

Fairness and Support for Redistribution: The Role of Preferences and Beliefs

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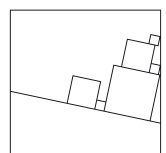
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Fairness and Support for Redistribution: The Role of Preferences and Beliefs^{*}

Sören Harrs,¹ and Maj-Britt Sterba²

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Abstract

This paper establishes three novel findings on fairness and redistribution by combining theory-driven experimental games with large-scale surveys in the U.S. and five European countries. First, individuals revealing egalitarian, libertarian, or meritocratic fairness preferences in experimental games show large differences in support for tax and transfer policies. Second, beliefs in merit strongly predict policy support among meritocrats, but are less predictive among non-meritocrats. Third, fairness concerns matter across income groups and political camps. Our findings challenge the assumptions that meritocratic preferences are homogeneous, that fairness is a luxury good, and that fairness is mainly a moral foundation of left voters.

Keywords: Fairness, Redistribution, Political Ideology, Moral Foundations

JEL Codes: D31, D63, H24

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1 Introduction

Many democracies today face rising levels of economic inequality, driven by technological change and shifting global trade patterns. How much the government should reduce inequalities in market outcomes deeply divides voters and political parties, leading to constant political conflicts over taxation, government budgets, and welfare policies. But what explains people’s polarized views about redistribution? Scholars across the social sciences have argued that, in addition to economic self-interest, *fairness views* about economic inequality play a central role.¹ Yet, despite an apparent consensus about the general importance of fairness views, two fundamental debates remain: How should we conceptualize fairness views? And which voter groups care about fairness?

Most of the political economy literature has conceptualized fairness views as *beliefs*: some voters believe inequality is caused by merit and thus fair, while other voters believe it is caused by luck and thus unfair (e.g. Fong 2001; Alesina and Angeletos 2005; Bénabou and Tirole 2006; Cavallé 2023). However, the underlying assumption that all voters share a preference for meritocratic fairness has been challenged by an experimental literature arguing that there is a pluralism of *fairness preference types* (Cappelen et al. 2007; Cappelen et al. 2013). Based on transfer choices in abstract games, Almås et al. (2020) estimate that fewer than half of U.S. Americans and Norwegians are *Meritocrats*. Many instead reveal *Egalitarian* or *Libertarian* fairness preferences, which reject or accept inequalities regardless of their beliefs about the causes of inequality. This conceptual debate is still unresolved because it lacks a comprehensive test of whether fairness preference types are relevant for explaining support for redistributive policies outside experimental games.

Moreover, two prominent strands of literature have recently questioned the relevance of fairness views – however they are conceptualized – arguing that major voter groups may care little about fairness. One literature argues that moral values are a “luxury good” that shapes policy support among the rich but not among the poor (Rueda and Stegmueller 2019; Enke et al. 2022; Fehr et al. 2024). Another argues that left voters are motivated by fairness as a moral foundation, but right voters are rather motivated by group-based moral values (Haidt 2012; Graham et al. 2013; Enke et al. 2022). If fairness did indeed not matter for the poor or for right voters, then fairness views would play a far more limited role for understanding redistributive conflicts in today’s democracies than commonly thought.

This paper contributes to resolving these debates by presenting novel empirical evidence on how fairness shapes support for redistribution. Using a combination of large-scale surveys and experimental games, we collect comprehensive data on people’s fairness

1. In economics, see, e.g. Alesina and Giuliano (2011), Almås et al. (2020), Stantcheva (2021), and Cohn et al. (2023). In political science, see, e.g. Kluegel and Smith (1986), Dimick et al. (2018), Suhay et al. (2021), and Cavallé (2023). In sociology, see, e.g. Mijs (2021).

preference types, beliefs about the causes of inequality, and support for redistributive policies. In our main analysis, based on U.S. data (N=1,975), we test three central predictions about the disputed roles of preferences and beliefs: (1) fairness preference types should differ in their level of support for redistributive policies, (2) beliefs about the causes of inequality should be more important for meritocrats than for non-meritocrats, and (3) fairness views should matter for high and low income voters and for left and right voters. We replicate our analysis in representative data from five European countries (N=10,366), which provides us with the unique opportunity to test the robustness of the three predictions across various tax and transfer policies, measurement approaches, and six industrialized market economies.

We establish our main results using a large U.S. sample (N=1,975) collected in 2020 and 2021. The United States, with its high level of economic inequality, deeply polarized debates about redistribution, and strong beliefs in meritocracy, provides an ideal setting for a first test of our three predictions. We study support for a set of controversial redistributive policies including, for example, the expansion of unemployment benefits during the coronavirus pandemic, and long-term policy reforms such as universal health care. To measure beliefs about the causes of economic inequality in U.S. society, we use established survey questions about the relative importance of merit and luck as causes of economic success and poverty. To identify fairness preference types, our empirical approach requires an experimental game that is simple enough to be included in large-scale surveys but that allows us to classify individuals into distinct types. For that purpose, we employ a within-subjects design of the spectator game, building on the between-subjects design of Almås et al. (2020).

In our within-subjects spectator game, each respondent makes two consequential transfer choices, one where an inequality in payments between two workers is caused by a lottery (“luck”), and one where it is caused by differences in productivity in a real effort task (“merit”). According to the definition of fairness preference types, *Egalitarians* equalize economic outcomes in both scenarios, *Libertarians* accept the inequality in both scenarios, and *Meritocrats* equalize outcomes when inequality is caused by luck, but accept inequalities caused by merit. Based on their two transfer choices, we classify N=235 of our U.S. respondents as *Egalitarians* (11.9%), N=104 as *Libertarians* (5.3%), and N=982 as *Meritocrats* (49.7%). A third of respondents make transfer choices that are not consistent with any type definition and are classified as *Others*. To validate this simple individual-level type classification, we run several tests showing (1) consistency with between-subjects estimates and prior literature, (2) stability across elicitation order, (3) robustness to small implementation errors, and (4) consistent choices in a subsequent ambiguity treatment and a dictator game.

Our main analysis establishes three novel results. Our first main result shows that there are large and robust differences in support for redistributive policies between the fairness preference types, in line with theoretical predictions. *Egalitarians* show the strongest support for redistribution, *Libertarians* show the strongest opposition to redistribution, and *Meritocrats* fall between these two extremes. The differences in support for redistribution between all three fairness preference types are statistically significant and remarkably large: *Egalitarians* on average show a 0.88 standard deviations higher support for redistribution than *Libertarians*. For comparison, the mean difference between respondents in the highest and the lowest income bracket is 0.46 standard deviations. The estimated differences between the types remain large and significant (0.53 SD) even after controlling for socio-demographics, economic background characteristics, and beliefs about the causes of inequality. In an extensive set of robustness checks, we show robustness to adding a variety of controls including left-right political ideology, trust in government, national identity, and altruism, and estimate bounds for the influence of unobservable confounders.

Our second main result shows that fairness preference types and beliefs interact. The policy preferences of *Meritocrats* strongly depend on their beliefs about the causes of inequality in U.S. society. The policy preferences of *Non-Meritocrats*, in contrast, depend significantly less on beliefs. The sizes of the estimated coefficients indicate that heterogeneity in fairness preferences and heterogeneity in beliefs are both important for explaining support for redistributive policies. *Meritocrats* who believe that economic inequalities are mainly caused by luck are as supportive of redistribution as *Egalitarians*. *Meritocrats* who believe that economic inequalities are mainly caused by merit are at least as opposed to redistribution as *Libertarians*. Thus, differences in policy positions between opposing fairness preference types are comparable in magnitude to differences between *Meritocrats* with opposing beliefs.

Our third main result establishes that fairness matters universally across voter groups. Fairness views matter for high and low income voters, left and right voters, and both Biden and Trump voters in the 2020 presidential election. Within each voter group, the estimated differences in policy preferences between *Egalitarians* and *Libertarians* are large and significant, as are the differences between *Meritocrats* with opposing beliefs about the causes of inequality. We find no evidence that these voter groups differ significantly in the weight they assign to fairness views when forming their policy preferences. Thus, our data rejects the idea that fairness concerns are a luxury good - or that voters on the left and the right rely to different extents on fairness as a moral foundation.

We strengthen and extend our three main results in multiple ways: (1) by benchmarking the quantitative importance of fairness preference types with other measures, (2) by analyzing the role of measurement error using repeated type classifications, (3)

by investigating whether there are previously overlooked fairness preference types in the spectator game, and (4) by showing that the simple theory-driven type classification outperforms data-driven type classifications (based on clustering algorithms and supervised machine learning algorithms) in predicting support for redistribution.

To assess the generalizability of our three main results, we replicate our analysis using a dataset collected across five European countries in 2022 (Sweden, Norway, Germany, Czechia, and Belgium, N=10,366). The dataset includes transfer choices on inequalities due to luck and merit in a spectator game, beliefs about the causes of inequality, and support for redistributive policies. All three main results replicate both qualitatively and quantitatively in the European data despite considerable differences in the measurement of fairness preferences (hypothetical vs. incentivized), beliefs (different questions), and types of redistributive policies included (taxes vs. transfers). The consistency of results demonstrates that fairness preferences and beliefs are central for understanding political conflicts about redistributive policies in modern democracies.

This paper offers novel theory-driven evidence about the relationship between fairness views and support for redistribution. Our main contribution is to test comprehensively how preferences and beliefs interact in explaining support for redistribution. This paper thereby unifies two separate strands of literature on fairness in economics: a political economy literature focused on beliefs (e.g. Fong 2001; Alesina and La Ferrara 2005; Alesina and Giuliano 2011; Fong and Poutvaara 2019), and an experimental literature focused on fairness preferences (e.g. Konow 2000; Cappelen et al. 2007; Cappelen et al. 2013). More broadly, this study contributes to the ongoing effort in economics to understand how social preferences shape support for economic policies (e.g. Luttmer 2001; Fisman et al. 2017; Kerschbamer and Müller 2020; Enke et al. 2023; Stantcheva 2021; Hvidberg et al. 2023; Fehr et al. 2024; Henkel et al. 2024).

In particular, our study is the first to establish that the three fairness preference types widely discussed in the experimental literature differ in their support for real-world redistributive policies. Most closely related to our paper are studies by Almås et al. (2020), Cohn et al. (2023), and Almås et al. (2025) who also employ spectator games in large-scale surveys. Almås et al. (2020) document differences in the distribution of fairness preference types between the United States and Norway, proposing these differences could help explain why the United States does not have a Scandinavian-style welfare state. Cohn et al. (2023) study differences in inequality acceptance between the top 5% and the bottom 95% of the U.S. income distribution. Most recently, Almås et al. (2025) provide global evidence about how fairness preference types vary in 60 countries around the world. The key distinction between our paper and these studies is that they estimate the shares of fairness preference types at the aggregate level, but cannot classify types at the individual level. While these studies provide initial evidence that behavior in

the spectator game is correlated with views on inequality in society (Almås et al. 2020; Almås et al. 2025) or tax policy (Cohn et al. 2023), they cannot test whether fairness preference types differ in their support for redistributive policies and how types interact with beliefs.² Therefore, our paper complements and advances this literature by providing a comprehensive test of the role that fairness preference types play in shaping preferences for tax and transfer policies.³

These findings have implications for policymakers and researchers trying to understand political conflicts about redistributive policies. One key implication of our findings is that focusing exclusively on beliefs – and ignoring that people can apply fundamentally different fairness principles – may overlook the moral motives underlying support for and opposition to redistribution. Another implication is that politicians should not assume that poor voters cannot afford to care about fairness and are only motivated by income concerns. Left and right voters have opposing views about the *fair* level of economic inequality in society, but right voters care as much about fairness as left voters – and not only about in-group and out-group identity. Hence, our data challenge the idea that fairness is a luxury good (Rueda and Stegmueller 2019; Enke et al. 2022; Fehr et al. 2024), and that left and right voters rely on different moral foundations (Haidt 2012; Graham et al. 2013; Enke et al. 2022). Instead, fairness views seem to influence policy preferences among a broad electorate in today’s democracies. These findings offer fundamental insights about fairness that also seem relevant for understanding inequality acceptance in other economic choice contexts.

From a methodological perspective, our findings relate to the discussion about the external validity of preferences measured in experimental games and the extent to which they can explain attitudes and behaviors outside the laboratory (see e.g. Levitt and List 2007; Kessler and Vesterlund 2015). We show that a simple within-subjects design of the spectator game can effectively identify fairness preference types, which differ in their acceptance of inequality both inside and outside the experimental game. In light of the recent criticism of experimentally validated survey questions (Chapman et al. 2025), our study contributes to the development and validation of simple choice-based elicitation techniques for economic preferences that can be implemented in large-scale surveys.

2. Using simulated data, we also show that using the implemented Gini or inequality acceptance as a measure of fairness preferences (as in Almås et al. 2020; Almås et al. 2025; Cohn et al. 2023) may produce regression estimates with an undesirable property: as the share of meritocrats in a sample increases, the estimated relationship between these measures and policy preferences converges to zero.

3. Also related are findings on the shares of fairness preference types within political camps, delivering mixed results: while Cappelen et al. (2013) and Almås et al. (2020) find differences in shares between camps, Andre (2024) recently does not find any differences between Republicans and Democrats in the United States (see Table C.5 in his Online Appendix). Our paper, in contrast, shows that fairness preference types classified at the individual-level predict support for redistributive policies even when controlling for political ideology, and that left and right voters assign similar weight to fairness.

From a theoretical perspective, our findings have implications for modeling the demand side of redistributive politics in political economy. The universal importance of fairness across major voter groups supports the common assumption that the median voter cares about fairness. At the same time, our data provide evidence that the weight individuals assign to beliefs about the causes of inequality depends on their fairness preference type and is not homogeneous as assumed in Alesina and Angeletos (2005). This calls for theoretical models that explicitly incorporate heterogeneity in fairness preference types. The conceptual distinction between heterogeneity in moral preferences and heterogeneity in beliefs seems important for explaining classical phenomena in political economy including polarization within countries, and variation in the size of the tax and transfer system between countries.

The remainder of this paper is organized as follows. Section 2 presents the three predictions. Section 3 describes our data collection and survey design. Section 4 presents the main empirical results. Section 5 discusses and extends the empirical results. Section 6 concludes.

2 Predictions about Fairness and Redistribution

In this section, we describe the three predictions that we test in our empirical analyses. To motivate these predictions, we present a stylized theoretical framework that incorporates heterogeneous fairness preferences and heterogeneous beliefs about the causes of inequality – building on Cappelen et al. (2007) and Alesina and Angeletos (2005) – into a simple political economy framework along the lines of the classical Meltzer and Richard (1981) model.

2.1 Fairness and Redistribution: A Simple Framework

Voters are motivated by income and by fairness considerations. Each voter’s market income y_i is determined by individual effort choices (“merit”) plus a random noise component (“luck”). The after-tax income depends on the size of a tax and transfer system implemented in society. A tax and transfer system specifies the share of total income collected as a tax, $\tau \in [0, 1]$, which is then distributed as a lump-sum transfer to all voters in society, $T = \frac{1}{N} \sum_{i=1}^N \tau \cdot y_i = \tau \cdot \bar{y}$. Voters treat market incomes as given and maximize the following utility function when choosing their preferred tax rate τ :

$$U_i = (1 - \tau) \cdot y_i + T - \gamma \cdot \Omega \tag{1}$$

The parameter Ω captures the disutility generated by unfair social outcomes and $\gamma \geq 0$ denotes the weight voters assign to fairness considerations, as in Alesina and Angeletos

(2005). For simplicity, voters do not consider the efficiency costs of redistribution.⁴ We assume that the disutility from unfair social outcomes takes the following form:

$$\Omega = \frac{(\tau - m^i)^2}{2} \quad (2)$$

A fairness view, $m^i \in [0, 1]$, specifies what the voter perceives to be a fair tax rate in society. To find their policy bliss point, voters then maximize:

$$U_i = (1 - \tau) \cdot y_i + \tau \cdot \bar{y} - \gamma \cdot \frac{(\tau - m^i)^2}{2} \quad (3)$$

Given an interior solution, the preferred tax rate, τ^* , corresponds to⁵:

$$\tau^* = \frac{1}{\gamma}(\bar{y} - y_i) + m^i \quad (4)$$

As in the classical Meltzer-Richard model, the preferred tax rate depends on the difference between the income of a voter and the mean income in society: a lower relative income increases the preferred tax and transfer level. However, as long as fairness considerations are sufficiently large, $\gamma > 0$, fairness views about a fair tax rate now constrain purely self-interested policy preferences of voters.

2.2 Two Debates on Fairness and Redistribution

Despite broad consensus in the literature on the importance of fairness considerations for explaining support for redistribution, fundamental questions about the micro-foundations of fairness views remain unresolved, particularly the roles of heterogeneity in preferences and heterogeneity in beliefs.

How to Conceptualize Fairness Views? A central assumption in the seminal model by Alesina and Angeletos (2005) is that all voters in society have the same meritocratic fairness preference: they consider income inequalities caused by merit to be fair, but inequalities caused by luck to be unfair. Any variation in views about fair tax rates m^i is then attributed to heterogeneity in beliefs about the causes of inequality. Beliefs about the causes of inequality can be understood as a belief about the signal-to-noise ratio in the market income distribution, where inequality caused by merit represents the signal, and inequality caused by luck represents the noise (Alesina and Angeletos 2005).

The assumption of homogeneous fairness preferences is challenged by Cappelen et al. (2007), Cappelen et al. (2013), and Almås et al. (2020), who argue that disagreements

4. Stantcheva (2021) shows that, when it comes to the formation of policy preferences, efficiency concerns seem to play surprisingly little role. In a similar way, Almås et al. (2020) show experimentally that fairness concerns seem to be more important than efficiency concerns.

5. The first order condition is: $\frac{dU_i}{d\tau} = -y_i + \bar{y} - \gamma(\tau - m^i)$.

about fairness also stem from fundamentally different normative views about which types of inequalities are fair or unfair. Almås et al. (2020) argue that the following distinct fairness preference types exist⁶:

Egalitarians: *Egalitarians* do not accept inequalities in economic outcomes caused by luck or merit.

Meritocrats: *Meritocrats* accept inequalities caused by merit, but do not accept inequalities caused by luck.

Libertarians: *Libertarians* accept inequalities caused by luck or merit.

Others: *Others* are a residual type that includes all individuals with fairness preferences that do not fall under any other type definition.

In the context of our theoretical framework, *Egalitarians* have to redistribute the total income in society lump-sum to all individuals to achieve equality of outcomes. Therefore, the fair tax rate for *Egalitarians* is $m^E = 1$. The fair tax rate for *Meritocrats* is $m^M = 1$ when inequalities are caused by luck, but $m^M < 1$ when inequalities are caused by merit. Hence, m^M is belief-dependent: it decreases with a stronger belief in merit as the main cause of inequality. The fair tax rate for *Libertarians* is simply $m^L = 0$.

Despite much ongoing experimental research about fairness preferences (e.g. Cappelen et al. 2023; Cappelen et al. 2024; Andre 2024; Sartor and Yusof 2025), the literature still lacks a comprehensive test of whether these widely discussed fairness preference types can explain support for real-world redistributive policies. Therefore it remains an open question whether a more accurate conceptualization of fairness views in political economy should incorporate both fairness preference types and beliefs.

Who Cares about Fairness? Two recent strands of literature on the role of morals in political economy challenge the assumption - embedded in our framework and in Alesina and Angeletos (2005) - that fairness matters universally. Instead, this literature argues that major voter groups place little or no weight on fairness when forming their policy preferences. Within our simple theoretical framework, this would correspond to the case where γ is zero for some subgroups in society. Alternatively, the influence of fairness on support for redistribution could be dominated by other motives that are not explicitly modeled in our framework.

One strand of literature argues that moral values are a “luxury good”, shaping policy support among the rich, but playing no role among the poor (Rueda and Stegmüller 2019;

6. This type classification distinguishes between fairness preference types based on the types of inequality (merit vs. luck) they find fair or unfair. The definitions do however not rule out a multiplicity of normative positions within fairness preference types.

Enke et al. 2022; Fehr et al. 2024). In line with this proposition, Fehr et al. (2024) and Henkel et al. (2024) show that people who make altruistic or inequality averse (as opposed to selfish) choices in experimental games have a higher support for redistributive policies, but only if their income is above the median.⁷ A second strand of literature argues that voters on the left and the right of the political spectrum assign different importance to fairness considerations: voters on the left are strongly motivated by fairness as a moral foundation, while voters on the right are strongly motivated by group-based moral values, and care less about universal fairness principles (Haidt 2012; Graham et al. 2013; Enke 2020).

If indeed major groups of voters in society assign little or no weight to fairness when forming their policy preferences, the explanatory power of fairness-based models in political economy would be substantially diminished. For example, it would be difficult to explain the political cleavage between the political left and the political right about the size of the tax and transfer system with differences in fairness views if right-leaning voters do not put any weight on fairness. Similarly, studying the fairness views of the bottom 50% of the income distribution would yield limited insights – or could even lead to incorrect conclusions about their support for redistributive policies – if this group puts no weight on fairness concerns.

2.3 Predictions

To contribute to resolving these debates, this paper tests the following three predictions about the relationship between fairness preference types, beliefs about the causes of inequality, and support for redistributive policies. Our first prediction addresses the ordering of support for redistribution implied by the fairness preference types.

Prediction 1: *Egalitarians* have a higher support for redistribution than *Libertarians*. *Meritocrats* fall between the two extreme types.

The first part follows from $m^E = 1 > m^L = 0$, by definition of the egalitarian and libertarian types. The support for redistribution of *Meritocrats* should lie in-between the two extreme types because $m^E = 1 \geq m^M \geq m^L = 0$. Our second prediction builds on the defining feature of *Meritocrats* – that their support for redistribution varies systematically with beliefs about the causes of inequality, unlike those of the other fairness types.

Prediction 2: The support for redistribution of *Meritocrats* depends on beliefs about the causes of inequality. The support for redistribution of *Non-Meritocrats* depends on beliefs to a weaker degree than for *Meritocrats*.

7. In contrast to the “luxury good” literature, earlier scholars (Lerner 1980; Hochschild 1981; Bénabou and Tirole 2006) have argued that voters with lower income are skeptical about redistribution if they believe that people get what they deserve.

Predictions 1 and 2 require that fairness considerations are strong enough to limit economic self-interest in the formation of policy preferences ($\gamma > 0$). Our third prediction addresses whether fairness considerations shape redistributive preferences similarly across key groups of voters in society.

Prediction 3: Fairness views predict support for redistribution among high and low income voters as well as among left- and right-leaning voters.

Under the assumption of homogeneous fairness concerns γ , our framework predicts that fairness views shape redistribution preferences similarly across voter groups. Taken together, Predictions 1-3 form the basis for our empirical analysis of how fairness preferences and beliefs shape support for redistribution, addressing two central and yet unresolved debates in the literature.

3 Data and Survey Design in the United States

In this section, we describe the data and survey design for our U.S. dataset (N=1,975), which we use to establish our main results in Section 4. In Section 5.3, we replicate our empirical analysis in a second dataset collected in five European countries (N=10,366). As there are several notable differences relative to the U.S. data (e.g., hypothetical transfer choices, types of policies, and the number of control variables), details about the European data and survey design are provided in Appendix D.1.

3.1 Data Collection

We ran our U.S. surveys on Prolific, a large online survey platform focused on scientific research. Prolific provides samples that are broadly representative of the U.S. population (see Appendix 3.2 for details) and is known for high data quality (Douglas et al. 2023). The dataset comprises two waves of data collection: Wave 1 was collected in May 2020 (N=745) and Wave 2 between September 2021 and January 2022 (N=1,230). Wave 2 consisted of re-sampling around two-thirds of participants from Wave 1 (N=501) and a new sample of participants (N=729).⁸

8. The U.S. dataset was collected for a companion paper investigating the impact of personal experiences and societal crises on fairness views (Harris and Sterba 2025). Wave 1 and the new sample in Wave 2 include experimental treatments in which respondents are provided with information about the pandemic and write about personal experiences that they made during the pandemic. The results of these treatments and the stability of fairness views over time in our panel are discussed in detail in our companion paper. To control for different survey instructions and treatments, we include fixed effects for each distinct treatment in each wave (“Sample FE”). While our analysis is not pre-registered, it is motivated by central predictions from the existing literature. To provide evidence for the robustness of our findings, we replicate our empirical analysis in five European countries .

To maximize statistical power and the precision of our estimates, we include all $N=1,975$ observations in our main analyses and cluster standard errors at the individual level. The results do not change meaningfully if we exclude resampled observations ($N=501$), or only use our Wave 2 data ($N=1,230$). As robustness checks, we also exclude speeders and participants with a high share of rejected submissions on Prolific in the past. As these robustness checks do not change our results meaningfully (see Appendix Tables B4, B7, B8), we rely on the full sample in our main analyses.

The surveys were implemented in the software Qualtrics. Survey instructions from all rounds of data collection are available in the Online Appendix E. Surveys differ across data collections (e.g. Wave 2 contains additional control variables), but they all contain our central variables of interest: fairness preferences, beliefs about the causes of inequality, and support for redistributive policies. The median time to complete the study was 12.5 minutes. Participants were paid between \$1.40 and \$3.60 depending on the survey and a choice in a dictator game. To ensure that all respondents in our sample live within the United States, we applied a screening protocol based on Winter et al. (2019) which screens out users who (a) try to hide their geographic location using VPNs, VPSs or proxy servers or (b) have an IP address outside the United States.

3.2 Sample

Through Prolific we obtained samples of U.S. adults, stratified by age, gender and race to approximate population representativeness. Participation was limited to individuals aged 18 or older. Table A1 shows that our sample closely matches the general population of the United States on several key characteristics such as age, sex, race, household income, employment status and census regions. Hispanics and people with very low education turn out to be underrepresented in our sample. Also, liberals are somewhat overrepresented relative to the U.S. population at large. However, these imbalances are common in quota-based online samples (Stantcheva 2023). Given that our sample covers a diverse set of subgroups of the U.S. population, it should provide sufficient heterogeneity in fairness views and policy preferences to test our predictions.

3.3 Measuring Fairness Views: Preferences and Beliefs

We next describe and graphically illustrate how we classify respondents into distinct fairness preference types based on their transfer choices in the spectator game (3.3.1), and how we measure beliefs about the causes of inequality (3.3.2).

3.3.1 Measuring Fairness Preference Types

Spectator Game We elicit fairness preferences through consequential transfer choices in a spectator game. We implement a within-subjects version of the spectator game, adapted from between-subjects design of Almås et al. (2020). In our spectator game, respondents can transfer earnings between two workers as an anonymous and impartial spectator. The workers were recruited in a different sample via Amazon Mechanical Turk prior to the main data collection and participate in a tedious real effort task.⁹ The workers earn a fixed show-up fee of \$0.50 plus a variable compensation for working on the real effort task (\$0 to \$4), which depends on the transfer choices made by the spectator.

Each of the spectators makes two transfer choices. In both choices, the level of inequality is held constant: one worker is initially endowed with \$4 and the other one with \$0 as their variable compensation for the real effort task. The causes of inequality, however, differ across the two choices. The causes of inequality are either:

- **Luck:** A lottery determines who receives 4\$.
- **Merit:** The more productive worker receives 4\$.

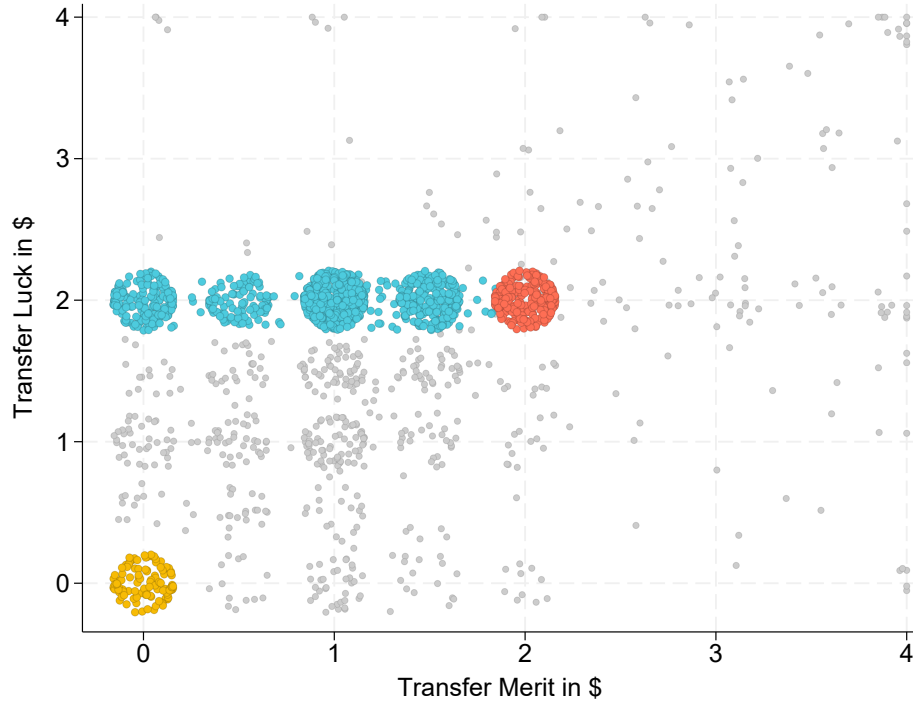
Each respondent makes one transfer choice on inequality caused by luck and one transfer choice on inequality caused by merit, in random order. Spectators can transfer any amount between \$0 and \$4 (in steps of 10 cents) to the worker with \$0. Spectators are not aware of the second cause of inequality when they make their first transfer choice, they only know that a second choice is pending.

To limit data collection costs, transfer choices are probabilistically incentivized (see Andre (2024) and Bartling et al. (2023) for a similar approach). We informed spectators transparently that for every fourth spectator, one choice would be implemented and determine the payoffs for a pair of workers. In total we recruited N=988 workers via MTurk. Shortly after data collection, spectators were matched to worker pairs and the choices of spectators were implemented by paying out the earnings after transfers to the MTurk workers.

Classification of Fairness Preference Types The within-subjects design allows us to classify individuals in our sample into egalitarian, libertarian and meritocratic fairness preferences based on their two transfer choices in the spectator game (T_{Luck} and T_{Merit} hereafter). *Egalitarians* equalize inequalities in both transfer choices: $T_{\text{Luck}} = T_{\text{Merit}} = \2 . *Libertarians* accept both types of inequality: $T_{\text{Luck}} = T_{\text{Merit}} = \0 . *Meritocrats* equalize inequalities due to luck but accept inequality due to merit: $T_{\text{Luck}} = \$2 > T_{\text{Merit}}$.

9. The task consists of counting the number 1 in a line of symbols. Productivity is measured as the number of correctly solved lines. Spectators are, however, not aware of these details about the real-effort task.

