

# WHAT EXPLAINS PREFERENCES FOR REDISTRIBUTION? EVIDENCE FROM AN INTERNATIONAL SURVEY

---

## OECD PAPERS ON WELL-BEING AND INEQUALITIES

See all papers in this series

WORKING PAPER No.32

Julien Bonnet,  
Emanuele Ciani,  
Gianluca Grimalda,  
Fabrice Murtin,  
David Pipke

# OECD Papers on Well-being and Inequalities

[www.oecd.org/wise/](http://www.oecd.org/wise/)

The OECD Papers on Well-being and Inequalities Series – managed by the OECD Centre on Well-being, Inclusion, Sustainability and Equal Opportunity (WISE) – features working papers on the measurement agenda for well-being, inclusion, sustainability and equal opportunity as well as papers seeking to deepen the understanding of the drivers of these issues, the ways in which they interact and how they evolve. These papers are prepared by OECD staff, external experts or by outside consultants working on OECD projects.

OECD Working Papers should not be reported as representing the official views of the OECD or of its member countries. The opinions expressed and arguments employed are those of the author(s).

Working Papers describe preliminary results or research in progress by the author(s) and are published to stimulate discussion on a broad range of issues on which the OECD works. Comments on Working Papers are welcomed, and may be sent to [wellbeing@oecd.org](mailto:wellbeing@oecd.org).

This series is designed to make available to a wider readership selected labour market, social policy and migration studies prepared for use within the OECD. Authorship is usually collective, but principal writers are named. The papers are generally available only in their original language – English or French – with a summary in the other.

This document is without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

The release of this working paper has been authorised by Romina Boarini, Director of the OECD Centre on Well-being, Inclusion, Sustainability and Equal Opportunity (WISE).

© OECD 2024



## Attribution 4.0 International (CC BY 4.0)

This work is made available under the Creative Commons Attribution 4.0 International licence. By using this work, you accept to be bound by the terms of this licence (<https://creativecommons.org/licenses/by/4.0>).

**Attribution** – you must cite the work.

**Translations** – you must cite the original work, identify changes to the original and add the following text: *In the event of any discrepancy between the original work and the translation, only the text of original work should be considered valid.*

**Adaptations** – you must cite the original work and add the following text: *This is an adaptation of an original work by the OECD. The opinions expressed and arguments employed in this adaptation should not be reported as representing the official views of the OECD or of its Member countries.*

**Third-party material** – the licence does not apply to third-party material in the work. If using such material, you are responsible for obtaining permission from the third party and for any claims of infringement.

You must not use the OECD logo, visual identity or cover image without express permission or suggest the OECD endorses your use of the work.

Any dispute arising under this licence shall be settled by arbitration in accordance with the Permanent Court of Arbitration (PCA) Arbitration Rules 2012. The seat of arbitration shall be Paris (France). The number of arbitrators shall be one.

WHAT EXPLAINS PREFERENCES FOR REDISTRIBUTION?

# Abstract

Income redistribution differs widely across countries. Several theories have been developed to account for such differences. However, we know little about their relative importance. This paper fills this gap by contrasting the main theories of preferences for redistribution in a unified empirical framework. We implement standardised hypothetical choices of income redistribution in nationally representative samples of Germany, Italy, Japan, Slovenia, the UK and the US. We find that the belief in equal opportunities to get ahead in life is the strongest predictor of demand for redistribution. Surprisingly, higher trust in government correlates with lower demand. The perception of immigrants as a threat also significantly reduces preferences for redistribution, whereas other factors such as self-interest, social capital, and experimentally measured pro-sociality play lesser roles. We uncover significant cross-country heterogeneity; for instance, beliefs in equal opportunities strongly influence redistribution preferences in the US, UK, and Germany but are less impactful elsewhere. Our findings reveal limited variability in how theoretical factors relate to redistribution preferences across socio-demographic groups, with notable exceptions. Attitudes towards immigrants have a stronger influence on redistribution preferences among non-right-wing respondents in the US and Germany. Contrary to previous research, beliefs in equal opportunities show no significant differences by political orientation, indicating a widely accepted, ideologically neutral view of fairness.

# Résumé

La redistribution des revenus varie considérablement d'un pays à l'autre. Plusieurs théories ont été élaborées pour expliquer ces différences, mais nous savons peu de choses sur leur importance relative. Cet article comble cette lacune en opposant les principales théories des préférences en matière de redistribution dans un cadre empirique unifié. Nous mettons en œuvre des choix hypothétiques standardisés de redistribution des revenus dans des échantillons nationaux représentatifs en Allemagne, en Italie, au Japon, en Slovénie, au Royaume-Uni et aux États-Unis. Nous constatons que la croyance en l'égalité des chances pour progresser dans la vie est le meilleur prédicteur de la demande de redistribution. Il est surprenant de constater qu'une plus grande confiance dans le gouvernement est en corrélation avec une demande plus faible. La perception des immigrants comme une menace réduit également de manière significative les préférences pour la redistribution, tandis que d'autres facteurs tels que l'intérêt personnel, le capital social et la pro-socialité mesurée expérimentalement jouent un rôle moins important. Nous montrons qu'il existe une hétérogénéité significative entre les pays ; par exemple, les croyances en l'égalité des chances influencent fortement les préférences en matière de redistribution aux États-Unis, au Royaume-Uni et en Allemagne, mais ont moins d'impact ailleurs. Nos résultats révèlent une variabilité limitée dans la manière dont les facteurs théoriques sont liés aux préférences en matière de redistribution au sein des groupes sociodémographiques, à quelques exceptions notables près. Les attitudes à l'égard des immigrants ont une plus grande influence sur les préférences en matière de redistribution chez les personnes interrogées qui ne sont pas de droite aux États-Unis et en Allemagne. Contrairement aux recherches antérieures, les croyances en l'égalité des chances ne présentent pas de différences significatives en fonction de l'appartenance politique.

# Table of contents

OECD Papers on Well-being and Inequalities	1
Abstract	2
Résumé	3
1 Introduction	5
2. Theoretical predictions	8
3. Data and descriptive statistics	13
4. Empirical analysis	17
5. Discussion of internal and external validity	33
6. Conclusion	35
References	37
<b>FIGURES</b>	
Figure 1. The density of tax progressivity by country	14
Figure 2. Country mean for key variables	16
Figure 3. Contribution of different components to the overall variance	25
Figure 4. Cross-country differences in the association with ideal redistribution	26
Figure 5. Heterogeneity analysis across socio-demographic groups	29
Figure 6. Heterogeneity with respect to political orientation by country	31
Figure 7. Preferences for redistribution in the World Value Survey	35
<b>TABLES</b>	
Table 1. Theoretical predictions	11
Table 2. The role of self-interest	18
Table 3. The role of beliefs in equal opportunities, ethnic attitudes and social capital	19
Table 4. The role of trust in government	20
Table 5. The role of pro-sociality	22
Table 6. Testing competing theories	23
Table 7. Testing competing theories, by country	25

# 1 Introduction

Redistribution is one of the defining features of modern welfare states. Developed countries such as the United States and European democracies redistribute large proportions of their GDP via taxes, transfers, and public goods provision. Yet, there are considerable differences across these countries. In the group of OECD countries, taxes and transfers reduce market income inequality by 59% in Finland to 2% in Mexico (OECD, 2023<sup>[1]</sup>).

In democracies, governmental decisions are expected to largely reflect the demands for redistribution expressed by their citizens through voting (Persson and Tabellini, 2000<sup>[2]</sup>). A substantial body of literature has put forth various potential determinants of redistributive policies, aiming not only to explain cross-country disparities (Alesina and Giuliano, 2011<sup>[3]</sup>) but also the extensive diversity of opinions among citizens of the same country (Alesina, Stantcheva and Teso, 2018<sup>[4]</sup>). Despite the importance of this research question, we are not aware of any attempt to quantify the relative importance of such theories either between or within countries in a unified empirical framework. This is the goal of this paper. Following (Alesina, Stantcheva and Teso, 2018<sup>[4]</sup>), we use a standardised measure of demand for redistribution derived from individual preferences for a tax schedule constrained by budget limits. Such a measure helps alleviate several confounding issues existing in conventional survey questions, where preferences for redistribution are typically confounded with the actual level of inequality in the country and with other attitudinal views.

The basic economic model of rational public choice posits that individuals are solely concerned with their personal incomes. This model predicts that individuals with above-average incomes oppose any form of income redistribution, while those with below-average incomes demand the highest possible redistribution rate to maximise their own incomes, taking into account the negative impact of taxation on labour supply. In democracies with universal suffrage, the equilibrium tax rate is determined by the median voter in the income distribution (Meltzer and Richard, 1981<sup>[5]</sup>). This model has been initially extended by taking into account expected future income prospects (the Prospect Of Upward Mobility – POUM – hypothesis of Benabou and Ok (2001<sup>[6]</sup>)) and risk aversion (Varian, 1980<sup>[7]</sup>). Beyond pure 'pocketbook' motives, the literature has since then shifted its focus toward a wide range of social preferences, beliefs, and attitudes regarding society. In this paper, we examine the following factors: beliefs about the fairness of opportunities for economic mobility (Fong and Luttmer, 2011<sup>[8]</sup>; Alesina, Stantcheva and Teso, 2018<sup>[4]</sup>); attitudes toward immigrants and ethnic minorities (Alesina and Stantcheva, 2020<sup>[9]</sup>), trust in government (Kuziemko and al., 2015<sup>[10]</sup>; Peyton, 2020<sup>[11]</sup>), social capital, trust in others and, more generally, prosociality (Algan, Cahuc and Sangnier, 2016<sup>[12]</sup>). Such theories are discussed in detail in Section 2.

Despite an abundance of empirical studies investigating these determinants, cross-country evidence is currently lacking in several respects. Firstly, most international surveys do not cover the comprehensive array of beliefs and attitudes identified in the literature as relevant for demand for redistribution. This is worrisome as certain beliefs, such as those related to the degree to which merit is rewarded and equal opportunity are granted, may exhibit high correlations with other preferences that, in turn, influence demand for redistribution, such as altruism and reciprocity. Secondly, international surveys often collect demand for redistribution data using very general items that are prone to conflating individual beliefs about the level and sources of inequality. For instance, a widely used question from the World Values Survey

asks respondents whether they agree more with the statement “People should take more responsibility to provide for themselves” or “The government should take more responsibility to ensure that everyone is provided for”. This question conflates a meritocratic attitude, i.e., whether individuals are responsible for their own circumstances, with preferences for government intervention. Moreover, questions that explicitly refer to income redistribution (e.g. agreement with “The government should reduce income differences” in the International Social Survey Programme) seldom impose budget constraints, thereby mixing preferences for the absolute size of government with the degree of progressivity.

To address these limitations, we employ individual-level data from Trustlab, an online survey of representative samples drawn from the populations of Germany, Italy, Japan, Slovenia, the UK and the US. Trustlab encompasses (i) a measure of redistribution based on desired income tax schedules within a budget constraint; (ii) a comprehensive assessment of beliefs and attitudes pertinent to preferences for redistribution; and (iii) monetarily incentivized experimental choices to uncover core aspects of pro-sociality, including cooperation, reciprocity, altruism, and trustworthiness. These measures enable us to explore the relationship between various preferences, beliefs, and attitudes and preferences for redistribution, as well as to assess their relative weight in six OECD countries.

Our analysis points to beliefs in equal opportunities to get ahead in life as the overall strongest predictor of demand for redistribution. The stronger the belief that anyone working hard can climb up the economic ladder, the lower demand for redistribution. Trust in government comes second as a single predictor in terms of importance. Perhaps surprisingly, individuals who trust their government are *less* inclined to demand higher redistribution through taxes. This finding contrasts with part of the literature (Kuziemko and al., 2015<sup>[10]</sup>), but aligns with the idea that if one perceives the political apparatus as corrupt and inefficient, the case for rectifying inequality through redistribution becomes more compelling (Alesina and Angeletos, 2005<sup>[13]</sup>). Most other dimensions exhibit roughly equal importance. Self-interest plays some role as current income is a significant predictor of redistribution when entering the analysis on its own. However, it loses significance when expectation of greater financial security – a proxy for the POUM hypothesis – and risk aversion enter the model, both factors being negatively correlated with redistribution. Stronger social capital, measured by indicators of social connectedness and the significance attributed to religion, correlates with lower demand for redistribution, presumably because individuals anticipate receiving private assistance from their social networks in case of need. In line with theoretical expectations (Algan, Cahuc and Sangnier, 2016<sup>[12]</sup>; Fong and Luttmer, 2011<sup>[8]</sup>), people who are more prosocial in terms of trust in others, reciprocity and cooperation, demand more redistribution. Beliefs regarding immigrants' cultural integration exhibit relatively lower importance in explaining preferences for redistribution.

We also find that while some theoretical factors have similar effects across countries others vary significantly. Beliefs in equal opportunities is the variable whose effect varies the most across countries. It is a strongly significant predictor of demand for redistribution in the US, Germany, and the UK but has hardly any predictive power in other countries in the sample. Similarly, the coefficient for immigrant threat is significant in the US, Japan, and Germany, but lacks significance in the other three countries.

Our heterogeneity analysis suggests that while the link between preferred redistribution and certain theoretical factors varies across demographic groups, this variation is generally modest and sometimes inconsistent across countries. For instance, in the US and Germany, more favourable views on immigrants' cultural contributions correlate with a more robust demand for redistribution among non-right-wing respondents but not among their right-wing counterparts. One plausible interpretation is that for right-wing individuals, positive attitudes toward immigrants may clash with right-wingers' desire for less redistribution, given that both concepts challenge traditional conservative ideologies (Jost et al., 2003<sup>[14]</sup>; Jost, 2017<sup>[15]</sup>). Conversely, in progressive politics – especially in increasingly diverse European societies similar to the US – favourable views on immigration and multiculturalism coexist with advocacy for redistribution (Fukuyama, 2018<sup>[16]</sup>), rationalizing the existence of amplifying moderation effects between both variables among the non-right-wing respondents.

Conversely, we find no such variations in beliefs about equal opportunity or most other theoretical determinants. This finding diverges from (Alesina, Stantcheva and Teso, 2018<sup>[4]</sup>) but aligns with theories suggesting that 'fairness' in the context of equal opportunity may be a broadly accepted concept that transcends narrow political ideologies (Rawls, 1971<sup>[17]</sup>; Fleurbaey, 1995<sup>[18]</sup>; Roemer, 1998<sup>[19]</sup>). In line with this, both political extremes may find common ground in "equal opportunity" offering potential for policy compromise. This interpretation aligns well with evidence indicating that inequality of opportunity is generally viewed as more unfair than inequality resulting from effort; (Almås et al., 2011<sup>[20]</sup>; Almås, Cappelen and Tungodden, 2020<sup>[21]</sup>; Hufe, Kanbur and Peichl, 2022<sup>[22]</sup>).

Measures of pro-sociality, such as cooperation and altruism, correlate with redistribution preferences and appear largely independent of other factors. In summary, our analysis reveals more significant heterogeneity in the importance of individual theoretical factors across countries than within specific socio-demographic groups.

The paper contributes to a wide empirical literature on the determinants of demand for redistribution, which has typically examined one factor at a time without attempting a comparison of alternative theories (Alesina and Giuliano, 2011<sup>[3]</sup>). Our measure of preferences for redistribution is adapted from Alesina, Stantcheva and Teso (2018<sup>[4]</sup>), who first applied it to the study of how perceptions of social mobility influence demand for redistribution in five Western countries. They find that informing respondents that social mobility is lower than their perception influences only left-wing individuals' demand for redistribution. Few experimental studies have analysed preferences for redistribution in a cross-national or international context. Almås, Cappelen and Tungodden (2020<sup>[21]</sup>) added an experiment into the 2019 Gallup World Poll, in which they recover underlying preferences for equality by asking respondents to choose whether to change the pay gap between two workers in a real-life situation.<sup>1</sup> They also collect people's beliefs about the reason behind inequality, i.e. whether it is due to differences in hard work or in circumstances beyond individuals' control. They find that both preferences and beliefs matter for reported policy attitudes towards government redistribution, and that preferences and beliefs are uncorrelated. They further show that concerns for efficiency are not as relevant as social preferences in shaping preferences for redistribution. In another cross-national experimental study, Grimalda et al. (2023<sup>[23]</sup>) find higher tolerance of inequality in the US and Italy than in Norway and Germany. These differences are driven by the extent to which below-median earners (in the experiment) demand redistribution or allow above-median earners to retain their higher assigned earnings. Rey-Biel, Sheremeta and Uler (2018<sup>[24]</sup>) show that while people in Spain and in the US do not differ in their demand for redistribution when the origin of inequality is known, US Americans attribute inequality to lack of effort significantly more than Spaniards. Nevertheless, this divergence in beliefs does not translate into differences in demand for redistribution. Fehr, Mollerstrom and Perez-Truglia (2022<sup>[25]</sup>) find significant underestimation of one's position in the world's income distribution. Demand for redistribution is roughly similar in the national and world context after people are informed of their position in the world income distribution.

