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Attitudes to income inequality and redistribution

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We survey the literature on attitudes towards inequality and redistributive preferences. We focus on the effects of misperceptions, social preferences, and social identity. Recent contributions addressing these relationships have produced novel findings that are hardly covered in previous surveys. Before reviewing the empirical literature, we discuss how the theoretical literature has embedded in canonical models of social preferences the three issues we focus on in this review.

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1 Introduction

The study of attitudes towards inequality has gained renewed importance in recent years, driven by the heightened public debates acknowledging the growing economic and social disparities. Understanding how individuals perceive inequality and how they prefer to address it is critical for shaping effective policies that promote social welfare and cohesion. Attitudes towards inequality and preferences for redistribution are closely connected. Individuals who feel more affected by existing inequalities tend to support greater income redistribution as a way to reduce the disutility they experience. In contrast, those who feel less impacted by inequality are less likely to favour redistributive policies. Beyond self-interest, there are many other elements that influence inequality attitudes and preferences for redistribution. In this survey, we review how different aspects that affect attitudes towards inequality impact individual preferences for redistribution.

Ours is not the first survey to cover inequality and the degree of redistribution people would like to see in society. Previous reviews have focused on income inequality measurement, its impact on well-being and behavior, and the determinants of people's attitudes towards it.[1] This last topic is particularly wide, with an increasing number of contributions in recent years. Previous surveys have examined some of these determinants, including actual inequality, social mobility, and the institutional setting. We focus on three issues that have received less attention in previous surveys, namely misperceptions of own social position and overall inequality, and the role of social preferences and social identity.

A significant body of research suggests that many people have inaccurate views about their income position in society. For example, poorer people often underestimate the income of richer individuals, leading them to believe that inequality is low and to be complacent with regard to redistributive policies. We describe common income and status misperceptions and review the results of different experimental studies that use information treatments on misperceptions to

[1] Alesina and Giuliano (2011) reviews the determinants of preferences for redistribution. The survey starts by explaining the theoretical literature, building over Meltzer and Richard (1981) seminal model to sequentially cover some of its extensions: prospects of upward mobility (Benabou and Ok, 2001), inequality's impacts on consumption (as in Perotti, 1993), inequality's impact on utility, and fairness considerations. Using data from the United States and cross-country, the authors also provide empirical evidence on these determinants and explore the correlates suggested by the theoretical models. Mengel and Weidenholzer (2023) focuses on the literature of preferences for redistribution. The authors review how redistributive preferences are measured (i.e., survey, experiments, non-experiments) and discuss the contributions that analyze some of its determinants, including income inequality, social mobility, institutions and demographics, beliefs in meritocracy, and fairness. Clark and D'Ambrosio (2015) describes survey and experimental studies on attitudes to income inequality. The review focuses on the impact of income inequality on individual well-being and on the behaviour it induces, distinguishing between normative and comparative evaluations of income inequality and between group members and aspirates members. We refer interested readers to any of these reviews if they want to explore any of these topics further.

identify the impact of social position on preferences for redistribution.

In addition to misperceptions, social preferences —such as inequality aversion and fairness concerns— play a central role in shaping attitudes towards inequality. Some individuals may prioritize equality of outcomes, while others may focus on the fairness of the income distribution. These social preferences can affect individual attitudes and, through them, policies resulting from collective decision-making. Our survey will cover how different conceptions of social preferences influence people's support for redistributive policy.

Finally, social identity can significantly influence attitudes towards inequality. People can align with the interests of their in-group even if this is harmful to their own interests. For instance, poorer individuals may oppose redistribution if they identify with a group that looses from redistribution. By examining the role of social identity in shaping preferences for redistribution, our survey seeks to provide a more nuanced understanding of the factors that drive public opinion on this issue.

The chapter is organized as follows. Section 2 presents a simple theoretical framework that can accommodate the three issues covered in this survey. Section 3 reviews the empirical evidence on how misperceptions, social preferences and social identity impact attitudes to inequality and redistributive preferences. The last Section concludes.

2 Theoretical framework

We describe a short theoretical framework to illustrate how the topics covered in this review can impact attitudes towards inequality. We start by reviewing the canonical model (Meltzer and Richard, 1981; Roberts, 1977; Romer, 1975) and we independently consider how agents behave if they have misperceptions, social preferences and social identity.

2.1 Canonical model

First, we review the canonical model. Consider an economy populated by N agents. Agent i is endowed with ability (e_i), which is distributed according to $F(\cdot)$ across all agents. Agents transform labour into outcome: $y(e_i) = e_i n_i$, with working productivity depending on each agent's ability and their endogenously determined labour supply (n_i). They value consumption and leisure according to a concave and twice differentiable quasi-linear function:

$$U_i = c_i + u(l_i), \tag{1}$$

where c_i is consumption; l_i is leisure; and $u(\cdot)$ is leisure utility. All agents maximize their labour supply, constrained by an equal amount of disposable time: $n_i = \bar{l} - l_i$, where $\bar{l}$ is total disposable time. Agents pay taxes on their labour income (τy_i) and receive an equal lump-sum transfer (T). The redistributive policy is based on a balanced budget: $T = \tau\tilde{y}$, with $\tilde{y}$ being the mean income in the economy ($\frac{\sum_{\forall j} y_j}{N}$). Thus, agents' budget constraint is: $c_i = (1-\tau)y_i + T$.

The economic maximization yields $(1-\tau)e_i = u_l'(l_i^*)$, defining individual's optimal leisure (l_i^*), labour supply ($n_i^* = \bar{l} - l_i^*$) and income ($y_i^* = e_i n_i^*$). In short, agents continue supplying working hours as long as their marginal utility from income equals the marginal utility from leisure. A relevant implication of this is that taxation impacts labour supply. Agents internalize that this happens not only to them, but also across society: with a higher taxation rate, everybody will work less. As a consequence, they understand that higher taxation increases the share of total income collected but reduces total income generated ($\frac{\partial\tilde{y}}{\partial\tau} < 0$).

Hereafter, we will focus on the agent's redistributive decisions, taking optimal leisure, labour supply, and income as given. For the sake of clarity, we will express these variables as (l_i, n_i, y_i). Leisure utility will not play any role in redistributive decisions, so for the sake of simplicity, we will exclude it from the analysis.[2] The implications remain unchanged by this simplification.

Agent i chooses their preferred τ_i by maximizing their indirect utility: $V(\tau_i) = (1-\tau_i)y_i + T$. Assuming preferences to be single-peaked, we derive an agent's reduced-form redistributive policy preferences:

$$\tau_i^* = -\frac{\tilde{y} - y_i}{(\frac{\partial\tilde{y}}{\partial\tau})} \tag{2}$$

where $\tilde{y}$ is the mean income in society; and $\frac{\partial\tilde{y}}{\partial\tau}$ is the distortion induced by taxation on taxable income, which has a negative sign. Hence, demanded redistributive policy will depend on own income and mean income. If we consider that the negative signs in the numerator and the denominator (due to $\frac{\partial\tilde{y}}{\partial\tau}$) cancel out, it is easy to see that support for redistribution is greater as own income drops relative to mean income. That is, there is a self-interest motive on redistributive preferences. Those who have material gains from redistribution support it more than those who have lose from it.

This insight is an important, but limited, part of the story. Next, we modify agent's utility function to explore other aspects that agents take into account when assessing inequality. We

[2] In line with previous literature, the optimal tax rate does not depend on leisure utility. We will exclude the term to simplify the exposition of the different utility functions.

independently add misperceptions, social preferences, and social identity and explore their implications. Since misperceptions can interact with social preferences and social identity, we address them last.

2.2 Social preferences

The canonical model for attitudes towards redistributive policies can be easily extended to consider that people have social preferences. One common way of doing so is by incorporating social preferences as an additive factor in agents' utility. A key aspect is how these social preferences are modeled. We will describe two possibilities: inequality aversion and fairness concerns. Both of them follow a similar form. Inequality aversion and fairness concerns affect utility additively and negatively. They are an additional factor that adds to agents' utility, without directly interacting with selfish motives. Both reduce utility. People dislike inequality (unfairness) and they can reduce this disutility by contributing to making society more equal (fair).

Inequality aversion

We extend the utility function by incorporating aversion to advantageous and disadvantageous inequality, based on Fehr and Schmidt (1999):

$$U_i = c_i - \alpha_i \left(\frac{1}{n-1} \sum_{j \neq i} max(c_j - c_i, 0) \right) - \beta_i \left(\frac{1}{n-1} \sum_{j \neq i} max(c_i - c_j, 0) \right), \tag{3}$$

where α_i is aversion to disadvantageous inequality ($c_i < c_j$) for agent i, and β_i is aversion to advantageous inequality ($c_i > c_j$) for agent i. The disutility increases alongside distance to other's consumption and varies depending on whether own consumption is above or below in the comparison. Agents dislike both types of inequalities, but they have a stronger aversion to inequality that leaves them at a disadvantage ($\alpha_i > \beta_i > 0$). When α_i and β_i are equal to 0, agent i is selfish and their preferred redistributive policy is equal to the canonical model. Whenever α_i or β_i are larger than 0, agent i will prefer a larger taxation rate. When selfish motives are large enough (e.g. own income is close to 0), support for redistribution is already high and difference between selfish and inequality averse agents is almost null.

Fairness concerns

Consider a fairness function $\Omega_i = \sum_{\forall j} h_i(c_j - m_j^i)$, where m_j^i is the consumption of individual j that agent i considers to be fair and $h_i(\cdot)$ is a cost function for deviations from fair consumption. Importantly, the values of this fairness function depend on the redistributive policy, i.e. $\frac{\partial \Omega_i}{\partial \tau} \neq 0$. Policy can change consumption across society, altering the deviations between actual consumption and what an agent considers to be fair. We now add fairness concerns to the utility function:

$$U_i = c_i - \gamma_i \Omega_i, \tag{4}$$

where γ_i is the weight given to fairness concerns by agent i. Two relevant aspects determine how fairness concerns affect attitudes to inequality. The first aspect is the weight agents placed on them (γ_i). Agents who are purely selfish will not be affected by this, but those who care about fairness will take it into account when choosing their preferred redistributive policy. Similarly, how costly agents perceive the deviations from what they consider fair ($h_i(\cdot)$) is relevant. More costly deviations will be more taken into account for decisions. The second aspect is what agents consider to be fair. As we will discuss in Section 3.2, people hold different fairness views. How this affects the preferred taxation rate depends on whether taxation closes or widens the gap between actual and fair consumption. For example, an egalitarian agent (who considers that all inequalities are unfair) will behave as an inequality averse agent and support higher taxation. In contrast, a libertarian agent (who considers that all existing inequalities are fair) will consider that modifying individual's consumption is unfair and support lower taxation.

