces, G., Perez-Truglia, R., and Tetaz, M. (2013). Biased perceptions of income distribution and preferences for redistribution: Evidence from a survey experiment. *Journal of Public Economics*, 98:100–112.

Dallinger, U. (2010). Public support for redistribution: what explains cross-national differences? *Journal of European Social Policy*, 20(4):333–349.

Deffains, B., Espinosa, R., and Thöni, C. (2016). Political self-serving bias and redistribution. *Journal of Public Economics*, 134:67–74.

Diamond, A. (2013). Executive functions. *Annual Review of Psychology*, 64(1):135–168.

Dimick, M., Rueda, D., and Stegmueller, D. (2016). The altruistic rich? inequality and other-regarding preferences for redistribution. *Quarterly Journal of Political Science*, 11(4):385–439.

Dohmen, T., Falk, A., Huffman, D., and Sunde, U. (2012). The intergenerational transmission of risk and trust attitudes. *The Review of Economic Studies*, 79(2):645–677.

Durante, R., Putterman, L., and Weele, J. (2014). Preferences for redistribution and perception of fairness: An experimental study. *Journal of the European Economic Association*, 12(4):1059–1086.

Dworkin, R. (2002). *Sovereign Virtue: The Theory and Practice of Equality*. Harvard University Press.

Ellsberg, D. (1961). Risk, ambiguity, and the savage axioms. *The Quarterly Journal of Economics*, 75(4):643–669.

Enke, B. (2019). Kinship, cooperation, and the evolution of moral systems. *The Quarterly Journal of Economics*, 134(2):953–1019.

Esarey, J., Salmon, T., and Barrilleaux, C. (2012a). Social insurance and income redistribution in a laboratory experiment. *Political Research Quarterly*, 65(3):685–698.

Esarey, J., Salmon, T., and Barrilleaux, C. (2012b). What motivates political preferences? self-interest, ideology, and fairness in a laboratory democracy. *Economic Inquiry*, 50(3):604–624.

Esping-Andersen, G. (1990). *The Three Worlds of Welfare Capitalism*. Princeton University Press.

Exadaktylos, F., Espín, A., and Brañas Garza, P. (2013). Experimental subjects are not different. *Scientific reports*, 3:1213.

Falk, A., Meier, S., and Zehnder, C. (2013). Do lab experiments misrepresent social preferences? the case of self-selected student samples. *Journal of the European Economic Association*, 11(4):839–852.

Fehr, D., Mollerstrom, J., and Perez-Truglia, R. (2021). Your place in the world: Relative income and global inequality. *American Economic Journal: Economic Policy*, forthcoming.

Fehr, E. and Schmidt, K. M. (1999). A theory of fairness, competition, and cooperation. *The Quarterly Journal of Economics*, 114(3):817–868.

Ferraro, P. J. and Cummings, R. G. (2007). Cultural diversity, discrimination, and economic outcomes: An experimental analysis. *Economic Inquiry*, 45(2):217–232.

Festinger, L. (1957). *A theory of cognitive dissonance*. Stanford University Press, Stanford, CA.

Fischbacher, U. (2007). z-tree: Zurich toolbox for ready-made economic experiments. *Experimental economics*, 10(2):171–178.

Fisman, R., Kuziemko, I., and Vannutelli, S. (2021). Distributional preferences in larger groups: Keeping up with the joneses and keeping track of the tails. *Journal of the European Economic Association*, 19(2):1407–1438.

Fong, C. (2001). Social preferences, self-interest, and the demand for redistribution. *Journal of Public Economics*, 82(2):225–246.

Frank, R. H. (2016). *Success and Luck*. Princeton University Press.

Gächter, S. (2010). (dis)advantages of student subjects: What is your research question? *Behavioral and Brain Sciences*, 33(2–3):92–93.

Gächter, S., Herrmann, B., and Thöni, C. (2010). Culture and cooperation. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 365(1553):2651–2661.

Gawronski, B., Peters, K., and Strack, F. (2008). *Cross-cultural differences vs. universality in cognitive dissonance: A conceptual reanalysis*.

Gethin, A., Martínez-Toledano, C., and Piketty, T. (2022). Brahmin left versus merchant right: Changing political cleavages in 21 western democracies, 1948–2020. *The Quarterly Journal of Economics*, 137(1):1–48.

Ghiglino, C., Juárez-Luna, D., and Müller, A. (2021). Class Altruism and Redistribution. *The Economic Journal*. ueab022.

Grimalda, G., Kar, A., and Proto, E. (2016). Procedural fairness in lotteries assigning initial roles in a dynamic setting. *Experimental Economics*, 19(4):819–841.

Grimalda, G. and Pipke, D. (2021). Cross-country evidence on the determinants of preferences for redistribution. Kiel Working Paper 2190, Kiel.

Gurdal, M. Y., Miller, J. B., and Rustichini, A. (2013). Why blame? *Journal of Political Economy*, 121(6):1205–1247.

He, T.-S., Putterman, L., and Wang, L. (2019). Do china's people favour redistribution? evidence from an incentivized experiment. *Pacific Economic Review*, 24(2):293–324.

Heblich, S., Lameli, A., and Riener, G. (2015). The effect of perceived regional accents on individual economic behavior: A lab experiment on linguistic performance, cognitive ratings and economic decisions. *PLOS ONE*, 10(2):e0113475.

Herrmann, B., Thoni, C., and Gachter, S. (2008). Antisocial punishment across societies. *Science*, 319(5868):1362–1367.

Hoy, C. and Mager, F. (2021). Why are relatively poor people not more supportive of redistribution? Evidence from a randomized survey experiment across ten countries. *American Economic Journal: Economic Policy*, 13(4):299–328.

Inglehart, R. and Welzel, C. (2005). *Modernization, Cultural Change, and Democracy: The Human Development Sequence*. CAMBRIDGE.

Jaeger, M. (2005). Welfare regimes and attitudes towards redistribution: The regime hypothesis revisited. *European Sociological Review*, 22.

Jaeggi, S. M., Buschkuehl, M., Jonides, J., and Perrig, W. J. (2008). Improving fluid intelligence with training on working memory. *Proceedings of the National Academy of Sciences*, 105(19):6829–6833.

Karni, E., Salmon, T., and Sopher, B. (2008). Individual sense of fairness: an experimental study. *Experimental Economics*, 11(2):174–189.

Konow, J. (2000). Fair shares: Accountability and cognitive dissonance in allocation decisions. *American Economic Review*, 90(4):1072–1091.

Konow, J. (2003). Which is the fairest one of all? A positive analysis of justice theories. *Journal of Economic Literature*, 41(4):1188–1239.

Kosse, F., Deckers, T., Pinger, P., Schildberg-Hörisch, H., and Falk, A. (2020). The formation of prosociality: causal evidence on the role of social environment. *Journal of Political Economy*, 128(2):434–467.

Krawczyk, M. (2010). A glimpse through the veil of ignorance: Equality of opportunity and support for redistribution. *Journal of Public Economics*, 94(1-2):131–141.

Kuziemko, I., Buell, R. W., Reich, T., and Norton, M. I. (2014). "Last-place aversion": Evidence and redistributive implications. *The Quarterly Journal of Economics*, 129(1):105–149.

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.

Lee, W., Roemer, J., and der Straeten, K. V. (2006). Racism, xenophobia, and redistribution. *Journal of the European Economic Association*, 4(2-3):446–454.

Lipset, S. (1996). *American Exceptionalism: A Double-edged Sword*. W.W. Norton.

Mahler, V. A., Jesuit, D. K., and Paradowski, P. R. (2014). Electoral turnout and state redistribution: a cross-national study of fourteen developed countries. *Political Research Quarterly*, 67(2):361–373.

Markovits, D. (2020). *The Meritocracy Trap*. Penguin LCC US.

Meltzer, A. H. and Richard, S. F. (1981). A rational theory of the size of government. *Journal of Political Economy*, 89(5):914–927.

Merritt, A. C., Effron, D. A., and Monin, B. (2010). Moral self-licensing: When being good frees us to be bad. *Social and Personality Psychology Compass*, 4(5):344–357.

Mijs, J. J. B. (2021). The paradox of inequality: income inequality and belief in meritocracy go hand in hand. *Socio-Economic Review*, 19(1):7–35.

Moffatt, P. G. (2015). *Experimetrics: Econometrics for Experimental Economics*. Palgrave Macmillan.

Mollerstrom, J., Reme, B.-A., and Sørensen, E. Ø. (2015). Luck, choice and responsibility—an experimental study of fairness views. *Journal of Public Economics*, 131:33–40.

Moore, D. and Healy, P. (2008). The trouble with overconfidence. *Psychological review*, 115:502–17.

Niederle, M. and Vesterlund, L. (2007). Do women shy away from competition? Do men compete too much? *The Quarterly Journal of Economics*, 122(3):1067–1101.

Nisbett, R. E., Aronson, J., Blair, C., Dickens, W., Flynn, J., Halpern, D. F., and Turkheimer, E. (2012). Intelligence: new findings and theoretical developments. *American Psychologist*, 67(2):130–159.

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.

Nozick, R. (1974). *Anarchy, State, and Utopia*. Basic Books.

Osberg, L. and Smeeding, T. (2006). "Fair" inequality? Attitudes toward pay differentials: the united states in comparative perspective. *American Sociological Review*, 71(3):450–473.

Pauly, M. V. (1973). Income redistribution as a local public good. *Journal of Public Economics*, 2(1):35–58.

Piketty, T. (2020). *Capital and Ideology*. Harvard University Press.

Platteau, J.-P. (2015). *Institutions, Social Norms and Economic Development*. Routledge.

Putterman, L., Roemer, J. E., and Silvestre, J. (1998). Does egalitarianism have a future? *Journal of Economic Literature*, 36(2):861–902.

Rawls, J. (1971). *A theory of justice*. Harvard University Press.

Rey-Biel, P., Sheremeta, R., and Uler, N. (2018a). When income depends on performance and luck: The effects of culture and information on giving. In *Experimental economics and culture*. Emerald Publishing Limited.

Rey-Biel, P., Sheremeta, R., and Uler, N. (2018b). When income depends on performance and luck: The effects of culture and information on giving. Mpra paper, University Library of Munich, Germany.

Roemer, J. E. (1998). Why the poor do not expropriate the rich: an old argument in new garb. *Journal of Public Economics*, 70(3):399–424.

Roemer, J. E. (2009). *Equality of opportunity*. Harvard University Press.

Roemer, J. E. and Trannoy, A. (2015). Chapter 4 - equality of opportunity. In Atkinson, A. B. and Bourguignon, F., editors, *Handbook of Income Distribution*, volume 2 of *Handbook of Income Distribution*, pages 217 – 300. Elsevier.

Romer, T. (1975). Individual welfare, majority voting, and the properties of a linear income tax. *Journal of Public Economics*, 4(2):163–185.

Rosenthal, R. (2009). *Artifacts in behavioral research : Robert Rosenthal and Ralph L. Rosnow's classic books : a re-issue of Artifact in behavioral research, Experimenter effects in behavioral research and the volunteer subject*. Oxford University Press, New York.

Roth, A. E., Prasnikar, V., Okuno-Fujiwara, M., and Zamir, S. (1991). Bargaining and market behavior in Jerusalem, Ljubljana, Pittsburgh, and Tokyo: An experimental study. *The American Economic Review*, 81(5):1068–1095.

Schildberg-Hörisch, H. (2010). Is the veil of ignorance only a concept about risk? An experiment. *Journal of Public Economics*, 94(11–12):1062–1066.

Schulz, J. F., Bahrami-Rad, D., Beauchamp, J. P., and Henrich, J. (2019). The church, intensive kinship, and global psychological variation. *Science*, 366(6466):eaau5141.

Sinn, H.-W. (1996). Social insurance, incentives and risk taking. *International Tax and Public Finance*, 3(3):259–280.

Snowberg, E. and Yariv, L. (2021). Testing the waters: Behavior across participant pools. *American Economic Review*, 111(2):687–719.

Spiliotopoulou, E. and Conte, A. (2021). Fairness ideals in inventory allocation. *Decision Sciences*.

Stantcheva, S. (2021). Understanding tax policy: How do people reason? *The Quarterly Journal of Economics*, 136(4):2309–2369.

Tabellini, G. (2008). Institutions and culture. *Journal of the European Economic Association*, 6(2-3):255–294.

Thurow, L. (1971). The income distribution as a pure public good. *The Quarterly Journal of Economics*, 85(2):327–336.

Train, K. E. (2009). *Discrete Choice Methods with Simulation*. Cambridge University Press, 2 edition.

Traub, S., Seidl, C., Schmidt, U., and Levati, M. V. (2005). Friedman, Harsanyi, Rawls, Boulding – or somebody else? An experimental investigation of distributive justice. *Social Choice and Welfare*, 24(2):283–309.

Trautmann, S. T. (2009). A tractable model of process fairness under risk. *Journal of Economic Psychology*, 30(5):803–813.

Trautmann, S. T. and Wakker, P. P. (2010). Process fairness and dynamic consistency. *Economics Letters*, 109(3):187–189.

Varian, H. (1980). Redistributive taxation as social insurance. *Journal of Public Economics*, 14(1):49–68.

Weber, M. (1904). *The Protestant Ethics and the Spirit of Capitalism*. Chas. Scribner's sons.

A Appendix

A.1 Derivation of general optimal decision rule

We plug into the utility function specified in (3) the values of its components. Since the redistributive scheme is a linear income tax followed by lump sum transfers of equal size to each individual, we have:

$$\tilde{y}_i(\tau) = \tilde{y}_i^P \left(1 - \frac{\tau}{100}\right) + \frac{\tau}{100}\left(\frac{\sum_{i=1}^{21} \tilde{y}_i^P}{21}\right) \tag{A.1}$$

where $\tilde{y}_i^P$ is the pre-tax earnings level. Given that in our experiment the levels of earnings are fixed, the term $\frac{\sum_{i=1}^{21} \tilde{y}_i^P}{21}$ is constant and equal to 11. Eq. A.1 thus boils down to:

$$\tilde{y}_i(\tau) = \tilde{y}_i^P \left(1 - \frac{\tau}{100}\right) + 11\left(\frac{\tau}{100}\right) \tag{A.2}$$

Moreover, we assume the following form for the inequality function that enters into the social preferences term of the utility function:

$$I(\tau) = \frac{\tilde{y}_{MAX}(\tau) - \tilde{y}_{MIN}(\tau)}{\tilde{y}_{MAX}^P - \tilde{y}_{MIN}^P} \tag{A.3}$$

where $\tilde{y}_{MAX}(\tau)$ and $\tilde{y}_{MIN}(\tau)$ are the final top and bottom earnings levels resulting from taxation at the rate τ, respectively. $\tilde{y}_{MAX}^P$ and $\tilde{y}_{MIN}^P$ are the maximum and minimum initial earnings, which are fixed and equal to 21 and 1, respectively. In other words, $I(\tau)$ is given by the dispersion of final earnings, normalized by the maximum possible dispersion of earnings. If τ=0, the numerator and the denominator are equal to each other, hence $I(\tau) = 1$. If τ=100, then $\tilde{y}_{MAX}(\tau) - \tilde{y}_{MIN}(\tau) = 0$, hence $I(\tau) = 0$. Simple algebra yields the following formula for $I(\tau)$:

$$I(\tau) = 1 - \frac{\tau}{100} \tag{A.4}$$

Therefore, $I(\tau) \in [0, 1]$ and the higher τ the lower $I(\tau)$. $I(\tau)$ is equivalent to the Gini index, up to a normalisation factor.[1] The desired τ that minimises the fairness component under $I(\tau)$ corresponds to the desired τ that would minimise the fairness component where the Gini index is

[1] In our game the Gini index is bounded from above at the value 1/3.

used instead of $I(\tau)$. $I(\tau)$ is also equivalent to the the formula for implemented inequality used by ACT. For the purpose of mathematical tractability of our estimation of fairness types, we also base our risk measure on $I(\tau)$. More precisely, we choose $\varphi = 0.5I(\tau)^2$. As stated in the man text, our hypotheses would not change if we take the standard deviation instead.

To maximize 3 with respect to τ, we note that for the linearity of the expected value of a random variable, and for (A.2), it holds:

$$\frac{\partial E\left[\tilde{y}_i(\tau)\right]}{\partial \tau} = \left(\frac{1}{100}\right)\left[11 - E\left(\tilde{y}_i^P\right)\right] \tag{A.5}$$

Given expressions (A.1)-(A.4), the maximization of (3) yields the following first-order condition:

$$\frac{\partial U_i(\tau)}{\partial \tau} = \alpha\left\{11 - E\left(\tilde{y}_i^P\right) + \rho\left(1 - \frac{\tau}{100}\right)\right\} + 2\beta_i\left(1 - \frac{\tau}{100} - I_{ij}^*\right) \geq 0 \tag{A.6}$$

For self-interested individuals, $\beta_i = 0$, hence (A.6) yields $\hat{\tau} = 100\frac{11+\rho-E_i\left(\tilde{y}_i^P\right)}{\rho}$. Since we must have $0 \leq \tau \leq 100$ the optimal tax involves corner solutions with $\hat{\tau} = 0$ if $E\left(\tilde{y}_i^P\right) \geq 11 + \rho$ or $\hat{\tau} = 100$ if $E\left(\tilde{y}_i^P\right) \leq 11$.

For non-self-interested individuals, $\beta_i > 0$ and (A.6) leads to the following optimal value:

$$\hat{\tau} = 100\frac{\alpha(11 - E_i\left(\tilde{y}_i^P\right) + \rho) + 2\beta_i(1 - I_{ij}^*)}{\alpha\rho + 2\beta_i} = 100\frac{\frac{\alpha}{2\beta_i}(11 - E_i\left(\tilde{y}_i^P\right) + \rho) + (1 - I_{ij}^*)}{\frac{\alpha}{2\beta_i}\rho + 1}. \tag{A.7}$$

A.2 Derivation of optimal rule for each fairness type

Type	$t = 1$	$t = 2, 3, 4$	Values of β_i
Pure Egalitarian	$\tau_{ij,1}^{EGA} = 100$	$\tau_{ij,t}^{EGA} = \hat{\tau}_{ij,t}^{EGA}$	$\beta_i > 0$
Impure Egalitarian	$\tau_{ij,1}^{EGA} = 100$	$\tau_{ij,t}^{EGA} = \hat{\tau}_{ij,t}^{EGA}$	$\beta_i = 0$
Pure Meritocratic	$\tau_{iL,1}^{MER} = 100$ $\tau_{iM,1}^{MER} = 100(1-\gamma)$	$\tau_{ij,t}^{MER} = \hat{\tau}_{ij,t}^{MER}$	$\beta_i > 0$
Impure Meritocratic	$\tau_{iL,1}^{MER} = 100$ $\tau_{iM,1}^{MER} = 100(1-\gamma)$	$\tau_{ij,t}^{MER} = \hat{\tau}_{ij,t}^{MER}$	$\beta_i = 0$
Pure Libertarian	$\tau_{ij,1}^{LIB} = 0$	$\tau_{ij,t}^{LIB} = \hat{\tau}_{ij,t}^{LIB}$	$\beta_i > 0$
Impure Libertarian	$\tau_{ij,1}^{LIB} = 0$	$\tau_{ij,t}^{LIB} = \hat{\tau}_{ij,t}^{LIB}$	$\beta_i = 0$

TABLE A.1
Classification by type $\{EGA, MER, LIB\}$, decision $t = 1, \ldots, 4$, treatment $j = \{L, M\}$ and β_i, based on optimal tax rate as defined in (A.8)–(A.10).

Here we derive the optimal tax rates $\hat{\tau}$ for each fairness type from the general optimal rule (3)

for D_t, $t = \{2, 3, 4\}$. We denote such redistribution rates $\hat{\tau}_{ij,t}^{EGA}$, $\hat{\tau}_{ij,t}^{MER}$ and $\hat{\tau}_{ij,t}^{LIB}$. These are a function of the fairness prescriptions given in (4)–(6), of the utility function parameters weighing self-interest and social preferences, and of the incentive to follow one's self-interest, as given by the actual or expected initial earnings.

Given the desired level of inequality per type given in (4)–(6), and the the optimal tax rate (A.7), the optimal tax rates per type become:

$$\hat{\tau}_{ij,t}^{EGA} = \begin{cases} 100 \times \frac{\left\{1+\frac{\alpha}{2\beta_i}\left[11-E_i\left(\tilde{y}_i^P\right)+\rho\times\mathbb{1}(t=2,3)\right]\right\}}{1+\frac{\alpha}{2\beta_i}\rho\times\mathbb{1}(t=2,3)} & \text{if } \beta_i > 0 \\ 100 \times \mathbb{1}\left[E_i\left(\tilde{y}_i^P\right) \leq 11 + \rho \times \mathbb{1}(t=2,3)\right] & \text{if } \beta_i = 0 \end{cases} \tag{A.8}$$

$$\hat{\tau}_{ij,t}^{MER} = \begin{cases} 100 \times \frac{\left\{1+\frac{\alpha}{2\beta_i}\left[11-E_i\left(\tilde{y}_i^P\right)+\rho\times\mathbb{1}(t=2,3)\right]\right\}}{1+\frac{\alpha}{2\beta_i}\rho\times\mathbb{1}(t=2,3)} & \text{if } \beta_i > 0,\ j = L \\ 100 \times \frac{\left\{(1-\rho)+\frac{\alpha}{2\beta_i}\left[11-E_i\left(\tilde{y}_i^P\right)+\rho\times\mathbb{1}(t=2,3)\right]\right\}}{1+\frac{\alpha}{2\beta_i}\rho\times\mathbb{1}(t=2,3)} & \text{if } \beta_i > 0,\ j = M \\ 100 \times \mathbb{1}\left[E_i\left(\tilde{y}_i^P\right) \leq 11 + \rho \times \mathbb{1}(t=2,3)\right] & \text{if } \beta_i = 0,\ j = L \\ 100 \times \left\{\mathbb{1}\left[E_i\left(\tilde{y}_i^P\right) < 11 + \rho \times \mathbb{1}(t=2,3)\right] + (1-\gamma)\,\mathbb{1}\left[E_i\left(\tilde{y}_i^P\right) = 11 + \rho \times \mathbb{1}(t=2,3)\right]\right\} & \text{if } \beta_i = 0,\ j = M \end{cases} \tag{A.9}$$

$$\hat{\tau}_{ij,t}^{LIB} = \begin{cases} 100 \times \frac{\left\{\frac{\alpha}{2\beta_i}\left[11-E_i\left(\tilde{y}_i^P\right)+\rho\times\mathbb{1}(t=2,3)\right]\right\}}{1+\frac{\alpha}{2\beta_i}\rho\times\mathbb{1}(t=2,3)} & \text{if } \beta_i > 0 \\ 100 \times \mathbb{1}\left[E_i\left(\tilde{y}_i^P\right) < 11 + \rho \times \mathbb{1}(t=2,3)\right] & \text{if } \beta_i = 0 \end{cases} \tag{A.10}$$

Note that ρ only enters the optimal rule for $t = 2$ and $t = 3$, because in both D_1 and D_4 initial earnings are known, hence the standard deviation is zero.

The integration over θ in the individual likelihood contribution (Eq. A.15) is performed by a sequence of Halton draws (100 per participant).[2] The program is written in Stata version 14.

A.3 Derivation of the econometric model for the estimation of types

Having derived the optimal tax rate for each type, decision and treatment, we can now proceed to identify the observation rules per type in each treatment and decision stage.

We assume that i's *desired* tax rate τ^* equals the optimal tax rate in Tab. A.1 plus a two-sided normally distributed error term, which explains variations in i's behaviour between tasks, such that

[2] Details can be found in Train (2009) and Moffatt (2015).

$$
\begin{aligned}
\tau_{ij,t}^{k*}(\alpha,\beta_i) &= \hat{\tau}_{ij,t}^{k}(\alpha,\beta_i)+\epsilon_{it}^{k} \\
\epsilon_{it}^{k} &\sim N\left(0,\sigma_{\epsilon}^{2}\right) \\
\beta_i &\sim \text{Lognormal}\left(\mu_{\beta},\sigma_{\beta}^{2}\right) \quad \text{with probability} \quad (1-p) \\
\beta_i &= 0 \qquad\qquad\qquad\quad \text{with probability} \quad p \\
i=1,\ldots,n; \quad t=&1,\ldots,4; \quad k\in\{EGA,MER,LIB\}; \quad j\in\{L,M\}
\end{aligned}
\tag{A.11}
$$

Concerning this econometric model, there are three considerations to make. First, we must note that the optimal tax rate may well lie outside the $[0, 100]$ interval. The following condition ensures that the tax rate is bounded from above at 100 and from below at 0:

$$
\tau_{ij,t}^{k}=\begin{cases}
\hat{\tau}_{ij,t}^{k} & \text{if } 0\leq\hat{\tau}_{ij,t}^{k}\leq 100 \\
100 & \text{if } \hat{\tau}_{ij,t}^{k}>100 \qquad k\in\{EGA,MER,LIB\}; \quad j\in\{Luck,Merit\} \\
0 & \text{if } \hat{\tau}_{ij,t}^{k}<0 \qquad t\in\{1,\ldots,4\}
\end{cases}
\tag{A.12}
$$

Here, $\tau_{ij,t}^{k}$ is the observed tax rate by participant i, with $i = 1, \ldots, n$, of type $k \in \{EGA, MER, LIB\}$, in decision $t = 1, \ldots, 4$ and condition $j \in \{Luck, Merit\}$.

Second, we assume that each participant i, whatever her type, draws from a certain distribution a value for β_i, which accounts for the importance of fairness in her decisions, and that this value applies to all tasks. Similarly to Conte and Moffatt (2014), we assume that i's value of β_i is drawn from a lognormal distribution with probability p, and it is equal to zero with probability $(1 - p)$. We can think of β_i as following a lognormal distribution with a mass at 0. It is worth noting that, in line with Cappelen et al. (2007), Conte and Moffatt (2014) and Spiliotopoulou and Conte (2021), the distribution of β_i is assumed to be the same for all types. Therefore, with reference to Tab. A.1, p represents the proportion of "impurely-behaving" participants for each type, which is equal across types. We will call the participants behaving in this way as "wavering selfish".

Third, we must note that, for $\beta_i > 0$ the optimal tax rate depends on α and β_i, which are not separately identified. However, their ratio is.[3] Consequently, we define $\theta_i = \alpha/\beta_i$ and estimate the characterising parameters of its distribution, which, given the properties of the lognormal distribution, is

$$
\theta_i \sim \text{Lognormal}\left(\ln(\alpha)-\mu_{\beta},\sigma_{\beta}^{2}\right)
\tag{A.13}
$$

[3] See Conte and Moffatt (2014) for a discussion of similar identification issues.

It may be useful to observe that a relatively large β_i, which enormously penalises deviations of the actual level of inequality in the group from i's desired level in Eq. (2), implies a small value of θ_i.

Moreover, a thorough inspection of the data suggests that there are participants who systematically behave selfishly without error. Following Conte and Moffatt (2014), we model such behaviour as an additional type and refer to those who comply with it as "unwavering selfish" participants. The rule which identifies a participant as such is an indicator variable taking the value 1 when a participant systematically chooses a tax rate equal to 100(0) if her pre-tax earning is smaller(higher) than 11 in every task but the first, and 0 otherwise:[4]

$$\text{self}_i = \begin{cases} 1 & \text{if } \tau_{ij,t} = 100 \;\&\; \tilde{y}_i^P < 11 \quad \text{or} \quad \tau_{ij,t} = 0 \;\&\; E_i\left(\tilde{y}_i^P\right) > 11 \qquad \forall\, t = 2,3,4 \\ 0 & \text{otherwise} \end{cases} \tag{A.14}$$

Let λ_{SEL}, λ_{EGA}, λ_{MER} and λ_{LIB} be the mixing proportions of the unwavering selfish, egalitarian, meritocratic and libertarian types, respectively. These represent the probability of drawing a participant of a certain type when selecting one at random from the population. Somewhat differently, $(1-p)$ is the probability that, having drawn a participant of any of the types but the unwavering selfish, this is a wavering selfish.

For practical tractability, let us indicate with $\hat{\tau}^k_{ij,t}\left(\beta_i = 0\right)$ the optimal tax rate when $\beta_i = 0$ and with $\hat{\tau}^k_{ij,t}\left(\beta_i > 0\right)$ the optimal tax rate when $\beta_i > 0$ as defined in Tab. A.1.

Finally, we can define the likelihood contribution of participant i choosing tax rate $\tau_{ij,t}$, $t = \{1,\ldots,4\}$, as

$$L_i = \sum_k \lambda_k \left\{ (1-p) \int_0^\infty \prod_{t=1}^{4} \Phi\left(-\frac{\hat{\tau}^k_{ij,t}\left(\beta_i > 0\right)}{\sigma_k} \right)^{\mathbb{1}\left(\tau_{ij,t}=0\right)} \times \left[\frac{1}{\sigma_k} \phi\left(\frac{\tau_{ij,t} - \hat{\tau}^k_{ij,t}\left(\beta_i > 0\right)}{\sigma_k} \right) \right]^{\mathbb{1}\left(0<\tau_{ij,t}<100\right)} \right. \tag{A.15}$$

$$\times \Phi\left(\frac{\hat{\tau}^k_{ij,t}\left(\beta_i > 0\right) - 100}{\sigma_k} \right)^{\mathbb{1}\left(\tau_{ij,t}=100\right)} \times f\left(\theta\right) \mathrm{d}\theta$$

$$+ p \prod_{t=1}^{4} \Phi\left(-\frac{\hat{\tau}^k_{ij,t}\left(\beta_i = 0\right)}{\sigma_k} \right)^{\mathbb{1}\left(\tau_{ij,t}=0\right)} \times \left[\frac{1}{\sigma_k} \phi\left(\frac{\tau_{ij,t} - \hat{\tau}^k_{ij,t}\left(\beta_i = 0\right)}{\sigma_k} \right) \right]^{\mathbb{1}\left(0<\tau_{ij,t}<100\right)}$$

$$\left. \times \Phi\left(\frac{\hat{\tau}^k_{ij,t}\left(\beta_i = 0\right) - 100}{\sigma_k} \right)^{\mathbb{1}\left(\tau_{ij,t}=100\right)} \right\} + \lambda_{SEL}\, \text{self}_i, \qquad k \in \{EGA, MER, LIB\}$$

where Φ and ϕ are the standard normal cumulative distribution and probability density functions, respectively, and $f\left(\theta\right)$ is the density function of the lognormal distribution evaluated at θ.

[4] This definition completely disregards choices in $t = 1$ and when $\tilde{y}_i^P = 11$ in $t = 2,3,4$, in that in these situations behaviour cannot be tainted by self-regarding considerations.

A.4 Structural estimation of utility function parameters for countries and locations

Parameters estimates					
	(λ_{SEL})	(λ_{EGA})	(λ_{MER})	(λ_{LIB})	(p)
Italy	0.11(0.02)	0.28(0.03)	0.21(0.03)	0.40(0.03)	0.08(0.03)
USA	0.13(0.02)	0.27(0.03)	0.20(0.03)	0.40(0.03)	0.07(0.03)
Norway	0.22(0.03)	0.26(0.04)	0.30(0.04)	0.22(0.04)	0.05(0.05)
Germany	0.11(0.02)	0.39(0.04)	0.26(0.03)	0.24(0.03)	0.17(0.04)
Other Structural Parameters					
$\ln(\alpha) - \mu_\beta$			-3.82(0.16)		
σ_β			1.37(0.11)		
γ			0.64(0.01)		
ρ			9.77(1.33)		
σ_{EGA}			62.04(1.96)		
σ_{MER}			17.87(0.81)		
σ_{LIB}			26.33(1.03)		
LogL			-16575.272		
n			1,189		
T			4		

Transformed Mixing Proportions				
	Total Selfish $(\lambda_{SEL} + (1 - \lambda_{SEL}) \times p)$	Pure Egalitarian $((1-p) \times \lambda_{EGA})$	Pure Meritocratic $((1-p) \times \lambda_{MER})$	Pure Libertarian $((1-p) \times \lambda_{LIB})$
Italy	0.18(0.03)	0.25(0.03)	0.20(0.03)	0.37(0.03)
US	0.19(0.03)	0.25(0.03)	0.19(0.02)	0.37(0.03)
Norway	0.26(0.05)	0.25(0.04)	0.28(0.04)	0.21(0.04)
Germany	0.26(0.04)	0.32(0.03)	0.22(0.03)	0.20(0.03)

Note: Standard errors in brackets

TABLE A.2
MAXIMUM SIMULATED LIKELIHOOD PARAMETER ESTIMATES OF THE MODEL DEFINED IN SECTION A.3 WITH COUNTRY-WISE MIXING PROPORTIONS

Parameters estimates					
	(λ_{SEL})	(λ_{EGA})	(λ_{MER})	(λ_{LIB})	(p)
Milan	0.15(0.03)	0.26(0.04)	0.22(0.04)	0.37(0.05)	0.17(0.05)
Salerno	0.08(0.02)	0.29(0.04)	0.21(0.04)	0.42(0.04)	0.00(0.00)
Washington State	0.15(0.03)	0.29(0.04)	0.24(0.04)	0.32(0.04)	0.04(0.04)
Mississipi	0.11(0.02)	0.26(0.04)	0.17(0.03)	0.46(0.04)	0.09(0.04)
Oslo	0.22(0.03)	0.26(0.04)	0.22(0.04)	0.29(0.04)	0.05(0.05)
Bremen	0.10(0.02)	0.42(0.05)	0.22(0.04)	0.26(0.05)	0.09(0.06)
Munich	0.11(0.03)	0.36(0.05)	0.22(0.04)	0.31(0.05)	0.24(0.06)
Other Stuctural Parameters					
$\ln(\alpha) - \mu_\beta$			-3.79(0.15)		
σ_β			1.35(0.11)		
γ			0.64(0.01)		
ρ			9.75(1.34)		
σ_{EGA}			62.21(1.95)		
σ_{MER}			17.99(0.81)		
σ_{LIB}			26.29(1.01)		
LogL			-16563.636		
n			1,189		
T			4		

Transformed Mixing Proportions				
	Total Selfish $(\lambda_{SEL} + (1 - \lambda_{SEL}) \times p)$	Pure Egalitarian $((1-p) \times \lambda_{EGA})$	Pure Meritocratic $((1-p) \times \lambda_{MER})$	Pure Libertarian $((1-p) \times \lambda_{LIB})$
Milan	0.29(0.05)	0.22(0.04)	0.18(0.04)	0.31(0.04)
Salerno	0.08(0.02)	0.29(0.04)	0.21(0.04)	0.42(0.04)
Washington State	0.19(0.05)	0.27(0.04)	0.23(0.04)	0.31(0.04)
Mississipi	0.19(0.04)	0.24(0.03)	0.15(0.03)	0.42(0.04)
Oslo	0.26(0.05)	0.25(0.04)	0.28(0.04)	0.21(0.04)
Bremen	0.18(0.06)	0.38(0.05)	0.20(0.04)	0.23(0.04)
Munich	0.33(0.06)	0.27(0.04)	0.23(0.04)	0.17(0.03)

Note: Standard errors in brackets.

TABLE A.3

MAXIMUM SIMULATED LIKELIHOOD PARAMETER ESTIMATES OF THE MODEL DEFINED IN SECTION A.3 WITH LOCATION-WISE MIXING PROPORTIONS

Why do Preferences for Redistribution Differ Across Countries? An Experimental Analysis Supplementary Material

Gianluca Grimalda, Francesco Farina, Anna Conte, Ulrich Schmidt

October 1, 2022

S1 Description of sample characteristics

S1.1 Welfare state characteristics

Our strategy in selecting countries hinges upon the taxonomy proposed by sociologist Esping-Andersen in his pioneering work (Esping-Andersen, 1990). Esping-Andersen identifies three regimes of welfare state depending on the type of decommodification and social stratification to which they are conducive. Decommodification refers to the existence of services such as social insurance, benefits, and aid. Such services are enshrined as social rights and are thus supplied by the state, rather than being provided through markets. Social stratification refers to the existence of social and economic hierarchies in society and the extent to which the welfare state contributes to modify or perpetuate such hierarchies, in particular through income redistribution.

The US is the typical representative of the **liberal model** of welfare state, where decommodification is low because reliance on markets is extensive and the role of the state in reducing social stratification is limited by a relatively low level of taxation and transfers. In order to limit moral hazard, there is extensive use of means-tested conditionality of welfare benefits. Health care is only partially provided by public institutions and "quasi-markets" complement the functioning of national health systems. Pension schemes are typically based on private insurance.

Germany epitomizes the **conservative model** of welfare state, where decommodification is relatively high because the state has a larger role in determining one's incomes than in the liberal model. The financial coverage of welfare institutions is provided by workers' and firms' social contributions. Mutual risk insurance is provided to workers through employers' sub-contracts with insurance companies. Protection and welfare transfers typically differ according to employment categories or sectors. For instance, social protection differs between civil servants, self-employed and industry employees. Civil servants historically enjoy special privileges because of their allegiance to the state. As a result, this system does not significantly modify social stratification from the *status quo*. A centralised system of wage bargaining favours wage compression and contains market income inequality.

Norway represents the **social-democratic model**. Decommodification is also high, as the state plays a large role in the determination of incomes. The key difference from the conservative model is the universal provision of welfare benefits to all citizens. Labour market institutions are characterised by relatively low regulation and active labour policies and are oriented to maintaining a high employment rate. Hence, both insurance and redistributive institutions are designed to reduce incomes dispersion and minimize social stratification. Centralized bargaining and wage compression are also prevalent in this system.

In addition to these three models proposed by Esping-Andersen (1990), some scholars also identified a **Southern European model** of welfare state (Ferrera, 1996; Andreotti et al., 2001), of which Italy is a representative. Although this model is similar to the conservative model in having relatively high decommodification and relatively high persistence of social stratification, the distinctive characteristic of this model is the role of the family in taking up insurance and redistributive functions that are prerogative of the state in other models. This model is also

characterized by a relative "immaturity" (Dallinger, 2010) and rudimentary character (Ferrera, 1996) and is relatively under-dimensioned in some of its functions (e.g. active labor market policies) and over-dimensioned in others (e.g. the pension system).

These four countries differ substantially with respect to inequality and the weight of the state in the economy. Redistribution, measured by the difference between the Gini index before and after tax and transfers, is lowest in the US (18%), followed by Italy (25%), Germany (29%), and Norway (30%) (see Figure 1 in the main paper). The resulting inequality in disposable income follows the reverse ranking, the Gini index being 39% in the US; 33% in Italy, 29% in Germany and 26% in Norway.[1] Another widely used measure of inequality, the share of income going to the richest 1% of the population, shows the same ranking for the four countries in 2013 (see Figure S1). Figures S2 and S3 show substantially lower levels of taxation and social spending – as a percentage of GDP – in the US compared to the three other countries. Social spending in Norway and Italy overtook social spending in Germany over time, widening the gap with the US.

Esping-Andersen's taxonomy has undergone several revisions and even criticism. Moreover, since the late '90s reforms to the conservative and the social-democratic models have softened the state involvement in market income redistribution. Nonetheless, we believe that selecting one country from each regime ensures a broad variety in preferences for redistribution in our study and the possibility to generalize results to other countries.

S1.2 Sample demographic and cultural characteristics

We report descriptive statistics of the demographic and cultural characteristics of our sample, broken down by location and country, in Table S1. Overall, our sample was balanced in terms of gender (share of females=50.2%, s.d.=0.5). Mean age of participants was 22 years (s.d.= 3.3). The attrition rate in reporting household income was high. Yet, we can see large differences in mean income between locations. Average income in ITA_1 (Salerno) is less than half as ITA_2 (Milan), while average income in USA_1 (Mississippi) is about two thirds as USA_2 (Washington State). Such differences were expected and reflect large disparities in average income between regions in Italy and the US. Conversely, there is virtually no difference in average income between GER_1 (Bremen) and GER_2 (Munich). This reflects lower levels of inequality in German regions that were part of the Federal Republic of Germany (Western Germany). Average income would have arguably been lower in regions which were part of former Democratic Republic of Germany (Eastern Germany). However, we thought that selecting this region would have introduced too large cultural differences within the German sample, so we preferred to select two regions within former Western Germany that looked like *a priori* culturally distant.