The paper is organized as follows. Section 2 provides an overview of the key determinants of demand for redistribution. Section 3 describes the data. Section 4 provides econometric results relating the different determinants with demand for redistribution. Section 5 concludes.

---

<sup>1</sup> The authors randomly vary the reason why the pay gap was different to begin with (effort vs luck) and the deadweight loss associated with altering the gap. They find that people are less willing to shrink the pay gap when it is due to workers' effort and the cost of redistributing is higher, although the latter matter less.



## 2. Theoretical predictions

In this section, we review the main theoretical accounts that have been put forward to account for preferences for redistribution. We describe the variables used to measure the relative mechanisms in Section 3. In the standard economic model of public choice, economic agents favour redistributive policies if they expect to be net beneficiaries and oppose them otherwise (Meltzer and Richard, 1981). As a result, demand for redistribution should decrease with own income, as usually found in empirical studies.<sup>2</sup> From a cross-country perspective, this model predicts that average demand for progressive taxation should increase with inequality because the median voter falls behind average income when the income distribution becomes more skewed. However, this prediction is often at odds with reality (Alesina, Glaeser and Sacerdote, 2001<sup>[26]</sup>; Dallinger, 2010<sup>[27]</sup>).

Part of the subsequent literature has tried to incorporate a broader view of individuals' self-interest. First, people differ in their degree of risk aversion. As redistribution may serve as an insurance device against income shocks, more risk-averse people should demand more of it (Varian, 1980<sup>[7]</sup>). Second, Benabou and Ok (2001<sup>[6]</sup>) argued that what matters is not only current income but also the expected Prospect Of Upward Mobility (POUM). People with stronger confidence in their future prospects should expect fewer gains from redistribution and therefore demand less of it. The empirical evidence is broadly supportive of the POUM hypothesis.<sup>3</sup>

Going beyond self-interest, a first set of theories focuses on beliefs about social mobility. It has been argued that the beliefs about the fairness of the economic system and the deservedness of welfare benefits recipients have a crucial role in determining demand for redistribution (Alesina and Angeletos, 2005<sup>[13]</sup>; Benabou and Tirole, 2006<sup>[28]</sup>; Alesina and Giuliano, 2011<sup>[3]</sup>). The more one believes that economic success is determined by factors under one's control – such as hard work and ability – rather than by luck, birth, or family connections, the lower the demand for redistribution. Such beliefs may have their origin in personal experiences or inter-generational transmission of family values (Piketty, 1995<sup>[30]</sup>), ideology serving as motivation device (Benabou and Tirole, 2006<sup>[29]</sup>), (historical) indoctrination (Alesina and Fuchs-Schündeln, 2007<sup>[31]</sup>), assumptions on the moral qualities of the rich (Almås, Cappelen and Tungodden, 2020<sup>[22]</sup>). Both surveys (Alesina and Giuliano, 2011<sup>[3]</sup>), in-survey informational experiments (Alesina, Stantcheva and Teso, 2018<sup>[4]</sup>) and experiments (Rey-Biel, Sheremeta and Uler, 2018<sup>[24]</sup>; Almås, Cappelen and Tungodden, 2020<sup>[21]</sup>) have confirmed the importance of these beliefs.

A partly related account concerns racial and ethnic hostility between groups. The key idea is that people from the racial and ethnic majority may decide to “shrink” the size of the welfare state if they realize that the beneficiaries of redistribution are mainly adversary racial or ethnic groups. According to this hypothesis, the larger racial and ethnic fractionalization in the US in comparison to Europe plays a major factor in accounting for differences in demand for redistribution. Racial or ethnic antagonism may be based on a pure “taste” for discrimination, or may rest on a belief that people from other groups are not as hard-working

<sup>2</sup> Most empirical studies on the demand for redistribution look at current individual income in absolute (Alesina and Giuliano, 2011<sup>[3]</sup>; Luttmer, 2001<sup>[32]</sup>) or relative terms (Corneo and Grüner, 2002<sup>[75]</sup>; Isaksson and Lindskog, 2009<sup>[76]</sup>; Rueda, 2018<sup>[45]</sup>). Other studies account for material self-interest by the inclusion of proxy variables for the socio-economic status (Jaime-Castillo and Sáez-Lozano, 2018<sup>[77]</sup>). Typically, studies find that rich persons have a lower demand for redistribution than the poor.

<sup>3</sup> Alesina and La Ferrara (2005<sup>[33]</sup>) show for the US that support for redistribution is indeed negatively affected by future income prospects using panel data to construct objective transition probabilities to account for prospects of upward mobility. Ravallion and Lokshin (2000<sup>[48]</sup>) find lower support for governmental redistribution among people who expect their welfare to fall in the next year. For European countries, Checchi and Filippin (2004<sup>[78]</sup>) offer experimental evidence for the POUM hypothesis by evaluating subjects' demand for redistribution with respect to different income transition matrices. Grimalda et al. (2023<sup>[23]</sup>) also find support for the POUM hypothesis with similar effect sizes in the four countries involved.

as people from one's one group (Cetre et al., 2024<sup>[32]</sup>). Beliefs' heterogeneity might help explain differences in opinions between individuals living in the same country. Evidence from the US suggests the generosity of White people depends on whether they suspect Black people to be overrepresented among transfer recipients (Luttmer, 2001<sup>[32]</sup>; Fong and Luttmer, 2011<sup>[8]</sup>). Economic considerations about immigrants may also matter (Alesina and La Ferrara, 2005<sup>[34]</sup>). Immigration may be perceived as a threat that may overburden the welfare state resulting in weaker preferences for redistribution. Alternatively, natives may fear increased labour market competition leading to stronger demand for redistribution, *ceteris paribus* (Alesina, Murard and Rapoport, 2021<sup>[35]</sup>). Alesina, Stantcheva and Teso (2018<sup>[4]</sup>) find that respondents, on average, hold overly negative views about immigrants' reliance on the welfare state. Providing respondents with an emotionally-laden story about a hard-working immigrant increases support for redistributive politics, while providing hard facts does not.

Another set of relevant factors concerns what we refer to as social capital (Putnam, 2000<sup>[36]</sup>). While social capital is used to define at times different notions, what we mean by social capital is the personal and direct social connections that people have with others. It can be argued that people with more social connections can expect that they will receive help from others in case of need. This supply of "private" insurance might crowd out demand for government redistribution. Being part of a religious community may engender similar effects. Religious individuals may rely more on charity and community assistance to cope with poverty and therefore oppose a government-led intervention (Stegmueller and al., 2011<sup>[37]</sup>). This negative relationship between religiosity and demand for redistribution might, however, also be driven by a cultural factor induced by the historical opposition between church and state.

A third factor pertains to trust in public institutions. Evidence from the United States suggests that low and decreasing trust in government hinders support for redistributive policies (Heterington, 2006<sup>[37]</sup>; Rudolph and Evans, 2005<sup>[38]</sup>). Evidence from other countries is not always consistent. Edlund (2006<sup>[39]</sup>) provides evidence suggesting that in Sweden and Norway, those who report less trust in government do not demand lower redistribution, perhaps because widespread support for the welfare state exists in both countries. Evidence from informational experiments is also mixed. While Kuziemko and al.(2015<sup>[10]</sup>) find that respondents who were primed to doubt the integrity of government officials demand less redistribution, Peyton (2020<sup>[11]</sup>) finds that getting respondents to read an article praising public officials' integrity did not change their support for redistribution. Peyton finds that increasing/decreasing people trust in government by providing them with information about civil servants' honesty/corruption does not lead to sizeable and statistically significant changes in demand for redistribution.

In order to better understand the relation with support for redistribution, it is useful to recognize that trust in government is shaped by a complex set of determinants of trust in public institutions, including responsiveness, reliability, openness, fairness and integrity (OECD, 2017<sup>[40]</sup>; Murin and al., 2018<sup>[41]</sup>), which vary extensively across countries (OECD, 2021<sup>[43]</sup>). From a theoretical point of view, the different determinants might relate differently to support for redistributive policies, although some theoretical predictions are ambiguous.

Kuziemko and al. (2015<sup>[10]</sup>) argue that people who do not believe that the government policies are effective might not support expanding redistributive policies. Stantcheva (2021<sup>[43]</sup>) indeed finds that providing people with information about the effectiveness of redistributive tax policies increases their support for them. A stronger belief in government reliability should therefore increase demand for redistribution. However, people might demand less redistribution if they are satisfied with the current level of government responsiveness and reliability, or vice versa. For example, Edlund (2006<sup>[39]</sup>) suggests that, in Sweden, people who distrust the welfare state are concerned by the limited resources dedicated to it, and therefore back increased social spending. Furthermore, those who are, or feel, treated unfairly by other policies might demand more progressive taxation as compensation (Scheve and Stasavage, 2016<sup>[45]</sup>). Conversely, those who find the government open and fair might demand less redistributive taxation.

Beliefs in the integrity of the government might spur demand for redistribution. In fact, civic-minded citizens support a larger welfare state and stronger redistribution if they believe that petty corruption is low, so that that money waste is limited and benefits effectively go to those who need them most (Algan, Cahuc and Sangnier, 2016<sup>[12]</sup>). Beliefs in integrity at the upper echelons of the state, for example related to revolving door practices or corruption linked with big businesses, might instead be negatively related to demand for redistribution. When people perceive less top-tier corruption, they are more likely to believe that income distribution is fair or meritocratic so that there is no need to redistribute (Alesina and Angeletos, 2005<sup>[13]</sup>).

Finally, another set of relevant factors is what we can, in general terms, refer to as pro-sociality. Firstly Algan, Cahuc and Sangnier (2016<sup>[12]</sup>) argue that civic-minded people are more likely to favour a larger welfare state if they believe that others are trustworthy and not likely to cheat. This hypothesis entails that trust in others, propensity to cooperate, and beliefs of trustworthiness may be positively associated with preferences for redistribution. Relatedly, Fong and Luttmer (2011<sup>[8]</sup>) argue that the core idea behind the welfare state is one of reciprocity. Accordingly, people who have contributed to help others in the past gain the entitlement to be helped themselves in the future. This implies that dispositions to reciprocate others' actions should be positively associated with redistribution. Finally, pure altruism, i.e., the propensity to help others without expecting anything in return, is another component of pro-sociality that can be expected to be positively correlated with redistribution, especially when the recipient of help is considered needy and deserving (Rueda, 2018<sup>[46]</sup>).

Fehr, Epper and Senn (2022<sup>[46]</sup>) show that these factors explain preferences for redistribution beyond self-interest and other beliefs. The authors measure social preferences in Switzerland using a series of dictator games and a clustering algorithm that identifies three groups: a group of inequality-averse individuals; another that is concerned about social welfare; and a third composed of selfish individuals. They find that these preferences shape stated support for actual redistributive policies being discussed in Switzerland at the time of survey. The effect of social preferences does not change once beliefs about equal opportunity and other determinants of redistribution are included in the regression. This denotes a tendency to act in the interests of others rather than in the interests of the self.

Table 1 summarizes the different determinants and the mechanisms affecting preferences for redistribution, indicating the variables used to test for such mechanisms.

**Table 1. Theoretical predictions**

Dimension	Factor	Theory	References	Prediction	Test in Trustlab: variable and expected sign
<b>Self-interest: Income and risk aversion</b>	Own current income	Meltzer-Richard	Meltzer and Richard (1981)	Income below average -> More redistribution	Equalised household income -
	Expected income	POUM	Benabou and Ok (2001)	Expected upward mobility -> Less redistribution	Financial security -
	Risk aversion	Public insurance	Varian (1980)	Higher risk aversion -> more demand for insurance -> more redistribution	Risk aversion +
<b>Beliefs in fair opportunities</b>	Perceived social mobility	Meritocratic beliefs	Fong (2001), Alesina and Glaeser (2004)	Stronger beliefs in equal opportunity to get ahead -> Less redistribution	Beliefs in equal opportunities to get ahead in life -
<b>Inter-racial/ethnic attitudes</b>	Beliefs and preferences about people from other racial groups or immigrants	Ethnic fractionalization	Alesina and Stantcheva (2020)	More immigrants or ethnic fractionalization -> less altruistic preference from natives and/or across groups	Immigrants are not a cultural threat +
<b>Social capital</b>	Social connectedness	Supply of private insurance		More connection with other people -> less reliance on welfare state -> less demand for redistribution	Expect. Trustworthiness of others -
					Connected with neighbourhood -
					Frequency of meetings with friends -
	Religiosity	Private insurance	Stegmueller et al. (2011)	Higher integration in religious community -> less dependence on state -> less redistribution	Importance of religion -
	Religiosity	Religious cleavages	Stegmueller et al. (2011)	Religious identity Catholic and Protestant -> conflict church state -> less redistribution	Importance of religion -

WHAT EXPLAINS PREFERENCES FOR REDISTRIBUTION?

<b>Trust in Government</b>	General trust in government	Trust and effectiveness of policies	Kuziemko et al. (2015)	Higher trust in the government -> stronger perceived effect of policies -> more demand for redistribution	Trust in government +
	Government competence (responsiveness – will act upon a complain on quality of service – reliability – will provide in case of a natural disaster)	Trust and effectiveness of policies	Kuziemko et al. (2015)	Higher trust in the government -> stronger perceived effect of policies -> more demand for redistribution	Government reliability +
		Satisfaction with current services		More satisfaction -> less demand for redistribution	Government responsiveness – Government reliability –
	Government openness (considers people’s views)	Compensatory theory	Scheve et al. (2016)	Differential treatment by the state -> demand of compensation through progressive taxation	Government openness –
	Government fairness (treats minorities fairly)	Compensatory theory	Scheve et al. (2016)	Differential treatment by the state -> demand of compensation through progressive taxation	Government fairness –
	Government integrity	Expected fairness of benefits	Algan et al. (2016)	Lower corruption -> public benefits are rightly targeted -> more support/demand for redistribution	Government integrity: Low petty corruption +
Perceived fairness		Alesina and Angeletos (2005)	Lower corruption -> more meritocracy -> less demand for redistribution	Gov. Integrity: Low petty corruption – Gov. Integrity: No revolving doors – Gov. Integrity: No high-level corruption –	
<b>Pro-sociality</b>	Civic-mindedness (Trust in others, cooperation, expected trustworthiness)	More civic-minded people are more willing to redistribute.	Algan et al. (2016)	Higher pro-sociality -> more redistribution	Amount Sent in Trust Game +
					Contribution in Cooperation Game +
					Expected trustworthiness in Trust Game +
Generalized reciprocity	People who have stronger reciprocity attitudes are more inclined to support the welfare state.	Fong et al. (2005)	Higher propensity to reciprocate -> more redistribution	Reciprocity (Slope of the conditional cooperation line derived from cooperation game) +	
Altruism	Higher altruism leads to stronger concern for the poor’s needs.	Konow (2003); Rueda, (2018), Ghigliino et al., (2021)		Altruism (Amount Sent in Dictator Game) +	

### 3. Data and descriptive statistics

#### **Trustlab**

The data come from the OECD's Trustlab project (Murtin and al., 2018<sup>[42]</sup>). Trustlab is an international initiative to study the determinants of trust and social preferences from a cross-country perspective. Data contain more than 1 000 respondents per country chosen to be nationally representative of the population in terms of age, gender, and income. Data collection took place online between November 2016 and February 2020.<sup>4</sup> Our analysis is restricted to the six countries which included the question on preferred income tax schedule: Germany, Italy, Japan (Hanaki et al., 2022<sup>[48]</sup>), Slovenia, the UK, and the US. From the raw sample, we only dropped 25 observations for Germany, for which two experimental variables (cooperation and reciprocity) were not elicited.

Participants first complete a series of economic experiments and implicit association tests (questionnaire and instructions can be found in supplementary material; see also (Murtin and al., 2018<sup>[42]</sup>) for a more detailed presentation). These two modules are followed by a survey aimed at measuring participants' demographic, attitudinal, and personal characteristics.