2.3 Social identity

Another relevant aspect to account for when examining attitudes towards inequality is that agents may have varying degrees of concern for others. People identify with social groups and want them to succeed.

We follow Klor and Shayo (2010) to model social identity. Define a set of social groups $\mathcal{G} = \{\mathcal{J} : \mathcal{J} \subseteq \mathcal{N}\}$ with $\mathcal{G} \neq \emptyset$. Agents self-categorize into one of these groups considering how close they feel to it and the group status. Each social group $\mathcal{J}$ shares H typical attributes $q_{\mathcal{J}} = (q_1^{\mathcal{J}}, q_2^{\mathcal{J}}, \ldots, q_H^{\mathcal{J}})$. Agents measure the distance between their own attributes and the attributes of each social group, weighted by how relevant they perceive each attribute to be, $d_{i,\mathcal{J}}^2 = \sum_{h=1}^{H} w_h (q_h^i - q_h^{\mathcal{J}})^2$. Each social group has status, composed by non-material and material dimensions: $S_{\mathcal{J}} = \sigma_1^{\mathcal{J}} + \sigma_2^{\mathcal{J}}(\pi^{\mathcal{J}}(\tau) - \pi^{r(\mathcal{J})}(\tau))$. The relevance of material dimensions in group

status are weighted by $\sigma_2^{\mathcal{J}}$ and are assessed in comparison to a reference group, with $\pi^{\mathcal{J}}(\tau)$ being the payoffs of group $\mathcal{J}$ and $\pi^{r(\mathcal{J})}(\tau)$ being the payoffs of the comparison group. Incorporating both into the utility function of an agent who identifies with group $\mathcal{J}$ yields:

$$U_i = c_i - \lambda_i d_{i,\mathcal{J}}^2 + \theta_i S_{\mathcal{J}}, \tag{5}$$

where λ_i is the weight given to the distance with social group $\mathcal{J}$ and θ_i is the weight given to the social status of group $\mathcal{J}$. In contrast to previous extensions that include factors that create disutility to agents, the status of the social group adds utility to agents. Agents dislike being distant from the social group they identify with but like being in a social group with higher status. The trade-off between distance and status lies at the core of agents' identification with a social group. Given the disutility from distance, agents tend to identify with the group of higher status. Given equal status, agents tend to identify with the group more similar to themselves.

Group identification is likely to impact redistributive policy preferences. Agents will care about the impact of taxation on the status of that group and on the status of the reference group. Redistribution reduces (increases) income, and, thus, the status of high (low) income groups. Whenever agents identify with a group of their same income level, social identity will amplify the preferred redistributive policy that comes from the canonical model. In contrast, when agents identify with groups of different income level, the impact of social identity is inverse to that of selfish motives. For instance, agents who identify with a group with higher average income than themselves will have subdued support for redistribution, as redistribution reduces the status of that group.

2.4 Misperceptions

Lastly, we incorporate perceptions into the decision-making process. It is reasonable to assume that agents know their own income with certainty. However, they may have a less clear idea of the income of others in society. These incomes are relevant for redistributive decisions. Selfish agents care about the difference between their own income and mean income in society. Agents with social preferences or social identity care about more fine-grained income distributions across society. If perceptions of these incomes are biased, redistributive policy preferences may differ from those based on objective measures.

To better understand this, we follow Hoy and Mager (2021) and incorporate perceptions into

the inequality averse utility function outlined in Subsection 2.2:

$$U_i = c_i - \alpha_i \left(\frac{1}{n-1} \sum_{j \neq i} max(c_j^P - c_i, 0) \right) - \beta_i \left(\frac{1}{n-1} \sum_{j \neq i} max(c_i - c_j^P, 0) \right), \tag{6}$$

where c_j^P is the perceived consumption of individual j. The main aspect to consider is how others' perceived consumption (c_j^P) differs from their objective consumption (c_j). Or alternatively, how perceived income differs from objective income. This directly connects to agent's perception of their relative position in society, both in income and consumption. As we will see in Section 3.1, many people are centre-biased, that is, the rich tend to underestimate their income while the poor tend to overestimate it. Thus, the sign of the bias depends on the actual income position of the individual in the income distribution. Low-income agents perceive they are richer than they actually are, which reduces their disutility from disadvantageous inequality and increases their disutility from advantageous inequality. If we consider that agents dislike more disadvantageous inequality than advantageous inequality, then these biased low income agents would support less redistribution than if unbiased.

Even though the former prediction falls from the canonical model of social preferences (see equation (3)), recent empirical studies cast doubt on the validity of this prediction (see Section 3.1 for more details). Such results call for a better understanding on how misperceptions affect agents' decision-making. Misperceptions may be having implications on other aspects considered by agents when deciding their support for redistributive policies. The empirical exploration of such aspects and its incorporation into theoretical models are on-going areas of research.

3 Empirical Evidence

This Section reviews the empirical evidence on the three factors of our interest, which we have outlined in the previous Section.

3.1 Misperceptions

In contrast to what theories of social preferences and optimal policy design have long assumed (e.g., Meltzer and Richard, 1981; Romer, 1975; Fehr and Schmidt, 1999; Charness and Rabin, 2002), recent evidence from poor and rich countries shows that a significant proportion of people

misperceive their own and others' income, and thus their position in the income distribution.[3] People also tend to have biased beliefs about the level of income or wealth inequality in their own country (Norton and Ariely, 2011; Kuziemko et al., 2015; Hauser and Norton, 2017; Gimpelson and Treisman, 2018). Importantly, most of these studies have also explored the causal relationship between the relative position of individuals in the income distribution, on the one hand, and their inequality views and their preferences for redistribution, on the other hand, by using information treatments that inform a random group of respondents about their accurate position in the income distribution (Cruces et al., 2013; Hauser and Norton, 2017; Karadja et al., 2017; Engelhardt and Wagener, 2018; Feichtmayer and Gründler, 2021; Gimpelson and Treisman, 2018; Hoy and Mager, 2021; Hvidberg et al., 2023).

In the next Subsections, we first explain how people tend to misperceive their own position in the income distribution and inequality in their own country, and then review the studies that examine the effect of these misperceptions on inequality attitudes and preferences for redistribution. In doing so, we pay special attention to studies that use information treatments that confront people's biased beliefs with accurate information to uncover the causal impact of relative position or inequality on people's inequality views or support to redistributive policies. Stantcheva (2024) offers a more detailed review on how (mis-)perceptions about several factors affect people's support for redistributive policies.[4]

3.1.1 Misperceptions of own position in the income distribution

Misperceptions of own position in the income distribution follow mainly two patterns, which are independent of the region or continent of the country of the respondents or the type of data from which the true income is drawn.[5] Many studies find that poorer individuals tend to overestimate their position in the income distribution, while richer individuals tend to underestimate it (Cruces et al., 2013; Engelhardt and Wagener, 2018; Fernández-Albertos and Kuo, 2018; Bublitz, 2022; Hvidberg et al., 2023).[6] Furthermore, in a recent contribution, Hvidberg et al. (2023)

[3] In a notable exception, Iacono and Ranaldi (2021) introduce perceptions of inequality in a model of formation of preferences for redistribution and show that they are key in determining the equilibrium redistribution level.

[4] She reviews the importance of misperceptions about inequality, social mobility, diversity and immigration, social position, and understanding of how policies work.

[5] Most studies draw the information that is conveyed to respondents as true from survey data. Only a few studies (e.g., Karadja et al., 2017; Hvidberg et al., 2023) derive actual information on income levels from administrative records. Even though the income information from administrative records is more reliable, which should allow estimating misperceptions more accurately, (Karadja et al., 2017; Hvidberg et al., 2023) show that the perceptions of own income that individuals self-report are typically not biased.

[6] Note that the results from Fernández-Albertos and Kuo (2018) are not comparable with the rest of studies because they use equivalent (as opposed to non-equivalent) household income to place households in the income distribution.

combine Danish survey and administrative data to show that the centre-bias pattern of income rank misperceptions, originally documented in Cruces et al. (2013), holds not only for the entire income distribution but also for the distribution within several reference groups that vary by domain, size, and proximity to the respondent.[7]

Two mechanisms may explain these centre-biased misperceptions, namely limited information and bounded rationality. Individuals observe the income levels of only a (typically small) subsample of the population, which is likely selected. Then, they have to infer the entire distribution from that information. If individuals do not take into account that their observations are often not accurate and the selection of the subsample, their assessment about their relative position and about the income distribution is bound to be biased. In line with this, Cruces et al. (2013) find, for a representative sample of households in Greater Buenos Aires, that the positive bias of the poorer individuals and the negative bias of the richer individuals can be attributed to respondents using local reference groups to infer their relative position. In particular, they find that income rank misperceptions in the overall income distribution are partly driven by the rank in the income distribution of their local area of residence, as perceived rank in the overall income distribution positively correlates with the actual relative position of individuals in the income distribution of their local area of residence. Likewise, having friends from more diverse social backgrounds, which can lead to less selected groups, is found to reduce bias.

Misperceptions of one's relative position may come from erroneous assessments of one's own income or/and of others' incomes. Hvidberg et al. (2023) shows that in the Danish sample, systematic misperceptions of one's relative position are due to systematic misperceptions of others' incomes, and not to systematic misperceptions of one's own income. That is, within each reference group, individuals with higher income tend to overestimate the income of others, while those with lower income tend to do the opposite. Their analysis of misperceptions across different population groups shows the importance of limited information for accuracy. For instance, people working in the public sector or in academia are more accurate than those working in the private sector. Likewise, respondents who have worked at the same workplace or lived on the same road for a longer time are more likely to have accurate perceptions of their own position in that group. Individuals in a managerial position or working in a workplace where a large share of workers are subject to union agreements also assess their relative position more accurately. According to the authors, this may reflect the effect of pay transparency or pay information on

[7] They consider 8 reference groups: people from the same birth cohort, of the same gender, living in the same municipality, having the same education level, working in the same sector, neighbours, co-workers at the same workplace, and former schoolmates.

misperceptions. Likewise, variables that proxy for possible strength of interactions within the group, such as length of time in the group and proximity to others show a positive relation with accuracy. For instance, respondents who live on a longer road are less able to accurately assess their own position among their neighbours. Having said this, not all the features of groups that seem to be related to more or better quality information predict more accurate assessments of own relative position. The size of the reference group in which one is trying to assess her relative position is a clear example of this. Hvidberg et al. (2023) finds that misperceptions are not significantly different when individuals try to assess their position within large reference groups, such as cohort, age or municipality groups, or smaller ones, such as formal school mates, co-workers, or close neighbours, living on the same road (if living in a house) or stairwell (if living in an apartment).