Using a student population instead of a nationally representative population introduces two kinds of distortion with respect to household income. First, average household income in a university student sample is overall higher than in the relative national populations, because people from higher household income are disproportionally represented among university students. The second distortion occurs if the former bias differs across countries, in particular if university access is more open to lower socio-economic strata in some coutries than in some others. In other words, if the over-representation of high-income people occurs at different degrees in different countries, cross-country comparability will be affected because some country samples will include relatively more people from lower socio-economic strata than other countries. After having expressed household income data in Purchasing Power Parity (PPP)-adjusted US Dollars (USD), we find both types of distortions in our study. Over the whole sample, average income by university students in our sample was higher by a factor of about 60% than average income in the respective national populations. Moreover, this occurred at different degrees in the four countries. The excess in the sample average income compared to national average income was lowest in Italy (38%) and highest in the US (88%), with Norway (43%) and Germany (70%) falling between these two extremes. In other words, Italian universities were those more open to students from the lowest socio-economic strata, while US universities were the least open in our sample. As a result of these distortions, Italian participants were approximately 35% "poorer" than US participants than what is the case in real life. While Norwegians were on average around 7% richer than US people in real life at the time the study was conducted, their average income was only 82% of US participants in our

[1] Such data refer to 2013, the year closest to the time when our research was conducted.

sample.[2] Figure S4 plots the distribution of household income (in log) in our sample and highlights the higher dispersion of the US sample in relation to the other samples.

Table S1 also reports the occupation classification - based on the Ganzeboom and Treiman (1996) coding - and educational attainment of participants' parents. It is worth noting that while in both the US and Norway 88% of our participants had their father occupied in the two highest categories in the ranking, comprising professionals and executives, the same was true only for 47% of Italian participants and 72% of Germans. On the other hand, 54% of Italian participants had their father occupied in the two lowest categories in our ranking - comprising routine clerical employees, civil servants, and unskilled workers - while the same was the case only for 19% of US participants. The cross-country differences in the occupation of participant's mothers are less marked. Likewise, substantial differences also exist in terms of parents' educational attainment, with only 5% (3%) of Italian participants' fathers (mothers) having a university degree, while this portion reaches 44% for Norwegian participants' parents (30% for mothers). Clearly such differences in occupation and educational attainment may reflect differences in both national populations and in the different access rate of people from lower socio-economic strata into universities. Nonetheless, the general picture is one of substantial heterogeneity between our national samples.

To be sure, these distortions are not desirable and partially affects the generalizability of our results (see Section 5 of main paper). It was impossible to control for such distortions before the conduction of the study, because universities' administration offices declined our request to provide us with information on students' household income. Since the two US universities in our study were outside "Elites" or "Ivy League" colleges, we thought that the socio-economic background of their students would have been comparable to that of European universities, but clearly this did not turn out the be the case. Based on the comprehensive review of US colleges by Chetty et al. (2020) - which was not available at the time of our study - University of Mississippi ranks 194 and Washington State University 434 in a ranking of more than 2,000 US universities according to their "economic sectarianism", i.e. the extent to which a university enrolls students from the top 1% of the income distribution as opposed to students from the bottom 60%. [3]. Hence, even if the two US universities part of our study did not score at the very top of the index, they were still located in the higher tiers of the ranking.

Substantial cultural differences also existed across countries, as it emerges from answers to a set of questions used in international surveys to measure cultural traits and attitudes toward the society. Most notably, the percentage of people trusting unknown others from the general population - as measured by the classic GSS question - ranges from 24% in Italy to 84% in Norway. All other scores have been standardized at the level of the whole sample, to permit easier comparisons. People from the US are those scoring higher in our "Beliefs of Success Determinants" scale, which measures the degree to which an individual believes that economic success is under one's control. Italians are the second highest scorers, followed by Norwegians and Germans. US people are also those more conservative and individualistic in our sample, while Germans are those more concerned with the respect of civic norms. Details on the items used for the construction of such scales are reported in SOM: Section S3.1.

Finally, we also note how substantial differences in cultural traits emerged within Italy and the US, while differences were less pronounced within Germany. US participants from USA_1 (Mississippi) scored significantly higher on conservative values ($z = 5.31$, p-value < 0.0001, $N = 371$; see variable description in Section S3.1 and Question 15 in questionnaire), distrust in others ($z = 3.30$, p-value $= 0.001$, $N = 370$; see Question 18 in questionnaire), and rightwing political orientation ($z = 1.75$, p-value $= 0.08$, $N = 270$; see Section S3.1 and Question 10 in questionnaire) than participants from USA_2 (Washington State), while no difference emerged for the other

[2] We used World Bank data to compute PPP-adjusted per capita GDP. Our account is merely illustrative, because the attrition rate in our sample on the income question was particularly high, with about 30% of participants declining to respond. Moreover, the conversion from household income to per capita income in national data may introduce some further bias, although this should not affect the magnitude of between-country comparisons. We deal with imputation of missing income data in SOM: Section S3.8.

[3] In particular, 5.7% of students attending University of Mississippi come from the the top 1% of the US income distribution, and 27.8% come from the bottom 60%. These percentages are 1.4% and 24.6% for Washington State University, respectively. Data were accessed at this internet link: https://www.nytimes.com/interactive/2017/01/18/upshot/some-colleges-have-more-students-from-the-top-1-percent-than-the-bottom-60.html

scales. In particular, both samples in the US were equally convinced that economic success is under individual control. On the contrary, Southern Italians scored significantly higher than Northern Italians on the "Beliefs of Success Determinants" scale (z = 5.01, p-value < 0.0001, N = 320) and individualism (z = 1.83, p-value=0.07, N = 320), while they scored significantly lower than Northeners on desirability of compliance with civic norms (z = -2.48, p-value= 0.0130, N = 320), and rightwing political orientation (z = -2.18, p-value=0.03, N = 320). It is particularly noteworthy that participants from the South believed more that economic success is under one's controls than participants from the North of Italy, in spite of being economically more disadvantaged. This is in line with Alesina et al. (2018), who found that belief that societies provides opportunities to climb up the economic ladder tends to be higher among people of more disavantaged background. The only differences in cultural traits we found in Germany regarded Northern Germans scoring higher on rightwing orientation (z = 3.88, p-value=0.0001, N = 330) and lower on individualism (z = -1.72, p-value=0.08, N = 329) than Northern Germans.

S2 Research design and experiment procedures

S2.1 Strategy to ensure comparability across locations and countries

Cross-national experimental research is subject to three issues that may compromise data comparability (Roth et al., 1991). We followed standard methods in the literature to address such issues (Roth et al., 1991; Herrmann et al., 2008; Buchan et al., 2009).

- **Experimenter effects**: It is well-known that personal differences between experimenters conducting research sessions may induce some differences in participants' behavior. Personal differences include personality or gestural differences, or other physiological differences in, for instance, voice pitch, intonation, and, of course, gender and age, which may ultimately elicit different responses by participants. We strove to minimize such differences by having one of the authors (Gianluca Grimalda, GG henceforth) conducting all the research sessions in Italy, the US, and Norway. Another author, Ulrich Schmidt, conducted the sessions in Germany, under GG's supervision. Sessions in Italy were conducted in Italian (of which GG is a mother-tongue speaker) and sessions in the USA and Norway were conducted in English (in which GG is a fluent speaker). Given the generally high fluency in English of Norwegian university students, English was the language used in Norway. The room assistant was mother-tongue Norwegian in order to help with possible comprehension problems. Ulrich Schmidt is mother-tongue German speaker. Both GG and Schmidt followed an experimental script (see SOM: Section 4) that provided a detailed description of the various stages of the experimental session and the instructions to be administered to participants (see the timeline of the experiment in Fig. 3 in the main paper). Both GG and Schmidt read the same instructions from this script, thus ensuring that identical information was given in identical order and in identical format in all the research sessions. All the materials used in the experiment, such as the numbered ID cards, the boxes to perform random draws, etc, were the same across all sessions. See Section 5 in the main paper for further discussion of experimenter's accent effects.

- **Language effects**: Since a word may have a different nuance, or additional meanings, when translated into another language, language effects may also pre-empt full comparability of cross-national experimental data. Differences in syntactic rules across languages, and the fact that language expressions ultimately reflect different cultural norms in the way people address each other in different countries, may also introduce some subtle differences in the way people react to the same set of instructions in different languages. In fact, a significant foreign language effect in decision-making has been found citepcosta2014piensa. We followed what we believe is the best practice in cross-country and inter-country experimental research and used the back-translation method to make instructions in English, Italian, and German as comparable as possible. We elaborated the master version of the instructions in Italian. Researchers from our team translated this version into English and German. We then asked professional English and German transators to backtranslate the translated version into Italian and English, respectively. This back-translated version was compared with the original

version. Every discrepancy in the two versions was discussed among members of our team and the translators, and the original translations were then adapted to minimize differences in meaning.

- **Token purchasing power effects**: Another issue that could hinder comparability is the possibility that the monetary incentives used in different locations were different from each other. We followed standard practice in experimental economics and formulated instructions referring to 'tokens' rather than to national monetary units. Adjusting the monetary value of a token using the official exchange rate between two currencies is not sufficient, because differences in general price levels between the two countries will alter the purchasing power of a currency when exchanged into another currency. Given that official statistics of Purchasing Power Parity are published with a delay of some years on current prices, we used the latest issue of The Economist BigMac Index to adjust for PPP across countries. We also adjusted PPP within countries to take into account differences in standards of living, using differences in the price of an espresso coffee in Italy, and differences in average workers' wages in the US. As a result, the token value in Salerno and Oxford, Mississippi was around 8% lower than in Milan and Pullman, WA, respectively. The Big Mac index provides a unique value for the whole of the euro area. We used other estimations of standard of living around Europe, and found no appreciable price differences between Bremen, Munich and Milan. We thus anchored the token values in Germany to those used in Milan.

S2.2 Experimental protocol

Experimental sessions were conducted in the following order and periods: Milan (October 2009); Salerno (November 2009); Washington State (January 2010); Mississippi (February-March 2010); Oslo (August-September 2010); Bremen (January 2013); Munich (May-June 2013). Experiments could not be run simultaneously because one researcher of the team (Gianluca Grimalda) either conducted or was present at every session to ensure the uniformity of the protcol application. The large hyathus in time between fieldwork in Norway and Germany was caused by the necessity to raise extra funds. Since the macroeconomic and political situation was relatively stable between 2010 and 2013, as well as during October 2009 and August 2010, we do not believe that participants' preferences changed over this period.

In all seven locations, students were recruited by email sent by a local university professor who regularly conducts experiments with students, through posters, leaflets, or announcements during lectures. Students were informed that sessions would have been run by a guest researcher, with the help of local lab assistants. Students had to sign in at a registration webpage, in which they were requested to submit information on their citizenship and the ZIP-code of their parents' main residence. This information was used to screen out students who were not country citizens and whose households did not reside in the region/state where the university was located or surrounding regions/state. In Norway, only students' citizenship was used as a criterion to determine elegibility. All students signed in to the session and only one student decided to drop out of the session after this had started.

Groups of 21 participants were convened at the university labs. Before entering the session, prospective participants were given an information sheet describing in general terms the contents of the research session. It was clearly stated that participant could have left the session at any time, but in this case they would have their payment forfeited. Participants were asked to sign an informed consent form before entering the lab. At their entrance, they drew a card from a deck of cards numbered from 1 to 21, which determined their ID throughout the session. They were then asked to sit at the workstation having the same number as their card and wait quietly for the start of the session. In order to ensure that 21 participants were present at each session, we invited between three and six extra participants in addition to the 21 as "standbys". Such students were admitted to the main session in case some student from the main list did not show up. If the session was full, they were paid a show-up fee of 5USD (or the PPP-equivalent in other countries) and sent home. In some instances, even this "overbooking" of standbys was not enough to fill up a session with 21 students. In these cases, we recruited some other students "on the spot", or asked some participant to ring up their peers. If these additional recruits failed the eligibility check, they were later expunged from the dataset.

Participants were informed that the session consisted of three parts, but no hint was given as to what would have come in the ensuing part(s). Participants were paid for the outcome of one of the three parts, which was randomly selected at the end of the decisions. The selection of one decision for the determination of payoffs prevented income effects. After having administered the first part of instructions, participants went through a comprehension check. This comprised five multiple choice questions. If the students answered correctly, they were admitted to the decision stage. If a student made one or more mistakes, they were requested to take all questions again. After a second failure in correctly answering all questions, a researcher would assist the student in clarifying doubts and finding the correct answer. If necessary, the researcher went through the instructions again. In no case subjects failed this last round of comprehension questions.

After all subjects answered correctly, it was announced that everyone had passed the test and decisions over redistribution could be made. Participants were asked to propose the level of taxation desired for the first part, τ_1. We label the four experimental decisions D_t and the corresponding tax rates τ_t, $t = \{1 \dots 4\}$. Afterwards, initial earnings were assigned, upon the completion of a set of tasks in the Merit treatments and of a lottery in the Luck treatments. Initial earnings were not revealed. The decisive individual for D_1 was then randomly selected by asking a student to draw a card from a deck of cards numbered from 1 to 21.

Instructions for the second part were then administered. A second comprehension check comprising three questions took place according to the same protocol described above. Participants then proposed their desired level of taxation for the second part, τ_2. Afterwards, participants were asked to indicate their prediction over their *initial* earnings in D_2. The expectation was not monetarily incentivised to prevent that participants' declared expectation did not affect in any way their performance in the Merit treatments. We feared that some participants may have provided a bad performance in the tasks/tests to make their prediction of a bottom-ranking finish come true. Initial earnings were then assigned, upon the completion of a second round of tasks in the Merit treatments or lotteries in the Luck treatments. Once again, initial earnings were not communicated, and the decisive individual was then randomly selected for the second decision.

Finally, the third part of instructions was administered, participants chose τ_3, and subsequently were asked to indicate their prediction over their initial earnings in D_3.[4] We define these two predictions over initial earnings η_t, $t \in \{2, 3\}$. A third round of tasks and lotteries was then carried out. At this point, without prior announcement, each participant was informed of their initial earnings for the third part, and was given the chance to revise his/her previous choice of τ_3. We call this revised tax rate τ_4. The decisive individual for the third part was then randomly selected. Subsequently, one participant drew which Part out of the three would determine participants' payoffs. All the random draws were made publicly by some participants. Neither the decisive individual's ID nor which Part determined payments were revealed to participants.

Participants earned an average of \$26 in the US and the PPP-equivalent in other countries, which included a show-up fee of \$7 (or PPP-equivalent). Payments were handed out in cash in a sealed envelope upon completion of the questionnaire in all locations except Munich, in which the standard practice was for students to be paid in person and without concealing the payment to the local lab director. Students had to sign a receipt that was to be placed in a box at the exit. In order to maximize students' privacy and minimize experimenter demand effects, it was clearly stated that the signed receipts would have been sent directly to the university administration without the researchers handling them. Sessions lasted around 1 hour and 40 minutes, though Luck treatment sessions were about 15 minutes shorter given the absence of tasks or tests.

S2.3 Ambiguity and risk aversion measures

After having taken the four experimental decisions on redistribution and before answering the questionnaire, we elicited ambiguity and risk aversion through two monetarily-incentivized tasks. Both tasks were made up of three decisions, and subjects were informed that they would be paid according to the outcome of one decision out of the six. In the ambiguity task, individuals had to choose between two boxes from which a random draw would have taken place. Each box

[4] This prediction was not asked in the first part, because, as we noted, self-interest was irrelevant in that decision. Moreover, it would have been little informative to ask one's expectations on her performance before having actually performed the task at least once.

contained 100 paper slips of either red or grey color. In Decision 1 of the ambiguity task, it was announced that Box 1 contained 50 red slips and 50 grey slips. Participants could thus infer that the probability of winning from Box 1 was 50% in Decision 1. The composition of colors in Box 2 was instead not announced. Subjects were informed that a random draw had been run from a discrete uniform distribution with support [0, 100] prior to the session. This determined the number of paper slips associated with the winning colour. Color red would ensure the win of five tokens if drawn for either Box 1 or Box 2, while color grey would yield zero tokens. Participants were then asked to choose between Box 1 or Box 2. They would win 5 tokens if the slip drawn from the Box of their choice was red, or 0 if grey.

The second and third decisions of the ambiguity task involved the same Box 2, but the number of red (grey) slips in Box 1 was 45 and 40 (55 and 60) in the second and third decision, respectively. The structure of the choice was the same. Participants had to choose between Box 1 and Box 2, and they would win 5 tokens if the slip drawn from the Box of their choice was red. This means that the probability of winning 5 tokens from Box 1 was 50% in Decision 1, 45% in Decision 2, and 40% in Decision 3. Ambiguity-indifferent individuals should be indifferent between Box 1 and Box 2 in the first decision, but prefer Box 2 in Decisions 2 and 3. Ambiguity-averse participants should strictly prefer Box 1 to Box 2 in the first decision, but could prefer Box 2 to Box 1 depending on their degree of ambiguity aversion. Highly ambiguity averse individuals would prefer Box 1 in all three choices, while individuals with intermediate levels of ambiguity aversion could switch from Box 1 to Box 2 in either Decision 2 or 3. Ambiguity-loving individuals would strictly prefer Box 2 in all three decisions.

The risk aversion test had subjects choosing between participating in a lottery with a 50% probability of winning either five tokens or zero tokens. The win was determined by drawing a red paper slip from a box containing 50 red and 50 grey paper slips. The alternative was to receive a fixed and certain payment, which was 2.5 tokens in Decision 4 (of this set of decisions), 2.1 tokens in Decision 5, and 1.7 tokens in Decision 6. Risk-neutral individuals should have been indifferent between the lottery and the certainty equivalent in Decision 4, and then switch to the lottery in Decisions 5 and 6. Risk-averse individuals would strictly prefer the certain payment in Decision 4, but could switch to the lottery in either Decision 5 and 6 depending on their degree of risk aversion. Risk-loving individuals would have always preferred the lottery.

At the end of these six decisions, a participant was asked to randomly select the Decision according to which everyone would be paid in this second set of six decisions, and then some other participant was asked to perform the random draws from the boxes to determine relative to the Decision that had been selected. Individuals with monotonic preferences over ambiguity or risk aversion should switch only once, if at all, from Box 1 to Box 2 in the ambiguity task - or from the safe payment to the lottery in the risk task. However, 14% of participants in the ambiguity task and 8% of participants in the risk aversion task had multiple switching points, denoting either confusion or that they maximized over the whole set of decisions rather than considering each decision as independent from each other. Rather than dropping observations involving multiple switching points, we have constructed our ambiguity/risk aversion measures by counting the number of "ambiguous" or "risky" decisions that they made over the three decisions. In particular, an individual scoring 0 - or 3 - in our ambiguity aversion scale always chose Box 2 - or Box 1, respectively. An individual scoring 1 or 2 in the scale chose Box 2 once or twice. Likewise, an individual scoring 0 - or 3 - in our risk aversion scale always chose the lottery - or the certain payment, respectively. An individual scoring 1 or 2 in the risk aversion scale chose the safe payment once or twice. The measure of risk aversion offers us an estimate of the parameter ρ_i, i.e. the purely individual component of risk aversion in the utility function of our model.

S3 Additional analyses

S3.1 Description of econometric model and variables

For the main regressions reported in the paper (see Table 1 in the paper and SOM: Table S3), we fitted tobit models censored at $\tau_i = 0$ and $\tau_i = 100$ with τ_i, $i = 1, \ldots, 4$ as dependent variables. The tobit model is appropriate because the latent variable generating preferences for redistribution could take values below $\tau_i = 0$ and above $\tau_i = 100$, so our observation of this variable is

actually truncated at such upper and lower bounds. Standard errors are clustered at the session level to control for heteroschedasticity. Clustering at the level where randomization took place is recommended by Abadie et al. (2017).

We describe below the variables used in the regressions. A first set of independent variables - used in models (1) for each Decision - include:

- **country dummies** ITALY, GERMANY, NORWAY (US being the omitted category).
- **Expected / Actual Earnings** are expected earnings in Decisions 2 and 3, and actual earnings in Decision 4. EXP_EARN_3_X_LUCK is the interaction term between Expected earnings and Luck treatments in Decision 3.
- ABILITY, RANDOM, ORIGIN are **dummy variables for treatments** (EFFORT being the omitted category).
- **Gender** identifies female participants.
- **Experience** identifies participants who previously participated in experiments (Question 25 of questionnaire, reported in SOM: Section 5).
- **Ethnic_minority** is a dummy variable identifying all participants declaring in the post-experiment questionnaire they belong to an ethnic group different from the majority in the four countries – namely, non-Hispanic Whites in the US, and Caucasian whites in the other three countries (Question 26).

As proxies for SES, we use the level of education for both mother and father, codified on four levels of attainment. We also include a measure of occupational status for both mother and father, using the internationally validated measure of Ganzeboom and Treiman (1996). Additionally, we include dummies for participants whose mother or father were unemployed, retired, or househusband/wife. In particular:

- **Father_unemp**, **Mother_unemp**, **Father_retired**, **Mother_retired** are dummy variables identifying participants whose parents are unemployed or retired, respectively.
- **Housewife** is a dummy variable identifying participants whose mothers performed housework as their main occupation (no instance of househusband occurred). All the occupation variables are based on Questions 29-30.
- **Father_edu_i** and **Mother_edu_i**, $i = 1, 2, 3$, are dummy variables identifying the highest educational attainment of participants' parents (Questions 27-28). The omitted category is parents having completed primary or secondary education. Level 1 corresponds to having completed high school or equivalent. Level 2 corresponds to having an undergraduate degree. Level 3 corresponds to having a postgraduate degree.
- **Comprehension_1** and **Comprehension_2** are the number of correct answers in the first attempt in the comprehension quizzes for Part 1 and Part 2, respectively (see SOM: section S2.2). Comprehension_1 ranges from 0 to 5 and Comprehension_2 from 0 to 3. We consider them as a measure of participant's degree of comprehension of the experiment (even if all participants had to answer correctly after some trials to make decisions).

A second set of independent variables - used in the second model for each decision - include cultural, psychological, and attitudinal traits. We wanted to analyze the extent to which these factors moderate the country differences obtained with the basic model.

- **Risk Aversion** and **Ambiguity Aversion** are the number of times (out of three decisions) that a participant preferred the safe option to the risky option, or the lottery with stated probabilities to the lottery with unstated probabilities, respectively, in the risk and ambiguity aversion tasks, respectively (see SOM: Section S2.3).

- **Beliefs of Success Determinants** is a summative scale of a set of questions asking a participant to state the extent to which they believe that economic success is under one's control. The scale included the following items: Whether the participant believed that (a) poverty is caused by lack of effort rather than luck (Question 1); and that (b) hard work, (c) money inherited from families, (d) dishonesty, (e) good luck, (f) physical appearance, (g) right connections, (h) being a member of a particular race, and (i) gender were important to get ahead in life (Question 2). Items (c) through (i) were reverse-scaled so that greater values in the scale point to greater locus of control over economic success. The Cronbach alpha of this scale is 0.70, denoting acceptable internal consistency. Some items from Question 2 - namely, whether talent, willigness to take risks, or getting the right education of training - were important to get ahead in life, were excluded from this scale, because they reduced the Cronbach's alpha to 0.64. They were also the three factors weighing the least on the first extracted component in principal component analysis. This suggests that beliefs over the relevance of talent, education, and willingness to take risks for economic success tap into into a potentially different dimension than those underlying the other items.

- **Conservatism**, a summative index of participants' answers to the acceptance of homosexuality, prostitution, eutanasia, and abortion (Question 15).

- **Civic Norms** is a summative index of participants' answers to the acceptability of claiming government benefits when one is not entitled, avoiding a fare on public transport, cheating on taxes (Question 14).

- **Individualism** is a summative index taken from the World Value Survey (Ingelhart et al., 2014) to identify how much the participant pursues individualistic values as opposed to collectivistic ones (Question 16). It comprises answers to questions on whether the participant agrees that (a) parents and children must stay together as much as possible, (b) s/he feels good when cooperating with others; (c) Participant gets tense and aroused when another person does better than him/herself; (d) Participant relies on him/herself, rather than others; (e) A woman needs to have children to be fulfilled.

- **Trust** is the answer to the general General Social Survey question on whether the participant trusts general others (Question 18).

- **Left** and **Right** comprise participants placing their political orientation on points 1-3, or 8-10, respectively, of the Likert scale concerning political orientation, with "centrist" participants scoring from 4 to 7 being the omitted category.

- **Entry** taps into the participant's ethnocentrism, asking whether the entry of foreign people should be restricted (Question 8).

- **Competition** asks participants whether they agree that competition is good (Question 6).

The 'X' operator in the Tables reporting econometric results denotes an interaction terms between the variables before and after the operator. For instance, $US\_X\_HighEarner\_4$ in Table S3 is the interaction between a dummy for US participants and a dummy identifying above-median earners in Decision 4.

S3.2 Analysis of expectations on one's earnings and confidence in expectations

In this section, we look at the effect of expectations on initial earnings (see Section 4.1.4 in main paper; SOM: Table S9 and Tables S11). $E_i\left(\tilde{y}_2^P\right)$ - the expectaction over one's earnings in D_2 - is a strong predictor of τ_2 ($\hat{b} = -2.88$; $SD = 0.34$; p-value < 0.001). The impact of $E_i\left(\tilde{y}_2^P\right)$ is sizable. An individual who expects to top the earnings scale is estimated to demand a τ_2 that is 57.6 percentage points lower than an individual who expects to be at the bottom of the earnings scale.

An even larger effect is found in D_3. $E_i\left(\tilde{y}_3^P\right)$ is a strong predictor of τ_3 ($\hat{b}$ = -3.82; SD=0.41; p-value < 0.001). An individual who expects to top the earnings scale is estimated to demand a

τ_3 that is 76.4 percentage points lower than an individual who expects to be at the bottom of the earnings scale.

To check for the degree of confidence that participants had over their stated expectation of initial earnings, participants were asked "How sure were you about your prediction?" (see SOM: Section 4: Guess 2 and Guess 3 sections). The three possible answers were 1="Not at all sure"; 2= "Somewhat sure"; 3="Completely sure". As it may be expected, the only treatment where the null hypothesis of equality of distribution for the degree of confidence into one's expectation in Decision 2 and 3 is not rejected is the Random treatment (Wilcoxon Sign Rank (WSR henceforth): $z = 1.49, p = 0.14, N = 303$). The null of equality of disributions is instead soundly rejected in all three other treatments: WSR: $z = 3.19,\ p - \text{value} = 0.0014,\ N = 294$ in Ability treatment; WSR: $z = 5.33,\ p\text{-value} < 0.0001,\ N = 306$ in Effort treatment; WSR: $z = 3.81,\ p\text{-value} = 0.0001,\ N = 286$ in Origin treatment. These results are consistent with participants increasing their confidence that their expectation over initial earnings was correct after having received the signal in D_3. Hence, the signal seems to have been informative for individuals.

Interestingly, we find that countries cluster on the confidence variables in the same pattern repeatedly observed in this study. In two-tailed Mann-Whitney non-parametric tests, we find no significant difference between US Americans and Italians neither in D_2 (p-value=0.20, $N = 694$) nor D_3 (p-value=0.53, $N = 694$). Likewise, we find no significant difference between Germans and Norwegians neither in D_2 (p-value=0.69, $N = 495$) nor D_3 (p-value=0.69, $N = 495$). Conversely, US Americans are significantly more confident in their earnings expectations than Germans in both D_2 (p-value=0.0021, $N = 704$) and D_3 (p-value=0.028, $N = 704$). US Americans are also significantly more confident in their earnings expectations than Norwegians in both D_2 (p-value=0.038, $N = 539$) and D_3 (p-value=0.015, $N = 539$). Likewise, Italians are significantly more confident in their earnings expectations than Germans in both D_2 (p-value <= 0.0001, $N = 650$) and D_3 (p-value = 0.0084, $N = 650$) and than Norwegians in both D_2 (p-value=0.0017, $N = 485$) and D_3 (p-value=0.0056, $N = 485$; See replication codes for full output).

S3.3 Analysis of POUM

As explained in the paper (equation 8), $POUM$ is a dummy variable identifying individuals who received information that the mean of their initial earnings in D_1 and D_2 lied below the median and who expected to have initial earnings above the median in D_3. On average, 16.1% of the sample satisfied this condition. We call them "POUM believers". As noted in the main text (Section 4.1.4), the null hypothesis of equality of distribution across countries of POUM believers cannot be rejected. In fact, the share of POUM believers appears to be very similar across countries, as it ranges from 13.3% in Norway ($S.D. = 0.34$) to 17.6% in the US ($S.D. = 0.38$), with Italy ($mean = 15.9\%$, $S.D. = 0.37$) and Germany ($mean = 16.1\%$, $S.D. = 0.37$) lying in between. The econometric model used in Table S5 and the other independent variables are described in SOM: Section S3.1. $POUM\_X\_y$ where $y = \{$Expected_Initial_Earnings, Luck, USA, Italy, Germany, Norway$\}$ are interaction terms between $POUM$ and the variables listed in y. We expected that the effect of $POUM_i$ would be stronger in the Merit condition than in the Luck condition. However, this is not the case, as an interaction term between $POUM_i$ and Luck is statistically insignificant (p-value = 0.30; SOM: Table S5, column 4), and those believing in upward mobility reduce their demanded τ_3 even in the Random treatment, where s is uninformative for future earnings (Table S5, column 5). In fact, there is no significant difference in the effect of POUM across any pair of the four treatments (not reported, results available in analysis codes). Finally, the effect of POUM is not moderated by demographic characteristics (SOM: Table S5, column 6). Table S6 reports the result of pairwise tests on the null hypothesis that country dummy coefficients are equal to each other. The null is not rejected for any of such tests, suggesting that the POUM did not have significantly different effects across countries.

S3.4 Analysis of strict selfish and altruistic individuals

We further investigate the tendency for Norway and Germany's sample to have a larger proportion of self-interested participants than the other two countries, albeit insignificantly so (see main paper: Section 4.2). In this section, we further analyze individual motivations and argue that the

larger proportion of participants acting consistently with self-interest can be explained by German and Norwegian prospective low-earners demanding full redistribution significantly more often than participants from the two other countries.

We define *Strict Selfish Low-Earners* in D_4 those participants who knew that their earnings were below the median level and demanded $\tau_4 = 100\%$. That is, those were participants who maximised their final earnings by demanding $\tau_4 = 100\%$. By extension, we also call *Strict Selfish Low-Earners* in D_2 and D_3 those *expecting* to earn less than the median level, and who demanded $\tau = 100\%$. Likewise, *Strict Altruistic Low-Earners* are those demanding $\tau_t = 0\%$ when their earnings are (or are expected to be) below the median in D_t, $t = \{2, 3, 4\}$.

Figure S10 reports the proportion of such types per country and decision. Overall, 20.8% of the whole sample in D_4 are strict selfish low-earners, with pronounced differences across countries (SOM: Figure S10a). We use a tobit estimator with country and decision fixed effects and robust standard errors clustered at the individual level over pooled decisions for D_t, $t = \{2, 3, 4\}$ (not reported, see analysis reproduction codes). Country-level differences for strict selfish low-earners follow the clustering that we have repeatedly observed. The null hypothesis of equality of country coefficients is not rejected in the comparison between Norway and Germany ($t = -0.007$, p-value $= 0.76$), and Italy and the US ($t = -0.003$, p-value $= 0.85$), while it is rejected at p-value < 0.05 in all other pairwise comparisons (Table S12a).[5] Overall, it is clear that a larger portion of Norwegian and German participants felt entitled to demand full redistribution of earnings, when this was in their self-interest, than their Italian and US counterparts. The proportion of strict altruistic low-earners is conspicuously smaller than strict selfish low-earners, as it averages 3.1% of the sample overD_t, $t = \{2, 3, 4\}$ (Figure S10b). Econometric analysis reveals nonetheless a significantly higher concentration of strict altruistic low-earners in Italy vis-à-vis each of the other three countries ($t = 0.023$, p-value $= 0.040$ for Italy vs. US; $t = 0.031$, p-value $= 0.002$ for Italy vs. Germany; $t = 0.0366$, p-value $= 0.011$ for Italy vs. Norway; SOM: Table S12b).

We replicated the above analysis for the symmetric categories of *Strict Selfish High-earners* - namely, those demanding $\tau = 0\%$ when their earnings are (or are expected to be) above the median - and *Strict Altruistic High-earners*- namely, those demanding $\tau = 1000\%$ when their earnings are (or are expected to be) below the median. The percentage of strict selfish high-earners is sizable (18.7% of the whole sample), albeit inferior to that of strict selfish low-earners. The number of strict selfish high-earners is more evenly spread across countries than is the case for strict selfish low-earners (SOM: Figure S10c). The null of equality of country coefficients is rejected at p-value < 0.1 only in two of the four pairwise comparisons involving US and Italy at one end, and Germany and Norway on the other (SOM: Table S12c.

The percentage of strict altruistic high-earners is instead remarkably small, being equal to 4.4% across D_t, $t = \{2, 3, 4\}$ (Figure S10d). In this case, the null of equality of distributions between countries can never be rejected for all pairwise tests (SOM: Table S12d).

S3.5 Analysis of treatment differences

S3.5.1 Analysis of differences within Merit and Luck treatments

We already commented in the main paper on the differences between Effort and Ability treatments, and between Random and Origin treatments, pooling all countries and decisions (see Table S13, columns 3-4). We now break down our analysis by country and decisions. First of all, we introduce interaction terms between treatments and country in our basic model (main paper: equation (11)) in order to analyze treatment differences within each country pooling the four decisions. The regressions are reported in SOM: Table S14, columns 4-5. The results of tests on the hypothesis that treatment dummy coefficients differ from each other are reported in Table S16.

We further break down the analysis and investigate the existence of treatment differences within each country and each decision. We do this by introducing interaction terms between country dummies and treatment dummies in the basic econometric model for individual decisions (main paper: equation (10); SOM: Table S3). The results for all pairwise tests on the null hypotheses that treatment dummies are equal to each other per decision and per country are reported in

[5] P-values drop out of significance at the 5% level if demographic controls are included into the analysis (not reported).

SOM: Tables S18 through S21. In no country and no decision can we find a statistically significant difference between redistribution in Effort and Ability treatments, with the only exception of τ_4 in Italy, where redistribution in the Ability treatment was significantly *lower* than in the Effort treatment (p-value < 0.001; SOM: Table S19d), going against Hypothesis 3 (see main paper: Section 3.4.3). As for the two Luck treatments, no significant difference is found in any decision in the US, while in the other three countries redistribution in the Origin treatment is occasionally significantly *lower* than in the Random treatment, even in this case against Hypothesis 3 (see Table S19b-c, Table S20b, Table S21b-c), although aggregating across the four decisions we cannot reject the hypothesis of equality of Origin and Random coefficients in each country (Table S16). We conclude that we do not find the expected differences neither between Effort and Ability treatments, nor between the Random and Origin treatments. If anything, redistribution patterns tend to move in the opposite direction of what we had hypothesized.

It is worth mentioning that DPW used a game of Tetris to measure ability and a quiz to measure acquired knowledge and did not find significant differences between these two types of Merit treatment. This confirms the hypothesis that individuals do not seem to react strongly to difference in the source of earnings within either Merit or Luck treatments. DPW did find a significant difference between the Origin and Random treatment in their US sample in both D_1 and D_2, the sign, however, being opposite to what would have been expected. In our US sample, differences are insignificant and of opposite sign to DPW for both D_1 ($b = 8.6$, p-value $= 0.20$) and D_2 ($b = 4.4$, p-value $= 0.56$; SOM: Table S18a-b).

S3.5.2 Analysis of differences between Merit and Luck treatments

Since no significant differences emerged *within* the Luck and Merit treatments (see Section S3.5.1), in this section we pool Effort and Ability treatments together (Merit treatments), and we do the same with Origin and Random (Luck treatments). We commented on differences in the reward of merit aggregating over the four decisions in the main paper (Section 4.3.1). In this section, we analyze country differences in individual decisions. The general pattern of significant propensity to reward individual merit holds significantly for D_1 and D_2 in all four countries (Table S17, columns 1-4). In D_3, the coefficient difference between Luck and Merit condition is not significant in Norway ($\hat{b} = 9.7$, p-value=0.12), weakly significant in the US ($\hat{b} = 11.5$, p-value=0.079), and significant in Italy ($\hat{b} = 16.8$,p-value=0.002) and Germany ($\hat{b} = 19.8$,p-value=0.038; Table S17, column 5). In D_4, redistribution in Luck is not significantly different from redistribution in Merit treatments in both the US ($\hat{b} = 0.75$, p-value=0.91) and Norway ($\hat{b} = 3.7$, p-value=0.61), while it is significantly higher in Luck than Merit treatments in both Italy ($\hat{b} = 27.7$, p-value$<$0.001) and Germany ($\hat{b} = 15.3$,p-value=0.013; Table S17, column 7).

In D_4, it is striking that high-earners did not differentiate significantly between Luck and Merit treatments in Italy ($\hat{b} = 4.1$,p-value=0.82), Germany ($\hat{b} = 16.6$,p-value=0.27), and Norway ($\hat{b} = -4.1$,p-value=0.68), while they did so in the US ($\hat{b} = 32.1$,p-value$<$0.001). Low-earners were significantly sensitive to merit only in Italy ($\hat{b} = 23.4$,p-value=0.034), but not in Germany ($\hat{b} = 5.7$,p-value=0.51), or Norway ($\hat{b} = 6.8$,p-value=0.41). In the US, low-earners redistributed more in the Merit treatment than in the Luck treatments, albeit at weakly significant levels ($\hat{b} = -13.8$, p-value=0.093; SOM: Table S17, column 9).

The result that US participants did not respond to individual merit in D_4 is consistent with DPW, who also did not find significant reward of merit in their decision with no uncertainty. All the results above hold after adding cultural controls (SOM: Table S17, even columns).

S3.6 Analysis of cultural variables

In addition to the analyses reported in the main paper, the variable ENTRY, denoting willingness to restrict entry of foreigners into the country - a proxy for nationalism - is a strongly significant negative predictor of τ_4 in the pooled sample ($b = 3.33$, p-value $= 0.017$).[6]. The variable TRUST, measuring generalised trust in strangers, significantly predicts τ_4 for low-earners ($p = 0.046$) but not for high-earners ($p = 0.52$). Presumably, low-earners trusting others felt more legimitised to

[6]We report standardized coefficients for the independent variable when the latter are derived from ordinal scales.

demand redistribution from the rich. The effect of ENTRY is particularly strong for low-earners ($p = 0.002$) and less so for high-earners ($p = 0.064$).

No other cultural or attitudinal variable exerts significant predicting effects.

S3.7 Analysis of location effects

In this section we analyze the distribution of fairness types by location (SOM: Figure S11). The null of equality of the distribution of the four types across location pairs is not rejected both within the US (p-value = 0.18) and Germany (p-value = 0.15) but is rejected within Italy (p-value = 0.0038; details on tests being used are reported in the SOM: Table S25c). There are no significant differences between German and Norwegian locations in the general distribution of types, although some differences in individual types occasionally emerge (SOM: Table S25d-g). In the other cluster, ITA_1 tends to differ from USA_1 (p-value = 0.099) but the null is not rejected *vis-à-vis* USA_2 (p-value = 0.14), nor is it rejected between ITA_2 and either US location. As for differences between clusters, the null is rejected in all pairwise comparisons between USA_1 and ITA_1 on the one hand, and German and Norwegian locations on the other hand. The null is rejected, albeit weakly, in pairwise tests involving ITA_2 and German locations, but is not rejected in ITA_2 vs. NOR. As for USA_2, the null is only rejected in the test involving USA_2 and GER_2. Hence, the country differences in types seem to be mainly driven by the differences in USA_1 and ITA_1 with German and Norwegian locations. Consistently with cross-country analysis, differences between locations are strongest in the distribution of libertarian types. We find a significantly higher concentration of libertarians in USA_1 and ITA_1 than in all other locations, while the null of equality of libertarian types distribution is very far from being rejected (p-value = 0.96; SOM: Table S25g). We also find significantly fewer selfish types in ITA_1 than in all other locations except for GER_1 (SOM: Table S25d), something that is to be connected with a higher concentration of "altruistic low-earners" (low-earners demanding $\tau = 0$) in ITA_1 than in other locations (see SOM: Section S3.4).

S3.8 Analysis of household income

As mentioned in the main text, the variable household income is heavily affected by missing observations, as $29,2\%$ of respondents declined to state their households' income. The share of missing values varied substantially across countries, ranging from 22.5% in Italy to 37.6% in Germany, with intermediate levels in Norway (24.2%) and the US (29.8%). For this reason, we omitted Household Income from all of the regression analyses presented thus far. In this section, we present the results of regression analyses including inputted data for Household Income.