Figure 1: Transfer Choices and Fairness Preference Types



Fairness Preference Type	Classification	N	Share
● Egalitarian	$T_{\text{Luck}} = T_{\text{Merit}} = \2	235	11.9%
● Meritocrat	$T_{\text{Luck}} = \$2 > T_{\text{Merit}}$	982	49.7%
● Libertarian	$T_{\text{Luck}} = T_{\text{Merit}} = \0	104	5.3%
● Other	-	654	33.1%

Notes: The figure shows a scatter plot of transfer choices in the spectator game on inequalities due to merit (x-axis) and luck (y-axis). Each point represents one observation in our sample (N=1975). The colors of the points indicate the type classification: red stands for the egalitarian, yellow for the libertarian, and blue for the meritocratic fairness preference type. Dots are jittered so that clusters of individuals are visible.

In a between-subjects design, the shares of these types can be estimated at the population level under a number of assumptions about counterfactual choices across treatments. In a within-subjects design, observing the joint distribution of transfer choices under both conditions allows us to classify types at the individual level.

Heterogeneity in Fairness Preference Types Figure 1 shows a jittered scatter plot of respondents' transfers from the rich worker (\$4) to the poor worker (\$0) when the inequality is caused by merit (x-axis) and when it is caused by luck (y-axis). Each dot represents one observation in our sample. *Egalitarian* fairness preferences (red dots) are implemented by 11.9% of our respondents (N=235), while *Libertarian* fairness preferences

(yellow dots) are implemented by 5.3% of our respondents (N=104). *Meritocratic* fairness preferences (blue dots) are implemented by 49.7% of our respondents (N=982). The largest six clusters of transfer choices in Figure 1 are classified into one of these three fairness preference types, which are derived from influential theories of distributive justice. Around 33.1% of our sample do not match any of the three type definitions and are classified as *Others* (grey dots).

To align with the existing literature, we focus our main analysis on comparing the fairness preference types described above. However, in Section 5.2, we also explore whether there are more fairness preference types in the spectator game that may be relevant for explaining people’s support for redistribution.

Validating the Type Classification To validate our individual-level classification of fairness preference types, we present several pieces of supporting evidence in Appendix A.3. First, we estimate the type distribution with the between-subjects approach of Almås et al. (2020) using just the first transfer choice of each respondent. The within and between type distributions do not differ by much, except that the shares of *Egalitarians* and *Libertarians* are slightly higher using the between estimation approach (by 3-4pp). This is largely a “mechanical” effect if some respondents violate the assumptions that are made about their counterfactual choices in the between-subjects estimation approach (see A.3.1). Second, while we observe some order effects in our data, they do not cause substantial changes in the type distributions. Third, the type shares are robust to small implementation errors as classifying respondents who are close to (\$0,\$0) as *Libertarians* and those close to (\$2,\$2) as *Egalitarians* (diff < \$0.25) increases the shares by only 1 and 15 observations respectively. Fourth, the shares of *Egalitarians* and *Meritocrats* in our sample are very similar to those reported for the representative U.S. samples in Almås et al. (2020) and Cohn et al. (2023), while the share of *Libertarians* is lower (see Appendix Table A3 for a detailed comparison).

Finally, we show that respondents make transfer choices consistent with their fairness preference type in a subsequent dictator game and in a third treatment condition in the spectator game. In the dictator game, we show that differences between types persist even when transfer choices are personally costly (see Appendix A.5). In Wave 1, we also elicit a third transfer choice in the spectator game under ambiguity: participants are informed that either the “luck” or the “merit” treatment will be implemented with a fixed but ex-ante unknown probability.¹⁰ In this treatment condition, 92.9% of respondents among *Egalitarians*, *Meritocrats*, and *Libertarians* make a transfer choice that is a convex combination of their two transfer choices on merit and luck (see Appendix A.6). When asked about their beliefs in merit vs. luck in the ambiguity treatment, we find no differ-

10. We dropped the choice in Wave 2 to shorten the survey. As the ambiguity rule was always displayed last, this omission should not confound the classification of fairness preference types.

ences in belief formation between the types. Moreover, beliefs in merit in the ambiguity treatment are uncorrelated with beliefs in merit in US society, providing evidence that subjects do not “import” their societal beliefs into the spectator game.

3.3.2 Measuring Beliefs about the Causes of Inequality

We elicit beliefs about the causes of inequality using two established survey items from the World Values Survey. As Almås et al. (2023) point out, broad survey questions remain the most widely used method for eliciting beliefs about the causes of inequality. In fact, most of the literature in political economy on fairness and support for redistribution relies on these or closely related items (see Fong 2001; Alesina and Angeletos 2005; Alesina and Giuliano 2011).

Our two questions measure beliefs about the relative importance of factors within individual control (e.g. merit) and factors outside individual control (e.g. luck) as causes of economic success and poverty. Recent findings by Fong and Poutvaara (2019) show that individuals may differentiate between the causes of economic success and poverty. We thus measure beliefs about both. To measure beliefs about the causes of success in U.S. society, participants place their view on a scale ranging from 1: “*In the long run, hard work usually brings a better life.*” to 10: “*Hard work doesn’t generally bring success, it is more a matter of luck and connections.*”. To measure beliefs about the causes of poverty, participants place their view on a scale ranging from 1: “*Most people are poor because of laziness or bad decisions.*” to 10: “*Most people are poor because of bad luck or an unfair society.*”¹¹

To construct the variable “*Belief in Merit*”, we reverse-code responses and calculate the average of the two items. A higher value thus indicates a stronger belief that economic inequalities are merit-based. Throughout the paper, we use the terms “*Belief in Merit*” and “beliefs about the causes of inequality” interchangeably. To make our belief measure more comparable to our preference measure - and later to our European data which uses different belief questions - we construct *Belief Types* among Meritocrats based on quartiles of the *Belief in Merit* distribution ranging from strong belief in merit (Q1) to strong belief in luck (Q4).

A majority of respondents in our U.S. sample believe that hard work rather than luck is the main cause of economic success in U.S. society (68.0%), consistent with repeated findings in the literature (e.g. Alesina and Angeletos 2005). At the same time, a majority also believe that most people are poor because of bad luck rather than laziness or bad decisions (59.7%), supporting the finding by Fong and Poutvaara (2019) that beliefs about the causes of economic success and poverty may diverge. Appendix Figure A9 shows histograms of beliefs about the causes of inequality in our U.S. sample.

11. For the last statement, we slightly modified the version used in the World Values Survey by including “bad decisions” and “bad luck” as a reason for poverty to also include individual-level and choice factors.

3.4 Measurement of Outcome and Control Variables

Support for Redistribution We measure respondents’ support for redistribution via a set of redistributive policies: (i) transfer policies from the U.S. government during the COVID-19 pandemic, (ii) economic redistribution in general, and (iii) universal health care (elicited in this order). Together, these items capture a broad spectrum of redistributive policies – ranging from temporary crisis measures to long-term, polarizing reforms of the U.S. tax and transfer system

For the transfer policies enacted during the pandemic we include: the economic impact payments (EIP) paid out to individuals with income below \$75,000 (total amount: more than 814 billion USD), the increase and expansion of unemployment benefits (total amount: more than 653 billion USD), expanded Medicaid eligibility, and the introduction of paid sick leave.¹² These items capture support for a unique set of large-scale redistributive policies that were implemented to address economic inequalities in U.S. society during the pandemic. Another item measures support for economic redistribution in general, which in contrast should capture preferences for the overall level of taxes and transfers, tied to the long-standing conflict about the size of the government in U.S. society. Finally, universal health care has been one of the most contentious policy proposals to reform the U.S. tax and transfer system in the past decades. Funded via taxation, it would mostly benefit lower-income individuals who otherwise would lack access to adequate health care.

All policy preferences are elicited on a 5-point Likert scale (1 “strongly disapprove” to 5 “strongly approve”). To reduce dimensionality in our main analysis, we construct a composite index of “*Support for Redistribution*” as our main outcome variable, which is the first principal component of the full set of policy preferences (see Appendix A.9 for details). As part of our robustness checks, we show that our results are robust across policy domains.¹³

Socio-Demographics As our standard socio-demographic characteristics, we use age in years, gender, education (high school or lower, college degree, master’s degree), race (White, Black, Asian, Other), and Hispanic ethnicity.

Economic Background Characteristics As economic background characteristics, we measure respondents’ income and current employment status. Income is measured as gross household income in the previous calendar year using seven income brackets [<\$20,000, \$20,000-\$34,999, \$35,000-\$49,999, \$50,000-\$74,999, \$75,000-\$99,999, \$100,000-

12. The data about the size of the transfer payments is based on <https://pandemicoversight.gov/>.

13. Responses to the four pandemic policies are aggregated to a “*Pandemic Support*” index by taking a simple average of the four items. Using the first principal component produces almost identical results as it assigns similar weight to all items.

\$149,999, >\$150,000]. Employment status is either employed, unemployed, or not in labor force. We also elicit more detailed income and employment data related to the economic impacts of the pandemic, which are used in robustness checks.

Political Ideology Political ideology is self-reported on a scale from 1 to 10, where 1 refers to left/liberal and 10 to right/conservative. In Wave 2, we additionally ask for a self-classification of political orientation on economic policy issues on a 5-point scale [Very Liberal/ Liberal/ Moderate/ Conservative/ Very Conservative], and for voting behavior in the 2016 and 2020 presidential elections.

Selfishness /Altruism Selfishness and altruism are elicited via a consequential transfer choice with self-interest measured in a modified dictator game. Participants are matched with one other participant. They are told that one of them will receive a bonus of \$1.20. Who gets the bonus is determined by a lottery. Subjects are then asked how much they want to give to the other participant in case that they win the bonus. The amount transferred in the dictator game measures respondents' altruism. We classify respondents as selfish who do not give any money to the other participant in the dictator game.

3.5 Empirical Strategy

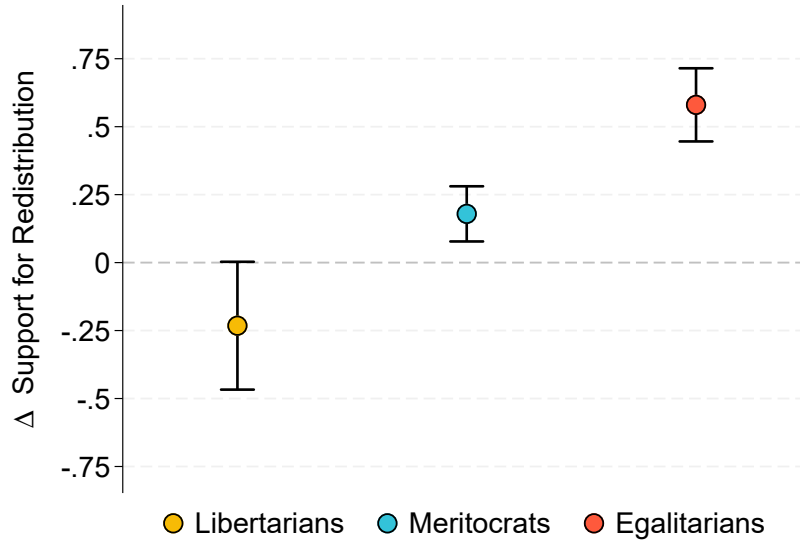
As our empirical strategy, we employ a controlling-for-observables approach, which is standard in studies linking experimental measures of social preferences and policy support (see e.g. Kerschbamer and Müller 2020; Enke et al. 2023; Enke 2020; Fehr et al. 2024). Our standard control variables include socio-demographics (age, gender, race/ethnicity, education), economic background characteristics (income bracket, employment status), and sample fixed effects.

Although the observational nature of our data precludes strong causal claims, we strengthen the credibility of our findings in several ways: First, we conduct robustness checks that control for a variety of potential confounders including political ideology, trust in government, national identity, selfishness and altruism. Second, we estimate bounds following Oster (2019) to assess the robustness of our estimates against unobserved confounders. Third, we replicate our main analyses using data from five European countries, providing external validation of our core findings.

4 Main Results

In this section, we establish our main results by testing three central predictions about fairness and redistribution in our U.S. dataset (N=1,975).

Figure 2: Fairness Preference Types Differ in Support for Redistribution



Notes: The figure shows estimated coefficients with 95% confidence intervals from an OLS regression explaining support for redistribution (standardized first principal component of all policy preferences) with dummies for Egalitarians, Libertarians, and Meritocrats (“Others” serve as the reference category). Controls include socio-demographics (age, gender, race/ethnicity, education), economic background characteristics (income bracket and employment status) and sample fixed effects, corresponding to Column (2) in Table 1.

4.1 Fairness Preference Types Differ in Policy Support

First, we test Prediction 1 that *Egalitarians* show greater support for redistribution than *Libertarians*, and that *Meritocrats* fall in between. We estimate a set of OLS regressions that regress *Support for Redistribution* on dummies for each fairness preference type while controlling for a set of observable characteristics. Figure 2 depicts the estimated coefficients of the type dummies for *Egalitarians*, *Libertarians*, and *Meritocrats* from a regression model that includes our standard set of controls (socio-demographics, economic background characteristics, and sample fixed effects). The *Other* fairness preference type serves as the reference category (indicated by the dashed gray line at zero).

Figure 2 shows that the average levels of support for redistribution of our fairness preference types are consistent with Prediction 1. *Egalitarians* on average show the highest support for redistribution, while *Libertarians* show the strongest opposition. *Meritocrats* and *Others* fall between these two extremes. The estimated differences between fairness preference types are statistically significant and remarkably large: *Libertarians* are on average 0.81 standard deviations less in support of redistribution than *Egalitarians* ($p < 0.001$). *Meritocrats* show on average a 0.40 standard deviations lower support for redistribution than *Egalitarians* ($p < 0.001$), but a 0.41 standard deviations greater support for redistribution than *Libertarians* ($p < 0.001$).

Table 1 presents four OLS regressions that explain support for redistribution with

Table 1: Fairness Preference Types Differ in Support for Redistribution

	Dep Var: Support for Redistribution			
	(1)	(2)	(3)	(4)
Egalitarian	0.59*** (0.07)	0.58*** (0.07)	0.36*** (0.07)	0.22*** (0.06)
Meritocrat	0.15** (0.05)	0.18*** (0.05)	0.12** (0.05)	0.04 (0.04)
Libertarian	-0.29** (0.10)	-0.23* (0.10)	-0.17 (0.09)	-0.13 (0.08)
Belief in Merit			-0.19*** (0.01)	-0.10*** (0.01)
Political Ideology				-0.17*** (0.01)
Income Bracket FE	No	Yes	Yes	Yes
Employment Status FE	No	Yes	Yes	Yes
Socio-Demographics	No	Yes	Yes	Yes
Sample FE	No	Yes	Yes	Yes
Diff (Egalitarian - Libertarian)	0.884	0.812	0.531	0.352
p	< 0.001	< 0.001	< 0.001	< 0.001
Diff (Egalitarian - Meritocrat)	0.444	0.401	0.237	0.185
p	< 0.001	< 0.001	< 0.001	0.001
Diff (Meritocrat - Libertarian)	0.440	0.411	0.294	0.168
p	< 0.001	< 0.001	0.001	0.039
Observations	1975	1975	1975	1975
R^2	0.041	0.114	0.248	0.407

Notes: OLS estimates with robust standard errors clustered at the individual level in parentheses. Dependent variable: support for redistribution (standardized first principal component of all policy preferences). Reference category for fairness preference types: “Others”. Socio-Demographics include age, gender, race, ethnicity and education dummies.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

varying sets of control variables. Column (1) includes only fairness preference type dummies as explanatory variables. Column (2) corresponds to Figure 2 and adds controls for socio-demographics (age, gender, race/ethnicity, education), economic background characteristics (income bracket and employment status), and sample fixed effects. Column (3) adds beliefs in merit, and Column (4) adds left-right political ideology.

All specifications in Table 1 support Prediction 1, replicating the pattern presented in Figure 2 (*Egalitarians* > *Meritocrats* > *Libertarians*). The estimated differences in column (1) remain largely unchanged after adding standard control variables in column (2). Controlling for beliefs about the causes of inequality in column (3) reduces the coefficients, but the estimated differences remain large and statistically significant (*Egal-*

itarians - Libertarians: 0.53 SD, $p < 0.001$).¹⁴ Columns (1)-(3) show that the differences in support for redistribution between the fairness preference types cannot be explained by differences in beliefs about the causes of inequality, socio-demographics, or economic background characteristics.

In column (4) we control for political ideology – a key robustness check in the related literature (see e.g. Enke et al. 2023; Fehr et al. 2024). Left-right political ideology captures a broad range of beliefs, preferences, and values that shape the political views of voters (Jost et al. 2009). Including this variable can help account for unobserved determinants of political ideology.¹⁵ At the same time, political ideology may absorb variation attributable to fairness preference types, to the extent that left-right political ideology is itself shaped by fairness preferences. Therefore, column (4) is a conservative test of our prediction. Reassuringly, the estimated differences remain large and statistically significant even after controlling for political ideology (*Egalitarians* vs. *Libertarians*: 0.352 SD, $p < 0.001$). This result is robust when using alternative measures of political ideology (see Appendix Table B3).

Taken together, our data consistently confirm Prediction 1:

Result 1: *Egalitarians* have a higher support for redistribution than *Libertarians*. *Meritocrats* are in between the two extreme types.

Robustness of Result 1 We first show that Result 1 holds **across redistributive policies**, and is not only driven by a specific policy. Appendix Table B1 shows that the differences in policy support between *Egalitarians* and *Libertarians* range from 0.42 standard deviations for the pandemic support policies to 0.49 standard deviations for universal health care and 0.64 standard deviations for general economic redistribution (in specifications including standard controls and belief in merit).

To show that Result 1 is robust to the inclusion of **additional control variables**, Appendix Table B2 presents a set of regression models using variables that were mainly collected in Wave 2 of our data collection. Result 1 remains robust when controlling for trust in government (e.g. Kuziemko et al. 2015), national identity (e.g. Shayo 2009), a selfish type identified in our dictator game (Fehr et al. 2024),¹⁶ and altruism (e.g. Dimick

14. The estimated difference between *Egalitarians* and *Libertarians* is only marginally smaller (0.50 SD, $p < 0.001$) in an equivalent regression model that controls for answers to both of our belief questions instead of using *Belief in Merit*.

15. Including political ideology can also address the concern that the estimated association merely reflects ideological consistency or identity-signaling – i.e., participants making choices in the spectator game and reporting policy preferences that are consistent with their political identity as a left or right voter. If this was the case, then differences between fairness preference types should disappear once we control for left-right political ideology.

16. Fehr et al. (2024) show that selfish respondents (14.8% in their sample) are around 0.3 standard deviations less in support of redistributive policies than altruistic and inequality-averse respondents. Consistent with Fehr et al. (2024), we also observe that selfish respondents (13.8% in our sample) are 0.27 standard deviations less supportive of redistribution.

et al. 2018). We further show robustness to the inclusion of a vector of controls for the economic, health and psychological impacts of the coronavirus pandemic on each participant (including income loss, job loss, transfers received, COVID-19 cases). Even when all additional control variables are included simultaneously, the estimated difference between *Egalitarians* and *Libertarians* remains large (0.45 SD) and statistically significant ($p = 0.001$). Appendix Table B4 further demonstrates that Result 1 is robust **across different sample specifications**.¹⁷

Finally, we **estimate bounds** proposed by Oster (2019) to assess the potential influence of unobserved confounders on our estimates. Specifically, we estimate how strongly unobservables would have to bias our results to fully explain away the observed difference between *Libertarians* and *Egalitarians* (see Enke 2020, for a similar application). Using column (5) of Appendix Table B3 as our reference model, which controls for the most extensive set of control variables, we estimate a bound of $\delta = 0.95$ under the assumption of a maximal R^2 of 0.70.¹⁸ This implies that, for the true coefficient to be zero, unobservables would need to introduce a very large bias – almost as large (95%) as the full set of observed covariates – providing evidence of robustness to unobserved confounders.

4.2 Fairness Preference Types and Beliefs Interact

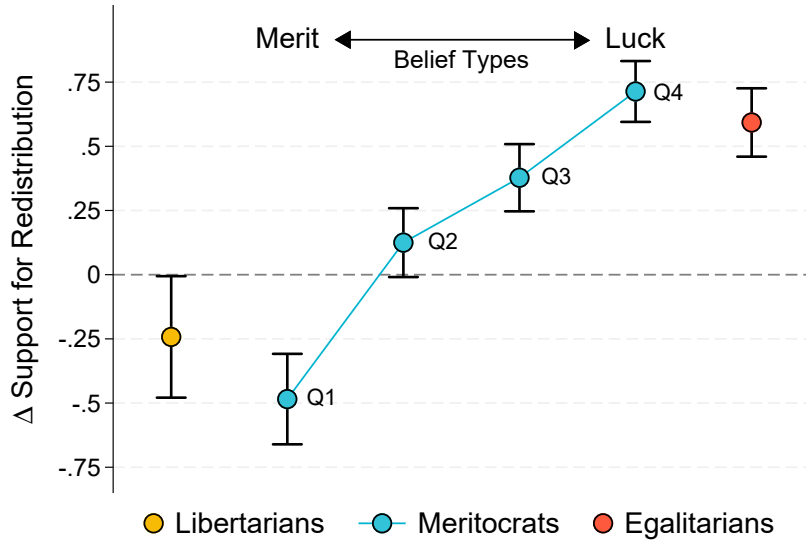
We next test Prediction 2 that the policy preferences of *Meritocrats* depend on their beliefs about the causes of inequality in U.S. society, and that the policy preferences of *Non-Meritocrats* depend on their beliefs to a weaker degree. Table 2 presents OLS regressions equivalent to Table 1, except that we now add interaction terms between *Belief in Merit* and dummies for the fairness preference types. *Meritocrats* always serve as the omitted category. In Panel A, we include an interaction term of *Belief in Merit* with a dummy for *Non-Meritocrats*. In Panel B, we include interaction terms of *Belief in Merit* with an *Egalitarian*, *Libertarian* and *Other* type dummy. All regressions include type fixed effects to account for baseline differences in support for redistribution across fairness types.

We first discuss the role of beliefs for *Meritocrats*. The *Belief in Merit* coefficient in Table 2, Panel A and B, indicates that the association between beliefs and support for redistribution among *Meritocrats* is strong and significant across model specifications (-0.24 to -0.13, $p < 0.001$), confirming the first part of Prediction 2. The more a *Meritocrat*

17. These sample specifications include reweighting the sample to match the U.S. population on key demographics, excluding observations of resampled respondents (N=501), excluding speeders (5% and 10% fastest), excluding participants with low levels of approved submissions on Prolific (less than 95% and 98%), excluding outliers (respondents who transfer more than 2\$ in one choice in the spectator game), or jointly implementing exclusion criteria.

18. As proposed by Oster (2019), the maximal R^2 is chosen to be 1.3 times the R^2 of the reference model, which is 0.53 in column (5) of Appendix Table B3. When choosing column (4) of Table 1 as our reference model, we estimate a bound of $\delta = 1.8$, suggesting even greater robustness to unobserved confounders.

Figure 3: The Role of Beliefs for Meritocrats



Notes: The figure shows estimated coefficients and 95% confidence from OLS regressions explaining support for redistribution (standardized first principal component of all policy preferences) with dummies for Egalitarians, Libertarians, and four subtypes of Meritocrats (“Others” serve as the reference category). Meritocrats are classified into four subtypes based on quartiles of the belief distribution: from high belief in merit (left coefficient) to high belief in luck (right coefficient) (see Appendix A.8 for details). Regressions control for socio-demographics (age, gender, race/ethnicity, education), economic background characteristics (income bracket and employment status) and sample fixed effects.

believes in merit, the less she supports redistributive policies. To illustrate the role of beliefs for *Meritocrats*, Figure 3 depicts coefficients from an OLS regression identical to the one for Figure 2, except that *Meritocrats* are now classified into four subtypes based on quartiles of the *Belief in Merit* distribution (Q1 to Q4). Figure 3 shows that *Meritocrats* who believe that inequalities in U.S. society are mainly caused by luck (Q4) are, on average, as supportive of redistribution as *Egalitarians*. In contrast, *Meritocrats* who believe that inequalities in U.S. society are mainly caused by merit (Q1) are on average at least as opposed to redistribution as *Libertarians*.

This empirical pattern has two major implications. First, both support for and opposition to redistribution may be based on different normative fairness principles. *Egalitarians* and *Meritocrats* who believe in luck strongly support redistributive policies. *Libertarians* and *Meritocrats* who believe in merit strongly oppose redistributive policies. *Meritocrats* with intermediate beliefs take a moderate position. Thus, observing the level of support for redistribution of a voter – or even knowing whether a voter perceives current economic inequalities as fair or unfair – does not allow to infer the normative principle underlying these views. Second, differences in support for redistribution between individuals with opposing fairness preferences (*Libertarians* versus *Egalitarians*) are comparable in size to differences between *Meritocrats* with opposing beliefs (belief in merit versus belief in

luck). Thus, in terms of their estimated coefficient sizes, fairness preferences and beliefs about the causes of inequality are similarly important for explaining support for redistribution.

We now test whether the policy preferences of *Non-Meritocrats* depend to a weaker degree on beliefs than the policy preferences of *Meritocrats*. If Prediction 2 holds, the estimated coefficients for the interaction terms between fairness preference types and beliefs should be positive and significant – indicating that the negative impact of beliefs on support for redistribution is smaller for *Non-Meritocrats*.

The coefficients of the interaction terms largely confirm Prediction 2: In Panel A of Table 2, the coefficients of the interaction term in columns (1) to (3) show that the estimated association between beliefs and policy support is around 36% to 42% weaker for *Non-Meritocrats* than for *Meritocrats* (0.09 to 0.05, $p \leq 0.002$). Panel B replicates this finding when analyzing the differences by type. The interaction effect is statistically significant across columns (1) to (3) for *Egalitarians* (0.10 to 0.07, $p \leq 0.001$) and for individuals with *Other* fairness preferences (0.11 to 0.06, $p \leq 0.003$). For instance, in column (2), a one-point increase in belief in merit is associated with a 0.24 standard deviations lower support for redistribution among *Meritocrats*, but this association is 43% weaker among *Egalitarians* (0.13 SD) and 47% weaker among *Others* (0.12 SD). Only the estimated interaction effect for *Libertarians* in Panel B is not significant in any specification. This is not consistent with the theoretical prediction that for *Libertarians*, who always accept inequality, beliefs in merit should matter less than for *Meritocrats*. Given that *Libertarians* comprise only 5.3% of our sample (N=104), this finding may be due to a lack of power. We revisit the case of *Libertarians* when discussing the results of the European data. As the results are consistent with Prediction 2 in 94.7% of our sample, our results largely confirm Prediction 2:

Result 2: Fairness preferences and beliefs interact: The policy support of *Meritocrats* depends strongly on their beliefs about the causes of inequality, the policy support of *Non-Meritocrats* to a much weaker degree.

Robustness of Result 2 As a first robustness check, Table B5 shows that Result 2 holds **across redistributive policies**. Specifically, the estimated association between beliefs and policy support is between 34% to 42% weaker for *Non-Meritocrats* than for *Meritocrats* across policies ($p < 0.001$). Also for the individual types, the interaction effects are consistent across policies, with a 39% to 54% weaker association for *Egalitarians* ($p \leq 0.003$) and a 44% to 51% weaker association for *Others* ($p < 0.001$). Result 2 also holds **across belief measures**: when using either beliefs about the causes of success or beliefs about the causes of poverty (see Appendix Table B6). In Appendix Tables B7 and B8 we show that Result 2 is again robust **across different sample restrictions**.

In particular, the interaction effects remain robust when excluding outliers (respondents with a transfer choice of $>2\$$ in the spectator game).

Table 2: Fairness Preference Types and Beliefs Interact

	Dep Var: Support for Redistribution		
	(1)	(2)	(3)
Panel A: Meritocrats vs Non-Meritocrats			
Belief in Merit	-0.24*** (0.02)	-0.23*** (0.02)	-0.13*** (0.01)
Non-Meritocrat \times Belief in Merit	0.09*** (0.02)	0.09*** (0.02)	0.05** (0.02)
Type FE	Yes	Yes	Yes
Income Bracket FE	No	Yes	Yes
Employment Status FE	No	Yes	Yes
Socio-Demographics	No	Yes	Yes
Sample FE	No	Yes	Yes
Political Ideology	No	No	Yes
p (Non-Meritocrat \times Belief in Merit)	< 0.001	< 0.001	0.002
Observations	1975	1975	1975
R^2	0.214	0.256	0.410
Panel B: By Type			
Belief in Merit	-0.24*** (0.02)	-0.23*** (0.02)	-0.13*** (0.01)
Egalitarian \times Belief in Merit	0.10*** (0.02)	0.10*** (0.02)	0.07*** (0.02)
Libertarian \times Belief in Merit	-0.08 (0.04)	-0.07 (0.04)	-0.05 (0.04)
Other Type \times Belief in Merit	0.11*** (0.02)	0.11*** (0.02)	0.06** (0.02)
Type FE	Yes	Yes	Yes
Income Bracket FE	No	Yes	Yes
Employment Status FE	No	Yes	Yes
Socio-Demographics	No	Yes	Yes
Sample FE	No	Yes	Yes
Political Ideology	No	No	Yes
p (Egalitarian \times Belief in Merit)	<0.001	<0.001	<0.001
p (Libertarian \times Belief in Merit)	0.057	0.111	0.169
p (Other Type \times Belief in Merit)	<0.001	<0.001	0.003
Observations	1975	1975	1975
R^2	0.222	0.262	0.413

Notes: OLS estimates with robust standard errors clustered at the individual level in parentheses. Dependent variable: support for redistribution (standardized first principal component of all policy preferences). Reference category for fairness preference types: “Meritocrats”. Socio-Demographics include age, gender, race, ethnicity and education dummies.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

4.3 Fairness Matters Universally Across Voter Groups

We next test Prediction 3 that fairness views explain support for redistribution among key voter groups in political economy: high- and low-income voters and left and right voters. To construct voter groups, we split our sample into respondents with above and below median income: (high-income: $\geq 75,000$ Dollar). For political ideology, we split our sample into left and right voters using the midpoint of the 10-point scale (left: ≤ 5).

To test Prediction 3, we separately estimate the differences in support for redistribution between individuals with opposing fairness views *within* each subgroup. Specifically, we estimate the differences in support for redistribution between the two opposing fairness preference types: *Egalitarians* - *Libertarians*, and between *Meritocrats* with opposing beliefs about the causes of inequality: *Belief: Luck* - *Belief: Merit*. To see whether fairness explains support for redistribution similarly across subgroups, we then test for differences in these estimated differences *between* subgroups. Table 3 presents the corresponding set of regression models. The reference category in all regressions is *Others*.