As outlined above, bounded rationality also seems to influence individuals' capacity to assess their own position accurately. For instance, education level or IQ scores are typically found to have a positive relation with perception accuracy. In particular, Hvidberg et al. (2023) correlate several variables with misperceptions and find that education is the strongest predictor of accuracy across all domains (own position, median income, and income at the 95th percentile).

In contrast to the studies showing that misperceptions of one's own relative position are centre-biased, some studies find that most people tend to underestimate their position in the income distribution, irrespective of their income level (Grigorieff and Roth, 2016; Karadja et al., 2017). Several variables have been found to correlate with these negative misperceptions, suggesting again that limited information and bounded rationality shape own position misperceptions. Karadja et al. (2017) finds that actual, perceived, and expected income mobility reduce negative self-rank misperceptions in a representative sample of Swedish people.[8] Likewise, they also find that lower negative misperceptions correlate with education level, cognitive ability, and media consumption.

Do disparities in the reference group where respondents place themselves correlate with misperceptions about their own position? If it is more difficult to place one-self in more compressed distributions, perceptions should be more accurate in reference groups that have more unequal income distributions. This is precisely what Hvidberg et al. (2023) finds for the various reference groups they analyse in Denmark.

[8] In contrast with this findings for mobility, Hvidberg et al. (2023) shows that negative and positive life events, such as unemployment spells, promotions, health conditions that required hospitalization, and disability, do not affect misperceptions on their own relative position —but they do affect fairness views in the expected direction.

3.1.2 Misperceptions of inequality

There is more work on misperceptions of people's position in the income distribution, outlined in the preceding Section, than on misperceptions of inequality. This could be because people's relative position is a key determinant in seminal theories of preferences for redistribution (e.g. Meltzer and Richard, 1981). People's perceptions about income or wealth inequality are generally not accurate (Norton and Ariely, 2011; Engelhardt and Wagener, 2018; Gimpelson and Treisman, 2018; Bussolo et al., 2021). While some studies find that people believe that inequality is larger than it actually is, other studies report the opposite. Beyond misperceptions, people tend to prefer lower levels of inequality than those they perceive (Hoy and Mager, 2021).

What drives inequality perceptions? Bussolo et al. (2021) argues that individuals do not form perceptions of inequality based solely on 'objective' inequality, but also on other contextual economic factors, such as unemployment, poverty, and the GDP share of government expenditures in education. Using data from the International Social Survey Program for 26 countries over 20 years, they show that the effect of unemployment or poverty on inequality perceptions is as large as that of objective inequality.

Beyond contextual factors, some individual socio-economic characteristics, which may capture self-interest motives, and beliefs also matter. Own income tends to correlate with inequality perceptions. Knell and Stix (2020), using data for 40 countries, Bussolo et al. (2021), and Faggian et al. (2023), using data for all EU regions, show that poor people perceive inequality to be higher than rich people. The role of other individual variables, such as gender or education, is less clear and may depend on the data and the definition of inequality used. For instance, Bussolo et al. (2021) and Faggian et al. (2023) find that the effect of these two variables go in the opposite direction. While Bussolo et al. (2021) find that females and lower education individuals tend to perceive their country as more unequal, Faggian et al. (2023) report the opposite.

Interestingly, the role of actual inequality in shaping inequality perceptions is unclear. Bussolo et al. (2021) find a positive correlation between the two, Faggian et al. (2023) find a negative one, and still other studies find no significant correlation between them (Gimpelson and Treisman, 2018; Trump, 2023).

3.1.3 Misperceptions and inequality attitudes

In this Section, we review the literature that describes the relationship between misperceptions —both of own relative position and of inequality— and inequality attitudes or concerns, and

the studies that use experimental survey designs to estimate the causal effect of own (social) position and inequality on inequality concerns.

Misperceptions about one's position in the income distribution

Learning about one's misperceptions about one's position in the income distribution is likely to influence one's views on inequality, as the percentage of people who are poorer and richer than the respondent and the income gap between the respondent and the poorest and the richest individuals in the distribution are actually different from what the respondent originally thought. For instance, being informed that one is poorer than one thought means that a smaller share of people is poorer and a larger share is richer than one thought. It also means that the gap between one's income and that of a poorer group of people is now smaller and the gap between a richer group of people and one's income is now larger. Since seminal theories of other-regarding preferences (e.g. Fehr and Schmidt, 1999) assume that people dislike income differences and that people are more concerned with income gaps to the richer than to the poorer, we would expect people to be more concerned about inequality when they are informed that they are poorer than they thought —see equation (6).

We are not aware of any study that looks, for nationally representative samples, at how inequality concerns change when people are informed that their belief about their relative position is biased. A recent contribution examines this issue for relatively poor people who belong to the poorest two quintiles of the income distribution of their country. Hoy and Mager (2021) runs survey experiments in 10 poor, middle-income and rich countries, and finds results that are in stark contrast to the predictions of the seminal theories outlined above. That is, informing respondents who belong to the poorest two quintiles that they are relatively poorer than they thought reduces their belief that inequality is too large in 7 non-Anglo-Saxon countries and has no effect on their inequality beliefs in 3 Anglo-Saxon countries. However, treatment has no effect on those who accurately estimated their position in the distribution.[9] This finding is seemingly counterintuitive, especially because a larger share of poorer than richer people in these samples believe that inequality is too large. However, it is important to note that beliefs and misperceptions (about own relative position) can have differential effects on people's inequality attitudes. What can explain that respondents who though they were richer reduce their concern about inequality once they know they are poorer? Before being informed about their accurate position in the distribution, those who believed that they were richer thought they had a larger share of people

[9] The 10 countries are India, Mexico, Morocco, the Netherlands, Nigeria, South Africa, and Spain, Australia, the United Kingdom, and the United States.

who were poorer than them. When they are informed that they are poorer than they thought, the share of people who are actually poorer than them is smaller than they thought. That is, with the new information, they perceive that the distribution is more compressed, and therefore it is reasonable that a smaller share now report that inequality is too large.

Other studies provide accurate information on the relative position of respondents in the income distribution to explore how responsive are respondents' inequality views to the provision of accurate information. However, since these studies do not elicit the beliefs of the respondents regarding their relative position in the income distribution prior to the information treatment, they cannot study misperceptions and their effects on attitudes toward inequality. Kuziemko et al. (2015) examines the impact of an omnibus treatment that, among others, informs about the accurate position in the income distribution of respondents and allows them to explore the income distribution, and finds that treatment substantially increases the share of respondents who agree that inequality is a very serious problem.[10] Due to the three-fold omnibus treatment, it is difficult to identify which of the three treatments is responsible for the effect. In contrast to this evidence, Hoy et al. (2024) find that the inequality views of Indonesians who belong to the two poorest and two richest quintiles are insensitive to providing accurate information about their relative position in the income distribution.

Misperceptions about income inequality in society

Beliefs about the extent of inequality and concerns about inequality appear to be related. Using data for 23 European countries and the US, Niehues (2014) shows a large (0.8) cross-country correlation between perceived inequality and inequality concern, as measured by the share of individuals who report that income differences are too large. The experimental evidence from priming designs provides similar results. People who receive accurate information on the income distribution believe that inequality is a more serious problem, relative to control individuals who are not exposed to such information (Kuziemko et al., 2015; Hoy et al., 2024).[11] Interestingly, the inequality information treatment also induces people to perceive that inequality is somewhat

[10] The omnibus information treatment provides interactive and personalized information on US income inequality —which includes the position of the respondent in the income distribution, the income level at different income percentiles, and the income level the respondent would have had if growth had been evenly shared since 1980— the historical correlation between top income tax rates and economic growth, and the incidence of the estate tax.

[11] Kuziemko et al. (2015) finds that respondents who received information about the income distribution are 10 percentage points more likely to agree that inequality is a "very serious" problem in the US, while Hoy et al. (2024) finds that respondents who received information about the income distribution are 4 percentage points more likely to state that the gap between the rich and the poor is too large in Indonesia.

more unfair.[12]

Inequality concerns can arise because inequality is perceived to be high and/or because individuals care about inequality.[13] If people care a lot about inequality, small perceived inequalities can lead to great concerns. In contrast, perceiving large inequalities will not raise any concern if people care little about inequality. Informing a random treatment group about their misperceptions on inequality can be a good identification strategy to identify the causal effect of inequality on concerns about inequality.[14] Unfortunately, we do not know of any study that exploits misperceptions about the level of inequality to examine this issue.

3.1.4 Misperceptions and support for redistributive policies

In this Section, we review the literature that describes the relationship between misperceptions —both of own relative position and of inequality— and preferences for redistribution, and the studies that use experimental survey designs to estimate the causal effect of misperceptions on preferences for redistribution.

Misperceptions about one's position in the income distribution

The individual's position in the income distribution is a good predictor of whether she is likely to gain or to lose from redistribution. This self-serving motive should induce poorer individuals to demand more redistribution as they benefit from it. As outlined above, recent empirical studies use information treatments, whereby a random part of the sample is informed about their true position in the distribution, to identify the causal effect of individuals' position in the distribution on their preferences for redistribution. The results of these studies are mixed and inconclusive. While some papers show that people are consistent with the predictions of the canonical models, others find the opposite, and still others find that information treatments do not change people's support for redistributive policies.

[12] Kuziemko et al. (2015) finds that respondents who received information about the income distribution are 5 percentage points more likely to agree that the rich are deserving of their income in the US, while Hoy et al. (2024) finds that respondents who received information about the income distribution are 8 percentage points more likely than the control group to report that it is difficult or impossible for people to increase the amount of money they have despite working hard in Indonesia.

[13] Note that those who do not care about inequality need not have purely selfish preferences. For example, when the source of inequality is deemed legitimate, people care less about inequality of outcomes.

[14] Our argument builds on Atkinson (1970). In Atkinson (1970), the cost of inequality (i.e., how much is the agent willing to give up to distribute the rest equally and obtain the same level of welfare) is a function of inequality aversion and the shape of the income distribution. Importantly, the inequality aversion parameter is independent of the level of income and the shape of the income distribution. In our argument, what we call "caring about inequality" is Atkinson's inequality aversion parameter, while what we call "inequality concern" is Atkinson's cost of inequality.

Consistent with the predictions of canonical models, Cruces et al. (2013) find that people who thought they were relatively richer than they are, when provided with accurate information on their relative position in the income distribution, demand more redistribution than those in the control group, who did not receive any information about their true position in the income distribution.[15] Likewise, Karadja et al. (2017) finds for Sweden that those who thought they were relatively poorer than they are, demand less redistribution, when provided with accurate information on their relative position in the income distribution.