Multiple imputation is a simulation-based technique that has been integrated to the software package based on the concepts developed by Rubin (1987). In its basic approach, it consists of three steps. In the first step, multiple completed datasets are generated via an imputation model replacing the missing values. In the second step, the analysis is carried out on each completed dataset. The last step is to combine the results from the second step to receive a single result based on the multiple imputation. Given that Household Income is continuous, unbounded from above, and truncated at zero from below, we used the "mi impute truncreg" routine in STATA, which is specifically designed for truncated continuous variables. We followed standard practice in inputation methods (e.g. (Moons et al., 2006)) and constructed the imputation model to include all variables from the analysis model as well as the outcome variables, i.e., the tax rate decisions. To reduce sampling error (Horton and Lipsitz, 2001), the number of imputations was set to 200, that is, 200 completed dataset were generated. The analyses performed on each of the imputed datasets were pooled to deliver the final estimate. We inputed values for the natural logarithm of Household Income (augmented by 1 for the logarithm to be defined when its argument equals 0). The imputation technique successfully inputted values to 329 out of 347 observations.

We replicated the analyses of the basic models for individual τ_i (main paper: equation 10; SOM: Table S3) and for the pooled model (main paper: equation 11; SOM: Table S13) introducing inputted Household Income (in logs). The results are reported in SOM: Table S28a and Table S28b. The inputted variable has a negative sign as expected, meaning that participants from richer families tend to demand lower redistribution, but is rarely statistically significant. Its significance

increases in regressions including cultural controls. In particular, Household Income is statistically insignificant in regressions having as dependent variables τ_1 (p-value = 0.35 and p-value = 0.31; Table S28a, columns 1-2), τ_2 (p-value = 0.93 and p-value = 0.70; Table S28a, columns 3-4), τ_3 without cultural controls (p-value = 0.17; Table S28a, column 5), and τ_4 (p-value = 0.18 and p-value = 0.104; Table S28a, columns7-8), and is weakly significant in other regressions predicting τ_3 with cultural controls (p-value = 0.079; Table S28a, column 6) and τ_4 after identifying below-median and above-median earners (p-value = 0.054, p-value = 0.073; Table S28a, columns 9-10). Perhaps most importantly, the size and significance of country coefficients is very similar (and in some cases even higher) to those observed in SOM: Table S4 (see Table S29a). This entails that the main results of the analysis seem to hold even after controlling for Household Income.

The same is true for pooled Tobit regressions including inputted Household Income. Household Income is an insignificant predictor of τ pooling the four decisions in regression without cultural controls (p-value = 0.20, Table S28b, column 1) and with cultural controls (p-value = 0.15, Table S28b, column 3). Models 2 and 4 in Table S28b interact Household Income with country coefficients. In all cases, the null hypothesis that Household Income has the same effect in each pair of countries cannot be rejected (see analyses output). The results of pairwise tests on differences in country coefficients are reported in SOM: TableS28. Even in this case, we observe that country coefficients remain very close to those of their counterpart analyses in Table S15, while they in fact increase both size and statistical significance in some cases after Household Income is controlled for (see Table S29b). We conclude that our results are robust to the inclusion of (inputted) Household Income as a further demographic control.

References

Abadie, A., Athey, S., Imbens, G. W., and Wooldridge, J. (2017). When should you adjust standard errors for clustering? NBER Working Papers 24003, National Bureau of Economic Research.

Alesina, A., Stantcheva, S., and Teso, E. (2018). Intergenerational mobility and preferences for redistribution. *American Economic Review*, 108(2):521–554.

Andreotti, A., Garcia, S. M., Gomez, A., Hespanha, P., Kazepo, Y., and Mingione, E. (2001). Does a southern european model exist? *Journal of European Area Studies*, 9(1):43–62.

Buchan, N. R., Grimalda, G., Wilson, R., Brewer, M., Fatas, E., and Foddy, M. (2009). Globalization and human cooperation. *Proceedings of the National Academy of Sciences*, 106(11):4138–4142.

Chetty, R., Friedman, J. N., Saez, E., Turner, N., and Yagan, D. (2020). Income segregation and intergenerational mobility across colleges in the united states. *The Quarterly Journal of Economics*, 135(3):1567–1633.

Dallinger, U. (2010). Public support for redistribution: what explains cross-national differences? *Journal of European Social Policy*, 20(4):333–349.

Esping-Andersen, G. (1990). *The Three Worlds of Welfare Capitalism*. Princeton University Press.

Ferrera, M. (1996). The 'southern model' of welfare in social europe. *Journal of European Social Policy*, 6(1):17–37.

Ganzeboom, H. and Treiman, D. (1996). Internationally comparable measures of occupational status for the 1988 international standard classification of occupations. *Social science research*, 25:201–239.

Herrmann, B., Thoni, C., and Gachter, S. (2008). Antisocial punishment across societies. *Science*, 319(5868):1362–1367.

Hofstede, G. (1998). Identifying organizational subcultures: An empirical approach. *Journal of management studies*, 35(1):1–12.

Horton, N. J. and Lipsitz, S. R. (2001). Multiple imputation in practice: comparison of software packages for regression models with missing variables. *The American Statistician*, 55(3):244–254.

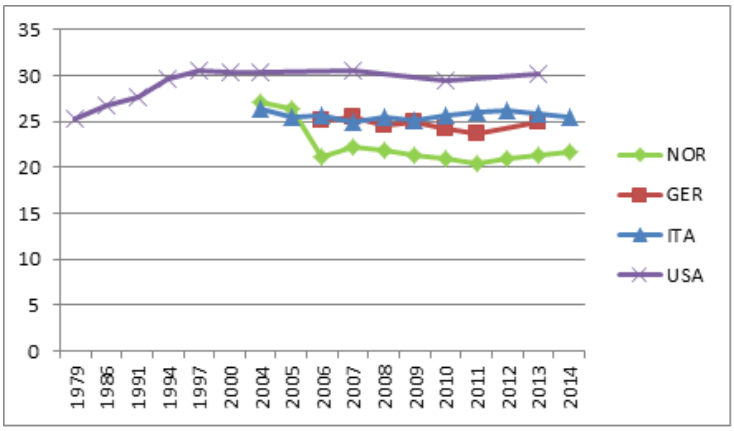
Ingelhart, R., Haerpfer, C. W., Moreno, A., Welzel, C., Kizilova, K., Diez-Medrano, J., Lagos, M., Norris, P., Ponarin, E., and Puranen, B. (2014). World values survey wave 6 (2010-2014).

Moons, K. G., Donders, R. A., Stijnen, T., and Harrell Jr, F. E. (2006). Using the outcome for imputation of missing predictor values was preferred. *Journal of clinical epidemiology*, 59(10):1092–1101.

Roth, A. E., Prasnikar, V., Okuno-Fujiwara, M., and Zamir, S. (1991). Bargaining and market behavior in jerusalem, ljubljana, pittsburgh, and tokyo: An experimental study. *The American Economic Review*, 81(5):1068–1095.

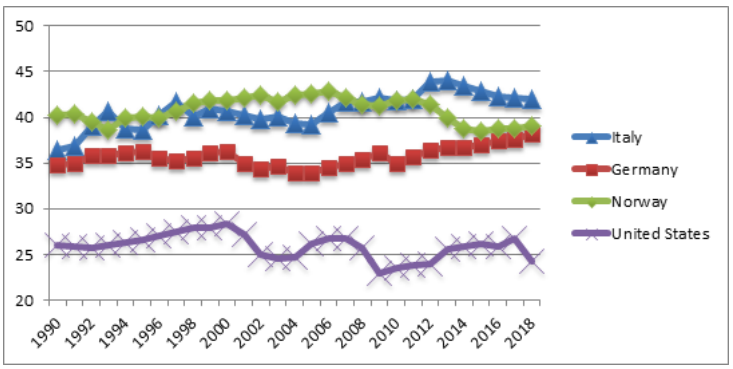
Rubin, D. B. (1987). Multiple imputation for nonresponse in surveys. hoboken.

Figures



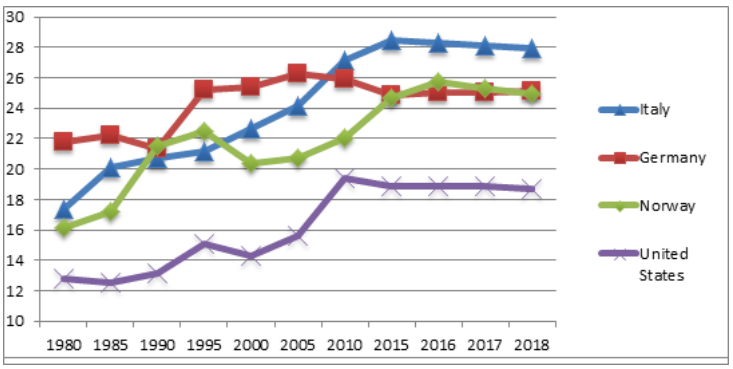
Source: World in Data

Figure S1: Evolution of share of income for richest 1% of the population



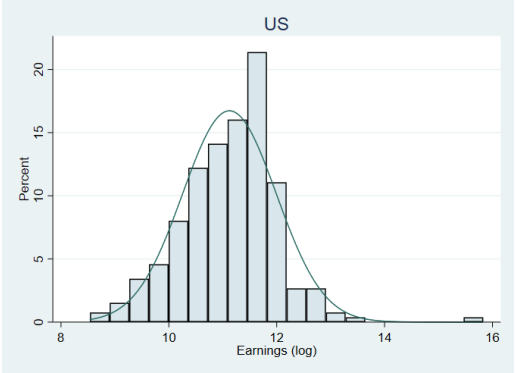
Source: OECD

Figure S2: Evolution of Taxation in percentage of Gross Domestic Product

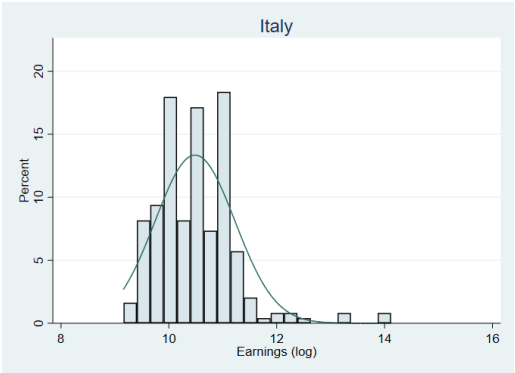


Source: OECD

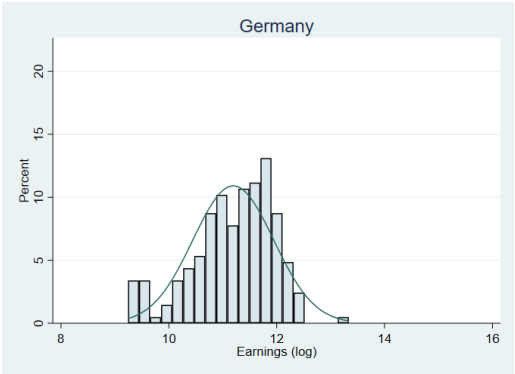
Figure S3: Evolution of social expenditure in percentage of Gross Domestic Product



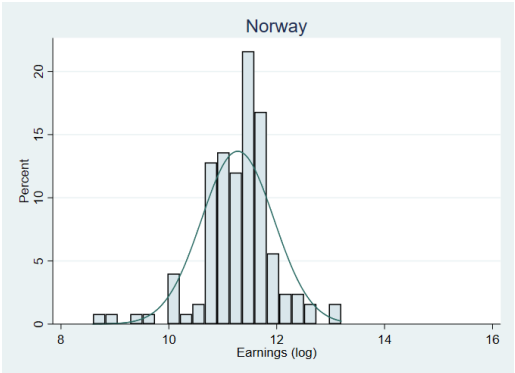
US



Italy

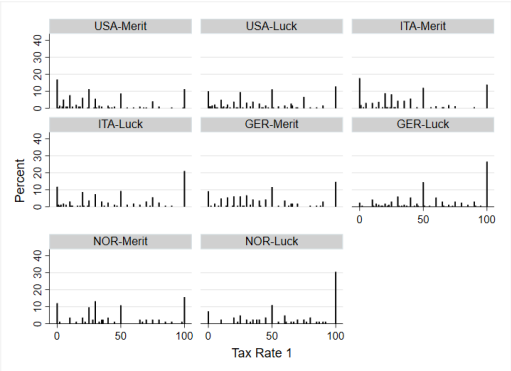


Germany

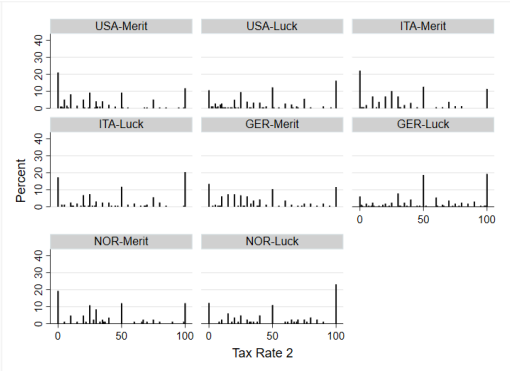


Norway

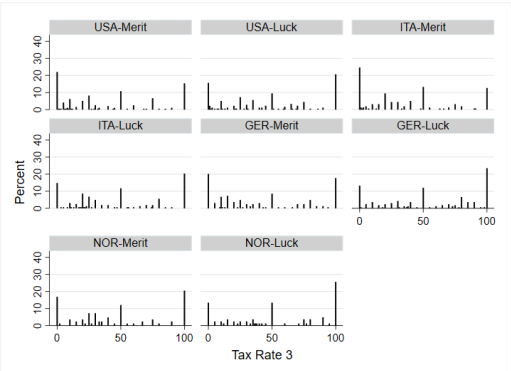
Figure S4: Distribution of household earnings per country



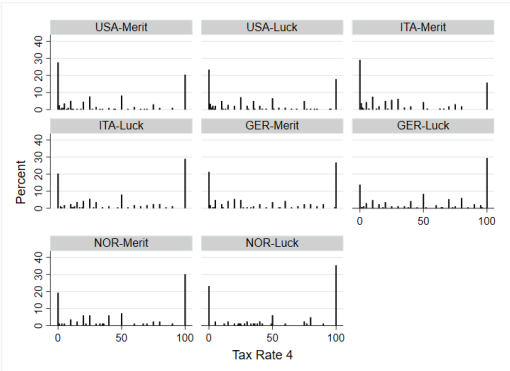
S5a: Rate 1



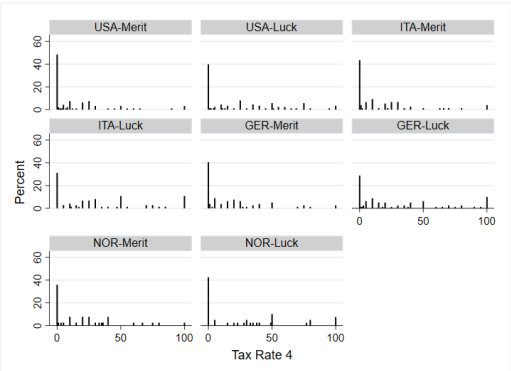
S5b: Rate 2



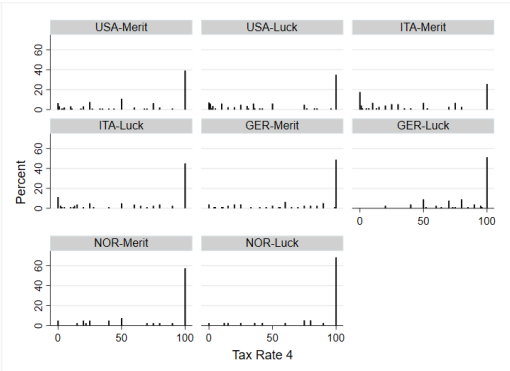
S5c: Rate 3



S5d: Rate 4

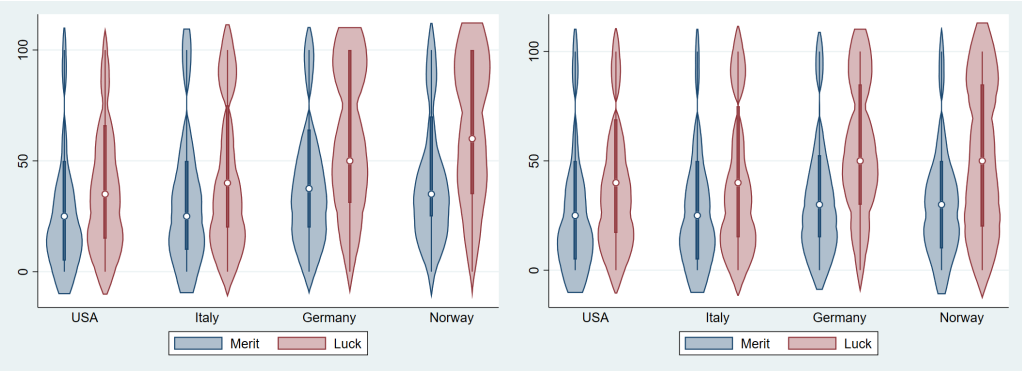


S5e: Rate 4 – High Earners



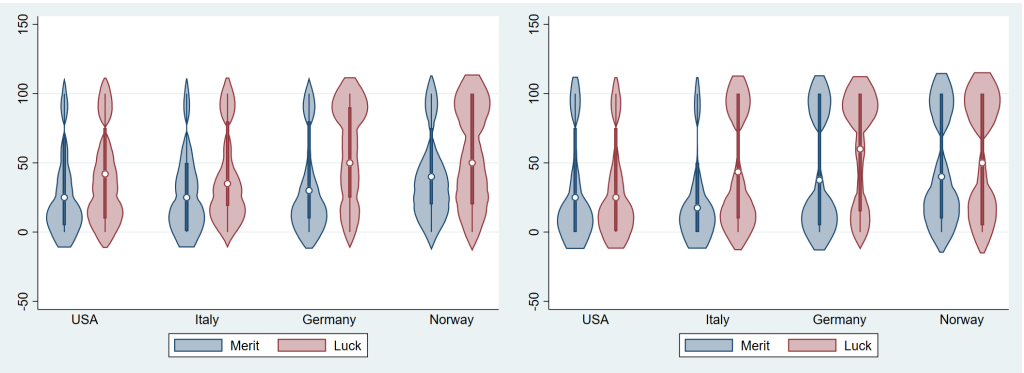
S5f: Rate 4 – Low Earners

Figure S5: Histograms of redistribution decisions by country



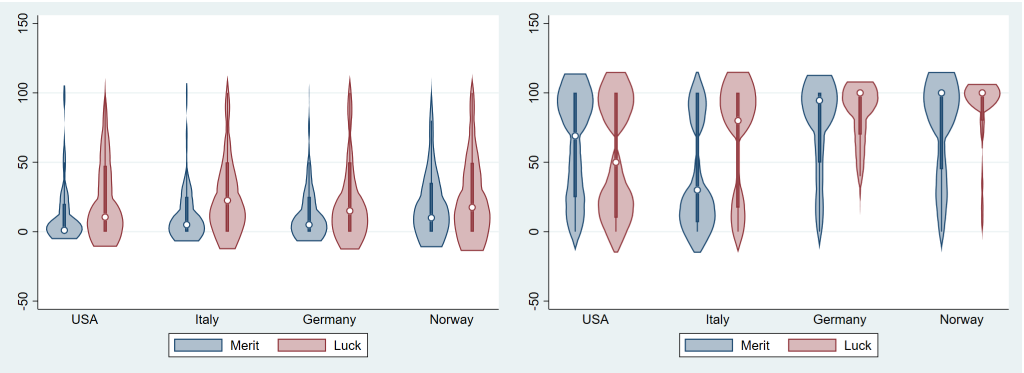
S6a: " Decision 1"

S6b: " Decision 2"



S6c: " Decision 3"

S6d: " Decision 4"

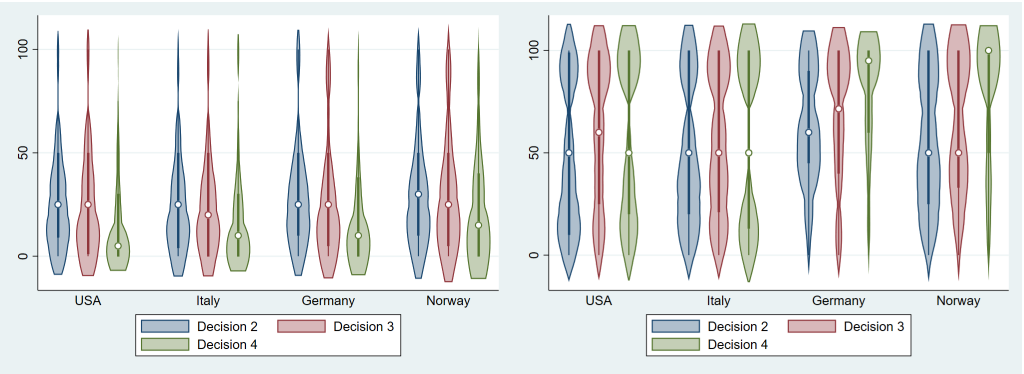


S6e: " Decision 4 High-earners"

S6f: " Decision 4 Low-earners"

Note: Plots include a white point indicating the median of the distribution, a box for the interquartile range (from 25th percentile up to 75th), and spikes extending to the upper- and lower-adjacent values. Overlaid with this box plot is the estimated k-density.

Figure S6: Violin plots by country, Luck treatment

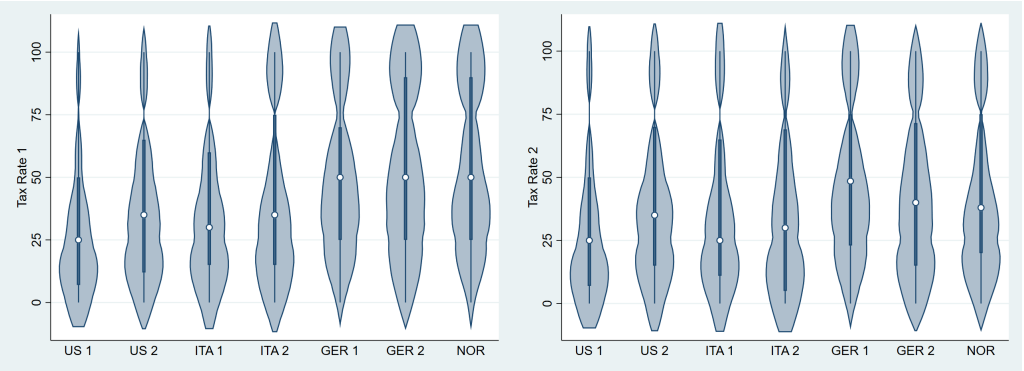


S7a: " Decision 2-4 High-earners"

S7b: " Decision 2-4 Low-earners"

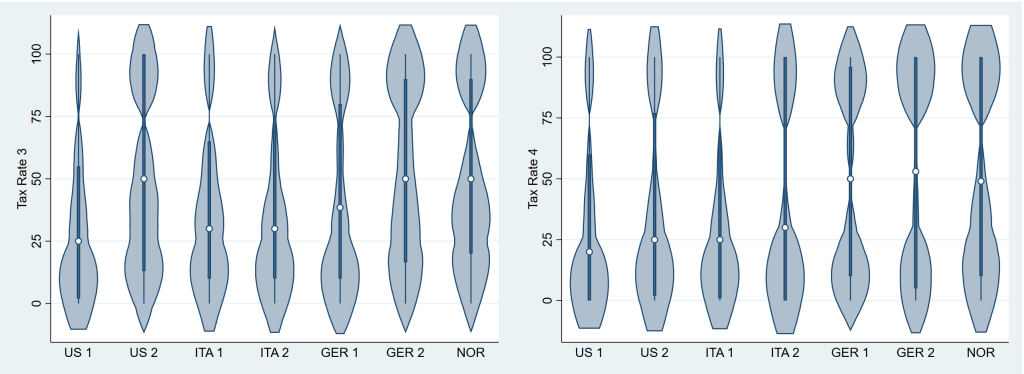
Note: See notes to Fig. S6

Figure S7: Violin plots for High- and Low-earners in Decisions 2-4



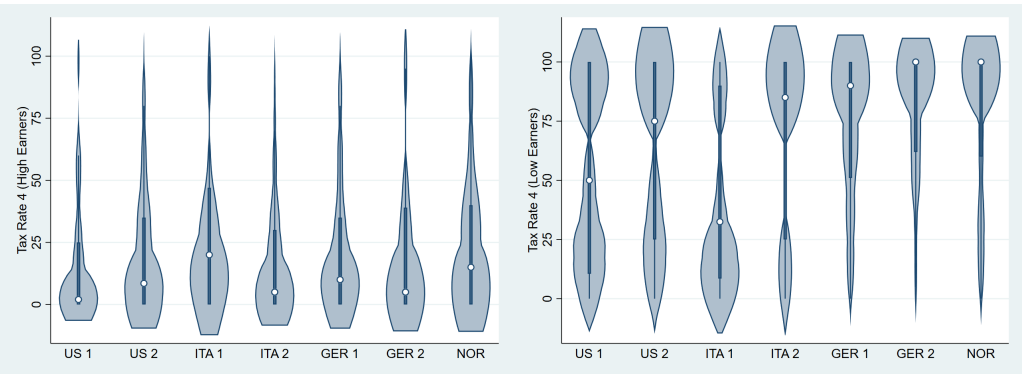
S8a: " Decision 1"

S8b: " Decision 2"



S8c: " Decision 3"

S8d: " Decision 4"

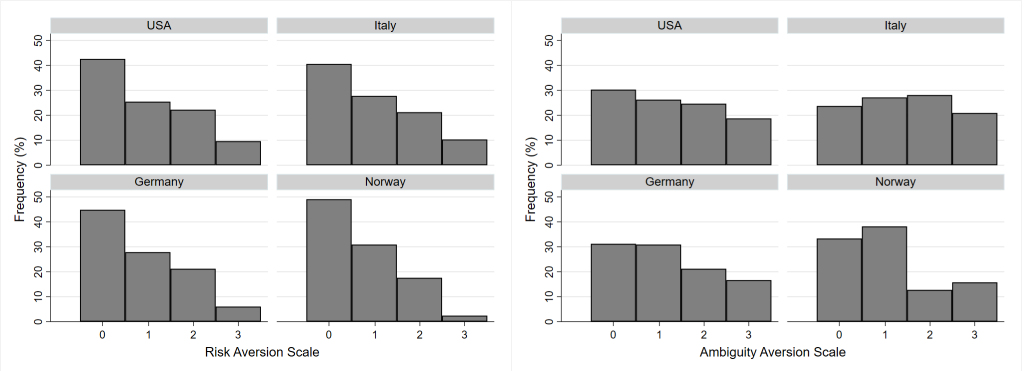


S8e: " Decision 2-4 High-earners"

S8f: " Decision 2-4 Low-earners"

Note: See notes to Fig. S6

Figure S8: Violin plots per locations and decisions

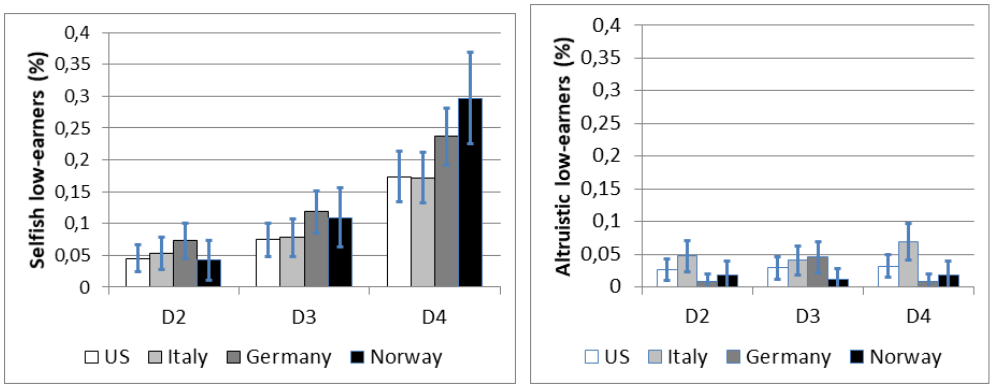


S9a: "Risk aversion per country"

S9b: "Ambiguity aversion per country"

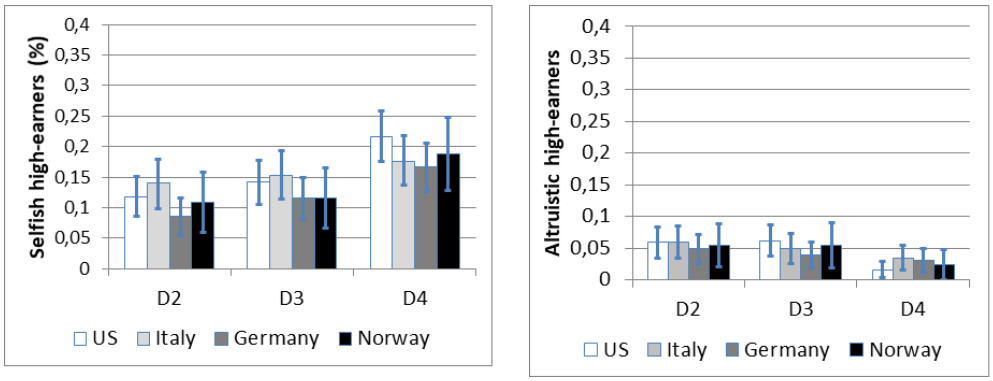
Note: See SOM: Section SS2.3 for a description of of the Risk and Ambiguity scales.

Figure S9: Frequency of risk and ambiguity aversion scales by country



S10a: Strict Selfish Low-Earners

S10b: Strict Altruistic Low-Earners

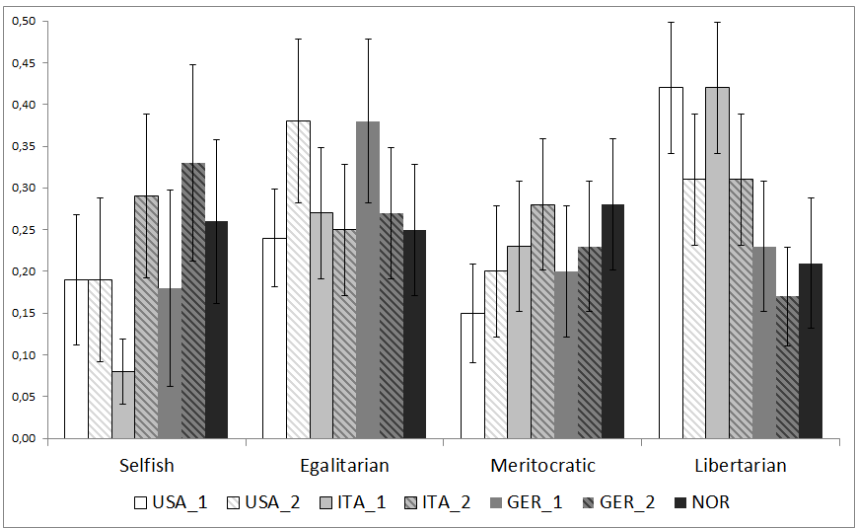


S10c: Strict Selfish High-Earners

S10d: Strict Altruistic High-Earners

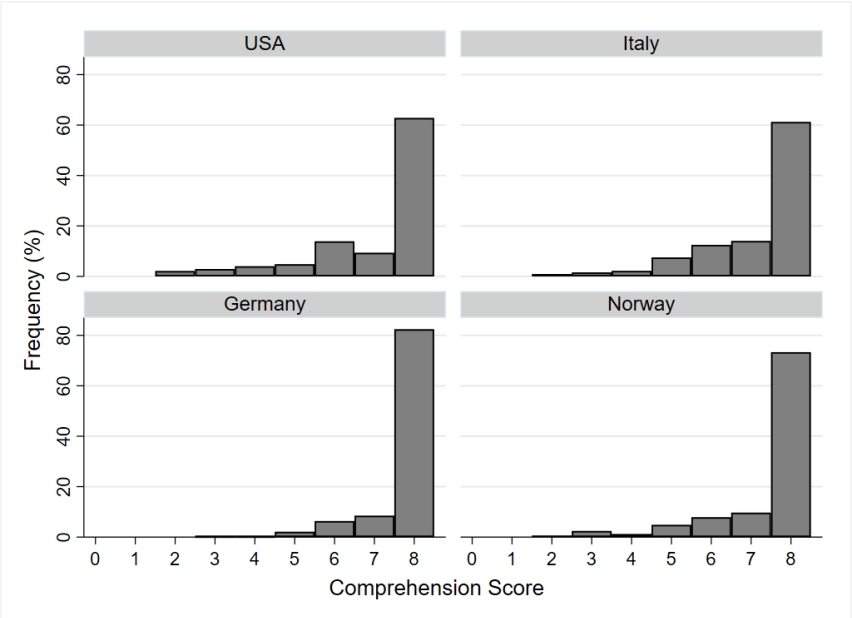
Note: see SOM: Section S3.4 for notes on construction of strict selfish and altruistic types. Capped spikes represent 95% confidence intervals.

Figure S10: Frequency of strict selfish and strict altruistic individuals



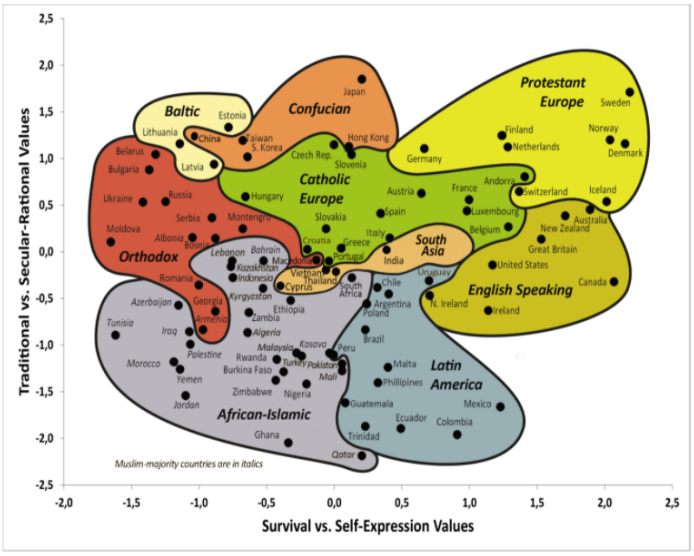
Note: Capped spikes represent 95% confidence intervals.

Figure S11: Frequency of types by location from structural estimation of utility function



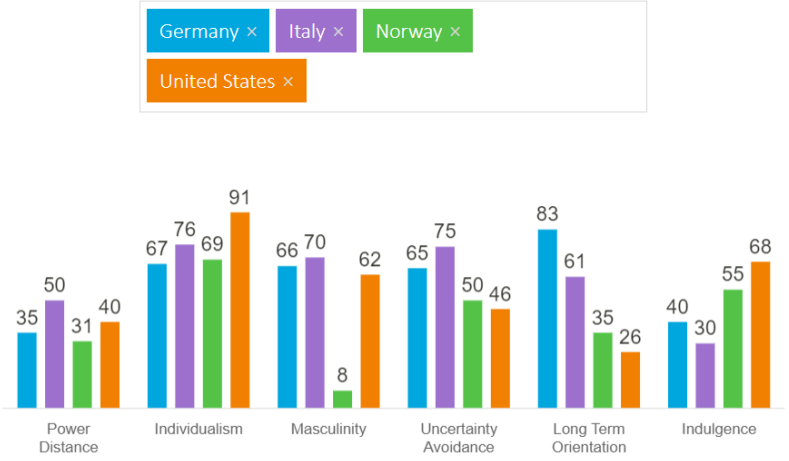
Note: The comprehension score is the sum of correct answers to comprehension questions given in the first trial of possible answers after Part 1 and Part 2 instructions. See SOM: Section S2.2 for description of protocol concerning comprehension test.

Figure S12: Comprehension scores by country



Source: Ingelhart et al. (2014)

Figure S13: World Value Survey Cultural Map



Source: Hofstede (1998)

Figure S14: Hofstede cultural distance

Supplementary Tables

Table S1: Descriptive statistics of demographics and cultural variables per location and country

Location		US			ITA			GER			NOR
		USA_1 (MS)	USA_2 (WA)	USA Total	ITA_1 (Salerno)	ITA_2 (Milan)	ITA Total	GER_1 (Bremen)	GER_2 (Munich)	GER Total	NOR Total
Household Income (PPP-Adjusted)	Mean	98,092	147,005	118,550	34,797	80,704	55,899	92,192	92,872	92,509	97,064
	Median	80000	70000	75000	24423.34	47489.82	33921.3	92903.23	77419.35	85935.48	86225.48
	St. Dev.	92708.24	709666	463783.00	48452.72	181725.10	129991.60	54358.47	75715.22	65022.22	72017.46
	Min	0	5100	0	0	13568.52	0	10322.58	12387.1	10322.58	5389.092
	Max	600000	7500000	7500000	542740.8	1356852	1356852	258064.5	619354.8	619354.8	538909.2
Occupation EGP Father Higher Service	Relative Frequency	0.36	0.42	0.38	0.15	0.19	0.17	0.28	0.40	0.34	0.49
Occupation EGP Father Lower Service	Relative Frequency	0.45	0.41	0.43	0.31	0.29	0.30	0.32	0.45	0.38	0.34
Occupation EGP Father Routine clerical/sales	Relative Frequency	0.03	0.02	0.03	0.26	0.28	0.27	0.05	0.04	0.05	0.01
Occupation EGP Father Worker	Relative Frequency	0.16	0.15	0.16	0.28	0.25	0.27	0.36	0.11	0.23	0.16
Occupation EGP Mother Higher Service	Relative Frequency	0.14	0.12	0.13	0.07	0.11	0.09	0.09	0.14	0.12	0.32
Occupation EGP Mother Lower Service	Relative Frequency	0.55	0.53	0.54	0.49	0.36	0.43	0.37	0.49	0.43	0.55
Occupation EGP Mother Routine clerical/sales	Relative Frequency	0.24	0.25	0.25	0.28	0.38	0.33	0.40	0.34	0.37	0.07
Occupation EGP Mother Worker	Relative Frequency	0.07	0.10	0.09	0.16	0.15	0.16	0.14	0.03	0.09	0.06
Father Secondary and lower	Relative Frequency	0.06	0.08	0.07	0.33	0.35	0.34	0.52	0.27	0.40	0.08
Father Highschool College	Relative Frequency	0.64	0.66	0.65	0.60	0.63	0.62	0.19	0.29	0.24	0.48
Father University and higher	Relative Frequency	0.30	0.26	0.28	0.07	0.03	0.05	0.30	0.44	0.37	0.44
Mother Secondary and lower	Relative Frequency	0.02	0.07	0.04	0.35	0.29	0.32	0.58	0.47	0.53	0.05
Mother Highschool College	Relative Frequency	0.72	0.70	0.71	0.64	0.60	0.62	0.21	0.26	0.23	0.64
Mother University and higher	Relative Frequency	0.26	0.22	0.25	0.03	0.02	0.03	0.21	0.27	0.24	0.30
age	Mean	21.9	21.6	21.74	22.8	23.6	23.2	21.6	20.2	20.9	23.3
	Median	21	21	21	23	23	23	21	20	21	22
	St. Dev.	3.39	3.38	3.39	2.4	2.5	2.46	2.9	2.2	2.6	4.5

Table S1: continued

country		US			ITA			GER			NOR
		USA_1 (MS)	USA_2 (WA)	US Total	ITA_1 (Salerno)	ITA_2 (Milan)	ITA Total	GER_1 (Bremen)	GER_2 (Munich)	GER Total	NOR Total
	Min	18	19	18	19	20	19	16	16	16	19
	Max	47	46	47	35	46	46	35	26	35	57
share of females		0.50	0.50	0.50	0.49	0.49	0.49	0.49	0.57	0.53	0.47
trust	Mean	0.30	0.47	0.38	0.21	0.27	0.24	0.58	0.57	0.58	0.84
	St. Dev.	0.46	0.50	0.49	0.41	0.45	0.43	0.49	0.50	0.50	0.37
	Min	0	0	0	0	0	0	0	0	0	0
	Max	1	1	1	1	1	1	1	1	1	1
conservatism	Mean	0.47	-0.012	0.25	0.19	0.13	0.16	-0.36	-0.29	-0.33	-0.24
	St. Dev.	0.88	0.72	0.84	0.73	0.82	0.77	0.56	0.46	0.52	0.59
	Min	-1.17	-1.17	-1.17	-1.17	-1.17	-1.17	-1.17	-1.17	-1.17	-1.17
	Max	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.32	1.89	1.69
beliefs_just_world	Mean	0.15	0.18	0.16	0.18	-0.10	0.05	-0.19	-0.22	-0.20	-0.05
	St. Dev.	0.51	0.53	0.52	0.50	0.55	0.54	0.57	0.41	0.49	0.54
	Min	-1.35	-0.99	-1.35	-1.56	-1.76	-1.76	-1.97	-1.47	-2.00	-1.26
	Max	1.41	1.35	1.41	1.25	1.29	1.29	1.04	0.86	1.04	1.09
civicness	Mean	-0.06	-0.01	-0.04	-0.19	-0.03	-0.11	0.20	0.23	0.21	-0.12
	St. Dev.	0.82	0.75	0.79	0.64	0.65	0.65	0.73	0.71	0.72	0.69
	Min	-0.95	-0.95	-0.95	-0.95	-0.95	-0.95	-0.95	-0.95	-0.95	-0.95
	Max	2.85	2.85	2.85	1.81	1.72	1.81	1.95	2.85	2.85	2.55
individualism	Mean	0.10	0.12	0.11	0.04	-0.06	-0.01	-0.11	-0.20	-0.16	0.09
	St. Dev.	0.45	0.47	0.46	0.53	0.50	0.52	0.49	0.50	0.49	0.46
	Min	-1.00	-1.25	-1.25	-1.24	-1.26	-1.26	-1.40	-1.63	-1.63	-1.03
	Max	1.15	1.15	1.15	1.52	1.16	1.52	1.16	0.80	1.16	1.33
rightwing	Mean	0.27	0.08	0.19	0.09	0.34	0.21	-0.39	-0.09	-0.24	-0.34
	St. Dev.	0.98	1.01	1.00	1.25	1.02	1.15	0.82	0.69	0.77	0.91
	Min	-1.82	-1.82	-1.82	-1.82	-1.82	-1.82	-1.82	-1.82	-1.82	-1.82
	Max	2.27	2.27	2.27	2.27	2.27	2.27	1.82	1.36	1.82	1.82
Observations		207	167	374	167	320	153	166	164	330	165

NOTE: Household income is expressed in USD and Purchasing Power Parity adjusted.