Estimates for high and low-income voters are presented in columns (1) and (2). For both high- and low-income voters fairness preference types are strong and statistically significant predictors of support for redistribution ($p < 0.001$). The differences between *Egalitarians* and *Libertarians* are almost identical: 0.84 standard deviations among voters with low income and 0.86 standard deviations among voters with high income. The difference between the estimates is not significant ($Diff = Diff: p = 0.930$). The same is true for the differences between *Meritocrats* with opposing beliefs about the causes of inequality, which are 1.20 standard deviations among voters with high income and 1.18 standard deviations among voters with low income. These differences are statistically significant ($p < 0.001$), but again, the difference in these estimates is not significant ($Diff = Diff: p = 0.927$).

Estimates for left and right voters are presented in columns (5) and (6). Among left voters the estimated difference between *Egalitarians* and *Libertarians* is 0.38 standard deviations ($p = 0.001$), while among right voters the estimated difference between *Egalitarians* and *Libertarians* is 0.78 standard deviations ($p < 0.001$). *Meritocrats* with opposing beliefs differ in their support for redistribution by 0.56 standard deviations among left voters ($p < 0.001$), and by 0.64 standard deviations among right voters ($p = 0.002$). So if anything, the estimated differences between fairness types among right voters are larger than among left voters (though not significantly so: $Diff = Diff: p = 0.068$ and $p = 0.690$ respectively).

The regression results in Table 3 clearly reject the idea that fairness views do not matter for the poor because they cannot afford their moral convictions, or for right voters because they rely on different moral foundations. Instead, we find that fairness matters universally across key groups of voters. Remarkably, within all subgroups the

support for redistribution of *Meritocrats* who believe in luck is comparable to the policy support of *Egalitarians*, while the opposition to redistribution of *Meritocrats* who believe in merit is comparable to that of *Libertarians*. Hence, the pattern illustrated in Figure 3 holds consistently within voter groups.

Taken together, our results confirm Prediction 3:

Result 3: Fairness matters universally across voter groups: Support for redistribution among high- and low-income voters and among left and right voters depends strongly on their fairness views.

Robustness of Result 3 As a robustness check, we repeat our analyses for subgroups with more pronounced income differences and for vote choices in the 2020 U.S. presidential election. First, we compare the estimates for participants in the lowest income quartile ($\leq 35,000$ Dollar) and in the highest income quartile ($\geq 100,000$ Dollar). Using these subgroups, columns (3) and (4) of Table 3 produce results equivalent to columns (1) and (2). Second, we compare the estimates for respondents who reported voting for Trump or for Biden in the 2020 election, using our Wave 2 data. Columns (7) and (8) of Table 3 show that the differences between fairness types are significant among Trump voters as well as among Biden voters, and if anything, larger among Trump voters than among Biden voters. Overall, Result 3 is thus robust to alternative specifications for income groups and political ideology.

To address the concern that the absence of differences could partly reflect measurement error in our subgroup classification, we show that there is minimal noise in the repeated measurement of income and political ideology in our sample, confirming a high level of data quality (see Appendix B.3).

Table 3: Fairness Matters Universally Across Voter Groups

	Dep Var: Support for Redistribution							
	By Income				By Political Ideology			
	Low (≤\$75,000)	High (>\$75,000)	Low (≤\$35,000)	High (>\$100,000)	Left Voters	Right Voters	Biden Voters 2020	Trump Voters 2020
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Fairness Preference Types								
Egalitarian	0.55*** (0.08)	0.68*** (0.12)	0.62*** (0.11)	0.76*** (0.15)	0.48*** (0.06)	0.39** (0.14)	0.47*** (0.08)	0.48 (0.34)
Libertarian	-0.29 (0.16)	-0.19 (0.18)	-0.40 (0.27)	-0.28 (0.22)	0.10 (0.11)	-0.39* (0.16)	-0.03 (0.14)	-0.36 (0.27)
Meritocrats: Belief Types								
Belief: Luck	0.72*** (0.07)	0.69*** (0.11)	0.78*** (0.10)	0.83*** (0.14)	0.46*** (0.06)	0.22 (0.19)	0.48*** (0.08)	0.68 (0.47)
Belief: Rather Luck	0.32*** (0.08)	0.49*** (0.11)	0.27* (0.12)	0.48*** (0.13)	0.19** (0.07)	0.32** (0.12)	0.25** (0.08)	0.12 (0.25)
Belief: Rather Merit	0.13 (0.09)	0.12 (0.10)	0.08 (0.16)	0.11 (0.13)	0.03 (0.07)	0.16 (0.12)	0.03 (0.10)	0.01 (0.25)
Belief: Merit	-0.46*** (0.12)	-0.51*** (0.14)	-0.49* (0.19)	-0.63*** (0.17)	-0.10 (0.10)	-0.42*** (0.11)	-0.20 (0.11)	-0.26 (0.19)
Diff (Egalitarian - Libertarian)	0.84	0.86	1.03	1.05	0.38	0.78	0.50	0.84
p	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.033
p (Diff = Diff)	p=0.930		p=0.957		p=0.068		p=0.389	
Diff (Belief: Luck - Belief: Merit)	1.18	1.20	1.26	1.45	0.56	0.64	0.69	0.94
p	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	0.047
p (Diff = Diff)	p=0.927		p=0.466		p=0.690		p=0.580	
Income Bracket FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Employment Status FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Socio-Demographics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sample FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1172	803	484	512	1280	695	800	217
R^2	0.213	0.196	0.259	0.250	0.135	0.266	0.160	0.262

Notes: OLS estimates with robust standard errors clustered at the individual level in parentheses. Dependent variable: support for redistribution (standardized first principal component of all policy preferences). Reference category for fairness preference types: “Others”. The p-value of (Diff = Diff) refers to testing for equality of estimated differences between columns, e.g. columns (1) and (2). Controls include socio-demographics (age, gender, race, ethnicity, education dummies), income group fixed effects, employment status fixed effects, and sample fixed effects. For comparing Biden and Trump Voters in 2020 we can only use our Wave 2 data.

*** p<0.001, ** p<0.01, * p<0.05

5 Discussion and Extensions

Having established our main results on how fairness views shape support for redistribution, we now turn to discussing their relevance, generalizability, and broader implications. We also discuss extensions and limitations of our methods.

5.1 How Quantitatively Important Are Fairness Preference Types?

We begin by discussing how quantitatively important the fairness preference types are for explaining support for redistribution based on our results.

Benchmarking As a benchmarking exercise, we compare the estimated differences in support for redistribution between fairness preference types to other relevant predictors of support for redistribution. The estimated differences between *Egalitarians* and *Libertarians* (0.52 SD when controlling for socio-demographics, income brackets, employment status, and beliefs in merit) are larger than the mean differences in support for redistribution between respondents in the lowest and the highest income bracket (0.46 SD), between the employed and the unemployed (0.35 SD), than the black-white gap (0.41 SD), and the gender gap (0.15 SD) in our data. In terms of the explained variation in policy support (R^2), fairness preference types explain more variation (4.1%) than economic background characteristics (income brackets and employment status, 2.8%) and about as much as socio-demographics (age, gender, education, race, ethnicity, 4.2%) (see Appendix Table C1).

The strongest argument for the quantitative relevance of fairness preference types on policy support is, however, their comparison to and interaction with beliefs about the causes of inequality. Beliefs about the causes of inequality are considered in the literature one of the – if not the – strongest predictor of support for redistributive policies (Alesina and Giuliano 2011; Stantcheva 2021; Fehr et al. 2024). Our data show that: (1) the differences between *Egalitarians* and *Libertarians* are comparable in size to the estimated differences between *Meritocrats* with opposing beliefs about the causes of inequality (as shown in Figure 2), and (2) fairness preference types predict how strongly beliefs about the causes of inequality are associated with support for redistribution (Result 2). Heterogeneity in fairness preference types therefore proves to be conceptually and quantitatively important.

Measurement Error One valid concern with our estimates is that they may be biased by measurement error in our fairness preference type classification. This raises the question of whether eliciting more choices per respondent could further improve the classification and predictive power for policy preferences.

To address this question, we can exploit that our U.S. dataset contains repeated observations for $N=499$ respondents (though the approximately 1.5-year gap between Wave 1 and Wave 2 is not ideal for this exercise).¹⁹ Four empirical observations, based on Appendix Table C4, suggest that the main analyses may in fact underestimate the relevance of fairness preference types to some extent in our main analysis due to some level of measurement error in our type classification. First, fairness preference types predict support for redistribution across waves (types in Wave 1 predict support for redistribution in Wave 2, and vice versa). Second, the predictive power in terms of R^2 increases once both type classifications are used to predict support for redistribution (using one type classification: $R^2 = 0.049$ to 0.061 , using both type classifications: $R^2 = 0.090$ to 0.093). Third, types elicited in Wave 1 are almost as predictive of support for redistribution in Wave 2 as types elicited in Wave 2 (and vice versa). Fourth, the estimated differences between respondents classified twice as *Libertarians* and those classified twice as *Egalitarians* are larger than the estimated differences between *Libertarians* and *Egalitarians* in our main analysis.

From a methodological point of view, our main results still demonstrate that even a simple within-subjects design based on two transfer choices can identify meaningful variation in fairness preferences at the individual level. An interesting question for follow-up research is how many transfer choices are optimal to classify types and how to balance the trade-offs between the number of spectator choices, the limited attention span of respondents, measurement error, and survey costs.

Types vs. Implemented Gini A key distinction between our paper and the related literature is that we classify fairness preference types at the individual level. Related studies observe a single transfer choice per participant – either for the luck or the merit treatment – and use the implemented Gini (Almås et al. 2020; Almås et al. 2025) or the share of income redistributed (Cohn et al. 2023) as a measure of fairness preferences in regression analyses. But does it make a difference which measure of fairness preferences is used in empirical work?

Using simulated data, described in detail in Appendix C.3, we show that the measures of fairness preferences used in the existing literature can produce unreliable estimates about the relationship between fairness preferences and policy support. In particular, the estimated association between the implemented Gini and policy support converges to zero, as the share of *Meritocrats* in a sample increases. This may lead to false negative

19. As the time gap between observations is quite large, changes in choices may also reflect true changes in underlying preferences, differences in perceptions of the choice context, or changes in the psychological state, and thus can only provide an upper bound for the level of measurement error in our data. In our companion paper, Harrs and Sterba (2025), we discuss the stability over time in detail. We show that there is stability at the individual level as type classifications in wave 1 significantly predict types classifications in wave 2 for all types including *Others* (with $p < 0.001$). At the aggregate level, the type distribution does not change over time or in response to experimental manipulations.

results finding no association between fairness preferences and an outcome even when a strong causal effect exists. Moreover, two samples (e.g. countries or subgroups) may yield substantially different regression estimates even when the effect of fairness preferences on policy support is identical. The intuitive explanation for this result is that strong *Meritocrats* implement a Gini of 0 in the luck treatment and a Gini of 1 in the merit treatment, and thus attenuate any estimated associations with other variables. Therefore, there are relevant differences when using other measures of fairness preferences instead of fairness preference types.²⁰

5.2 Are There More Fairness Preference Types?

The main objective of our paper is to test predictions about differences between the fairness preference types that have been extensively discussed in the literature: *Egalitarians*, *Libertarians*, and *Meritocrats* (e.g. Cappelen et al. 2007; Almås et al. 2020). However, our data also allows us to explore the possibility of additional fairness preference types in the spectator game, that have so far been overlooked.

The Case of Strong and Weak *Meritocrats* One apparent heterogeneity in transfer choices revealed by our within-subjects design is heterogeneity among the *Meritocrats* (see Figure 1). From a philosophical perspective, the meritocratic fairness ideal specifies that inequalities caused by luck are unfair but does not specify how much inequality is fair when inequalities are caused by merit (Roemer and Trannoy 2015). Heterogeneity along this dimension among the *Meritocrats* is illustrated in Figure 1 by the four clusters of *Meritocrats* around (\$0,\$2), (\$0.5,\$2), (\$1,\$2) and (\$1.5,\$2). All of these respondents fully equalize inequalities due to luck but accept inequalities due to merit to varying degrees. Do these differences in transfer choices among the *Meritocrats* also translate into differences in their support for redistributive policies?

To answer this question, we classify *Meritocrats* into four subtypes according to the strength of their meritocratic preferences, which we define as the difference in transfer choices between the luck and merit conditions: $Meritocratic\ Preferences = T_{Luck} - T_{Merit}$. *Meritocrats* are classified into those with strong (18.3%), rather strong (10.9%), moderate (45.4%), and weak (25.4%) meritocratic preferences (each containing one of the four clusters of *Meritocrats*, see Figure C1).

We find that the meritocratic subtypes differ in two respects. First, they differ significantly in their level of support for redistribution: *Meritocrats* with strong meritocratic

20. In our dataset, we estimate a coefficient of -0.38 ($p < 0.001$, $R^2=0.019$) for the implemented Gini when predicting support for redistribution, and a coefficient of 0.47 ($p < 0.001$, $R^2=0.010$) for the share redistributed. Both measures thus explain a smaller share of the variation in support for redistribution than our fairness preference types ($p < 0.001$, $R^2=0.041$), again confirming differences between types and existing measures.

preferences are less in support of redistribution than *Meritocrats* with weak meritocratic preferences ($p < 0.001$). This difference is robust to controlling for beliefs and other covariates (see Appendix Table C2). Second, meritocratic preferences and beliefs about the causes of inequality also interact among *Meritocrats*: beliefs about the causes of inequality have a significantly stronger effect on the policy support of *Meritocrats* with strong meritocratic preferences than on *Meritocrats* with weak meritocratic preferences ($p < 0.010$, see Appendix Table C3).

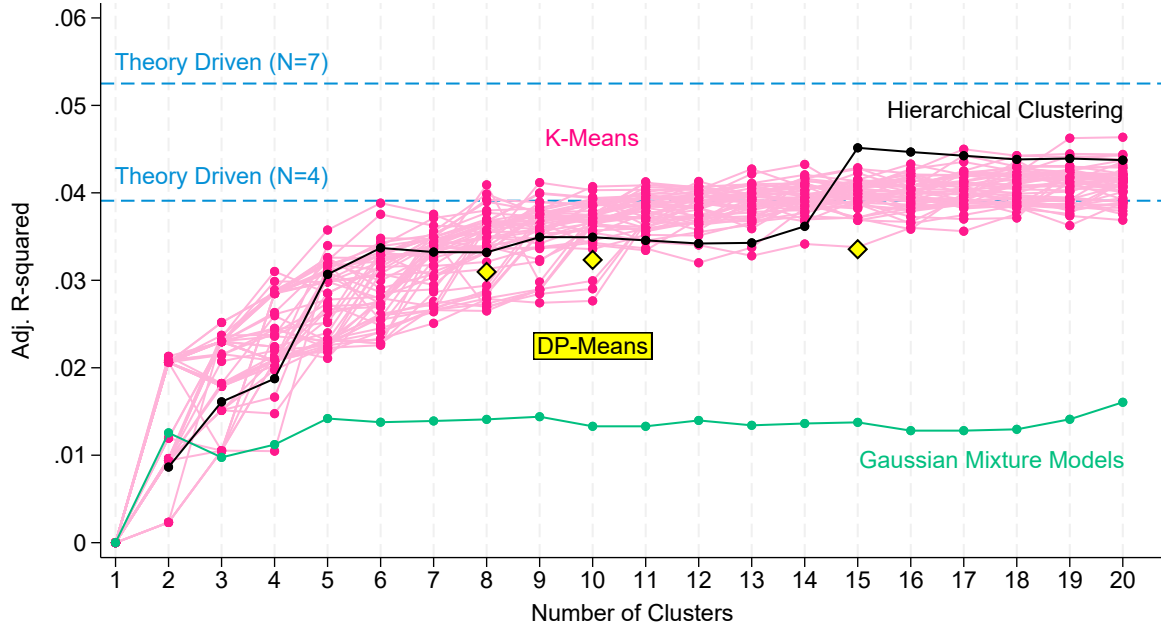
Taken together, this analysis suggests that there is relevant heterogeneity in fairness preferences among *Meritocrats* that has so far been overlooked in the literature. Thus, even if *Meritocrats* dominate in a given sample or choice context, there can still be relevant heterogeneity in fairness preferences that shapes inequality acceptance and support for redistribution.

What about Heterogeneity among *Others*? Among the *Others*, respondents do not cluster strongly around one point in Figure 1: the largest cluster is at (\$1,\$1) with around 3.2% of respondents in our sample. All of the other types discussed so far (including the meritocratic subtypes) had at least 5% or more of our respondents implementing the respective choices. Still, many of the choices among *Others* seem sensible such as (\$1,\$1), (\$1.5,\$1.5), or (\$1.5,\$1), and likely reflect respondents' genuine fairness views about a fair allocation in the spectator game. To systematically explore heterogeneity in fairness preferences among *Others* in a systematic way, we will use a data-driven approach described below.

Theory-driven vs. Data-driven Types So far, we have used a theory-driven approach to classify individuals based on the foundational work by Cappelen et al. (2007) and Almås et al. (2020). This approach assumes that only these four types exist. However, it is possible that this theory-driven approach ignores relevant heterogeneity in fairness preferences. An alternative would be a data-driven approach that determines types independent of theoretical considerations (Fehr and Charness 2023). We next examine whether data-driven type classifications improve the predictive power of fairness preference types for support for redistribution.

As one such data-driven approach, we use unsupervised machine learning methods in the form of clustering algorithms, as proposed in Fehr and Charness (2023). We investigate how well type classifications based on widely used clustering algorithms (k-means, hierarchical clustering, Gaussian mixture models (gmm), DP-means) predict support for redistribution relative to our theory-driven type classification. All clustering algorithms classify respondents based on their two transfer choices. For the k-means, hierarchical, and gmm algorithm, we classify observations into a pre-specified number of types (ranging from 2 to 20). For the k-means algorithms, we show data for 50 random seeds as

Figure 4: Theory- vs. Data-Driven Type Classifications



Notes: The figure shows the adjusted R^2 values of OLS regressions explaining support for redistribution using theory- and data-driven type classifications of fairness preference types. Regressions include one dummy for each type. The clustering algorithms classify observations into 1 to 20 types based on the two transfer choices in the spectator game. The pink points refer to 1000 type classifications from k-means clustering algorithms, each pink line connects points for one of 50 random seeds determining starting positions. The DP-Means classifications (yellow diamonds) are based on three penalty parameters: $\lambda \in 1, 1.5, 2$ (chosen around the median pairwise squared Euclidean distance between observations). The Gaussian Mixture Model classifications (green points) are based on the highest posterior type probability for each observation. As benchmarks, the blue lines indicate the adj. R^2 of OLS regressions including dummies for our standard theory-driven type classification with 4 types (Egalitarians, Meritocrats, Libertarians, Others, adj. $R^2 = 0.039$) and the extended type classification with 7 types (Egalitarians, Libertarians, Others, and the four meritocratic preferences subtypes, adj. $R^2 = 0.053$).

the algorithm is sensitive to initial cluster assignment. The DP-means algorithm used in Fehr et al. (2024) determines the number of clusters endogenously (based on a penalty parameter λ). We present three DP-means classifications for $\lambda \in 1, 1.5, 2$. Appendix C.4 provides examples of type classifications for the different clustering algorithms. To evaluate classifications, we use the adjusted R^2 from an OLS regression predicting support for redistribution with type dummies. Figure 4 presents the regression results. The number of types are indicated on the x-axis and the adjusted R^2 on the y-axis.

Figure 4 shows that our theory-driven type classifications outperform most of the data-driven type classifications as they predict a larger share of the variance with fewer types. Even the data-driven classifications that allow for 20 types do not improve much upon the predictive power of the standard theory-driven classification (adj. $R^2 = 3.9\%$), and still perform worse than the theory-driven type classification with meritocratic preference

subtypes (adj. $R^2 = 5.3\%$). This holds true for all of the displayed clustering algorithms. The DP-means algorithm used in Fehr et al. (2024) classifies 8 to 15 types (illustrated in Figure 4 with yellow diamonds), with an adj. R^2 of 3.1-3.4%. These results are also evident when reproducing Figure 4 using the unadjusted R^2 (see Appendix Figure C4).

As another data-driven approach, we use a supervised machine learning method that identifies the optimal cluster assignment of observations based on the two transfer choices and their level of support for redistribution. In Appendix C.5, we show a classification determined by predictive regression trees that iteratively split the two-dimensional space of merit-luck transfer choices into partitions that maximize the difference in support for redistribution between partitions. Reassuringly, the type classification that minimizes the out-of-sample prediction error (determined using 10-fold cross-validation) identifies *Egalitarians*, *Libertarians*, and *Meritocrats* as distinct types, confirming the validity of our theory-driven classifications. Moreover, the predictive power of the classification based on predictive trees is not much higher than our theory-driven type classifications (adj. $R^2 = 5.5\%$).

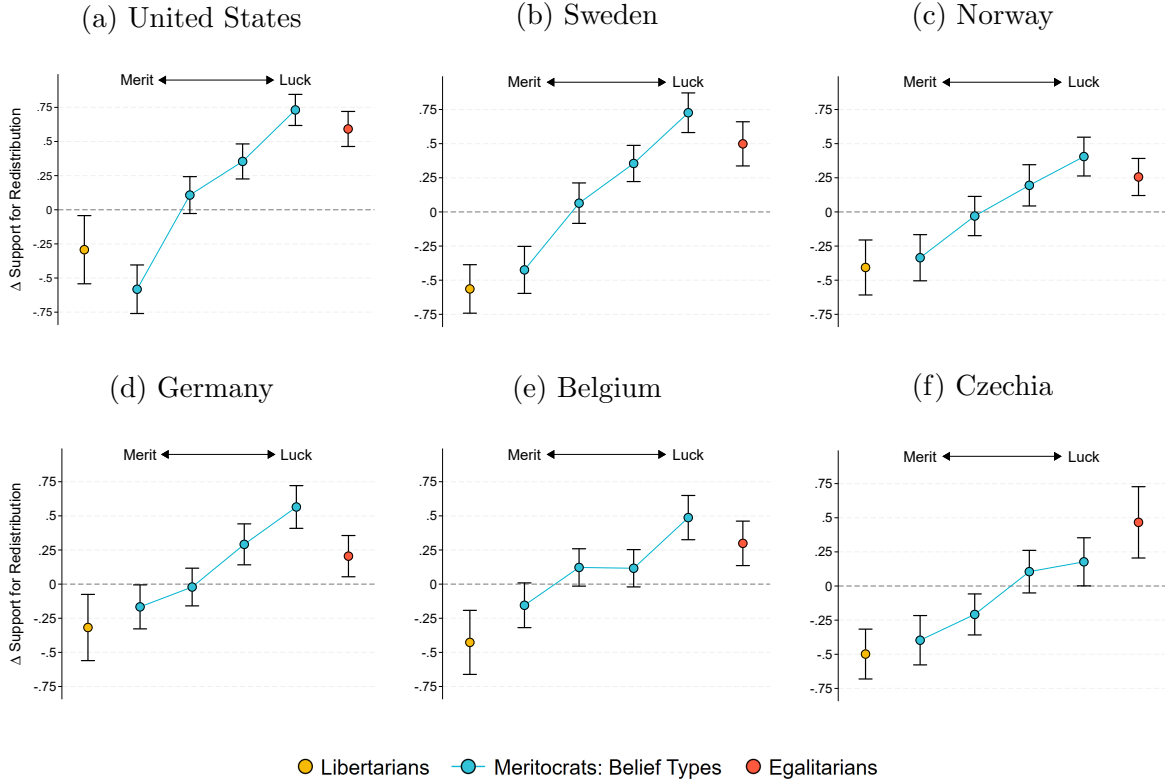
These comparisons show that the theory-driven type classification into *Egalitarians*, *Libertarians*, *Meritocrats*, and *Others* captures most of the heterogeneity in fairness preferences in our spectator game - at least most of the heterogeneity that is relevant for explaining differences in support for redistributive policies. This also indicates that any remaining unobserved heterogeneity among *Others* is either small or just not relevant for explaining support for redistributive policies outside the experimental game.

5.3 European Data: Do Our Findings Generalize?

An important question is whether our findings are specific to the U.S. context or generalize to other countries, measurement approaches, and time periods. To answer this question, we test whether our results replicate in representative samples from five European countries (Sweden, Norway, Germany, Czechia, and Belgium (Flanders only)). The data was collected via Dynata as part of the “POLEVPOP” project between February and March 2022 (for details see Appendix D.1). The final dataset contains 10,366 independent observations, with about 2,000 observations per country.

The European dataset comprises transfer choices in a spectator game, beliefs about the causes of inequality, and support for redistributive policies. At the same time, there are several differences between the European and U.S. data. Spectators make two transfer choices (luck and merit), in random order, which allows us to classify individuals into *fairness preference types*. However, in the European data, the spectator game is hypothetical and the choices made are hence not consequential. The level of inequality between the two workers is 100 Euro, and spectators can choose a transfer in steps of 5 Euro. Beliefs about the causes of inequality are measured through four questions on

Figure 5: Replication in Five European Countries (N=10,366)



Notes: The figure shows estimated coefficients and 95% confidence intervals from OLS regressions explaining support for redistribution (standardized first principal component of all policy preferences) with dummies for Egalitarians, Libertarians, and four subtypes of Meritocrats (“Others” serve as the reference category). Within each country, Meritocrats are classified into four subtypes based on quartiles of the belief distribution: from high belief in merit (left coefficient) to high belief in luck (right coefficient). Regressions in the European data control for socio-demographics (age, gender, education) and economic background characteristics (income). Regression in the U.S. controls for socio-demographics (age, gender, race/ethnicity, education), economic background characteristics (income bracket and employment status) and sample fixed effects.

the reasons why the rich are richer than the poor. *Belief in Merit* corresponds to the first principal component of all four belief items. Support for redistributive policies was measured via two questions on support for wealth and inheritance taxation, and two questions on support for a general effort by the government to reduce income and wealth inequality. *Support for Redistribution* is the first principal component of all four policy preferences. For details on the measurements, see Section D.1.2. To assess the generalizability of our main results, we replicate the empirical analysis from Tables 1 to 3 in our European data. Results are presented in Appendix D.2 to D.4.

All three main results replicate both qualitatively and quantitatively in the pooled European dataset. Replicating Result 1, *Egalitarians* have the highest support for redistribution, while *Libertarians* have the strongest opposition, and the policy support of *Meritocrats* lies between. The estimated difference between *Egalitarians* and *Liber-*

arians is as large as in the U.S. (0.55 to 0.74 SD), statistically significant ($p < 0.001$), and robust across different model specifications (see Appendix D.2). One noteworthy difference between the U.S. and the European data is that *Meritocrats* in the U.S. are on average in the middle between *Egalitarians* and *Libertarians* in terms of their support for redistribution (see Table 1), while *Meritocrats* in the European data are on average much closer to *Egalitarians* than to *Libertarians* (see Table D1). This pattern would be consistent with the idea that *Meritocrats* in the United States on average believe more strongly in merit than *Meritocrats* in Europe.

Replicating Result 2, the policy preferences of *Meritocrats* strongly depend on their beliefs about the causes of inequality ($p < 0.001$). Again, we find an interaction effect: the estimated association between beliefs and policy support is about 50 to 57% weaker for *Non-Meritocrats* than for *Meritocrats* ($p < 0.001$). Also mirroring the U.S. patterns, the interaction effect is statistically significant for *Egalitarians* (44 to 54% weaker, $p < 0.001$) and *Others* (59 to 65% weaker, $p < 0.001$), but not for *Libertarians* ($p = 0.657$). These interaction effects are again robust to different model specifications (see Appendix D.3).

Taken together, our U.S. and European data leave some open questions about the *Libertarian* type. Consistent with our prediction, *Libertarians* on average support less redistribution than the other types. However, while the experimental variation of the causes of inequality in the spectator game does not affect their transfer choices, their beliefs about the causes of inequality *in society* strongly predict their support for redistributive policies. Although speculative, one plausible explanation for this pattern is that *Libertarians* are similar to *Meritocrats* in what they view as unfair inequality in society, but prefer lower levels of governmental intervention in the free market. In the game, they might not view the stakes as high enough to justify a third-party’s intervention. An alternative explanation for the influence of beliefs on policy support is that *Libertarians* find inequality due to luck unfair when luck is systematic – such as stemming from gender or family background – but not when it is the result of a one-shot, random event as in our game. These differences could explain why inequality acceptance in the spectator game and inequality acceptance in society may sometimes diverge.

Turning to the role of fairness views across income and ideological groups, the estimated differences between *Egalitarians* and *Libertarians* are significant and comparable in size among high and low-income voters and among politically left and right-leaning voters ($p < 0.001$). The same is true for the differences between *Meritocrats* with opposing beliefs about the causes of inequality ($p < 0.001$). The differences in these differences are not significant for any of the comparisons (see Appendix D.4). This replicates Result 3.

When testing our three predictions separately within each of the five European countries, we find that Result 1 and Result 3 hold consistently (except for one coefficient, see Appendix D.2 and D.4). The differences in policy support among *Meritocrats* with opposing beliefs about the causes of inequality is large and significant in all countries (Part

1 of Result 2). For the interaction effect in Result 2, the coefficients in all countries are directionally consistent, though not always statistically significant (see Appendix D.3).

To compare results, Figure 5 reproduces Figure 3 for the United States and the five European countries. It shows that in all countries the estimates reveal the same pattern: *Meritocrats* who believe that inequalities are mainly caused by luck are similar in their support for redistribution to *Egalitarians*. *Meritocrats* who believe that inequalities are mainly caused by merit, in contrast, are similar to *Libertarians*. Moreover, the sizes of the estimated differences between types are remarkably stable across countries.

Overall, the main results established in the U.S. data replicate consistently in the five European countries. These findings underscore the generalizability of our results across six democracies. Thus, fairness views seem to shape political cleavages about redistributive policies similarly across industrialized market economies with diverse cultural and institutional contexts.

5.4 Implications: How Do Our Findings Matter?

Our findings have at least three types of implications: (1) for empirical and theoretical research on redistributive politics, (2) for our general understanding of inequality acceptance in economics, and (3) for policymakers.

First of all, our findings challenge the assumption of homogeneous meritocratic fairness preferences in prominent theoretical and empirical research on redistributive politics (Alesina and Angeletos 2005; Bénabou and Tirole 2006; Alesina et al. 2012). Our data show that people with heterogeneous fairness preferences differ in their support for redistributive policies across countries, income groups, and ideological camps. Fairness preference types also differ in how much beliefs about the causes of inequality influence their policy preferences. This enhances our understanding of why individuals, political parties, and countries differ in their support for redistributive policies. For example, it has implications for understanding the evolution of redistributive institutions over time: shifts in public support for redistribution may either be caused by changes in beliefs about the causes of inequality or by changes in underlying fairness preferences. Future theoretical and empirical research on redistributive politics should take both heterogeneous fairness preferences and heterogeneous beliefs about the causes of inequality into account.