However, in contrast to the predictions of canonical models, several studies find that those who thought they were relatively poorer than they are do not change their preferences for redistribution, when confronted with accurate information about their relative position in the income distribution (Cruces et al., 2013; Engelhardt and Wagener, 2018; Hoy and Mager, 2021). Hoy and Mager (2021) argue that relatively poor people who belong to the two poorest quintiles are not responsive because they use their own standard of living as a 'benchmark' for what they consider acceptable to others. The idea is that when respondents realise that their living standard is the living standard of those who they originally thought were poorer than them, they view the absolute living standard of the poor as sufficient, which leads them to consider that redistribution to the poor is less necessary. This mechanism outweighs other possible mechanisms that may be at play and that operate in the opposite direction. For instance, when respondents are told that they are poorer than they thought, they could believe that they are set to benefit from redistributive policies. Likewise, the treatment could drive respondents to think that inequality is unfairer than they originally thought. These two mechanisms should lead relatively poor people who are informed that they are poorer than they thought to be more supportive of redistributive policies.

It is important to note that the 'benchmarking' mechanism explains findings, only if it is assumed that respondents have accurate beliefs about their net gains or losses from increased redistribution. However, Hoy and Mager (2021) do not test whether this is the case, which is unfortunate because Engelhardt and Wagener (2018) shows that learning whether one gains or loses from redistribution is important. Using an experimental design on a German sample, Engelhardt and Wagener (2018) shows that respondents who do not change their preferences for redistribution when they are informed about their misperceptions about their position in

[15] In a cross-country study, Bublitz (2022) also finds that those who were richer than they thought reduce their preference for redistribution in Germany and Russia. However, since more than one information treatment is implemented at the same time, it is difficult to identify which mechanism is causing the impact on redistributive preferences. Moreover, no effect is found for the other countries included in the study, namely France, Spain, Brazil, and the United States.

the income distribution, reduce their preferences for redistribution when they learn that they are net payers in the German tax and transfer system. Interestingly, this change in preferences occurs regardless of the political leanings of the respondents and their perception of fairness.

Studies that, instead of correcting biased beliefs, prime inequality by providing accurate information on the income distribution and income inequality find that this information has a very limited effect on people's support for redistribution (e.g. Hoy et al., 2024; Kuziemko et al., 2015). As we explain in Section 3.1.3, US respondents increase their inequality concerns when exposed to an omnibus treatment that primes inequality issues, including the respondent's position in the income distribution (Kuziemko et al., 2015). In spite of this, the omnibus treatment does not shift people's support for some redistributive policies such as earned income tax credits or food stamps, and only induces a small increase in people's support for policies such as increasing tax rates for top incomes, estate taxes, or minimum wage. Trust in government helps explain this seeming paradox between inequality views and lack of willingness to take action through government-led policy.[16]

The only study that explores preferences for redistribution at a global scale, as opposed to within country, also finds that respondents are not consistent with canonical models of preference for redistribution and of other-regarding preferences. When respondents from a sample in the US are informed that they are globally richer than they thought, Nair (2018) finds that they are more supportive of policies that help reduce global inequality.

Misperceptions about income inequality in society

Observational studies show a positive correlation between perceived inequality and preferences for redistribution, which is greater than the correlation between the latter and measured inequality (Niehues, 2014; Bussolo et al., 2021). Because of this, perceptions of, rather than actual inequality, are claimed to explain preferences. However, we are not aware of any experimental study that exploits misperceptions to identify the effect of income inequality on preferences for redistribution. As reported above, Kuziemko et al. (2015) primes several aspects related to income inequality by providing accurate information to a random sub-sample of respondents. However, from these priming designs, we cannot estimate the causal effect of inequality on preferences for redistribution.

[16] Previous studies also show that trust in government undermines public support for redistributive policies (e.g. Yamamura, 2014; Hauk et al., 2022).

3.2 Social Preferences

Social preferences are an important determinant of human behavior, often surpassing self-interest. A large and growing body of literature has documented that people are willing to sacrifice their own payoffs for other goals, such as helping others or establishing fairness.[17] Redistribution decisions are not exempt from this influence. The canonical model for attitudes towards redistributive policies (Meltzer and Richard, 1981; Roberts, 1977; Romer, 1975) can be easily extended to consider that people have social preferences. One way to do so is to incorporate social preferences as an additive factor in the utility of individuals, as described in Section 2.2. The interest is on whether this change has implications for individual and collective outcomes.

Characterizing social preferences is a necessary first step. There are many reasons why people do not fully maximize their own payoffs.[18] Each of these may entail different implications and mechanisms affecting attitudes towards inequality. In this review, we focus on two reasons why people care about others: inequality aversion and fairness concerns. Both reasons follow a similar form, namely they both affect utility additively and negatively. They are an additional factor that adds to individuals' utility, without directly interacting with selfish motives. Either of them reduces individuals' utility. People dislike inequality (unfairness) and they can reduce this disutility by contributing to making society more equal (fair).

3.2.1 Inequality aversion

Extensive literature has shown that people care about the pay-off difference between themselves and other reference individuals (e.g., Andreoni and Miller, 2002; Bellemare et al., 2008; Bolton and Ockenfels, 2000; Charness and Rabin, 2002; Fehr and Schmidt, 1999). It is important to note that this literature typically assumes that preferences are self-centered and that individuals give more weight to disadvantageous than to advantageous inequalities.[19] The preferences modelled in equation (3) embed both features.[20] In self-centered preferences, the individual is always involved. For instance, self-centered inequality aversion has to do with disparities between oneself

[17] For a recent review on social preferences in economics, see Fehr and Charness (2023).

[18] For example, altruism towards all others (Dimick et al., 2017), towards others perceived as closer (covered in Section 3.3), or last-place aversion (Kuziemko et al., 2014). Dimick et al. (2018) provides a short summary explaining how some of these models of social preferences theoretically affect redistribution decisions.

[19] As we discussed above, in Section 3.1.4, Hoy and Mager (2021) show that relatively poor individuals in the US violate this assumption, as they give more weight to advantageous than to disadvantageous inequalities.

[20] To see that equation (3) models self-centered preferences note that own consumption is an argument in the two other-regarding components. α_i and β_i capture the importance of disadvantageous and advantageous inequality, respectively. The literature typically assumes that $\alpha_i > \beta_i$.

and another individual. In contrast, non-self-centered inequality aversion is related to disparities between two other individuals.[21]

Most studies analyzing inequality aversion use lab or online experiments to estimate such attitudes. The setting allows experimenters to isolate other influencing factors on individual decision making and to create the necessary variations to estimate how averse people are to inequality. To do so, authors tend to use dictator games (Andreoni and Miller, 2002; Bellemare et al., 2008; Fisman et al., 2007; Kerschbamer, 2015; Bruhin et al., 2019; Fehr et al., 2024, e.g.,). Participants are matched in pairs. Each member of the pair is given an initial endowment. One participant (labelled *dictator*) decides on whether to redistribute the initial endowments with the other participant (labelled *recipient*). *Dictators* actions are final, with no decision role for *recipients*. Experimenters can vary *dictators*' decision range. In the original dictator game the decision range can go from keeping the totality of the endowment to giving all the endowment, but this can be limited depending on what is the focus of analysis. Experimenters can also vary the incentives to distribute by changing the price *dictators* pay for giving. In the original dictator game *recipients* receive one monetary unit for every monetary unit *dictators* give. By changing the amount received per monetary unit given, experimenters vary the cost of redistribution. For example, redistribution is costlier (cheaper) if the *recipient* receives 1/2 (10) monetary unit for every monetary unit the *dictator* gives. Experimenters can even allow *dictators* to give monetary units to reduce *recipients* payoff. For example, *recipients* loose 5 monetary units for every monetary unit the *dictator* gives. Through several rounds in which *dictators* elicit which allocations they prefer when the initial endowments and prices of giving to others change, experimenters can measure how people react to inequality. These responses allow to categorize participants based on their aversion to advantageous and disadvantageous inequalities.

Different authors have studied theoretically how accounting for these preferences can change predictions from the canonical model on attitudes towards redistribution. Galasso (2003) incorporates agents that either have solely selfish preferences or have inequality averse preferences (as well as selfish preferences).[22] Preferences for redistribution in both type of agents are increasing in income, but inequality averse agents prefer higher redistribution as they additionally experience

[21] Non-self-centered inequality aversion has been found to be relevant to understand people's attitudes to inequality. Using a survey experiment Burone and Leites (2021) find that most respondents show non-self-centered inequality aversion.

[22] Galasso (2003) only incorporates disutility from advantageous inequality (guilt), equating disutility from disadvantageous inequality (envy) to zero. Subsequent work has introduced more widely used functional forms for inequality aversion (e.g., Tyran and Sausgruber, 2006; Dhami and Al-Nowaihi, 2010; Durante et al., 2014; Fehr et al., 2024), yielding similar results.

disutility from inequality. The presence of such agents is not only testimonial, but has the potential to impact collective choices and increase overall redistribution.[23] Subsequent studies have incorporated additional variations to the theoretical model, achieving similar conclusions (Tyran and Sausgruber, 2006; Dhami and Al-Nowaihi, 2010). An interesting extension is Iacono and Ranaldi (2021), which further considers the role of inequality perceptions. In their analysis, inequality only affects agents through its perceived level, rather than through its objective level. This can produce changes, as people tend to believe that they belong to the middle class irrespective of their position in the income distribution (see Section 3.1), which leads them to underestimate inequality. Their main takeaway is that if people perceive inequality to be lower than it actual is, (inequality averse) agents will have a subdued demand for redistribution.