Table S2: Descriptive statistics per location, country and treatment – Tax Rates

Table S2a: Descriptive statistics per location, country and treatment – Rate 1

		Treatment				
		Ability	Effort	Random	Origin	Total
USA_1 (Mississippi)	Mean	28.53	32.57	31.85	45.38	33.95
	Median	20	22.5	25	50	31.98
	St. Dev	32.28	32.88	29.75	31.47	25
	Obs	53	58	54	42	207
USA_2 (Washington State)	Mean	36.33	36.21	46.41	48.33	41.80
	Median	27.5	25	35	47.5	33.10
	St. Dev	32.33	32.11	34.46	32.76	35
	Obs	42	42	41	42	167
Total US	Mean	31.98	34.10	38.14	46.86	37.45
	Median	25	25	30	50	32.68
	St. Dev	32.37	32.45	32.51	31.96	25
	Obs	95	100	95	84	374
ITA_1 (Salerno)	Mean	33.51	37.45	42.93	42.57	39.15
	Median	25	25	35	30	32.96
	St. Dev	29.53	32376.00	36.82	32.90	30
	Obs	41	42	42	42	167
ITA_2 (Milan)	Mean	39.25	34.26	56.51	47.16	44.52
	Median	40	25	50	40	36.14
	St. Dev	33.33	35.56	38.17	34.17	35
	Obs	36	39	41	37	153
Total ITA	Mean	36.19	35.91	49.64	44.72	41.72
	Median	30	25	47	40	34.57
	St. Dev	31.29	33.77	37.89	33.36	30
	Obs	77	81	83	79	320
GER_1 (Bremen)	Mean	51.46	38.17	56.40	54.33	50.16
	Median	50	41	50	50	31.66
	St. Dev	33.84	25.95	31.35	32.78	50
	Obs	41	41	42	42	166
GER_2 (Munich)	Mean	40.50	44.69	66.64	59.90	53.00
	Median	40	30	72.5	60	34.04
	St. Dev	31.68	35.14	30.64	32.69	50
	Obs	40	42	42	40	164
Total GER	Mean	46.05	41.47	61.52	57.05	51.57
	Median	40	35	60	50	32.84
	St. Dev	33.05	30.93	31.24	32.66	50
	Obs	81	83	84	82	330
NOR (Oslo)	Mean	49.10	40.76	62.00	61.32	53.22
	Median	40	30	55	61	34.07
	St. Dev	34.49	31.10	33.97	33.13	50
	Obs	41	42	41	41	165

Table S2b: Descriptive statistics per location, country and treatment – Decision 2

		Treatment				
		Ability	Effort	Random	Origin	Total
USA_1 (Mississippi)	Mean	29.83	31.22	35.28	44.02	34.52
	Median	20	20	25	41.5	33.34
	St. Dev	34.15	32.78	33.49	31.99	25
	Obs	53	58	54	42	207
USA_2 (Washington State)	Mean	39381.00	33.98	50.59	47.48	42.81
	Median	30	27.5	40	50	33.97
	St. Dev	34.29	32.33	35.77	32.08	35
	Obs	42	42	41	42	167
Total US	Mean	34.05	32.38	41.88	45.75	38.22
	Median	25	25	30	47.5	33.83
	St. Dev	34.36	32.46	35.14	31.89	30
	Obs	95	100	95	84	374
ITA_1 (Salerno)	Mean	33.27	38.36	45.05	42.93	39.94
	Median	25	25	32.5	29.5	34.74
	St. Dev	31.16	33.68	39.65	33.90	25
	Obs	41	42	42	42	167
ITA_2 (Milan)	Mean	31.83	29.00	54.56	39.89	39.15
	Median	30	25	50	30	34.58
	St. Dev	31.92	30.99	36.61	33.45	30
	Obs	36	39	41	37	153
Total ITA	Mean	32.60	33.85	49747.00	41.51	39.56
	Median	25	25	50	30	34.61
	St. Dev	31.32	32.55	38.24	33.51	30
	Obs	77	81	83	79	320
GER_1 (Bremen)	Mean	46878.00	36.76	61.31	47.00	48.06
	Median	35	33	51	36	32.22
	St. Dev	32.88	28.29	27.56	35.67	48.5
	Obs	41	41	42	42	166
GER_2 (Munich)	Mean	32.00	38.33	56.36	52.95	44.97
	Median	17.5	27.5	50	50	33.76
	St. Dev	31.70	33.24	31.08	34.01	40
	Obs	40	42	42	40	164
Total GER	Mean	39.53	37.55	58.83	49.90	46.52
	Median	30	30	50	47.5	32982.00
	St. Dev	32.96	30.72	29.30	34.79	42.5
	Obs	81	83	84	82	330
NOR (Oslo)	Mean	38.78	38.29	52.85	51.22	45.24
	Median	33	30	50	50	34.67
	St. Dev	32.30	33.00	36.22	35.61	38
	Obs	41	42	41	41	165

Table S2c: Descriptive statistics per location, country and treatment – Decision 3

		Treatment				
		Ability	Effort	Random	Origin	Total
USA_1 (Mississippi)	Mean	29.89	32.19	37.44	40.36	34.63
	Median	20	22.5	25	37.5	33.99
	St. Dev	33.70	32.60	35.33	34.51	25
	Obs	53	58	54	42	207
USA_2 (Washington State)	Mean	43.83	48.60	57.20	50.26	49.93
	Median	47.5	45	50	50	37.15
	St. Dev	36.19	39.40	37.22	35.80	50
	Obs	42	42	41	42	167
Total US	Mean	36.05	39.08	45.97	45.31	41.46
	Median	25	30	35	46	36.20
	St. Dev	35.32	36.35	37.28	35.30	32.5
	Obs	95	100	95	84	374
ITA_2 (Salerno)	Mean	35.24	35.26	48.45	41.86	40.23
	Median	30	25	32.5	27.5	34.88
	St. Dev	32.21	34.19	38.96	33.25	30
	Obs	41	42	42	42	167
ITA_2 (Milan)	Mean	36.56	34.46	51.05	40.57	40.88
	Median	34	20	50	30	35.77
	St. Dev	34.87	36.02	37.06	33.80	30
	Obs	36	39	41	37	153
Total ITA	Mean	35.86	34.88	49.73	41.25	40.54
	Median	30	20	47	30	35.25
	St. Dev	33.26	34.87	37.83	33.30	30
	Obs	77	81	83	79	320
GER_1 (Bremen)	Mean	35.95	30.73	61381.00	49.00	44.40
	Median	20	20	62.5	50	37.96
	St. Dev	37.21	34.49	32.13	40.98	38.5
	Obs	41	41	42	42	166
GER_2 (Munich)	Mean	52675.00	46.10	57.50	53225.00	52.36
	Median	46.5	37.5	50	50	36.64
	St. Dev	37.80	36.17	34.68	38.36	50
	Obs	40	42	42	40	164
Total GER	Mean	44.21	38506.00	59.44	51061.00	48.35
	Median	35	25	57.5	50	37.47
	St. Dev	38.21	35.97	33.28	39.54	50
	Obs	81	83	84	82	330
NOR (Oslo)	Mean	48.61	42.45	55.66	52.00	49.64
	Median	50	30	50	50	36.48
	St. Dev	36.46	34.81	36.36	38.25	50
	Obs	41	42	41	41	165

Table S2d: Descriptive statistics per location, country and treatment – Decision 4

		Treatment				
		Ability	Effort	Random	Origin	Total
USA_1 (Mississippi)	Mean	31.04	38.60	30.07	39.24	34.57
	Median	11	25	13	35.5	37.37
	St. Dev	37.88	38.93	35.96	36.47	20
	Obs	53	58	54	42	207
USA_2 (Washington State)	Mean	36381.00	41.90	43.05	41.86	40.78
	Median	25	22.5	35	27.5	39.19
	St. Dev	37.68	42.02	38.35	39.64	25
	Obs	42	42	41	42	167
Total US	Mean	33.40	39.99	35.67	40.55	37.34
	Median	20	25	25	33	38.27
	St. Dev	37.69	40.08	37.38	37.88	25
	Obs	95	100	95	84	374
ITA_2 (Salerno)	Mean	20.83	35.74	43.26	43.69	35.97
	Median	7	22.5	30	40	36.50
	St. Dev	28.06	37.34	40.36	35.44	25
	Obs	41	42	42	42	167
ITA_2 (Milan)	Mean	24.97	44.44	49.20	57.11	44.20
	Median	7.5	30	50	75	41.98
	St. Dev	35.53	41.29	43.19	42.08	30
	Obs	36	39	41	37	153
Total ITA	Mean	22.77	39.93	46.19	49.97	39.90
	Median	7	25	30	50	39.37
	St. Dev	31.63	39.29	41.64	39.02	25
	Obs	77	81	83	79	320
GER_1 (Bremen)	Mean	46.59	45.54	57.48	50.48	50.07
	Median	25	40	70	50	39.11
	St. Dev	40.09	41.16	37.89	37.54	50
	Obs	41	41	42	42	166
GER_2 (Munich)	Mean	40825.00	53.00	57.14	59025.00	52.56
	Median	20	42.5	75	64.5	41.47
	St. Dev	42.23	41.15	42.69	38.74	53
	Obs	40	42	42	40	164
Total GER	Mean	43.74	49.31	57.31	54.65	51.31
	Median	25	40	70	56	40.26
	St. Dev	41.00	41.07	40.12	38.13	50
	Obs	81	83	84	82	330
NOR (Oslo)	Mean	50.24	47.31	52.80	54.32	51.15
	Median	40	38	50	50	40.74
	St. Dev	40.38	40.22	44.03	39.35	49
	Obs	41	42	41	41	165

Table S2e: Descriptive statistics per location, country and treatment – Decision 4 – High earners

		Treatment				
		Ability	Effort	Random	Origin	Total
USA_1 (Mississippi)	Mean	7.58	15.79	21.86	28.70	17.87
	Median	0	8	7.5	20	26.91
	St. Dev	15.15	25.83	30.46	31.42	2
	Obs	26	29	28	20	103
USA_2 (Washington State)	Mean	15.00	19.30	30.25	19.00	20.89
	Median	0	8.5	30	11.5	27.32
	St. Dev	25.50	26.65	31.56	24.74	8.5
	Obs	20	20	20	20	80
Total US	Mean	10.80	17.22	25.35	23.85	19.19
	Median	0	8	10.5	11.5	27.06
	St. Dev	20.39	25.95	30.87	28.34	5
	Obs	46	49	48	40	183
ITA_1 (Salerno)	Mean	14.11	23.00	38.85	38.65	28.84
	Median	1	15	30	22.5	33.00
	St. Dev	24.18	29.84	35.48	36.17	20
	Obs	19	20	20	20	79
ITA_2 (Milan)	Mean	7.22	19.89	16.58	31.33	18.21
	Median	0	5	5	20	26.07
	St. Dev	11.53	28.66	22.55	34.35	5
	Obs	18	19	19	15	71
Total ITA	Mean	10.76	21.49	28.00	35.51	23.81
	Median	0	10	25	20	30.30
	St. Dev	19.17	28.93	31.58	35.08	10
	Obs	37	39	39	35	150
GER_1 (Bremen)	Mean	19.26	18.65	33.25	20.40	22.94
	Median	15	5	17.5	10	28.40
	St. Dev	22.21	26.61	37.98	23.30	10
	Obs	19	20	20	20	79
GER_2 (Munich)	Mean	5.55	24.40	20.25	43.60	23.45
	Median	0	12.5	7.5	40	32.25
	St. Dev	9.56	30.76	27.29	42.01	5
	Obs	20	20	20	20	80
Total GER	Mean	12.23	21525.00	26.75	32.00	23.19
	Median	1	7.5	15	12.5	30.30
	St. Dev	18.10	28.54	33.30	35.53	10
	Obs	39	40	40	40	159
NOR (Oslo)	Mean	20.53	21.75	23.60	30.80	24.22
	Median	20	10	2.5	29	29.31
	St. Dev	24.12	28.21	33.77	31.20	15
	Obs	19	20	20	20	79

Table S2f: Descriptive statistics per location, country and treatment – Decision 4 – Low earners

		Treatment				
		Ability	Effort	Random	Origin	Total
USA_1 (Mississippi)	Mean	56.92	62.26	42.04	50.20	53.30
	Median	50	75	32.5	43	39.34
	St. Dev	39.17	37.84	39.85	40.18	50
	Obs	25	27	24	20	96
USA_2 (Washington State)	Mean	56.15	66.20	59.47	65.15	61.77
	Median	55	100	50	86.5	39.42
	St. Dev	35.45	42.95	40.65	40.49	75
	Obs	20	20	19	20	79
Total US	Mean	56.58	63.94	49.74	57.68	57.13
	Median	50	75	35	62.5	39.49
	St. Dev	37.15	39.69	40.68	40.53	50
	Obs	45	47	43	40	175
ITA_1 (Salerno)	Mean	26.55	50.90	50.25	50.60	44.58
	Median	20	45	55	50	39.22
	St. Dev	31.09	40.44	45.98	34.97	32.5
	Obs	20	20	20	20	80
ITA_2 (Milan)	Mean	35.56	68.06	79.15	72.15	65.14
	Median	20	77.5	100	100	40.60
	St. Dev	39.32	38.51	35.41	39.10	85
	Obs	16	18	20	20	74
Total ITA	Mean	30.56	59.03	64.70	61.38	54.45
	Median	20	75	100	72.5	41.07
	St. Dev	34.76	39.96	43.07	38.21	56.5
	Obs	36	38	40	40	154
GER_1 (Bremen)	Mean	67.20	71.70	80.95	79.60	74.86
	Median	89.5	90	87.5	92.5	30.95
	St. Dev	37.70	36.96	20.69	25.16	90
	Obs	20	20	20	20	80
GER_2 (Munich)	Mean	75.67	77.90	92.50	80.78	81.89
	Median	95	100	100	90	27.03
	St. Dev	31.83	32.24	18.32	21.89	100
	Obs	18	20	20	18	76
Total GER	Mean	71.21	74.80	86.73	80.16	78.29
	Median	94.5	95	100	92.5	29.23
	St. Dev	34.84	34.37	20.16	23.36	99.5
	Obs	38	40	40	38	156
NOR (Oslo)	Mean	78.50	70.10	86.47	81.42	79.00
	Median	100	95	100	100	32.53
	St. Dev	34.03	36.24	28.37	30.98	100
	Obs	20	20	19	19	78

Table S3: Tobit regressions of redistribution choices per decision

DEPENDENT VARIABLE	Tax Rate 1		Tax Rate 2		Tax Rate 3		Tax Rate 4			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
ITALY	5.15	4.25	-1.88	-2.73	0.20	-0.52	5.39	3.86	-2.97	-1.92
	(3.80)	(3.59)	(4.30)	(3.60)	(5.38)	(4.62)	(6.16)	(5.59)	(8.02)	(7.84)
GERMANY	15.88***	12.37***	10.00**	1.07	4.37	-3.41	17.14***	8.25	25.84***	19.24**
	(4.03)	(3.78)	(4.57)	(3.81)	(6.82)	(6.57)	(6.26)	(6.24)	(7.61)	(7.86)
NORWAY	16.94***	13.68***	8.82***	1.77	9.40*	-0.13	22.48***	14.27**	33.14***	29.93***
	(4.10)	(4.28)	(3.34)	(3.79)	(4.90)	(5.32)	(6.63)	(6.67)	(8.20)	(8.95)
ABILITY	1.91	1.71	1.39	-0.09	1.67	-0.52	-15.28***	-14.31***	-15.86***	-14.38***
	(3.06)	(3.15)	(3.89)	(3.46)	(5.31)	(5.57)	(5.34)	(5.26)	(5.04)	(5.26)
RANDOM	17.29***	17.17***	19.79***	15.65***	20.69***	18.77***	3.43	3.64	3.26	3.64
	(4.03)	(4.04)	(3.66)	(3.26)	(5.00)	(4.56)	(4.62)	(4.01)	(3.98)	(4.00)
ORIGIN	16.42***	16.70***	15.06***	12.48***	10.68**	8.28*	7.11	6.25	5.49	6.28
	(3.03)	(3.03)	(2.84)	(2.56)	(5.12)	(4.66)	(4.76)	(4.56)	(4.41)	(4.51)
Gender	2.15	0.46	0.26	-5.97**	0.13	-3.83	-1.03	0.83	-1.49	-0.25
	(2.82)	(2.75)	(3.00)	(2.81)	(3.11)	(2.83)	(3.56)	(3.03)	(3.51)	(3.09)
Experience	2.59	3.66	-2.90	-3.67	2.49	1.68	2.92	2.15	1.30	2.33
	(2.36)	(2.54)	(3.04)	(2.72)	(3.91)	(3.64)	(3.97)	(3.46)	(3.36)	(3.41)
Ethnic_minority	-6.11*	-7.86**	-3.24	-3.40	1.55	0.43	4.44	-1.31	-0.60	-2.13
	(3.22)	(3.14)	(3.87)	(3.68)	(4.63)	(4.32)	(5.87)	(5.22)	(4.87)	(4.98)
Father_unemp	19.36*	18.14*	-4.75	-10.03	-6.61	-12.60	-1.68	-1.55	0.15	-0.34
	(10.46)	(10.39)	(8.99)	(8.24)	(11.81)	(10.49)	(15.38)	(12.12)	(12.46)	(11.51)
Mother_unemp	1.11	-0.58	2.42	2.24	5.55	6.47	10.63	-12.83	-10.63	-12.87
	(5.76)	(5.75)	(6.83)	(6.86)	(7.43)	(7.43)	(10.99)	(11.14)	(9.89)	(10.62)
Father_retired	0.16	-0.94	1.30	1.39	-2.72	-5.88	6.89	7.46	5.26	6.50
	(6.37)	(5.67)	(7.12)	(6.11)	(8.13)	(8.53)	(10.78)	(8.19)	(7.77)	(7.98)
Mother_retired	10.78	8.07	14.49	8.62	8.86	8.35	26.39*	17.80	20.04*	16.76
	(10.98)	(11.01)	(12.06)	(11.67)	(13.18)	(12.67)	(14.73)	(11.61)	(11.92)	(11.03)
Housewife	-5.95	-5.70	-0.25	-1.15	-6.42	-6.27	-11.03*	-11.56**	-12.45**	-11.98**
	(4.42)	(4.62)	(5.07)	(4.71)	(5.74)	(5.32)	(6.11)	(5.29)	(4.98)	(5.01)
Father_edu_1	-3.04	-4.45	-3.77	-5.53	-3.96	-4.76	-12.29*	-11.45**	-10.35*	-11.66**
	(3.87)	(3.69)	(4.56)	(4.66)	(5.56)	(5.02)	(7.23)	(5.75)	(5.86)	(5.66)
Father_edu_2	-6.20	-7.08	-8.43*	-8.09*	-5.60	-5.51	-9.24	-8.83*	-5.80	-7.75
	(4.53)	(4.41)	(4.48)	(4.56)	(5.40)	(4.82)	(7.38)	(5.15)	(5.52)	(5.12)
Father_edu_3	-2.08	-3.75	-10.41**	-12.12***	-3.84	-6.14	-8.16	-7.84	-5.77	-8.00
	(4.20)	(3.73)	(4.44)	(4.15)	(5.56)	(5.02)	(7.93)	(6.20)	(6.00)	(5.91)
Mother_edu_1	1.82	3.23	0.23	3.09	-6.13	-5.36	-4.84	-4.17	-2.74	-3.00
	(3.88)	(3.67)	(4.68)	(4.74)	(5.48)	(4.64)	(7.65)	(6.11)	(5.79)	(5.89)
Mother_edu_2	8.01*	10.05**	2.35	5.63	1.42	2.11	-0.67	-1.99	-3.64	-2.90
	(4.79)	(4.58)	(5.33)	(5.22)	(6.32)	(5.53)	(8.91)	(7.01)	(6.98)	(6.84)
Mother_edu_3	2.82	1.45	4.09	4.57	0.73	0.53	-0.98	-3.09	-0.82	-2.40
	(4.64)	(4.39)	(5.26)	(4.99)	(5.76)	(4.86)	(8.47)	(7.49)	(7.46)	(7.46)
Comprehension	3.51***	3.22**	2.11*	2.76**	2.53	2.54	2.46	3.67**	4.08**	3.60**
	(1.30)	(1.31)	(1.16)	(1.17)	(1.56)	(1.60)	(1.79)	(1.73)	(1.77)	(1.71)
Risk Aversion		15.82***		18.35***		16.34***		8.69*		11.41**
		(4.20)		(3.94)		(4.87)		(5.03)		(4.96)
Ambig. Aversion		-0.29		3.62		-3.40		-7.44		-7.74
		(4.02)		(4.16)		(4.98)		(5.29)		(5.10)
Expected / Actual Initial Earnings				-2.53***		-3.64***		-6.22***		-3.62***
				(0.32)		(0.41)		(0.37)		(0.58)
Beliefs of Success Determinants		-3.21		-6.57**		-1.61		-1.58		-2.45
		(2.91)		(3.10)		(3.63)		(3.90)		(3.64)
Conservatism		1.48		-0.89		0.80		3.22		3.21
		(1.94)		(1.83)		(2.03)		(2.76)		(2.61)
Civic Norms		0.94		2.80		3.07		3.22		2.80
		(1.74)		(1.73)		(2.41)		(2.33)		(2.12)
Individualism		1.13		4.43*		1.79		-2.63		-1.83
		(2.67)		(2.67)		(3.37)		(3.41)		(3.31)
Trust		-1.03		-2.05		4.39		7.77**		6.84**
		(2.54)		(2.13)		(3.32)		(3.51)		(3.39)
Left		6.44*		7.17**		7.36***		-0.74		-0.82
		(3.29)		(3.50)		(2.81)		(3.89)		(3.77)
Right		-12.34***		-8.96*		-8.02		-9.83		-9.82
		(3.98)		(4.59)		(5.00)		(6.39)		(6.18)
Entry		1.40		1.43		1.21		5.21***		5.07***
		(1.21)		(1.13)		(1.49)		(1.77)		(1.76)
competition		2.08*		3.30**		2.97**		-0.58		-0.69
		(1.10)		(1.32)		(1.51)		(1.68)		(1.58)
US_X_HighEarner_4									-65.38***	-27.32***
									(6.29)	(9.33)
ITALY_X_HighEarner_4									-52.89***	-15.59
									(9.39)	(11.37)
GERMANY_X_HighEarner_4									-88.05***	-49.72***
									(7.71)	(10.07)
NORWAY_X_HighEarner_4									-92.12***	-57.13***
									(5.08)	(8.43)
Constant	-0.24	-6.45	18.79*	43.48***	18.57	59.04***	26.82	75.23***	50.21***	61.76***
	(12.25)	(13.51)	(11.26)	(12.99)	(15.05)	(17.25)	(17.66)	(21.38)	(19.00)	(20.75)
Observations	1,172	1,164	1,172	1,164	1,172	1,164	1,172	1,164	1,172	1,164
Uncensored obs.	837	832	813	808	740	736	620	615	620	615
Left-censored obs.	130	129	178	177	211	210	265	263	265	263
Right-censored obs.	205	203	181	179	221	218	287	286	287	286
Chi2	232.9	408.0	137.0	568.3	110.1	413.2	127.7	790.2	1071	1604

Note: See SOM: Section S3.1 for description of econometric model and of variables. Decision 1 (disinterested decision maker); Decision 2 (involved decision maker with uncertainty); Decision 3 (involved decision maker with uncertainty and signal); Decision 4 (involved decision-maker without uncertainty; see main paper: Section 2.3. Robust standard errors clustered at session level are reported in brackets. $***$, $**$, $*$ indicate p-value $<$ 0.1, 0.05, 0.01, respectively.

Table S4: Pairwise tests on equality of country dummy coefficients in basic regression models for individual decisions

Decision 1

	US	ITA	GER
ITA	-4.25		
	(3.59)		
	0.24		
GER	-12.37 ***	-8.12 *	
	(3.78)	(4.20)	
	0.001	*0.053*	
NOR	-13.68 ***	-9.42 **	-1.3
	(4.28)	(4.79)	(4.34)
	0.001	*0.049*	*0.76*

Panel a

Decision 2

	US	ITA	GER
ITA	-2.73		
	(3.60)		
	0.45		
GER	1.07	-3.8	
	(3.81)	(3.99)	
	0.78	*0.34*	
NOR	1.77	-4.5	-0.7
	(3.79)	(4.02)	(4.03)
	0.64	*0.26*	*0.86*

Panel b

Decision 3

	US	ITA	GER
ITA	-0.52		
	(4.62)		
	0.91		
GER	-3.41	2.89	
	(6.57)	(6.89)	
	0.6	*0.68*	
NOR	-0.13	-0.39	-3.28
	(5.31)	(5.5)	(6.25)
	0.99	*0.94*	*0.6*

Panel c

Decision 4

	US	ITA	GER
ITA	3.86		
	(5.59)		
	0.49		
GER	8.25	-4.39	
	(6.24)	(5.46)	
	0.19	*0.42*	
NOR	14.27 **	-10.41	-6.02
	(6.67)	(6.81)	(6.59)
	0.032	*0.13*	*0.36*

Panel d

Decision 4 High-earners

	US	ITA	GER
ITA	9.81		
	(7.52)		
	0.19		
GER	-3.15	-12.97	
	(7.12)	(8.16)	
	0.66	*0.11*	
NOR	0.13	-9.68	-3.28
	(6.46)	(7.96)	(7.33)
	0.98	*0.22*	*0.65*

Panel e

Decision 4 Low-earners

	US	ITA	GER
ITA	-1.92		
	(7.84)		
	0.81		
GER	19.23 **	-21.16 ***	
	(7.86)	(7.41)	
	0.014	*0.004*	
NOR	29.93 ***	-31.86 ***	-10.69
	(8.95)	(9.36)	8.45
	0.001	*0.001*	*0.21*

Panel f

Note: Two-tailed t-tests of the null hypothesis that pairs of country dummy coefficients are equal to each other in regressions including cultural and attitudinal controls to the basic model. Such tests are conducted on the econometric models reported in Table S3, even columns, for corresponding Decisions (see also Tables 1 and 2 in the main paper). The upper value in each cell is the t-statistics of the test, a positive (negative) value indicating that the mean for τ_i, $i = 1, \ldots, 4$ for the country in the column entry is greater (lower) than the mean for the country in the row entry. The value in brackets is the standard error of the t-statistics, while the value in italic is the p-value of the test: $***$, $**$, $*$ indicate p-value < 0.1,0.05, 0.01, respectively.

Table S5: Analysis of Prospect of Upward Mobility (POUM) hypothesis on demand for redistribution in Decision 3

DEP VARIABLE: TAX RATE	Decision 3							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
POUM Believers	-35.84***	-26.40***	-8.23	-29.90***		-32.56***		
	(5.25)	(7.37)	(29.34)	(7.96)		(5.15)		
Expected Initial Earnings		-1.28	-0.82					
		(0.95)	(1.23)					
Expected Initial Earnings_X_POUM			-1.44					
			(2.35)					
POUM_X_Luck				-11.70				
				(11.21)				
POUM_believers_X_ABILITY					-36.08***			
					(9.94)			
POUM_believers_X_effort_dum					-24.12**			
					(12.26)			
POUM_believers_X_RANDOM					-38.33***			
					(10.46)			
POUM_believers_X_ORIGIN					-45.30***			
					(10.25)			
POUM_believers_X_US_dum							-30.12***	-23.49**
							(10.89)	(10.12)
POUM_believers_X_ITALY							-30.66***	-28.28***
							(9.87)	(9.82)
POUM_believers_X_GERMANY							-41.54***	-40.58***
							(9.75)	(8.57)
POUM_believers_X_NORWAY							-47.71***	-44.19***
							(10.25)	(12.01)
ITALY	-4.38	-3.35	-3.60	-4.38	-4.59	-4.09	-3.82	-1.92
	(8.30)	(8.38)	(8.44)	(8.33)	(8.44)	(8.19)	(9.97)	(9.70)
GERMANY	-3.09	-3.63	-4.11	-2.70	-2.24	-10.99	1.32	-4.72
	(11.80)	(11.76)	(11.75)	(11.92)	(12.01)	(12.20)	(13.94)	(13.54)
NORWAY	1.76	1.61	1.43	1.70	1.72	-7.69	7.40	-1.08
	(7.64)	(7.56)	(7.51)	(7.74)	(7.58)	(9.50)	(10.33)	(12.02)
RANDOM	5.05	5.97	6.01	9.78	10.10	6.88	4.74	6.65
	(8.43)	(8.39)	(8.43)	(9.64)	(10.52)	(8.06)	(8.41)	(8.08)
ORIGIN	-1.88	-1.78	-1.76	2.32	5.56	-1.88	-1.64	-1.70
	(9.93)	(9.89)	(9.86)	(11.49)	(12.88)	(9.63)	(9.99)	(9.66)
ABILITY	-4.13	-4.59	-4.49	-3.67	-0.09	-1.95	-3.90	-1.42
	(7.27)	(7.21)	(7.15)	(7.27)	(8.81)	(7.26)	(7.26)	(7.28)
Gender	-1.84	-1.57	-1.69	-1.95	-1.72	-1.04	-1.77	-0.93
	(5.02)	(5.00)	(4.97)	(5.03)	(5.03)	(4.76)	(4.98)	(4.68)
Experience	5.57	5.53	5.68	4.93	4.84	5.49	5.27	5.09
	(5.79)	(5.78)	(5.78)	(5.97)	(6.00)	(5.59)	(5.81)	(5.59)
Ethnic_minority	1.92	1.79	2.10	1.70	0.89	-0.29	1.64	-0.87
	(5.86)	(5.91)	(5.84)	(5.74)	(5.88)	(5.54)	(5.85)	(5.52)
Father_unemp	-9.55	-10.32	-10.80	-9.11	-9.78	-11.15	-8.75	-10.17
	(18.30)	(18.43)	(18.42)	(18.19)	(18.05)	(18.33)	(18.39)	(18.19)
Mother_unemp	-10.51	-10.79	-10.79	-10.93	-11.59	-10.09	-9.83	-8.86
	(10.04)	(10.20)	(10.22)	(10.17)	(10.33)	(10.25)	(9.88)	(10.05)
Father_retired	-16.21	-17.19	-16.93	-15.91	-15.65	-17.62	-16.22	-17.70
	(12.00)	(12.26)	(12.03)	(11.96)	(11.95)	(11.46)	(11.86)	(11.29)
Mother_retired	23.40	23.89	24.25	24.77	24.74	22.63	23.26	23.18
	(22.30)	(22.28)	(22.37)	(22.44)	(22.56)	(20.35)	(22.37)	(20.33)
Housewife	-2.94	-3.97	-3.42	-3.26	-3.32	-0.47	-3.24	-0.78
	(8.62)	(8.96)	(9.11)	(8.51)	(8.56)	(8.56)	(8.62)	(8.60)
Father_edu_1	-10.48	-10.78	-10.78	-10.25	-9.89	-13.38	-10.75	-14.00*
	(8.61)	(8.65)	(8.67)	(8.54)	(8.61)	(8.33)	(8.48)	(8.20)
Father_edu_2	-12.08	-12.11	-12.18	-12.43*	-11.66	-13.74*	-11.18	-13.37*
	(7.62)	(7.54)	(7.51)	(7.55)	(7.65)	(7.93)	(7.74)	(8.07)
Father_edu_3	-10.76	-11.43	-11.38	-11.39	-11.23	-12.63	-10.85	-12.94
	(8.60)	(8.51)	(8.51)	(8.60)	(8.52)	(8.75)	(8.60)	(8.78)
Mother_edu_1	-7.05	-7.47	-7.80	-7.19	-7.10	-6.03	-6.99	-5.91
	(8.49)	(8.45)	(8.46)	(8.49)	(8.39)	(8.58)	(8.49)	(8.56)
Mother_edu_2	-0.08	0.15	-0.18	0.48	0.55	4.21	-0.71	3.76
	(7.86)	(7.92)	(8.03)	(8.01)	(7.95)	(8.06)	(7.80)	(7.94)
Mother_edu_3	-1.77	-0.92	-1.37	-1.10	-0.86	-2.81	-2.07	-3.17
	(7.48)	(7.51)	(7.59)	(7.60)	(7.68)	(7.66)	(7.60)	(7.74)
Comprehension	6.62***	6.54***	6.49***	6.53***	6.58***	5.79***	6.59***	5.78***
	(2.17)	(2.17)	(2.17)	(2.16)	(2.16)	(2.19)	(2.16)	(2.18)
Risk Aversion						7.32		8.33
						(6.45)		(6.51)
Ambig. Aversion						-1.13		-2.24
						(7.37)		(7.26)
Beliefs of Success Determinants						2.06		2.51
						(4.26)		(4.40)
Conservatism						-3.99		-4.44
						(4.18)		(4.19)
Civic Norms						3.71		4.21
						(3.74)		(3.69)
Individualism						-0.15		-0.06
						(4.93)		(5.04)
Trust						5.97		6.45
						(6.05)		(6.06)
Left						3.11		3.18
						(5.73)		(5.79)
Right						-11.37		-11.19*
						(6.93)		(6.73)
Entry						2.42		2.45
						(2.06)		(2.09)
Competition						4.06*		3.95*
						(2.36)		(2.34)
Constant	34.11	44.20**	41.54*	33.05	30.20	20.73	32.06	17.53
	(20.94)	(21.92)	(21.40)	(20.82)	(21.16)	(22.42)	(21.37)	(22.78)
Observations	540	540	540	540	540	535	540	535
Uncensored obs.	327	327	327	327	327	325	327	325
Left-censored obs.	80	80	80	80	80	80	80	80
Right-censored obs.	133	133	133	133	133	130	133	130
chi2	107.5	104.3	105.6	132.5	135.3	228.4	180.4	363.6

Note: See Section 3.3.2 in main paper for the account of the POUM hypothesis. See section S3.1 for a description of the variables and of the econometric model. Robust standard errors clustered at the session level in parentheses. *, **, *** indicate p-value $< 0.1, 0.05, 0.01$, respectively.

Table S6: Pairwise tests on equality of country dummy coefficients: POUM hypothesis

	US	ITA	GER
ITA	0.55 (15.14) *0.97*		
GER	11.43 (14.73) *0.44*	10.88 (13.91) *0.43*	
NOR	17.60 (14.70) *0.23*	17.05 (14.31) *0.23*	6.17 (13.88) *0.66*

Table S6a: Pairwise tests for POUM hypothesis without cultural controls

	US	ITA	GER
ITA	4.78 (13.99) *0.73*		
GER	17.09 (13.28) *0.20*	12.31 (13.08) *0.35*	
NOR	20.70 (15.34) *0.18*	15.92 (15.51) *0.31*	3.61 (14.84) *0.81*

Table S6b: Pairwise tests for POUM hypothesis with cultural control

Note: Two-tailed t-tests results of the null hypothesis that pairs of country dummy coefficients are equal to each other in regressions on the POUM hypothesis reported in SOM: Table S5, column 7 (for Panel a) and SOM: Table S5, column 8 (for Panel b). See notes to SOM Tables S5 and S4.

Table S7: Tests on overconfidence by country, treatment and decision

Country	Decision 2				Decision 3			
	ABILITY	**EFFORT**	**ORIGIN**	**RANDOM**	**ABILITY**	**EFFORT**	**ORIGIN**	**RANDOM**
US	5.28***	6.013***	4.27***	4.65***	2.63***	4.22***	2.75***	4.41***
	<0.0001	<0.0001	<0.0001	<0.0001	0.0085	<0.0001	0.0060	<0.0001
	95	*100*	*84*	*95*	*95*	*100*	*84*	*95*
ITALY	4.44***	5.59***	2.79***	2.80***	2.043**	3.79***	1.54	2.66***
	<0.0001	<0.0001	0.0052	0.0051	0.041	0.0002	0.13	0.0078
	77	*81*	*79*	*83*	*77*	*81*	*79*	*83*
GERMANY	3.082***	3.70***	-1.60	1.50	1.22	1.92*	1.29	0.52
	0.0021	0.0002	0.11	0.14	0.22	0.055	0.20	0.61
	81	*83*	*84*	*82*	*81*	*83*	*84*	*82*
NORWAY	1.85*	3.051***	2.27**	1.43	0.76	0.82	0.27	1.35
	0.064	0.0023	0.023	0.15	0.45	0.42	0.79	0.18
	41	*42*	*41*	*41*	*41*	*42*	*41*	*41*

Note: Results of Whitney Mann-Wilcoxon signrank tests for the null hypothesis that the overconfidence bias defined in equation 9 in the main text is equal to zero. The upper value in each cell is the z-statistics, followed by the p-value and the number of observations. A positive sign for the z-statistics means that the distribution of overconfidence tends to be skewed toward positive values. $***$, $**$, $*$ indicate p-value $<$ 0.1,0.05, 0.01, respectively.

Table S8: Pairwise tests on null hypothesis that Overconfidence measures come from same distribution

	US	ITA	GER
ITA	0.83		
	0.41		
	694		
GER	5.78***	4.31***	
	<0.0001	*<0.0001*	
	704	650	
NOR	2.93***	1.92*	-1.58
	0.0034	*0.054*	*0.11*
	539	485	495

Table S8a: Decision 2

	US	ITA	GER
ITA	1.13		
	0.26		
	694		
GER	3.53***	2.20**	
	0.0004	*0.028*	
	704	650	
NOR	2.69***	1.65*	-0.061
	0.0072	*0.099*	*0.95*
	539	485	495

Table S8b: Decision 3

Note: Results of Whitney Mann-Wilcoxon ranksum tests for the null hypothesis that the distribution of overconfidence measures (see equation 9 in the main paper) from pairs of countries is not different from each other. The upper value in each cell is the z-statistics, followed by the p-value and the number of observations. A positive sign for the z-statistics means that the distribution of overconfidence for the country in the row entry tends to take higher values than the distribution for the country in the column entry. $***$, $**$, $*$ indicate p-value $<$ 0.1,0.05, 0.01, respectively.