Second, our findings have implications for our general understanding of inequality acceptance. Therefore, they can provide insights about economic decision-making in a variety of domains: whether workers accept pay inequality within firms, whether the public accepts gender inequalities in the labor market, or whether students accept affirmative action policies in college admissions. Across domains, simply measuring views about whether inequalities are perceived as fair or unfair - or whether inequalities should

be accepted or not - is not sufficient to understand the moral basis of these positions. Instead, researchers and practitioners have to differentiate between competing explanations for the same position: if an inequality is seen as unfair, does it reflect an egalitarian preference that rejects inequality per se, or does it stem from the belief that the inequality is unmerited (in combination with meritocratic preferences)? Conversely, if an inequality is seen as fair, does it reflect a libertarian preference that accepts inequality per se, or does it stem from the belief that the inequality is rooted in merit (in combination with meritocratic preferences)? Ignoring the fundamental conceptual difference between fairness preferences and beliefs about the causes of inequality could otherwise lead to wrong conclusions about the underlying reasons why people differ in their acceptance of economic inequality.

Third, our findings suggest that politicians on the left and the right could appeal to fairness considerations to persuade and mobilize voters. The universal relevance of fairness – across income groups and ideological lines – suggests that fairness-based messaging can resonate with a broad electorate in today’s democracies. However, the effectiveness of a specific persuasive message could depend on a voter’s fairness preference type. *Meritocrats* seem to represent “swing supporters” who may be persuaded by providing information about the causes of inequality in a policy domain. Instead, even objective and verifiable information about the causes of inequality in a policy domain may not change an *Egalitarian’s* support for a policy, who may rather respond to information about how effectively a policy reduces inequality in economic outcomes. Understanding the extent to which voters can be persuaded or mobilized by politicians through appeals to fairness concerns seems to be an interesting avenue for future research.

Beyond communication strategies, fairness considerations also have implications for policy design. By understanding the fairness views of citizens, policymakers can better anticipate which policy proposals are politically feasible and which are likely to encounter strong public resistance. If governments try to implement cuts to transfer policies or introduce taxes that are viewed as unfair by a majority of citizens, they may lose the next election or face political unrest through protests (see e.g. Passarelli and Tabellini 2017). Policy design that accounts for the fairness views of voters requires an understanding of how to conceptualize and measure fairness views, and which groups of voters are motivated by fairness views - key dimensions in which our study advances the existing literature.

6 Conclusion

A large literature in political economy has studied how fairness views shape support for redistribution, but two fundamental debates have so far been unresolved. The first debate is how to conceptualize fairness views: can researchers and policymakers assume that all voters share a meritocratic fairness preference, or does a pluralism of fairness preference types shape people’s support for redistributive policies? The second debate is who cares about fairness: do only limited groups of voters care about fairness, or is the importance of fairness largely universal?

In this paper, we address these two debates by combining theory-driven experimental games and large-scale surveys in the United States ($N=1,975$) and in five European countries ($N=10,366$). Our data reject the assumption of homogeneous fairness preferences in Alesina and Angeletos (2005). Instead, they show that fairness views can be conceptualized as a set of underlying fairness preference types that interact with beliefs about the causes of inequality. Individuals who reveal egalitarian, libertarian, and meritocratic fairness preferences in an abstract spectator game differ in their level of support for real-world redistributive policies and in the weight they attach to beliefs about the causes of inequality in society. Moreover, our data reject the hypotheses that fairness views do not matter for the poor because morals are a luxury good, or for right voters because they rely on different moral foundations. Instead, we find that fairness views matter universally – across income levels, political camps, tax and transfer policies, and six industrialized market economies.

Based on our findings, we would expect that fairness preference types and beliefs play a similar role in shaping inequality acceptance in many economic choice contexts. Studying support for taxes and transfer policies seems to be of first-order importance, but other relevant applications abound. These applications include, for example, understanding the acceptance of wage inequalities in firms, gender inequalities in the labor market, and racial inequalities in college admissions. Therefore, we hope that our paper will provide insights for future research on people’s demand for fair institutions and fair policies in a wide range of applied settings.

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A Descriptives

A.1 Sample Characteristics

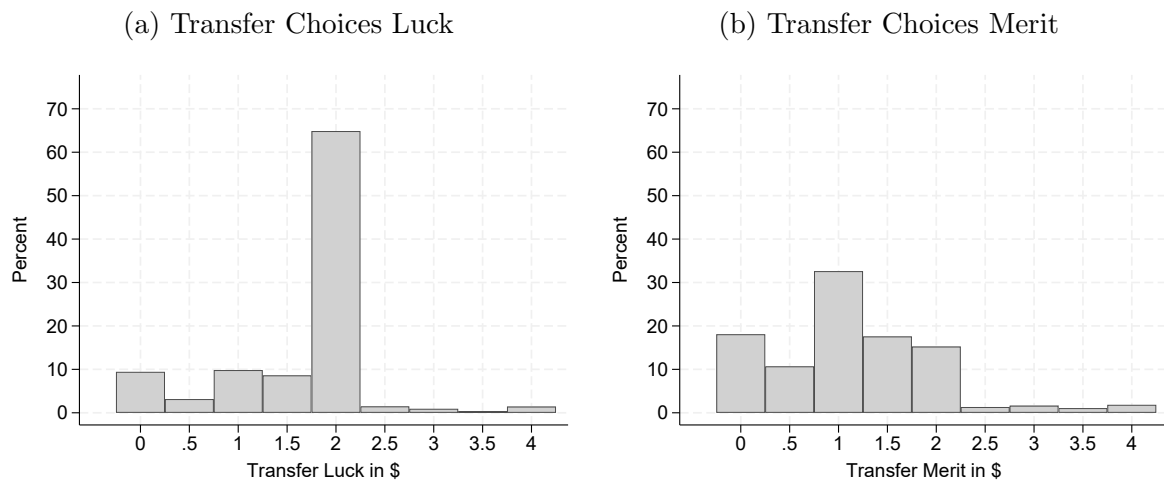
Table A1: US Sample Characteristics

	Wave 1 (1)	Wave 2 (2)	Full Sample (4)	US Population (5)
Socio-demographics				
Female	0.52	0.53	0.52	0.52
Median Age	40	45	43	38
<i>Race</i>				
White	0.75	0.75	0.75	0.75
Black	0.13	0.13	0.13	0.14
Asian	0.07	0.06	0.06	0.07
Race Other	0.05	0.06	0.05	0.04
<i>Ethnicity</i>				
Hispanic	0.07	0.08	0.08	0.18
<i>Education</i>				
High School/GED or lower	0.34	0.29	0.31	0.58
College Degree	0.47	0.45	0.46	0.29
Graduate Degree	0.19	0.25	0.23	0.12
Economic Background				
<i>Income</i>				
Less than \$49,999	0.42	0.37	0.38	0.39
\$50,000 to \$74,999	0.20	0.21	0.21	0.17
\$75,000 to \$99,999	0.14	0.15	0.15	0.13
\$100,000 to \$150,000	0.14	0.17	0.16	0.16
\$150,000 or more	0.09	0.10	0.10	0.15
<i>Employment Status</i>				
Employed	0.66	0.68	0.67	0.73
Unemployed	0.12	0.09	0.11	0.05
Not in Labor Force	0.21	0.23	0.22	0.22
Census Regions				
Northeast	0.21	0.20	0.21	0.17
Midwest	0.18	0.19	0.19	0.21
South	0.45	0.43	0.44	0.38
West	0.15	0.17	0.17	0.24
Political Ideology				
Liberals	-	0.51	-	0.30
Moderates	-	0.24	-	0.22
Conservatives	-	0.24	-	0.33
Observations	N=745	N=1230	N=1975	-

Notes: US population estimates are provided by the US Census Bureau (<https://data.census.gov/>) and are based on the 2020 US Census and the American Community Survey. US population estimates for education are based on the highest level of educational attainment of the population 25 years and over; the share of people not in the labor force is based on the population 20 years to 64 years. Income brackets in our sample were combined to match the US Census data. Political ideology is based on a self-classification of one's ideology on economic policy issues on a 5-point Likert scale (Very Liberal / Liberal / Moderate / Conservative / Very Conservative). As a comparison we use a question from the American National Election Survey 2020 (V201200) which is measured on a 7-point Likert scale (Extremely Liberal/ Liberal/ Rather Liberal/ Moderate/ Rather Conservatives/ Conservative/ Extremely Conservatives) with an additional response category "haven't thought much about this" chosen by the remaining 14.1% of participants.

A.2 Histograms of Transfer Choices in Spectator Game

Figure A1: Histograms of Transfer Choices



Notes: The figure shows histograms of transfer choices in the spectator game on inequalities due to luck (a) and inequalities due to merit (b).

A.3 Robustness of Type Classification

A.3.1 Between Approach: Estimation of Type Shares

The between-subjects approach by Almås et al. (2020) allows to estimate the shares of fairness preferences types in a sample after observing merit transfer choices in one treatment group and luck transfer choices in another treatment group (between-subjects). This estimation approach makes four assumptions about counterfactual choices across treatments, discussed in detail in the Online Appendix in Almås et al. (2020):

- **Assumption 1:** If a spectator divides equally in the Merit treatment, then the spectator would also have divided equally in the Luck treatment.
- **Assumption 2:** If a spectator allocates a greater share to the more productive worker in the Merit treatment, then the spectator would not have allocated a smaller share to the lucky worker in the Luck treatment.
- **Assumption 3:** If a spectator allocates everything to the lucky worker in the Luck treatment, then the spectator would also have allocated everything to the more productive worker in the Merit treatment.
- **Assumption 4:** The fairness view of a spectator is independent of treatment.

Under these four assumptions, the shares of the fairness preference types can be estimated as follows:

- **Egalitarians:** The share of egalitarians is given by the share of participants dividing equally in the Merit treatment.
- **Meritocrats:** The share of meritocrats is given by the difference between the share of participants allocating more to the more productive worker in the Merit treatment and the share of participants allocating more to the lucky worker in the Luck treatment.
- **Libertarians:** The share of libertarians is given by the share of participants allocating everything to the lucky worker in the Luck treatment.
- **Others:** The share of others is given by 1 minus the shares of egalitarians, libertarians, and meritocrats.

Table A2: Robustness of Type Classification: Within vs. Between, Implementation Errors, Order Effects

Types	Between Estimation				Within Classification			
	All Obs.	Impl. Errors	1st Choice	2nd Choice	All Obs.	Impl. Errors	1st Merit	1st Luck
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Egalitarians	14.1%	15.2%	15.7%	12.6%	11.9%	12.7%	11.4%	12.4%
Meritocrats	48.0%	48.0%	46.7%	49.3%	49.7%	49.5%	50.6%	48.8%
Libertarians	9.2%	9.4%	8.4%	9.9%	5.3%	5.3%	6.3%	4.3%
Other	28.7%	27.4%	29.1%	28.2%	33.1%	32.5%	31.7%	34.5%
N	3950	3950	1975	1975	1975	1975	989	986

Notes: The table compares the distribution of fairness preference types under different classification approaches. Columns (1)–(2) show the between-subject classifications using the standard classification and a classification that is robust to small implementation errors ($< \$0.25$) using all 3950 choices, respectively. Columns (3)–(4) show between-subject classifications based on the first and second choices only. Columns (5)–(6) show within-subject classifications using our standard classification and an error-robust classification. For the error-robust classifications (Columns 2 and 6), participants are classified as Egalitarians and Libertarians when their choices deviate by less than \$0.25 from (\$0) and (\$2). Columns (7)–(8) split the within-subjects classifications by the choice (merit or luck) that was randomly presented first.

A.3.2 Comparison: Between Estimation versus Within Classification

In Table A2, we provide a detailed comparison of the type shares using the “between estimation” approach by Almås et al. (2020) and our “within classification” approach. Differences in type shares should be expected if some subjects implement choice combinations that are inconsistent with the assumptions in the between estimation approach.

- **Egalitarians** In our data, $N=44$ subjects choose a transfer size of \$2 in the merit condition but do not choose a transfer of \$2 in the luck condition, inconsistent with Assumption 1 (see red crosses in Figure A2 (a)). This leads to a lower share of egalitarians using the within approach compared to the between approach (from 14.1% to 11.9%).
- **Meritocrats** Further, $N=26$ subjects allocate a greater share to the more productive worker in the Merit treatment, but less to the lucky worker in the luck treatment, inconsistent with Assumption 2 (see pink crosses in Figure A2 (c)). (The difference in the shares of meritocrats when using the between approach is equal to the difference in the number of subjects with black crosses ($N=60$) and pink crosses ($N=26$) in Figure A2 (c), so $N=34$ in our data set).
- **Libertarians** Finally, $N=77$ individuals choose a transfer of \$0 in the luck condition but choose a transfer $> \$0$ in the merit condition, inconsistent with Assumption 3 (see yellow crosses in Figure A2 (b)). This leads to a lower share of libertarians in the within compared to the between approach (a reduction from 9.2% to 5.3%).

A.3.3 Implementation Errors

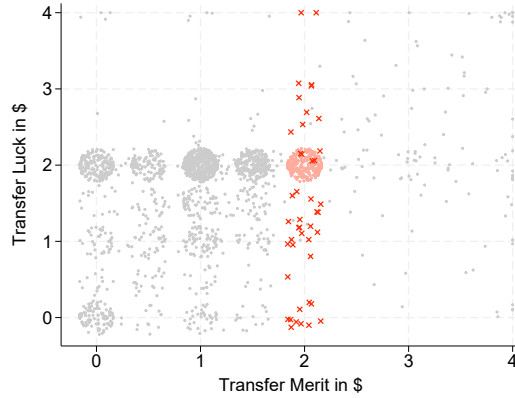
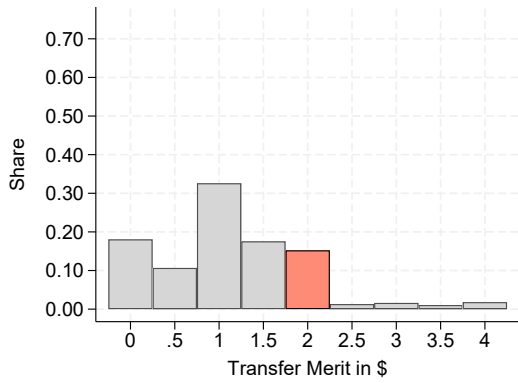
In columns (2) and (6), we show accounting for small implementation errors for the egalitarian and libertarian type does not change the type shares much. Participants are classified as libertarians and egalitarians when their choices deviate by less than \$0.25 from (\$0) and (\$2), respectively.

A.3.4 Order Effects

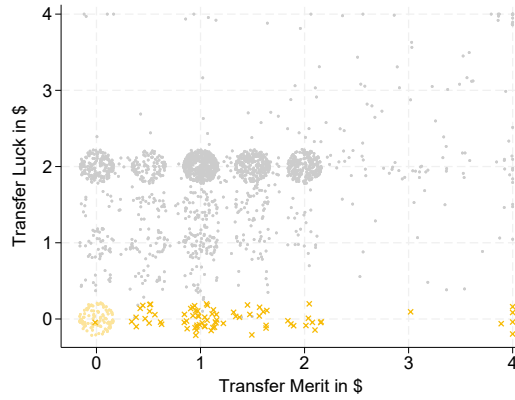
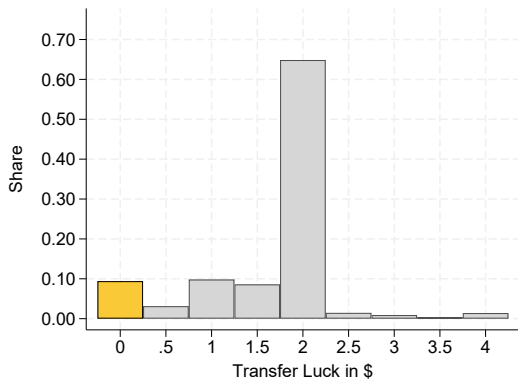
When comparing columns (3) — (4) and (7) — (8) in Table A2, we see that there are no strong order effects in the shares of fairness preference types, neither in the between estimation approach nor in the within classification approach.

Figure A2: Between Estimation vs. Within Classification

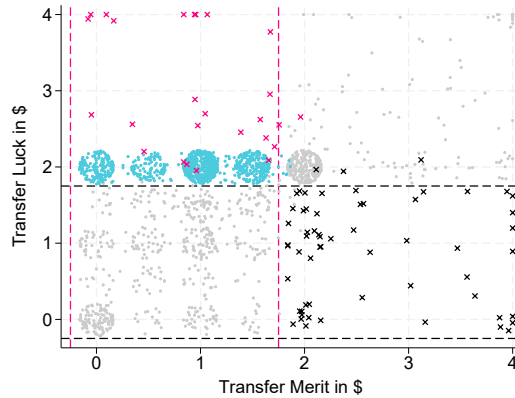
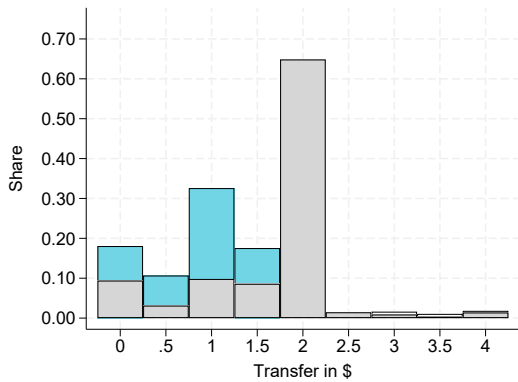
(a) Egalitarians



(b) Libertarians



(c) Meritocrats



Notes: Figures show histograms and scatter plots of merit and luck transfer choices illustrating differences between a between type estimation (left side) and our within type classification (right side). In Figure (a) we illustrate respondents who make choices inconsistent with Assumption 1 with a red cross ($N=44$). These respondents would cause a higher share of Egalitarians in the between approach. In Figure (b) we illustrate respondents who make choices inconsistent with Assumption 3 with a yellow cross ($N=77$). These respondents would cause a higher share of Libertarians in the between approach. In Figure (c) we illustrate respondents who make choices inconsistent with Assumption 2 with a pink cross ($N=26$). The difference between the shares of Meritocrats in the between approach and the within approach is given by the difference between the number of black crosses ($N=60$) and the number of pink crosses ($N=26$), which is equal to $N=34$ in our sample. Dots and crosses are jittered so that clusters are visible.

A.4 Type Classifications: Comparison to the Literature

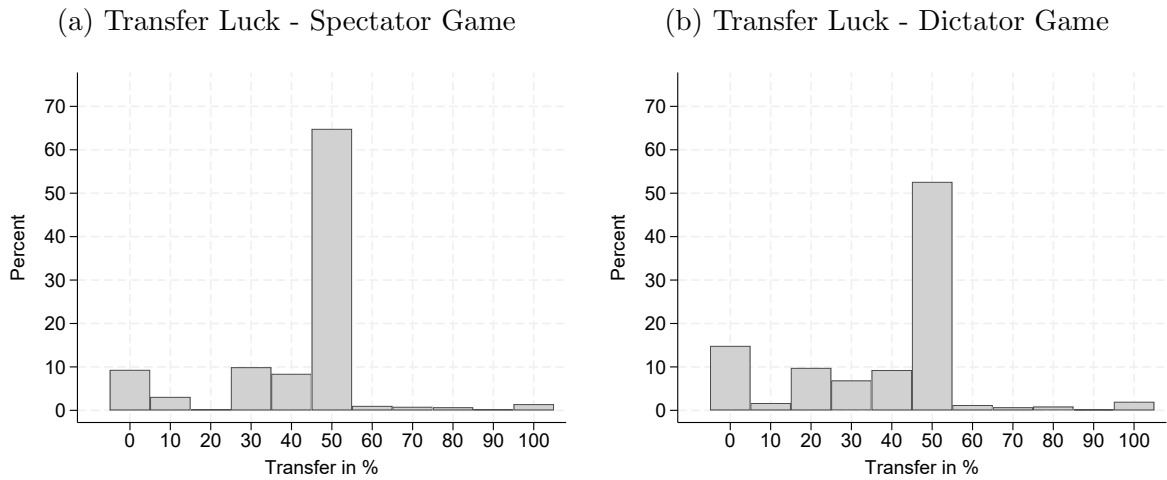
Table A3: Fairness Preference Types in the US: Comparison to the Literature

	Almås et al. (2020)	Cohn et al. (2023)	Our study	Our study
Approach:	Between Estimation	Between Estimation	Between Estimation (1st Choice)	Within Classification
Types				
Egalitarians	15.3%	17.8%	15.7%	11.9%
Meritocrats	37.5%	60.5%	46.7%	49.7%
Libertarians	29.4%	12.1%	8.4%	5.3%
Other	17.8%	9.6%	29.1%	33.1%
N	1000	417	1975	1975
Size of Choice Set	7	7	40	40x40
Survey Company	Research Now	YouGov	Prolific	Prolific

Notes: The table compares distributions of fairness preference types in representative US samples. Note that Almås et al. (2020) and Cohn et al. (2023) offer a choice between seven allocations [(\$0,\$6), (\$1,\$5), (\$2,\$4), (\$3,\$3), (\$4,\$2), (\$5,\$1), (\$6,\$0)]. In our design, instead, spectators can decide to transfer between \$0 and \$4 in steps of 10 cents to the worker with \$0. The reason for this design choice is that we wanted to have the opportunity to potentially observe more granular heterogeneity in fairness preferences.

A.5 Dictator Game

Figure A3: Histograms of Transfer Choices: Spectator vs. Dictator Game



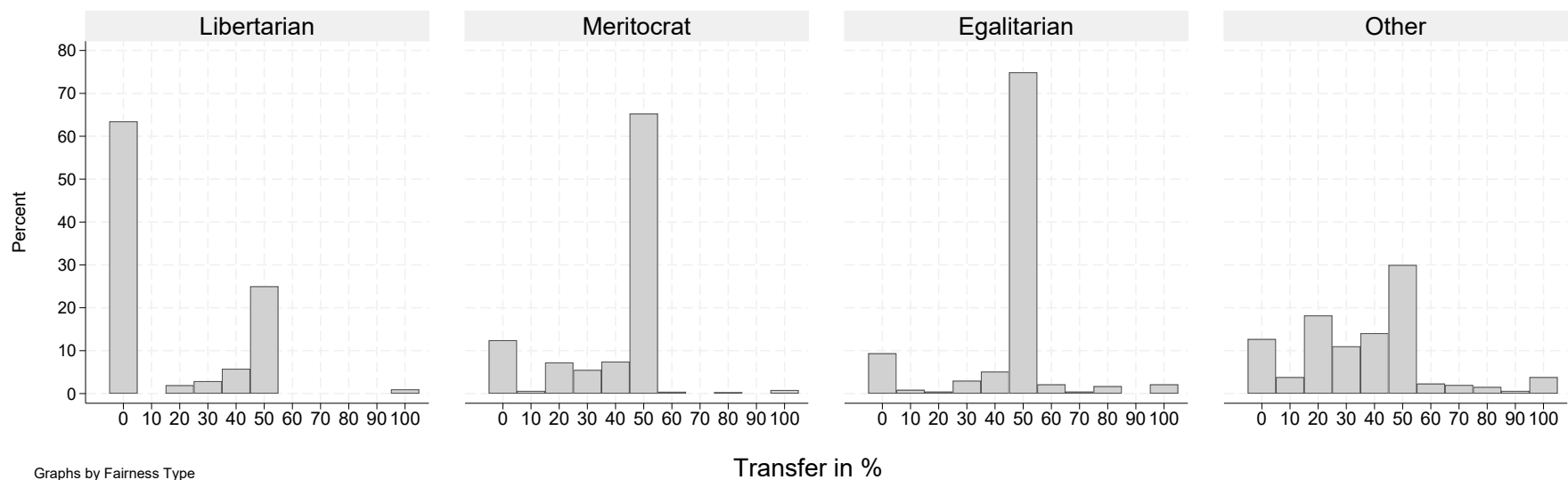
Notes: The figure shows histograms of transfer choices on inequalities due to luck in the spectator game (a) and on inequalities due to luck with self-interest in the dictator game (b).

On average, subjects redistribute just slightly less in the transfer choice on inequalities due to luck in the dictator game (38.1%) than in the transfer choice on inequalities due to luck in the spectator game (41.8%). Experimentally changing the cause of inequality in the spectator game from luck to merit thus has a much stronger effect on the size of the average transfer (minus 13.2 p.p.) than experimentally introducing self-interest (minus 3.7 p.p.).

When looking at the choices of the fairness preference types in the dictator game, we observe that 63.5% of *Libertarians* choose a transfer close to \$0 (5% or less of the endowment), in line with their fairness preference on inequalities due to luck. In comparison, only 12.4% of *Meritocrats*, 9.4% of *Egalitarians*, and 13.0% of *Others* choose a transfer close to \$0 (see Figure A4).

Instead, 65.3% of *Meritocrats* and 74.9% of *Egalitarians* choose to transfer around half of the endowment (45% to 55%), in line with their fairness preference on inequalities due to luck. Hence, the majority of subjects in each fairness type implement their fairness preference on inequalities due to luck in the dictator game. This shows that fairness preference types make different transfer choices even if transfer choices are personally costly. This finding is reassuring because it could be seen as a pre-requisite for fairness preference types to influence preferences over taxes and transfers in society, which have potentially much larger economic consequences for subjects' incomes than choices in a small-stakes dictator game.

Figure A4: Fairness Preference Types Make Different Transfer Choices in Dictator Game



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Graphs by Fairness Type

Notes: The figure shows histograms of transfer choices on inequalities due to luck with self-interest in the dictator game by fairness preference type.

A.6 Spectator Game: Ambiguity Treatment

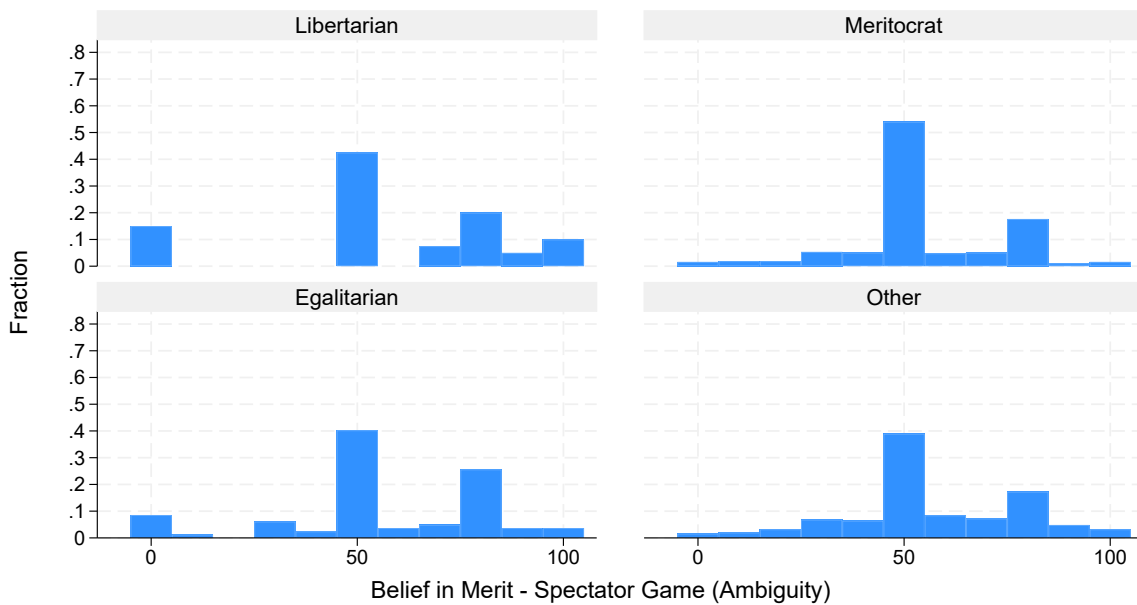
In the ambiguity treatment in Wave 1 (N=745), subjects are informed that with some fixed but unknown probability the luck treatment is implemented (a lottery) and otherwise the merit treatment is implemented (the more productive worker receives 4\$). After making their transfer choice, subjects are asked what they believe is the probability with which the lottery is implemented (0 to 100%). Belief in merit in the ambiguity treatment refers to 100 minus the elicited probability of the lottery.

A.6.1 Beliefs in Merit vs. Luck

Beliefs in merit in the ambiguity treatment, depicted in Figure A5, do not differ significantly between types in any pairwise comparison using MWU or t-tests (at the 10% level). The mean beliefs in merit are: Libertarians 55.8%, Meritocrats: 53.1%, Egalitarians: 54.7%, Others: 55.3%.

Figure A6 shows that the beliefs in merit in the ambiguity treatment are unrelated to beliefs in merit in US society, providing evidence that subjects do not “import” their societal beliefs into the spectator game.

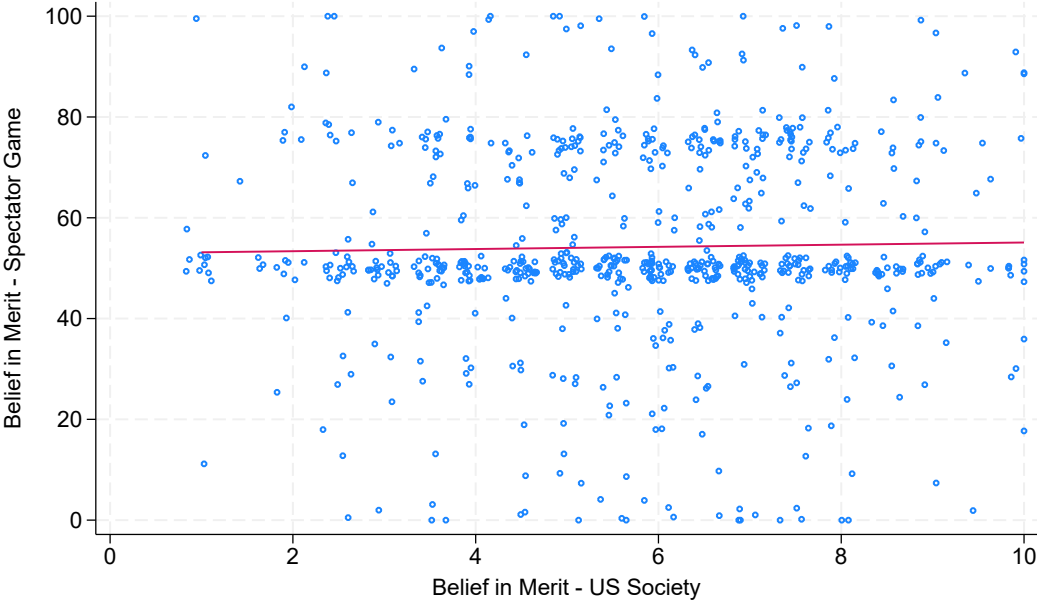
Figure A5: Ambiguity Treatment: Beliefs in Merit Do Not Differ By Type



Graphs by Fairness Type

Notes: The figure shows beliefs about the probability (0 to 100%) that the merit rule is implemented compared to the luck rule by fairness preference type. Analyses are based on Wave 1 data (N=745).