Several papers have validated empirically the main implications that inequality aversion has for support for redistribution. A first set of studies creates controlled environments in labs to assess this issue (e.g., Ackert et al., 2007; Dhami and Al-Nowaihi, 2010; Tyran and Sausgruber, 2006; Schildberg-Hörisch, 2010). For instance, Tyran and Sausgruber (2006) conducts a lab experiment that varies the selfish incentives faced by participants to prefer redistribution. Participants are split into three groups (rich, middle and poor) and vote on a redistribution policy that only affects the payoffs of those in the rich and poor groups. Middle group participants, whose payoff is not affected by redistribution, obtain no material gains from redistribution, but tend to favour it. If participants were not inequality averse, their support to change the original endowments should be split evenly between poor and rich. The fact that most participants support rich-to-poor redistribution is consistent with predictions from an inequality averse extended model. Furthermore, participants form the the rich group, who are set to loose from redistribution, are found not to be unequivocally against redistribution. This, again, is in line with the extended model. Lastly, as expected, nearly all participants from the poor group favour redistribution, as they benefit from it. Similarly, Durante et al. (2014) uses a lab experiment to assess the relative importance of selfish motives and inequality aversion in supporting redistributive policies. Participants are split into groups and assigned unequal earnings, to mimic the US pretax income distribution. The authors elicit their preferred taxation rate under different circumstances, affecting taxation cost and taxation impact on the decision-maker, among others. They find that even when participants decide on behalf of others, they are willing to give up part of their income to generate more equality. In general, Durante et al. (2014) shows that income maximization,

[23] Many papers use simple voting to aggregate individual preferences for redistribution. Such exercise predicts the equilibrium redistribution tax rate to equal the median voter's preferred rate. With a population including voters with higher preferences for redistribution, the equilibrium tax rate is larger than that of a population of selfish voters.

risk aversion, and social motivations matter for redistributive decisions.

A second set of papers combines data on social preferences, collected in lab experiments, and attitudes towards inequality (such as preferences for redistribution or voting behavior), that come from survey responses, to examine this issue (Cappelen et al., 2017; Fisman et al., 2017; Kerschbamer and Müller, 2020). For example, Fehr et al. (2024) merges the estimates of social preferences with the survey responses on voting decisions in a referendum on redistribution policies in Switzerland. Participants are classified as selfish, inequality averse, or altruistic according to their decisions in dictator games with varying initial endowments and cost of redistribution.[24] Selfish participants always maximize their own income, while inequality-averse participants tend to divide income equally with others. These categories are found to predict the vote of participants in referendums on taxation, wage policy, and basic income. Inequality-averse (and altruistic) individuals are more supportive of redistributive policies than selfish ones. This distinction is particularly visible among higher-income participants, for whom the conflict between selfish and inequality-averse motives is more pronounced.

3.2.2 Fairness concerns

People dislike inequalities, but not all of them equally. A more recent but already wide literature shows that the source of inequality is very relevant to individuals (Cappelen et al., 2007, 2013; Konow, 2000; Stantcheva, 2021). In particular, inequalities that result from choices or exerted effort are deemed to be more fair and are thus more accepted. This idea extends inequality aversion towards unfairness aversion: people dislike inequalities as long as they consider them unfair.

A key takeaway is that people may not only differ in the weight they place on their selfish motives but also in the inequalities they consider fair or not (see equation 4).[25] Starting from Cappelen et al. (2007), this literature has focused on a specific set of fairness views related to normative theories of justice: egalitarianism, libertarianism, and meritocratic fairness views. Egalitarians find all inequalities unfair —similar to inequality aversion with no fairness considerations; libertarians find all inequalities fair —similar to no inequality aversion; and meritocrats find inequalities due to performance fair and inequalities due to luck unfair.

[24] Altruistic individuals are those that care about others. This is not the same as inequality aversion. For example, altruistic individuals dislike to reduce others' payoffs, even if this reduces inequality.

[25] Epper et al. collects data to study the interaction between inequality aversion and fairness views. Based on dictator games, they categorize the population as selfish, inequality averse, and altruistic (as in Fehr et al., 2024). They find that the distribution of this type of social preferences is related to the views on fairness. Selfish individuals care little about merit: meritocrats are only found among those with inequality aversion.

To identify fairness views most studies use modified dictator games. Crucially, the dictator game is preceded by a production phase in which agents (labelled *workers*) produce initial incomes. The nature of the production phase is what allows identifying fairness concerns, rather than only inequality aversion. When initial income inequality is purely due to luck, inequality aversion is well captured. When initial income inequality is (at least) partially due to merit, fairness concerns come into play. The degree to which the income produced by *workers* is due to luck or merit is one of the key variables experimenters vary across studies. Following the production phase, an agent acts as a dictator who decides whether to redistribute the initial income. The experiments focus on the decisions made by this agent. The production phase and the *workers* play a purely instrumental role, giving rise to real consequences for decisions. Most studies tend to select third-party agents (labelled *spectators*) for the decision role to avoid that self-interest conditions redistributive decisions, as *spectators* have no stake at play on the decisions and should care only about how fair distributions are.

Recent studies have used this type of experiments to analyze the distribution of fairness views in general populations. To do so, experimenters usually implement between-subject designs: part of the *spectators* decide in contexts on inequality due to luck and the other *spectators* decide in contexts on inequality due to merit. As the context in which *spectators* decide is randomly assigned, the two samples should be similar. In the cases in which the source of inequality is luck, a lottery draw determines which *worker* has higher income, whereas in the cases in which the source of inequality is merit, performance in real effort tasks determine which *worker* has higher income. Almås et al. (2024) reports results from representative samples of 60 countries (accounting for approximately 80% of the world population) and shows that, in all countries, people are more willing to accept inequalities due to performance than those due to luck. Based on these decisions the authors can estimate the prevalence of fairness views. The share of egalitarians is computed as the share of participants equalizing income in merit contexts. The share of libertarians is computed as the share of participants maintaining the status quo in luck contexts. The share of meritocrats is computed as the differences between the share of participants allocating more income to the more productive agent in the merit contexts and the share of participants allocating more income to the lucky *worker* in the luck context. The remaining share is classified as other. Almås et al. (2024) shows that the share of meritocrats is large in rich countries but decreases in poorer countries. Within countries, those with higher income and more educated tend to be more meritocratic than the rest of the population.

Fairness concerns affect individuals' utility and through it their attitudes to redistributive policies.

As previously, the relevant factor is the difference between perceived inequality and preferred inequality. In this case, preferred inequality is not necessarily zero inequality. A precursory example of this idea is Alesina and Angeletos (2005), which compares attitudes to inequality in United States to Europe. The authors starting point is that in the United States inequality is more perceived to be determined by effort than in Europe. As a consequence, the non-selfish motives for redistribution are lower, resulting in less redistribution in the United States. Almås et al. (2020) further shows that Americans differ in their preferred inequality: they are more accepting of inequality compared to Norwegians. The authors explain this by the differing fairness views across populations. Despite the share of meritocrats is similar in both countries, egalitarians are a lower share in the United States. Moreover, the distributive behavior in the lab is associated with preferences for redistribution. In fact, participants state that fairness views are important in determining their voting behavior. Harrs and Sterba (2023) further explores the latter, by collecting individual data on fairness views and relating them with support for a set of welfare policies, including support for income redistribution. Egalitarians show the highest support for welfare policies, while libertarians show the strongest opposition against them.[26] An additional interesting aspect is that beliefs about the source of inequality are highly relevant to explaining support for welfare policies, but only among meritocrats. Meritocrats hold diverse beliefs about whether luck or effort is responsible for inequalities. Differences in support for welfare policies between meritocrats with opposing beliefs are comparable in size to the differences between individuals with opposing fairness views, such as libertarians and egalitarians.

How fair distributions are deemed by individuals depends on their perceptions of their own relative position in the distribution and changes in their social position over time that result from life events such as unemployment, health shocks, and promotions. Using an information treatment in a representative sample of Danish, Hvidberg et al. (2023) show that individuals who are informed that their position in the income distribution of a reference group is lower than they thought consider the distribution to be more unfair than those who also perceive their relative position to be higher than it is but are not informed about their true relative position. Recall that those who perceive that their position is higher than it actually is tend to belong to the lower half of the income distribution of the reference group. In contrast, the same information treatment has no effect on individuals who learn that their true position is higher than they thought. Using the same Danish sample, Hvidberg et al. (2023) shows that

[26] In a similar vein, Dawes et al. (2012) finds that participants that offer higher payoffs in the dictator game in a lab setting are more progressive.

individuals who have experienced a negative shock in life are more likely to consider inequality within the reference groups unfair, while those who have received a positive shock are less likely to do so. The shocks that move relative positions in the income distribution of the reference group the most (disability and unemployment) have the largest effects on fairness views.[27] It is worth noting that individuals' perceptions of the effect of shocks on their own position in the income distribution of the reference group ameliorate the effects of shocks on fairness views, as perceived effects of shocks are smaller than actual effects.

Støstad (2023) highlights the inverse interplay: fairness concerns can impact inequality perceptions *per se*. In a controlled lab setting, participants were asked to estimate the inequality of an income distribution on a fair or unfair context. The distribution was fictional and fixed for all participants, but the source of inequality differed. On one setting, income rankings were determined by luck, while in the other setting they reflected acquired abilities and effort. Although the distribution was the same, participants estimated inequality to be numerically larger when they knew it had an unfair source. Recent studies build upon well-established findings by extending them into more nuanced and complex scenarios that better reflect real-life situations. One relevant observation is that the distinction between luck and merit is often blurry. As a motivating example, Glover et al. (2017) finds that minority supermarket cashiers spend less time at work, scan items more slowly, and take longer between customers when supervised by managers who are biased against minorities. There is growing evidence across various contexts indicating that effort choices are rarely independent of surrounding circumstances (Bursztyn et al., 2017; Carlana et al., 2022; Parsons et al., 2011). Understanding how people perceive and accept inequality in these contexts, where choices are influenced by unequal opportunities, is crucial for gaining a more comprehensive understanding of inequality acceptance. Findings indicate that inequalities arising from unequal opportunities are more likely to be accepted. This acceptance may stem from individuals' uncertainty about what might have occurred under different circumstances (Andre, 2024; Bhattacharya and Mollerstrom, 2022), their biased perceptions regarding the impact of unequal opportunities on actual inequalities (Cappelen et al., 2024; Preuss et al., 2023), or their tendency to avoid contemplating the effects of these opportunities altogether (Brun and Ramos, 2025). Overall, it seems that as realism increases, the observed behaviours begin to show cognitive roots. The rise in contextual complexity makes information processing imperfections to play a larger role in behaviour.

[27] In contrast to the findings on the effect of perceived social position that come from the information, the effects of the shocks are not necessarily causal, as the life events may be correlated with other unobservable characteristics of the respondents that also affect their fairness views.

3.3 Social Identity

Social identity is another relevant determinant of individuals' attitudes to inequality and their willingness to redistribute.[28] A long tradition of laboratory experiments in social psychology shows that individuals favour ingroup members when they have to distribute payoffs (see equation 5). This holds even in minimal intergroup situations, where groups lack their usual features, such as interaction among members, shared goals, and group structure.[29] In line with this early evidence, a large number of studies in economics show that ingroup favouritism extends to natural groups (Bernhard et al., 2006; Goette et al., 2006; Fischbacher et al., 2023).