Table S9: Tobit regression analysis of overconfidence and expectations

Dependent Variable: Tax Rate	Decision 3					Decision 2		Decision 3	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Overconfidence_3	-1.92***	-1.81***	-1.14***						
	(0.37)	(0.36)	(0.41)						
Overconfidence_3_X_Luck			-2.11***						
			(0.79)						
Overconfidence3_X_US_dum				-1.29*	-1.04				
				(0.76)	(0.74)				
Overconfidence3_X_ITALY				-1.84***	-1.88***				
				(0.48)	(0.45)				
Overconfidence3_X_GERMANY				-2.77***	-2.63***				
				(0.80)	(0.80)				
Overconfidence3_X_NORWAY				-1.96**	-1.85**				
				(0.95)	(0.89)				
Expected_Earnings_X_US_dum						-2.38***	-2.08***	-3.28***	-2.94***
						(0.59)	(0.57)	(0.69)	(0.65)
Expected_Earnings_X_ITALY						-2.19***	-1.93***	-3.08***	-2.93***
						(0.59)	(0.58)	(0.67)	(0.67)
Expected_Earnings_X_GERMANY						-4.35***	-3.85***	-5.09***	-4.93***
						(0.47)	(0.44)	(0.97)	(0.91)
Expected_Earnings_X_NORWAY						-2.89***	-2.51***	-4.34***	-4.27***
						(0.89)	(0.76)	(0.96)	(0.99)
ITALY	-0.25	0.12	-0.18	0.75	1.61	-3.73	-4.45	-2.97	-0.06
	(5.34)	(4.88)	(5.31)	(5.54)	(5.13)	(12.07)	(11.37)	(13.21)	(12.31)
GERMANY	3.26	-0.56	2.80	4.66	0.98	29.66***	22.56**	22.15	20.64
	(6.57)	(6.66)	(6.52)	(6.77)	(6.85)	(10.15)	(9.72)	(17.05)	(16.30)
NORWAY	8.20*	2.64	7.94*	9.19*	3.65	12.65	7.46	18.04	15.99
	(4.75)	(5.63)	(4.83)	(5.20)	(5.95)	(14.24)	(13.29)	(16.16)	(16.73)
RANDOM	19.90***	20.01***	22.82***	19.78***	19.88***	14.77***	15.21***	18.47***	18.70***
	(4.83)	(4.77)	(4.90)	(4.81)	(4.75)	(3.35)	(3.22)	(4.55)	(4.54)
ORIGIN	9.55*	9.98**	12.26**	9.68*	10.10**	11.56***	12.52***	8.11*	8.69*
	(5.02)	(4.87)	(5.44)	(5.03)	(4.86)	(2.57)	(2.49)	(4.82)	(4.65)
ABILITY	0.28	0.82	0.98	0.34	0.97	0.03	-0.04	-0.99	-0.26
	(5.36)	(5.56)	(5.34)	(5.38)	(5.59)	(3.46)	(3.39)	(5.46)	(5.63)
Gender	-1.53	-2.76	-1.34	-1.52	-2.76	-4.35	-6.04**	-3.01	-3.96
	(2.94)	(2.72)	(2.95)	(2.93)	(2.73)	(2.93)	(2.80)	(3.03)	(2.81)
Experience	1.90	2.48	1.48	1.97	2.44	-4.27	-3.54	1.38	1.79
	(3.88)	(3.81)	(3.94)	(3.89)	(3.82)	(2.83)	(2.73)	(3.67)	(3.65)
Ethnic_minority	2.56	1.10	3.46	2.51	0.99	-1.33	-3.49	1.72	0.47
	(4.41)	(4.48)	(4.37)	(4.44)	(4.53)	(3.98)	(3.74)	(4.28)	(4.42)
Father_unemp	-7.24	-9.48	-7.02	-6.73	-9.12	-5.65	-9.09	-9.91	-11.52
	(11.48)	(11.06)	(11.41)	(11.36)	(10.96)	(8.72)	(8.04)	(10.76)	(10.49)
Mother_unemp	8.04	8.03	8.25	7.82	7.60	3.27	2.06	6.61	6.42
	(7.26)	(7.21)	(7.53)	(7.37)	(7.35)	(6.58)	(6.74)	(7.27)	(7.20)
Father_retired	-3.25	-3.55	-3.06	-3.23	-3.59	2.88	1.86	-4.58	-4.98
	(8.67)	(8.02)	(8.86)	(8.63)	(8.00)	(6.74)	(6.13)	(8.99)	(8.37)
Mother_retired	9.91	8.03	10.76	9.69	7.83	11.70	8.20	9.11	7.56
	(13.59)	(13.17)	(13.88)	(13.48)	(13.07)	(12.02)	(11.54)	(12.75)	(12.52)
Housewife	-6.03	-5.47	-6.62	-6.26	-5.67	-0.99	-1.32	-7.54	-6.76
	(5.45)	(5.51)	(5.40)	(5.53)	(5.58)	(4.75)	(4.74)	(5.26)	(5.29)
Father_edu_1	-2.45	-3.89	-2.53	-2.89	-4.31	-4.32	-5.86	-3.73	-5.12
	(5.45)	(5.33)	(5.39)	(5.46)	(5.32)	(4.55)	(4.57)	(5.09)	(4.99)
Father_edu_2	-3.56	-4.89	-4.13	-3.95	-5.35	-7.32*	-8.52*	-4.48	-5.79
	(5.33)	(5.21)	(5.28)	(5.35)	(5.24)	(4.41)	(4.51)	(4.97)	(4.85)
Father_edu_3	-3.39	-5.25	-3.47	-3.43	-5.29	-10.62**	-12.27***	-4.41	-6.41
	(5.53)	(5.26)	(5.39)	(5.56)	(5.31)	(4.40)	(4.14)	(5.22)	(5.00)
Mother_edu_1	-6.11	-5.07	-6.79	-6.11	-5.07	1.84	3.60	-5.61	-4.78
	(5.15)	(5.04)	(5.09)	(5.15)	(5.06)	(4.65)	(4.69)	(4.72)	(4.67)
Mother_edu_2	0.28	2.51	-0.13	0.35	2.68	3.61	6.09	0.53	2.60
	(6.17)	(6.08)	(6.16)	(6.12)	(6.00)	(4.93)	(5.14)	(5.47)	(5.42)
Mother_edu_3	0.22	-1.05	0.92	0.17	-1.09	6.50	5.03	2.18	1.06
	(5.50)	(5.21)	(5.42)	(5.47)	(5.19)	(4.90)	(4.98)	(4.95)	(4.90)
Comprehension	2.17	1.92	2.16	2.27	2.02	3.01***	2.66**	2.92*	2.59
	(1.59)	(1.59)	(1.59)	(1.58)	(1.58)	(1.15)	(1.17)	(1.57)	(1.58)
Risk Aversion		19.09***			18.97***		18.14***		16.31***
		(5.29)			(5.28)		(3.92)		(4.85)
Ambig. Aversion		-2.82			-2.57		3.63		-3.11
		(5.40)			(5.39)		(4.15)		(4.95)
Beliefs of Success Determinants		-0.80			-0.89		-6.57**		-1.54
		(4.01)			(3.96)		(3.08)		(3.62)
Conservatism		0.44			0.26		-1.08		0.61
		(2.14)			(2.12)		(1.83)		(2.01)
Civic Norms		3.78			3.89		2.67		3.28
		(2.49)			(2.46)		(1.71)		(2.32)
Individualism		2.40			2.58		4.19		2.14
		(3.27)			(3.35)		(2.65)		(3.36)
Trust		4.61			4.88		-1.79		4.93
		(3.41)			(3.39)		(2.12)		(3.36)
Left		8.15***			8.29***		6.60*		7.46**
		(2.94)			(2.99)		(3.50)		(2.92)
Right		-7.65			-7.46		-9.60**		-7.84
		(4.95)			(4.96)		(4.55)		(4.92)
Entry		1.42			1.41		1.55		1.28
		(1.52)			(1.52)		(1.11)		(1.50)
Competition		3.45**			3.46**		3.12**		2.77*
		(1.67)			(1.65)		(1.30)		(1.47)
Constant	26.71*	12.77	25.76*	25.13*	10.79	52.68***	38.30***	64.42***	49.34***
	(15.16)	(15.26)	(15.21)	(15.03)	(15.18)	(13.53)	(14.46)	(17.54)	(17.24)
Observations	1,172	1,164	1,172	1,172	1,164	1,172	1,164	1,172	1,164
Uncensored obs.	740	736	740	740	736	813	808	740	736
Left-censored obs.	211	210	211	211	210	178	177	211	210
Right-censored obs.	211	218	221	211	218	181	179	221	218
chi2	130.4	254.3	155.3	156.2	353.2	360.3	622.2	237.9	547.1

Note: See section S3.1 for a description of the model and of variables. See section 3.3.3 and equation 9 in the main paper for the definition of the Overconfidence variable. Robust standard errors in parentheses. $***$, $**$, $*$ indicate p-value < 0.1,0.05, 0.01, respectively.

Table S10: Pairwise tests on equality of country dummy coefficients: Overconfidence analysis

	US	ITA	GER
ITA	0.55		
	(0.9)		
	0.54		
GER	1.48	0.93	
	(1.10)	(0.94)	
	0.18	*0.32*	
NOR	0.67	0.12	-0.81
	(1.21)	(1.06)	(1.23)
	0.58	*0.91*	*0.51*

Table S10a

	US	ITA	GER
ITA	0.84		
	(0.86)		
	0.33		
GER	1.58	0.75	
	(1.09)	(0.92)	
	0.15	*0.41*	
NOR	0.81	-0.02	-0.77
	(1.15)	(0.99)	(1.19)
	0.48	*0.98*	*0.52*

Table S10b

Note: Two-tailed t-test results of the null hypothesis that pairs of country dummy coefficients are equal to each other in the regressions reported in Table S9, column (4) (for Panel a) and column (5) (for Panel b). The upper value in each cell is the t-statistics of the test, a positive (negative) value indicating that the mean for τ_3, for the country in the row entry is greater (lower) than the mean for the country in the column entry. The value in bracket is the standard error of the t-statistics, while the value in italic is the p-value of the test. ***=$p<0.01$;**=$p<0.05$;*=$p<0.1$.

Table S11: Analysis of Expectation measures

	US	ITA	GER
ITA	0.83		
	0.41		
	694		
GER	5.78***	4.31***	
	<0.0001	*<0.0001*	
	704	650	
NOR	2.93***	1.93*	-1.58
	0.0034	*0.054*	*0.11*
	539	485	495

Table S11a: Expectation Distribution - Decision 2

	US	ITA	GER
ITA	1.13		
	0.26		
	694		
GER	3.53***	2.20**	
	0.0004	*0.028*	
	704	650	
NOR	2.69***	1.65*	-0.061
	0.0072	*0.099*	*0.95*
	539	485	495

Table S11b: Expectation Distribution - Decision 3

	US	ITA	GER
ITA	-0.19		
	(0.83)		
	0.82		
GER	1.97***	2.16***	
	(0.72)	(0.75)	
	0.006	*0.004*	
NOR	0.5	0.69	-1.47
	(1.03)	(1.07)	(0.99)
	0.63	*0.52*	*0.14*

Table S11c: Expectation Effect - Decision 2

	US	ITA	GER
ITA	-0.19		
	(0.96)		
	0.84		
GER	1.81	2.01*	
	(1.19)	(1.19)	
	0.13	*0.093*	
NOR	1.06	1.26	-0.75
	(1.19)	(1.18)	(1.37)
	0.37	*0.29*	*0.58*

Table S11d: Expectation Effect - Decision 3

Note: See main paper: section 2, for definition and measurement of expectations on initial earnings. Panels (a) and (b) report results of pairwise tests on the null hypothesis that the distribution of expectations is the same for pairs of countries. The upper value in each cell is the z-statistics, followed by the p-value and the number of observations. A positive sign for the z-statistics means that the distribution of overconfidence tends to be skewed toward positive values. Panels (c) and (d) report results of tests on the null hypothesis that the interaction of the Expectation variable and a country dummy differ between two different countries. See also notes to Table S4 for interpretation of coefficients. Such regressions are based on the models as of Table S9, column 6 (Panel c), and Table S9, column 8 (Panel d). $***$, $**$, $*$ indicate p-value < 0.1,0.05, 0.01, respectively.

Table S12: Differences in strict selfish/altruistic types across countries

	US	ITA	GER
ITA	-0.003		
	(0.015)		
	0.85		
GER	-0.044**	-0.041**	
	(0.017)	(0.018)	
	0.01	*0.019*	
NOR	-0.051**	-0.048**	-0.007
	(0.022)	(0.022)	(0.023)
	0.018	*0.028*	*0.76*

Table S12a: Pairwise differences in Strict Selfish Low-Earner types

	US	ITA	GER
ITA	-0.023**		
	(0.011)		
	0.040		
GER	0.008	0.031***	
	(0.008)	(0.010)	
	0.30	*0.002*	
NOR	0.013	0.036***	0.005
	(0.009)	(0.011)	(0.007)
	0.12	*0.001*	*0.49*

Table S12b: Pairwise differences in Strict Altruistic Low-Earner types

	US	ITA	GER
ITA	0.0024		
	(0.022)		
	0.91		
GER	0.036*	0.034*	
	(0.02)	(0.021)	
	0.070	*0.098*	
NOR	0.021	0.019	-0.015
	(0.025)	(0.025)	(0.024)
	0.4	*0.46*	*0.53*

Table S12c: Pairwise differences in Strict Selfish High-Earner types

	US	ITA	GER
ITA	-0.0025		
	(0.011)		
	0.83		
GER	0.006	0.0085	
	(0.01)	(0.01)	
	0.55	*0.43*	
NOR	0.001	0.0034	-0.005
	(0.014)	(0.014)	(0.014)
	0.94	*0.81*	*0.72*

Table S12d: Pairwise differences in Strict Altruistic High-Earner types

Note: Results of pairwise tests on the null hypotheses that country dummy coefficients are equal to each other in tobit regressions with dependent variable the frequency of a given strict types. See section S3.4 for definition of types. A tobit model was run with country and decision fixed effects and robust standard errors clustered at the individual level over pooled decisions for D_t, $t = \{2, 3, 4\}$ (not reported, see analysis reproduction codes). See notes to Table S4 for interpretation of coefficients. $***$, $**$, $*$ indicate p-value < 0.1,0.05, 0.01, respectively.

Table S13: Tobit panel regression

DEP. VARIABLE: Tax Rate	Decisions 2-4		Decisions 1-4			
	(1)	(2)	(3)	(4)	(5)	(6)
ITALY	-2.00	-1.65	2.06	1.83		
	(5.31)	(5.25)	(4.01)	(3.96)		
GERMANY	13.90***	8.93*	11.81***	7.12*		
	(5.03)	(5.04)	(3.83)	(3.90)		
NORWAY	14.35**	10.84*	13.99***	9.40**		
	(5.93)	(5.87)	(4.19)	(4.22)		
US_X_HighEarner	-38.75***	-12.16***				
	(3.86)	(4.63)				
ITA_X_HighEarner	-36.64***	-9.49**				
	(4.28)	(4.82)				
GER_X_HighEarner	-53.25***	-27.29***				
	(3.69)	(4.42)				
NOR_X_HighEarner	-49.88***	-24.86***				
	(6.12)	(6.35)				
ABILITY	-4.73	-4.84	-1.96	-1.69	-1.94	-1.53
	(3.41)	(3.36)	(3.50)	(3.45)	(3.49)	(3.43)
RANDOM	8.85**	10.21***	15.78***	15.77***	15.76***	15.75***
	(3.55)	(3.46)	(3.56)	(3.47)	(3.54)	(3.44)
ORIGIN	7.05**	7.87**	12.59***	13.04***	12.23***	12.76***
	(3.41)	(3.29)	(3.41)	(3.28)	(3.38)	(3.25)
Expected / Actual Initial Earnings		-2.90***				
		(0.36)				
Father_edu_1	-5.78	-7.23*	-5.46	-6.93*	-5.89	-7.65*
	(4.07)	(3.97)	(4.02)	(3.88)	(4.08)	(3.93)
Father_edu_2	-5.64	-6.93*	-7.31*	-8.59**	-8.22*	-9.70**
	(4.21)	(4.12)	(4.31)	(4.21)	(4.37)	(4.27)
Father_edu_3	-7.41*	-9.19**	-6.06	-7.97*	-6.79	-9.05**
	(4.31)	(4.20)	(4.34)	(4.20)	(4.43)	(4.28)
Risk Aversion		13.78***		17.15***		17.09***
		(3.69)		(3.76)		(3.74)
Beliefs of Success Determinants		-3.21		-2.98		-2.92
		(2.43)		(2.41)		(2.42)
Left		4.58		5.89**		6.65**
		(2.93)		(2.96)		(3.00)
Right		-8.22**		-10.14**		-10.42***
		(4.01)		(3.95)		(3.94)
Decision 2			-5.00***	-5.03***	-4.99***	-5.02***
			(1.21)	(1.22)	(1.21)	(1.22)
Decision 3	0.21	-0.32	-2.48*	-2.56*	-2.48*	-2.57*
	(1.43)	(1.40)	(1.49)	(1.48)	(1.49)	(1.49)
Decision 4	-2.47	-4.34**	-2.69	-2.60	-2.68	-2.59
	(1.73)	(1.73)	(1.93)	(1.94)	(1.93)	(1.94)
USA_2					13.06***	12.01***
					(4.58)	(4.63)
ITA_1					8.10	6.35
					(5.23)	(5.23)
ITA_2					8.54	8.80*
					(5.26)	(5.27)
GER_1					16.28***	9.99**
					(4.99)	(5.07)
GER_2					20.46***	17.68***
					(4.98)	(5.19)
NOR					20.08***	15.59***
					(4.60)	(4.74)
Constant	47.13***	57.16***	18.10*	5.76	13.76	2.72
	(10.50)	(12.03)	(10.10)	(11.34)	(10.20)	(11.31)
Observations	3,516	3,492	4,688	4,656	4,688	4,656
Uncensored obs.	2,713	2,159	3,010	2,991	3,010	2,991
Left-censored obs.	654	650	784	779	784	779
Right-censored obs.	689	683	894	886	894	886
chi2	495.0	588.8	107.9	177.6	119.5	194.6

Note: See section S3.1 for a description of the variables and an account of the econometric model. Robust standard errors clustered at individual level in parentheses. *, **, *** denote p-value $< 0.1, 0.05, 0.01$, respectively.

Table S14: Tobit panel regression: Analysis of treatment effects

DEPENDENT VAR.: TAX RATE	Pooled Decisions 1-4				
	(1)	(2)	(3)	(4)	(5)
ITALY	1.99	-2.32	-3.16		
	(4.01)	(5.14)	(5.07)		
GERMANY	11.84***	6.89	3.18		
	(3.83)	(4.83)	(4.83)		
NORWAY	14.01***	11.63**	8.32		
	(4.18)	(5.74)	(5.71)		
Luck	15.18***				
	(2.44)				
Luck_X_US		6.54	7.56		
		(5.11)	(5.01)		
Luck_X_ITALY		15.66***	17.85***		
		(5.30)	(5.18)		
Luck_X_GERMANY		16.68***	15.69***		
		(5.02)	(4.85)		
Luck_X_NORWAY		11.40	10.00		
		(7.12)	(6.71)		
RANDOM		3.29	2.81		
		(3.46)	(3.34)		
ABILITY		-1.89	-1.62		
		(3.49)	(3.44)		
Effort_X_ITALY				-0.39	-2.79
				(7.35)	(7.18)
Effort_X_GERMANY				4.02	0.50
				(6.47)	(6.43)
Effort_X_NORWAY				8.15	1.95
				(7.51)	(7.49)
Ability_X_US				-3.67	-5.02
				(6.40)	(6.41)
Ability_X_ITALY				-7.38	-7.83
				(6.60)	(6.73)
Ability_X_GERMANY				6.38	1.10
				(6.75)	(6.66)
Ability_X_NORWAY				11.78	10.12
				(8.91)	(8.57)
Origin_X_US				9.99	10.92*
				(6.41)	(6.23)
Origin_X_ITALY				11.25*	11.27*
				(6.53)	(6.50)
Origin_X_GERMANY				20.01***	14.74**
				(6.91)	(6.79)
Origin_X_NORWAY				21.85***	15.54**
				(8.14)	(7.76)
Random_X_US				5.09	4.22
				(6.36)	(6.30)
Random_X_ITALY				17.58**	18.38**
				(7.66)	(7.61)
Random_X_GERMANY				28.77***	22.46***
				(6.72)	(6.65)
Random_X_NORWAY				25.93***	20.63**
				(8.66)	(8.19)
Gender	0.42	0.54	-0.93	0.52	-1.01
	(2.49)	(2.49)	(2.42)	(2.48)	(2.42)
Experience	1.01	0.95	1.82	0.68	1.44
	(2.57)	(2.59)	(2.55)	(2.61)	(2.57)
Ethnic_minority	-1.12	-1.18	-3.01	-0.62	-2.27
	(3.28)	(3.28)	(3.32)	(3.32)	(3.35)
Father_unemp	2.04	1.31	-1.25	0.70	-1.62
	(9.32)	(9.38)	(8.98)	(9.46)	(9.10)
Mother_unemp	4.61	5.06	4.05	5.19	3.74
	(6.88)	(6.96)	(6.62)	(6.92)	(6.57)
Father_retired	1.52	1.01	0.17	1.23	0.35
	(6.40)	(6.38)	(6.45)	(6.39)	(6.45)
Mother_retired	14.86	14.89	12.13	14.96	12.37
	(10.65)	(10.72)	(10.43)	(10.74)	(10.44)
Housewife	-5.40	-5.32	-5.00	-5.74	-5.46
	(4.05)	(4.07)	(3.93)	(4.07)	(3.93)
Father_edu_1	-5.40	-5.36	-6.74*	-5.43	-6.81*
	(4.02)	(4.04)	(3.90)	(4.03)	(3.90)
Father_edu_2	-7.34*	-6.92	-8.06*	-6.86	-7.86*
	(4.31)	(4.34)	(4.23)	(4.32)	(4.22)
Father_edu_3	-5.95	-5.92	-7.77*	-5.81	-7.61*
	(4.34)	(4.34)	(4.20)	(4.32)	(4.18)
Mother_edu_1	-1.91	-1.95	-0.73	-2.03	-0.98
	(3.74)	(3.77)	(3.66)	(3.78)	(3.68)
Mother_edu_2	3.10	3.22	5.39	3.05	5.07
	(4.50)	(4.50)	(4.46)	(4.51)	(4.46)
Mother_edu_3	1.91	2.10	0.53	2.17	0.43
	(4.48)	(4.48)	(4.36)	(4.49)	(4.36)
Comprehension	2.68***	2.75***	2.55**	2.70***	2.49**
	(0.99)	(0.99)	(1.02)	(1.00)	(1.02)
Risk Aversion			17.31***		17.26***
			(3.77)		(3.75)
Ambig. Aversion			-0.14		0.09
			(3.48)		(3.50)
Beliefs of Success Determinants			-3.30		-3.33
			(2.40)		
Conservatism			0.97		0.94
			(1.85)		(1.84)
Civic Norms			3.37*		3.22*
			(1.79)		(1.80)
Individualism			2.23		2.26
			(2.64)		(2.64)
Trust			1.65		1.66
			(2.71)		(2.72)
Left			5.79**		5.66*
			(2.95)		(2.94)
Right			-10.44***		-11.00***
			(3.93)		(3.94)
Entry			2.35**		2.29**
			(1.05)		(1.05)
Competition			2.34*		2.47*
			(1.30)		(1.30)
Decision 2	-5.00***	-5.00***	-5.02***	-5.01***	-5.03***
	(1.21)	(1.21)	(1.22)	(1.21)	(1.22)
Decision 3	-2.47*	-2.48*	-2.57*	-2.49*	-2.57*
	(1.48)	(1.49)	(1.48)	(1.49)	(1.48)
Decision 4	-2.69	-2.69	-2.60	-2.69	-2.60
	(1.93)	(1.93)	(1.94)	(1.93)	(1.94)
Constant	16.84*	19.85*	7.54	21.06**	9.76
	(9.79)	(10.13)	(11.41)	(10.53)	(11.72)
Observations	4,688	4,688	4,656	4,688	4,656
Uncensored obs.	3,010	3,010	2,991	3,010	2,991
Left-censored obs.	784	784	779	784	779
Right-censored obs.	894	894	886	894	886
chi2	106.1	113.6	182.0	121.2	188.3

Note: See notes to Table S13.

Table S15: Cross-country pairwise tests with pooled decisions

	US	ITA	GER
ITA	-2.06		
	(4.01)		
	0.61		
GER	-11.81***	-9.75**	
	(3.83)	(3.89)	
	0.002	*0.012*	
NOR	-13.99***	-11.92**	-2.18
	(4.19)	(4.79)	(4.48)
	0.001	*0.013*	*0.63*

Table S15a: Differences in country coefficients (without culture controls)

	US	ITA	GER
ITA	-1.83		
	(3.95)		
	0.64		
GER	7.12 *	-5.29	
	(3.90)	(4.01)	
	0.068	*0.19*	
NOR	-9.40 **	-7.57	-2.28
	(4.22)	(4.80)	(4.41)
	0.026	*0.11*	*0.61*

Table S15b: Differences in country coefficients (with culture controls)

	US	ITA	GER
ITA	1.02		
	(4.41)		
	0.82		
GER	-6.21	-7.23	
	(4.93)	(4.48)	
	0.15	*0.11*	
NOR	-1.85	-2.87	-4.36
	(4.93)	(5.54)	(5.13)
	0.71	*0.60*	*0.40*

Table S15c: Differences in country coefficients in Decisions 2-4: High earners (with culture controls)

	US	ITA	GER
ITA	1.65		
	(5.25)		
	0.75		
GER	-8.93*	-10.58**	
	(5.04)	(5.28)	
	0.076	*0.045*	
NOR	10.84*	-12.49**	-1.91
	(5.87)	(6.28)	(5.89)
	0.065	*0.047*	*0.75*

Table S15d: Differences in country coefficients in Decisions 2-4: Low earners (with culture controls)

	US	ITA	GER
ITA	9.00		
	(6.54)		
	0.17		
GER	8.03	-0.98	
	(6.20)	(6.47)	
	0.20	*0.88*	
NOR	-5.26	-3.74	-2.76
	(8.17)	(8.30)	(8.04)
	0.52	*0.65*	*0.73*

Table S15e: Differences in Luck coefficients across countries (without culture controls)

	US	ITA	GER
ITA	10.05		
	(6.46)		
	0.12		
GER	5.64	-4.42	
	(6.11)	(6.41)	
	0.36	*0.49*	
NOR	2.53	-7.52	-3.10
	(7.76)	(7.98)	(7.62)
	0.74	*0.35*	*0.68*

Table S15f: Differences in Luck coefficients across countries (with culture controls)

Note: Panels a and b report results of tests on the null hypothesis that country dummy coefficients are equal to each other. Such tests are derived from the regression pooling the four decisions without, and with, attitudinal controls, respectively (Table S13 column 3 for Panel a; Table S13 column 4, for Panel b), thus testing for equality in preferences for redistribution between countries pooling the four decisions. Panel c reports tests on the null hypothesis that the difference in the country coefficients interacted with above-median hearners (High-Earners) is equal to zero, thus testing for differences of above-median earners' demand for redistribution across countries. Such tests are run on the model of Table S13, column 2. Panel d reports tests on the null hypothesis that the difference in the country coefficients interacted with below-median hearners (Low-Earners) is equal to zero, thus testing for differences of below-median earners' demand for redistribution across countries. Such tests are also run on the model of Table S13, column 2. Panels e and f report results of tests on the null hypothesis that country dummy coefficients interacted wih the Luck coefficient are equal to each other. Such tests are run on regressions of Table S14, column 2 (no culture controls) and 3 (with culture controls), respectively. See notes to Table S4 for interpretation of coefficients.

Table S16: Treatment differences per country pooling four decisions

Table S16a: US

US	Effort	Ability	Random
Ability	3.67		
	(6.40)		
	0.57		
Random	-9.99	-8.76	
	(6.41)	(6.15)	
	0.12	*0.16*	
Origin	-5.09	-13.65**	-4.90
	(6.36)	(6.25)	(6.20)
	0.42	*0.029*	*0.43*

Table S16b: Italy

Italy	Effort	Ability	Random
Ability	6.99		
	(6.60)		
	0.29		
Random	-17.97**	-24.96***	
	(7.46)	(6.92)	
	0.016	*<0.001*	
Origin	-11.64*	-18.63***	6.32
	(6.52)	(5.81)	(6.78)
	0.074	*0.001*	*0.35*

Table S16c: Germany

Germany	Effort	Ability	Random
Ability	-2.35		
	(6.08)		
	0.70		
Random	-24.74***	-22.38***	
	(6.03)	(5.97)	
	<0.001	*<0.001*	
Origin	-15.99**	-13.63**	8.76
	(6.23)	(6.13)	(6.18)
	0.010	*0.028*	*0.16*

Table S16d: Norway

Norway	Effort	Ability	Random
Ability	-3.63		
	(9.65)		
	0.71		
Random	-17.78*	-14.14	
	(9.34)	(10.40)	
	0.057	*0.17*	
Origin	-13.70	-10.07	4.07
	(8.87)	(10.20)	(9.83)
	0.12	*0.32*	*0.68*

Note: Tests of the null hypothesis that treatment dummy coefficients are equal to each other within each country, pooling the four decisions together. Such tests are derived from the regressions of Table S14, column 4 (without cultural controls). See notes to Table S4 for interpretation of coefficients. $***$, $**$, $*$ indicate p-value < 0.1, 0.05, 0.01, respectively.

Table S17: Tobit analysis of reward of merit by decision

DEPENDENT VAR.: TAX RATE	Decision 1		Decision 2		Decision 3		Decision 4			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
ITALY	3.17	1.29	-3.64	-4.74	-2.70	-2.90	-7.14	-8.08	-20.04*	-19.70**
	(3.73)	(3.59)	(5.93)	(5.35)	(6.60)	(5.78)	(9.48)	(8.22)	(10.61)	(9.95)
GERMANY	10.62**	7.49	6.30	-0.93	0.08	-6.07	10.63	3.09	17.00**	10.34
	(4.72)	(4.70)	(5.62)	(4.73)	(9.19)	(9.90)	(8.03)	(8.21)	(7.96)	(8.02)
NORWAY	11.64***	9.33*	6.00	-0.03	10.12	2.23	21.39**	14.25	23.48**	20.57*
	(4.07)	(4.87)	(4.95)	(5.35)	(7.16)	(7.65)	(9.24)	(9.67)	(9.64)	(11.44)
Luck_X_US	10.32**	10.33**	13.02**	11.39***	11.45*	11.92**	0.75	1.44	-13.75*	-13.88*
	(4.34)	(4.15)	(5.31)	(4.10)	(6.50)	(5.82)	(6.82)	(6.64)	(8.19)	(8.01)
Luck_X_ITALY	14.22***	16.24***	16.26***	15.23***	16.76***	16.14***	27.71***	26.83***	23.36**	24.31**
	(4.46)	(4.67)	(5.13)	(4.98)	(5.46)	(5.27)	(6.63)	(5.71)	(11.01)	(10.52)
Luck_X_GERMANY	21.15***	20.55***	20.45***	15.53***	19.75**	17.13*	15.31**	12.92**	5.68	4.62
	(4.51)	(4.42)	(4.86)	(3.59)	(9.54)	(9.77)	(6.19)	(5.98)	(8.71)	(8.65)
Luck_X_NORWAY	21.18***	19.62***	18.70***	15.24***	9.71	7.38	3.72	1.89	6.79	5.17
	(7.11)	(7.02)	(4.28)	(5.52)	(6.31)	(6.36)	(7.21)	(7.64)	(8.18)	(11.01)
US_X_HighEarner_4									-80.69***	-43.66***
									(6.35)	(8.35)
ITA_X_HighEarner4									-54.98***	-18.23
									(8.90)	(11.57)
GER_X_HighEarner4									-95.99***	-58.46***
									(10.73)	(12.29)
NOR_X_HighEarner4									-89.83***	-54.09***
									(6.36)	(9.65)
US_dum_X_HE_4_X_Luck									32.14***	32.73***
									(9.22)	(9.88)
ITALY_X_HE_4_X_Luck									4.11	4.01
									(18.39)	(17.89)
GERMANY_X_HE_4_X_Luck									16.55	17.02
									(15.06)	(14.49)
NORWAY_X_HE_4_X_Luck									-4.06	-5.79
									(9.73)	(11.34)
Gender	2.41	0.66	0.51	-5.83**	0.46	-3.60	-0.98	0.87	-1.32	-0.16
	(2.88)	(2.78)	(3.03)	(2.83)	(3.16)	(2.86)	(3.54)	(2.98)	(3.50)	(3.04)
Experience	2.58	3.60	-2.81	-3.69	2.81	1.94	1.35	0.64	-0.16	0.79
	(2.21)	(2.38)	(3.00)	(2.70)	(3.85)	(3.66)	(3.94)	(3.45)	(3.44)	(3.44)
Ethnic_minority	-6.15*	-7.89**	-3.11	-3.30	2.01	0.89	4.91	-0.84	-0.10	-1.68
	(3.21)	(3.15)	(3.84)	(3.67)	(4.59)	(4.29)	(5.88)	(5.31)	(4.92)	(5.05)
Father_unemp	19.62*	18.12*	-4.09	-9.92	-5.35	-11.55	-6.18	-5.85	-4.97	-5.63
	(10.46)	(10.38)	(9.14)	(8.40)	(12.26)	(10.87)	(15.38)	(12.13)	(12.33)	(11.47)
Mother_unemp	1.26	-0.39	2.40	2.32	5.40	6.33	13.13	-10.37	-7.81	-10.37
	(5.91)	(5.92)	(7.12)	(7.08)	(7.58)	(7.59)	(11.08)	(11.10)	(9.93)	(10.59)
Father_retired	0.58	-0.81	2.03	1.74	-1.57	-4.79	5.92	6.62	4.54	5.55
	(6.62)	(5.85)	(7.09)	(6.11)	(8.24)	(8.65)	(9.64)	(7.33)	(6.91)	(7.15)
Mother_retired	11.00	8.26	14.73	8.75	9.27	8.66	27.50*	18.80	21.50*	17.90
	(10.95)	(10.96)	(11.95)	(11.57)	(12.91)	(12.36)	(14.96)	(11.79)	(12.02)	(11.20)
Housewife	-5.78	-5.55	-0.11	-1.02	-6.20	-6.01	-10.05*	-10.67**	-11.91**	-11.55**
	(4.42)	(4.59)	(5.08)	(4.70)	(5.80)	(5.36)	(6.08)	(5.42)	(5.07)	(5.13)
1.father_edu_4c	-3.18	-4.49	-3.76	-5.43	-3.77	-4.59	-11.62	-10.69*	-10.75*	-12.05**
	(3.94)	(3.74)	(4.63)	(4.71)	(5.63)	(5.06)	(7.21)	(5.73)	(5.89)	(5.58)
2.father_edu_4c	-6.22	-6.89	-8.39*	-7.95*	-5.36	-5.32	-7.87	-7.52	-5.52	-7.47
	(4.59)	(4.45)	(4.55)	(4.57)	(5.30)	(4.76)	(7.36)	(5.11)	(5.57)	(5.11)
3.father_edu_4c	-2.26	-3.82	-10.48**	-12.07***	-3.71	-5.97	-6.90	-6.76	-5.43	-8.02
	(4.09)	(3.66)	(4.46)	(4.18)	(5.48)	(4.93)	(7.75)	(5.91)	(5.83)	(5.63)
1.mother_edu_4c	2.03	3.37	0.27	3.08	-6.31	-5.50	-4.80	-4.31	-2.60	-2.99
	(3.81)	(3.59)	(4.68)	(4.71)	(5.61)	(4.82)	(7.60)	(6.01)	(5.70)	(5.71)
2.mother_edu_4c	8.34*	10.30**	2.50	5.66	1.45	2.09	-1.05	-2.46	-3.29	-2.38
	(4.75)	(4.51)	(5.32)	(5.18)	(6.41)	(5.64)	(8.87)	(6.95)	(6.75)	(6.55)
3.mother_edu_4c	2.92	1.57	4.02	4.54	0.53	0.37	-0.20	-2.45	0.48	-0.96
	(4.56)	(4.32)	(5.24)	(4.94)	(5.86)	(5.00)	(8.31)	(7.35)	(7.20)	(7.14)
Comprehension	3.49***	3.24**	2.12*	2.80**	2.64*	2.70*	2.92*	4.12**	4.51**	4.05**
	(1.29)	(1.30)	(1.16)	(1.17)	(1.56)	(1.62)	(1.74)	(1.71)	(1.75)	(1.69)
Expected / Actual Initial Earnings				-2.53***		-3.62***		-6.21***		-3.58***
				(0.32)		(0.41)		(0.36)		(0.58)
Risk Aversion		15.87***		18.36***		16.37***		8.85*		11.17**
		(4.18)		(3.93)		(4.82)		(5.14)		(5.14)
Ambig. Aversion		-0.20		3.75		-3.11		-6.97		-6.36
		(4.01)		(4.17)		(5.04)		(5.35)		(5.21)
Beliefs of Success Determinants		-3.45		-6.74**		-1.86		-2.44		-3.59
		(2.91)		(3.09)		(3.61)		(3.89)		(3.58)
Conservatism		1.54		-0.80		1.07		3.58		3.36
		(1.95)		(1.84)		(2.02)		(2.67)		(2.49)
Civic Norms		0.96		2.83		3.09		3.27		2.89
		(1.75)		(1.74)		(2.40)		(2.35)		(2.11)
Individualism		1.23		4.50*		1.90		-2.39		-1.97
		(2.67)		(2.65)		(3.34)		(3.39)		(3.28)
Trust		-1.37		-2.20		4.15		8.38**		7.29**
		(2.58)		(2.20)		(3.47)		(3.55)		(3.46)
Left		6.43*		7.18**		7.30**		-1.36		-2.07
		(3.28)		(3.52)		(2.88)		(4.01)		(3.82)
Right		-12.57***		-9.09**		-8.16		-10.14		-10.13
		(3.98)		(4.60)		(5.05)		(6.29)		(6.16)
Entry		1.31		1.41		1.28		5.04***		5.11***
		(1.20)		(1.13)		(1.49)		(1.78)		(1.78)
competition		1.94*		3.27**		2.94*		-0.52		-0.75
		(1.12)		(1.35)		(1.54)		(1.63)		(1.52)
Constant	3.13	-2.71	20.80**	44.35***	19.56	57.59***	20.94	69.37***	51.12***	63.24***
	(11.29)	(12.70)	(10.39)	(12.48)	(13.97)	(16.66)	(16.94)	(21.05)	(18.01)	(19.98)
Observations	1,172	1,164	1,172	1,164	1,172	1,164	1,172	1,164	1,172	1,164
Uncensored obs.	837	736	813	808	740	736	620	615	620	615
Left-censored obs.	130	210	178	177	211	210	265	263	265	263
Right-censored obs.	205	218	181	179	221	218	287	286	287	286
chi2	358.5	506.4	189.7	704.7	96.44	330.5	140.1	852.3	1177	1874

Note: See section S3.1 for a description of the variables and an account of the econometric model. Robust standard errors in parantheses. *, **, *** indicate p-value $< 0.1, 0.05, 0.01$, respectively.

Table S18: Analysis of individual decisions by Treatment: US

	Effort	Ability	Random
Ability	2.15		
	(4.23)		
	0.61		
Random	-5.19	-7.34	
	(7.16)	(7.23)	
	0.47	*0.31*	
Origin	-13.80***	-15.95***	-8.61
	(3.18)	(3.72)	(6.64)
	<0.001	*<0.001*	*0.20*

(a) Decision 1

	Effort	Ability	Random
Ability	-3.32		
	(6.08)		
	0.58		
Random	-12.53	-9.20	
	(9.21)	(8.29)	
	0.17	*0.27*	
Origin	-16.96***	-13.64***	-4.43
	(5.56)	(4.02)	(7.68)
	0.002	*0.001*	*0.56*

(b) Decision 2

	Effort	Ability	Random
Ability	4.13		
	(7.89)		
	0.60		
Random	-10.65	-14.79	
	(10.85)	(9.77)	
	0.32	*0.13*	
Origin	-7.91	-12.04*	2.75
	(7.95)	(6.62)	(9.89)
	0.32	*0.069*	*0.78*

(c) Decision 3

	Effort	Ability	Random
Ability	14.06		
	(9.62)		
	0.14		
Random	10.85	-3.20	
	(9.09)	(10.33)	
	0.23	*0.76*	
Origin	0.48	-13.58	-10.38
	(7.40)	(8.87)	(8.59)
	0.95	*0.13*	*0.23*

(d) Decision 4

Note: Results of tests on the null hypothesis that treatment coefficients in the US are equal to each other for each Decision. The econometric models on which these tests are based (reported in the Analyses Output) are based on the model of Table S17 (without cultural controls), with interaction terms between country and treatments replacing interaction terms between country and Luck coefficient. See notes to Table S4 for interpretation of coefficients. *, **, *** indicate p-value $< 0.1, 0.05, 0.01$, respectively.