#### **Demand for redistribution**

We derive our measure of demand for redistribution from a hypothetical task taken from Alesina, Stantcheva and Teso (2018<sup>[4]</sup>), in which participants indicate how to split the tax burden between specific income groups in their country to sustain current public spending. The four groups are the top 1%, the next 9%, the next 40%, and the bottom 50% of the income distribution. Respondents choose tax rates by moving four sliders – corresponding to the four income groups – on the screen. A fifth slider below the other sliders moves simultaneously and turns green when the respondent's choice raises enough revenue. To ensure economically meaningful answers keeping the size of the government fixed, tax rates are restricted to generate a budget for the government between 97% and 103% of the revenue implied by a proportional (flat) tax rate of 25%. Revenues are calculated based on an OECD-average income distribution from the OECD Income Distribution Database.<sup>5</sup> Thus, tax rates are measuring preferred progressivity without being confounded by concerns about the absolute size of the government.

Using answers to this task we derive a measure of *ideal* redistribution for each participant based on the widely used Reynolds-Smolensky index<sup>6</sup> to measure tax progressivity. Such a measure equals the difference between the actual market income Gini for the respondent's country and the Gini index that would result applying the income tax schedule selected by the respondent. The variable has a long tail on the left. To avoid that such values have a strong influence on the estimates, we censor the left tail at -10, which affects 1.5% of the observations.

Figure 1 shows the distribution of *Ideal Redistribution* by country. Negative (positive) values on the x-axis indicate regressive (progressive) redistribution, in which taxation transfers resources from the poor to the rich (from the rich to the poor). Values around the zero indicate proportionality, with no net transfer across

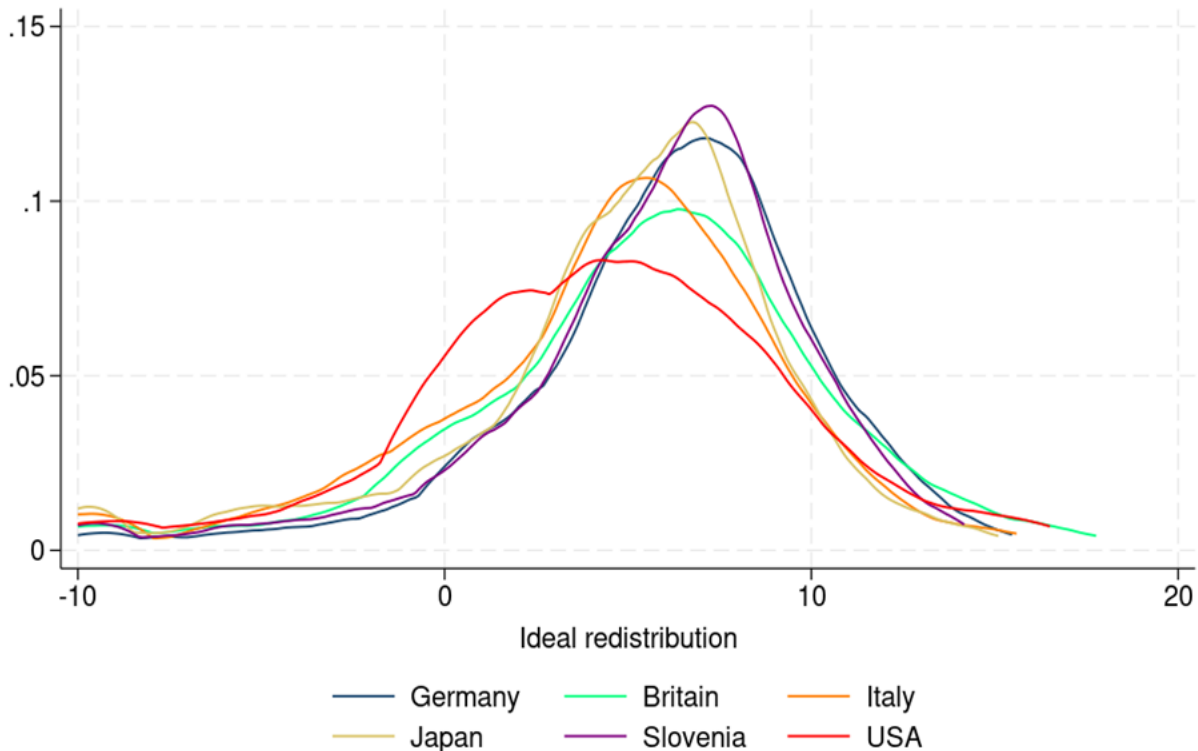
<sup>4</sup> Data collection of the first wave started in November 2016 in France followed by Korea in January 2017. The second wave includes data from Slovenia (April 2017), the US (June 2017), Germany (August 2017), and Italy (November 2017). Data from the UK is from March 2018 and Japanese data is from February 2020.

<sup>5</sup> <https://www.oecd.org/en/data/datasets/income-and-wealth-distribution-database.html>.

<sup>6</sup> This index assumes no re-ranking of individuals between the pre- and post-tax distribution. Under this assumption, the index equals the difference between the Gini for gross (pre-tax, post-benefit) income and the Gini for after-tax income. Intuitively, it captures how much the tax-benefit system reduces inequality.

groups. The mean of the distribution is highest in Germany (6 percentage points) and lowest in the United States (4.3). The other countries span between the two extremes (Slovenia 5.6; United Kingdom 5.5; Japan 4.7; Italy 4.4). However, the within-country variation is much larger than that between countries. Even if the majority of people implement a progressive tax system, which reduces inequality in market income, in all countries a group of respondents implements a regressive system (the negative values for ideal redistribution). The distribution is particularly polarized in the United States, where a larger group of respondents than in other countries demands proportional or mildly regressive taxation.<sup>7</sup>

**Figure 1. The density of tax progressivity by country**



Note: Kernel density distributions using Epanechnikov Kernel and Silverman's rule of thumb for the bandwidth. This graph shows the probability density of the preferred degree of tax progressivity (as measured by the Gini before tax minus Gini after tax) implied by people's self-declared tax rates by income group.

### **Key variables affecting preferences for redistribution**

*Financial security.* — We use respondents' expectations about their household's financial situation in the next year as a proxy for the POUM hypothesis (see, for instance, Ravallion and Lokshin (2000<sub>[48]</sub>)). Surely, one year is too short a horizon for the mechanism behind the POUM hypothesis to manifest its full effects. We believe we are therefore capturing a lower bound of the effect. On average, financial security is highest in the US and lowest in Japan (Figure 2).

*Risk aversion.* — We use answers to the general question about the participant's propensity to take risks taken from (Dohmen et al., 2011<sub>[50]</sub>). Such a survey measure was found to be consistent with experimental

<sup>7</sup> The stronger dispersion in the United States is confirmed by looking at the coefficient of variation, which is 1.19, followed by Italy (1.11), Japan (1.00), the United Kingdom (0.92), Slovenia (0.79) and Germany (0.71).

measures of risk aversion and consistently predict risky behaviour in real life. Average risk aversion follows the opposite pattern to financial security, being the lowest in the US and the highest in Japan.

*Beliefs in fair opportunities.* — We use the question asking respondents to state whether enough opportunities to get ahead in life exist in society. Such beliefs are highest in the US, closely followed by Germany. Both countries show similar mean scores, a result which is in contrast with the so-called “American exceptionalism” hypothesis (Lipset, 1996<sub>[51]</sub>) and with the general US-Europe divide assumed in the comparative literature on preferences for redistribution (Alesina, Glaeser and Sacerdote, 2001<sub>[27]</sub>). In contrast, respondents from Japan are the most sceptical about opportunities to climb up the social ladder through hard work. Respondents from Italy, the UK and Slovenia are located between these two extremes, being somewhat closer to Japan than to the US and Germany.

*Inter-racial/ethnic attitudes.* — We focus on a question asking whether society’s culture is undermined or enriched by immigrants. We interpret this question as a measure of general preferences for ethnic diversity.<sup>8</sup> We observe a positive correlation between a country’s ethnic and racial diversity and the tendency to hold positive views about immigrants in the sample. Respondents from the US hold the most positive views about immigrants concerning their integration and their effect on the culture. At the other end of the spectrum, respondents from more ethnically homogenous Japan and Slovenia have the most negative views about immigrants. Germans and UK respondents are somewhat more favourable toward immigrants than Italians.

*Trust in government.* — Trust in government in its most general form is elicited by simply asking respondents how much they trust the government. Mean scores indicate distrust in all countries. Additional questions capture a complex set of determinants of trust in government, such as the government responsiveness to complaints about the bad quality of public services, reliability in case of a natural disaster, openness to listening the citizens’ opinion before taking a decision, fairness in treating individuals from a minority group, perceptions of corruptibility of improper behaviour by government officials – decomposed into three items: perceptions of a government employee’s propensity to take bribes, of the pervasiveness of “revolving doors”, and of corruptibility of a member of Parliament. The cross-country averages of each driver are consistently related to overall trust in government, although some deviations exist.

*Social capital.* — We use participants’ social connectedness by asking them the frequency of their contacts with friends and the extent to which they feel connected to their neighbourhood. We also measure the degree to which attachment to a religious community could be a form of social capital asking the importance of religion for the participant.

*Pro-sociality.* — We use the monetarily incentivized measures of pro-sociality taken from the experimental module of Trustlab. Several of our measures come from the so-called trust game (Berg, Dickhaut and McCabe, 1995<sub>[52]</sub>), the workhorse to study trust in experimental economics. In this game, two participants are given an initial sum of 10 tokens, whose value was USD 1 in the US and an equivalent sum in other countries. Participant A can transfer all, a part, or nothing from their initial endowment to Participant B. Such an amount is multiplied by 3 and assigned to Participant B. Participant B is then asked which proportion of their endowment (now equal to 10 tokens plus 3 times the amount given by Participant A) they return to Participant A. The Nash equilibrium with rational payoff-maximizing players is the least socially efficient allocation, in which Participant A sends nothing to Participant B and Participant B transfers nothing to Participant A. Nevertheless, only a minority of individuals actually play this strategy. We measure

---

<sup>8</sup> The questionnaire also includes a related question that asks whether the respondent believes that immigrants are integrated. This question has a more complicated interpretation which is not related to the theoretical predictions related to attitudes towards diversity. One may be in favour of immigrants’ integration but believe that immigrants are not actually integrated into society, and think that redistribution might help them integrate. Indeed, when the answer to this question is included in the regression together with the other, its coefficient is negative (more perceived integration is associated with lower redistribution).



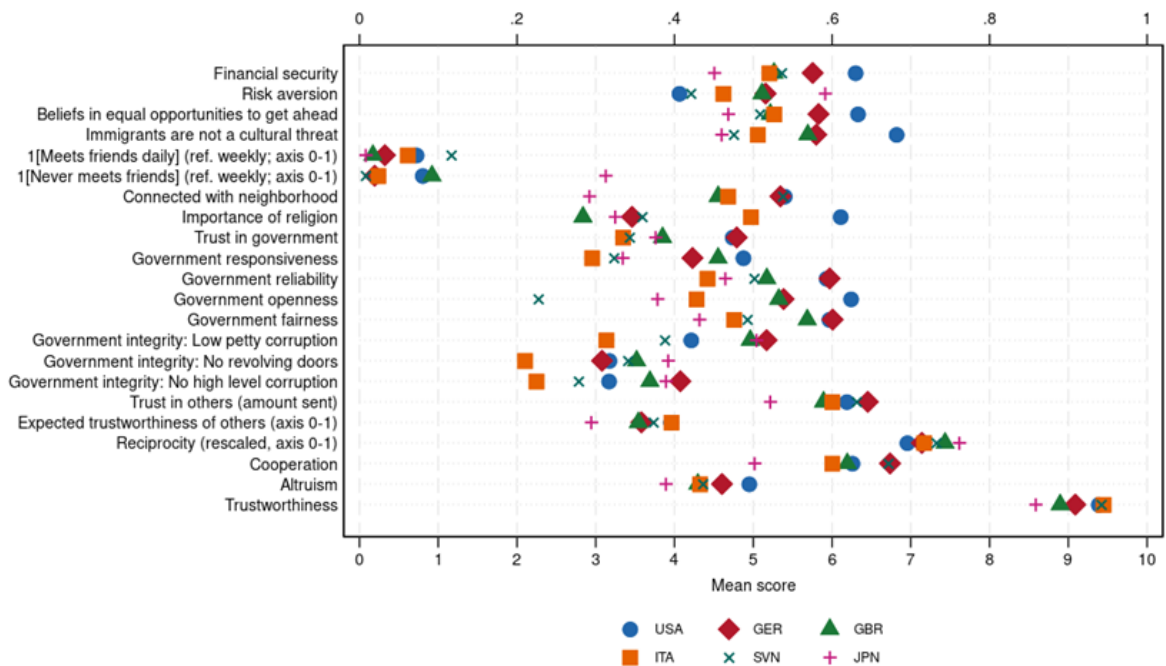
*interpersonal trust* through the amount sent by Participant A to Participant B. *Expected trustworthiness* is the share a participant expects to be sent back from Participant B relative to a fixed amount sent (5 tokens). *Trustworthiness* is the amount sent back (averaged for each possible value sent by Participant A).

We measure *cooperation* through the contribution to the public good in the game devised by Fehr and Gächter (2000<sup>[52]</sup>). Four participants are given an initial endowment of 10 currency units and may contribute it to a “joint project”. The amount contributed by each player is then multiplied by 1.6 and split equally among participants. This makes contributing beneficial for the group but detrimental to the individual’s payoff.

*Reciprocity* is measured through a conditional version of the public goods game. Players are asked how much they would contribute, given each possible average contribution of the three other participants. Reciprocity is the slope of the regression of the amounts contributed by each player on the amounts contributed by other players.

*Altruism* is derived from a standard “Dictator game” (Kahneman, Knetsch and Thaler, 1986<sup>[54]</sup>) in which Participant A sends a part of their endowment to Participant B, without any further action by B. Figure 2 reports country average values for our experimental measure of trust, that is, the amount sent by the first mover in the Trust Game, and expected trustworthiness. We find a relatively small range of variation across countries in our sample, with Japan registering lowest trust and expected trustworthiness than all other countries. The analysis of the other variables is reported in (Murtin and al., 2018<sup>[42]</sup>).

Figure 2. Country mean for key variables



Note: Mean answer score per country. All variables are on a 10-point Likert scales, except for 1[meets friends daily], 1[never meets friend], which are binary variables so the average is a share, expected trustworthiness, which is a share, reciprocity, which has been rescaled for this picture on a 0-1 range as (var-min)/(max-min).

## 4. Empirical analysis

The analysis relates ideal redistribution to the different sets of factors:

$$\begin{aligned} \text{Idealredist}_i = & \beta_0 + \text{SELFINT}'_i \beta_{\text{SELFINT}} + \beta_{\text{EQOPP}} \text{EQOPP}_i + \beta_{\text{IMM}} \text{ATTIMM}_i + \text{SOCCAP}'_i \beta_{\text{SOCCAP}} \\ & + \text{TRUSTGOV}'_i \beta_{\text{TRUSTGOV}} + \text{PROSOCIALITY}'_i \beta_{\text{SOCPPREF}} + X'_i \beta_X + C'_i \beta_C + \epsilon_i \end{aligned}$$

where *SELFINT*, *EQOPP*, *ATTIMM* and *TRUSTGOV* are vectors of variables referring to the different dimensions, i.e. the extended self-interest model (own income, financial security and risk aversion), belief in equal opportunities to get ahead in life, attitudes towards immigrants, social capital, trust in government and pro-sociality factors while *i* indexes respondents. Controls for basic demographic variables *X* and country dummies *C* are also included in all regressions.

We start by introducing the different components separately to provide a detailed discussion of each dimension. We then implement a ‘horse-race’ regression where all factors are included to appraise which factor is most relevant. Finally, we analyse which sets of variables contribute the most to explaining the overall variance in demand for redistribution, and we study the heterogeneity across countries and across demographic characteristics and political preferences.

All main variables (apart from *X*, country dummies, and dummies for the amount of social contacts) are standardized in the overall sample. Therefore, their coefficient can be interpreted as the percentage point change in ideal redistribution associated with a 1-standard deviation change in the variable. In what follows, we exclude observations where the dependent variable is missing, or that have missing values for any of the variables included in that specific regression. This implies that sample size changes across specifications, depending on which variables are included. Given the long list of variables being considered, excluding observations with a missing value in any of the variables can lead to a small sample.