Like in the fairness literature we survey in Section 3.2, most studies in social psychology use other-other allocation tasks. Recall that this design does not allow self-interest to condition the allocation of payoffs. However, the fundamental findings from earlier social psychology studies regarding ingroup favouritism hold when conflict with self-interest is introduced.

Because of social identity, experimental subjects typically favour ingroup members above and beyond their willingness to reduce outcome disparities. As a result, ingroup favouritism conditions attitudes to inequality in ways that are not always obvious. As expected, when ingroup favouritism leads to greater equality, subjects typically choose more egalitarian distributions of payoffs. For instance, Chen and Li (2009) pair individuals in the laboratory with another experimental subject and find them to be more inequality averse toward ingroup than outgroup matches, when asked to allocate payoffs between self and others.[30] Individuals are also willing to bear a limited cost in order to benefit their ingroup. For instance, Klor and Shayo (2010) find that lab subjects choose schemes that increase the average income of the group to which they belong instead of maximizing their own payoff when subjects have to vote for redistributive tax-transfer schemes.[31,32] This implies that relatively rich individuals prefer higher levels of

[28] See Costa-Font and Cowell (2015) for a more detailed review of this literature.

[29] Minimal groups, first in social psychology (Tajfel and Turner, 1986), and then in economics (Chen and Li, 2009; Kranton and Sanders, 2017), are often created based on subjects' taste for pictures by Paul Klee and Vassili Kandisnky.

[30] Chen and Li (2009) introduce social identity into Charness and Rabin's (2002) model of social preferences and estimate its effect. Their experimental design randomly assigns individuals either to a treatment group, where individuals are categorized into minimal groups, or to a control group, where subjects are not categorized into groups.

[31] In a lab setting, Klor and Shayo (2010) divide students into two groups based on their study field and inform treatment individuals on the existence of two groups, the size of the group, their group affiliation, the support and the average of the income distribution of their group, and overall average income. Subjects also know that incomes within a group are randomly allocated. Information on the existence of groups and group affiliation is omitted to control individuals. They are only informed on their own income and overall average income.

[32] Individuals are willing to pay a limited price to benefit ingroup members. When the amount of income individuals must forgo is too high, they vote schemes that maximize their own income instead of average group income.

redistribution when their group is relatively poor. This behaviour is consistent with a compassion motive and is also in line with strong preferences for equality. However, it also implies that relatively poor individuals prefer lower levels of redistribution when their group is relatively rich, a behaviour that cannot be explain by inequality aversion or preferences for redistribution, as above. As Klor and Shayo (2010) point out, social norms are not likely to account either for this behaviour, as their voting behaviour is not observed by other subjects and the prototypical behaviour of the groups is also not known. This unexpected behaviour is thus likely explained by mere ingroup bias. In a different laboratory study, Fischbacher et al. (2023) find that ingroup favouritism is a dominant motive for redistribution choices that increase or reverse inequality. More than a quarter of redistribution choices increase inequality (19 % of choices make the rich even richer, and 8 % make the poor very rich), while an additional 13 % of choices reduce overall inequality, but reorder the rich and the poor. A large majority, 85%, of redistribution choices that increase or reverse inequality favour ingroup members.

We only have a limited understanding as to why individuals have different social preferences towards ingroup members. We have some evidence that suggests that the heterogeneity between ingroup and outgroup members of the relevant group is important. Chen and Li (2009) show that subjects show less or no envy and more compassion when they are matched with an ingroup member than an outgroup member. This means that they prefer a situation with less inequality when the income distribution comprises ingroup members only and accept a larger inequality when the income distribution is heterogeneous, that is, comprises ingroup and outgroup members. Furthermore, Fischbacher et al. (2023) shows that the relative position of ingroups and outgroup members also matters. Participants redistribute less in favour of ingroup members if they are interleaved with outgroup members. The experimental design used by Chen and Li (2009), however, does not allow us to understand subjects' preferences when both groups are homogeneous. That is, we do not know whether individuals prefer there to be more or less inequality within their ingroup than within the outgroup. Likewise, no study has investigated individuals' attitude to inequality between the two groups (ingroup and outgroup). These are definitely avenues for further research.

Ingroup bias in natural o real groups, as opposed to random or minimal groups, may result from entitlement or fairness concerns, and may thus be difficult to disentangle whether it is fairness concerns or social identity that is causing ingroup bias. As outlined above, there is substantial research showing that individuals' fairness perceptions depend on the extent to which individuals are deemed accountable or responsible for their economic outcomes (Konow,

2000; Croson and Konow, 2009; Krawczyk, 2010; Cappelen et al., 2013; Gill and Stone, 2015; Mollerstrom et al., 2015). Individuals are deemed entitled to their results when they are deemed responsible for the factors that bring them about. Otherwise, people typically prefer to neutralize outcome differences. Now, if people identify with groups based on the factors and characteristics individuals are deemed responsible for, certain ingroup biases may results from fairness concerns instead of social identity. For instance, productivity has been found to be one such attribute individuals deem others responsible for (Cappelen et al., 2010; Paetzel and Sausgruber, 2018). Fairness concerns will lead individuals to demand compensation for income differences that arise from other factors individuals are not deemed responsible for, such as gender, family background or ethnicity. Thus, finding individuals to be inequality averse towards her own productivity group is consistent with fairness concerns as well as with social identity aspects. Fairness concerns, however, cannot explain that individuals seek to increase average ingroup income, as Klor and Shayo (2010) find, especially if it is at the expense of own income.

Paetzel and Sausgruber (2018) find that cognition influences ingroup bias and distributive preferences. In an experimental study, they find that ingroup bias is larger when groups are cognition-based rather than minimal, for high-cognition experimental subjects, while they find the opposite to hold for low-cognition subjects. As cognitive ability is inversely related to biased behaviour (Benjamin et al., 2013), the authors claim that high-cognition individuals are less ingroup biased towards minimal groups than low-cognition subjects because they are more cognitively able.

Whenever high-cognition subjects face a conflict between favouring a cognition-based ingroup member or having an equal distribution, most subjects choose the distribution where ingroup members are better-off —and the distribution is more unequal. Low-cognition subjects also do so, but to a lesser extent. To benefit ingroup members, low-cognition subjects give a lower payoff to subjects who score higher on the cognition test. Thus, if we assume that higher scores deserve larger payoffs, the choice of most low-cognition individuals cannot be explained by meritocratic or fairness concerns. However, their experimental design does not allow them to distinguish whether it is social identity or fairness concerns that drive the preferences of high-cognition subjects, as the distribution that maximizes the outcome of the ingroup member also gives a higher payoff to subjects who score higher on the cognition test.

4 Conclusion

Since the seminal contributions on redistributive preferences in the 1970's, a large body of literature in economics but also in the other social sciences provides a fair understanding of what influences inequality views and redistributive preferences. In this survey, we have focused on three issues that have received increased attention in recent years, namely misperceptions, social preferences, and social identity.

To conclude, we highlight some important issues that we believe deserve further attention if we want to gain a deeper understanding of the inequality views individuals hold and their preferences for redistribution.

As we explain in Section 3.1, causal identification of the impact of several factors on inequality views and redistributive preferences relies on information treatments, which typically provide accurate or real information to a random set of respondents. This empirical strategy to uncover causal effects of the social position of individuals or of income inequality, for instance, faces two main criticisms. First, the impact that the intervention captures is short-lived, and, second, results are not informative about how individuals change their voting behaviour in reality. We believe that there is much room for improvement in trying to address these two shortcomings of current information treatment designs, as previous attempts to address these two issues are not satisfactory. For instance, Kuziemko et al. (2014) try to address the ephemerality of effects by studying whether the effects of the information treatments persist after one month. As other papers have done before, they also intend to capture changes in individuals' real behavior by looking at whether respondents send an email to their US senator in response to their information treatment. Epper et al. (2024) addresses the issue of learning about the effects of factors on political behavior by matching the fairness beliefs elicited through laboratory games with data on voting decisions in referendums about redistributive policies.

Even though there are theoretical arguments that explain that misperceiving one's position in the income distribution shifts support for redistribution, the empirical evidence we have is mixed, and little effort has been devoted to understand the mechanisms that explain contradictory results. One possible mechanism is inequality views. Learning that one is poorer than one thought can shift views on inequality and, in turn, support for redistributive policies. Despite this, most studies do not elicit how inequality views change when relative positions are misperceived. Likewise, we do not know of any study that elicits misperceptions on other possible channels, such as whether individuals gain or lose from redistribution. Further work on this front can help

us understand the mixed results we have on the effect of relative position misperceptions on preferences for redistribution.

Last, one of the purposes of studying people's inequality views and preferences for redistribution is to understand why our societies are more or less equal and why some countries deploy public policies to address social and economic inequalities with more intensity than others. Of course, the political process is very important in shaping more or less equal societies. Now, political influence is unevenly distributed among the population. One of the groups with greater influence on political issues is that of individuals with greater cognitive ability (Dal Bó et al., 2017). Furthermore, in (US) politics, power begets power (Dal Bó et al., 2009). Because of this, it is especially interesting to study how cognition shapes inequality views and redistributive preferences. More cognitive able individuals are more likely to be richer (Heckman et al., 2006) and to believe that economic success is the result of effort, rather than luck (Blouin et al., 2024), which in turn is likely to induce them to demand less redistribution. This is what Mollerstrom and Seim (2014) find in a sample of Swedish individuals. However, cognitive ability has also been found to be associated with pro-sociality (Bašić et al., 2021; Chen et al., 2013; Proto et al., 2019), which should lead to more demand for redistribution. Using cohort data from the UK, **?** find evidence consistent with the latter prediction. Individuals who have higher preferences for redistribution at 42 are found to be more cognitive able when they were small children. In sum, the only two studies that examine preferences for redistribution of the more cognitive able yield results that are not consistent. Further work is therefore needed to gain a deeper understanding about this relationship and especially to identify the underlying mechanisms.

References

Ackert, L. F., Martinez-Vazquez, J., and Rider, M. (2007). "Social Preferences and Tax Policy Design: Some Experimental Evidence". *Economic Inquiry* 45(3): 487–501. DOI: 10.1111/j.1465-7295.2007.00048.x.

Alesina, A., and Angeletos, G.-M. (2005). "Fairness and Redistribution". *American Economic Review* 95(4): 960–980. DOI: 10.1257/0002828054825655.

Alesina, A., and Giuliano, P. (2011). "Preferences for Redistribution". In *Handbook of Social Economics*, edited by Bisin, A., and Benhabib, J. Volume 1.: 93–131, North-Holland, . DOI: 10.1016/B978-0-444-53187-2.00004-8.