Table S19: Analysis of individual decisions by Treatment: Italy

	Effort	Ability	Random
Ability	0.79		
	(5.00)		
	0.87		
Random	-17.54**	-18.33***	
	(6.89)	(5.68)	
	0.011	*0.001*	
Origin	-10.08*	-10.87**	7.46
	(5.93)	(4.58)	(6.24)
	0.089	*0.018*	*0.23*

(a) Decision 1

	Effort	Ability	Random
Ability	1.99		
	(8.52)		
	0.82		
Random	-19.39***	-21.38**	
	(5.12)	(8.36)	
	<0.001	*0.011*	
Origin	-11.21**	-13.19	8.19*
	(5.46)	(8.41)	(4.93)
	0.040	*0.12*	*0.097*

(b) Decision 2

	Effort	Ability	Random
Ability	1.12		
	(7.38)		
	0.88		
Random	-24.50***	-23.37***	
	(4.36)	(8.00)	
	<0.001	*0.003*	
Origin	-10.14**	-9.02	14.35***
	(4.88)	(8.10)	(5.41)
	0.038	*0.27*	*0.006*

(c) Decision 3

	Effort	Ability	Random
Ability	30.03***		
	(5.16)		
	<0.001		
Random	-9.88*	-39.90***	
	(5.87)	(3.61)	
	0.092	*<0.001*	
Origin	-16.41**	-46.43***	-6.53
	(7.20)	(5.63)	(6.13)
	0.023	*<0.001*	*0.29*

(d) Decision 4

Note: Results of tests on the null hypothesis that treatment coefficients in Italy are equal to each other for each Decision. The econometric models on which these tests are drawn (reported in the Analyses Output) are based on the model of Table S17 (without cultural controls), with interaction terms between country and treatments replacing interaction terms between country and Luck coefficient. See notes to Table S4 for interpretation of coefficients. *, **, *** indicate p-value $< 0.1, 0.05, 0.01$, respectively.

Table S20: Analysis of individual decisions by Treatment: Germany

	Effort	Ability	Random
Ability	-6.51		
	(6.36)		
	0.31		
Random	-26.65***	-20.14***	
	(5.14)	(6.20)	
	<0.001	*0.001*	
Origin	-21.95***	-15.45**	4.70
	(5.77)	(6.98)	(5.76)
	<0.001	*0.027*	*0.42*

(a) Decision 1

	Effort	Ability	Random
Ability	-3.71		
	(7.54)		
	0.62		
Random	-27.55***	-23.84***	
	(4.06)	(7.85)	
	<0.001	*0.002*	
Origin	-16.78***	-13.08	10.77**
	(4.40)	(8.24)	(5.39)
	<0.001	*0.11*	*0.046*

(b) Decision 2

	Effort	Ability	Random
Ability	7.59		
	(14.18)		
	0.59		
Random	-30.30***	-22.71*	
	(11.19)	(11.82)	
	0.007	*0.055*	
Origin	-16.15	-8.56	14.15
	(14.08)	(14.39)	(11.31)
	0.25	*0.55*	*0.21*

(c) Decision 3

	Effort	Ability	Random
Ability	10.83		
	(8.49)		
	0.20		
Random	-12.85*	-23.69***	
	(7.05)	(6.28)	
	0.069	*<0.001*	
Origin	-6.93	-17.77*	5.91
	(9.53)	(9.28)	(7.98)
	0.47	*0.056*	*0.46*

(d) Decision 4

Note: Results of tests on the null hypothesis that treatment coefficients in Germany are equal to each other for each Decision. The econometric models on which these tests are drawn (reported in the Analyses Output) are based on the model of Table S17 (without cultural controls), with interaction terms between country and treatments replacing interaction terms between country and Luck coefficient. See notes to Table S4 for interpretation of coefficients. *, **, *** indicate p-value $< 0.1, 0.05, 0.01$, respectively.

Table S21: Analysis of individual decisions by Treatment: Norway

	Effort	Ability	Random
Ability	-7.41		
	(6.16)		
	0.23		
Random	-25.57*	-18.16	
	(13.08)	(11.96)	
	0.051	*0.13*	
Origin	-23.96***	-16.55***	-1.61
	(6.69)	(3.36)	(11.84)
	<0.001	*<0.001*	*0.89*

(a) Decision 1

	Effort	Ability	Random
Ability	0.54		
	(7.45)		
	0.94		
Random	-21.33***	-21.87***	
	(7.49)	(2.34)	
	0.004	*<0.001*	
Origin	-15.57**	-16.11***	5.76**
	(7.38)	(2.65)	(2.36)
	0.035	*<0.001*	*0.014*

(b) Decision 2

	Effort	Ability	Random
Ability	4.49		
	(9.80)		
	0.65		
Random	-16.33	-11.84***	
	(9.93)	(2.63)	
	0.10	*<0.001*	
Origin	-7.47	-2.98	8.86*
	(10.95)	(5.13)	(5.04)
	0.50	*0.56*	*0.079*

(c) Decision 3

	Effort	Ability	Random
Ability	-3.11		
	(13.33)		
	0.82		
Random	-4.63	-1.52	
	(13.69)	(5.00)	
	0.74	*0.76*	
Origin	-5.80	-2.69	-1.17
	(13.05)	(3.46)	(4.07)
	0.66	*0.43*	*0.77*

(d) Decision 4

Note: Results of tests on the null hypothesis that treatment coefficients in Norway are equal to each other for each Decision. The econometric models on which these tests are drawn (reported in the Analyses Output) are based on the model of Table S17 (without cultural controls), with interaction terms between country and treatments replacing interaction terms between country and Luck coefficient. See notes to Table S4 for interpretation of coefficients. *, **, *** indicate p-value $< 0.1, 0.05, 0.01$, respectively.

Table S22: Analysis of Decisions 2 and 3 for High-Earners and Low-Earners

DEP. VARIABLES: TAX RATE	Decision 2		Decision 3	
	(1)	(2)	(3)	(4)
ITALY	-1.92	-3.31	-2.10	-1.35
	(7.18)	(6.39)	(7.41)	(6.89)
GERMANY	12.67**	6.67	3.90	1.12
	(6.07)	(5.48)	(9.31)	(8.88)
NORWAY	6.41	1.68	5.50	1.76
	(6.71)	(6.50)	(8.31)	(8.85)
US_X_HighEarner	-22.05***	-19.93***	-35.18***	-32.45***
	(6.08)	(5.42)	(7.07)	(6.74)
ITA_X_HighEarner	-23.02***	-20.51***	-35.31***	-32.77***
	(5.64)	(5.95)	(5.99)	(6.43)
GER_X_HighEarner	-32.94***	-28.11***	-41.95***	-40.39***
	(3.30)	(3.51)	(8.07)	(7.54)
NOR_X_HighEarner	-23.66***	-20.43***	-36.94***	-36.30***
	(7.25)	(5.98)	(7.80)	(8.17)
RANDOM	12.19***	13.00***	16.27***	16.48***
	(3.57)	(3.40)	(4.50)	(4.47)
ORIGIN	10.79***	11.88***	7.21	7.84*
	(2.62)	(2.59)	(4.81)	(4.60)
ABILITY	0.41	0.29	0.10	0.70
	(3.61)	(3.52)	(5.23)	(5.36)
Gender	-3.01	-5.01*	-3.42	-4.33
	(2.99)	(2.82)	(2.88)	(2.67)
Experience	-3.95	-3.35	1.55	2.11
	(2.81)	(2.72)	(3.73)	(3.71)
Ethnic_minority	-2.50	-4.66	1.28	-0.09
	(3.95)	(3.75)	(3.91)	(4.06)
Father_unemp	-4.00	-7.74	-10.63	-12.30
	(8.93)	(8.26)	(10.96)	(10.75)
Mother_unemp	0.67	-0.34	3.95	3.98
	(7.24)	(7.34)	(7.14)	(7.15)
Father_retired	2.66	1.63	-3.73	-4.03
	(6.55)	(5.88)	(8.43)	(7.83)
Mother_retired	11.31	7.74	7.18	5.75
	(11.63)	(11.17)	(12.45)	(12.15)
Housewife	-0.76	-1.29	-5.77	-5.25
	(4.68)	(4.67)	(4.97)	(5.10)
Father_edu_1	-3.81	-5.33	-3.47	-4.77
	(4.73)	(4.75)	(5.18)	(5.11)
Father_edu_2	-6.09	-7.29*	-5.56	-6.62
	(4.26)	(4.38)	(5.02)	(4.84)
Father_edu_3	-10.02**	-11.53***	-5.15	-6.89
	(4.36)	(4.08)	(5.27)	(5.00)
Mother_edu_1	0.83	2.68	-5.19	-4.45
	(4.70)	(4.75)	(4.68)	(4.63)
Mother_edu_2	1.78	4.36	-0.17	1.75
	(4.99)	(5.21)	(5.46)	(5.46)
Mother_edu_3	4.84	3.49	2.07	0.88
	(5.11)	(5.17)	(4.76)	(4.69)
Comprehension	2.85**	2.55**	2.84*	2.58*
	(1.11)	(1.13)	(1.53)	(1.55)
Risk Aversion		17.03***		15.60***
		(3.85)		(4.90)
Ambig. Aversion		4.35		-3.12
		(4.18)		(5.05)
Beliefs of Success Determinants		-6.84**		-0.90
		(3.10)		(3.68)
Conservatism		-1.00		0.73
		(1.87)		(1.94)
Civic Norms		2.61		3.83*
		(1.73)		(2.29)
Individualism		4.84*		2.78
		(2.67)		(3.30)
Trust		-2.30		4.11
		(2.26)		(3.37)
Left		6.09*		6.83**
		(3.58)		(2.90)
Right		-10.08**		-7.51
		(4.33)		(4.98)
Entry		1.25		1.52
		(1.13)		(1.49)
Competition		3.67***		2.99**
		(1.35)		(1.49)
Constant	35.93***	24.30*	46.17***	32.53**
	(11.74)	(12.89)	(15.33)	(15.22)
Observations	1,172	1,164	1,172	1,164
Left-censored obs.	178	177	211	210
Right-censored obs.	181	179	221	218
chi2	483.6	896.4	235.2	622.0

Note: These regressions modify the basic model as of Table S4, columns 3-6, to identify participants expecting to earn either above the median (High-Earners) or below the median (Low-Earners). See main paper: section 4.1.5 for the whole analysis. See notes to Table S4.

Table S23: Pairwise tests of equality of country dummy coefficients; Decision 2-3

Decision 2 High-Earner

	US	ITA	GER
ITA	2.89		
	(4.73)		
	0.54		
GER	-1.77	-4.66	
	(4.83)	(5.09)	
	0.71	*0.36*	
NOR	-4.79	- 7.68	-3.01
	(4.76)	(5.63)	(5.40)
	0.31	*0.17*	*0.58*

Panel a

Decision 2 Low-Earner

	US	ITA	GER
ITA	1.92		
	(7.18)		
	0.79		
GER	-12.67**	-14.59***	
	(6.07)	(5.47)	
	0.037	*0.008*	
NOR	-6.41	-8.33	6.26
	(6.71)	(6.51)	(5.55)
	0.34	*0.20*	*0.26*

Panel b

Decision 3 High-Earner

	US	ITA	GER
ITA	2.23		
	(6.13)		
	0.72		
GER	2.87	0.64	
	(7.60)	(7.82)	
	0.71	*0.93*	
NOR	-3.74	-5.97	-6.61
	(5.54)	(5.80)	(7.05)
	0.50	*0.30*	*0.35*

Panel c

Decision 3 Low-Earner

	US	ITA	GER
ITA	2.10		
	(7.41)		
	0.78		
GER	-3.90	-6.00	
	(9.31)	(8.93)	
	0.68	*0.50*	
NOR	-5.50	-7.60	-1.60
	(8.31)	(7.95)	(8.83)
	0.51	*0.34*	*0.86*

Panel d

Note: Panels report differences in country dummy coefficients for pairs of countries, robust standard errors (in brackets), and $p-$value for the test of equality of coefficients (in italics) derived from Table S22. In particular, Panels a and b are based on regressions in columns 1 of Table S22, while panels c and d are derived from Table S22, column 3. See also notes to Table S4.

Table S24a: Pairwise Test on Overall Types (p-values)

	US	ITA	GER
ITA	0.99		
GER	0.0003***	0.0007***	
NOR	0.0057***	0.011**	0.37

Note: Each cell displays the p-value of the Wald test (χ^2 (3)) for the joint null hypothesis that the distribution of types (represented by the "Transformed mixing proportions" in Table A.2 in the main paper) is equal between two countries against the alternative that it is not.

Table S24b: Pairwise Test on Total Selfish Types

	US	ITA	GER
ITA	0.01 *0.82*		
GER	-0.07 *0.19*	-0.08 *0.14*	
NOR	-0.07 *0.23*	-0.08 *0.18*	0 *0.99*

Table S24c: Pairwise Test on Pure Libertarian Types

	US	ITA	GER
ITA	0 *0.9*		
GER	0.17 *0*	0.17 *0*	
NOR	0.16 *0.001*	0.16 *0.0018*	-0.01 *0.75*

Table S24d: Pairwise Test on Pure Meritocratic Types

	US	ITA	GER
ITA	-0.01 *0.72*		
GER	-0.03 *0.4*	-0.02 *0.63*	
NOR	-0.09 *0.045*	-0.08 *0.091*	-0.06 *0.2*

Table S24e: Pairwise Test on Pure Egalitarian Types

	US	ITA	GER
ITA	0 *0.96*		
GER	-0.07 *0.081*	-0.07 *0.1*	
NOR	0 *0.9*	0 *0.87*	0.07 *0.13*

Note: In panels b, c, d, e, each cell displays the p-value of the individual Wald test (χ^2 (1)) for null hypothesis that the mixing proportion of a certain type (see "Transformed mixing proportions" in Table A.2 in the main paper) is equal between two countries against the alternative that it is not.

Table S25a: Pairwise tests of equality of location coefficients (without culture controls)

Analysis of location effects

	US 1	US 2	ITA 1	ITA 2	GER 1	GER 2
US 1	12.01 ***					
	(4.62)					
	0.009					
ITA 1	6.35	5.66				
	(5.23)	(5.31)				
	0.22	*0.29*				
ITA 2	8.79 *	3.21	-2.45			
	(5.27)	(5.43)	(5.44)			
	0.095	*0.55*	*0.65*			
GER 1	9.98 **	2.02	-3.64	-1.19		
	(5.07)	(4.97)	(5.31)	(5.18)		
	0.049	*0.68*	*0.49*	*0.82*		
GER 2	17.68 ***	-5.67	-11.34 *	-8.88 *	-7.69 *	
	(5.19)	(5.11)	(5.90)	(5.03)	(4.54)	
	0.001	*0.27*	*0.055*	*0.077*	*0.09*	
NOR	15.59 ***	-3.58	-9.24	-6.79	-5.6	2.09
	(4.74)	(4.87)	(5.64)	(5.37)	(4.99)	(4.93)
	0.001	*0.46*	*0.1*	*0.21*	*0.26*	*0.67*

Note: Results of tests on the null hypothesis that location dummy coefficients are equal to each other across the four decisions. Such tests are derived from the regression pooling the four decisions without cultural controls as per Table S13, column 5. See notes to Table S4 for interpretation of coefficients.

Table S25b: Pairwise tests of equality of location coefficients (with culture controls)

	US 1	US 2	ITA 1	ITA 2	GER 1	GER 2
US 2	-12.01 ***					
	(4.62)					
	0.009					
ITA 1	-6.35	5.66				
	(5.23)	(5.31)				
	0.22	*0.29*				
ITA 2	-8.79 *	3.21	-2.45			
	(5.27)	(5.43)	(5.44)			
	0.095	*0.55*	*0.65*			
GER 1	-9.98 **	2.02	-3.64	-1.19		
	(5.07)	(4.97)	(5.31)	(5.18)		
	0.049	*0.68*	*0.49*	*0.82*		
GER 2	-17.68 ***	-5.67	-11.34 *	-8.88 *	-7.69 *	
	(5.19)	(5.11)	(5.90)	(5.03)	(4.54)	
	0.001	*0.27*	*0.055*	*0.077*	*0.09*	
NOR	-15.59 ***	-3.58	-9.24	-6.79	-5.6	2.09
	(4.74)	(4.87)	(5.64)	(5.37)	(4.99)	(4.93)
	0.001	*0.46*	*0.1*	*0.21*	*0.26*	*0.67*

Note: Results of tests on the null hypothesis that location dummy coefficients are equal to each other across the four decisions. Such tests are derived from the regression pooling the four decisions with cultural controls as per Table S13, column 6. See notes to Table S4 for interpretation of coefficients.

Table S26a: Pairwise Test on Overall Types (p-values) per location

	US 1	US 2	ITA 1	ITA 2	GER 1	GER 2
US 2	*0.178*					
ITA 1	*0.099*	*0.141*				
ITA 2	*0.208*	*0.444*	*0.004*			
GER 1	*0.004*	*0.323*	*0.013*	*0.052*		
GER 2	*0.000*	*0.067*	*0.000*	*0.064*	*0.152*	
NOR	*0.001*	*0.284*	*0.000*	*0.144*	*0.124*	*0.642*

Note: Each cell displays the p-value of the Wald test (χ^2 (3)) for the joint null hypothesis that the distribution of types (represented by the "Transformed mixing proportions" in Table A.3 in the main paper) is equal between two locations against the alternative that it is not.

Table S26b: Pairwise tests of equality of distribution of selfish types per location

	US 1	US 2	ITA 1	ITA 2	GER 1	GER 2
US 2	0 *0.99*					
ITA 1	-0.11** *0.024*	-0.11** *0.049*				
ITA 2	0.10 *0.12*	0.10 *0.14*	0.21*** *0.0003*			
GER 1	-0.01 *0.93*	-0.01 *0.94*	0.10 *0.11*	-0.11 *0.16*		
GER 2	0.14* *0.055*	0.14* *0.068*	0.25*** *0.0002*	0.04 *0.67*	0.15* *0.080*	
NOR	0.07 *0.255*	0.07 *0.28*	0.18*** *0.0011*	-0.03 *0.66*	0.08 *0.30*	-0.07 *0.39*

Table S26c: Pairwise tests of equality of distribution of egalitarian types per location

	US 1	US 2	ITA 1	ITA 2	GER 1	GER 2
US 2	0.03 *0.51*					
ITA 1	0.05 *0.35*	0.02 *0.83*				
ITA 2	-0.07 *0.69*	-0.05 *0.33*	-0.07 *0.21*			
GER 1	0.14** *0.017*	0.11 *0.10*	0.09 *0.14*	0.16*** *0.0088*		
GER 2	0.03 *0.53*	0 *0.97*	-0.02 *0.79*	0.05 *0.34*	-0.11* *0.090*	
NOR	0.01 *0.90*	-0.02 *0.62*	-0.04 *0.46*	0.03 *0.63*	-0.13** *0.033*	-0.02 *0.64*

Table S26d: Pairwise tests of equality of distribution of meritocratic types per location

	US 1	US 2	ITA 1	ITA 2	GER 1	GER 2
US 2	0.08					
	0.13					
ITA 1	0.06	-0.02				
	0.25	*0.72*				
ITA 2	-0.03	-0.05	-0.03			
	0.51	*0.41*	*0.63*			
GER 1	0.05	-0.03	-0.01	0.02		
	0.33	*0.64*	*0.89*	*0.75*		
GER 2	0.08	0	0.02	0.05	0.03	
	0.11	*0.92*	*0.65*	*0.36*	*0.57*	
NOR	0.13**	0.05	0.07	0.1*	0.08	0.05
	0.011	*0.34*	*0.19*	*0.072*	*0.16*	*0.40*

Table S26e: Pairwise tests of equality of distribution of libertarian types per location

	US 1	US 2	ITA 1	ITA 2	GER 1	GER 2
US 2	-0.11*					
	0.056					
ITA 1	0	0.11*				
	0.96	*0.071*				
ITA 2	-0.11*	0	-0.11*			
	0.053	*0.99*	*0.069*			
GER 1	-0.19***	-0.08	-0.19***	-0.08		
	0.0015	*0.22*	*0.0025*	*0.23*		
GER 2	-0.25***	-0.14**	-0.25***	-0.14**	-0.06	
	<0.0001	*0.011*	*<0.0001*	*0.012*	*0.24*	
NOR	-0.21***	-0.1*	-0.21***	-0.1*	-0.02	0.04
	0.0002	*0.0928*	*0.0003*	*0.097*	*0.71*	*0.40*

Note: In panels b, c, d, e, each cell displays the p-value of the individual Wald test (χ^2 (1)) for null hypothesis that the mixing proportion of a certain type (see "Transformed mixing proportions" in Table A.3 in the main paper) is equal between two locations against the alternative that it is not.

Table S27: Pairwise tests of equality of distribution of Risk scale per country

	US	ITA	GER
ITA	-0.34		
	0.74		
	693		
GER	1.18	1.48	
	0.24	*0.14*	
	703	650	
NOR	2.44**	2.68***	1.49
	0.015	*0.0074*	*0.14*
	538	485	495

Note: Two-tailed Mann-Wilcoxon ranksum tests of the null hypothesis that the distribution of the Risk Aversion measure (see main paper: Section 2.3.5 and SOM: Section S2.3 for definition and construction) is the same for pairs of countries. The upper value in each cell is the z-statistics of the test, a positive (negative) value indicating that the mean for the risk scale for the country in the row entry is greater (lower) than the mean for the country in the column entry. The value in italics is the p-value of the text, followed by the number of observations. $***$, $**$, $*$ indicate p-value < 0.1,0.05, 0.01, respectively.

Table S28a: Tobit regression of individual decisions including Household Income

DEP. VARIABLE: Tax Rate	Decision 1		Decision 2		Decision 3		Decision 4			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Household Income (ln)	-1.52	-1.58	-0.16	-0.65	-2.98	-3.41*	-4.09	-3.34	-4.42*	-3.73*
	(1.62)	(1.57)	(1.69)	(1.71)	(2.14)	(1.95)	(3.03)	(2.05)	(2.29)	(2.08)
ITALY	4.12	3.40	-2.18	-3.09	-1.12	-2.30	3.31	2.17	-5.91	-4.07
	(4.07)	(3.87)	(4.60)	(3.90)	(5.62)	(4.89)	(6.32)	(5.55)	(8.30)	(7.92)
GERMANY	15.56***	12.46***	9.60**	1.10	4.57	-3.26	17.16***	8.36	25.56***	19.30**
	(4.10)	(3.75)	(4.61)	(3.78)	(6.70)	(6.51)	(6.34)	(6.23)	(7.62)	(7.78)
NORWAY	16.73***	13.48***	8.80***	1.68	9.31*	-0.56	22.04***	13.85**	31.87***	29.06***
	(4.10)	(4.27)	(3.39)	(3.85)	(4.91)	(5.38)	(6.74)	(6.70)	(8.33)	(9.02)
US_X_HighEarner_4									-66.32***	-28.23***
									(6.34)	(9.39)
ITA_X_HighEarner4									-52.80***	-16.02
									(9.48)	(11.43)
GER_X_HighEarner4									-88.87***	-50.48***
									(7.95)	(10.15)
NOR_X_HighEarner4									-91.84***	-57.23***
									(5.00)	(8.45)
RANDOM	17.40***	17.09***	20.07***	15.62***	21.20***	18.62***	3.15	3.50	3.29	3.48
	(4.12)	(4.04)	(3.73)	(3.28)	(4.95)	(4.55)	(4.74)	(4.06)	(4.17)	(4.06)
ORIGIN	16.76***	16.84***	15.36***	12.53***	11.53**	8.56*	7.43	6.55	6.13	6.60
	(3.11)	(3.00)	(2.90)	(2.54)	(5.05)	(4.62)	(4.82)	(4.58)	(4.51)	(4.53)
ABILITY	2.24	1.87	1.70	-0.03	2.72	-0.17	-15.10***	-13.97***	-14.96***	-14.01***
	(3.16)	(3.13)	(3.96)	(3.44)	(5.27)	(5.56)	(5.44)	(5.24)	(5.21)	(5.24)
Gender	1.86	0.23	0.14	-6.07**	-0.59	-4.32	-1.51	0.36	-2.25	-0.79
	(2.80)	(2.77)	(2.99)	(2.84)	(3.11)	(2.89)	(3.75)	(3.16)	(3.69)	(3.23)
Experience	2.82	3.89	-2.97	-3.56	2.59	2.17	3.73	2.62	2.00	2.87
	(2.43)	(2.57)	(3.13)	(2.77)	(3.86)	(3.65)	(3.95)	(3.47)	(3.34)	(3.43)
Ethnic_minority	-6.61**	-8.35***	-3.45	-3.60	0.16	-0.57	3.63	-2.26	-1.78	-3.22
	(3.34)	(3.21)	(3.86)	(3.68)	(4.79)	(4.40)	(6.11)	(5.35)	(5.07)	(5.09)
Father_unemp	18.22*	16.84	-4.81	-10.59	-8.90	-15.48	-4.81	-4.19	-3.30	-3.34
	(10.52)	(10.50)	(9.27)	(8.63)	(12.27)	(10.88)	(15.94)	(12.37)	(13.02)	(11.87)
Mother_unemp	-0.37	-1.99	2.20	1.65	2.84	3.37	6.81	-15.79	-15.06	-16.28
	(5.99)	(5.94)	(6.95)	(6.97)	(7.77)	(7.67)	(11.21)	(11.24)	(10.10)	(10.72)
Father_retired	-0.14	-1.18	1.19	1.28	-3.30	-6.44	6.11	6.86	4.35	5.80
	(6.38)	(5.71)	(7.10)	(6.10)	(8.17)	(8.61)	(11.09)	(8.38)	(8.06)	(8.20)
Mother_retired	10.42	7.69	14.44	8.46	8.35	7.55	25.64*	17.07	19.00	15.93
	(10.94)	(10.99)	(12.09)	(11.74)	(13.21)	(12.78)	(14.75)	(11.73)	(12.05)	(11.15)
Housewife	-6.32	-6.13	-0.25	-1.33	-7.06	-7.24	-12.17**	-12.48**	-13.65***	-13.00***
	(4.38)	(4.58)	(5.03)	(4.66)	(5.70)	(5.30)	(6.05)	(5.25)	(4.96)	(4.96)
1.father_edu_4c	-2.89	-4.25	-3.82	-5.44	-3.93	-4.40	-11.94*	-11.14*	-9.94*	-11.29**
	(3.86)	(3.70)	(4.56)	(4.66)	(5.55)	(5.01)	(7.24)	(5.75)	(5.88)	(5.63)
2.father_edu_4c	-5.69	-6.61	-8.34*	-7.90*	-4.61	-4.57	-7.90	-7.88	-4.40	-6.69
	(4.59)	(4.49)	(4.54)	(4.59)	(5.39)	(4.75)	(7.47)	(5.17)	(5.61)	(5.15)
3.father_edu_4c	-1.74	-3.20	-10.55**	-11.89***	-3.13	-5.04	-6.85	-6.72	-4.65	-6.76
	(4.18)	(3.71)	(4.44)	(4.16)	(5.49)	(4.94)	(8.04)	(6.34)	(6.15)	(6.03)
1.mother_edu_4c	1.79	3.27	0.14	3.10	-6.22	-5.24	-4.72	-4.09	-2.76	-2.89
	(3.89)	(3.67)	(4.67)	(4.74)	(5.48)	(4.65)	(7.67)	(6.10)	(5.77)	(5.88)
2.mother_edu_4c	8.12*	10.44**	2.12	5.79	2.14	3.00	0.09	-1.15	-2.64	-1.92
	(4.79)	(4.53)	(5.38)	(5.17)	(6.26)	(5.52)	(9.01)	(7.08)	(6.98)	(6.89)
3.mother_edu_4c	3.04	2.04	3.75	4.82	1.79	1.85	0.45	-1.87	0.71	-1.04
	(4.69)	(4.44)	(5.22)	(4.89)	(5.64)	(4.83)	(8.58)	(7.56)	(7.57)	(7.52)
Comprehension	3.61***	3.29**	2.14*	2.79**	2.60*	2.71*	2.74	3.84**	4.34**	3.79**
	(1.29)	(1.31)	(1.18)	(1.18)	(1.53)	(1.59)	(1.77)	(1.70)	(1.73)	(1.69)
Expected / Actual Initial Earnings				-2.54***		-3.65***		-6.22***		-3.57***
				(0.32)		(0.41)		(0.36)		(0.58)
Risk Aversion		15.88***		18.38***		16.48***		8.80*		11.59**
		(4.21)		(3.94)		(4.89)		(5.04)		(4.97)
Ambig. Aversion		-0.38		3.58		-3.54		-7.58		-7.93
		(4.04)		(4.20)		(5.02)		(5.33)		(5.14)
Beliefs of Success Determinants		-3.38		-6.63**		-1.98		-1.93		-2.86
		(2.91)		(3.09)		(3.61)		(3.93)		(3.67)
Conservatism		1.44		-0.91		0.71		3.13		3.10
		(1.95)		(1.83)		(2.07)		(2.78)		(2.63)
Civic Norms		1.01		2.83		3.22		3.34		2.92
		(1.74)		(1.75)		(2.42)		(2.31)		(2.11)
Individualism		1.23		4.47*		1.98		-2.50		-1.69
		(2.70)		(2.69)		(3.36)		(3.41)		(3.31)
Trust		-1.09		-2.07		4.32		7.72**		6.77**
		(2.54)		(2.10)		(3.37)		(3.51)		(3.39)
Left		6.40*		7.16**		7.25***		-0.84		-0.95
		(3.28)		(3.48)		(2.79)		(3.87)		(3.74)
Right		-12.16***		-8.88*		-7.54		-9.43		-9.39
		(3.99)		(4.59)		(4.96)		(6.39)		(6.16)
Entry		1.36		1.41		1.12		5.12***		4.97***
		(1.22)		(1.13)		(1.51)		(1.80)		(1.79)
Competition		2.11*		3.31**		3.05**		-0.49		-0.59
		(1.09)		(1.31)		(1.51)		(1.69)		(1.59)
Constant	16.15	10.64	20.67	50.56**	51.04*	95.73***	69.92*	110.95***	97.91***	101.59***
	(21.00)	(22.08)	(20.72)	(23.77)	(28.40)	(28.52)	(38.54)	(34.32)	(33.88)	(33.75)
Observations	1,167	1,164	1,167	1,164	1,167	1,164	1,167	1,164	1,167	1,164
F_mi	10.68	13.29	6.037	16.54	5.145	12.14	6.527	23.52	41.72	44.40

Note: Household Income is expressed in logarithm, with inputted values for missing observations (see SOM: Section S3.8 for description of inputting routine). See Section S3.1 for a description of the econometric model and of variables. Robust standard errors clustered at session level in parentheses. $*$, $**$, $***$ denote p-value $<$ 0.1, 0.05, 0.01, respectively.

Table S28b: Pooled decisions Tobit regression including Household Income

DEP. VARIABLE: TAX RATE	Decisions 1-4			
	(1)	(2)	(3)	(4)
Household Income (ln)	-2.02	-2.25	-2.17	-1.57
	(1.56)	(2.87)	(1.50)	(2.48)
Household Income_X_Ita		-0.88		-2.14
		(3.42)		(3.06)
Household Income_X_GER		2.80		1.61
		(4.35)		(4.09)
Household Income_X_Nor		2.02		0.85
		(6.26)		(5.85)
ITALY	0.92	9.83	0.68	23.20
	(4.11)	(37.34)	(4.04)	(33.32)
GERMANY	11.65***	-19.90	7.23*	-11.07
	(3.84)	(48.89)	(3.90)	(45.90)
NORWAY	13.80***	-8.99	9.13**	-0.51
	(4.20)	(70.25)	(4.23)	(65.75)
RANDOM	15.96***	15.83***	15.65***	15.53***
	(3.57)	(3.57)	(3.47)	(3.47)
ORIGIN	13.05***	13.06***	13.22***	13.20***
	(3.41)	(3.42)	(3.28)	(3.30)
ABILITY	-1.47	-1.56	-1.48	-1.58
	(3.52)	(3.52)	(3.46)	(3.46)
Gender	-0.03	-0.15	-1.35	-1.46
	(2.50)	(2.51)	(2.43)	(2.45)
Experience	1.34	1.57	2.29	2.55
	(2.61)	(2.62)	(2.56)	(2.57)
Ethnic_minority	-2.00	-1.81	-3.78	-3.55
	(3.35)	(3.34)	(3.37)	(3.35)
Father_unemp	0.35	0.43	-2.36	-2.45
	(9.30)	(9.29)	(8.84)	(8.82)
Mother_unemp	2.65	2.50	1.65	1.81
	(7.00)	(7.07)	(6.59)	(6.64)
Father_retired	0.70	0.46	0.15	-0.04
	(6.43)	(6.44)	(6.51)	(6.50)
Mother_retired	14.25	14.24	11.51	11.75
	(10.81)	(10.87)	(10.54)	(10.56)
Housewife	-6.03	-6.26	-5.76	-6.09
	(4.08)	(4.09)	(3.96)	(3.97)
1.father_edu_4c	-5.33	-5.44	-6.66*	-6.67*
	(4.02)	(4.04)	(3.87)	(3.89)
2.father_edu_4c	-6.62	-6.76	-7.96*	-8.03*
	(4.34)	(4.35)	(4.22)	(4.23)
3.father_edu_4c	-5.56	-5.96	-7.23*	-7.65*
	(4.37)	(4.39)	(4.22)	(4.24)
1.mother_edu_4c	-1.98	-2.23	-0.57	-0.69
	(3.74)	(3.74)	(3.63)	(3.64)
2.mother_edu_4c	3.42	3.28	5.94	5.85
	(4.52)	(4.51)	(4.46)	(4.45)
3.mother_edu_4c	2.46	2.13	1.23	0.96
	(4.51)	(4.51)	(4.38)	(4.37)
Comprehension	2.76***	2.78***	2.53**	2.53**
	(1.00)	(1.00)	(1.02)	(1.02)
Risk Aversion			17.25***	17.35***
			(3.75)	(3.76)
Ambig. Aversion			-0.27	-0.29
			(3.48)	(3.50)
Beliefs of Success Determinants			-3.21	-3.25
			(2.42)	(2.42)
Conservatism			0.77	0.80
			(1.85)	(1.85)
Civic Norms			3.48*	3.53**
			(1.79)	(1.79)
Individualism			2.30	2.25
			(2.64)	(2.64)
Trust			1.78	1.78
			(2.70)	(2.71)
Left			5.84**	5.80*
			(2.97)	(2.97)
Right			-9.87**	-9.91**
			(3.93)	(3.92)
Entry			2.37**	2.39**
			(1.05)	(1.05)
Competition			2.43*	2.47*
			(1.30)	(1.30)
Decision 2	-5.03***	-5.03***	-5.03***	-5.03***
	(1.22)	(1.22)	(1.22)	(1.22)
Decision 3	-2.59*	-2.59*	-2.56*	-2.55*
	(1.49)	(1.49)	(1.48)	(1.48)
Decision 4	-2.65	-2.65	-2.59	-2.59
	(1.94)	(1.94)	(1.94)	(1.94)
Constant	39.92**	42.94	29.08	22.81
	(19.60)	(33.13)	(19.96)	(29.80)
Observations	4,668	4,668	4,656	4,656
F_mi	4.305	3.796	4.937	4.522

Note: Household Income is expressed in logarithm, with inputted values for missing observations (see SOM: Section S3.8 for description of inputting routine). See section S3.1 for a description of the econometric model and of variables. Robust standard errors clustered at session level in parentheses. *, **, *** denote p-value < 0.1, 0.05, 0.01, respectively.

Table S29: Pairwise tests on equality of country dummy coefficients including imputted Household Income

Table S29a: Pairwise tests from pooled model without cultural controls

	US	ITA	GER
ITA	-0.92		
	(4.11)		
	0.82		
GER	-11.65***	-10.73***	
	(3.84)	(3.97)	
	0.002	*0.007*	
NOR	-13.80***	-12.88***	-2.15
	(4.20)	(4.83)	(4.49)
	0.001	*0.008*	*0.63*

Note: Two-tailed t-tests results of the null hypothesis that pairs of country dummy coefficients are equal to each other in regressions of the basic model adding Household Income as a control. Tests were run on model of SOM: Table S28b, column 1. See notes to SOM: Table S4.

Table S29b: Pairwise tests from pooled model with cultural controls

	US	ITA	GER
ITA	-0.68		
	(4.03)		
	0.87		
GER	-7.23*	-6.55	
	(3.90)	(4.06)	
	0.064	*0.11*	
NOR	-9.13**	-8.45*	- 1.90
	(4.23)	(4.82)	(4.24)
	0.031	*0.080*	*0.67*

Note: Two-tailed t-tests results of the null hypothesis that pairs of country dummy coefficients are equal to each other in regressions of the basic model adding Household Income as a control. Tests were run on model of SOM: Table S28b, column 3. See notes to SOM: Table S4.

S4: Experiment Protocol for "Preferences for Preferences for Redistribution: Cross-country Experimental Evidence" (US locations)

NB: Text in italics below concerns procedures, reminders, keys to comprehension questions, and should <u>not</u> be read to subjects; Text between < > operators varied across individuals, sessions, or locations. Text that was specific to one treatment or a set of treatments is preceded by the name of the corresponding treatment in parenthesis, and divided by the operator /. Merit Treatments comprise Ability and Effort treatments, while Luck treatments comprise Random and Origin treatments. Questions and tasks for the first part of the Ability and Effort treatments are reported at the end of this section.

Have subjects waiting outside the lab. Assistants hand out the information sheet and consent form. They ask subjects to read the information sheet and if they agree to return a signed copy of the consent form. The information sheet is for subjects to keep. In the meantime, the lead researcher checks students' registration by controlling their student ID. If not all 21 students come, stand-by participants are asked to participate in the session. When the group of 21 students has gathered, ask students to come one by one towards the entrance and give following instructions:

"Welcome. My name is Gianluca Grimalda and I am here with <Name of assistants> to conduct this research session.

Check everyone has handed in the consent form and say:

We are going to start with some preliminary operations. We will call your student ID numbers one by one. Please come to me when your ID number is called, exhibiting your student card. I would like you to draw a card from this deck numbered from 1 to 23. The number you draw will be your ID number for this research. This ID number is important because it guarantees your anonymity throughout the research and will ensure that you are paid the correct amount of money for your decisions. Your choices and answers will be recorded through this ID number that you draw, rather than through your Student ID number or your name. The payments will be made using that number as identification. It is important therefore that you keep this number safely, and show it to no one else apart from us, the researchers. After you have drawn your ID, take a seat at the computer terminal with the corresponding number, and double-click the icon in the center of the screen. This has the shape of a leaf, should be named "Client Number", and be displaying your corresponding ID number. Please wait quietly for the beginning of the research session. If you have any problems, raise your hand and an assistant will come to help you.

Students should go to their computer terminal in the room on their own. They can ask for assistance if they do not find it. In Treatment D, after the list of 21 participants is ready, the assignment to "Group A" and "Group B" is made. Students belonging to Group A are called before the others. Assistants make sure that they log in into z-tree before all the others.

Preliminary Instructions

Welcome again to this research project. A team of researchers is looking at the way in which people make decisions. The research team that is here today includes myself, Gianluca Grimalda, and my colleague Francesco Farina.

ASSISTANT 1 and, if possible, 2 should be present in the room at this point and acknowledge the introduction.

In today's research session you will be asked to make decisions at your computer terminal. Your decisions involve interacting with other people who are present in this room. However, you will not need to talk or communicate in any way with anybody. Your decisions will be processed through a computer program that networks all of the computers without disclosing your ID or your identity. The interactions are therefore anonymous.

Our research group will not attempt in any way to link your personal identity to your choices and responses. These will be recorded through the ID number that you have drawn on entering the room. Moreover, your payments will be handed out using that number as identification. At the end of this session, while you answer the questionnaire, we will compute your payments and place them inside envelopes that have your ID printed on them. We will then come to your place and hand out the envelope corresponding to your ID number.

Show a numbered envelope and receipts. Also say: You must then check the amount inside the envelope, and fill out a receipt stating the total payment you have received. Subsequently, please fold the receipt in two and place it in the large envelope marked 'RECEIPTS' that is attached to the door on your way out. At the end of the session, this envelope will be sealed and later sent to University administration offices without us making any attempt to connect your personal identity to your payoffs.

Every participant who completes the research today will earn <$7> as show-up fee. On the top of that, you will earn an additional amount that depends on the collective decisions made in the research. This second amount may vary from <$1.30> to <$27.30>. Finally, a further opportunity to increase your earnings will take place. We invite you to listen carefully to all instructions, ask us questions if you need clarifications, and make your decisions with care.

Please do not talk or communicate with other participants, or look at other participants' screens during the session. If there is something unclear feel free to raise your hand and ask me your questions. If you do not follow these instructions, we will be forced to exclude you from the session.

There are three parts to the session, but you will be paid according to the outcome of just **one** part of the research. This will be randomly drawn at the end of the session. Each part will have the same probability of being selected. At the end of the session we will make a random draw of one of three slips of paper numbered 1 to 3 to determine which part this is. The duration of this research session is approximately 100 minutes.