### **Revisiting the median-voter and POUM hypotheses**

As hypothesized, the richest individuals are less in favour of redistribution than the poorest. Those in the top quintile of the income distribution demand 0.53 percentage points less redistribution (p-value 0.004) than those in the bottom quintile of equivalised disposable household income, around 11% of the sample average for the outcome (4.98) (Table 2, column 1).

Yet, future financial prospects and risk aversion matter more than the current economic condition. When adding these two factors in the regression, the effect of current income becomes small and not statistically significant (Table 2, column 2). A 1-standard deviation increase in expected financial security is associated with 0.58 percentage points lower demand for redistribution (p-value 0.000), or 12% of the sample mean, while a 1-standard deviation higher risk aversion is associated with 0.37 percentage higher demand for redistribution (p-value 0.000; 7% of sample mean), thus confirming the POUM hypothesis and the relevance of the insurance motive for redistribution.

**Table 2. The role of self-interest**

Changes in the dependent variable associated with 1 standard deviation change in each variable (or with the switch from the reference category for dummy variables)

	(1)	(2)
	Ideal redistribution (percentage points)	
1[5 <sup>th</sup> quintile household income] (ref. 1 <sup>st</sup> quintile)	-0.53*** (0.18)	-0.21 (0.19)
Financial security		-0.58*** (0.06)
Risk aversion		0.37*** (0.06)
Basic socio-demographics	Yes	Yes
Country dummies	Yes	Yes
Observations	7954	7493
R2	0.03	0.05

Note: OLS regression. Robust standard errors in parenthesis. All the explanatory variables (except for dummies) are standardized. Basic socio-demographics include dummies for: quintiles of equivalent household disposable income (equivalence scale = square root of household size); respondent's upward educational mobility with respect to parents; age group (18-34; 35-49; ref. 50+); female; education (less than secondary; tertiary; ref. secondary); employment status (unemployed; inactive; ref. employed); country native; size of municipality (town; city; ref. rural).

### ***Beliefs in fair opportunities, ethnic relations, and social capital***

Beliefs in equal opportunities strongly correlate with redistributive preferences (Table 3, column 1), in line with existing evidence. A 1-standard deviation stronger confidence in equal opportunities to get ahead in life is associated with a 0.8 percentage point lower desired redistribution (p-value 0.000), approximately 16% of the outcome sample average.

Group-related concerns also matter. Without controlling for other societal beliefs, the respondent's opinion that immigrants are not a cultural threat appears to be uncorrelated with demand for redistribution (Table 3, column 2). However, this result is confounded by the fact that, in our sample, those who believe immigrants are not a cultural threat are also more likely to believe in equality of opportunity. Once we control for this factor (Table 3, column 4), the coefficient on the belief that immigrants are not a cultural threat turns out to be positive and statistically significant (0.24, p-value 0.000; 5% of the sample average). This result aligns with the hypothesis that people are more likely to redistribute within their own group and might oppose redistribution if it benefits culturally distant people.

Moreover, people who are more socially connected with their neighbours and friends demand lower redistribution (Table 3, columns 3 and 4). This finding confirms that when people have confidence that they will get help from others "privately", they demand less redistribution through taxation and benefits. Similarly, those who give more importance to religion, and therefore are more likely to belong to a religious community, tend to prefer lower levels of redistribution. The latter result might also be interpreted as a cultural trait resulting from the opposition between church and state, which leads religious people to be less supportive of state intervention. This cultural explanation cannot be disentangled with our data.

**Table 3. The role of beliefs in equal opportunities, ethnic attitudes and social capital**

Changes in the dependent variable associated with 1 standard deviation change in each variable (or with the switch from the reference category for dummy variables)

	(1)	(2)	(3)	(4)
	Ideal redistribution (percentage points)			
Beliefs in equal opportunities to get ahead in life	-0.80*** (0.06)			-0.70*** (0.06)
Immigrants are not a cultural threat		0.08 (0.06)		0.24*** (0.06)
1[Meets friends daily] (ref. weekly)			-0.56** (0.27)	-0.59** (0.27)
1[Never meets friends] (ref. weekly)			0.12 (0.20)	0.23 (0.21)
Connected with neighbourhood			-0.48*** (0.06)	-0.32*** (0.07)
Importance of religion			-0.34*** (0.06)	-0.27*** (0.06)
Basic socio-demographics (including income)	Yes	Yes	Yes	Yes
Country dummies	Yes	Yes	Yes	Yes
Observations	7620	7325	7587	7325
R2	0.05	0.03	0.05	0.06

Note: OLS regression. Robust standard errors in parenthesis. All the explanatory variables (but dummies) are standardized.

### ***Trust in government***

Higher trust in government is negatively associated with demand for redistribution (Table 4, column 1). A one-standard deviation stronger trust in government is associated with a 0.68 percentage point lower demand for redistribution ( $p$ -value 0.000), approximately 14% of the sample average.

This result contrasts with part of the literature, at least for the United States (Kuziemko and al., 2015<sup>[10]</sup>; (Macdonald, 2019<sup>[55]</sup>)). However, general trust in government is shaped by different determinants of trust in public institutions – responsiveness, reliability, openness, fairness, and integrity (OECD, 2017<sup>[40]</sup>; Murtin and al., 2018<sup>[41]</sup>) – which are likely to relate differently to demand for redistribution. Furthermore, the relevance and magnitude of the different determinants is not homogeneous across countries (OECD, 2021<sup>[43]</sup>).

When we break down trust in government into its possible components, stronger beliefs in government responsiveness and reliability are negatively associated with demand for redistribution (Table 4, column 2). Therefore, those who are more satisfied with the government action demand less redistribution, as found, for instance, by Edlund (2006<sup>[39]</sup>) for Sweden. Similarly, those who believe that the government is more open to people's requests demand less redistribution. This result aligns with the compensatory theory argument, i.e. the idea that people demand more progressive taxation as compensation for the state having privileged a specific social group – the rich – in the past (Scheve and Stasavage, 2016<sup>[45]</sup>). However, beliefs in government fairness per se are unrelated to ideal redistribution.

Respondents who see low levels of low-tier government corruption are more favourable to redistribution. This is in line with the argument made by Algan, Cahuc and Sangnier (2016<sup>[12]</sup>) that people who believe that there is a lower level of cheating in the welfare state are also more likely to support it. At the same time, beliefs in low high-end corruption are associated with lower demand for redistribution. This can be explained by the Alesina-Angeletos model (Alesina and Angeletos, 2005<sup>[13]</sup>), according to which widespread corruption will prompt feelings of unfairness and lead to stronger demand for taxing the rich

and redistributing. If we include all the determinants together with general trust in government (Table 4, column 3), the effect of the latter remains negative but shrinks by almost half.

The large number of covariates in these regressions might be a concern. For this reason, we explore two different regularization methods to select only a subset of determinants of government redistribution. The “Best Subset Selection” (column 4) first chooses the best model (in terms of reducing the RSS) for each possible number of regressors, and then picks the best number of regressors using Akaike’s (AIC) criterion. The “LASSO selection” estimates the model by OLS including only the regressors for which the LASSO algorithm estimates a non-zero coefficient (Table 4, column 5; see also footnote to the table). For both selection methods, the control variables (basic socio-demographics and country dummies) were not subject to selection.

The best subset selection confirms the main results by selecting only the determinants of trust in public institutions that appeared to have a sizeable and statistically significant coefficient. LASSO instead excludes also the government integrity variables. Overall, these results confirm the importance of the different determinants, particularly those related to government responsiveness, reliability, and openness.

#### Table 4. The role of trust in government

Changes in the dependent variable associated with one standard deviation change in each variable (or with the switch from the reference category for dummy variables)

	(1)	(2)	(3)	(4)	(5)
	Ideal redistribution (percentage points)				
Trust in government	-0.68*** (0.06)		-0.36*** (0.08)		
Government responsiveness		-0.62*** (0.09)	-0.54*** (0.09)	-0.63*** (0.09)	-0.61*** (0.09)
Government reliability		-0.15* (0.08)	-0.05 (0.09)	-0.18** (0.08)	-0.13* (0.08)
Government openness		-0.20** (0.10)	-0.17* (0.10)	-0.21** (0.09)	-0.18* (0.09)
Government fairness		-0.06 (0.08)	-0.00 (0.08)		
Government integrity: Low petty corruption		0.34*** (0.08)	0.31*** (0.08)	0.30*** (0.07)	
Government integrity: No revolving doors		-0.27*** (0.10)	-0.28*** (0.10)	-0.33*** (0.07)	
Government integrity: No high-level corruption		-0.09 (0.11)	-0.04 (0.11)		
Selection				Best Subset	LASSO
Basic socio-demographic (including income)	Yes	Yes	Yes	Yes	Yes
Country dummies	Yes	Yes	Yes	Yes	Yes
Observations	7820	6270	6248	6270	6270
R2	0.05	0.07	0.07	0.08	0.08

Note: OLS regression. Robust standard errors in parenthesis. All the explanatory variables (except dummies) are standardized. Satisfaction with government is the average across seven dimensions (education, health, transport, welfare, security, culture, environment), ignoring missing values (unless all dimensions missing). The “Best Subset Selection” uses the version implemented by Lindsey and Sheather (2014), based on the leaps-and-bounds algorithm by Furnival and Wilson (1974) (see Becker et al., 2017, for an application). The “LASSO selection” uses the data-driven penalization method allowing for heteroscedasticity proposed by Belloni et al. (2013) and implemented Ahrens et al. (2019). For both selection methods, the control variables (basic socio-demographics and country dummies) were not subject to selection (partialled out for the Lasso).

## Prosociality

Redistributive preferences also depend on the individual propensity to act in the interest of others, which we observe in Trustlab through a series of experimental measures of prosociality. In general, we expect these components to be all positively correlated with demand for more tax progressivity (see Table 2). We focus on the results where all the components are included together (Table 5, column 7), but we also present regressions where each factor is included without the others.

The coefficient on trust in others – as captured by the money sent in the first stage of the trust game – is positive. By contrast, the coefficient on higher expected trustworthiness (the share they expect to receive back) is negative (Table 5, column 3). While the first result aligns with the hypothesis that trusting people are more willing to support redistribution, the latter is contrary to the reverse of the same hypothesis, i.e. that civic-minded people are more likely to favour state intervention if they believe that the others are trustworthy (Algan, Cahuc and Sangnier, 2016<sup>[12]</sup>). One explanation is that expected trustworthiness captures individual beliefs about the presence of private social insurance, similarly to the social capital variables discussed above. If people expect to receive more from others, they might feel privately insured against income shocks, and therefore demand less redistribution from the state. The negative coefficient on expected trustworthiness (0.36 or 7% of the outcome sample average; p-value 0.000) is more than double the one on trust in others (0.17 or 3% of the outcome sample average; p-value 0.009).

The positive and relatively strong coefficient on reciprocity (0.28 or 6% of the sample average; p-value 0.000) is consistent with theory. Similarly, cooperation is positively related with demand for redistribution, although its coefficient is smaller (0.14 or 3% of the sample average; p-value 0.031).

A seemingly surprising result is that pure altruism is negatively associated with ideal redistribution (-0.27 or 6% of the outcome sample average; p-value 0.000). The result is robust as it holds also when the other variables are not included (column 5). Bayesian methods used to classify different types of preferences for redistribution in a representative sample of the Swiss population help identify three different groups. In addition to selfish people and inequality averse people – the latter being people willing to spend money to increase the poor's income or decrease the rich's income – they also find that about a third of the population are characterised by people having altruistic concerns *exclusively* for the worst off. These people are willing to spend some of their money to increase the welfare of the poorest people in the group, but, crucially, they are *not* willing to spend money to reduce the income of the rich. In terms of the Fehr and Schmidt's utility function, this group is characterised by aversion to *disadvantageous* inequality and indifference to *advantageous* inequality. In other words, this group is against the very idea of taking away money from the rich to give it to the poor. This type of preferences is consistent with Charness and Rabin (2002<sup>[55]</sup>) model, which posits that individuals' utility depends on their own income, the sum of incomes in a group, and the income of the worst-off in the group. It is also consistent with other-regarding CES-preferences that incorporate an equity-efficiency trade-off as modelled by Fisman (2015<sup>[56]</sup>). In additional results, we also checked whether this result is driven by more affluent people, but adding financial security to the regression and interacting it with altruism. We find that the higher financial security, the more negative is the marginal effect of altruism (from -0.13 at the 10<sup>th</sup> percentile of financial security to -0.30 at the 90<sup>th</sup> percentile), suggesting that this result is indeed driven by people at the top-end of the income distribution.

The coefficient on trustworthiness is negative but quite small and not statistically significant. This finding is somewhat different from the result of Algan, Cahuc and Sangnier (2016<sup>[12]</sup>), reporting that less civic-minded people are also more favourable to expanding the welfare state. The difference might be related to the fact that our measure of redistribution does not concern the size of government but rather the degree of redistribution conditional on its size.

**Table 5. The role of pro-sociality**

Changes in the dependent variable associated with 1 standard deviation change in each variable (or with the switch from the reference category for dummy variables)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Ideal redistribution (percentage points)						
Trust in others	0.06 (0.06)						0.17*** (0.07)
Expected trustworthiness of others (expected return as share of available sum)		-0.37*** (0.06)					-0.36*** (0.07)
Reciprocity			0.32*** (0.06)				0.28*** (0.06)
Cooperation				0.05 (0.06)			0.14** (0.06)
Altruism					-0.26*** (0.06)		-0.27*** (0.07)
Trustworthiness						-0.10 (0.06)	0.03 (0.07)
Basic socio-demographics	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	7954	7954	7954	7954	7954	7954	7954
R2	0.03	0.03	0.03	0.03	0.03	0.03	0.04

Note: OLS regression. Robust standard errors in parenthesis. All the explanatory variables (but dummies) are standardized.

### **What factors matter the most?**

We include indicators for all theoretical factors analysed in the previous sections in a ‘horse-race’ regression (Table 6, column 1), which enables us to find out the contribution of each theoretical factor keeping all others constant. We only comment on factors that are statistically significant at the 5% level.<sup>9</sup> The factor that proves to be the strongest predictor of demand for redistribution is beliefs in equal opportunities, as a one s.d. increase in this factor is associated with a 0.51 percentage points reduction in redistribution demand (Table 6, column 1). When this factor entered alone in the regression, its coefficient was 0.80 (Table 3, column 1). Therefore, about 36% of the association between beliefs in equal opportunities and redistribution demand is explained away by the correlation between beliefs in equal opportunities and other theoretical factors. The second most relevant factor is general trust in government, for which a one s.d. increase is associated with a 0.34 percentage points reduction in redistribution demand – against a coefficient of 0.68 when trust in government entered the regression alone (Table 4, column 1).<sup>10</sup> This means that 50% of the effect of trust in government is mediated by other theoretical factors. The third most sizable factor is attitudes towards immigrants. A one s.d. increase in the belief that immigrants are not a cultural threat to the country is associated with a 0.29 percentage points increase in redistribution demand. It is noteworthy that the coefficient for attitudes toward immigrants increases threefold in comparison with the regression in which it entered the regression alone (Table 3, column 2). Therefore,

<sup>9</sup> In particular, the variable [Meet friends daily] has a rather large coefficient – i.e., 0.45 – but also a much larger standard error than other variables, so that it is statistically insignificant at conventional levels. Therefore, we do not consider this variable in our analysis.

<sup>10</sup> Introducing different determinants of trust in public institution, rather than the general trust in government variable, also confirms previous results, with the strongest association being the negative one with government responsiveness.

only when controlling for other factors do attitudes toward immigrants turn out as a sizable and significant predictor of demand for redistribution, confirming what already found out in Section 4.2.

Other theoretical factors have a lower coefficient than the three analysed above, most of them remaining statistically significant. This suggests that each of the factors being considered has some predictive power that is independent from other factors. In particular, both financial security – proxying the POUM hypothesis - and risk aversion are significant at  $p < 0.01$  with a sizable coefficient – between 0.18 and 0.22. Among the social capital indicators, being connected with neighbours and the importance of religion are significant at  $p < 0.05$  and their coefficients are 0.16 and 0.15, respectively. Among the prosociality indicators, expected trustworthiness stands out as the strongest predictor, with a coefficient equalling 0.27 and  $p < 0.01$  significance. Trust in others, Reciprocity, Cooperation, and Altruism are also significant at  $p < 0.05$ . It is noteworthy that Altruism keeps its negative sign.