Figure A6: Beliefs in Spectator Game Are Uncorrelated With Beliefs about US Society



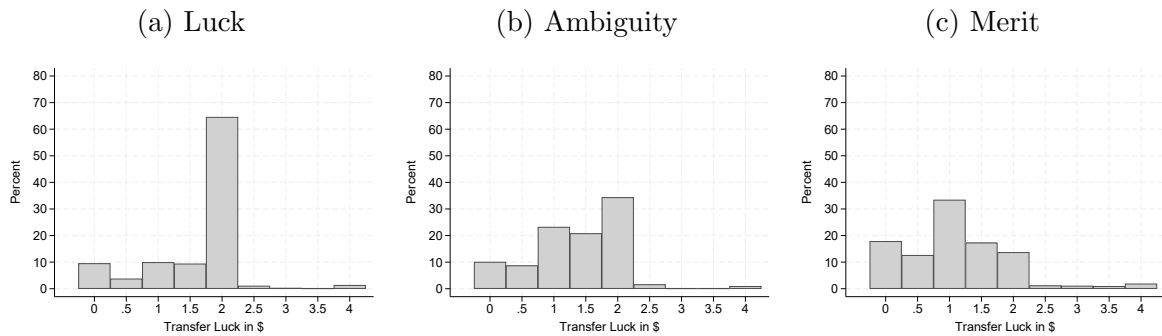
Notes: The figure shows a scatterplot of beliefs in merit in US society (x-axis) and beliefs in merit in the spectator game in the ambiguity treatment (y-axis). The belief in the spectator game indicates the belief about the probability with which the merit rule is implemented rather than the luck rule (0 to 100%). Analyses are based on Wave 1 data (N=745)

A.6.2 Transfer Choices

Transfer choices in the ambiguity treatment are on average in between transfer choices in the luck and merit treatment. Figure A5 compares the distributions of transfer choices in Wave 1 by treatment. The means of the share transferred in Wave 1 are: Luck 41.1%, Ambiguity 34.1%, Merit 27.6%. Transfers in the ambiguity treatment are 6.9 p.p. higher than in the merit treatment (t-test: $p < 0.001$) and 6.5 p.p. lower than in the luck treatment (t-test: $p < 0.001$). Hence, the average transfer choice under ambiguity is between the merit and luck treatment, consistent with the average belief of subjects that both treatments are implemented with roughly equal probability.

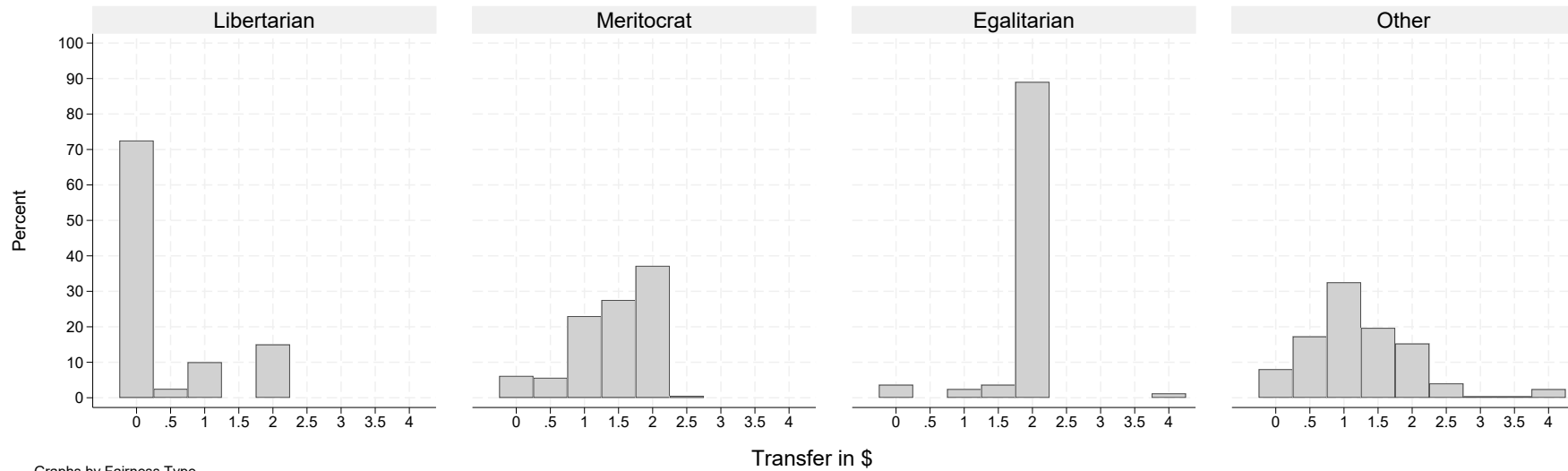
When analyzing the consistency of choices at the individual level, we observe that 92.9% of subjects among Egalitarians, Meritocrats, and Libertarians make a consistent choice, i.e. they choose a convex combination of their transfer choices in the merit and the luck treatment. Figure A8 shows histograms of transfer choices by type. 87.8% of Egalitarians choose a transfer of \$2, 72.5% of Libertarians choose a transfer of \$0, and 96.3% of Meritocrats choose a transfer that is a convex combination of their merit and luck transfer choices.

Figure A7: Transfer Choices: Ambiguity Compared to Luck and Merit



Notes: The figure shows histograms of transfer choices in the spectator game on inequalities due to luck (a), inequalities under ambiguity (b), and inequalities due to merit (c). Analyses are based on Wave 1 data (N=745).

Figure A8: Fairness Preference Types Make Different Transfer Choices in Ambiguity Treatment

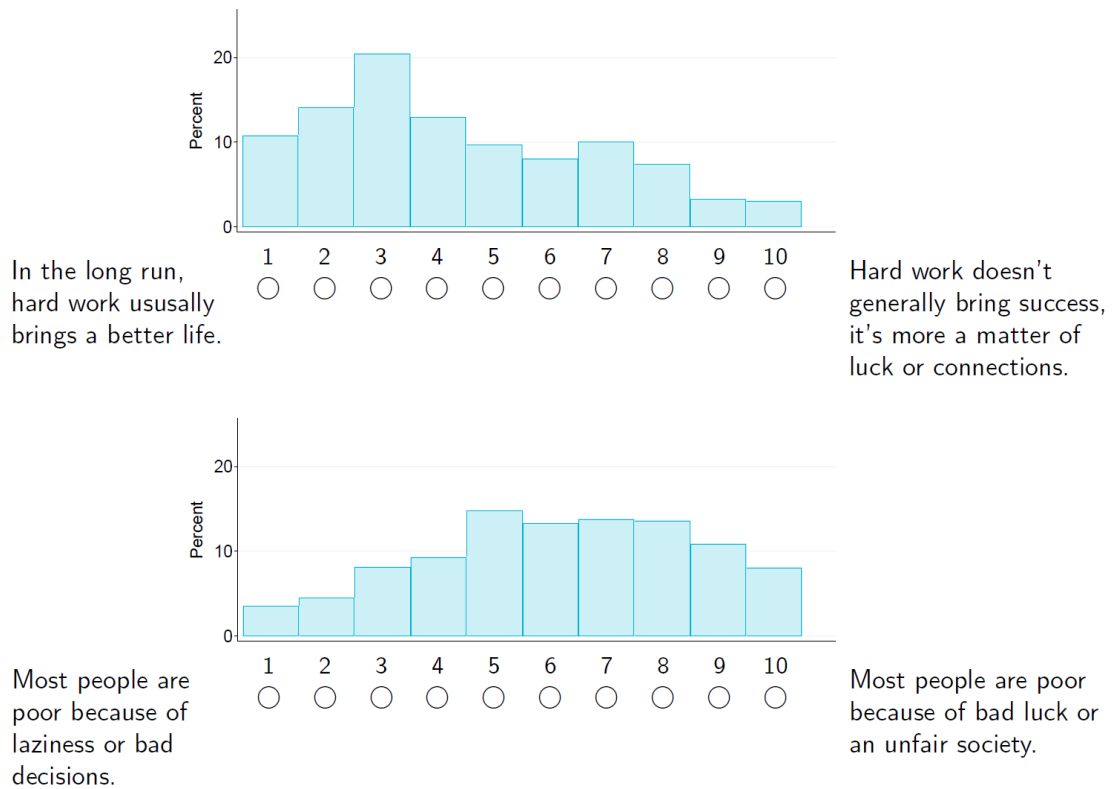


Graphs by Fairness Type

Notes: The figure shows histograms of transfer choices in the spectator game in the ambiguity treatment by fairness preference type. Analyses are based on Wave 1 data (N=745).

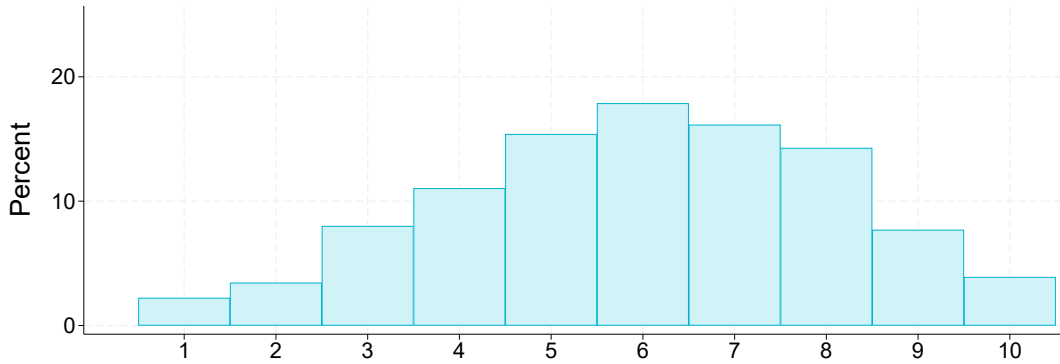
A.7 Histograms of Beliefs

Figure A9: Answers to Beliefs Questions



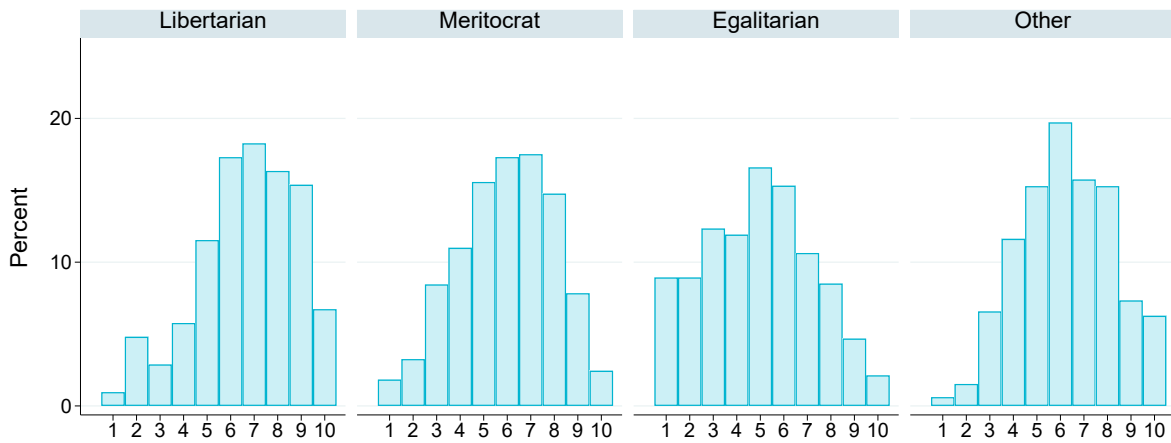
Notes: The figure shows the distributions of answers to our survey questions about the causes of inequality in US society. Respondents are asked whether they rather agree with the statement on the left or on the right and to place their views on the scale from 1 to 10 accordingly.

Figure A10: Histogram of Beliefs in Merit



Notes: The figure shows histograms of beliefs in merit. Beliefs in merit are a simple average of answers to our two survey items (reverse coded). A higher value corresponds to a higher belief in merit as the main cause of inequality in US society.

Figure A11: Histograms of Beliefs in Merit by Fairness Preference Type



Notes: The figure shows histograms of beliefs in merit by fairness preference type. Beliefs in merit are a simple average of answers to our two survey items (reverse coded). A higher value corresponds to a higher belief in merit as the main cause of inequality in US society.

A.8 Belief Types among Meritocrats

Figure A12: Classification of Belief Types among Meritocrats

Subtype	Classification	N	Share	Mean Belief
Luck	$1.0 \leq \text{Beliefs in Merit} < 4.5$	241	24.5%	2.98
Rather Luck	$4.5 \leq \text{Beliefs in Merit} < 6.0$	239	24.3%	5.05
Rather Merit	$5.5 \leq \text{Beliefs in Merit} < 7.5$	256	26.1%	6.50
Merit	$7.5 \leq \text{Beliefs in Merit} \leq 10$	246	25.1%	8.23
Total		982	100%	

Notes: The figure shows the classification of Meritocrats into four subtypes according to their beliefs about the causes of inequalities using quartiles (Q1 to Q4) of the distribution.

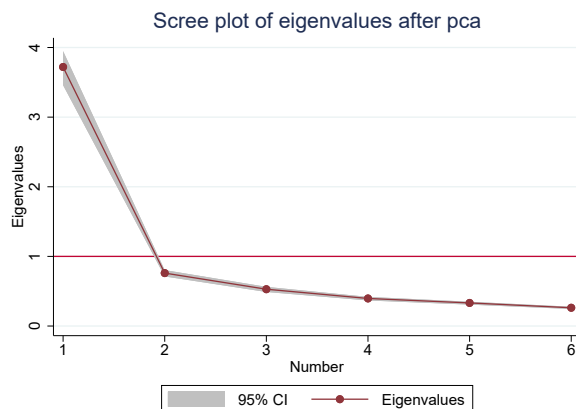
A.9 Support for Redistribution: Principal Components

Table A4 shows that the first principal component can explain 62% of the total variance in policy preferences. Moreover, the first principal component is the only component with an eigenvalue large than one, as shown in A13. Based on the standard criterion to only use components with eigenvalues larger than 1, subjects support for redistribution can thus be well described by the first principal component alone. Table A5 shows that the six policies are assigned almost equal weights to construct the first principal component.

Table A4: Eigenvalues of Components and Proportion of Variance Explained

	Eigenvalue	Proportion
1st Component	3.72	62.0
2nd Component	0.76	12.7
3rd Component	0.53	0.09
4th Component	0.40	0.07
5th Component	0.33	0.05
6th Component	0.26	0.04

Figure A13: Eigenvalues after Principal Component Analysis



Notes: The figure shows the eigenvalues of the first six principal components with 95% confidence intervals.

Table A5: Principal Components

	1st Comp	2nd Comp	3rd Comp	4th Comp	5th Comp	6th Comp
Redistribution	0.3912	0.5379	-0.2475	0.5209	-0.4132	-0.2332
Univ. Health Care	0.3839	0.6057	0.2914	-0.2571	0.4437	0.3712
E.I. Payments	0.4077	-0.3380	-0.5079	0.2857	0.6163	-0.0103
UE Benefits	0.4318	-0.2393	-0.3194	-0.3894	-0.4909	0.5115
Medicaid	0.4478	-0.1083	0.1502	-0.4904	-0.0166	-0.7242
Paid Sick Leave	0.3825	-0.4008	0.6865	0.4345	-0.1061	0.1472

B Main Results

B.1 Robustness: Result 1

Table B1: Robustness of Result 1: By Policy Domain

	Economic Redistribution		Pandemic Support Policies		Universal Health Care	
	(1)	(2)	(3)	(4)	(5)	(6)
Egalitarian	0.52*** (0.07)	0.31*** (0.07)	0.56*** (0.07)	0.35*** (0.07)	0.39*** (0.08)	0.21** (0.07)
Meritocrat	0.01 (0.05)	0.02 (0.04)	0.18*** (0.05)	0.14** (0.05)	0.08 (0.05)	0.07 (0.05)
Libertarian	-0.49*** (0.10)	-0.32*** (0.09)	-0.15 (0.10)	-0.07 (0.10)	-0.41*** (0.10)	-0.29** (0.10)
Belief in Merit		-0.19*** (0.01)		-0.16*** (0.01)		-0.17*** (0.01)
Income Bracket FE	No	Yes	No	Yes	No	Yes
Employment Status FE	No	Yes	No	Yes	No	Yes
Socio-Demographics	No	Yes	No	Yes	No	Yes
Sample FE	No	Yes	No	Yes	No	Yes
Diff (Egalitarian - Libertarian)	1.01	0.64	0.71	0.42	0.80	0.49
p	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Diff (Egalitarian - Meritocrat)	0.51	0.29	0.38	0.21	0.32	0.13
p	< 0.001	< 0.001	< 0.001	0.002	< 0.001	0.046
Diff (Meritocrat - Libertarian)	0.50	0.34	0.33	0.21	0.49	0.36
p	< 0.001	< 0.001	0.001	0.027	< 0.001	< 0.001
Observations	1975	1975	1975	1975	1975	1975
R^2	0.043	0.269	0.032	0.202	0.026	0.190

Notes: OLS estimates with robust standard errors clustered at the individual level in parentheses. Dependent variables: policy preferences as standardized z-scores. Reference category for fairness preference types: “Others”. Socio-Demographics include age, gender, race, ethnicity and education dummies.

*** p<0.001, ** p<0.01, * p<0.05

Table B2: Robustness of Result 1: Adding Wave 2 Controls

	Dep Var: Support for Redistribution							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Egalitarian	0.42*** (0.08)	0.49*** (0.08)	0.42*** (0.08)	0.41*** (0.08)	0.37*** (0.08)	0.42*** (0.08)	0.42*** (0.08)	0.45*** (0.08)
Meritocrat	0.12 (0.06)	0.20** (0.06)	0.14* (0.06)	0.12 (0.06)	0.10 (0.06)	0.13* (0.06)	0.13* (0.06)	0.18** (0.06)
Libertarian	-0.19 (0.14)	-0.10 (0.13)	-0.18 (0.14)	-0.06 (0.14)	-0.09 (0.14)	-0.19 (0.14)	-0.17 (0.14)	0.01 (0.13)
Belief in Merit	-0.21*** (0.01)	-0.21*** (0.01)	-0.21*** (0.01)	-0.21*** (0.01)	-0.20*** (0.01)	-0.20*** (0.01)	-0.21*** (0.01)	-0.20*** (0.01)
Potential Confounders								
Trust in Government		0.40*** (0.05)						0.39*** (0.05)
National Group Identity			0.06 (0.03)					-0.02 (0.03)
Selfish Type				-0.27** (0.09)				-0.04 (0.12)
Altruism					0.49*** (0.13)			0.34* (0.17)
Economic Impacts of Pandemic								
Lost Income						0.17* (0.07)		0.19** (0.07)
Lost Job						-0.12 (0.07)		-0.10 (0.07)
Received UE Benefits						0.14* (0.07)		0.14* (0.07)
Transfers Received (in thousand \$)						0.01 (0.01)		0.00 (0.01)
Health and Psychological Impacts								
Had COVID							-0.11 (0.06)	-0.09 (0.06)
Had Severe Case							-0.00 (0.07)	-0.01 (0.07)
Mood							-0.01 (0.03)	-0.03 (0.03)
Perceived Impact							0.11 (0.06)	0.05 (0.06)
Income Bracket FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Employment Status FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Socio-Demographics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sample FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Diff (Egal. - Libe.)	0.609	0.582	0.604	0.466	0.462	0.607	0.595	0.447
<i>p</i>	< 0.001	< 0.001	< 0.001	0.002	0.002	< 0.001	< 0.001	0.001
Diff (Egal. - Meri.)	0.298	0.291	0.281	0.290	0.273	0.288	0.297	0.275
<i>p</i>	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Diff (Meri. - Libe.)	0.311	0.291	0.323	0.176	0.188	0.319	0.298	0.172
<i>p</i>	0.020	0.017	0.014	0.202	0.167	0.016	0.026	0.172
Observations	1230	1230	1230	1230	1230	1230	1230	1230
<i>R</i> ²	0.269	0.318	0.272	0.276	0.278	0.277	0.273	0.333

Notes: OLS estimates with robust standard errors clustered at the individual level in parentheses. Dependent variable: support for redistribution (standardized first principal component of all policy preferences). Reference category for fairness preference types: "Others". Socio-Demographics include age, gender, race, ethnicity and education dummies. Selfish Type: subjects who transfer \$0 to the other participant in the dictator game. Altruism: share of the endowment transferred in the dictator game (0 to 1). Impacts are self-reported. Lost Income, Lost Job, and Received Unemployment Benefits are dummy variables. Transfers Received measures the total sum of governmental transfers received during the pandemic. Perceived Impact is a dummy indicating whether a participant thinks they were more strongly impacted by the pandemic than the average US American.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Table B3: Robustness of Result 1: By Measures of Political Ideology

	Dep Var: Support for Redistribution				
	(1)	(2)	(3)	(4)	(5)
Egalitarian	0.28*** (0.07)	0.31*** (0.07)	0.35*** (0.07)	0.29*** (0.07)	0.32*** (0.07)
Meritocrat	0.02 (0.06)	0.06 (0.06)	0.10 (0.05)	0.07 (0.05)	0.13* (0.05)
Libertarian	-0.15 (0.12)	-0.13 (0.12)	-0.10 (0.12)	-0.09 (0.12)	0.02 (0.11)
Belief in Merit	-0.12*** (0.01)	-0.11*** (0.01)	-0.12*** (0.01)	-0.09*** (0.01)	-0.10*** (0.01)
<i>Political Ideology: Left-Right</i>					
Political Ideology	-0.18*** (0.01)			0.01 (0.02)	-0.00 (0.02)
<i>Political Ideology: Economic Policy</i>					
Liberal		-0.30*** (0.06)		-0.32*** (0.06)	-0.29*** (0.06)
Moderate		-0.74*** (0.07)		-0.64*** (0.10)	-0.57*** (0.10)
Conservative		-1.29*** (0.09)		-0.85*** (0.15)	-0.81*** (0.15)
Very Conservative		-1.87*** (0.16)		-1.35*** (0.22)	-1.33*** (0.21)
<i>Voting Behavior in 2016 and 2020</i>					
No Vote/Other			-0.39*** (0.07)	-0.29*** (0.07)	-0.23** (0.07)
Voted Trump 2020			-1.13*** (0.10)	-0.84*** (0.11)	-0.72*** (0.10)
No Vote/Other			-0.07 (0.06)	0.04 (0.06)	0.05 (0.06)
Voted Trump 2016			-0.27** (0.09)	-0.09 (0.09)	-0.09 (0.09)
<i>Potential Confounders</i>					
Trust in Government					0.18*** (0.04)
National Group Identity					0.07* (0.03)
Selfish Type					0.00 (0.10)
Altruism					0.24 (0.15)
Economic Impacts	No	No	No	No	Yes
Health and Psychological Impacts	No	No	No	No	Yes
Income Bracket FE	Yes	Yes	Yes	Yes	Yes
Employment Status FE	Yes	Yes	Yes	Yes	Yes
Socio-Demographics	Yes	Yes	Yes	Yes	Yes
Sample FE	Yes	Yes	Yes	Yes	Yes
Diff (Egal. - Libe.)	0.426	0.441	0.442	0.387	0.302
<i>p</i>	0.001	< 0.001	0.001	0.002	0.012
Diff (Egal. - Meri.)	0.257	0.255	0.245	0.223	0.192
<i>p</i>	< 0.001	< 0.001	< 0.001	< 0.001	0.002
Diff (Meri. - Libe.)	0.170	0.186	0.197	0.164	0.111
<i>p</i>	0.160	0.112	0.099	0.148	0.316
Observations	1230	1230	1230	1230	1230
<i>R</i> ²	0.430	0.455	0.454	0.508	0.536

Notes: OLS estimates with robust standard errors clustered at the individual level in parentheses. Dependent variable: support for redistribution (standardized first principal component of all policy preferences). Reference category for fairness preference types: "Others". Socio-Demographics include age, gender, race, ethnicity and education dummies. Reference categories: very liberal (for political ideology) and voted for Biden 2020 / Clinton 2016 (for voting behavior). Selfish Type: subjects who transfer \$0 to the other participant in the dictator game. Altruism: share of the endowment transferred in the dictator game (0 to 1). Economic, Health and Psychological Impacts are specified as in Table B2.

*** p<0.001, ** p<0.01, * p<0.05

Table B4: Robustness of Result 1: By Sample Specifications

	Dep Var: Support for Redistribution								
	Full Sample	Reweighted Sample	Unique IDs	Speeder 5%	Speeder 10%	Prolific Score <95	Prolific Score <98	Outliers	Joint Exclusion
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Egalitarian	0.36*** (0.06)	0.42*** (0.09)	0.32*** (0.07)	0.35*** (0.07)	0.33*** (0.07)	0.34*** (0.07)	0.32*** (0.07)	0.33*** (0.07)	0.30*** (0.07)
Meritocrat	0.12* (0.05)	0.13 (0.07)	0.11* (0.05)	0.12* (0.05)	0.11* (0.05)	0.10* (0.05)	0.09 (0.05)	0.11* (0.05)	0.07 (0.05)
Libertarian	-0.17 (0.10)	-0.12 (0.13)	-0.14 (0.11)	-0.19 (0.10)	-0.18 (0.11)	-0.20 (0.10)	-0.19 (0.11)	-0.17 (0.10)	-0.21 (0.11)
Belief in Merit	-0.19*** (0.01)	-0.20*** (0.02)	-0.16*** (0.01)	-0.18*** (0.01)	-0.18*** (0.01)	-0.19*** (0.01)	-0.19*** (0.01)	-0.20*** (0.01)	-0.20*** (0.01)
Income Bracket FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Employment Status FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Socio-Demographics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sample FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Diff (Egalitarian - Libertarian)	0.531	0.539	0.455	0.543	0.507	0.537	0.519	0.508	0.513
<i>p</i>	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Diff (Egalitarian - Meritocrat)	0.237	0.286	0.210	0.237	0.213	0.238	0.239	0.225	0.231
<i>p</i>	< 0.001	< 0.001	0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Diff (Meritocrat - Libertarian)	0.294	0.254	0.245	0.307	0.294	0.299	0.280	0.283	0.282
<i>p</i>	0.004	0.049	0.031	0.003	0.006	0.004	0.008	0.005	0.008
Observations	1975	1975	1474	1876	1775	1919	1819	1823	1609
<i>R</i> ²	0.248	0.252	0.218	0.249	0.245	0.254	0.264	0.264	0.276

Notes: OLS estimates with robust standard errors clustered at the individual level in parentheses. Dependent variable: support for redistribution (standardized first principal component of all policy preferences). Reference category for fairness preference types: “Others”. Socio-Demographics include age, gender, race, ethnicity and education dummies. Column (2) uses sample weights to match the US population on key characteristics. Column (3) excludes the N=501 respondents that were resampled in Wave 2, so that the sample contains only unique Prolific IDs. Columns (4)-(5) exclude the fastest 5% / 10%. Columns (6)-(7) exclude respondents with a prolific score (% accepted submissions in the past) of less than 95% or 98%. Column (8) excludes respondents that choose a transfer size of > 2\$ in either the merit or luck condition. Column (9) excludes all respondents which fulfill at least one condition from (4) to (8).

*** p<0.001, ** p<0.01, * p<0.05

B.2 Robustness: Result 2

Table B5: Robustness Result 2: By Policy Domain

	Economic Redistribution		Pandemic Support Policies		Universal Health Care	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Meritocrats vs Non-Meritocrats						
Belief in Merit	-0.25*** (0.01)	-0.24*** (0.02)	-0.20*** (0.02)	-0.19*** (0.02)	-0.22*** (0.02)	-0.22*** (0.02)
Non-Meritocrat × Belief in Merit	0.10*** (0.02)	0.10*** (0.02)	0.07*** (0.02)	0.07*** (0.02)	0.09*** (0.02)	0.09*** (0.02)
Type FE	Yes	Yes	Yes	Yes	Yes	Yes
Income Bracket FE	No	Yes	No	Yes	No	Yes
Employment Status FE	No	Yes	No	Yes	No	Yes
Socio-Demographics	No	Yes	No	Yes	No	Yes
Sample FE	No	Yes	No	Yes	No	Yes
p (Non-Meritocrat × B)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Observations	1975	1975	1975	1975	1975	1975
R^2	0.228	0.278	0.155	0.207	0.168	0.199
Panel B: By Fairness Preference Type						
Belief in Merit	-0.25*** (0.01)	-0.24*** (0.02)	-0.20*** (0.02)	-0.19*** (0.02)	-0.22*** (0.02)	-0.22*** (0.02)
Egalitarian × Belief in Merit	0.11*** (0.03)	0.10*** (0.03)	0.08*** (0.02)	0.07** (0.03)	0.12*** (0.03)	0.12*** (0.03)
Libertarian × Belief in Merit	-0.07 (0.04)	-0.06 (0.04)	-0.08 (0.05)	-0.06 (0.04)	-0.07 (0.05)	-0.07 (0.05)
Other Type × Belief in Merit	0.13*** (0.02)	0.12*** (0.02)	0.09*** (0.02)	0.08*** (0.02)	0.11*** (0.02)	0.11*** (0.02)
Type FE	Yes	Yes	Yes	Yes	Yes	Yes
Income Bracket FE	No	Yes	No	Yes	No	Yes
Employment Status FE	No	Yes	No	Yes	No	Yes
Socio-Demographics	No	Yes	No	Yes	No	Yes
Sample FE	No	Yes	No	Yes	No	Yes
p (Egalitarian × B)	<0.001	<0.001	<0.001	0.003	<0.001	<0.001
p (Libertarian × B)	0.070	0.111	0.090	0.190	0.142	0.146
p (Type Other × B)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Observations	1975	1975	1975	1975	1975	1975
R^2	0.236	0.285	0.161	0.211	0.176	0.206

Notes: OLS estimates with robust standard errors clustered at the individual level in parentheses. Dependent variables: policy preferences as standardized z-scores. Reference category for fairness preference types: “Meritocrats”. . Socio-Demographics include age, gender, race, ethnicity and education dummies. *** p<0.001, ** p<0.01, * p<0.05

Table B6: Robustness of Result 2: By Belief Measures

	Dep Var: Support for Redistribution			
	Belief Measure 1		Belief Measure 2	
	(1)	(2)	(3)	(4)
Panel A: Meritocrats vs Non-Meritocrats				
Belief in Merit	-0.14*** (0.01)	-0.13*** (0.01)	-0.22*** (0.01)	-0.21*** (0.01)
Non-Meritocrat × Belief in Merit	0.06*** (0.02)	0.06*** (0.02)	0.08*** (0.02)	0.08*** (0.02)
Type FE	Yes	Yes	Yes	Yes
Income Bracket FE	No	Yes	No	Yes
Employment Status FE	No	Yes	No	Yes
Socio-Demographics	No	Yes	No	Yes
Sample FE	No	Yes	No	Yes
p (Non-Meritocrat × B)	< 0.001	< 0.001	< 0.001	< 0.001
Observations	1975	1975	1975	1975
R^2	0.119	0.173	0.236	0.278
Panel B: By Type				
Belief in Merit	-0.14*** (0.01)	-0.13*** (0.01)	-0.22*** (0.01)	-0.21*** (0.01)
Egalitarian × Belief in Merit	0.06** (0.02)	0.06** (0.02)	0.08*** (0.02)	0.08** (0.02)
Libertarian × Belief in Merit	-0.07 (0.04)	-0.06 (0.04)	-0.05 (0.04)	-0.03 (0.04)
Other Type × Belief in Merit	0.08*** (0.02)	0.08*** (0.02)	0.09*** (0.02)	0.09*** (0.02)
Type FE	Yes	Yes	Yes	Yes
Income Bracket FE	No	Yes	No	Yes
Employment Status FE	No	Yes	No	Yes
Socio-Demographics	No	Yes	No	Yes
Sample FE	No	Yes	No	Yes
p (Egalitarian × B)	0.004	0.008	< 0.001	0.001
p (Libertarian × B)	0.099	0.091	0.224	0.485
p (Other Type × B)	< 0.001	< 0.001	< 0.001	< 0.001
Observations	1975	1975	1975	1975
R^2	0.125	0.179	0.242	0.282

Notes: OLS estimates with robust standard errors clustered at the individual level in parentheses. Dependent variable: support for redistribution (standardized first principal component of all policy preferences). Reference category for fairness preference types: “Meritocrats”. Socio-Demographics include age, gender, race, ethnicity and education dummies. Belief measures 1 and 2 refer to the two questions that measure belief in merit (see Figure A9).