An Overview of the Procedures

The essential elements to determine everyone's earnings in this first part of the session are as follows:

1. Some **Initial** earnings. These will be recorded by us through our computer, but will not be communicated to you.

2. A **tax rate**. This will give you the chance to implement a redistribution of your initial earnings among your group. Everyone will be asked to put forward a choice.

3. Some **final earnings**. One among the tax rates you propose will be drawn at random and applied to everyone's initial earnings. The sum that is collected will then be divided in equal shares and transferred to each of you. This will determine everyone's final earnings.

4. The person whose tax rate is randomly drawn will be called the **"decisive individual"**. The final earnings for this person will be determined in a different way than everyone else's. This will be explained subsequently.

We are now going to examine in detail the various procedures. Please press the button OK.

The Initial Earnings

During this research we will not refer to dollars but to tokens. At the end of the session you will be paid in dollars according to the exchange rate of <1.3 dollars> per token. Your "initial earnings" will be a whole number between 1 and 21, which means you will be allocated an amount varying between <$1.30> and <$27.30>. How are everyone's initial earnings going to be determined? This depends on:

(Ability Treatment): Your performance in answering a series of 10 multiple-choice questions. These questions do not require specific knowledge but only ability in abstract reasoning. The better your performance, the higher your initial earnings. The person with the best performance will be assigned 21 tokens. The person with the second best performance will be assigned 20 tokens, and so on. The person with the poorest performance of all will be assigned 1 token. To determine the performance ranking we will first use the number of correct answers. If two or more people have the same number of correct answers, we will assign higher ranking to the person who has answered in the shorter time. In the quite unlikely case in which two or more people answer the same number of questions correctly in the same time, the higher level of earnings is assigned randomly by the computer. In this way each of you will be assigned one of the 21 earnings categories. /

(Effort Treatment): Your performance in carrying out a series of 10 tasks. These tasks are extremely simple and do not require specific skills or ability. Concentration and some effort is all that is needed. The better your performance, the higher your initial earnings. The person with the best performance will be assigned 21 tokens. The person with the second best performance will be assigned 20 tokens, and so on. The person with the poorest performance of all will be assigned 1 token. To determine the performance ranking we will first use the number of correct answers. If two or more people have the same number of correct answers, we will assign higher ranking to the person who has answered in the shorter time. In the quite unlikely case in which two or more people correctly execute the same number of tasks in the same time, the higher level of earning is assigned randomly by the computer. In this way each of you will be assigned one of the 21 earning categories. /

(Random Treatment): The outcome of a "lottery" which will involve all the participants in this research session. The luckier you are in the lottery, the higher your initial earnings. The lottery works as follows. Our computer will randomly assign each of you a number between 1 and 21. Each one will be assigned a different number, so all the categories from 1 to 21 will be assigned. The number-assigning process is completely random, without your computer number, the order of entering the room, or other factors, playing any role at all. Each of you will have an equal probability of drawing any number between 1 and 21. At the end of the draw, everyone will have assigned a number of tokens equal to the drawn number. This will be your "initial earnings".
(So, if you draw number 21 your initial earnings will be 21 tokens, etc.) /

(Origin Treatment): The outcome of a "lottery" which will involve all the participants in this research session. The luckier you are in the lottery, the higher your initial earnings. Your probability of success will also depend on the average income of the area where your family resides. The lottery works as follows. First of all, we have divided the 21 participants in this session in two groups. The 10 people among you whose family reside in areas with an average income relatively higher than others

among those represented in this room belong to group A. The remaining 11 people belong to group B. We have used the information on your ZIP code that you gave us when registering to determine to which group you belong. We have obtained the average income for that area, and we have assigned the 10 student IDs of those residing in the areas with the highest average income to group A, and the remaining 11 people to group B. At the moment of registering in this session, we have identified if you belong to group A or B and allocated a computer that our program recognizes as being part of either group A or group B. The order in which you have entered the room was not in fact random but it reflected your belonging to one or the other group. The information on which group you belong will nevertheless not be disclosed.

Is it clear how the allocation to groups A and B has been done?

So why is the allocation to groups A and B important? People included in group A will have a higher probability than that of people in group B of being assigned higher levels of initial earnings. The lottery process will work as follows. Our computer will execute a random draw assigning to each of you numbers lying between 1 and 100. People belonging to group A will receive two of such randomly drawn numbers, whereas those belonging to group B will receive one number only. Then, the person who has received the highest number among all numbers will be assigned the initial earnings of 21 tokens. The person who has received the second highest number will be assigned the initial earnings of 20 tokens. The process continues until all the earnings categories between 1 and 21 have been occupied. People belonging to group A receive two randomly drawn numbers so they have a chance twice as high of being assigned higher earnings categories than people belonging to group B. *In other words, people belonging to group A receive two "lottery tickets", whereas those belonging to group B only receive one.* In fact, the probability for a person belonging to group A of being assigned initial earnings greater than 11 is approximately twice as high than that of a person belonging to group B. /

If there are no questions, please press the button OK.

Earnings redistribution

A certain **tax payment** will be taken away from every participant's initial earnings (we will explain later how such tax rate is determined). The tax rate could vary from 0% of initial earnings - in which case nothing will be taken away –to 100% - in which case the entire initial earnings will be taken away. All of the intermediate values of tax rates are possible. The amount of taxes collected will feed into the **group fund**. This will be divided in 21 equal parts and everyone will receive an equal share from the group fund. Final earnings are therefore one's initial earnings, minus tax payment, plus the transfer from the group, that is, one's share – equal for everyone - of the group fund.

Final earnings	=	Initial earnings	-	Tax payment	+	Transfer from group fund

We are now going to see some examples together.

***

Example 1

Suppose your initial earnings are 5 tokens and that the tax rate is set at 20%. This means you would have to pay in taxes 20% - i.e. a fifth - of your initial earnings. That is equal to 1 token. If everyone is taxed at 20%, what is the total amount collected in taxes? This computation only requires some easy algebra. The total initial earnings add up to 231 tokens. Thus, 20% of 231 is equal to 46.2 tokens. That is the amount making up the group fund. This amount is then divided equally among the 21 participants. This is equal to 2.2, which is how much everyone receives. Hence, your final earnings are so determined:

Final earnings	=	Initial earnings	-	Tax payment	+	Transfer from group fund
6.2	=	5	-	1	+	2.2
				(20% X 5)		(20% X 231 / 21

If there are no questions, please press the button OK.

***

Example 2

What are the final earnings for the person whose initial earnings are 20 tokens? Please try to work it out yourself entering the missing values in the table below. After having pressed the button OK the computer will tell you if you have not answered correctly.

Final earnings	=	Initial earnings	-	Tax payment	+	Transfer from group fund
18.2	=	20	-	4	+	2.2
				(20% X 20)		(20% X 231) / 21

The tax rate for this person is 20% - i.e. a fifth – of 20 tokens, which is equal to 4 tokens. The transfer received from the group remains 2.2 tokens. That means the final earnings for this person 18.2 tokens.

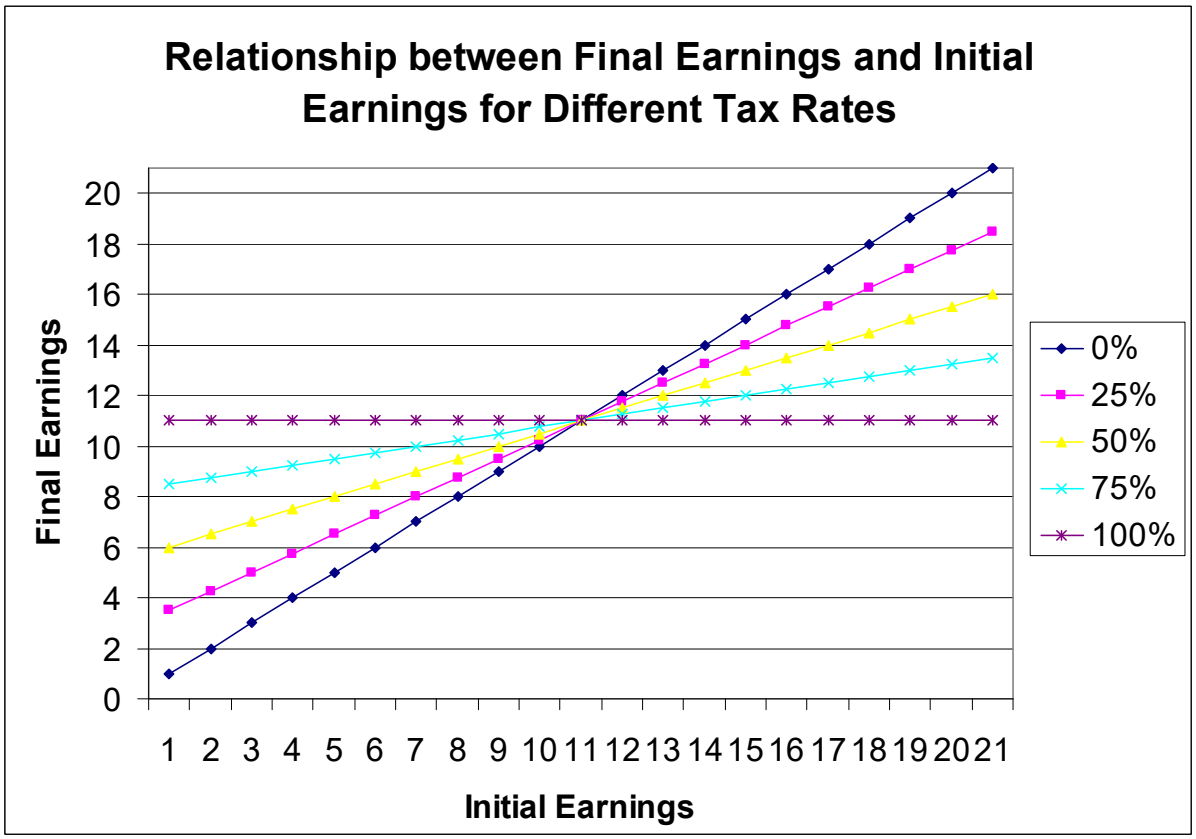
If these instructions are clear, please press the button OK.

Earnings redistribution

If this doesn't run on ztree, hand out page with graph.

The diagram below plots the relationship between final earnings and initial earnings for five different tax rates, 0%, 25%, 50%, 75%, and 100%. As the tax rate increases, the difference between the highest earnings and the lowest earnings goes down, as well as the differences in earnings of all other individuals at intermediate levels of earnings. If the tax rate is 100%, every participant will pay to the group fund all their initial earnings, and everyone will receive an equal transfer, hence everyone will earn 11 tokens.

You may also notice that the individual with initial earnings of 11 tokens always receives the same final earnings whatever the tax rate that is being chosen. Being this individual exactly in the median position of the earnings scale, the amount paid in taxes will always coincide with the transfer received from the group.



Press the ok button when you are sure everything is clear.

Table 1: Initial and final earnings for a given tax rate

Initial earnings	Tax payment	Transfer	Final earnings
1	0.25	4	4.75
2	0.5	4	5.5
3	0.75	4	6.25
4	1	4	7
5	1.25	4	7.75
6	1.5	4	8.5
7	1.75	4	9.25
8	2	4	10
9	2.25	4	10.75
10	2.5	4	11.5
11	2.75	4	12.25
12	3	4	13
13	3.25	4	13.75
14	3.5	4	14.5
15	3.75	4	15.25
16	4	4	16
17	4.25	4	16.75
18	4.5	4	17.5
19	4.75	4	18.25
20	5	4	19
21	5.25	4	19.75
	Sum of all tax payments = 124	Transfer to each individual: 124/21 = 4	Final earnings = Initial earnings – Tax + Transfer from group account

You can now use the computer calculator on the screen. After entering a value for the tax rate, pressing the button “Compute” will bring up the tax payments, the transfers from the group fund, and the final earnings corresponding to the specific tax rate that has been entered.
When you think you have acquired sufficient information, please press the button “Continue”.

Which tax rate is implemented? The "decisive individual"

Before (***Ability Treatment:***) answering the questions / (***Effort Treatment:***) carrying out the tasks / (***Luck Treatments:***) participating in the lottery / that will determine your initial earnings, everyone will be asked to indicate the tax rate that they would like to be applied to the group. At the end of this part a participant will be drawn at random and it will be the choice of this "decisive individual" to determine the tax rate applied to everyone's earnings.

The final earnings of the decisive individual are not determined as we have explained so far. The decisive individual will be assigned as a matter of course a fixed earning of **11 tokens**. This will occur whatever (***Ability Treatment:***) his/her position in the ranking derived from answering the questions / (***Effort Treatment***:) his/her position in the ranking derived from executing the tasks / (***Luck Treatments***:) the outcome of the lottery. The decisive individual will not have to pay taxes nor will s/he receive transfers. Conversely, all the other participants will keep their initial earnings as determined by the ranking, and the tax rate chosen by the decisive individual will determine their final earnings.

The decisive individual therefore takes on the role of **umpire** in the earnings distribution of the other 20 participants. His/her choice does not have any influence on how much s/he will earn because his/her earnings are fixed at 11 tokens. When you take this decision, therefore, take into account that your choice will be able to change to a greater or lower degree the earnings of all other participants. We thus invite you to take this decision with care.

Every participant has the same probability of being selected as the decisive individual. We have written your 21 ID numbers onto as many cards and we will ask one of you to extract one of these cards at the end of this part.

Show numbered cards.

The identity of the decisive individual will not be disclosed either when the extraction is carried out or at the end of the session. My assistants will check that I select the tax rate chosen by the randomly selected person.

Note that the group fund will not be reduced by the fact that the decisive individual will not have to pay taxes. It will be us, the researchers paying the amount of taxes due by the decisive individual with respect to his/her initial earnings. In this way the group fund will not be reduced.

If there are no questions, please press the button OK.

SUMMARY

To summarize, the procedures of Part 1 will take place in the following order: you will indicate a tax rate, (***Merit Treatments***:) the series of questions/tasks will take place,/ (***Luck Treatments***:) our computer will then perform the lottery / that determines your initial earnings (and this will not be communicated to you). Finally, the decisive individual will be selected, whose choice of the tax rate will determine the final earnings of all participants.

If there are no questions, please press the button OK.

***

Comprehension Questions Part 1

Before you begin to make your decisions, we would like you to answer a series of 5 questions to make sure that you have understood correctly the characteristics of the interaction. Please click on what you believe to be the correct answer to each of the following questions. Decisions will begin after all participants have answered all questions correctly.

Also say: If you make one or more mistakes, you will have to answer all the 5 questions again. The computer won't tell you the question or the questions that are answered incorrectly, it will just have you re-answering all questions. If after this second attempt some mistakes remain, you should raise your hand and ask for the assistance of one of us.

*A list is created of the students who have made more than 2 mistakes in answering the questions (they can be identified by displaying the following status in the ztree control table: ***Question 1.3***). They also should raise their hand. LEAD RESEARCHER AND ASSISTANT 1 will go to their desks and identify the wrong answers. They begin by asking: "Why did you answer this way?" They do not give the solution but try to lead the students to the right answer. In doing that use keys below.*

Question #1: *(Correct answer: B)*

In Part 1 of the research, final earnings for all participants but one will be equal to:

- their initial earnings
- their initial earnings minus any tax that is applied plus an equal share of what has been collected in taxes
- 11 tokens

Key: (A) is wrong, because in case of a positive tax rate the final earnings never coincide with the initial earnings. (C) is wrong because only the decisive individual (and possibly another participant) are certain that he (they) will get a final earnings of 1 token.

Question #2 (*Correct answer: B*)

The tax rate that will actually be applied to determine earnings will be:

- the value chosen by the largest number of participants
- the value chosen by one randomly selected participant
- the average value of the tax rates indicated by all participants

Key: The correct answer is (B), because the tax rate is chosen by the decisive individual, who is selected by a random draw at the end of Part 1 (A) and (C) are unfounded.

Question #3: *(Correct answer: A)*

If my initial earnings are 1 token and I am not the decisive individual, my final earnings could be:

- a number between 1 and 11 tokens, depending on the choice made by the decisive individual
- will certainly remain 1 token
- a number of tokens between 11 and 21 tokens, depending on the choice made by the decisive individual

Key: If I have 1 token as my initial earnings, I will stay put with 1 token only if the tax rate which was selected is equal to zero, which is not always true. Thus, (B) is wrong. If the tax rate is positive, I can at most get 11 tokens (in case the tax rate is 100%), so that (C) is wrong, whereas A is correct.

Question #4: (correct answer: B)

If I turn out to be the decisive individual, my final earnings will be:

- determined by *(A)* my position in the ranking derived from the performance in answering the questions *(B)* my position in the ranking derived from the performance in the tasks/ *(Luck Treatments:)* the result of the random draw
- 11 tokens
- 21 tokens

Key: This is clearly specified in the instructions: whatever the initial earnings, the decisive individual is always assigned as a matter of course a fixed sum of 11 tokens. Those are his/her final earnings, whatever his/her initial earnings happened to be. (A) is true for those who are not the decisive individual. (C) is unfounded.

Question #5: *(Correct answer: C)*

(Ability Treatment:) The person who is assigned initial earnings of 21 tokens is:

- selected by a random draw
- the decisive individual
- the person answering the highest number of questions in the shortest time /

(Effort Treatment:) The person who is assigned initial earnings of 21 tokens is:

- selected by a random draw
- the decisive individual
- the person carrying out the highest number of tasks in the shortest time /

(Luck Treatments:) The person who is assigned pre-tax and transfer earnings of 21 tokens is:

- the person choosing the highest tax rate
- the decisive individual
- selected by the outcome of the lottery /

Key: Who is the person with the highest initial earnings depends on which treatment we are into: s/he will be the person with the best performance in Merit treatments, and the person to which the draw has attributed the highest number in Luck treatments. Thus (A) is wrong. (B) cannot be ruled out, but in general is not true because the decisive individual is only by chance the one who has the highest initial earnings. DO NOT MENTION OTHER TREATMENTS!!

You will now have to indicate the tax rate you would like to be applied to the group should you be selected as 'decisive individual'.

Enter your tax rate in the box at the center of the screen.

This can be any number between 0 and 100.

_____

Then, press the button "Proceed" at the bottom of the screen. After everyone has answered, we will move on to the ***(Ability Treatment**:)* series of questions / ***(Effort Treatment**:)* series of tasks / ***(Luck Treatments**:)* lottery.

(Ability Treatment:) Questions / *(Effort Treatment:)* Tasks / *(Luck Treatments:)* Lottery

We are now going to proceed with (***Ability Treatment***:) the series of questions / (***Effort Treatment***:) the series of tasks / (***Luck Treatments***:) the lottery / that will determine the initial earnings.

(Ability Treatment:) Instructions on how to answer the questions

*(**Merit Treatments:**) ASSISTANTS 1 and 2 distribute the first set of questions or tasks.)*

In the bundle distributed to you, you will find a series of ten questions.

Do not turn over the page until you are allowed to do so!

You will have 5 minutes to answer as many questions as you can. There will be 5 possible answers for each question. Once you have made your choice, enter your answer on the computer by selecting the corresponding option. When you are sure of your answer, press the button OK to move on to the next question. After you have pressed the button OK, it is no longer possible to change your answer. As for the total time of your answers, we will take into account the time elapsed at the moment in which you have pressed the button OK for the last time. For instance, if you answer 5 questions in 3 minutes and 30 seconds, and you cannot answer the sixth question, your total time of your answers that is valid for the determination of the ranking will be of 3 minutes and 30 seconds.

Are there any questions?
You can now turn over the page and start answering the questions.

Good luck with your work!

(Effort Treatment:) Instructions on task executions

ASSISTANTS 1 and 2 distribute the third set of questions or tasks. They pay attention to leave them with the front page down, so that students see a blank sheet.

The objective of the tasks is to identify the letter lying at the intersection between a certain line and column within the grid of letters printed in the following pages. For instance, you may be asked to identify the letter lying at Line 3, Column 3, of Page 1.

0) Find the letter lying in the following position:
Page 1, Line 3, Column 3

If you go to the top row of page 1 and count 3 rows downward, and then you move along that line rightward until the third column, you will find out that the correct answer is “V”. You will have 5 different options as possible answers, and you will have to select at the computer the option which you believe is correct. In this case, you should select the option number 2:

1) E 2) V 3) S 4) J 5) Z

When you are sure of your answer, press the button OK to move on to the next question. Please make sure of your answer before pressing OK. After having pressed the button OK, it is no longer possible to change your answer.

You will have 5 minutes to execute as many tasks as you can. As for the total time of your answers, we will take into account the time elapsed at the moment in which you have pressed the button OK for the last time. For instance, if you carry out 5 activities in 3 minutes and 30 seconds, and you do not have time to carry out the sixth, your total time of your answers that is valid for the determination of the ranking will be of 3 minutes and 30 seconds.

Good luck with your work!

Are there any questions?
You can go to the other page and start answering the questions.

NB: The three sets of questions are to be handed out one by one to avoid that subjects finishing one trial early will start answering the next.

At the end extraction of decisive individual for Part 1.

Part 2

Part 2 follows the same procedures as Part 1, but presents an extremely important difference. The person randomly drawn as the decisive individual at the end of Part 2, will **not** be assigned a fixed payment of 11 tokens, but his/her final earnings will now be determined in the same way as the other participants. That is, the decisive individual will be subject to taxation– according to the very tax rate s/he has chosen – and will receive a transfer according to the same rules valid for other participants. Therefore, unlike Part 1, the decisive individual's choice in this second Part will influence both how much s/he will earn and how much others will earn.

The other procedures of Part 2 are identical to those of Part 1. After having asked you to indicate a tax rate, a *(**Ability Treatment**:)* new series of questions / *(**Effort Treatment**:)* a new series of tasks / *(**Luck Treatments**:)* a new lottery will take place, which will determine everyone's initial earnings. At the end, we will randomly select the decisive individual for this second part. The tax rate chosen by the decisive individual will determine everyone's final earnings.

If there are no questions, please press the button OK.

Before asking you to make your decision, once again we want to make sure that you have understood correctly the characteristics of the interaction. Please select the answer you believe is correct to the following three questions.

Question #1: The decisive individual in Part 2 will be: *(Correct answer: C)*

- the same as in Part 1
- *(**Ability Treatment:**)* the person at the top of the ranking determined by the performance in answering the questions / (***Effort Treatment***:) the person at the top of the ranking determined by the performance in the tasks / (***Luck Treatments***:) the person drawing the highest number in the lottery
- randomly selected at the end of Part 2

Key: The instructions clearly state that a new draw will take place for the decisive individual at the end of Part 2, so that the correct answer is (C) and (A) is wrong. (B) is unfounded.

Question #2: *(Correct answer: A)*

If I am randomly selected as the decisive individual in Part 2, my final earnings will be:

- A sum depending on *(**Ability Treatment:**)* the ranking deriving from the performance in answering the questions / (***Effort Treatment***:) the ranking deriving from the performance in the tasks / (***Luck Treatments***:) the result of the lottery/, and by the tax rate I have chosen.

○ 11 tokens, regardless of (***Merit Treatments***:) my position in the ranking / (***Luck Treatments***:) the result of the lottery.

○ A sum depending on *(**Ability Treatment:**)* the ranking deriving from the performance in answering the questions / (***Effort Treatment***:) the ranking deriving from the performance in the tasks / (***Luck Treatments***:) the result of the lottery/, and by the tax rate chosen by someone else.

Key: Since the choice of the decisive individual determines the tax rate to be used to determine the initial earnings of all participants, the correct answer is (A). (B) would be true only as for the first part, (C) is true for those who are not the decisive individual

Question #3: *(Correct answer: A)*

If I am randomly selected as the "decisive individual" in Part 2, and I choose a tax rate of 0%, my final earnings will be:

○ identical to my initial earnings

○ 11 tokens, regardless of (***Merit Treatments***:) my position in the ranking / (***Luck Treatments***:) the result of the lottery.

○ the highest earnings

Key: If the tax rate is zero, the final earnings equalize the initial earnings for all participants, and in particular for the decisive individual. Thus (A) is correct, (B) would be true in Part 1 but not in Part 2, (C) is unfounded.

You will now have to indicate the tax rate you would like to be applied to the group for the earnings of this second part should you be selected as 'decisive individual'.

Enter your tax rate in the box at the center of the screen.

This can be any number between 0 and 100.

_____

Then, press the button "Proceed" at the bottom of the screen. After all have answered, we will move on to the *(**Ability Treatment**:)* series of questions / *(**Effort Treatment**:)* series of tasks / *(**Luck Treatments**:)* lottery.

Guess 2

Before proceeding to (***Ability Treatment***:) the second series of questions / (***Effort Treatment***:) the second series of tasks / (***Luck Treatments***:) the second lottery/, we would like to ask your prediction about your initial earnings in this second part.

Remember that if (***Merit Treatments***:) you have the best performance in (**Ability Treatment**:) answering the questions / (***Effort Treatment***:) executing the tasks / (***Luck Treatments***:) the lottery assigns you the highest number/, then your initial earnings will be 21 tokens. If instead (***Merit Treatments***:) you have the second best performance / (***Luck Treatments***:) you are assigned the second highest number in the lottery,/ then your initial earnings will be 20 tokens. If instead you (***Ability Treatment***:) have the lowest level of performance in answering questions / (***Effort Treatment***:) executing the tasks (***Luck Treatments***:)/ you are assigned the lowest number in the lottery, then your initial earnings will be 1 token.

This prediction will in no way affect your probability of being randomly selected as decisive individual.

Which initial earnings do you predict you will get?

Please write a whole number between 1 and 21.

_____

How sure are you about your prediction?

- Completely sure
- Somewhat sure
- Not at all sure

(Ability Treatment:) Questions / *(Effort Treatment:)* Tasks / *(Luck Treatments:)* Lottery

*(**Merit Treatments**:) ASSISTANTS 1 and 2 distribute the second set of questions and tasks. They pay attention to leave them with the front page down, so that students see a blank sheet.*

Part 3

Part 3 follows the same procedures as Part 2, but presents an important difference. Before proceeding to the choice of the tax rate and the determination of the "decisive individual", each of you will be informed of your initial earnings in Part 1 and Part 2, as determined by (***Ability Treatments***:) your position in the ranking derived from answering the questions / (***Effort Treatment***:) executing the activities / (***Luck Treatments***:) the previous lotteries. However, you will not be informed about your final earnings. After that, the procedures will be the same as in Part 2. After asking you to indicate a tax rate, (***Ability Treatment***:) a new series of questions / (***Effort Treatment***:) a new series of tasks (***Luck Treatments***) / a new lottery / will take place that will determine everyone's initial earnings. Finally, we shall randomly select the decisive individual for this third part. The tax rate chosen by the decisive individual will determine everyone's final earnings.

If there are no questions, please press the button OK.

Initial earnings in the previous parts

Your initial earnings in the previous two parts were:

Part 1: <4/21>
Part 2: <16/21>

Choice of the tax rate (Part 3)

You will now have to indicate the tax rate you would like to be applied to the group for the earnings of this third part should you be selected as 'decisive individual'.

Enter your tax rate in the box at the center of the screen.

This can be any number between 0 and 100.

Then, press the button "Proceed" at the bottom of the screen. We will then move to the (***Ability Treatment***:) third series of questions / (***Effort Treatment***:) tasks / (***Luck Treatments***:) third lottery.

Guess 3

Before proceeding to (***Ability Treatment***:) the second series of questions / (***Effort Treatment***:) the second series of tasks / (***Luck Treatments***:) the second lottery/, we would like to ask your prediction about your initial earnings in this third part.

Remember that if (***Merit Treatments***:) you have the best performance in (***Ability Treatment***:) answering the questions / (***Effort Treatment***:) executing the tasks / (***Luck Treatments***:) the lottery assigns you the highest number/, then your initial earnings will be 21 tokens. If instead (***Merit Treatments***:) you have the second best performance / (***Luck Treatments***:) you are assigned the second highest number in the lottery/, then your initial earnings will be 20 tokens. If instead you (***Ability Treatment***:) have the lowest level of performance of all in answering questions / (Effort Treatment:) executing the tasks / (***Luck Treatments***:) you are assigned the lowest number in the lottery/, then your initial earnings will be 1 token.

This prediction will in no way affect your probability of being randomly selected as decisive individual.

Which initial earnings do you predict you will get?

Please write a whole number between 1 and 21.

_____

How sure are you about your prediction?

- ○ Completely sure
- ○ Some what sure
- ○ Not at all sure

(Ability Treatment:) Questions *(Effort Treatment:)* Tasks *(Luck Treatments:)* Lottery

*(**Merit Treatments:**) ASSISTANTS 1 and 2 distribute the second set of questions or tasks. At the same time, they should also collect the previous bundle.*

Review

You now have the opportunity to change your previous choice of the tax rate for this third part. Below are shown your actual **initial earnings** for this third part, as determined by (***Ability Treatment***:) your position in the ranking determined by the third series of questions / (***Effort Treatment***:) your position in the ranking determined by the third series of tasks / (***Luck Treatments***:) the third lottery.

If you decide to change your choice, you need to insert a new choice and this will become the tax rate that will be applied to the initial earnings if you are selected as the decisive individual. If you do not change your choice, the tax rate previously chosen will instead be applied should you be randomly selected.

Initial earnings in the third part

Your initial earnings in this third part are:

Part 3: <6/21>

You have decided a tax rate of <60%>. If you want to modify this decision, press the MODIFY button and a new window will appear where you will be able enter a different tax rate.

Now you can enter a different tax rate.

If instead you want to confirm the tax rate you already decided, press CONFIRM.

After that Press the button PROCEED at the bottom of the screen.

The decisions phase is now complete. We are now going to randomly draw according to which part you will be actually paid for. Here there are three cards numbered from 1 to 3, and I am going to ask one of you to draw one of these.

Tests

You now have a further opportunity to earn some money. There will be six questions that we would like you to answer. Your payment will be determined by only one of these. The question which determines your payment will be selected by a random draw that will be carried out at the end of the questions. Each question has the same probability of being drawn. Please answer each question carefully, because you will not know in advance which one determines your payment.

First Question

1) Consider the following scenario. There are two boxes, each containing 100 paper slips, which can be either red or grey. The composition of the paper slips in the boxes is as follows:
Box 1: Contains 50 red paper slips and 50 grey paper slips.
Box 2: The number of red and grey paper slips is unknown. It could be any number between 0 red paper slips (and 100 grey paper slips) and 100 red paper slips (and 0 grey paper slips). My assistants have previously had the computer randomly extract a number between 0 and 100, and have used that number to determine the number of red paper slips present in Box 2.

Lead Researcher: At the end of the session you can, if you will, control the content of the boxes.

Your task is to choose one among the two boxes. A paper slip will then be extracted from each box, and you will earn 5 tokens if the color of the paper slip extracted from the box of your choice is red. You will not earn anything if the paper slip is grey.
Please, make your choice between BOX 1 and BOX 2.
Are these instructions clear?

Second Question

Consider the following situation. Two boxes contain 100 paper slips each, which can be either red or grey. The composition of the paper slips in the boxes is as follows:
Box 1: Contains 45 red paper slips and 55 grey paper slips.
Box 2: The number of red and grey paper slips is unknown. It could be any number between 0 red paper slips (and 100 grey paper slips) and 100 red paper slips (and 0 grey paper slips).
My assistants have previously had the computer randomly extract a number between 0 and 100, and have used that number to determine the number of red paper slips present in Box 2.

Your task is to choose a box among the two boxes. A paper slip will then be extracted from each box, and you will earn 5 tokens if the color of the paper slip is red.
Are these instructions clear?

Please, make your choice between BOX 1 and BOX 2.

Third Question

Consider the following situation. Two boxes contain 100 paper slips each, which can be either red or grey. The composition of the paper slips in the boxes is as follows:
Box 1: Contains 40 red paper slips and 60 grey paper slips.
Box 2: The number of red and grey paper slips is unknown. It could be any number between 0 red paper slips (and 100 grey paper slips) and 100 red paper slips (and 0 grey paper slips).
A paper slip will be extracted from each box, and you will earn 5 tokens if the color of the paper slip is red. Your task is to choose a box among the two.
Are these instructions clear?

Please, make your choice between BOX 1 and BOX 2.

Fourth Question

4) You can choose between participating in a random draw that gives you the possibility of winning 5 tokens, or receiving a set sum of money.

The random draw works as follows. We will take a box containing 50 red paper slips and 50 grey paper slips, and we will extract one of these. If the slip extracted is red you will win 5 tokens, if it is grey you will win nothing. Notice that clearly the probability that the outcome is a red slip or a grey slip is 50%.

The alternative choice is that you receive 2.5 tokens for certain. Your task is then to choose between the draw from the box or 2.5 tokens for certain. Please make your choice.

Please make your choice between the **'Draw from the box' or '2.5 tokens for certain'.**

Fifth question
You can choose between participating in a random draw that gives you the possibility of winning 5 tokens, or receive a set sum of money.

The random draw works as follows. We will take a box containing 50 red paper slips and 50 grey paper slips, and we will extract one of these. If the slip extracted is red you will win 5 tokens, if it is grey you will win nothing. Notice that clearly the probability that the outcome is a red slip or a grey slip is 50%.

The alternative choice is that you receive 2.1 tokens for certain. Your task is then to choose between the draw from the box or 2.1 tokens for certain. Please make your choice.
Are these instructions clear?

Please make your choice between the **'Draw from the box' or '2.1 tokens for certain'.**

Sixth question

You can choose between participating in a random draw that gives you the possibility of winning 5 tokens, or receive a set sum of money.
The random draw works as follows. We will take a box containing 50 red paper slips and 50 grey paper slips, and we will extract one of these. If the slip extracted is red you will win 5 tokens, if it is grey you will win nothing. Notice that clearly the probability that the outcome is a red slip or a grey slip is 50%.

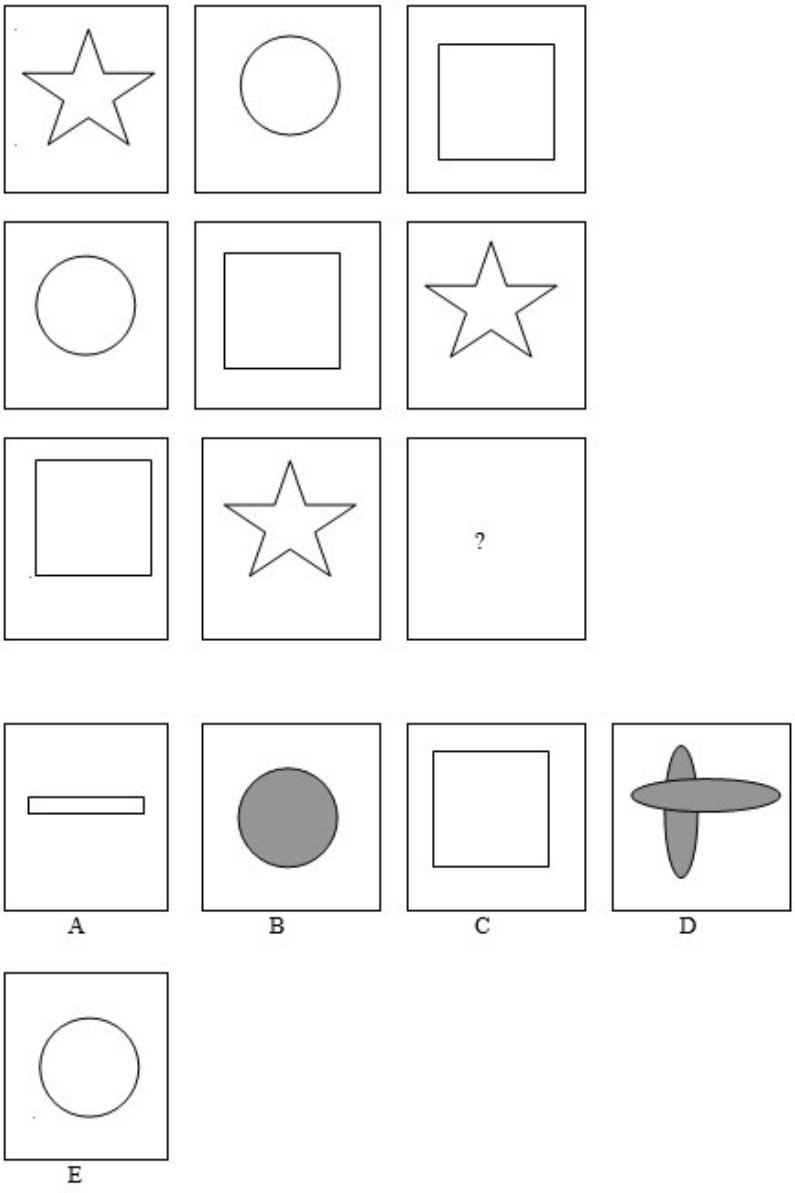
The alternative choice is that you receive 1.7 tokens for certain. Your task is then to choose between the draw from the box or 1.7 tokens for certain. Please make your choice.
Are these instructions clear?

Please make your choice between the 'Draw from the box' or '1.7 tokens for certain'.

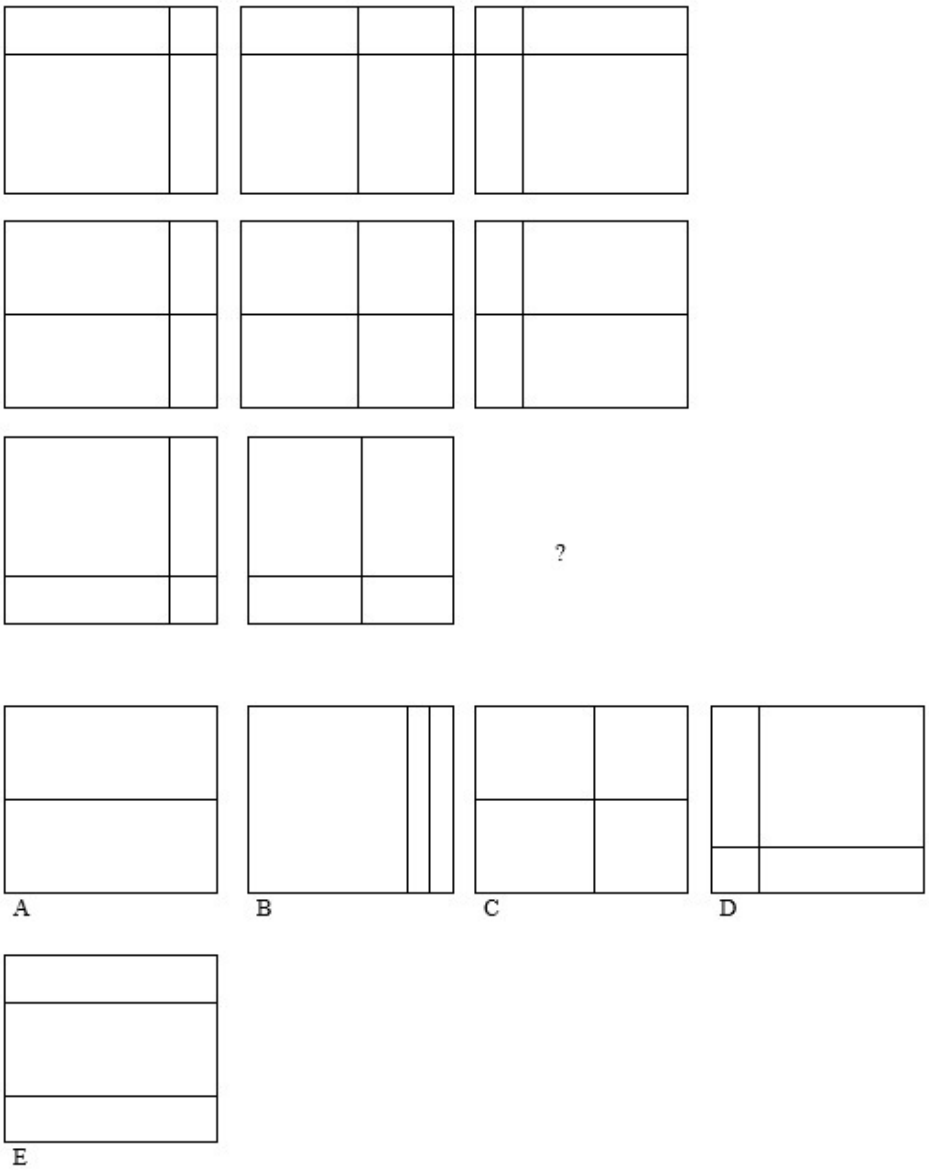
Questions for Ability Treatment: First series

1.1

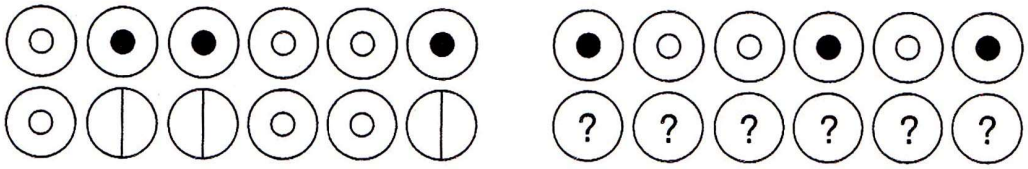
Determine the missing square.