Almås, I., Cappelen, A. W., Sørensen, E. Ø., and Tungodden, B. (2024). "Attitudes to Inequality: Preferences and Beliefs". *Oxford Open Economics* 3(Supplement 1): i64–i79. DOI: 10.1093/ooec/odae001.

Almås, I., Cappelen, A. W., and Tungodden, B. (2020). "Cutthroat Capitalism versus Cuddly Socialism: Are Americans More Meritocratic and Efficiency-Seeking than Scandinavians?". *Journal of Political Economy* 128(5): 1753–1788. DOI: 10.1086/705551.

Andre, P. (2024). "Shallow Meritocracy". *Review of Economic Studies*: rdae040. DOI: 10.1093/restud/rdae040.

Andreoni, J., and Miller, J. (2002). "Giving According to GARP: An Experimental Test of the Consistency of Preferences for Altruism". *Econometrica* 70(2): 737–753.

Atkinson, A. B. (1970). "On the measurement of inequality". *Journal of Economic Theory* 2(3): 244–263. DOI: 10.1016/0022-0531(70)90039-6.

Bašić, Z., Bindra, P. C., Glätzle-Rützler, D., Romano, A., Sutter, M., and Zoller, C. (2021). "The Roots of Cooperation". IZA Discussion Paper No. 14467.

Bellemare, C., Kroger, S., and Van Soest, A. (2008). "Measuring Inequity Aversion in a Heterogeneous Population Using Experimental Decisions and Subjective Probabilities". *Econometrica* 76(4): 815–839. DOI: 10.1111/j.1468-0262.2008.00860.x.

Benabou, R., and Ok, E. A. (2001). "Social Mobility and the Demand for Redistribution: The Poum Hypothesis". *Quarterly Journal of Economics* 116(2): 447–487. DOI: 10.1162/00335530151144078.

Benjamin, D. J., Brown, S. A., and Shapiro, J. M. (2013). "Who is 'Behavioral'? Cognitive Ability and Anomalous Preferences". *Journal of the European Economic Association* 11(6): 1231–1255. DOI: 10.1111/jeea.12055.

Bernhard, H., Fehr, E., and Fischbacher, U. (2006). "Group Affiliation and Altruistic Norm Enforcement". *American Economic Review* 96(2): 217–221. DOI: 10.1257/000282806777212594.

Bhattacharya, P., and Mollerstrom, J. (2022). "Lucky to Work". DOI: 10.2139/ssrn.4244266, GMU Working Paper in Economics No. 22-46.

Blouin, A., Mani, A., Mukand, S., and Sgroi, D. (2024). "The Meritocratic Illusion: Inequality and the Cognitive Basis of Redistribution". IZA Discussion Paper No. 17180.

Bolton, G. E., and Ockenfels, A. (2000). "ERC: A Theory of Equity, Reciprocity, and Competition". *American Economic Review* 90(1): 166–193. DOI: 10.1257/aer.90.1.166.

Bruhin, A., Fehr, E., and Schunk, D. (2019). "The many Faces of Human Sociality: Uncovering the Distribution and Stability of Social Preferences". *Journal of the European Economic Association* 17(4): 1025–1069. DOI: 10.1093/jeea/jvy018.

Brun, M., and Ramos, X. (2025). "A Cognitive Root in Fairness". Unpublished manuscript.

Bublitz, E. (2022). "Misperceptions of income distributions: cross-country evidence from a randomized survey experiment". *Socio-Economic Review* 20(2): 435–462. DOI: 10.1093/ser/mwaa025.

Burone, S., and Leites, M. (2021). "Self-centered and non-self-centered inequality aversion matter: Evidence from Uruguay based on an experimental survey". *Journal of Economic Inequality* 19(2): 265–291. DOI: 10.1007/s10888-021-09479-6.

Bursztyn, L., Fujiwara, T., and Pallais, A. (2017). "'Acting Wife': Marriage Market Incentives and Labor Market Investments". *American Economic Review* 107(11): 3288–3319. DOI: 10.1257/aer.20170029.

Bussolo, M., Ferrer-i Carbonell, A., Giolbas, A., and Torre, I. (2021). "I Perceive Therefore I Demand: The Formation of Inequality Perceptions and Demand for Redistribution". *Review of Income and Wealth* 67(4): 835–871. DOI: https://doi.org/10.1111/roiw.12497.

Cappelen, A. W., de Haan, T., and Tungodden, B. (2024). "Fairness and limited information: Are people Bayesian meritocrats?". *Journal of Public Economics* 233: 105097. DOI: 10.1016/j.jpubeco.2024.105097.

Cappelen, A. W., Halvorsen, T., Sørensen, E. Ø., and Tungodden, B. (2017). "Face-saving or fair-minded: What motivates moral behavior?". *Journal of the European Economic Association* 15(3): 540–557. DOI: 10.1093/jeea/jvw014.

Cappelen, A. W., Hole, A. D., Sørensen, E. Ø., and Tungodden, B. (2007). "The Pluralism of Fairness Ideals: An Experimental Approach". *American Economic Review* 97(3): 818–827. DOI: 10.1257/aer.97.3.818.

Cappelen, A. W., Moene, K. O., Sørensen, E. , and Tungodden, B. (2013). "Needs Versus Entitlements—An International Fairness Experiment". *Journal of the European Economic Association* 11(3): 574–598. DOI: 10.1111/jeea.12000.

Cappelen, A. W., Sørensen, E. , and Tungodden, B. (2010). "Responsibility for what? Fairness and individual responsibility". *European Economic Review* 54(3): 429–441. DOI: 10.1016/j.euroecorev.2009.08.005.

Carlana, M., La Ferrara, E., and Pinotti, P. (2022). "Goals and Gaps: Educational Careers of Immigrant Children". *Econometrica* 90(1): 1–29. DOI: 10.3982/ECTA17458.

Charness, G., and Rabin, M. (2002). "Understanding Social Preferences with Simple Tests∗". *Quarterly Journal of Economics* 117(3): 817–869. DOI: 10.1162/003355302760193904.

Chen, C.-C., Chiu, I.-M., Smith, J., and Yamada, T. (2013). "Too smart to be selfish? Measures of cognitive ability, social preferences, and consistency". *Journal of Economic Behavior & Organization* 90: 112–122. DOI: 10.1016/j.jebo.2013.03.032.

Chen, Y., and Li, S. X. (2009). "Group Identity and Social Preferences". *American Economic Review* 99(1): 431–457. DOI: 10.1257/aer.99.1.431.

Clark, A. E., and D'Ambrosio, C. (2015). "Attitudes to Income Inequality: Experimental and Survey Evidence". In *Handbook of Income Distribution*, edited by Atkinson, A., and Bourguignon, F. Volume 2A.: 1147–1208, Elsevier, . DOI: 10.1016/B978-0-444-59428-0.00014-X.

Costa-Font, J., and Cowell, F. (2015). "Social Identity and Redistributive Preferences: A Survey". *Journal of Economic Surveys* 29(2): 357–374. DOI: 10.1111/joes.12061.

Croson, R., and Konow, J. (2009). "Social preferences and moral biases". *Journal of Economic Behavior & Organization* 69(3): 201–212. DOI: 10.1016/j.jebo.2008.10.007.

Cruces, G., Perez-Truglia, R., and Tetaz, M. (2013). "Biased perceptions of income distribution and preferences for redistribution: Evidence from a survey experiment". *Journal of Public Economics* 98: 100–112. DOI: 10.1016/j.jpubeco.2012.10.009.

Dal Bó, E., Dal Bó, P., and Snyder, J. (2009). "Political Dynasties". *Review of Economic Studies* 76(1): 115–142. DOI: 10.1111/j.1467-937X.2008.00519.x.

Dal Bó, E., Finan, F., Folke, O., Persson, T., and Rickne, J. (2017). "Who Becomes A Politician?". *Quarterly Journal of Economics* 132(4): 1877–1914. DOI: 10.1093/qje/qjx016.

Dawes, C. T., Johannesson, M., Lindqvist, E., Loewen, P. J., Ostling, R., Bonde, M., and Priks, F. (2012). "Generosity and Political Preferences". DOI: 10.2139/ssrn.2179522, IFN Working Paper No. 941.

Dhami, S., and Al-Nowaihi, A. (2010). "Redistributive policies with heterogeneous social preferences of voters". *European Economic Review* 54(6): 743–759. DOI: 10.1016/j.euroecorev.2010.01.001.

Dimick, M., Rueda, D., and Stegmueller, D. (2017). "The Altruistic Rich? Inequality and Other-Regarding Preferences for Redistribution". *Quarterly Journal of Political Science* 11(4): 385–439. DOI: 10.1561/100.00015099.

Dimick, M., Rueda, D., and Stegmueller, D. (2018). "Models of Other-Regarding Preferences, Inequality, and Redistribution". *Annual Review of Political Science* 21: 441–460. DOI: 10.1146/annurev-polisci-091515-030034.

Durante, R., Putterman, L., and van der Weele, J. (2014). "Preferences for Redistribution and Perception of Fairness: An Experimental Study". *Journal of the European Economic Association* 12(4): 1059–1086. DOI: 10.1111/jeea.12082.

Engelhardt, C., and Wagener, A. (2018). "What do Germans think and know about income inequality? A survey experiment". *Socio-Economic Review* 16(4): 743–767. DOI: 10.1093/ser/mwx036.

Epper, T., Senn, J., and Fehr, E. (2024). "Who Are The Meritocrats?". Unpublished manuscript.

Faggian, A., Michelangeli, A., and Tkach, K. (2023). "Income inequality in Europe: Reality, perceptions, and hopes". *Research in Globalization* 6: 100118. DOI: 10.1016/j.resglo.2023.100118.

Fehr, E., and Charness, G. (2023). "Social Preferences: Fundamental Characteristics and Economic Consequences". DOI: 10.2139/ssrn.4464745, IZA Discussion Paper No. 16200.

Fehr, E., Epper, T., and Senn, J. (2024). "Social Preferences and Redistributive Politics". *Review of Economics and Statistics*: 1–45. DOI: 10.1162/rest_a_01511.

Fehr, E., and Schmidt, K. M. (1999). "A Theory of Fairness, Competition, and Cooperation". *Quarterly Journal of Economics* 114(3): 817–868. DOI: 10.1162/003355399556151.

Feichtmayer, J. E., and Gründler, K. (2021). "Global Evidence on Misperceptions and Preferences for Redistribution". DOI: 10.2139/ssrn.3953017, CESifo Working Paper, No. 9381.

Fernández-Albertos, J., and Kuo, A. (2018). "Income Perception, Information, and Progressive Taxation: Evidence from a Survey Experiment". *Political Science Research and Methods* 6(1): 83–110. DOI: 10.1017/psrm.2015.73.