*** p<0.001, ** p<0.01, * p<0.05

Table B7: Robustness of Result 2: By Sample Specifications - Panel A

	Dep Var: Support for Redistribution								
	Full Sample	Reweightd Sample	Unique IDs	Speeder 5%	Speeder 10%	Prolific Score <95	Prolific Score <98	Outliers	Joint Exclusion
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Panel A: Meritocrats vs Non-Meritocrats									
Belief in Merit	-0.23*** (0.02)	-0.24*** (0.02)	-0.21*** (0.02)	-0.23*** (0.02)	-0.23*** (0.02)	-0.23*** (0.02)	-0.24*** (0.02)	-0.23*** (0.02)	-0.23*** (0.02)
Non-Meritocrat × Belief in Merit	0.09*** (0.02)	0.09*** (0.03)	0.09*** (0.02)	0.09*** (0.02)	0.08*** (0.02)	0.08*** (0.02)	0.08*** (0.02)	0.07*** (0.02)	0.07** (0.02)
Type FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Income Bracket FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Employment Status FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Socio-Demographics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sample FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
p (Non-Meritocrat × B)	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001
Observations	1975	1975	1474	1876	1775	1919	1819	1823	1609
R^2	0.256	0.261	0.228	0.257	0.252	0.261	0.271	0.269	0.281

Notes: OLS estimates with robust standard errors clustered at the individual level in parentheses. Dependent variable: support for redistribution (standardized first principal component of all policy preferences). Reference category for fairness preference types: “Meritocrats”. Socio-Demographics include age, gender, race, ethnicity and education dummies. Column (2) uses sample weights to match the US population on key characteristics. Column (3) excludes the N=501 respondents that were resampled in Wave 2, so that the sample contains only unique Prolific IDs. Columns (4)-(5) exclude the fastest 5% / 10%. Columns (6)-(7) exclude respondents with a prolific score (% accepted submissions in the past) of less than 95% or 98%. Column (8) excludes respondents that choose a transfer size of > 2\$ in either the merit or luck condition. Column (9) excludes all respondents which fulfill at least one condition from (4) to (8).

*** p<0.001, ** p<0.01, * p<0.05

Table B8: Robustness of Result 2: By Sample Specifications - Panel B

	Dep Var: Support for Redistribution								
	Full Sample	Reweighted Sample	Unique IDs	Speeder 5%	Speeder 10%	Prolific Score <95	Prolific Score <98	Outliers	Joint Exclusion
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Panel A: Meritocrats vs Non-Meritocrats									
Belief in Merit	-0.23*** (0.02)	-0.24*** (0.02)	-0.21*** (0.02)	-0.23*** (0.02)	-0.23*** (0.02)	-0.23*** (0.02)	-0.24*** (0.02)	-0.23*** (0.02)	-0.24*** (0.02)
Egalitarian × Belief in Merit	0.10*** (0.02)	0.12*** (0.03)	0.10*** (0.03)	0.10*** (0.03)	0.09*** (0.03)	0.10*** (0.02)	0.10*** (0.03)	0.10*** (0.02)	0.11*** (0.03)
Libertarian × Belief in Merit	-0.07 (0.04)	-0.01 (0.05)	-0.08 (0.05)	-0.07 (0.04)	-0.06 (0.05)	-0.06 (0.04)	-0.05 (0.05)	-0.07 (0.04)	-0.06 (0.05)
Other Type × Belief in Merit	0.11*** (0.02)	0.10** (0.03)	0.11*** (0.02)	0.11*** (0.02)	0.10*** (0.02)	0.10*** (0.02)	0.09*** (0.02)	0.08** (0.03)	0.07** (0.03)
Type FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Income Bracket FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Employment Status FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Socio-Demographics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sample FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
p (Egalitarian × B)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
p (Libertarian × B)	0.111	0.879	0.096	0.134	0.194	0.138	0.240	0.110	0.259
p (Other Type × B)	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	0.007
Observations	1975	1975	1474	1876	1775	1919	1819	1823	1609
R ²	0.256	0.261	0.228	0.257	0.252	0.261	0.271	0.269	0.281

Notes: OLS estimates with robust standard errors clustered at the individual level in parentheses. Dependent variable: support for redistribution (standardized first principal component of all policy preferences). Reference category for fairness preference types: “Meritocrats”. Socio-Demographics include age, gender, race, ethnicity and education dummies. Column (2) uses sample weights to match the US population on key characteristics. Column (3) excludes the N=501 respondents that were resampled in Wave 2, so that the sample contains only unique Prolific IDs. Columns (4)-(5) exclude the fastest 5% / 10%. Columns (6)-(7) exclude respondents with a prolific score (% accepted submissions in the past) of less than 95% or 98%. Column (8) excludes respondents that choose a transfer size of > 2\$ in either the merit or luck condition. Column (9) excludes all respondents which fulfill at least one condition from (4) to (8).

*** p<0.001, ** p<0.01, * p<0.05

B.3 Robustness: Result 3

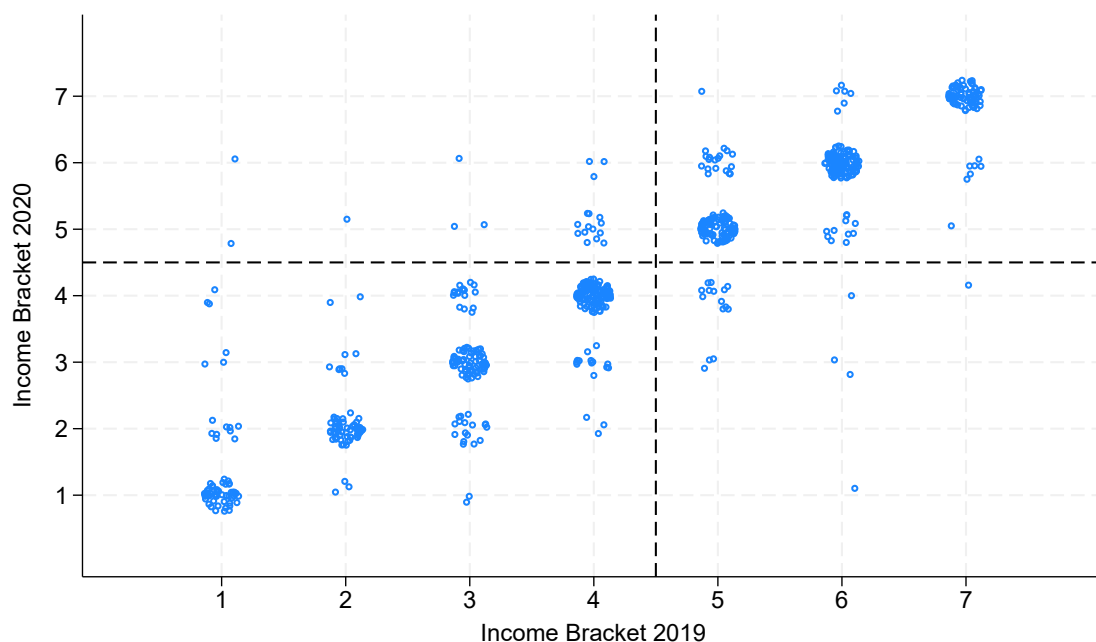
Noise in Income and Ideology To show that there is minimal noise in our subgroup classifications, we rely on repeated measures of income and political ideology in Wave 2.

At the beginning of Wave 2, subjects are asked about their income in 2020, and towards the end about their income in 2019. This comparison provides us with an upper bound of the level of noise in our income elicitation because some subjects could have moved between income brackets between years. We observe that 3.4% of subjects (N=42 out of 1,230) would have changed classifications between measures (above median income in 2019 but below median income in 2020, or vice versa). Figure B1 illustrates that most participants reported the same income bracket or moved at most one bracket up or down, confirming minimal noise in our income elicitation.

Similarly, we asked about left-right political ideology on a 1 to 10 scale at the beginning of Wave 2, and about liberal to conservative political ideology on a 5-points scale at the end. Only N=18 observations that were classified as left voters self-classified as conservative or very conservative, and N=6 that were classified as right voters would self-classify as liberal or very liberal, in total 1.9% of our participants (N=24 out of 1,230).

Both comparisons show that participants report income and political ideology with minimal noise, confirming a high level of data quality in our sample.

Figure B1: Income Brackets 2020 vs. 2019



Notes: The figure shows a scatter plot of self-reported income bracket in 2019 (x-axis) and self-reported income bracket in 2020 (y-axis).

C Discussion and Extensions

C.1 Benchmarking

Table C1: OLS: Benchmarking: Fairness Preference Types

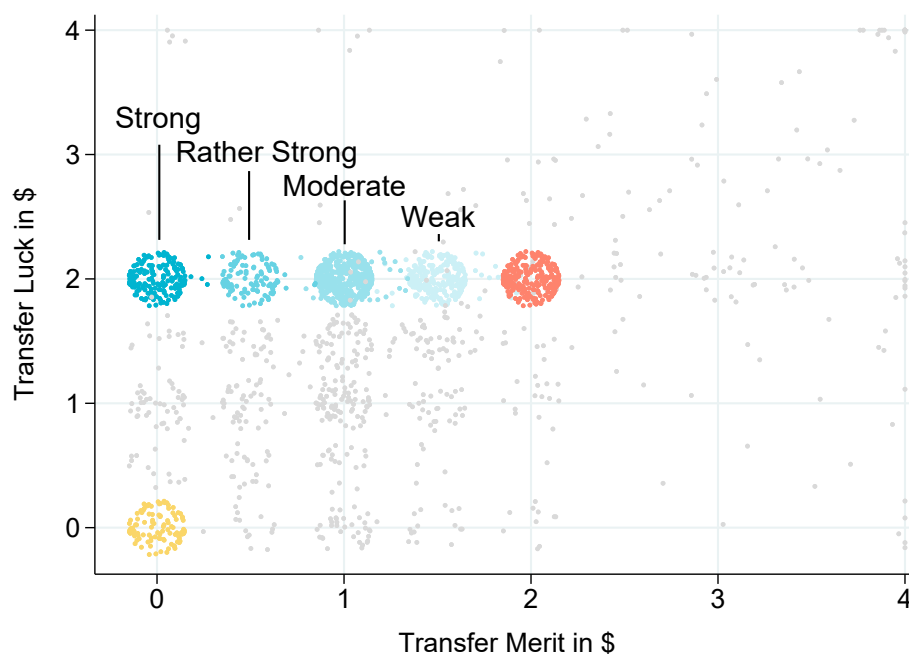
	Dep Var: Support for Redistribution			
	(1)	(2)	(3)	(4)
Egalitarian	0.59*** (0.07)			0.56*** (0.07)
Meritocrat	0.15** (0.05)			0.17*** (0.05)
Libertarian	-0.29* (0.13)			-0.24 (0.12)
Income (20-35k)		-0.11 (0.09)		-0.12 (0.09)
Income (35-50k)		-0.19* (0.09)		-0.20* (0.09)
Income (50-75k)		-0.22* (0.09)		-0.23* (0.09)
Income (75-100k)		-0.29** (0.10)		-0.29** (0.10)
Income (100-150k)		-0.47*** (0.10)		-0.43*** (0.10)
Income (>150k)		-0.42*** (0.11)		-0.41*** (0.11)
Unemployed		0.19** (0.06)		0.14* (0.07)
Not in Labor Force		-0.06 (0.07)		-0.00 (0.06)
Age (in decades)			-0.06*** (0.02)	-0.06*** (0.02)
Female			0.18*** (0.05)	0.12* (0.05)
College Degree			-0.03 (0.06)	0.04 (0.06)
Masters Degree			0.02 (0.07)	0.16* (0.07)
Black			0.42*** (0.06)	0.39*** (0.06)
Asian			0.21* (0.09)	0.26** (0.09)
Race Other			0.19 (0.13)	0.13 (0.12)
Hispanic			0.18 (0.10)	0.19 (0.10)
Constant	-0.13** (0.04)	0.24** (0.07)	0.08 (0.09)	0.16 (0.11)
Observations	1975	1975	1975	1975
R ²	0.041	0.028	0.042	0.101

Notes: OLS estimates with robust standard errors clustered at the individual level in parentheses. Dependent variable: support for redistribution (standardized first principal component of all policy preferences). Reference category for fairness preference types: “Others”.

*** p<0.001, ** p<0.01, * p<0.05

C.2 Extension: Meritocratic Preference Subtypes

Figure C1: Classification of Subtypes among Meritocrats: Preferences



Subtype	Meritocratic Preferences	N	Share
Strong	$\$1.75 \leq T_{\text{Luck}} - T_{\text{Merit}} \leq \2.00	180	18.3%
Rather Strong	$\$1.25 \leq T_{\text{Luck}} - T_{\text{Merit}} < \1.75	107	10.9%
Moderate	$\$0.75 \leq T_{\text{Luck}} - T_{\text{Merit}} < \1.25	446	45.4%
Weak	$\$0.00 \leq T_{\text{Luck}} - T_{\text{Merit}} < \0.75	249	25.4%
Total		982	100%

Notes: The figure shows how Meritocrats are classified into four subtypes according to their meritocratic preferences. Meritocratic preferences correspond to the difference between the transfers choices in the spectator game (Transfer Luck - Transfer Merit).

Table C2: Meritocratic Preference Subtypes Differ in Policy Support

	Dep Var: Support for Redistribution		
	(1)	(2)	(3)
Sample: Only Meritocrats			
Meritocrat: Rather Strong	0.32** (0.12)	0.19 (0.11)	0.17 (0.10)
Meritocrat: Moderate	0.29** (0.10)	0.12 (0.09)	0.12 (0.08)
Meritocrat: Weak	0.53*** (0.11)	0.29** (0.09)	0.19* (0.08)
Political Ideology	No	No	Yes
Belief in Merit	No	Yes	Yes
Income Bracket FE	No	Yes	Yes
Employment Status FE	No	Yes	Yes
Socio-Demographics	No	Yes	Yes
Sample FE	No	Yes	Yes
Diff (Weak-Strong)	0.528	0.289	0.187
p	< 0.001	0.002	0.028
Observations	982	982	982
R^2	0.029	0.289	0.455

Notes: OLS estimates with robust standard errors clustered at the individual level in parentheses. Dependent variable: support for redistribution (standardized first principal component of all policy preferences). Sample restricted to individuals classified as meritocrats. Reference category for meritocrat subtypes: “Strong Meritocrats”. Socio-demographics include age, gender, race, ethnicity, and education dummies.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Table C3: Meritocratic Preference Subtypes Interact with Beliefs

	Dep Var: Support for Redistribution		
	(1)	(2)	(3)
Sample: Only Meritocrats			
Belief in Merit	-0.34*** (0.04)	-0.32*** (0.03)	-0.19*** (0.03)
Rather Strong \times Belief in Merit	0.17** (0.05)	0.15** (0.05)	0.14** (0.04)
Moderate \times Belief in Merit	0.10* (0.04)	0.11** (0.04)	0.09* (0.04)
Weak \times Belief in Merit	0.15*** (0.04)	0.14*** (0.04)	0.11** (0.04)
Political Ideology	No	No	Yes
Income Bracket FE	No	Yes	Yes
Employment Status FE	No	Yes	Yes
Socio-Demographics	No	Yes	Yes
Sample FE	No	Yes	Yes
p (Rather Strong \times B)	0.001	0.002	0.002
p (Moderate \times B)	0.014	0.005	0.014
p (Weak \times B)	< 0.001	< 0.001	0.004
Observations	982	982	982
R^2	0.253	0.299	0.462

Notes: OLS estimates with robust standard errors clustered at the individual level in parentheses and p-values in square brackets. Dependent variable: support for redistribution (standardized first principal component of all policy preferences). Reference category for meritocratic subtypes: “Strong Meritocrats”. Socio-demographics include age, gender, race, ethnicity, and education dummies.

*** p<0.001, ** p<0.01, * p<0.05

C.3 Simulations: Types vs Implemented Gini

In simulated data, we show that using the implemented Gini in the spectator game as a measure of fairness preferences — instead of types — may produce unreliable estimates about the relationship with policy preferences (and in general with any other variable). In particular, the estimated coefficients of the implemented Gini are sensitive to: (1) the share of meritocrats, and (2) the average level of policy support of meritocrats in any given sample.

C.3.1 The Share of Meritocrats Influences Regression Estimates

Type Shares To show how the type shares influence estimates, we simulate a series of samples of 1,000 observations in which the relative share of meritocrats varies from 1% to 99% (in 1-point increments). The shares of libertarians and egalitarians are adjusted accordingly and are split evenly:

- 1% Meritocrats, 49.5% Egalitarians, 49.5% Libertarians
- 2% Meritocrats, 49.0% Egalitarians, 49.0% Libertarians
- ...
- 99% Meritocrats, 0.5% Egalitarians, 0.5% Libertarians

Transfer Choices Each type implements their characteristic transfer choices on merit and luck in the spectator game. The implemented transfer decisions (measured as the share of the endowment transferred) and the implemented inequality (measured via the Gini coefficient) are as follows:

- **Libertarians:**

$$T_{\text{Merit}} = 0, \quad T_{\text{Luck}} = 0 \quad \Rightarrow \quad G_{\text{Merit}} = 1, \quad G_{\text{Luck}} = 1$$

- **Meritocrats:**

$$T_{\text{Merit}} = 0, \quad T_{\text{Luck}} = 0.5 \quad \Rightarrow \quad G_{\text{Merit}} = 1, \quad G_{\text{Luck}} = 0$$

- **Egalitarians:**

$$T_{\text{Merit}} = 0.5, \quad T_{\text{Luck}} = 0.5 \quad \Rightarrow \quad G_{\text{Merit}} = 0, \quad G_{\text{Luck}} = 0$$

Policy Support Each individual’s support for redistribution is modeled as

$$Y_i = \mu_{t_i} + \varepsilon_i,$$

where $t_i \in \{1, 2, 3\}$ indicates the type of individual i (Libertarian, Meritocrat, or Egalitarian), μ_{t_i} is the type-specific mean policy support, and $\varepsilon_i \sim \mathcal{N}(0, \sigma^2)$ captures individual-level noise with $\sigma = 0.1$. The type-specific means are set as

$$\mu_t = \begin{cases} -0.25 & \text{if } t = 1 \text{ (Libertarian)} \\ 0 & \text{if } t = 2 \text{ (Meritocrat)} \\ +0.25 & \text{if } t = 3 \text{ (Egalitarian)}. \end{cases}$$

Regressions Then we simply estimate four regressions for each population composition with policy support as the dependent variable:

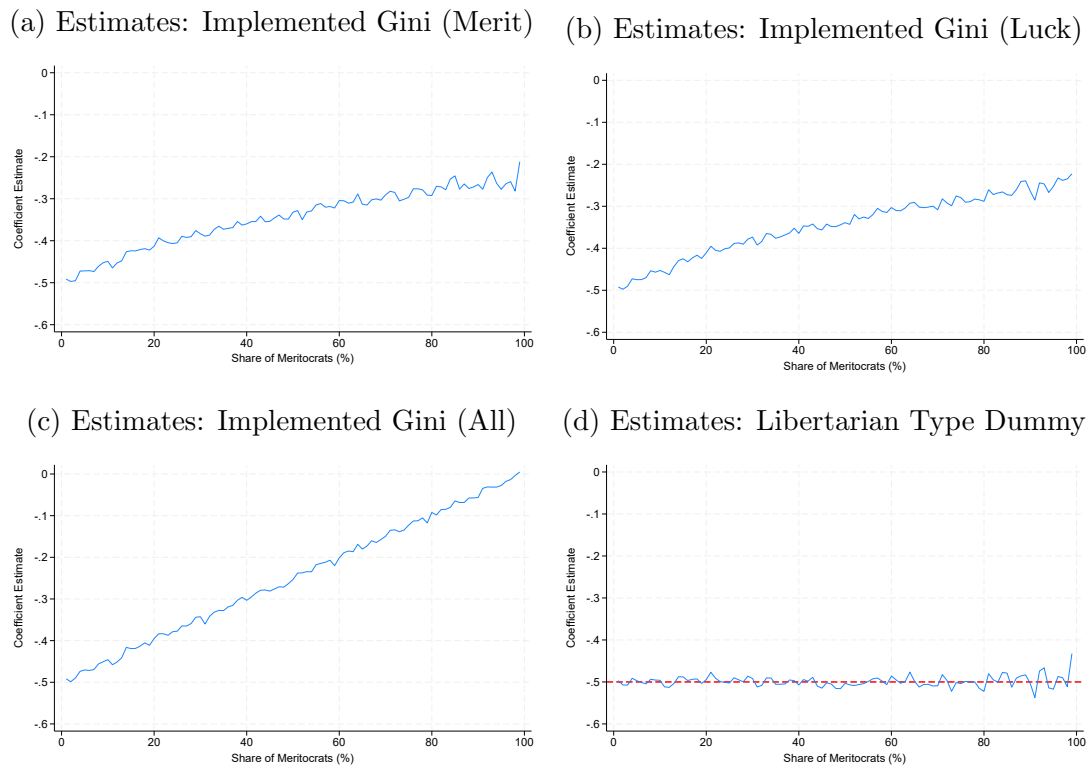
1. A regression on the implemented Gini in the merit treatment
2. A regression on the implemented Gini in the luck treatment
3. A regression on the implemented Gini in all treatments (pooled)
4. A regression on type dummies

Results Figure C2 plots the estimated coefficients as functions of the share of meritocrats in the population. Figures C2 (a) to (c) show that the estimated relationships between the implemented Gini and policy support vary with the share of meritocrats in a given sample. The higher the share of meritocrats, the lower the estimated relationship between the implemented Gini and support for redistribution. The strength of this attenuation effect differs between the implemented Gini in each treatment condition and the implemented Gini (all), with the effect being strongest for the latter:

Result 1: *As the share of Meritocrats increases, the implemented Gini (all) coefficient converges towards zero.*

The explanation for this convergence towards zero is that Meritocrats implement a Gini of 0 in the luck treatment and a Gini of 1 in the merit treatment, and thus attenuate any estimated relationships with policy support (and in principle with any other variable) in regression analyses.

Figure C2: The Share of Meritocrats Influences Regression Estimates



Notes: The figure plots the estimated regression coefficient from simulated samples of 1,000 individuals in which the share of Meritocrats varies from 1% to 99%, with the remaining share split equally between Libertarians and Egalitarians. Policy support is generated as a type-specific constant plus normally distributed noise. Figure (a) shows estimates from regressing policy support on the implemented Gini in the merit condition. Figure (b) uses the Gini from the luck condition. Figure (c) uses the implemented Gini from all conditions. Figure (d) shows estimates for the libertarian dummy from regressing policy support on the type dummies with the egalitarian type serving as the reference category.

C.3.2 The Policy Support of Meritocrats Influences Estimates

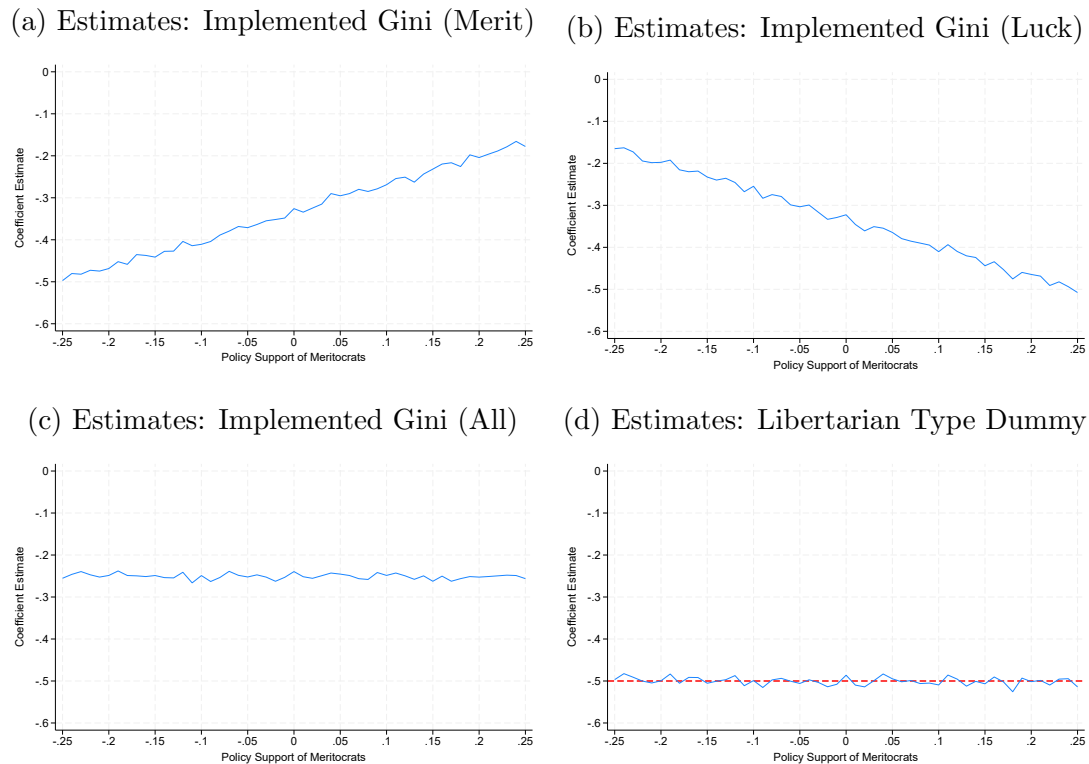
In a second set of simulations we hold the shares of fairness types fixed and vary the level of support for redistribution of meritocrats from -0.25 to +0.25 (in 1-point increments). The endpoints would match the case where two countries (or societal subgroups) have meritocrats with different beliefs in merit vs luck: Meritocrats in country A believe in merit (and thus oppose redistribution like Libertarians), while meritocrats in country B believe in luck (and thus support redistribution like Egalitarians). The type shares are fixed at: Meritocrats 50%, Egalitarians 25%, Libertarians 25%.

Results Figure C3 plots the estimated coefficients as functions of the policy support of meritocrats. Figures C3 (a) and (b) show that the estimated relationships between the implemented Gini in both treatment conditions and policy support varies with the policy support of Meritocrats. For the implemented Gini in the merit treatment, the higher the policy support of meritocrats, the lower the estimated relationship with policy support. For the implemented Gini in the luck treatment, in contrast, we observe the reverse relationship:

Result 2: *As the policy support of Meritocrats increases, the implemented Gini (Merit) coefficient increases, while the implemented Gini (Luck) coefficient decreases.*

The explanation for this reverse relationship is that the implemented Gini in the merit treatment estimates the difference between Egalitarians (Gini=0) and Libertarians plus Meritocrats (pooled) (Gini=1). The implemented Gini in the luck treatment, in contrast, estimates the difference between Egalitarians plus Meritocrats (pooled) (Gini=0) and Libertarians (Gini=1). For the implemented Gini (All) treatment, we observe no relationship because these effects cancel out.

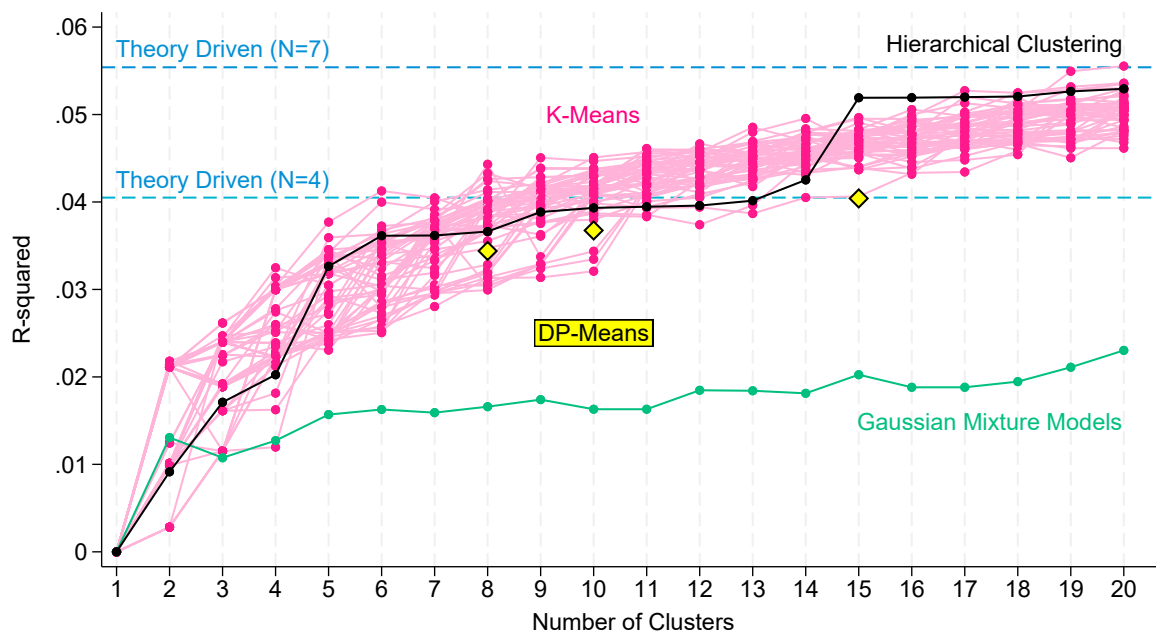
Figure C3: The Policy Support of Meritocrats Influences Regression Estimates



Notes: The figure plots the estimated regression coefficient from simulated samples of 1,000 individuals in which the policy support of Meritocrats varies from -0.25 (like libertarians) to +0.25 (like egalitarians). Type shares are fixed at: Meritocrats 50%, Egalitarians 25%, Libertarians 25%. Policy support is generated as a type-specific constant plus normally distributed noise. Figure (a) shows estimates from regressing policy support on the implemented Gini in the merit condition. Figure (b) uses the implemented Gini from the luck condition. Figure (c) uses the implemented Gini from all conditions. Figure (d) shows estimates for the libertarian dummy from regressing policy support on the type dummies with the egalitarian type serving as the reference category.