Model selection conducted using Best Subset Selection (Table 6, column 2) or LASSO (Table 6, column 3) leads to similar conclusions about the importance of the various factors. In both cases, beliefs in equal opportunities and general trust in government are the most sizable factors, with coefficient size being virtually unaltered. Notably, attitudes toward immigrants drop out in the LASSO regression, presumably due to the fact that its coefficient is low and insignificant when entering the regression alone. Trust in others and Altruism also drops out of the LASSO regression. We also obtain qualitatively similar results when using an alternative measure of demand for redistribution, namely the difference between the preferred tax rate on the top 1% and bottom 50% income.

**Table 6. Testing competing theories**

Changes in the dependent variable associated with 1 standard deviation change in each variable (or with the switch from the reference category for dummy variable)

		(1)	(2)	(3)	(4)
		Ideal redistribution (percentage points)			
Income, expected financial security and risk aversion	1[5 <sup>th</sup> quintile household income] (ref. 1 <sup>st</sup> quintile)	-0.13 (0.20)	-0.14 (0.20)	-0.13 (0.20)	-0.08 (0.20)
	Financial security	-0.22***	-0.22***	-0.21***	-0.19***
	Risk aversion	0.18*** (0.07)	0.18*** (0.07)	0.18*** (0.07)	0.17*** (0.07)
Beliefs on fair opportunities	Beliefs in equal opportunities to get ahead	-0.51*** (0.07)	-0.51*** (0.07)	-0.50*** (0.07)	-0.46*** (0.07)
Ethnic attitudes	Immigrants are not a cultural threat	0.29*** (0.06)	0.29*** (0.06)		0.19*** (0.07)
Social capital	1[Meets friends daily] (ref. weekly)	-0.45 (0.28)	-0.43 (0.28)		-0.38 (0.27)
	1[Never meet friends] (ref. weekly)	0.15 (0.22)			0.20 (0.22)
	Connected with neighbourhood	-0.16** (0.07)	-0.17** (0.07)	-0.17** (0.07)	-0.13* (0.07)
	Importance of religion	-0.15** (0.06)	-0.15** (0.06)	-0.17*** (0.06)	-0.06 (0.06)
Trust in government	Trust in government	-0.34*** (0.07)	-0.34*** (0.07)	-0.30*** (0.07)	-0.30*** (0.07)
	Trust in others	0.17** (0.07)	0.20*** (0.06)		0.15** (0.07)
Pro-sociality	Expected trustworthiness of others (expected return as share of available sum)	-0.27*** (0.07)	-0.25*** (0.07)	-0.25*** (0.07)	-0.23*** (0.07)
	Reciprocity	0.16***	0.17***	0.19***	0.14**



	(1)	(2)	(3)	(4)
	(0.06)	(0.06)	(0.06)	(0.06)
Cooperation	0.09			0.08
	(0.07)			(0.07)
Altruism	-0.18**	-0.16**		-0.17**
	(0.07)	(0.07)		(0.07)
Trustworthiness	0.02			0.01
	(0.07)			(0.07)
Political attitudes				
Centre (ref. Left)				-0.43***
				(0.15)
Right				-1.34***
				(0.17)
Prefer not to declare political affiliation				-0.41**
				(0.21)
Selection	None	Best subset	LASSO	None
Basic socio-demographics	Yes	Yes	Yes	Yes
Country dummies	Yes	Yes	Yes	Yes
Observations	6727	6727	6727	6727
R2	0.08	0.08	0.08	0.09

Note: OLS regression. Robust standard errors in parenthesis. All the explanatory variables (but dummies) are standardized.

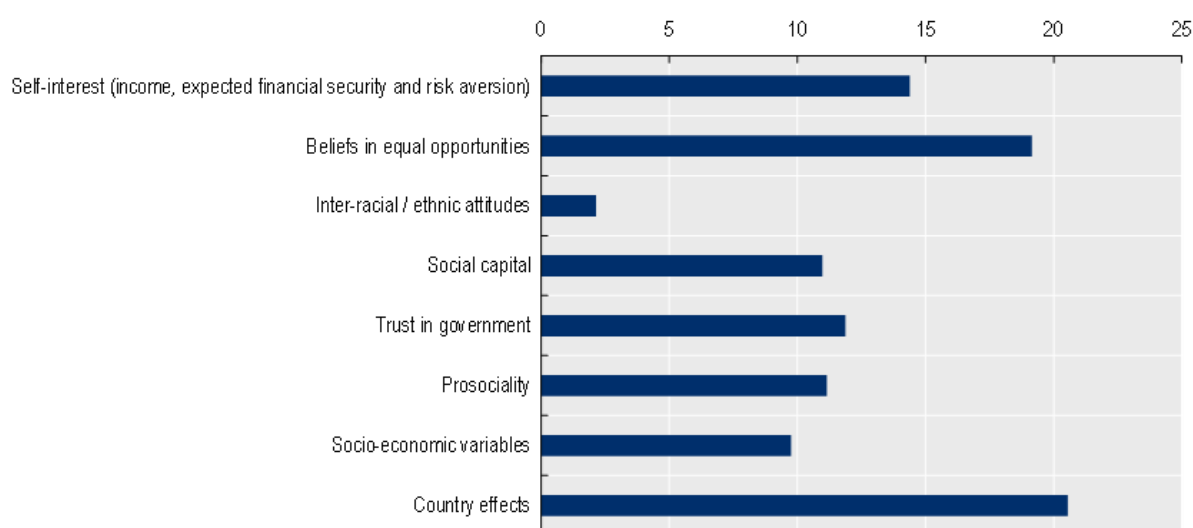
One may argue that such theoretical factors are relevant only in as much as they depend on individual political preferences, arguably a major determinant of preferences for redistribution. The fourth model in Table 6, then, controls for political orientation – originally measured on a 1-10 Likert scale in which the individual is asked to locate its political preference on a scale where 1 means Left and 10 means Right. We introduce dummies capturing political orientation to the right of the spectrum (8 to 10 in the original scale), centre (4 to 7 in the scale) and left (residual category). We also introduce a dummy for those declining to express their political orientation. Coefficients for the key variables analysed above decline only slightly, but maintain their statistical significance. The exception is Religion importance, whose coefficient decreases and is no longer statistically significant (Table 6, column 4).

We also perform a Shapley value decomposition of the explained variance (Figure 3). This analysis identifies the contribution of a theoretical factor aggregating over the various indicators we used. It is not affected by some indicators having only one component while others having multiples. The substantial importance of the belief in equal opportunities in explaining variation in demand for redistribution is confirmed by looking at this decomposition. Slightly more than 1/5 of the total explained variation can be attributed to this factor alone. Trust in government and self-interest motives (expected financial situation and risk aversion) contribute to approximately 15% of the total explained variation, while trust in others (including expected trustworthiness) and beliefs about immigrants' integration explain less than 10%. Social preferences also explain less than 10%. The large contribution of country dummies indicates that large cross-country differences remain explained by other country-related factors. The beliefs about immigrants variable turns out to explain only a large share of the variance. Despite having a similar coefficient as other variables, its own coefficient becomes sizeable only once other factors are included in the regression, and therefore it contributes to explain only a small part of the overall variation.<sup>11</sup>

<sup>11</sup> A standard Pratt's R2 decomposition gives a similar result.

### Figure 3. Contribution of different components to the overall variance

Shapley's decomposition of the  $R^2$



Note: The decomposition is performed on the regression in Table 6, column 1.

### Cross-country differences in factor relevance

We analyse the extent to which different theories hold similarly across countries. We replicate our main econometric model separately in each country (Table 7) and conduct tests on the null hypothesis that coefficients associated with a certain theoretical driver are the same across pairs of countries.

### Table 7. Testing competing theories, by country

Changes in the ideal redistribution (percentage points) associated with 1 standard deviation change in each variable (or with the switch from the reference category for dummy variables)

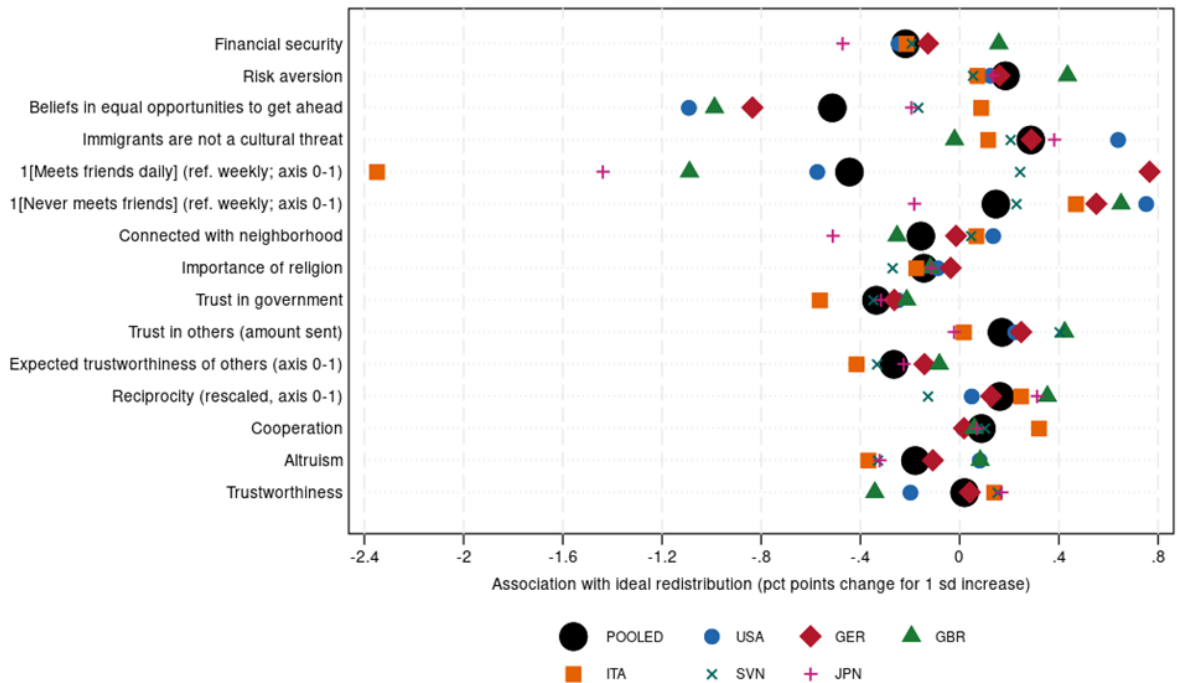
	(1)	(2)	(3)	(4)	(5)	(6)
	USA	DEU	GBR	ITA	JPN	SVN
Financial security	-0.25 (0.19)	-0.13 (0.18)	0.16 (0.19)	-0.21 (0.23)	- 0.47*** (0.14)	-0.19 (0.17)
Risk aversion	0.12 (0.16)	0.16 (0.16)	0.44*** (0.17)	0.07 (0.23)	0.13 (0.11)	0.05 (0.21)
Beliefs in equal opportunities to get ahead	- 1.09*** (0.19)	- 0.84*** (0.17)	- 0.99*** (0.19)	0.09 (0.22)	-0.19 (0.14)	-0.17 (0.18)
Immigrants are not a cultural threat	0.64*** (0.16)	0.29* (0.15)	-0.02 (0.17)	0.11 (0.17)	0.38** (0.15)	0.20 (0.16)
1[Meets friends daily] (ref. weekly)	-0.57 (0.61)	0.77 (0.68)	-1.09 (1.04)	- 2.35*** (0.71)	-1.44 (1.17)	0.24 (0.46)
1[Never meet friends] (ref. weekly)	0.75 (0.70)	0.55 (1.66)	0.65 (0.70)	0.47 (1.47)	-0.18 (0.26)	0.23 (1.48)
Connected with neighbourhood	0.13 (0.19)	-0.01 (0.18)	-0.25 (0.21)	0.07 (0.21)	- 0.51*** (0.14)	0.05 (0.17)

	(1)	(2)	(3)	(4)	(5)	(6)
Importance of religion	-0.09 (0.16)	-0.04 (0.15)	-0.12 (0.18)	-0.18 (0.17)	-0.11 (0.14)	-0.27 (0.17)
Trust in government	-0.25 (0.16)	-0.26 (0.17)	-0.21 (0.19)	- 0.56*** (0.19)	-0.32** (0.13)	-0.35* (0.18)
Trust in others	0.22 (0.18)	0.25 (0.18)	0.42** (0.19)	0.02 (0.20)	-0.02 (0.12)	0.40** (0.18)
Expected trustworthiness of others (expected return as share of available sum)	-0.42** (0.16)	-0.14 (0.19)	-0.08 (0.22)	-0.42** (0.20)	-0.23 (0.15)	-0.33 (0.20)
Reciprocity	0.05 (0.14)	0.13 (0.14)	0.35* (0.19)	0.25 (0.16)	0.31** (0.12)	-0.13 (0.16)
Cooperation	0.01 (0.17)	0.02 (0.18)	0.06 (0.18)	0.32* (0.19)	0.07 (0.12)	0.10 (0.19)
Altruism	0.08 (0.16)	-0.11 (0.18)	0.08 (0.20)	-0.37* (0.21)	-0.32** (0.13)	-0.33 (0.21)
Trustworthiness	-0.20 (0.15)	0.04 (0.17)	-0.34 (0.23)	0.14 (0.21)	0.17 (0.16)	0.15 (0.19)
Basic socio-demographics	X	X	X	X	X	X
Country dummies	X	X	X	X	X	X
Observations	1142	995	933	931	1819	907
R2	0.17	0.08	0.12	0.05	0.08	0.05

Note: OLS regression. Robust standard errors in parenthesis. All the explanatory variables (but dummies) are standardized.

Some theoretical factors have consistent coefficients across countries (Figure 4). The differences in coefficients for risk aversion, importance of religion, trust in government, expected trustworthiness of others and cooperation are relatively small and are never significant in any pairwise country comparison.

Figure 4. Cross-country differences in the association with ideal redistribution



Note: Results are derived from Table 7.

Nonetheless, substantial cross-country differences can be found for other variables. We observe the largest differences for Beliefs in equal opportunities, where the difference in coefficients between the US, Germany, and the UK on the one hand, and Italy, Japan, and Slovenia on the other, are strongly significant in any of the nine pairwise comparisons. In fact, this variable is a strongly significant predictor of demand for redistribution in each of the former three countries but in none in the latter. Similarly, the coefficient for Immigrant threat is strongly significant in the US, significant at  $p < 0.05$  in Japan, and weakly significant in Germany, but is not significant in the other three countries. Accordingly, the coefficient for the US is significantly higher than that for the UK, Italy, and Slovenia and the coefficients for the UK and Japan are also weakly significantly different. Some sizable differences across countries can also be found with respect to Connections with Neighbours. This variable is only strongly significant in Japan, and we observe significant coefficient differences between this country and the US, Germany, and Slovenia. Some differences also emerge with respect to the other variables. In general, each factor is a statistically significant predictor of demand for redistribution in at most three countries (this is the case for Beliefs of equal opportunity, Trust in government, and Immigrant threat), or two countries (as for Trust in others, Expected trustworthiness, and Reciprocity), or one country (as for Financial security, Risk aversion, Meeting with friends, Connection with neighbours, and Cooperation), or no country (all other variables). We conclude that across-country heterogeneity is substantial. Lack of significance in some individual countries may be a false negative that could be overcome with more observations. However, the fact that many pairwise comparisons reveal strongly significant differences of coefficient across countries suggest that different factors may have strong explanatory power in one country but not in another.

## Heterogeneity Analysis

### *Heterogeneity across socio-demographic groups*

We investigate the heterogeneity in the relationship between key theoretical drivers and preferences for redistribution, leveraging interaction terms to elucidate the nuanced influence of select socio-demographic variables. The following equation describes the underlying regressions, in which  $D_{i,j}$  is the theoretical factor  $j$  for individual  $i$ , and  $H_{i,k}$  is the interacting binary indicator capturing the heterogeneity category  $k$  for individual  $i$ . We ran separate regressions for each heterogeneity category  $k$ . We also control for both essential demographic variables  $X_i$ , which are not part of the heterogeneity categories considered, and country dummies  $C_i$ .

$$Ideal\ redist_{i,k} = \beta_0 + \alpha_H H_{i,k} + \sum_j D_{i,j} \beta_{D_j} + \sum_j D_{i,j} H_{i,k} \beta_{DH_j} + X_i' \beta_X + C_i' \beta_C + \epsilon_i$$

The heterogeneity categories' indicators  $H_k$  are (a) Political orientation contrasting right-wing in comparison to non-right-wing respondents, (b) female gender, (c) high income (the fifth quintile of household income in the country's income distribution) in comparison with all other categories, and (d) tertiary education in comparison with the remaining educational attainment categories.<sup>12</sup> Our choice of heterogeneity indicators aligns with key dimensions established in prior research .