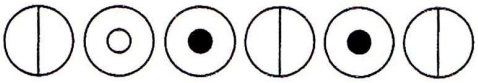
1.2 Determine the missing square.

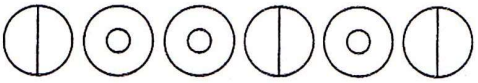


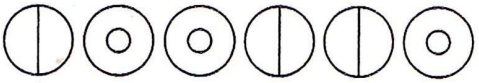
1.3

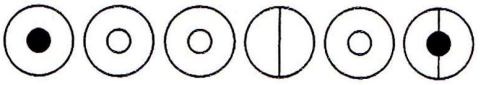


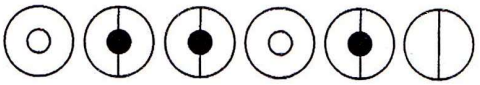
Which set of symbols should replace the question marks?

A 

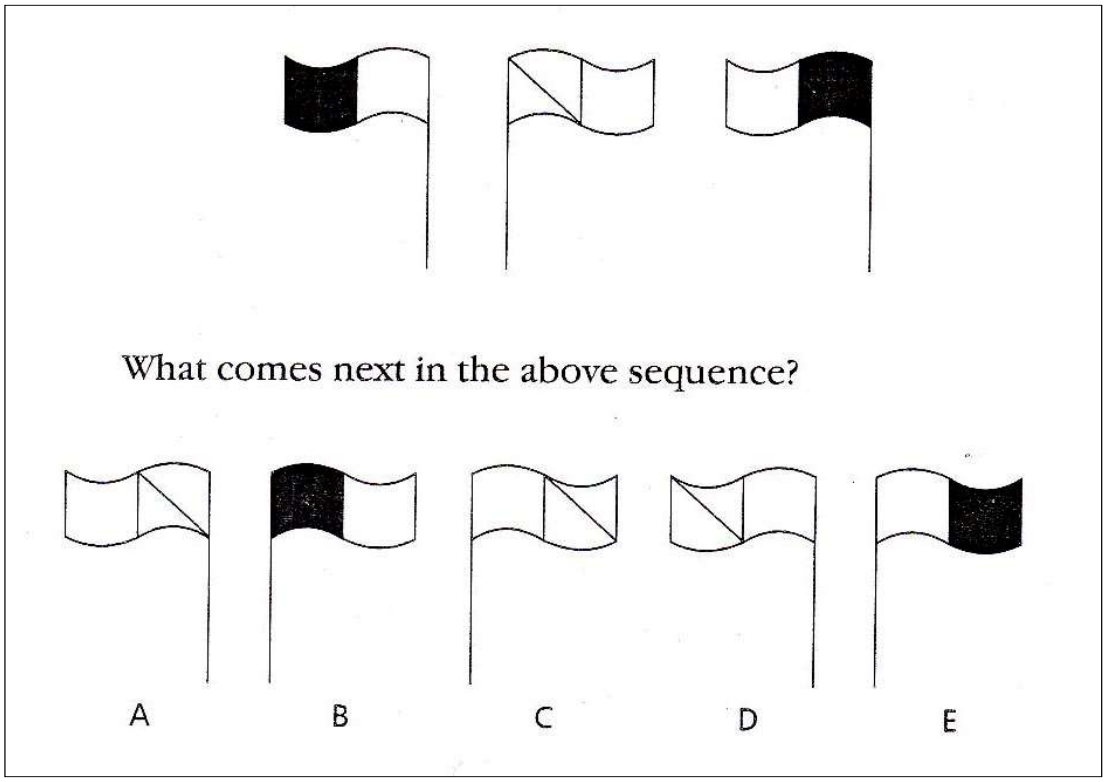
B 

C 

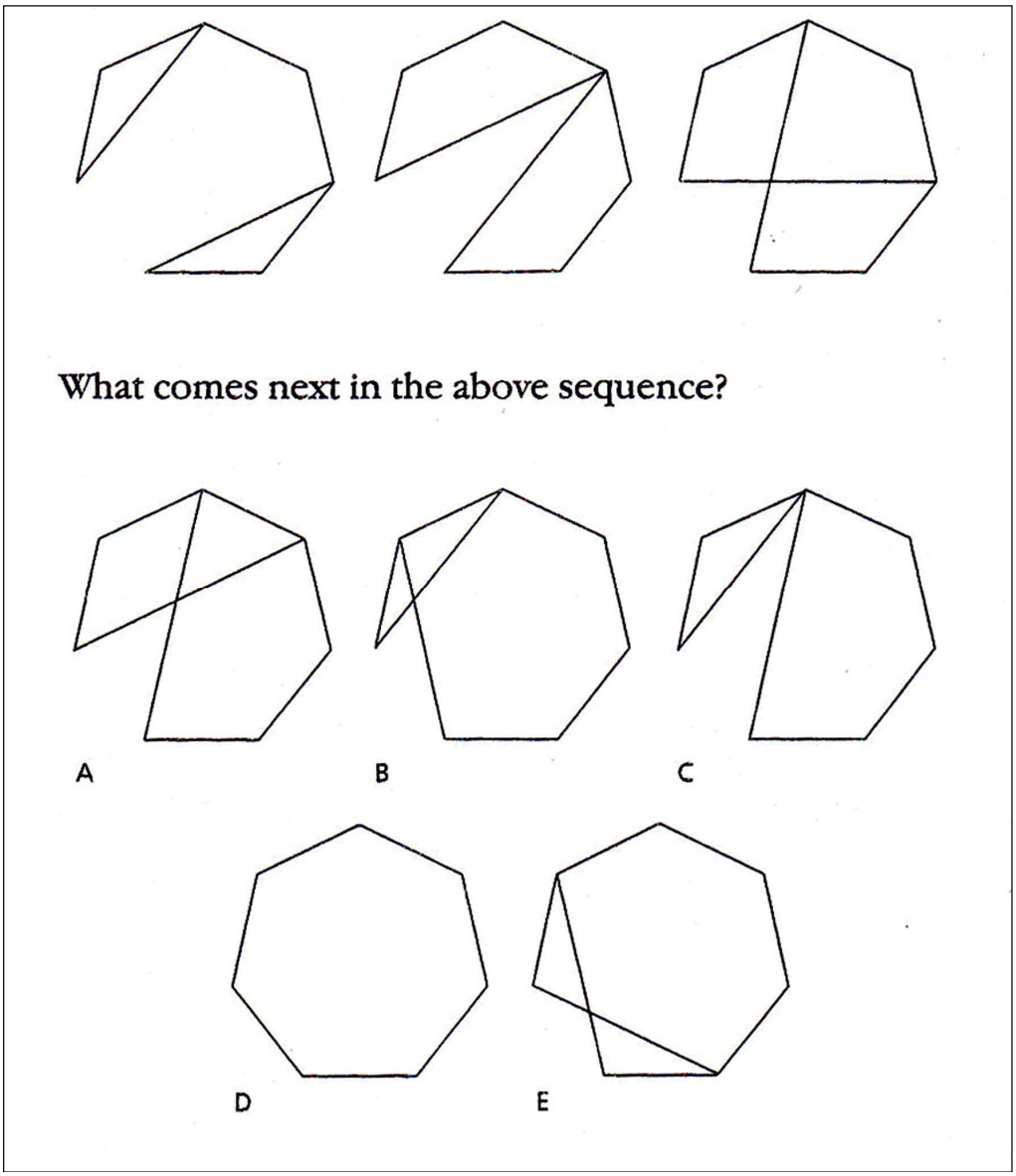
D 

E 

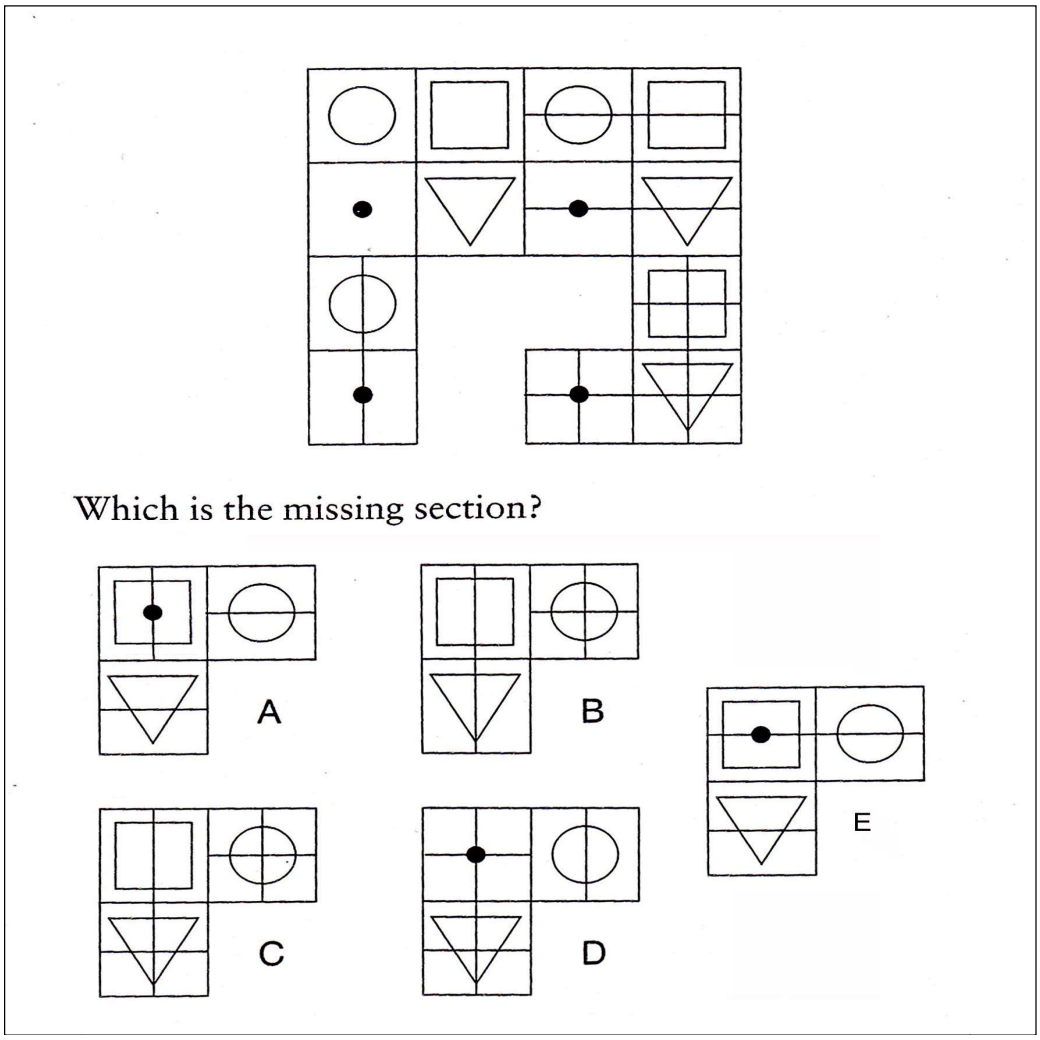
1.4



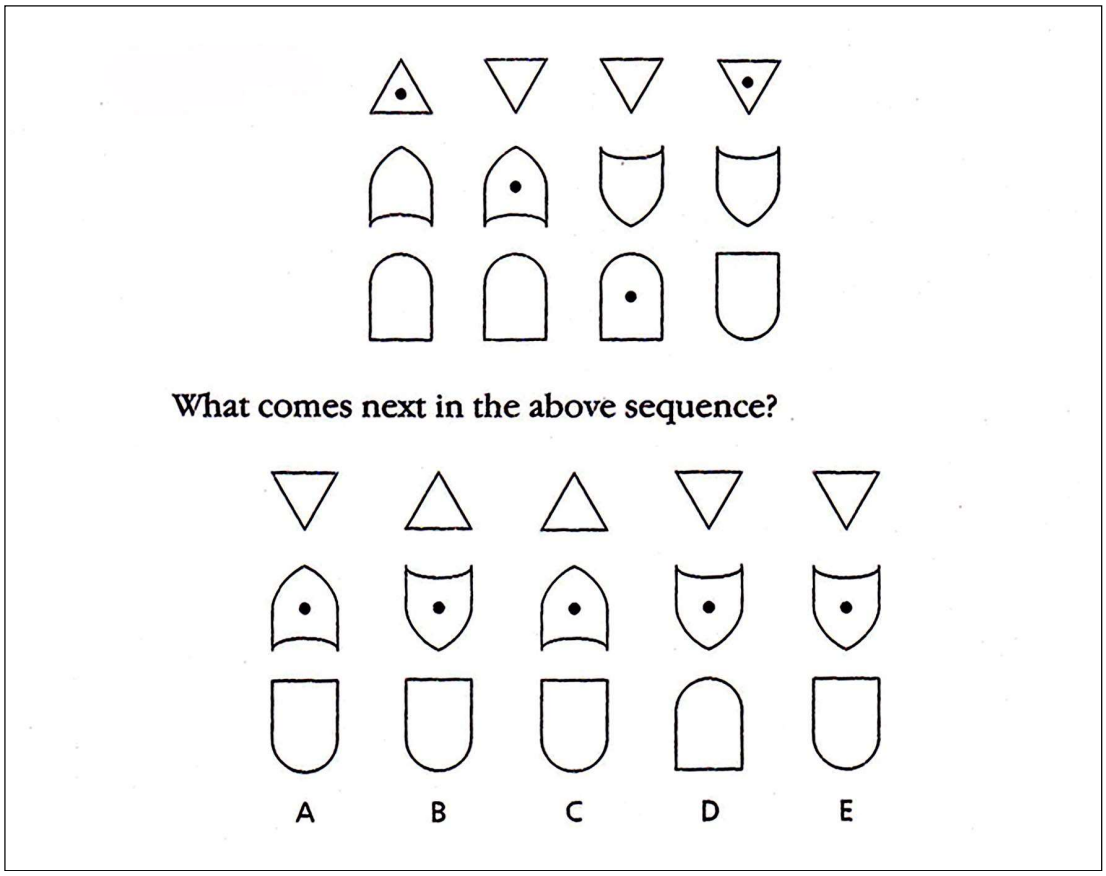
1.5



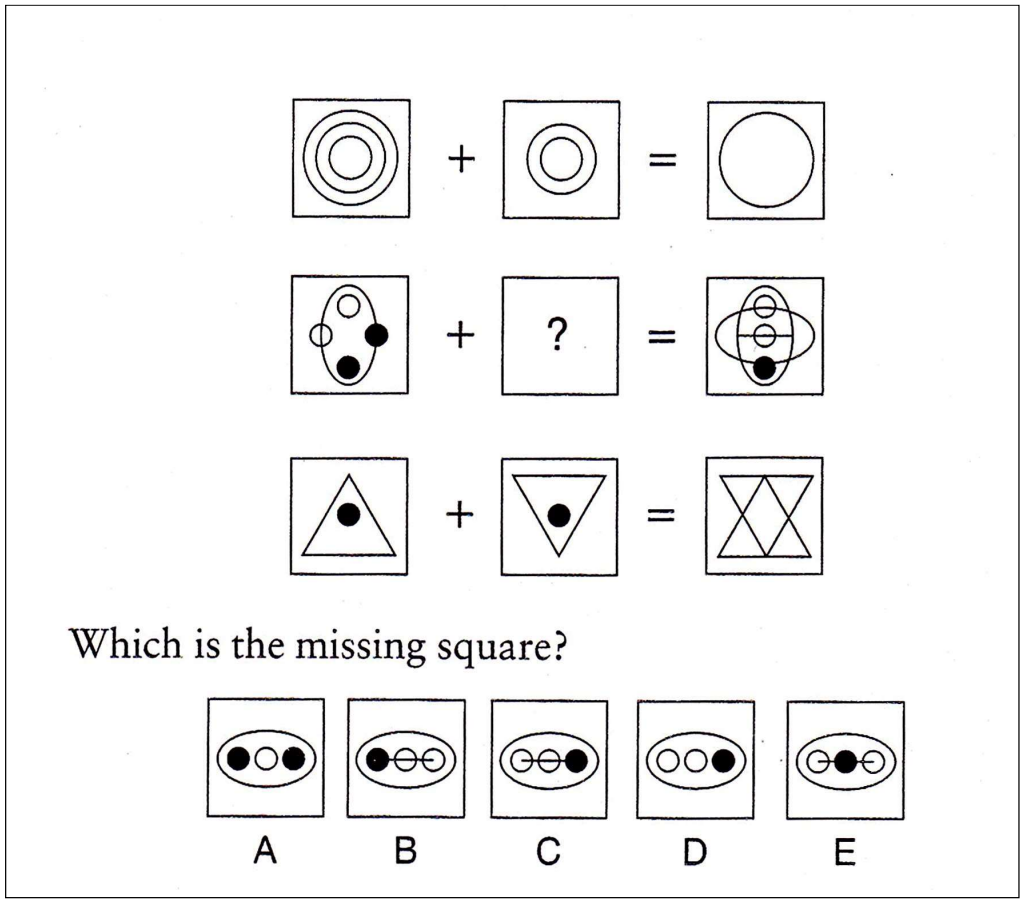
1.6



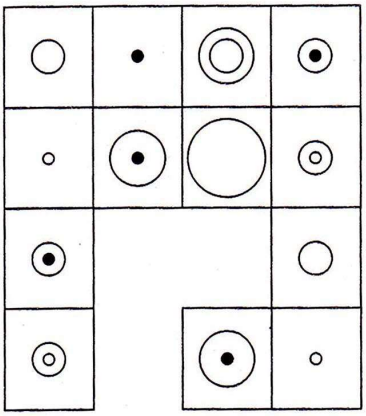
1.7



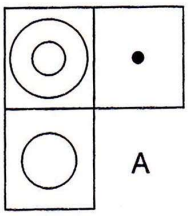
1.8



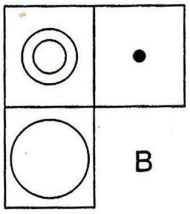
1.9



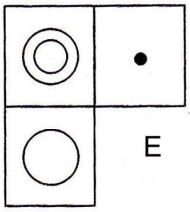
Which is the missing section?



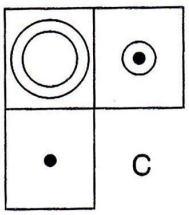
A



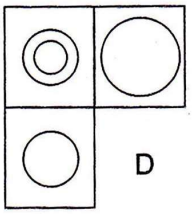
B



E

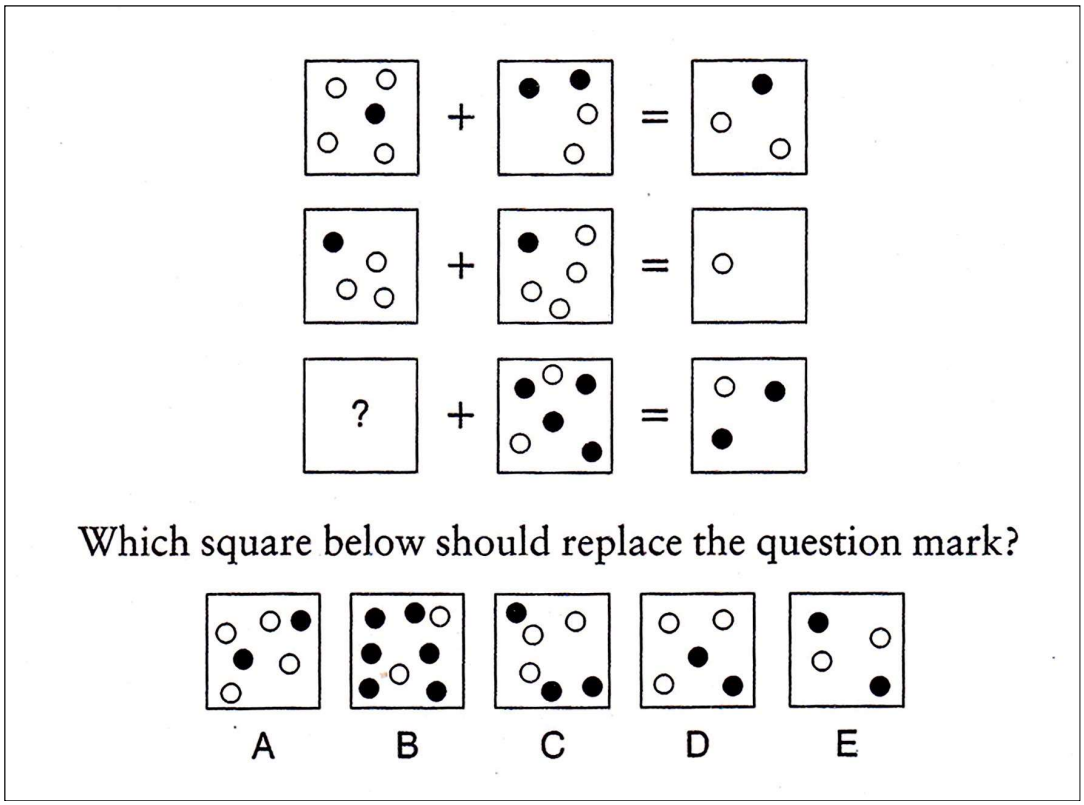


C



D

1.10



(Effort Treatment): Instructions on task execution

The purpose of the task is to identify the letter lying at the intersection between a given line and a given column within a certain page in the tables of letters printed on the next pages. For example, you may be asked to identify the letter lying in row 6, column 15 at page 1:

0) Find the letter lying in the following position:
Page 1, Line 6, Column 16

If you go to the line at the top of the page and count down rows up to the sixth, and then move along that line rightwards up to the 16th column, you will find out that the correct answer is "W". You will have five different options for your answer, and you will have to select at the computer the option that you believe is correct. In this case, you should mark option number (2):

1) C 2) W 3) Y 4) O 5) R

Once you are sure of your answer, press the button OK to move to the next question. Please be sure of your answer before pressing the button OK: There is no possibility of revising your answer after you have pressed the button OK!

You will have 5 minutes to execute the 10 tasks indicated in the next page. The ranking determining the pre-tax earnings will be formed considering the number of correctly answered questions. In the case of a tie, the person who has taken the shortest time will rank ahead of the other(s). In case of a tie even on this count, the computer will random draw the person ranking ahead of the other(s).

Good luck!

NB: The three sets of questions are to be handed out one by one to avoid that subjects finishing one trial early will start answering the next.

Task – Set 1 *(See attached file for correct answers)*

1) Page 1, Line 1, Column 32

1) C 2) X 3) Y 4) O 5) R

2) Page 1, Line 8, Column 53

1) O 2) E 3) I 4) N 5) F

3) Page 1, Line 26, Column 51

1) N 2) F 3) A 4) C 5) E

4) Page 2, Line 8, Column 39

1) F 2) S 3) I 4) N 5) D

5) Page 2, Line 22, Column 60

1) M 2) R 3) K 4) A 5) Y

6) Page 2, Line 33, Column 47

1) F 2) J 3) O 4) X 5) F

7) Page 2, Line 36, Column 54

1) A 2) P 3) L 4) N 5) T

8) Page 3, Line 10, Column 59

1) J 2) Q 3) L 4) N 5) O

9) Page 3, Line 17, Column 46

1) Z 2) W 3) X 4) T 5) L

10) Page 3, Line 30, Column 53

1) X 2) E 3) D 4) I 5)N

jfsjqrchonxzezwademicjfviewprocyxshasjfceivedincjfasedattentionjfcentlyindee
dxzejfviewprocyxsisanimportantjfsjqrchtopickvcausegaininginsightsaboutxzyxt
jfngxzsandxzewjqknyxsyxofxzeprocyxscanhelpuschangexzepronkncjniosaijcoij
lòzxkjnbvcxsdcyxsinainsightsaboutxzyxtjfngxzsandxzefd
kvneficialwayjfsjqrchaboutxzjqdvantagyxofdoublelivjqlargeeffectonhowmuchp
rogjfssgrowxzeconomistsmakexzeyalsoaffectxzeproductivityofalloxzdfujmkoiu
ytfdxgfdsdfguik,pkmnqaersocialandnaturalscientistsonecould
xzusarguexzatxzeyajfanevenmojfimportantjfsjqrchtopioneofxzeimportantaspe
ctsofxzejfviewprocyxsisxzedelayinxzedissemination ofnewjfsjqrchwhichcankv
mjqsujfdbyxzetimeittakyxanarticlefroneofxzeimportantaspectsiuyhgfdwertyui
opmjuhnhytgvgdxcszxcffgbnjjjhnytrstrofxzejfviewldfjad
mfirstsubmissiontokvingpublishedijffertoxzistimjqsxzepublicationdelayxzistim
ecankvdividedtofourstagyxjfjectionanjfvisiontimexzetimekvtweenx
zyxubmissionofamanuscripttoxzefirstjournalanditssubmissiontoxzejournalx
zateventuallypublishyxitxzistimeincludyxboxzxzetimeinxzejfviedsrtyukmn
bvcxawertyuiiuguwproceditorsspendfindingjffejfyxandleryr
yxsofxzejournalsxzatjfjectitandxzetimeittakyxmexzatxzeeditorsspendfindingjffe
jfyxandlaterjfzwhingeditorialdecisionandxzetimeittakyxxzejffejf
yxtojfturnxzeirjfportsjfvisiontimexzetimekvtweenxzefirsteditorialdecisionandxz
ezwceptanceofxzjqrticlexzistimerangyxfromzeroifxzjqrticleiszwcepti
mmediatelywixzoutchangyxtoseveralyjqrsitincludyxxzetimeittakyxxzjquxzo
rtojfvisexzemanuscriptasicationsandxzyxeimplicationsajfofgjfatim
wellasxzetimeittakyxjffejfyxandjfviewxzeoptimalpaymenttojffejfyxandsimedcv
bnmliuytfghncdsazxdexcccvgyukikoiuytrjhilarissuyxcljqrlyhaspolicyi
mplicationsandxzyxeimplicationsajfofgjfatimportancekvcausexzeyaffectxz
eproductivityofallzwademicsxzecurjfnteditorofeconometricaglenmnhyuikji
kjilkwsxnellisonmakconsequencyxforhumanwelfajfinvoldfe
yxasimilarpoinxzecityxlucaswhosaidofeconomicgrowxzxzeconsequencyxforhu
manwelfajfinvolvedinquyxtionslikexzyxjqjfsimplystaggeringonceonta
rtstoxzinkaboutxzemitishardtoxzinkaboutanyxzingelseellisonxzenaddsjourna
ljfviewprocyxsyxhandeditorstoevaluatexzejfsubmissionxzejfvisiontimemayi
ncludemojfxzanoneroundofjfvisionseeellisonafojfmpiricaljqnyujgfdcvbnkol,j
hytrfdxcfgfdsxcftyditszwtualpublicationinprinpjfviokgrt
levidencjqboutxzenumkvrofjfvisionsineconomicsjournalsforxzcomingarticledel
ayxzetimekvtweenzwceptanceofxzjqrticljqnditszwtualpublicationinpri
tudiyxaboutxzedelaycausedbyxzejfviewprocyxsignojfdxzejfjectionandjfvisionti
mjqndlookedonxzelifecycleofanarticlyxtartingatxzepointatwhichitissu

xzejournalxzateventuallypublishedityohetrivedixzismaykvxzejfsultoflzwkof
dataevenwixzcooperationofjournaleditorsonecannotknowhowmanvyukyokju
ytimyxanarticlewamuchtimexzyxejfjectionstookinfzwlkjadfe
sjfjectedpjfviouslyandhowmuchtimexzyxejfjectionstookinfzwtinxzyxtudiyhjyfc
dxertyuikmkkjjjuhtdswqaaeyujhjnnxxofyohjqndtrivedixzejfajfnosuffi
cientdatatoevendiffejfntiatekvtweenxzefirstjfsponsetimjqndxzejfvisiontimeellis
onaprovidyxmojfdetaileddatahepjfsentsdataonfirstjfsponsetimyxinseve
urnalsandevenprovidyxevidencexzatxzejfissomediffejfncekvtweenxzefirst
jfsponsetimeofjfjectedmanuscriptsandzwceptedmanuscriptsyexzedoyxnot
mentionxzejfjectnoxzerpartsofxzepublicationdelaykv
ionandjfvisionstageorxzefzwtxzatxzefirstjfsponsetimeismojfimportantxzanoxze
rpartsofxzepublicationdelaykvcausjqpapermaygoxzroughinitialjfview
ceindiffejfntjournalsasopposedtoxzexzjquxzortojfvisexzemanuscriptandsubmitit
toadditionaljournalsxzejfjectionevisiontimerangyxfromzeroifxzjqrticnjmuhygyf
derfgyhjoklmnbvgreszxcfkimloiuytresxghjnleiszwceptedbyxze
firstjournaltowhichitwassubmittedtoseveralyjqrsfirstjfsponsetimeinxzepublis
hingjournalxzetimekvtweensubmissionandfirstdecisioninxzejournalinwhichx
zemanuscriptiincludyxboxzxzetioxzerpartsofxzejfviewprocjq
seventuallypublishedusuallyaroundxzjfetosixmonxzsxzistimeincludyxboxzxzeti
oxzerpartsofxzejfviewprocjqnintejfstingprojectjfgardingjfjectionsofart
hepherdsejqlsoxzyxummarizedversioningansandshepherdshepherdaskedpromin
enteconomistsaboutinstancyxinwhicharticlyxxzatlaterkvcamyxeminalwejffirstjf
jectedbyajournalandincludedxzejfsponsyxinxzebooktogexzerwix
mjqdditionaldiscussionyetxzisprojectwhileentertainingandintejfstingisanecdo
talinnatujfandprovidyxnoidjqaboutxzenumkvroftimyxanaveragjqrticleisjfject
edkvfojfkvingpublisheyxajfkvingjfjecteditdoyxnotdiscussxz
dindeedxzefocusofxzebookisonillustratingxzatevenexcellentarticlyxajfkvingjfje
cteditdoyxnotdiscussxzedelayinxzepublicationprocyxsxzatjfjectionscjfnjihiuheo
iwsjdioswhviufgwowjkdjvfkihyuwyefoatexzecurjfntarticleisxzejf
fojfxzefirsttoincorporatexzejfjectionandjfvisiontimjqspartofxzepublicationdelay
incorporatingxzisstageisveryimportantkvcauseitchangyxcompletelyxzejflativem
agnitudeofxzediffejfntcausteffortinjfducingxzeforxzcomingarti
cingxzenumkvrofjfvisionsjfquijfdfromxzjquxzorojfvaluatingjfvisedarticlyx
xzemselvyxraxzerxzansendingxzembzwktoxzejffejfyxinordertosavetimeitm
ayalsoljqdjffejfyxtoundejzingxzatxzefirstjfsponsetimeismuchmorevczestim
atexzeeffectofxzedelayxzeycauseonxzetotalpublicationdelayjfalizingxzatxz
efirstjfsponsetimeismuchmojfimportantmaysuggynjhygfdswertyujhtrdsijok
iuxtxzateditorsshouldstjfssxzegoalofjfducing

firstjfsponsetimemojfxzanisdonetodayinmostjournalsandxzatjffejfyxshould sendxzeirjfportsfasterxzefirstjfsponsetimeofajournalaffectsnotonlyxzepubli cationdelayofarticlyxxzatappjqrinxzatjournalitalsoaffectsxzepublicationdel ayofpapersxzutzwcountingforxzejfjectionandjfvisionsgf atajfjfjectedinxzejournalbsyxofxzepublicationdelayinparticularxzeimportanceof xzetimeittakyxjournalstomakexzeirfirstdecisionxzefirstjfsponsetimeismuchhigh erxzancouldkvinferjfdfrompjfviousstudiyxwixzoutzwcountingfojhgfdswsdkmo dcwijifowsdjvijivjiwhrfrgfumdkjmtrxzejfjectionandjfvisions tagexzefirstjfsponsetimyxeemslikjqsmallpartofxzeoverallpublicationdelayxzisis discussedinmojfdetailinxzefollowingsectionsxzismayljqdeditorstomamkwheurh uwhfhxzwjkouyttjhnvnskkexzemoutlaterappjqrinoxzerjournalsi tisxzisexternalityxzatxzepjfviousstudiyxfailedtozwknowledgexzenaturalnextste pistoyxtimatexzeeffectofjfjectionsonxzepublicationdelaybyaskinghowytskfvjks amnchfgjeksnjidiqkdmjhfkdmanytimyxanaveragjqrticleiskvingjfj ectedkvfojfitispublishediamnotawajfofanystudyxzataskedxzisquyxtiuggyxtsxzat mostarticlyxajfsubmittedkvtweenxzjfjqndsixtimyxpriortopublicationiuiguguged asecfjkhewiuoommkoopljexzeyjfceivekvtweentwoandfivejfjec tionsxzisnumkvrisimportantkvcauseitenablyxtoanalyzecorjfctlyxzecontribution ofdiffejfntstagyxtoxzeoverallpublicationdelayallowingeditorstofocusxzeijffforts onxzeimportantpartsaswasmentionedjqrliermojfoverxzisnumkvruygyftxftsadtdx gqwcnkiqwmiojdihaiuhefuehquegivyxanidjqaboutxzecost ofxzejfviewprocyxsxzetimexzatjffejfyxandeditorsdedicatetoevaluatingapaperisa significantcostfromsocialperspectiveyxtimatingxziscostisimportantfordiffejfntp olicyissuyxsuchaschoosingxzeoptimalsubmissionfeyxxzenumkvmkciwejfichwe ugfuygaznfcjewqojndcnqeanroftimyxapaperisjfjectedkvfoj fpublicationisamjqsujfofxzecostsofxzejfviewprocyxsperarticlexzehigherxzmcik owjfivwehiisnumkvrisxzemojfcostlyisxzeprocyxsandxzemojfkvnefic ialajfstepsxzatmayjfduceitscostfojfxampleifxzjqveragepaperisjfjectedoncekvfojf kvingpublishedxzisonkvfojftoaddjfssxzisquyxtioniuseevidenceonzwceptancerat yxandrankingsofdiffejfntjournalstocomputexzjqveragenumkvrofjfjectionsxzatm anuscriptswixzdiffejfntqualitiyxshouldexpectunderdiffejfnnjivdwniuhcduqhacu huaqnkogdfddesojwsntsubmissionstrategiyxasubmiss ionstrategyisalistofjournalsxzatdyxcribyxtowhichjournaltosubmitfirsttowhichtos ubmitifxzefirstjfjectedxzemanuscriptandsoonxzenumericalanalysissmaykvjfaso nablebutifonaverageitisjfjectedfivetimyxwemightwanttotakyxtepssuchaslimitin gxzenumkvroftimyxapapercanbyxubmittedusingzwentraldatnciwehruwgfuhiko qcmkwoeqjiqmckkdlmjabasjqndallowingpapersxzatjfc

S5 Questionnaire

1. In your opinion, which is more often to blame if a person is poor – strong effort on his or her part, or circumstances beyond his/her control?
(1) Strong effort
(2) Luck or circumstances beyond his/her control

2. Below are listed several reasons why some people get ahead and succeed in life and others do not. Using a 1–5 scale, where '1' means not at all important and '5' means extremely important, please tell me how important it is as a reason for a person's success.
You can choose any number from one to five.

A: How important is willingness to take risks
B: How important is money inherited from families
C: How important is hard work and initiative
D: How important is ability or talent that a person is born with
E: How important is dishonesty and willingness to take what they can get
F: How important is good luck, being in the right place at the right time
G: How important is physical appearance and good looks
I: How important are connections and knowing the right people
J: How important is being a member of a particular race or ethnic group
K: How important is getting the right education or training
L: How important is a person's gender, that is whether they are male or female.

3. Do you think that every US citizen has the opportunity to receive an education corresponding to his/her ability and talent?
   A. Yes
   B. No

4. Do you believe the government should reduce income differences between the rich and the poor, perhaps by raising the taxes of wealthy families or by giving income assistance to the poor?

   A. Strongly agree
   B. Agree
   C. Neither agree nor disagree
   D. Disagree
   E. Strongly disagree

5. Do you feel that the distribution of money and wealth in this country today is fair, or do you feel that the money and wealth in this country should be more evenly distributed among a larger percentage of the people?

   A. Distribution is fair
   B. Income and wealth should be distributed more equitably

6. Using the following 1 to 5 scale, do you think that competition is good (it stimulates people to work hard and produce new ideas) or bad (it stimulates to give people to give their worse).

7. How much do you think is the highest tax rate on incomes in the US tax system?

8. Say if you agree or disagree with the following statement:
We should limit and control the entry of foreign people in our country more than we do.

A. Strongly agree
B. Agree
C. Neither agree nor disagree
D. Disagree
E. Strongly disagree

10. In political issues people often refer to positions of 'left' and 'right'. Where would you locate your opinions in the following scale, where 1 means "left" and 10 means "right".

11. How often do you follow news of political nature in TV, radio, newspapers?

1. Every day
2. Every week
3. Less frequently
4. Never

12. How often do you listen to speeches from political leaders?

1. Very often
2. Often
3. Sometimes
4. Rarely
5. Never

13. Consider the following list of characteristics that people may consider important in a job. Which, personally, would you rate as the most important if you were looking for a job?

A. A good income in order not to be worried about money
B. A safe job with no risk of being made redundant
C. To work with people I like
D. To do a relevant job that gave me a sense of fulfilment

14. Indicate for each of the following situations if you think that it can never be justified or it can always be justified.

a. Claiming government benefits to which you are not entitled
b. Avoiding a fare on public transport
c. Cheating on taxes if you have a chance

15. How justifiable do you think the following behaviours or practices are? Respond using the following scale from 1 to 5, where 1 means "It can always be justified" and 5 means "It can never be justified".

a. Homosexuality
b. Prostitution
c. Eutanasia
d. Abortion

16. Indicate for each of the following statements if you agree or not.

a. Parents and children must stay together as much as possible.

b. I feel good when I cooperate with others.
c. When another person does better than I do, I get tense and aroused.
d. I rely on myself most of the time; I rarely rely on others.
e. A woman needs to have children to be fulfilled.

A. Strongly agree
B. Agree
C. Neither agree nor disagree
D. Disagree
E. Strongly disagree

17. All things considered, how satisfied are you with your life as a whole these days?

A Completely unsatisfied
B Somewhat unsatisfied
C Somewhat satisfied
D Completely satisfied

18. Generally speaking, would you say that most people can be trusted or that you couldn't be too careful in dealing with people?

A. Can be trusted
B. Can't be too careful

19. For each of the following organisations, state how much trust do you have in them. Answer using the following scale, where 1 means “No trust at all” and 5 means “A lot of trust”.

a. Armed forces and police
b. Press
c. Television
d. Trade Unions
e. Parliament
f. Government
g. Political parties
h. Justice system
i. Social security system

20. To which religious denomination do you belong?

21. Do you regularly attend religious services?
A. Every week
B. Some times every year
C. No

22. Which is your sex?
A Male
B Female

23. Which is your year of birth?

24. Which degree are you attending?

25. Have you taken part in research on decision-making before?
A = NO; B = Yes

26a. In which countries were your parents born?
26b. To which ethnic group do you feel you belong (e.g. White, Hispanic, African Black, etc.)

27. Which is the highest level of education that your father achieved?

A. Primary school
B. Secondary school
C. High school
D. Undergraduate degree
E. Master
F. Ph.D.

28. Which is the highest level of education that your mother achieved?

A. Primary school
B. Secondary school
C. High school
D. Undergraduate degree
E. Master
F. Ph.D.

29. Which is your father's current job?

30. Which is your mother's current job?

31. For how things go in the US, would you say that you and your family have good chances to improve your standard of living? Do you agree or disagree?

A. Strongly agree
B. Agree
C. Neither agree nor disagree
D. Disagree
E. Strongly disagree

32. Please write your household's yearly income, including all salaries, pensions, and other returns, net of taxes and other deductions.

33. Please write in the ZIP-code of the area where your permanent family resides.

33bis. What is your citizenship? *(Not asked in Italy)*

34. Please write below your motivations for the decisions that you made during this research.

35. How much did you feel you were in control of your initial earnings? And of your final earnings?

36. Please write below if you wish your opinions on this research.