Fischbacher, U., Grammling, D., Hausfeld, J., and Zíka, V. (2023). "Identity breeds inequality: Evidence from a laboratory experiment on redistribution". *Journal of Public Economics* 222: 104866. DOI: 10.1016/j.jpubeco.2023.104866.

Fisman, R., Jakiela, P., and Kariv, S. (2017). "Distributional preferences and political behavior". *Journal of Public Economics* 155: 1–10. DOI: 10.1016/j.jpubeco.2017.08.010.

Fisman, R., Kariv, S., and Markovits, D. (2007). "Individual Preferences for Giving". *American Economic Review* 97(5): 1858–1876. DOI: 10.1257/aer.97.5.1858.

Galasso, V. (2003). "Redistribution and fairness: a note". *European Journal of Political Economy* 19(4): 885–892. DOI: 10.1016/S0176-2680(03)00042-9.

Gill, D., and Stone, R. (2015). "Desert and inequity aversion in teams". *Journal of Public Economics* 123: 42–54. DOI: 10.1016/j.jpubeco.2014.12.001.

Gimpelson, V., and Treisman, D. (2018). "Misperceiving inequality". *Economics & Politics* 30(1): 27–54. DOI: 10.1111/ecpo.12103.

Glover, D., Pallais, A., and Pariente, W. (2017). "Discrimination as a Self-Fulfilling Prophecy: Evidence from French Grocery Stores". *Quarterly Journal of Economics* 132(3): 1219–1260. DOI: 10.1093/qje/qjx006.

Goette, L., Huffman, D., and Meier, S. (2006). "The Impact of Group Membership on Cooperation and Norm Enforcement: Evidence Using Random Assignment to Real Social Groups". *American Economic Review* 96(2): 212–216. DOI: 10.1257/000282806777211658.

Grigorieff, A., and Roth, C. (2016). "How does economic status affect social preferences? Experimental evidence from the US". Unpublished manuscript.

Harrs, S., and Sterba, M.-B. (2023). "Fairness and Support for Welfare Policies". Unpublished manuscript.

Hauk, E., Oviedo, M., and Ramos, X. (2022). "Perception of corruption and public support for redistribution in Latin America". *European Journal of Political Economy* 74: 102174. DOI: 10.1016/j.ejpoleco.2021.102174.

Hauser, O. P., and Norton, M. I. (2017). "(Mis)perceptions of inequality". *Current Opinion in Psychology* 18: 21–25. DOI: 10.1016/j.copsyc.2017.07.024.

Heckman, J. J., Stixrud, J., and Urzua, S. (2006). "The Effects of Cognitive and Noncognitive Abilities on Labor Market Outcomes and Social Behavior". *Journal of Labor Economics* 24(3): 411–482. DOI: 10.1086/504455.

Hoy, C., and Mager, F. (2021). "Why Are Relatively Poor People Not More Supportive of Redistribution? Evidence from a Randomized Survey Experiment across Ten Countries". *American Economic Journal: Economic Policy* 13(4): 299–328. DOI: 10.1257/pol.20190276.

Hoy, C., Toth, R., and Merdikawati, N. (2024). "How does information about inequality shape voting intentions and preferences for redistribution? Evidence from a randomized survey experiment in Indonesia". *Journal of Behavioral and Experimental Economics* 112: 102274. DOI: 10.1016/j.socec.2024.102274.

Hvidberg, K. B., Kreiner, C. T., and Stantcheva, S. (2023). "Social Positions and Fairness Views on Inequality". *Review of Economic Studies* 90(6): 3083–3118. DOI: 10.1093/restud/rdad019.

Iacono, R., and Ranaldi, M. (2021). "The nexus between perceptions of inequality and preferences for redistribution". *Journal of Economic Inequality* 19(1): 97–114. DOI: 10.1007/s10888-020-09470-7.

Karadja, M., Mollerstrom, J., and Seim, D. (2017). "Richer (and Holier) Than Thou? The Effect of Relative Income Improvements on Demand for Redistribution". *Review of Economics and Statistics* 99(2): 201–212. DOI: 10.1162/REST_a_00623.

Kerschbamer, R. (2015). "The geometry of distributional preferences and a non-parametric identification approach: The Equality Equivalence Test". *European Economic Review* 76: 85–103. DOI: 10.1016/j.euroecorev.2015.01.008.

Kerschbamer, R., and Müller, D. (2020). "Social preferences and political attitudes: An online experiment on a large heterogeneous sample". *Journal of Public Economics* 182: 104076. DOI: 10.1016/j.jpubeco.2019.104076.

Klor, E. F., and Shayo, M. (2010). "Social identity and preferences over redistribution". *Journal of Public Economics* 94(3): 269–278. DOI: 10.1016/j.jpubeco.2009.12.003.

Knell, M., and Stix, H. (2020). "Perceptions of inequality". *European Journal of Political Economy* 65: 101927. DOI: 10.1016/j.ejpoleco.2020.101927.

Konow, J. (2000). "Fair Shares: Accountability and Cognitive Dissonance in Allocation Decisions". *American Economic Review* 90(4): 1072–1091. DOI: 10.1257/aer.90.4.1072.

Kranton, R. E., and Sanders, S. G. (2017). "Groupy versus Non-Groupy Social Preferences: Personality, Region, and Political Party". *American Economic Review* 107(5): 65–69. DOI: 10.1257/aer.p20171096.

Krawczyk, M. (2010). "A glimpse through the veil of ignorance: Equality of opportunity and support for redistribution". *Journal of Public Economics* 94(1): 131–141. DOI: 10.1016/j.jpubeco.2009.10.003.

Kuziemko, I., Buell, R. W., Reich, T., and Norton, M. I. (2014). ""Last-Place Aversion": Evidence and Redistributive Implications". *Quarterly Journal of Economics* 129(1): 105–149. DOI: 10.1093/qje/qjt035.

Kuziemko, I., Norton, M. I., Saez, E., and Stantcheva, S. (2015). "How Elastic Are Preferences for Redistribution? Evidence from Randomized Survey Experiments". *American Economic Review* 105(4): 1478–1508. DOI: 10.1257/aer.20130360.

Meltzer, A. H., and Richard, S. F. (1981). "A Rational Theory of the Size of Government". *Journal of Political Economy* 89(5): 914–927. DOI: 10.1086/261013.

Mengel, F., and Weidenholzer, E. (2023). "Preferences for redistribution". *Journal of Economic Surveys* 37(5): 1660–1677. DOI: 10.1111/joes.12519.

Mollerstrom, J., Reme, B.-A., and Sørensen, E. (2015). "Luck, choice and responsibility — An experimental study of fairness views". *Journal of Public Economics* 131: 33–40. DOI: 10.1016/j.jpubeco.2015.08.010.

Mollerstrom, J., and Seim, D. (2014). "Cognitive Ability and the Demand for Redistribution". *PLoS ONE* 9(10): e109955. DOI: 10.1371/journal.pone.0109955.

Nair, G. (2018). "Misperceptions of Relative Affluence and Support for International Redistribution". *The Journal of Politics* 80(3): 815–830. DOI: 10.1086/696991.

Niehues, J. (2014). "Subjective Perceptions of Inequality and Redistributive Preferences: An International Comparison". Cologne Institute for Economic Research WP1-23.

Norton, M. I., and Ariely, D. (2011). "Building a better America —one wealth quintile at a time". *Perspectives on Psychological Science* 6: 9–12. DOI: 10.1177/1745691610393524.

Paetzel, F., and Sausgruber, R. (2018). "Cognitive ability and in-group bias: An experimental study". *Journal of Public Economics* 167: 280–292. DOI: 10.1016/j.jpubeco.2018.04.006.

Parsons, C. A., Sulaeman, J., Yates, M. C., and Hamermesh, D. S. (2011). "Strike Three: Discrimination, Incentives, and Evaluation". *American Economic Review* 101(4): 1410–35. DOI: 10.1257/aer.101.4.1410.

Perotti, R. (1993). "Political Equilibrium, Income Distribution, and Growth". *Review of Economic Studies* 60(4): 755–776. DOI: 10.2307/2298098.

Preuss, M., Somerville, J., Reyes, G., and Wu, J. (2023). "Inequality of Opportunity and Income Redistribution". DOI: 10.2139/ssrn.4428282.

Proto, E., Rustichini, A., and Sofianos, A. (2019). "Intelligence, Personality, and Gains from Cooperation in Repeated Interactions". *Journal of Political Economy* 127(3): 1351–1390. DOI: 10.1086/701355.

Roberts, K. W. S. (1977). "Voting over income tax schedules". *Journal of Public Economics* 8(3): 329–340. DOI: 10.1016/0047-2727(77)90005-6.

Romer, T. (1975). "Individual welfare, majority voting, and the properties of a linear income tax". *Journal of Public Economics* 4(2): 163–185. DOI: 10.1016/0047-2727(75)90016-X.

Schildberg-Hörisch, H. (2010). "Is the veil of ignorance only a concept about risk? An experiment". *Journal of Public Economics* 94(11): 1062–1066. DOI: 10.1016/j.jpubeco.2010.06.021.

Stantcheva, S. (2021). "Understanding Tax Policy: How do People Reason?". *Quarterly Journal of Economics* 136(4): 2309–2369. DOI: 10.1093/qje/qjab033.

Stantcheva, S. (2024). "Perceptions and preferences for redistribution". *Oxford Open Economics* 3(Supplement 1): i96–i100. DOI: 10.1093/ooec/odad038.

Støstad, M. N. (2023). "Fairness Beliefs Affect Perceived Economic Inequality". DOI: 10.2139/ssrn.4667698, NHH Dept. of Economics Discussion Paper No. 22.

Tajfel, H., and Turner, J. C. (1986). "The Social Identity Theory of Intergroup Behavior". In *Psychology of Intergroup Relation*, edited by Worchel, S., and Austin, W.: 7–24, Hall Publishers.

Trump, K.-S. (2023). "Income inequality is unrelated to perceived inequality and support for redistribution". *Social Science Quarterly* 104(2): 180–188. DOI: 10.1111/ssqu.13269.

Tyran, J.-R., and Sausgruber, R. (2006). "A little fairness may induce a lot of redistribution in democracy". *European Economic Review* 50(2): 469–485. DOI: 10.1016/j.euroecorev.2004.09.014.

Yamamura, E. (2014). "Trust in government and its effect on preferences for income redistribution and perceived tax burden". *Economics of Governance* 15: 71–100. DOI: 10.1007/s10101-013-0134-1.