C.4 Clustering Algorithms

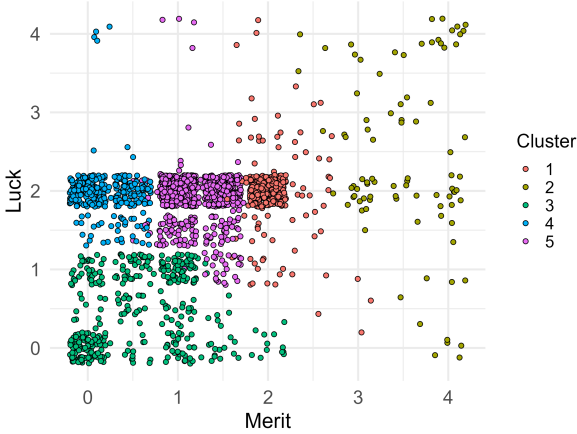
Figure C4: Robustness: Unadjusted R-squared



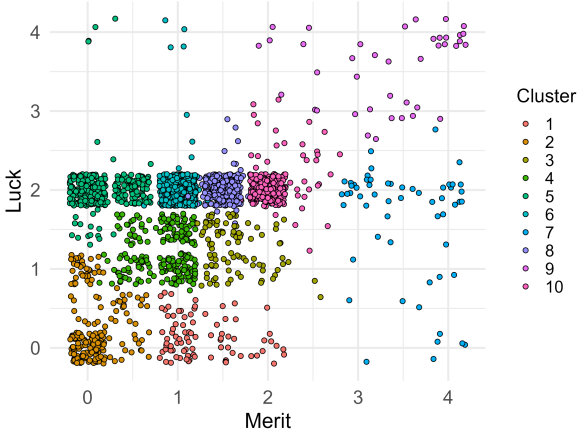
Notes: The figure shows the R^2 values of OLS regressions explaining support for redistribution using theory- and data-driven type classifications of fairness preference types. The OLS regressions include one dummy for each type. The clustering algorithms classify observations into 1 to 20 types based on the two transfer choices in the spectator game. The pink points refer to 1000 type classifications from k-means clustering algorithms, each pink line connects points for one of 50 random seeds determining starting positions. The DP-Means classifications (yellow diamonds) are based on three penalty parameters: $\lambda \in 1, 1.5, 2$ (chosen around the median pairwise squared Euclidean distance between observations). The Gaussian Mixture Model classifications (green points) are based on the highest posterior type probability for each observation. As benchmarks, the blue lines indicate the R^2 of OLS regressions including dummies for our standard theory-driven type classification with 4 types (Egalitarians, Meritocrats, Libertarians, Others, $R^2 = 0.041$) and the extended type classification with 7 types (Egalitarians, Libertarians, Others, and the four meritocratic preferences subtypes, $R^2 = 0.055$).

Figure C5: K-Means Clustering: Examples

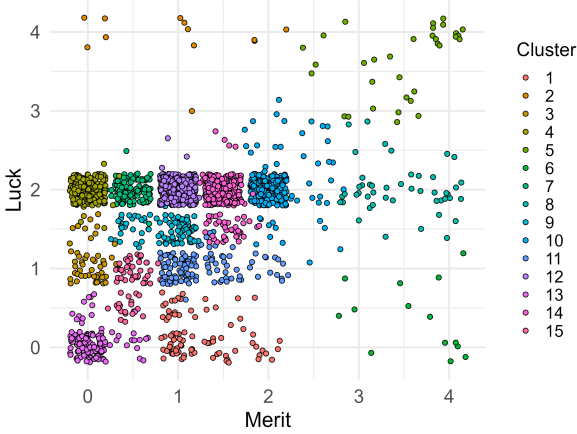
(a) $N = 5$



(b) $N = 10$

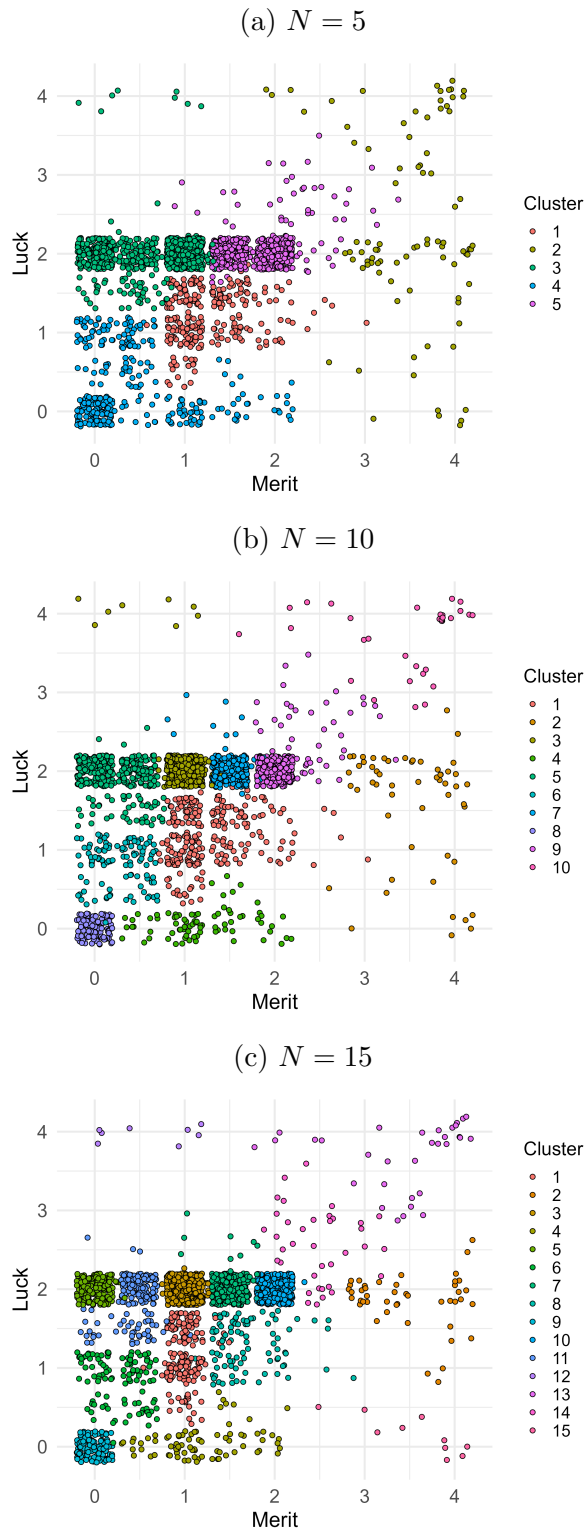


(c) $N = 15$



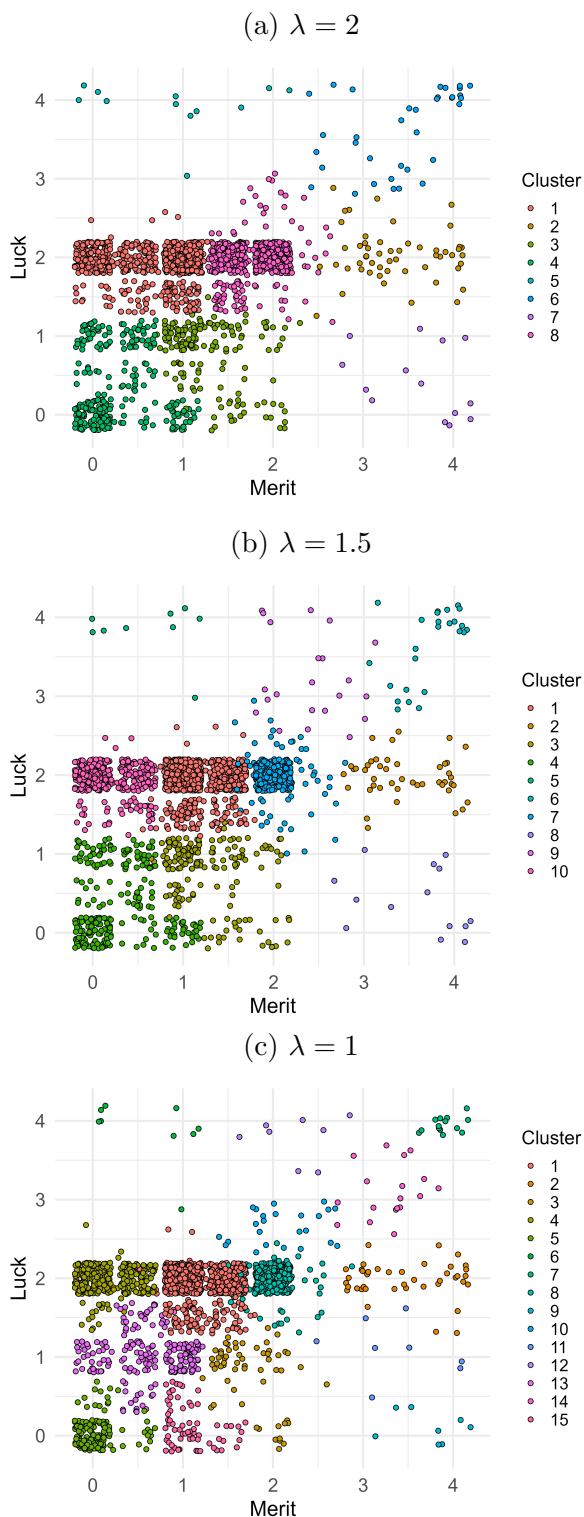
*Notes:*The figure shows clusters of observations determined by the k-means clustering algorithm: Figure (a) shows clusters for 5 types, Figure (b) for 10 types, and Figure (c) for 15 types. Figures use scatter plots of transfer choices of inequalities due to merit (x-axis) and luck (y-axis). Observations are jittered so that clusters are visible.

Figure C6: Hierarchical Clustering: Examples



Notes: The figure shows clusters of observations determined by the hierarchical clustering algorithm: Figure (a) shows clusters for $N = 5$ types, Figure (b) for $N = 10$ types, and Figure (c) for $N = 15$ types. Figures use scatter plots of transfer choices of inequalities due to merit (x-axis) and luck (y-axis). Observations are jittered so that clusters are visible.

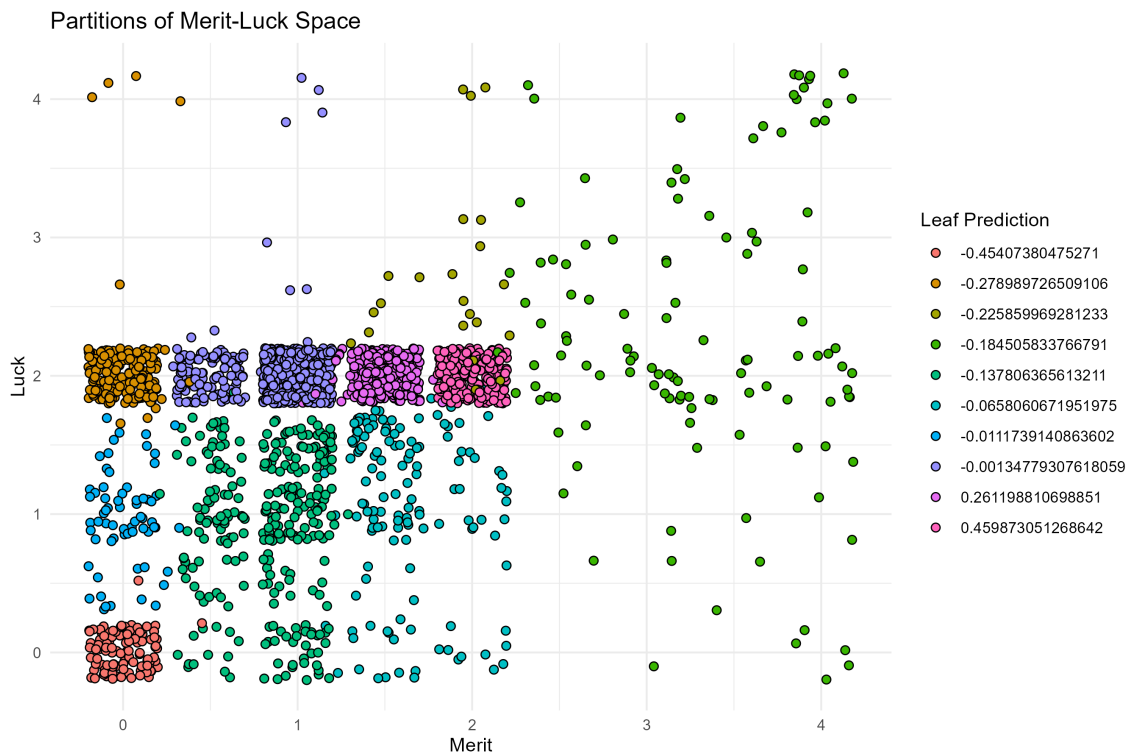
Figure C7: DP-Means Clustering



Notes: The figure shows clusters of observations determined by the DP-Means clustering algorithm: in Figure (a) for $\lambda = 1$, in Figure (b) for $\lambda = 1.5$, in Figure (c) for $\lambda = 2$. Figures use scatter plots of transfer choices of inequalities due to merit (x-axis) and luck (y-axis). Observations are jittered so that clusters are visible.

C.5 Predictive Regression Trees

Figure C8: Type Classification by Predictive Regression Trees



Notes: The figure shows clusters of observations in a scatter plot of transfer choices of inequalities due to merit (x-axis) and luck (y-axis). Observations are jittered so that clusters are visible. Individuals are classified by predictive regression trees, estimated using the `rpart` package in R. The outcome variable is support for redistribution, predicted with both transfer choices. The model uses an ANOVA splitting criterion appropriate for continuous outcomes. Minimum node size for splitting was set to 40 observations, terminal nodes to 20, and a complexity parameter of 0.001 was used to prune the tree. The complexity parameter was chosen based on the smallest out-of-sample prediction error using 10-fold cross-validation.

C.6 Repeated Type Classifications

Table C4: Repeated Type Classifications Predict Policy Preferences Across Waves

	Support for Redistribution W2			Support for Redistribution W1		
	(1)	(2)	(3)	(4)	(5)	(6)
Libertarian W2	-0.65** (0.24)		-0.50* (0.24)		-0.52** (0.18)	-0.41* (0.18)
Egalitarian W2	0.60*** (0.15)		0.54*** (0.15)		0.42*** (0.11)	0.38*** (0.11)
Other W2	-0.15 (0.12)		-0.09 (0.12)		-0.12 (0.09)	-0.06 (0.09)
Libertarian W1		-0.65** (0.23)	-0.55* (0.23)	-0.52** (0.17)		-0.45** (0.17)
Egalitarian W1		0.46** (0.16)	0.32* (0.16)	0.29* (0.12)		0.19 (0.12)
Other W1		-0.24* (0.11)	-0.22 (0.11)	-0.25** (0.08)		-0.23** (0.08)
p (joint test W1)		<0.001	<0.001	<0.001		<0.001
p (joint test W2)	<0.001		<0.001		<0.001	<0.001
p (Lib W1 = Lib W2)			0.882			0.883
p (Ega W1 = Ega W2)			0.357			0.293
p (Oth W1 = Oth W2)			0.493			0.219
R^2	0.061	0.049	0.090	0.054	0.059	0.093
Observations	499	499	499	499	499	499

Notes: OLS Estimates with robust standard errors in parentheses. Reference category for fairness preference types: “Meritocrats”. In column (3) and (6), the reference category are respondents classified twice as Meritocrats. The joint test tests the hypotheses that all type coefficients in a wave are equal to zero. Constant not reported.

*** p<0.001, ** p<0.01, * p<0.05

D European Data

D.1 Data and Survey Design

The data we use for the replication is collected as part of the project "How Politicians Evaluate Public Opinion (POLEVPOP)", hosted by the University of Antwerp.²¹ The project collects data on political attitudes across thirteen advanced democracies and is funded by an ERC Advanced Grant (Agreement ID: 101018105).²² While the main focus of the project is to study elected representatives, surveys with citizens of all participating countries were rolled out in parallel. One of the modules we use for our analyses, the hypothetical spectator game was added to the survey by Maj-Britt Sterba, who is part of the POLEVPOP project. Participating countries individually chose which modules to include in the survey so that the final questionnaire differs between countries.

In five countries, the final questionnaire includes the modules that allow us to combine people's fairness preferences, beliefs about the causes of inequality, and support for redistributive policies: Sweden, Norway, Germany, Flanders (Belgium), and Czechia. Below we describe the aspects of the data collection that are relevant for our replication.

D.1.1 Data Collection and Samples

Data collection in all countries of interest took place between February and March 2022. The survey data was collected by Dynata. The sampling frame was limited to males and females aged 18 and older with internet access but the sample was otherwise designed to represent the populations of the respective countries with respect to age, gender, education, and region. Our sample consists of all 10,366 observations that have complete data for our key variables, around 2,000 per country.

D.1.2 Measurement

Fairness Preference Types Fairness preferences are measured with a hypothetical version of the spectator game. As in the main data, participants see both the Luck and the Merit scenario. The display order of the two scenarios is randomized. The exact wording for the two scenarios is as follows:

21. We thank Stefaan Walgrave, Javier Olivera and Troy Saghaug Broderstad for allowing us to use the citizen data for our replication purposes.

22. POLPOP is an international collaboration examining elected politicians' opinions, perceptions and evaluations in thirteen countries. The project is led by Stefaan Walgrave (University of Antwerp) and supported by an ERC Advanced Grant (POLEVPOP, ID: 101018105). In Australia, the project is led by Patrick Dumont, Marija Taflaga and Annika Werner (Australian National University), in Belgium (Flanders) by Stefaan Walgrave (University of Antwerp), in Francophone Belgium by Jean-Benoit Pilet and Nathalie Brack (Université Libre de Bruxelles), in Canada by Peter Loewen (University of Toronto) and Jack Lucas (University of Calgary), in the Czech Republic by Ondrej Cisar (Charles University Prague), in Denmark by Anne Rasmussen (University of Copenhagen), in Germany by Christian Breunig (University of Konstanz—supported by the DFG's Excellence Strategy—EXC-2035/1-390681379.) and Stefanie Bailer (University of Basel), in Israel by Lior Sheffer (Tel Aviv University) and Eran Amsalem (Hebrew University Jerusalem), in Luxembourg by Javier Olivera (Luxembourg Institute of Socio-Economic Research), in the Netherlands by Rens Vliegenthart (Wageningen University), and Marc Van de Wardt (Free University of Amsterdam), in Norway by Yvette Peters (University of Bergen), in Portugal by Miguel Pereira (University of Southern California) and Jorge Fernandes (University of Lisbon), in Sweden by Mikael Persson (University of Gothenburg), and in Switzerland by Frédéric Varone (University of Geneva) and Pirmin Bundi (University of Lausanne). For more information on project, data and contributions, see: <https://www.uantwerpen.be/en/research-groups/m2p/polpop/polpop2>

- **Luck:** *“Imagine the following scenario: Two people, A and B, each work on a task. Their earnings are determined by a lottery. Person A has won the lottery and receives 100 euro. Person B receives nothing. You now have the option to redistribute the income between person A and person B. Person A and B are [Information treatment: not] informed about the outcome of the lottery and the original distribution of the 100 euro. Of the 100 euro from person A, how much do you give to person B who lost the lottery?”*
- **Merit:** *“Imagine the following scenario: Two people, X and Y, each work on a task. Their earnings are determined by their respective productivity. Person X was more productive and receives 100 euros. Person Y receives nothing. You have the option to redistribute the income between person X and person Y. Person X and Y are [Information treatment: not] informed about their productivity and the original distribution of the 100 euros. Of the 100 euro from person X, how much do you give to person Y who was less productive?”*

The design also includes an additional treatment that manipulates the information that spectators receive about the knowledge of the two people affected by the redistribution about their initial earnings (Information treatment). The Information treatment is administered between subjects.

Beliefs about the causes of inequality Beliefs about the causes of inequality are measured with a set of four questions asking for agreement with four reasons for economic differences between the rich and the poor, measured on a 7-point Likert scale from 1: Completely disagree to 7: Completely agree. The exact wording of the questions is:

“In our country, one of the main reasons for the rich being richer than the poor is that the rich...”

- [Q39_1] : *“... have had more luck in life”*
- [Q39_3] : *“... come from a wealthier family”*
- [Q39_4] : *“... have worked harder in life”*
- [Q39_5] : *“... have made smarter choices”*

To construct the variable *“Belief in Merit”*, we reverse-coded responses for the items Q39_1 and Q39_3 and calculated the average of the four items. As in the main dataset, a higher score indicates a stronger belief that economic inequalities are merit-based.

We do not include Q39_2 *“... were born with greater abilities”* for our analysis due to conceptual debates on whether ability is seen as a factor within or outside of individual control (see e.g. the differing opinions by Nozick 1974; Cohen 1989), and empirical findings that people rate talent in between clearly luck-based factors and clearly merit-based factors (Bartling et al. 2024).

Support for redistribution Support for redistribution is measured via four different policy questions. The variable “*Support for Redistribution*” is the first principal component of all four policy preferences. The first two questions elicit support for tax policies, measured on a 7-point Likert scale from 1: Completely disagree to 7: Completely agree. The exact wording of the questions is: “*How much would you agree or disagree with these tax policies?*” [Q42_1]: “*A tax on wealth above a certain amount*”; [Q42_2]: “*A tax on inheritances above a certain amount*”. Two further questions elicit support for a general effort by the government to reduce income and wealth inequality, measured on a 7-point Likert scale from 1: Completely disagree to 7: Completely agree. The exact wording of the questions is: “*To what extent do you agree or disagree with the following statements?*” [Q35_1]: “*The government should take measures to reduce differences in income levels*”; [Q35_2]: “*The government should take measures to reduce differences in wealth levels*”.

Control variables As sociodemographic control variables we include gender, age in years, and a dummy for college education. As economic background control variables we include household annual net income in deciles. As 12.2% of the sample did not disclose their income, the income decile fixed effects also include a dummy for income missing. Low income voters correspond to respondents in the bottom 5 deciles, high income voters to those in the top 5 deciles. Political ideology is measured on a scale from 0 to 10, where 0 refers to left and 10 to right. Left voters correspond to those respondents who reported a value less than 5 and right voters correspond to those who reported a value of more than 5.

D.2 Result 1

Table D1: Result 1 in Europe

	Dep Var: Support for Redistribution			
	(1)	(2)	(3)	(4)
Egalitarian	0.30*** (0.04)	0.27*** (0.04)	0.20*** (0.04)	0.15*** (0.03)
Meritocrat	0.10*** (0.02)	0.08*** (0.02)	0.08*** (0.02)	0.05** (0.02)
Libertarian	-0.44*** (0.05)	-0.46*** (0.04)	-0.44*** (0.04)	-0.39*** (0.04)
Belief in Merit			-0.20*** (0.01)	-0.15*** (0.01)
Political Ideology				-0.10*** (0.00)
Country FE	Yes	Yes	Yes	Yes
Income Decile FE	No	Yes	Yes	Yes
Socio-demographics	No	Yes	Yes	Yes
Diff (Egalitarian - Libertarian)	0.740	0.722	0.637	0.533
p	< 0.001	< 0.001	< 0.001	< 0.001
Diff (Egalitarian - Meritocrat)	0.204	0.182	0.123	0.096
p	< 0.001	< 0.001	< 0.001	0.006
Diff (Meritocrat - Libertarian)	0.536	0.540	0.514	0.438
p	< 0.001	< 0.001	< 0.001	< 0.001
Observations	10366	10366	10366	10366
R^2	0.086	0.113	0.151	0.204

Notes: OLS estimates with robust standard errors in parentheses. Dependent variable: support for redistribution (standardized first principal component of all policy preferences). Reference category for fairness preference types: “Others”. Socio-demographics include age, gender, and education dummies. *** p<0.001, ** p<0.01, * p<0.05

Table D2: Result 1 in Europe: By Country

	Dep Var: Support for Redistribution									
	Sweden		Norway		Germany		Czechia		Flanders	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Egalitarian	0.53*** (0.09)	0.36*** (0.09)	0.25*** (0.07)	0.17** (0.07)	0.20** (0.08)	0.14 (0.07)	0.41*** (0.12)	0.30** (0.11)	0.26*** (0.08)	0.17* (0.07)
Meritocrat	0.19*** (0.05)	0.16** (0.05)	0.06 (0.05)	0.06 (0.05)	0.17*** (0.05)	0.13** (0.05)	-0.07 (0.04)	-0.06 (0.04)	0.13** (0.04)	0.12** (0.04)
Libertarian	-0.60*** (0.10)	-0.54*** (0.09)	-0.40*** (0.10)	-0.41*** (0.10)	-0.31* (0.12)	-0.37** (0.11)	-0.44*** (0.08)	-0.41*** (0.08)	-0.40*** (0.11)	-0.40*** (0.10)
Belief in Merit		-0.27*** (0.02)		-0.20*** (0.03)		-0.17*** (0.02)		-0.19*** (0.02)		-0.13*** (0.02)
Income Decile FE	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
Socio-demographics	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
Diff (Egalitarian = Libertarian)	1.123	0.905	0.654	0.584	0.517	0.508	0.854	0.709	0.659	0.564
p	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Diff (Egalitarian = Meritocrat)	0.335	0.208	0.197	0.114	0.037	0.009	0.484	0.361	0.131	0.047
p	< 0.001	0.017	0.005	0.093	0.645	0.900	< 0.001	0.002	0.098	0.540
Diff (Meritocrat = Libertarian)	0.788	0.698	0.457	0.470	0.480	0.499	0.370	0.348	0.528	0.518
p	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Observations	2086	2086	2090	2090	2066	2066	2037	2037	2087	2087
R ²	0.046	0.156	0.019	0.075	0.015	0.124	0.023	0.098	0.019	0.105

Notes: OLS estimates with robust standard errors in parentheses. Dependent variable: support for redistribution (standardized first principal component of all policy preferences). Reference category for fairness preference types: "Others". Socio-demographics include age, gender, and education dummies.

*** p<0.001, ** p<0.01, * p<0.05

D.3 Result 2

Table D3: Result 2 in Europe

	Dep Var: Support for Redistribution		
	(1)	(2)	(3)
Panel A: Meritocrats vs Non-Meritocrats			
Belief in Merit	-0.32*** (0.02)	-0.31*** (0.02)	-0.26*** (0.02)
Non-Meritocrat \times Belief in Merit	0.16*** (0.02)	0.16*** (0.02)	0.15*** (0.02)
Type FE	Yes	Yes	Yes
Country FE	Yes	Yes	Yes
Political Ideology	No	No	Yes
Income Decile FE	No	Yes	Yes
Socio-Demographics	No	Yes	Yes
p (Non-Meritocrat \times Belief in Merit)	< 0.001	< 0.001	< 0.001
Observations	10366	10366	10366
R^2	0.133	0.157	0.209
Panel B: By Type			
Belief in Merit	-0.32*** (0.02)	-0.31*** (0.02)	-0.26*** (0.02)
Egalitarian \times Belief in Merit	0.14*** (0.04)	0.14*** (0.04)	0.14*** (0.04)
Libertarian \times Belief in Merit	0.02 (0.05)	0.02 (0.05)	0.01 (0.05)
Other Type \times Belief in Merit	0.19*** (0.02)	0.19*** (0.02)	0.17*** (0.02)
Type FE	Yes	Yes	Yes
Country FE	Yes	Yes	Yes
Political Ideology	No	No	Yes
Income Decile FE	No	Yes	Yes
Socio-Demographics	No	Yes	Yes
p (Egalitarian \times Belief in Merit)	<0.001	<0.001	<0.001
p (Libertarian \times Belief in Merit)	0.724	0.657	0.868
p (Other Type \times Belief in Merit)	<0.001	<0.001	<0.001
Observations	10366	10366	10366
R^2	0.135	0.159	0.211

Notes: OLS estimates with robust standard errors in parentheses. Dependent variable: support for redistribution (standardized first principal component of all policy preferences). Reference category for fairness preference types: “Meritocrats”. Socio-demographics include age, gender, and education dummies.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Table D4: Result 2 in Europe: By Country - Panel A

	Dep Var: Support for Redistribution									
	Sweden		Norway		Germany		Czechia		Flanders	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Panel A: Meritocrats vs Non-Meritocrats										
Belief in Merit	-0.45*** (0.04)	-0.43*** (0.04)	-0.34*** (0.04)	-0.34*** (0.04)	-0.30*** (0.04)	-0.29*** (0.04)	-0.23*** (0.04)	-0.22*** (0.04)	-0.23*** (0.04)	-0.22*** (0.03)
Non-Meritocrat \times Belief in Merit	0.25*** (0.05)	0.24*** (0.05)	0.19*** (0.05)	0.20*** (0.05)	0.17*** (0.05)	0.17*** (0.05)	0.03 (0.05)	0.04 (0.05)	0.13** (0.05)	0.14** (0.04)
Type FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Income Decile FE	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
Socio-demographics	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
p (Non-Meritocrat \times Belief in Merit)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.500	0.466	0.004	0.002
Observations	2086	2086	2090	2090	2066	2066	2037	2037	2087	2087
R^2	0.136	0.168	0.066	0.083	0.059	0.131	0.073	0.098	0.047	0.110

Notes: OLS estimates with robust standard errors in parentheses. Dependent variable: support for redistribution (standardized first principal component of all policy preferences). Reference category for fairness preference types: “Meritocrats”. Socio-demographics include age, gender, and education dummies. *** p<0.001, ** p<0.01, * p<0.05

Table D5: Result 2 in Europe: By Country - Panel B

	Dep Var: Support for Redistribution									
	Sweden		Norway		Germany		Czechia		Flanders	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Panel B: By Type										
Belief in Merit	-0.45*** (0.04)	-0.43*** (0.04)	-0.34*** (0.04)	-0.34*** (0.04)	-0.30*** (0.04)	-0.29*** (0.04)	-0.23*** (0.04)	-0.22*** (0.04)	-0.23*** (0.04)	-0.22*** (0.03)
Egalitarian × Belief in Merit	0.24** (0.09)	0.26** (0.09)	0.07 (0.07)	0.08 (0.07)	0.20** (0.08)	0.20* (0.08)	0.07 (0.15)	0.04 (0.14)	0.14 (0.09)	0.14 (0.08)
Libertarian × Belief in Merit	0.16 (0.11)	0.15 (0.11)	0.16 (0.15)	0.15 (0.14)	0.00 (0.12)	0.02 (0.11)	-0.06 (0.11)	-0.05 (0.11)	-0.19 (0.10)	-0.18 (0.11)
Type Other × Belief in Merit	0.27*** (0.05)	0.25*** (0.05)	0.24*** (0.06)	0.25*** (0.06)	0.18*** (0.05)	0.19*** (0.05)	0.04 (0.05)	0.05 (0.05)	0.17*** (0.05)	0.17*** (0.05)
Type FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Income Decile FE	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
Socio-demographics	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
p (Egalitarian × Belief in Merit)	0.005	0.003	0.342	0.254	0.008	0.011	0.651	0.765	0.109	0.090
p (Libertarian × Belief in Merit)	0.175	0.162	0.285	0.316	0.987	0.878	0.581	0.640	0.067	0.095
p (Other Type × Belief in Merit)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.425	0.383	<0.001	<0.001
Observations	2086	2086	2090	2090	2066	2066	2037	2037	2087	2087
R^2	0.137	0.169	0.070	0.086	0.061	0.133	0.074	0.099	0.054	0.116

Notes: OLS estimates with robust standard errors in parentheses. Dependent variable: support for redistribution (standardized first principal component of all policy preferences). Reference category for fairness preference types: “Meritocrats”. Socio-demographics include age, gender, and education dummies. *** p<0.001, ** p<0.01, * p<0.05

D.4 Result 3

Table D6: Result 3 in Europe

	By Income		By Political Ideology	
	Low	High	Left	Right
	(1)	(2)	(3)	(4)
Fairness Preference Types				
Egalitarian	0.29*** (0.05)	0.25*** (0.06)	0.26*** (0.05)	0.18* (0.07)
Libertarian	-0.36*** (0.06)	-0.55*** (0.06)	-0.22** (0.08)	-0.47*** (0.06)
Meritocrats: Belief Types				
Belief: Luck	0.54*** (0.05)	0.44*** (0.05)	0.54*** (0.05)	0.34*** (0.07)
Belief: Rather Luck	0.19*** (0.05)	0.16** (0.05)	0.17** (0.05)	0.08 (0.07)
Belief: Rather Merit	0.06 (0.05)	-0.08 (0.05)	0.05 (0.05)	-0.11 (0.06)
Belief: Merit	-0.19*** (0.05)	-0.40*** (0.05)	-0.02 (0.06)	-0.33*** (0.05)
Diff (Egalitarian - Libertarian)	0.644	0.801	0.476	0.650
p	< 0.001	< 0.001	< 0.001	< 0.001
p (Diff = Diff)	p=0.172		p=0.187	
Diff (Belief: Luck - Belief: Merit)	0.727	0.836	0.553	0.662
p	< 0.001	< 0.001	< 0.001	< 0.001
p (Diff = Diff)	p=0.277		p=0.324	
Income Decile FE	Yes	Yes	Yes	Yes
Socio-Demographics	Yes	Yes	Yes	Yes
Observations	4647	4454	3248	3842
R^2	0.124	0.127	0.198	0.111

Notes: OLS estimates with robust standard errors in parentheses. Dependent variable: support for redistribution (standardized first principal component of all policy preferences). Reference category for fairness preference types: “Others”. Controls include socio-demographics (age, gender, education dummies) and income decile fixed effects. The p-value of (Diff = Diff) refers to testing for equality of estimated differences between columns, e.g. columns (1) and (2).