Figure 5 describes the different coefficients depending on the interactions with socio-demographic categories. We chose at most two variables for each of the theoretical mechanisms discussed above (see Section 2). In the following, we denote the coefficients of the main effects (interaction effects) of a variable as "b" ( $b \times H$ ).

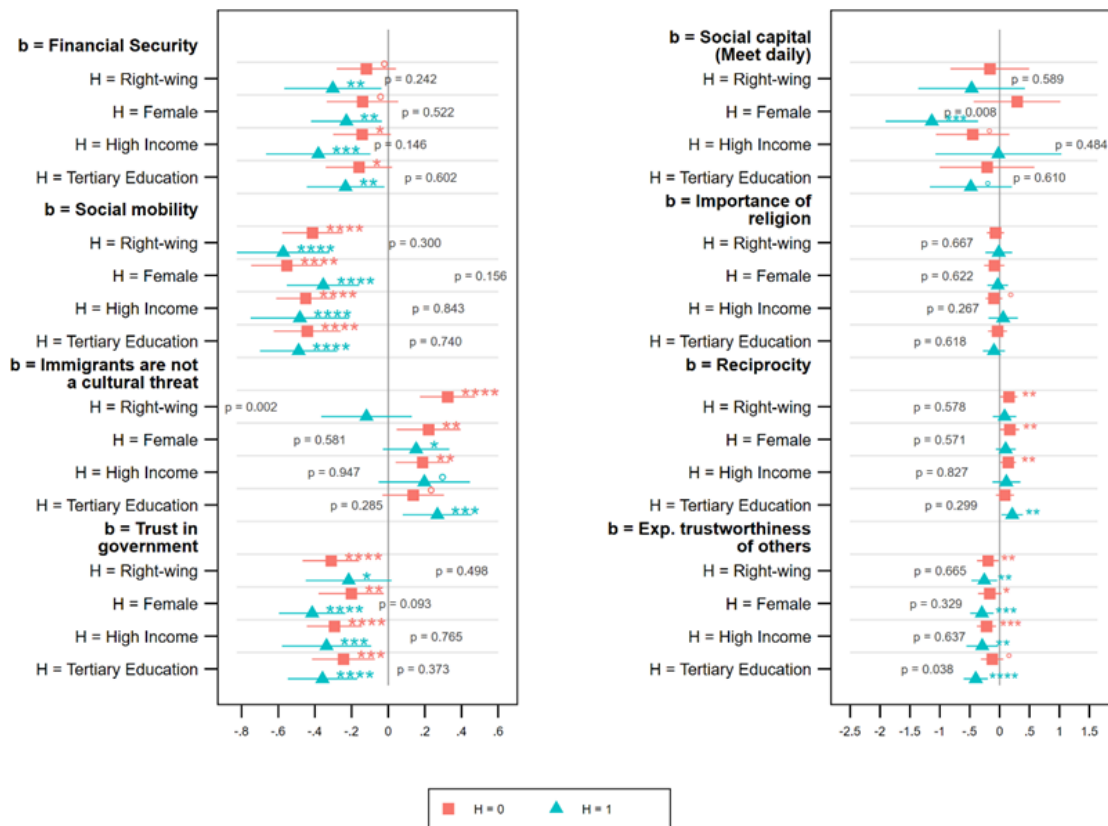
<sup>12</sup> Results are equivalent contrasting additional categories, e.g., high income relative to low income or tertiary education relative to an educational attainment of high school or below.

The results show that most theoretical determinants of preferences for redistribution have relatively similar effects across the considered heterogeneity categories. An exception is the role of perceptions about immigrants. Non-right-wing respondents' favourable views of immigrants correlate significantly with support for redistribution ( $b = 0.324$ ,  $p < 0.001$ ). However, this relationship becomes statistically insignificant among right-wing individuals ( $b = -0.119$ ,  $p\text{-value} = 0.347$ ), revealing a noteworthy ideological divergence ( $b \times H = -0.414$ ,  $p\text{-value} = 0.002$ ). This ideological gap aligns well with existing literature, emphasizing the influence of political orientation on redistributive attitudes.

This finding is congruent with established conservative ideology, which underscores values like uncertainty avoidance, cultural cohesion, and resistance to change while endorsing inequality (Jost et al., 2003<sup>[14]</sup>; Jost, 2017<sup>[15]</sup>). For right-wing individuals, a positive view on immigration and a preference for increased redistribution diverge sharply from these principles. As such, it may not be surprising that a significant moderating effect is absent in this group. In contrast, the interlinked ideals of multiculturalism and economic equality serve as cornerstones of modern progressive politics, likely fostering a mutual amplification between the variables among non-right-wing individuals (Fukuyama, 2018<sup>[16]</sup>). Similarly, the observed outcome may also indicate divergent impacts of varying degrees of universalism (proxied by their attitudes towards immigrants) between political extremes regarding nationwide redistribution. In this context, universalism refers to the breadth of one's moral circle, extending from immediate social networks to broader outgroups. This interpretation aligns with recent research by Enke, Rodríguez-Padilla and Zimmermann (2022<sup>[57]</sup>), demonstrating that the gap between the more universalist left-wing and the less universalist right-wing is less pronounced in local redistribution scenarios than redistribution across larger geographical scales.

The results also show that a high level of social capital significantly dampens preferences for redistribution among females compared to males ( $b = -1.134$ ,  $p\text{-value} = 0.004$  vs.  $b = 0.291$ ,  $p\text{-value} = 0.430$ ), and this gender difference is statistically significant ( $b \times H = -1.425$ ,  $p\text{-value} = 0.008$ ). This finding could be due to females' greater involvement in social relations and communal identity (Mackenzie and Stoljar, 2000<sup>[58]</sup>; Beutel and Marini, 1995<sup>[59]</sup>). Consequently, robust social networks may act as an alternative safety net for females, diminishing the perceived need for state-led redistribution. Financial security, beliefs in equal opportunities to get ahead, trust in government, the importance of religion, and reciprocity do not reveal any heterogeneous effects that are statistically significant at the 5 percent level.

Figure 5. Heterogeneity analysis across socio-demographic groups



Note: Coefficients for the bold-printed theoretical factor on the y-axis from linear regressions. The figure depicts the main effect for H = 0 and the sum of the main effect plus the interaction term for H = 1. Whiskers span the 95% confidence intervals. The P-value was reported for the coefficient difference between H = 0 and H = 1. The base categories (H = 0) are non-right-wing respondents, male gender, a household income in the first four quintiles, and educational attainment of high school or less and some college or other non-tertiary diploma.

In individuals with tertiary education, we find a robust negative correlation between the expectation of others' trustworthiness and preferences for redistribution ( $b = -0.399$ ,  $p < 0.001$ ), which is significantly more pronounced than in those with lower educational attainment ( $b = -0.125$ ,  $p\text{-value} = 0.190$ ;  $b \times H = -0.274$ ,  $p\text{-value} = 0.038$ ). One plausible interpretation is that higher education, often associated with greater social and economic capital (Putnam, 2000<sup>[36]</sup>), may foster beliefs that trust in society substitutes for the need for governmental redistribution due to a more optimistic view of civil society's capacity to replace formal redistributive mechanisms. Alternatively, the highly educated may interpret widespread trustworthiness as an indicator of a functioning meritocracy, thereby mitigating the perceived need for additional redistributive efforts.

Unexpectedly, our data shows no ideological divide in how beliefs in equality of opportunity influence preferences for redistribution (also see the next section). This finding suggests that such beliefs, or more generally, the ideal of equality of opportunity, may serve as a cross-cutting principle of fairness in shaping attitudes toward redistribution irrespective of political leanings. Likewise, variables such as financial security, trust in government, religious importance, and reciprocity show no statistically significant heterogeneous effects along the dimensions we examined, using a 5% significance level as the criterion.

### *Heterogeneity across groups and countries*

We replicate the above analysis country by country, which would be equivalent to a double interaction by socio-economic variable and country dummies in a pooled sample. Figure 6 shows the results for a specific heterogeneity variable, namely political orientation, which delivers the most relevant insights. Regarding other demographic factors such as gender, income, and education, the data reveals minimal cross-country heterogeneity.

We find that the differential impact along the political spectrum of the immigration variable on redistribution preferences varies by country. Consistent with the above analysis, we observe significant differences in the US ( $b \times H = -0.857$ ,  $p = 0.011$ ) and Germany ( $b \times H = -0.934$ ,  $p = 0.027$ ), where non-right-wing respondents exhibit positive, statistically significant coefficients, in contrast to the insignificant negative coefficients among right-wing respondents. In the UK, while the coefficients align directionally with those in the US and Germany, they lack statistical significance and do not differ significantly across political orientation ( $b \times H = -0.519$ ,  $p = 0.160$ ). Japan shows a similar pattern: positive and significant coefficients for non-right-wing respondents ( $b = 0.476$ ,  $p = 0.015$ ) but insignificant ones for right-wing respondents ( $b = 0.098$ ,  $p = 0.698$ ;  $b \times H = -0.378$ ,  $p = 0.233$ ).

Slovenia presents an anomaly; right-wing respondents manifest a higher, almost weakly significant, coefficient compared to non-right-wing respondents ( $b \times H = 0.637$ ,  $p = 0.119$ ). Additionally, the overall effect among right-wingers is positive and significant ( $b = 0.747$ ,  $p = 0.043$ ), whereas it remains marginal and insignificant among their non-right-wing counterparts ( $b = 0.111$ ,  $p = 0.530$ ). In Italy, the effects are statistically indistinguishable between the two groups ( $b \times H = -0.100$ ,  $p = 0.791$ ).

While this paper does not delve into the factors contributing to these cross-country variations, the observed disparities emphasize the need for contextualizing theories of redistributive preferences within specific socio-political and cultural landscapes. Factors such as political polarization, immigration experience, and population diversity could be influential in shaping these outcomes.

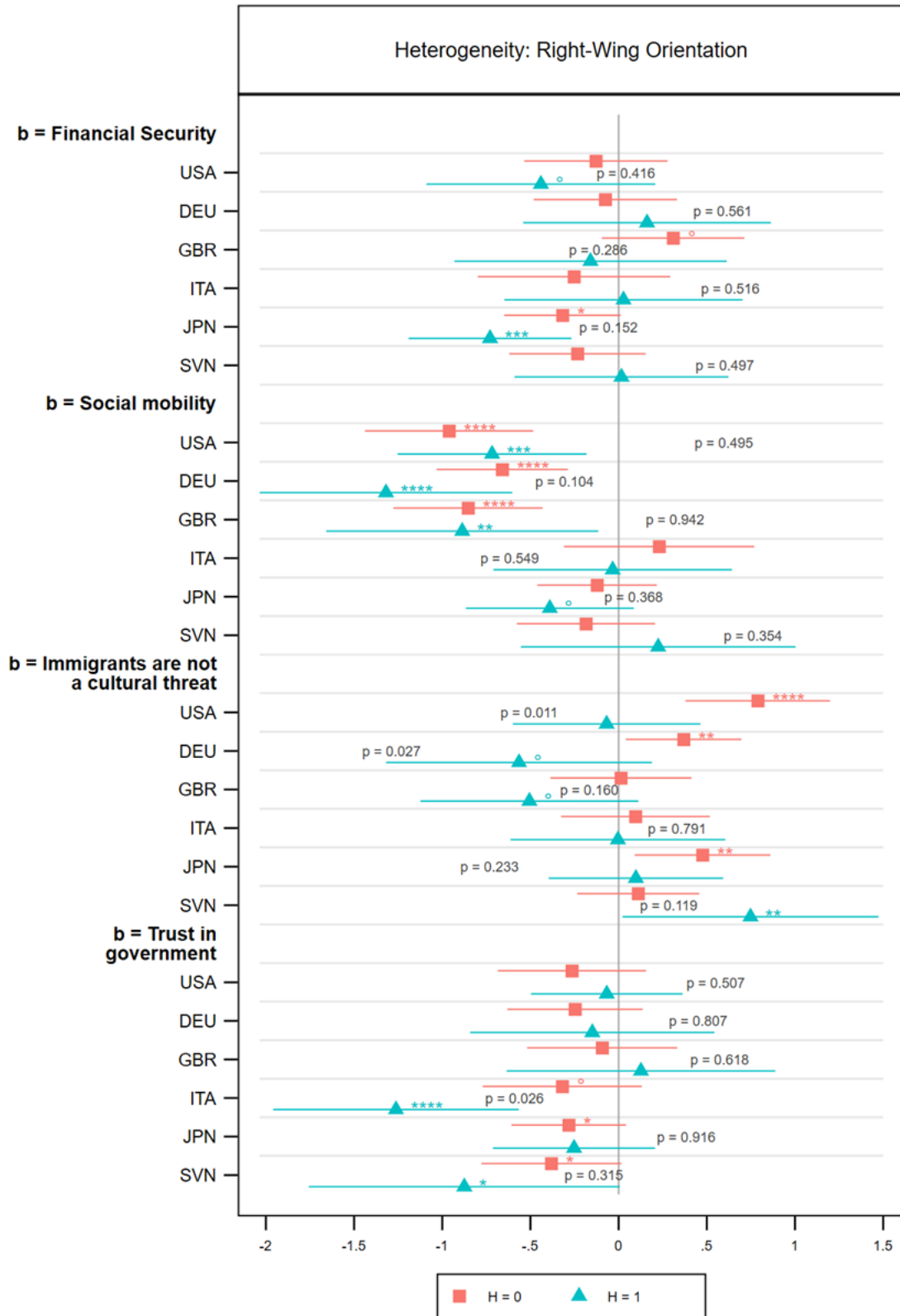
Regarding beliefs in equality of opportunity, no substantial difference exists between right-wing and non-right-wing respondents across countries concerning their association with redistributive preferences. In Germany, the difference approaches marginal significance ( $b \times H = -0.659$ ,  $p = 0.104$ ). This outcome corroborates the pooled analysis, suggesting that equality of opportunity is a broadly accepted fairness metric, shaping attitudes toward redistribution uniformly across political lines and countries.

Political orientation moderates the influence of several additional factors on redistribution preferences in selected countries. In Italy, higher trust in government exerts a significantly stronger negative impact on right-wing respondents ( $b = -1.262$ ,  $p < 0.001$ ) compared to their non-right-wing counterparts, where the effect is small and insignificant ( $b = -0.319$ ,  $p = 0.165$ ;  $b \times H = -0.943$ ,  $p = 0.026$ ). Social capital exhibits similar heterogeneity, exerting a significantly lower impact on redistribution preferences among right-wing Italians ( $b \times H = -3.235$ ,  $p = 0.017$ ). The observed patterns in Italy may be linked to its distinct political context at the time of the survey. It was characterized by escalating populism, governmental instability, and frequent shifts in coalition leading up to the 2018 elections. It is conceivable that right-wingers' reported trust in government may be more regional or local, where conservative authorities predominate rather than national. This localized trust could be consistent with a diminished preference for federal redistribution due to the previously mentioned mechanisms. Additionally, the role of social capital as a substitute for government intervention could be especially pronounced among right-wing respondents within such a highly charged political atmosphere.

In the UK, the reciprocity coefficient is significantly smaller among right-wing than non-right-wing respondents ( $b \times H = -0.888$ ,  $p = 0.027$ ). Conversely, in Slovenia, the expected trustworthiness of others has a more considerable impact on right-wing respondents ( $b \times H = 0.890$ ,  $p = 0.032$ ).