*** p<0.001, ** p<0.01, * p<0.05

Table D7: Result 3 in Europe: By Country - Low Income vs High Income

	Dep Var: Support for Redistribution									
	Sweden		Norway		Germany		Czechia		Flanders	
	Low (1)	High (2)	Low (3)	High (4)	Low (5)	High (6)	Low (7)	High (8)	Low (9)	High (10)
Fairness Preference Types										
Egalitarian	0.49*** (0.11)	0.44** (0.16)	0.26** (0.09)	0.21 (0.15)	0.14 (0.10)	0.18 (0.11)	0.47* (0.20)	0.37* (0.16)	0.30* (0.13)	0.19 (0.11)
Libertarian	-0.25 (0.15)	-0.83*** (0.13)	-0.35** (0.12)	-0.68** (0.23)	-0.42* (0.17)	-0.37* (0.19)	-0.44** (0.16)	-0.45*** (0.10)	-0.32 (0.20)	-0.46** (0.17)
Meritocrats: Belief Types										
Belief: Luck	0.81*** (0.10)	0.67*** (0.13)	0.42*** (0.09)	0.48** (0.16)	0.45*** (0.11)	0.61*** (0.12)	0.28 (0.15)	0.13 (0.11)	0.55*** (0.11)	0.27* (0.13)
Belief: Rather Luck	0.36*** (0.10)	0.42** (0.13)	0.26* (0.11)	0.09 (0.14)	0.29** (0.10)	0.26* (0.11)	0.16 (0.12)	0.07 (0.09)	0.10 (0.10)	0.13 (0.11)
Belief: Rather Merit	0.19 (0.11)	-0.07 (0.12)	0.00 (0.09)	-0.15 (0.14)	-0.10 (0.11)	0.06 (0.10)	-0.18 (0.13)	-0.16 (0.08)	0.15 (0.12)	0.06 (0.09)
Belief: Merit	-0.20 (0.14)	-0.68*** (0.13)	-0.35** (0.12)	-0.30* (0.15)	-0.07 (0.12)	-0.24 (0.12)	-0.31 (0.17)	-0.37*** (0.10)	0.13 (0.13)	-0.21 (0.11)
Diff (Egalitarian - Libertarian)	0.743	1.269	0.609	0.887	0.558	0.552	0.911	0.816	0.615	0.648
p	<0.001	<0.001	<0.001	<0.001	0.003	0.008	<0.001	<0.001	0.006	0.001
p (Diff = Diff)	p=0.039		p=0.322		p=0.983		p=0.744		p=0.909	
Diff (Belief: Luck - Belief: Merit)	1.006	1.345	0.765	0.781	0.517	0.852	0.583	0.496	0.420	0.482
p	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.006	<0.001	0.007	0.002
p (Diff = Diff)	p=0.144		p=0.948		p=0.116		p=0.721		p=0.774	
Income Decile FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Socio-demographics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1006	891	1155	619	1076	845	605	1233	805	866
R ²	0.112	0.153	0.067	0.088	0.124	0.105	0.073	0.070	0.101	0.096

Notes: OLS estimates with robust standard errors in parentheses. Dependent variable: support for redistribution (standardized first principal component of all policy preferences). Reference category for fairness preference types: "Meritocrats". Socio-demographics include age, gender, and education dummies. The p-value of (Diff = Diff) refers to testing for equality of estimated differences between columns, e.g. columns (1) and (2).

*** p<0.001, ** p<0.01, * p<0.05

Table D8: Result 3 in Europe: By Country - Left vs Right Voters

	Dep Var: Support for Redistribution									
	Sweden		Norway		Germany		Czechia		Flanders	
	Left (1)	Right (2)	Left (3)	Right (4)	Left (5)	Right (6)	Left (7)	Right (8)	Left (9)	Right (10)
Fairness Preference Types										
Egalitarian	0.35** (0.11)	0.47* (0.22)	0.28** (0.09)	-0.07 (0.12)	0.06 (0.13)	0.55** (0.18)	0.52** (0.20)	0.12 (0.21)	0.25 (0.15)	0.28* (0.11)
Libertarian	-0.24 (0.23)	-0.41*** (0.12)	-0.04 (0.15)	-0.56*** (0.14)	-0.43* (0.21)	-0.24 (0.21)	-0.37** (0.14)	-0.52*** (0.15)	-0.08 (0.21)	-0.43** (0.15)
Meritocrats: Belief Types										
Belief: Luck	0.81*** (0.08)	0.58*** (0.16)	0.43*** (0.10)	0.22 (0.13)	0.48*** (0.10)	0.17 (0.20)	0.03 (0.15)	0.31* (0.14)	0.55*** (0.11)	0.32* (0.14)
Belief: Rather Luck	0.23* (0.10)	0.34** (0.13)	0.22* (0.10)	0.08 (0.12)	0.32** (0.10)	-0.03 (0.20)	0.21 (0.16)	0.04 (0.14)	0.16 (0.11)	-0.03 (0.11)
Belief: Rather Merit	0.17 (0.10)	-0.05 (0.11)	-0.17 (0.11)	-0.04 (0.12)	-0.00 (0.11)	-0.12 (0.18)	-0.02 (0.15)	-0.31*** (0.09)	0.08 (0.10)	-0.00 (0.10)
Belief: Merit	0.06 (0.14)	-0.43*** (0.11)	-0.09 (0.17)	-0.29* (0.12)	0.07 (0.11)	-0.41* (0.18)	-0.33 (0.22)	-0.30* (0.12)	0.18 (0.14)	-0.17 (0.11)
Diff (Egalitarian - Libertarian)	0.596	0.877	0.327	0.490	0.486	0.796	0.891	0.647	0.324	0.709
p	0.016	<0.001	0.048	0.004	0.043	0.003	<0.001	0.011	0.194	<0.001
p (Diff = Diff)	0.404		0.482		0.374		0.470		0.203	
Diff (Belief: Luck - Belief: Merit)	0.750	1.006	0.515	0.507	0.409	0.574	0.360	0.602	0.368	0.490
p	<0.001	<0.001	0.005	0.001	0.003	0.026	0.168	<0.001	0.027	0.003
p (Diff = Diff)	p=0.269		p=0.975		p=0.562		p=0.431		p=0.599	
Income Decile FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Socio-demographics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	742	877	761	849	740	474	437	720	568	922
R ²	0.161	0.136	0.118	0.065	0.217	0.140	0.097	0.115	0.191	0.118

Notes: OLS estimates with robust standard errors in parentheses. Dependent variable: support for redistribution (standardized first principal component of all policy preferences). Reference category for fairness preference types: “Meritocrats”. Socio-demographics include age, gender, and education dummies. The p-value of (Diff = Diff) refers to testing for equality of estimated differences between columns, e.g. columns (1) and (2).

*** p<0.001, ** p<0.01, * p<0.05

E Instructions

Below we provide instructions for all three surveys of our US data collection:

- Wave 1
- Wave 2 (Panel)
- Wave 2 (New Sample)

Instructions shown to all respondents are presented in black text (corresponding to the core modules of our surveys).

Instructions only shown in **Wave 1** are presented in **red text**.

Instructions only shown in **Wave 2** are presented in **blue text**.

Instructions only shown in **Wave 2 (New Sample)** are presented in **green text**.

A dashed line indicates a page break.

Cursive words at the beginning of a question refer to the variable names in our data set.

Dear participant,

welcome to this research study! Please review the following consent form before proceeding with our survey.

DESCRIPTION: You will be asked questions about yourself, personal experiences and your opinions in relation to the coronavirus. Also, you can take decisions in two economic games. The survey will take approximately 12 minutes to complete.

PAYMENT: You will receive a guaranteed participation compensation of \$1.40. Additionally, you will earn a bonus of \$0 to \$1.20, depending on the actions that you and other participants take. Please make sure that you click through to the end of the survey to be redirected to Prolific. We can only recompense participants who give answers to all questions and complete the last page of the study.

RISK AND BENEFITS: The risk to your participation in this online study are those associated with basic surveys including the recall of pleasant or unpleasant past experiences, such as illness and job loss, and mild stress. The benefit to you is the learning experience from participating in a research study. The benefit to society is the contribution to scientific knowledge.

SUBJECT'S RIGHTS: Your participation is voluntary. You have the right to see or withdraw your data at any time. Your responses will be recorded in a completely anonymous way. To secure the transparency of scientific findings, the completely anonymized data set will be published and made available to other researchers.

WARNING: This survey uses a protocol to check that you are responding from inside the U.S. and not using a Virtual Private Server (VPS), Virtual Private Network (VPN) or proxy to hide your country. In order to take this survey, please turn off your VPS/VPN/proxy if you are using one and also any ad blocking applications. Failure to do this might prevent you from completing the study. For more information on why we are requesting this, see this post from TurkPrime (<https://goo.gl/WD6QD4>).

YOU ARE NOT ALLOWED TO USE YOUR MOBILE PHONE.

If you have any questions about this project or if you have a research-related problem, you may contact the principle investigator: Maj-Britt Sterba, by email.

Please indicate, in the box below, that you are at least 18 years old, have read and understand this consent form, and you agree to participate in this research study.

[I agree to participate in this research study]

[Wave 2: Please enter your Prolific ID in case it is not automatically displayed.]

Thank you for your participation in this study! Please read the instructions carefully. You will not be able to go back after you have exited a page.

Please answer the following questions about yourself. This information will only be used for statistical purposes. All your responses are anonymous.

Gender What is your gender? [Male; Female; Other]

Age What is your age? [Open textfield]

State In which state do you currently reside? [Drop-down menu]

County In which county or city county do you currently reside? [Open textfield]

Race Choose one or more races that you consider yourself to be: [White; Black or African American; American Indian or Alaska Native; Asian; Native Hawaiian or Pacific Islander; Other]

Ethnicity Are you Spanish, Hispanic, or Latino or none of these? [Yes; None of these]

Education What is the highest level of education you have completed?
[Less than High School; High School / GED; College Degree; Master's Degree]

Employment status What is your current employment status?
[Employed full-time (35+ hours a week); Unemployed and currently looking for work; Unemployed and not currently looking for work; Student; Retired; Homemaker; Self-employed; Other]

Income What was your family's gross household income in 2019 [*Wave 2: 2020*] in US dollars? [Less than \$20,000; \$20,000 to \$34,999; \$35,000 to \$49,999; \$50,000 to \$74,999; \$75,000 to \$99,999; \$100,000 to \$149,999; More than \$150,000]

Political Ideology Please answer the following question about your political orientation by moving the slider below. In general I am,
[Slider between Liberal left and Conservative right]

----- **Wave 1: Experiment** -----

High Control and Low Control:

We would now like you to read this short text carefully.

The coronavirus continues to spread in the United States. Until today, there have been at least 1,300,000 cases and more than 84,000 deaths, according to data from Johns Hopkins University. All federal states have declared a state of emergency. Forty states closed down all non-essential businesses. Nationwide more than 36,000,000 people have lost their job since mid-March, according to the Department of Labour.

High Control:

We are interested in your experience during the corona pandemic.

Please take one minute of time to write about a personal experience in the last two months in which you felt that you had **control over some aspect of your life**.

For example, did you perform a daily routine or exercise on a regular basis? Did you work on your home or garden? Did you take preventive measures to protect yourself?

Please describe the experience in as much detail as possible.

Low Control:

We are interested in your experience during the corona pandemic.

Please take one minute of time to write about a personal experience in the last two months in which you felt that you had **no control or choice over what happened to you**.

For example, have you been restricted performing your job or going about your daily activities? Did you have to cancel important plans?

Please describe the experience in as much detail as possible.

Baseline:

We would now like you to read this short text carefully.

Did you hear? The genome of the banana has been sequenced, an important development in scientist's efforts to produce better bananas. A look at that genome has revealed curious things, said Mat Peslop-Harrison, a plant geneticist at the University of Leicester in England who was a coauthor of the report published in the journal Nature. For example, there are regions of the banana genome that make them extra sweet and nutritious.

Baseline:

We are interested in your experience with bananas.

Please take one minute to write about your last experience with eating bananas.

Please describe the experience in as much detail as possible.

----- **Wave 1: End of Experiment** -----

----- Wave 2 (New Sample): Experiment -----

Low Control:

We would now like you to read this short text carefully.

The coronavirus continues to spread in the United States. More than 900,000 U.S. citizens were newly infected with the coronavirus in the past week, according to data from Johns Hopkins University. Many federal states have still declared a state of emergency. Since the start of the pandemic, more than 41,700,000 coronavirus cases have been recorded and more than 670,000 people in the U.S. have died after contracting the coronavirus.

Due to the outbreak of the pandemic, the U.S. labour market experienced the highest job losses since the Great Depression. Nationwide more than 20,000,000 people lost their job in the first months of the pandemic, according to the Department of Labor.

Low Control:

We are interested in your experiences during the corona pandemic.

Please take one minute to write about a personal experience during the pandemic in which you felt that you had no control or choice over what happened to you.

Please describe the experience in as much detail as possible.

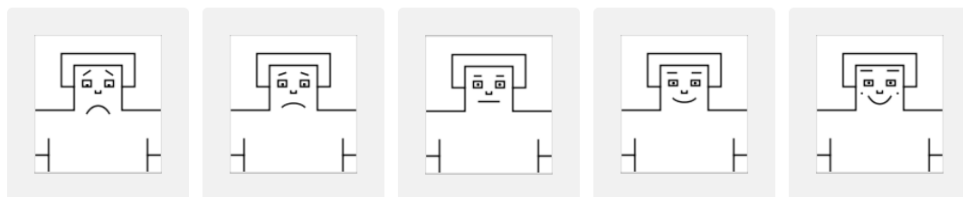
You can proceed to the next page after one minute has passed.

Baseline: Passive control group (no text displayed)

----- Wave 2 (New Sample): End of Experiment -----

Next we would like you to tell us how you feel right now.

Negative affect Which of these pictures best describes your current mood?



Stress To what extent are you feeling stressed at the moment? [Not at all 1; 2; 3; 4; 5; 6; Very much 7]

Fear To what extent are you experiencing the emotion fear at the moment? [Not at all 1; 2; 3; 4; 5; 6; Very much 7]

How close do you currently feel to:

Close 1 People in your country [5-item scale: Not close at all 1 – Very close 5]

Close 2 People in your local community [5-item scale: Not close at all 1 – Very close 5]

Now we would like you to answer some questions about your attitudes regarding personal and societal issues.

Control over life Sometimes people feel they have completely free choice and control over their lives, while at other times they feel that what they do has no real effect on what happens to them.

Please use this scale to indicate how much freedom of choice and control you feel you currently have in your life.

[10-item scale: No control at all 1 – A great deal of control 10]

Beliefs success How would you place your views on the following scale?

1 2 3 4 5 6 7 8 9 10

**In the long run,
hard work usually
brings a better life.** ○ ○ ○ ○ ○ ○ ○ ○ ○ ○

**Hard work doesn't
generally bring success,
it's more a matter of
luck or connections.**

Note: 1 means you completely agree with the statement at the left; 10 means you completely agree with the statement at the right; and if your views fall somewhere in between you can pick any number in between.

Beliefs poverty How would you place your views on the following scale?

1 2 3 4 5 6 7 8 9 10

**Most people are poor
because of laziness or
bad decisions** ○ ○ ○ ○ ○ ○ ○ ○ ○ ○

**Most people are poor
because of bad luck
or an unfair society**

Note: 1 means you completely agree with the statement at the left; 10 means you completely agree with the statement at the right; and if your views fall somewhere in between you can pick any number in between.

[Wave 2:] In the next section, you will take decisions in two types of economic games, let's call them **Task 1** and **Task 2**. You will learn more about the tasks as you proceed with the survey. Please now proceed to the description of **Task 1**.

TASK 1:

In contrast to traditional survey questions that are often about hypothetical situations, your following decisions can have real consequences.

You will now take decisions that can change the earnings of other participants of this research study.

[Check Box] I understand that my decisions can change the earnings of other participants.

A few days ago two individuals, let's call them "workers", have been recruited online to work on a tedious assignment. Both received a fixed participation compensation of \$0.50.

After completing the assignment, they were told that their additional earnings for the assignment would be determined by one of three [Wave 2: two] rules. According to all three [Wave 2: both] rules one worker earns \$4 and the other worker earns \$0.

They were not informed about their outcome nor which rule applies. However, they were told that a third person would be informed about the assignment and the rules, and would be given the opportunity to redistribute the earnings and thus determine how much they would actually be paid for the assignment.

You are the third person and we now want you to choose whether to redistribute the earnings between the workers.

You will take three [Wave 2: two] decisions, one for each rule that could apply. Each of the three [Wave 2: two] rules applies with equal probability. With 25% chance one of your decisions will be implemented.

Note: Your decisions are completely anonymous. The workers will receive their payment within a few days, but will not receive any further information.

Rule #1 [randomized order]:

The workers' earnings are determined by their productivity. The more productive worker earns \$4, and the other worker earns \$0.

Merit If Rule #1 applies, how much of the earnings from the worker that earned \$4 do you want to give to the worker that earned \$0?



Rule #2 [randomized order]:

The workers' earnings are determined by a lottery. The worker winning the lottery earns \$4, and the other worker earns \$0.

Luck If Rule #2 applies, how much of the earnings from the worker that earned \$4 do you want to give to the worker that earned \$0?



[Wave 1: Ambiguity Rule]

Rule #3

With a certain probability, the workers' earnings are determined by a lottery. If there is a lottery, the worker winning the lottery earns \$4, and the other worker earns \$0. If there is no lottery, the more productive worker earns \$4, and the other worker earns \$0.

If Rule #3 applies, how much of the earnings from the worker that earned \$4 do you want to give to the worker that earned \$0?



Probability When taking your previous decision: What probability that the earnings were determined by a lottery did you have in mind? [Slider from 0% to 100%]

Before we continue, we would like you to briefly recall the experience that you have been writing about at the beginning of this study. To what degree did you feel in control in that situation?

Recall Control Please tell us: to what degree did you feel in control in that situation? [10-item scale: Not at all 1 – Very much 10]

TASK 2:

You are now matched with one other participant of this study. Both of you have so far filled out the very same survey and will receive a fixed participation compensation of \$1.40.

In this task you will take one decision that can change your bonus payment and the bonus payment for the other participant that you are matched with.

[Check Box] I understand that my decision can change my bonus payment and that of the other participant.

You have been matched with another participant. One of you will get a bonus of \$1.20, the other one will get no bonus. Who gets the bonus is determined by a lottery.

The one with the bonus of \$1.20 can decide whether to give some amount of the bonus to the participant with no bonus.

Altruism In case that you win the lottery: How much of the bonus of \$1.20 do you want to give to the other participant with no bonus?

0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1 1.1 1.2

in \$



Note: Again, your decision is completely anonymous. The bonuses will be payed out within a few days. You will be informed whether your decision is implemented at the end of the survey.

Now, we would like you to answer some questions about your attitudes in relation to the current coronavirus pandemic, but also to more general questions.

Control beliefs How much control would you say people have over: [5-item scale: No control at all 1 – A great deal of control 5]

- Falling sick to the coronavirus
 - Losing their job or main source of income due to the outbreak of the coronavirus
 - Their health status in general
 - Their financial situation in general
 - Their life in general
-

We will now ask for your attitudes towards measures the federal government and state governments have taken to address the outbreak of the coronavirus policy.

Pandemic support To what degree do you approve or disapprove of the following measures? [5-item scale: Strongly disapprove 1 – Strongly approve 5]

- Economic Impact Payment of 1200\$ per Person
[[Wave 2: Economic Impact Payments](#)]
 - Increase and Expansion of Unemployment Benefits
 - Expansion of Medicaid
 - Paid Sick Leave
-

Redistribution Generally, to what degree do you approve of economic redistribution? [Strongly Disapprove; Rather Disapprove; Neutral; Rather Approve; Strongly Approve]

Universal Health Care Generally, to what degree do you approve of universal health care? [Strongly Disapprove; Rather Disapprove; Neutral; Rather Approve; Strongly Approve]

[Wave 1: Experiences]

In this section we would like you to fill out some information on your current financial situation. Remember, all your answers are anonymous.

Job Loss Have you or a member of your household lost a job or main source of income due to the outbreak of the coronavirus? [Yes; No]

Job Loss Peers How many people do you personally know (family, friends, neighbours, colleagues) that have lost a job or main source of income due to the outbreak of the coronavirus? [None; 1-2; 3-5; 6-10; More than 10]

Income Loss How many percent of your regular household's income do you expect to lose this month due to the outbreak of the coronavirus compared to February 2020? [0%; 0% to 20%; 20% to 40%; 40% to 60%; 60% to 80%; 80% to 100%]

In this last section we would like to ask about your personal exposure to the coronavirus (COVID-19).

Covid Case Have you or a member of your family been tested positively for COVID-19? [Yes; No]

Symptoms Have you or a member of your family showed symptoms associated with COVID-19 like fever, cough or difficulty breathing in the last two months? [Yes; Somewhat; No]

High Risk Do you have a serious underlying medical condition that puts you at higher risk for severe illness from COVID-19? [Yes; No]

Symptoms Peers How many people do you personally know (family, friends, neighbours, colleagues) that showed symptoms associated with COVID-19 like fever, cough or difficulty breathing in the last two months? [None; 1-2; 3-5; 6-10; More than 10]

News How frequently have you been consuming information about the outbreak of the coronavirus? [More than 5 times a day; 4-5 times a day; 2-3 times a day; Once a day; Every other day; Once a week; Less than once a week]

[Wave 2: Experiences and Additional Variables]

Dear participant, on top of your fixed payment of \$1.40 and your potential bonus from Task 2 we pay you a [\$1] / [\$0.50] bonus for your time and effort. In the following questions, we will ask about personal experiences that you made during the COVID-19 pandemic. You greatly help our research by providing us with this valuable information. Of course, as in the first part of the survey, all your answers are anonymous.

In this section, we would like to learn about your financial situation.

Job Loss 1 Please remember the first months of the coronavirus pandemic. Have you or has a member of your household lost a job or main source of income in the time period from February 2020 to May 2020? [Yes; No]

Job Loss 2 Please now remember the time after the first wave of the coronavirus pandemic. Have you or has a member of your household lost a job or main source of income since June 2020? [Yes; No]

Income Change How did your gross monthly household income change in the following time periods compared to your gross household income in February 2020 (before the COVID-19 pandemic)?

Note: Your gross household income includes any type of income before taxes (e.g. wages, self-employment income, rental income, retirement income) but excludes government transfers (e.g. unemployment benefits).

- March 2020 until May 2020 [Increased; Stayed the same; Decreased (by up to 20%; Decreased strongly (by 20% to 40%); Decreased drastically (by more than 40%)]
 - June 2020 until today [Increased; Stayed the same; Decreased (by up to 20%; Decreased strongly (by 20% to 40%); Decreased drastically (by more than 40%)]
-

Unemployment Benefits Did your household receive **unemployment benefits** in the following time periods?

- March 2020 until May 2020 [Yes; No]
- June 2020 until today [Yes; No]

Transfers Please try to estimate roughly **how much** government transfers your household received in total in the following time periods.

Note: Government transfers include unemployment benefits, economic impact payments and any other public assistance or welfare payments.

- March 2020 until May 2020 [None; Less than 2,500\$; 2,500\$ to 5,000\$; 5,000\$ to 10,000\$; More than 10,000\$]
- June 2020 until today [None; Less than 2,500\$; 2,500\$ to 5,000\$; 5,000\$ to 10,000\$; More than 10,000\$]

Job Loss Peers Has someone you are emotionally close to (but who is not a member of your household) **permanently** lost his or her main source of income due to the COVID-19 pandemic? [Yes; No]

In this section, we would like to learn about your personal exposure to COVID-19.

Covid Case Have you or has someone emotionally close to you been *tested positively* for COVID-19? [Yes; No]

If *Covid Case* = yes:

Severe Covid Case Did you or someone emotionally close to you have a *severe case* of COVID-19? [Yes; No]

If *Covid Case* = yes:

Covid Case 2 You stated that you or someone emotionally close to you was tested positively for COVID-19. Were any of these tests carried out *since June 2020*? [Yes; No]

If *Severe Covid Case* = yes:

Severe Covid Case 2 You stated that you or someone emotionally close to you had a severe case of COVID-19. Did any of these severe cases of COVID-19 happen *since June 2020*? [Yes; No]

Overall exposure What would you say, how much have you been affected by the outbreak of the coronavirus compared to the average American? [Much less; Somewhat less; Somewhat more; Much more]

Now we would like to ask some more questions about yourself and your opinions on politics and society.

Marital status What is your current marital status? [Married; Living with a partner; Widowed; Divorced/Separated; Never been married]

Household size How many people currently live in your household? [1; 2; 3; 4; 5; 6 or more]

Economic Orientation On economic policy matters, where do you see yourself on the liberal/conservative spectrum? [Very liberal; Liberal; Moderate; Conservative; Very Conservative]

Trust in Government How much of the time do you think you can trust the government to do what is right? [Never; Only some of the time; Most of the time; Always]

Vote 2016 Whom did you vote for in the 2016 presidential elections? [Donald J. Trump; Hillary Clinton; Other; I did not vote]

Vote 2020 Whom did you vote for in the 2020 presidential elections? [Donald J. Trump; Joseph Biden; Other; I did not vote]

Social expansion During the COVID-19 pandemic the US has increased spending on social security. Do you think that the US should permanently increase spending on social security, that is, even after the pandemic? [Yes; No; No opinion]

Taxing Rich Do you approve of increasing taxes for rich households to pay for a permanent expansion of the social security system? [Yes; No; No opinion]

[Wave 2 (Panel):]

Covid Statements Now, we give you a few statements about how the COVID-19 pandemic might have changed people's views.

Please read through the statements and select all statements that you agree with. You can select as many statements as you like.

The COVID-19 pandemic made me realize that...

- ... economic inequalities and injustices are inevitable.
 - ... it is unfair if people are in economic need due to no fault of their own.
 - ... I might be in need of financial support at some point in the future.
 - ... it is important to support one another in times of economic need.
 - ... the government can't do much to reduce inequality.
 - ... other [...]
-

Feedback: Is there anything you would like to tell us? This could relate to the topic of the survey, the ease of understanding of the questions or emotional strain that you felt while completing this survey.

All of your feedback is highly appreciated and helps us improve our research.

[*Open text box*]

Please Click the “Next” Button.

Thank you very much for your participation in this research study!

[In Task 2 you have not won the lottery. Your bonus payment (\$0 to \$1.20) depends on the decision of another participant.]

[In Task 2 you have won the lottery and decided to give \$X of your \$1.20 bonus to the other participant.]

[*Wave 2: You also earned a [\$1] / [\$0.50] bonus for your time and effort.*]

You will receive your bonus payment within a few days.

You have to click the “Next” button at the bottom of this screen for your survey to be counted and to be redirected to Prolific.

If you have questions about this research, please contact the principle investigator, Maj-Britt Sterba, via email at sterba@coll.mpg.de.

Sincerely,
Maj-Britt Sterba
Max Planck Institute for Research on Collective Goods

Official Information on COVID-19: You can find official information from the US government here: <https://www.usa.gov/coronavirus>

Information about how to stay safe is provided by the Center for Disease Control and Prevention: <https://www.cdc.gov/coronavirus>

For frequently asked questions see: <https://faq.coronavirus.gov>