Figure 6. Heterogeneity with respect to political orientation by country

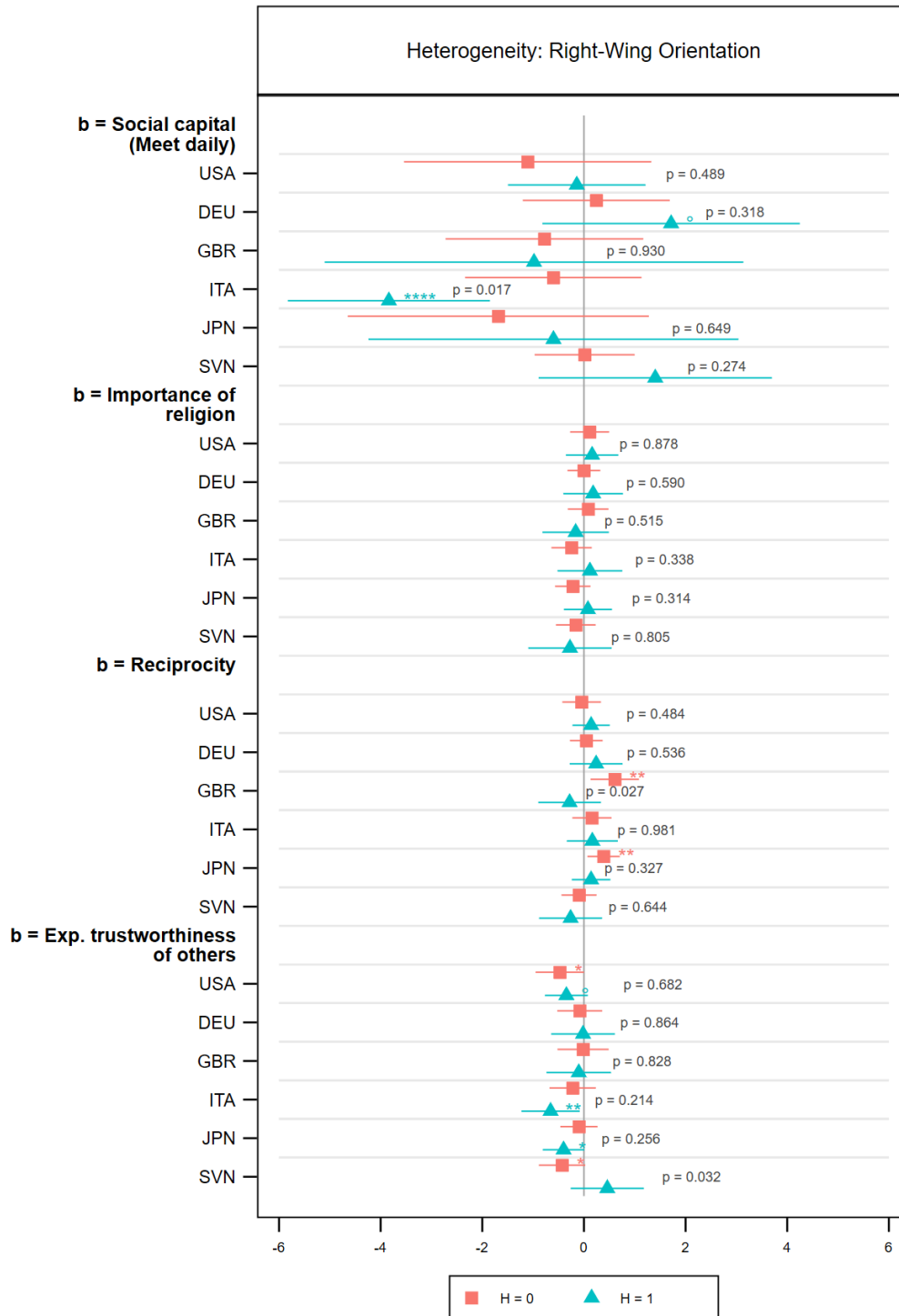
(Panel a)



WHAT EXPLAINS PREFERENCES FOR REDISTRIBUTION?



(Panel b)



Note: P-value reported for the difference in coefficients between H = 0 and H = 1.

## 5. Discussion of internal and external validity

Experiments are normally evaluated in terms of internal and external validity. In our case, internal validity is ensured by the uniform application of identical methodologies across all countries involved. In particular, the same online platform, originally developed by the OECD coordinators and commissioned to a professional IT developer, was used in every country involved in Trustlab (Murtin and al., 2018<sup>[42]</sup>). This aspect ensures that all participants in the study faced exactly the same procedures and survey layout. Instructions were translated from the original English script either by the lead researchers, who are all fluent in English, or by professional translators. Sample recruitment followed the same screening methodology to arrive at nationally representative samples. All these methodological characteristics of our design ensure the maximal comparability of decisions across countries.

Furthermore, we already stressed in the introduction that our main dependent variable comes from a choice that explicitly incorporated a budget constraint into the decision, which is made visually salient and as user-friendly as possible to participants through the use of sliders. Arguably, this aspect represents a major advantage with respect to existing survey questions, which in some cases merely ask whether the government should do more to redistribute, without mentioning any associated costs (Alesina, Stantcheva and Teso, 2018<sup>[41]</sup>).

A potential concern in our study arises from the primary experimental choice being hypothetical, lacking monetary incentives or direct self-interest involvement. It is widely held in economic research that financial incentives linked to the outcomes of subjects' actions are essential for motivating participants to choose actions that reflect their actual preferences, assuming a complete understanding of the environment and no subjective costs from task completion. This perspective often leads to scepticism about the reliability of responses to hypothetical scenarios despite the significance of the questions being explored (Bertrand and Mullainathan, 2001<sup>[61]</sup>). Such incentives are thought to ensure that participant engagement in experiments mirrors real-world economic decision-making behaviours. Indeed, a setup where participants had to redistribute actual funds might have yielded more salient and precise responses. However, although economic journals have traditionally emphasized that experiments should include financial rewards, there is an increasing trend toward using survey-based measures of preferences in large-scale cross-country studies (Falk et al., 2018<sup>[62]</sup>).

Importantly, these studies regularly conducted smaller-scale validations of these survey-based measures before reducing reliance on incentives in their primary investigations. For instance, (Enke, Rodríguez-Padilla and Zimmermann, 2022<sup>[58]</sup>) show that hypothetical questions to measure moral universalism either in terms of altruism or trust and their incentivized alternatives of donation decisions and hypothetical beliefs about others' cheating in a structured cheating game have an equally intertemporal solid correlation over a one-week interval as when using incentivized measures at both time points. Falk et al. (2023<sup>[62]</sup>) introduce two validated survey modules used in the Global Preferences Survey (Falk et al., 2018<sup>[62]</sup>) that assess risk aversion, time discounting, trust, altruism, and positive and negative reciprocity. These modules select survey items based on their predictive power for choices in corresponding incentivized experiments. Correspondingly, Dohmen et al. (2011<sup>[63]</sup>) find that self-reported willingness to take risks significantly correlates with decisions in an incentivized lottery choice experiment.

Moreover, numerous studies comparing both hypothetical and incentivized choices do not report significant differences in behaviour. This observation is supported by a meta-analysis of cooperation games by Balliet, Wu and De Dreu (2014<sup>[64]</sup>). Additionally, Pulford, Colman and Loomes (2018<sup>[65]</sup>) suggest that varying stake sizes do not substantially alter outcomes. In contrast, Slonim and Roth (1998<sup>[66]</sup>), Andersen et al. (2011<sup>[67]</sup>) find that stakes affect rejection rates in ultimatum games. The impact of monetary incentives might also depend on the type of experiment, as Lönnqvist, Verkasalo and Walkowitz (2011<sup>[68]</sup>) demonstrate that financial incentives yield more internally consistent choices in risk choice experiments.

Most relevant to our context, we are not aware of evidence that the absence of monetary incentives systematically influences redistributive choices by an impartial spectator. Consequently, we do not believe this design aspect has significantly affected our results. Furthermore, aiming to capture respondents' genuine preferences for a fair distribution of tax burdens – preferences they would likely uphold in real-world voting scenarios – a hypothetical survey question is arguably more direct than an experiment. Instead, experiments may not fully capture the complex motivations that underpin individuals' opinions on the tax contributions required from different income groups in society.

As for participants' not being affected by their own choices, we believe this is actually an advantage of the design, because “silencing” self-interest enables us to highlight cross-country differences better than what would have otherwise been the case. In fact, what is emerging as the paradigm in experimental economics to study preferences for redistribution (Almås, Cappelen and Tungodden, 2020<sup>[22]</sup>) involves “spectators” decisions (as in our present setting) in which participants are asked to redistribute (real) sums of money between two other “stakeholders”. Arguably, if self-interest mattered in the experimental choice, it would act to increase the transfer to the self, thus obscuring other-regarding motivations. Since self-interest clearly drives decisions in the same way across countries, what really matters in explaining cross-country differences is the specific nature of other-regarding preferences. By focusing on choices that are by construction not self-regarding, therefore, we can better appreciate cross-country differences in behaviour. Admittedly, people from different countries may have different attitudes toward selfishness. That is, we may observe more selfish behaviour in some countries rather than others (Grimalda et al., 2023<sup>[24]</sup>). Therefore, it would be advisable that a study assessing the impact of self-regarding motivations in cross-country comparisons of redistributive preferences complemented the present study in the future.

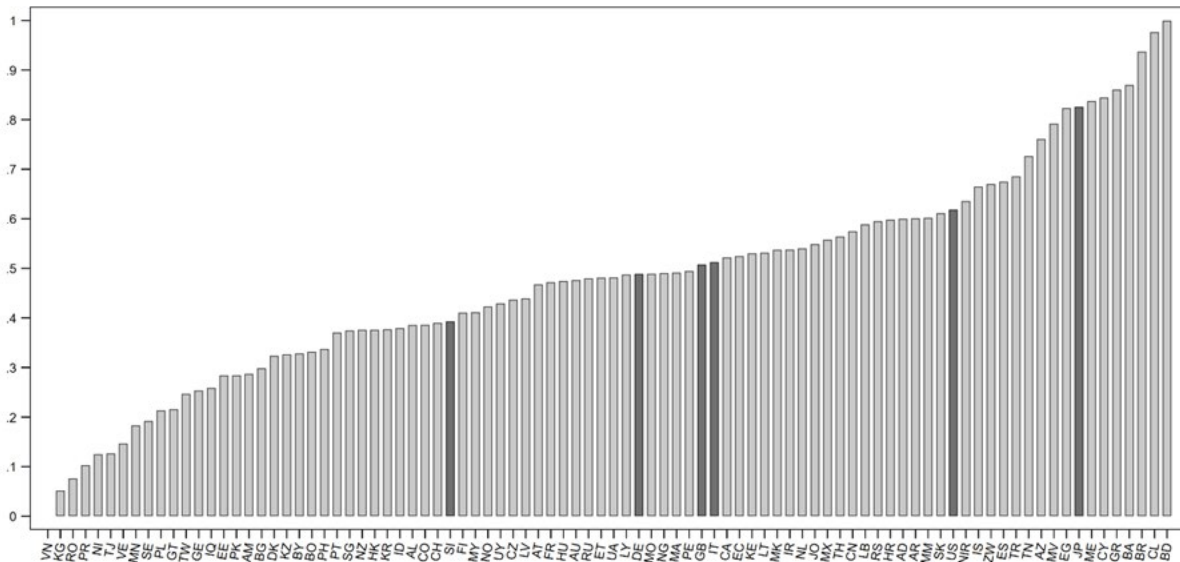
As for external validity, a matter of concern is that the countries included in Trustlab are not representative of the whole variability worldwide, both in terms of level of economic development and cultural variability. It is indeed the case that country selection in Trustlab did not aim at representativeness. Rather, due to budgetary constraints, a general call to participate in the Trustlab project was launched by the OECD coordinators. Research centres from different countries willing to participate in the Trustlab project and cover data collection costs in their own country were included in the project, provided that they could guarantee compliance with the methodological requirements. Even if country inclusion was somehow serendipitous, the six countries included in this study cover about 40% of world GDP at current rates, thus ensuring the economic relevance of our study. Admittedly, the sample is biased towards high-income countries. However, these are also the countries where income redistribution is most relevant, because redistribution in middle-income countries is often negligible and is limited in size, albeit relatively relevant, in low-income countries (Abdullah, Doucouliagos and Manning, 2015<sup>[70]</sup>).

As for cultural variability, the inclusion of Japan ensures that our sample is not limited to Western, Educated, Industrialized, Rich and Democratic (“WEIRD”) countries (Henrich, Heine and Norenzayan, 2010<sup>[71]</sup>), but covers a broad spectrum of worldwide cultural variability. In particular, our sample covers four of the eight cultural areas proposed by Inglehart and Welzel (2005<sup>[71]</sup>) – Anglo-Saxon, Protestant Europe, Catholic Europe, and Confucian.

Using World Value Survey data, in Figure 7 we tried to gauge the worldwide variability in cultural attitudes toward redistribution covered with our six-country sample. We drew on preferences for redistribution measures from the last wave (2017-2022) of the joint European Values Survey and World Values Survey. We took two questions measuring preferences for redistribution and derived the first principal component of such questions. The first question asked the degree to which the participant agreed – on a 10-point Likert scale – with the statement that “Individuals should take more responsibility for providing for themselves” versus “The state should take more responsibility to ensure that everyone is provided for”. The second question asked participants to state whether “Incomes should be made more equal” versus “There should be greater incentives for individual effort”, again using a 10-point Likert scale. These items are commonly employed in analysing attitudes toward redistribution (Alesina and Giuliano, 2011<sup>[3]</sup>;

Haggard, Kaufman and Long, 2013<sup>[72]</sup>). We adjusted the resulting index to a zero-to-one interval by adding the minimum value observed in Vietnam and subsequently dividing it by the maximum value found in Bangladesh.

**Figure 7. Preferences for redistribution in the World Value Survey**



Note: The figure displays average country scores for an index measuring preferences for redistribution, derived from two questions in the joint European Values Survey/World Values Survey conducted across 90 countries between 2017 and 2022. Countries included in the Trustlab are highlighted with darker bars.

This analysis reveals that our Trustlab sample spans a significant portion of the global distribution in redistribution preferences, as 51 out of 90 surveyed countries (56.7%) fall within the Trustlab range. Incidentally, according to the World Value Survey, Slovenia shows the lowest, while Japan exhibits the highest demand for redistribution, while the US, Italy, the UK, and Germany occupy intermediate positions. Moreover, an experiment on income redistribution carried out in China shows Chinese university students having similar preferences to US and European university students (He, Putterman and Wang, 2019<sup>[74]</sup>).

## 6. Conclusion

We provide novel cross-country evidence on theories that can account for preferences for redistribution. Thanks to the unique characteristics of the Trustlab survey, we contribute to the previous literature by studying the relative importance of a comprehensive set of potential determinants, including expected economic conditions, risk aversion, beliefs about equality of opportunity, beliefs about immigrants, trust in others and trust in the government. Unlike most previous literature, we exploit a continuous outcome – the preferred demand for redistribution for a given level of revenue – which does not confound preferences for redistribution with preferences for government size.

Our results show that the belief in equal opportunities to get ahead in life is the strongest single predictor of demand for redistribution. The stronger the belief that hard work leads to economic success, the lower the demand for redistribution. Trust in government is the second strongest single predictor, although contrary to part of the previous literature we find that the higher the trust in government, the lower the demand for redistribution. Aversion against immigrants has a negative coefficient, consistently with the

presence of in-group altruism. The different components making up the dimensions of self-interest (current income, financial security and risk aversion) and social capital (the individual's personal connectedness with others) matter less, although each dimension is important when all components are considered together. Among prosocial factors, trust in others and reciprocity are the strongest factors with a positive association. Expected trustworthiness has a negative coefficient, which can be reconciled with the idea of private insurance, but not with theories based on individual expectations of civic-mindedness. Altruism also has a negative coefficient, a result which can be accounted for by individuals being averse to disadvantageous inequality but indifferent to advantageous inequality.

Importantly, we find relevant variations across countries. The explanatory power of beliefs about equality of opportunity is the strongest in the United States, Germany, and United Kingdom, while it is small and closer to zero in Italy, Japan and Slovenia. Beliefs about immigrants' integration are strongly relevant in the United States but (much) less so in the other countries. Furthermore, our heterogeneity analysis across multiple socio-demographic dimensions, including political orientation for both the entire sample and individual country subsamples, yields two key insights. First, some factors influencing demand for redistribution are group-specific, while others are more universally applicable. For example, attitudes toward immigrants significantly affect redistribution preferences primarily among non-right-wing respondents, most notably in the US and Germany. However, a similar directional trend in coefficients, yet not reaching statistical significance in the comparison of political camps, also exists in other countries. In contrast, factors like beliefs in equal opportunities display no discernible difference across political lines, which suggests ideologically neutral fairness ideals within the countries studied. This finding diverges from part of the existing literature such as Alesina, Stantcheva and Teso (2018<sup>[41]</sup>). Second, variations in the importance of theoretical drivers across these dimensions are generally less pronounced than cross-country differences in their explanatory power.

# References

- Abdullah, A., H. Doucouliagos and E. Manning (2015), "Does education reduce income inequality? A meta-regression analysis", *Journal of Economic Surveys*, Vol. 29, pp. 301–316. [70]
- Alesina, A. and G. Angeletos (2005), "Fairness and Redistribution", *American Economic Review*, Vol. 95/4, pp. 960-980, <http://dx.doi.org/10.1257/0002828054825655>. [13]
- Alesina, A. and N. Fuchs-Schündeln (2007), "Good-Bye Lenin (or Not?): The Effect of Communism on People's Preferences", *American Economic Review*, Vol. 97/4, pp. 1507-1528, <http://dx.doi.org/10.1257/aer.97.4.1507>. [31]
- Alesina, A. and P. Giuliano (2011), *Preferences for Redistribution*, Elsevier, <http://dx.doi.org/10.1016/b978-0-444-53187-2.00004-8>. [3]
- Alesina, A., E. Glaeser and B. Sacerdote (2001), "Why Doesn't the United States Have a European-Style Welfare State?", *Brookings Papers on Economic Activity*, Vol. 2001/2, pp. 187-277, <http://dx.doi.org/10.1353/eca.2001.0014>. [27]
- Alesina, A. and E. La Ferrara (2005), "Preferences for redistribution in the land of opportunities", *Journal of Public Economics*, Vol. 89/5, pp. 897-931, <http://dx.doi.org/10.1016/j.jpubeco.2004.05.009>. [34]
- Alesina, A., E. Murard and H. Rapoport (2021), "Immigration and preferences for redistribution in Europe", *Journal of Economic Geography*, Vol. 21/6, pp. 925-954, <http://dx.doi.org/10.1093/jeg/lbab002>. [35]
- Alesina, A. and S. Stantcheva (2020), "Diversity, Immigration, and Redistribution", *AEA Papers and Proceedings*, Vol. 110, pp. 329-334, <http://dx.doi.org/10.1257/pandp.20201088>. [9]
- Alesina, A., S. Stantcheva and E. Teso (2018), "Intergenerational Mobility and Preferences for Redistribution", *American Economic Review*, Vol. 108/2, pp. 521-554, <http://dx.doi.org/10.1257/aer.20162015>. [4]
- Algan, Y., P. Cahuc and M. Sangnier (2016), "Trust and the Welfare State: The Twin Peaks Curve", *The Economic Journal*, Vol. 126/593, pp. 861-883, <http://dx.doi.org/10.1111/ecoj.12278>. [12]
- Almås, I. et al. (2011), "Measuring unfair (in)equality", *Journal of Public Economics*, Vol. 95/7-8, pp. 488–99. [21]

- Almås, I., A. Cappelen and B. Tungodden (2020), “Cutthroat Capitalism versus Cuddly Socialism. Are Americans More Meritocratic and Efficiency-Seeking than Scandinavians?”, *Journal of Political Economy*, Vol. 128/5, pp. 1753–88. [22]
- Andersen, S. et al. (2011), “Stakes matter in ultimatum games”, *American Economic Review*, Vol. 101/7, pp. 3427-3439. [68]
- Balliet, D., J. Wu and C. De Dreu (2014), “Ingroup favoritism in cooperation: a meta-analysis”, *Psychological Bulletin*, Vol. 140, pp. 1556–1581. [65]
- Benabou, R. and E. Ok (2001), “Social Mobility and the Demand for Redistribution: The Poup Hypothesis”, *The Quarterly Journal of Economics*, Vol. 116/2, pp. 447-487, <http://dx.doi.org/10.1162/00335530151144078>. [6]
- Benabou, R. and J. Tirole (2006), “Belief in a Just World and Redistributive Politics”, *The Quarterly Journal of Economics*, Vol. 121/2, pp. 699-746, <http://dx.doi.org/10.1162/qjec.2006.121.2.699>. [29]
- Berg, J., J. Dickhaut and K. McCabe (1995), “Trust, Reciprocity, and Social History”, *Games and Economic Behavior*, Vol. 10/1, pp. 122-142. [52]
- Bertrand, M. and S. Mullainathan (2001), “Do People Mean What They Say? Implications for Subjective Survey Data”, *American Economic Review*, Vol. 91/2, pp. 67–72, <https://doi.org/10.1257/aer.91.2.67>. [61]
- Beutel, A. and M. Marini (1995), “Gender and Values”, *American Sociological Review*, Vol. 60/3, pp. 436-450. [60]
- Cetre, S. et al. (2024), “Ethnic bias, economic achievement and trust between large ethnic groups: A study in Germany and the U.S”, *Journal of Economic Behavior & Organization*, Vol. 224/C, pp. 996-1021. [32]
- Charness, G. and M. Rabin (2002), “Understanding social preferences with simple tests”, *Quarterly Journal of Economics*, pp. 817–869. [56]
- Checchi, D. and A. Filippin (2004), *An Experimental Study of the POUM Hypothesis*, Emerald (MCB UP ), Bingley, <http://dx.doi.org/10.1016/s1049-2585>. [78]
- Corneo, G. and H. Grüner (2002), “Individual preferences for political redistribution”, *Journal of Public Economics*, Vol. 83/1, pp. 83-107, [http://dx.doi.org/10.1016/s0047-2727\(00\)00172-9](http://dx.doi.org/10.1016/s0047-2727(00)00172-9). [75]
- Dallinger, U. (2010), “Public support for redistribution: what explains cross-national differences?”, *Journal of European Social Policy*, Vol. 20/4, pp. 333-349, <http://dx.doi.org/10.1177/0958928710374373>. [28]
- Dohmen, T. et al. (2011), “Individual Risk Attitudes: Measurement, Determinants, and Behavioral Consequences”, *Journal of the European Economic Association*, Vol. 9/3, pp. 522-550, <http://dx.doi.org/10.1>. [50]
- Dohmen, T. et al. (2011), “Individual Risk Attitudes: Measurement, Determinants, and Behavioral Consequences”, *Journal of the European Economic Association*, Vol. 9/3, pp. 522-550, <http://dx.doi.org/10.1>. [64]

- Edlund, J. (2006), "Trust in the Capability of the Welfare State and General Welfare State Support: Sweden 1997-2002", *Acta Sociologica*, Vol. 49/4, pp. 395-417, <http://dx.doi.org/10.1177/0001699306071681>. [40]
- Enke, B., R. Rodríguez-Padilla and F. Zimmermann (2022), "Moral Universalism: Measurement and Economic Relevance", *Management Science*, Vol. 68/5, pp. 3590–3603, <https://doi.org/10.1287/mnsc.2021.4086>. [58]
- Falk, A. et al. (2018), "Global Evidence on Economic Preferences", *The Quarterly Journal of Economics*, Vol. 133/4, pp. 1645–1692, <https://doi.org/10.1093/qje/qjy013>. [62]
- Falk, A. et al. (2023), "The Preference Survey Module: A Validated Instrument for Measuring Risk, Time, and Social Preferences", *Management Science*, Vol. 69/4, pp. 1935–1950, <https://doi.org/10.1287/mnsc.2022.4455>. [63]
- Fehr, D., J. Mollerstrom and R. Perez-Truglia (2022), "Your Place in the World: Relative Income and Global Inequality", *American Economic Journal: Economic Policy*, Vol. 14/4, pp. 232–68. [26]
- Fehr, E., T. Epper and J. Senn (2022), "Other-regarding Preferences and Redistributive Politics", *Working Papers hal-03506826*, HAL.. [47]
- Fehr, E. and S. Gächter (2000), "Cooperation and punishment in public goods experiments", *American Economic Review*, Vol. 90/4, pp. 980-994. [53]
- Fisman, R. (2015), "The distributional preferences of an elite", *Science*, Vol. 349/6254, p. aab0096. [57]
- Fleurbaey, M. (1995), "Equal Opportunity or Equal Social Outcome?", *Economics and Philosophy*, Vol. 11/1, pp. 25–55. [18]
- Fong, C. and E. Luttmer (2011), "Do fairness and race matter in generosity? Evidence from a nationally representative charity experiment", *Journal of Public Economics*, Vol. 95/5, pp. 372-394, <http://dx.doi.org/10.1016/j.jpubeco.2010.07.010>. [8]
- Fukuyama, F. (2018), *Identity. The Demand for Dignity and The Politics of Resentment*, Farrar, Straus and Giroux. [16]
- Grimalda, G. et al. (2023), "Why do preferences for redistribution differ across countries? An experimental analysis", *Kiel Working Paper*, Vol. 2230. [24]
- Haggard, S., R. Kaufman and J. Long (2013), "Income, Occupation, and Preferences for Redistribution in the Developing World", *Studies in Comparative International Development*, Vol. 48/2, pp. 113–140, <https://doi.org/10.1007/s12116-013-9129-8>. [73]
- Hanaki, N. et al. (2022), "Comparing data gathered in an online and a laboratory experiment using the Trustlab platform", *ISER Discussion Paper N.1168*, <https://www.iser.osaka-u.ac.jp/library/dp/2022/>. [48]
- Henrich, J., S. Heine and A. Norenzayan (2010), "The weirdest people in the world?", *Behavioral and brain sciences*, Vol. 33/2, pp. 61-83. [71]
- Heterington, M. (2006), *Why Trust Matters: Declining Political Trust and the Demise of American Liberalism*, Princeton University Press. [38]



- He, T., L. Putterman and L. Wang (2019), "Do China's people favour redistribution? Evidence from an incentivized experiment", *Pacific Economic Review*, Vol. 24/2, pp. 293-324. [74]
- Hufe, P., R. Kanbur and A. Peichl (2022), "Measuring Unfair Inequality. Reconciling Equality of Opportunity and Freedom from Poverty", *The Review of Economic Studies*, Vol. 89/6, pp. 3345–80. [23]
- Inglehart, R. and C. Welzel (2005), *Modernization, cultural change, and democracy: The human development sequence*, Cambridge: Cambridge university press. [72]
- Isaksson, A. and A. Lindskog (2009), "Preferences for redistribution—A country comparison of fairness judgements", *Journal of Economic Behavior & Organization*, Vol. 72/3, pp. 884-902, <http://dx.doi.org/10.1016/j.jebo.2009.08.006>. [76]
- Jaime-Castillo, A. and J. Sáez-Lozano (2018), "Preferences for tax schemes in OECD countries, self-interest and ideology", *International Political Science Review*, Vol. 37/1, pp. 81-98, <http://dx.doi.org/10.1177/0192512114539716>. [77]
- Jost, J. (2017), "Ideological asymmetries and the essence of political psychology", *Political Psychology*, Vol. 38/2, pp. 167–208. [15]
- Jost, J. et al. (2003), "Political conservatism as motivated social cognition", *Psychological Bulletin*, Vol. 129/3, pp. 339–75. [14]
- Kahneman, D., J. Knetsch and R. Thaler (1986), "Fairness and the Assumptions of Economics", *The Journal of Business*, Vol. 59/4, pp. 285-300, [https://www.jstor.org/stable/2352761?seq=1#metadata\\_info\\_tab\\_contents](https://www.jstor.org/stable/2352761?seq=1#metadata_info_tab_contents). [54]
- Konow, J. (2000), "Fair Shares. Accountability and Cognitive Dissonance in Allocation Decisions", *American Economic Review*, Vol. 90/4, pp. 1072–92. [20]
- Kuziemko, I. and al. (2015), "How Elastic Are Preferences for Redistribution? Evidence from Randomized Survey Experiments", *American Economic Review*, Vol. 105/4, pp. 1478-1508, <http://dx.doi.org/10.1257/aer.20130360>. [10]
- Lipset, S. (1996), *American Exceptionalism: A Double-Edged Sword*, W. W. Norton and Company. [51]
- Lönnqvist, J., M. Verkasalo and G. Walkowitz (2011), "It pays to pay—Big Five personality influences on co-operative behaviour in an incentivized and hypothetical prisoner's dilemma game", *Personality and Individual Differences*, Vol. 50/2, pp. 300-304. [69]
- Luttmer, E. (2001), "Group Loyalty and the Taste for Redistribution", *Journal of Political Economy*, Vol. 109/3, pp. 500-528, <http://dx.doi.org/10.1086/321019>. [33]
- Macdonald, D. (2019), "Trust in Government and the American Public's Responsiveness to Rising Inequality", *Political Research Quarterly*, Vol. 73/4, pp. 790-804, <http://dx.doi.org/10.1177/1065912919856110>. [55]
- Mackenzie, C. and N. Stoljar (2000), *Relational autonomy. Feminist perspectives on autonomy, agency, and the social self*, New York: Oxford University Press. [59]
- Meltzer, A. and S. Richard (1981), "A Rational Theory of the Size of Government", *Journal of Political Economy*, Vol. 89/5, pp. 914-927, <http://dx.doi.org/10.1086/261013>. [5]

- Murtin, F. and al. (2018), "Trust and its determinants: Evidence from the Trustlab experiment", *OECD Statistics Working Papers*, Vol. 2018/2, <https://dx.doi.org/10.1787/869ef2ec-en>. [42]
- OECD (2023), *Government at a Glance 2023*, OECD Publishing, Paris, <https://doi.org/10.1787/3d5c5d31-en>. [1]
- OECD (2021), *Determinants of Trust in Public Institutions in Finland*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/52600c9e-en>. [43]
- OECD (2017), *Trust and Public Policy: How Better Governance Can Help Rebuild Public Trust*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/9789264268920-en>. [41]
- Persson, T. and G. Tabellini (2000), *Political economics: Explaining economic policy*, MIT Press. [2]
- Peyton, K. (2020), "Does Trust in Government Increase Support for Redistribution? Evidence from Randomized Survey Experiments", *American Political Science Review*, Vol. 114/2, pp. 596-602, <http://dx.doi.org/10.1017/s0003055420000076>. [11]
- Piketty, T. (1995), "Social Mobility and Redistributive Politics", *The Quarterly Journal of Economics*, Vol. 110/3, pp. 551-584, <http://dx.doi.org/10.2307/2946692>. [30]
- Pulford, B., A. Colman and G. Loomes (2018), "Incentive magnitude effects in experimental games: Bigger is not necessarily better", *Games*, Vol. 9/1, pp. 4-15. [66]
- Putnam, R. (2000), *Bowling alone. The collapse and revival of American community*, New York, NY: Simon & Schuster. [36]
- Ravallion, M. and M. Lokshin (2000), "Who wants to redistribute?", *Journal of Public Economics*, Vol. 76/1, pp. 87-104, [http://dx.doi.org/10.1016/s0047-2727\(99\)00064-x](http://dx.doi.org/10.1016/s0047-2727(99)00064-x). [49]
- Rawls, J. (1971), *A theory of justice*, Cambridge, Mass.: Belknap Press of Harvard Univ. Press. [17]
- Rey-Biel, P., R. Sheremeta and N. Uler (2018), "When Income Depends on Performance and Luck: The Effects of Culture and Information on Giving", *Experimental Economics and Culture*, Vol. 20, <https://doi.org/10.1108/S0193-230620180000020006>. [25]
- Roemer, J. (1998), *Equality of Opportunity*, Cambridge: Harvard University Press. [19]
- Rudolph, T. and J. Evans (2005), "Political Trust, Ideology, and Public Support for Government Spending", *American Journal of Political Science*, Vol. 49/3, pp. 660-671,, <http://dx.doi.org/10.1111/j.1540-5907.2005.00148.x>. [39]
- Rueda, D. (2018), "Food Comes First, Then Morals: Redistribution Preferences, Parochial Altruism, and Immigration in Western Europe", *The Journal of Politics*, Vol. 80/1, pp. 225-239, <http://dx.doi.org/10.1086/694201>. [46]
- Scheve, K. and D. Stasavage (2016), "Taxing the rich: A history of fiscal fairness in the United States and Europe", *Contemporary Sociology: A Journal of Reviews*, Vol. 46/3, <http://dx.doi.org/10.1177/0094306117705871nn>. [45]
- Slonim, R. and A. Roth (1998), "Learning in high stakes ultimatum games: An experiment in the Slovak Republic", *Econometrica*, pp. 569-596. [67]
- Stantcheva, S. (2021), "Understanding Tax Policy: How do People Reason?", *The Quarterly Journal of Economics*, Vol. 136/4, pp. 2309–2369, <https://doi.org/10.1093/qje/qjab033>. [44]

- Stegmueller, D. and al. (2011), "Support for Redistribution in Western Europe: Assessing the role of religion", *European Sociological Review*, Vol. 28/4, pp. 482-497, [37]  
<http://dx.doi.org/10.1093/esr/jcr011>.
- Varian, H. (1980), "Redistributive taxation as social insurance", *Journal of Public Economics*, [7]  
Vol. 14/1, pp. 49-68, [http://dx.doi.org/10.1016/0047-2727\(80\)90004-3](http://dx.doi.org/10.1016/0047-2727(80)90004-3).