

Do People Distinguish Income from Wealth Inequality? Evidence from the Netherlands.*

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Abstract

In most countries, wealth inequality is much higher than income inequality, spurring debates about wealth taxation. We study people’s perceptions of income and wealth inequality using a survey-experiment linked to administrative records for the Dutch population. We document a strong overlap in perceptions about the two distributions: people largely underestimate the difference between the respective levels of inequality and use information about income (inequality, own rank) to predict wealth and vice versa, even when information about both is provided. Informing people about inequality or their own rank has direct effects on their beliefs, but little effect on their policy preferences.

JEL classification: D31, D63, H31, P16

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1 Introduction

In many Western countries, inequality plays an important role in policy debates and voter preferences. While much debate has focused on income inequality, there is a recent surge in interest for *wealth* inequality, due to improvements in wealth measurements and administrative records. Such records show that wealth inequality in Western countries is typically much larger than income inequality: Whereas the top 10% of richest people earn between 30% and 45% of all income, they possess 45% to 70% of all wealth.¹ Moreover, there has been a large increase in wealth/income ratios over the last century, increasing the relevance of wealth relative to income (Piketty and Zucman, 2014; Waldenström, 2024).

These facts have spurred policy debates about the concentration of political power and (media) infrastructure in the hands of the wealthy (Robeyns, 2019; Reich, 2020), and the desirability and feasibility of wealth taxation (Piketty, 2014; Mankiw, 2015; Saez and Zucman, 2019; Chari et al., 2020; Scheuer and Slemrod, 2021). However, we know little about the views of the general public on this topic. In particular, how do people perceive the wealth distribution and the differences between income and wealth inequality? These insights are crucial for the adoption of policies like wealth taxation, and voters' understanding of their economic environment more generally.

In this study, we explicitly contrast the public's perceptions of income and wealth inequality to i) document whether citizens hold accurate beliefs about wealth and income inequality (including their own relative position), and ii) causally identify the impact of information on citizens inequality acceptance and policy preferences regarding income and wealth taxation. To do so, we use a survey-experiment where we give a selection of participants information about the actual levels of income and/or wealth inequality and their own position within these two distributions. We then ask them a series of questions on their perceptions of these distributions, their normative evaluations, and their preferences for a series of specific taxation policies.

We conduct our survey-experiment on a representative sample of the Dutch population ($N = 4,501$), using the online Longitudinal Internet studies for the Social Sciences panel (LISS). We link

¹See Chancel et al. (2022), Chapter 4, <https://wir2022.wid.world/chapter-4/> accessed February 26, 2024.

these survey data to registry data provided by the Dutch Statistical Agency (CBS), which yields high-quality background information on the *actual* wealth and income of participants. Combining the two data sources allows us to compare people’s perceptions to actual levels of inequality, and their own position within the income and wealth distributions. The Netherlands is well suited for this exercise. The top 10% of highest earners only earn 26% of the total income, a relatively low inequality within the OECD. By contrast, the OECD ranks the Netherlands as the second most unequal country in terms of wealth after the U.S., with the top 10% of wealthiest individuals owning 62% of the total wealth, ignoring money placed in pension funds.^{2,3}

Respondents think wealth inequality—as measured by the share of wealth owned by the richest 10%—is 3.4 p.p. larger than income inequality, at 49.8% and 46.4% respectively. While this difference is statistically significant, it underestimates the actual difference (62% vs. 26%) by a factor of more than 10. A large majority of respondents underestimate wealth inequality and overestimate income inequality, even though we provided precise definitions of income and wealth. This pattern persists when we saliently contrast income and wealth inequality by asking about both. Providing information about income inequality leads to a decrease in subjectively perceived income and wealth inequality while wealth information leads to an increase in subjectively perceived inequality. Participants also rate inequality as more or less fair upon seeing income or wealth information respectively, but we do not find that this translates into meaningful effects on policy views.

We also investigate respondents’ estimates of their own ranking in the two distributions, which we compare to their actual income and wealth levels in administrative data from the Dutch Bureau of Statistics (CBS). In line with previous literature on income (see e.g., Cruces et al., 2013; Hvidberg et al., 2023), we observe a clear “center-bias” in both income and wealth perceptions, meaning that people tend to think their income and wealth is closer to the 50th percentile than it

²See Balestra and Tonkin (2018). Whether pension funds should count as wealth is an unresolved debate in the literature. If pensions are included, the share of the top 10% drops to 48%, which is still substantially higher than income inequality. In our survey, we give information about wealth inequality either with or without pensions, allowing us to look at the impact of wealth inequality levels.

³For long-run trends in wealth inequality in the Netherlands, see Toussaint et al. (2022).

actually is. Strikingly, the average perceived rank of even the lowest income/wealth percentiles is 40. However, correcting these misperceptions has no discernible effect on their perceptions on the role of merit or their preferences for redistribution, in line with many earlier information provision experiments (Haaland et al., 2023).

Generally, our data reveal that participants do not make a sharp distinction between wealth and income distributions, despite a primer on these two concepts at the beginning of the survey. Not only do respondents underestimate the difference in inequality between the two measures, but providing information about income inequality also moves perceptions about wealth inequality and vice versa, even if information about both types of inequality is available. We find a similar effect for information about one’s perceived rank in the income or wealth distribution. Moreover, tax preferences also do not single out wealth specifically: respondents prefer roughly similar rates for income from labor and capital. Instead, our findings are consistent with people having a mental model including a single notion of economic inequality that spans across both dimensions. These results are also in line with responses to our open-ended question on the causes of economic inequality. We can rule out poor data quality or lack of attention as a driver of our findings (see Appendix A for robustness checks).

Instead, the picture that emerges is that respondents care about a single type of economic inequality, and consider both income and wealth as informative about its level. This finding is highly relevant to debates about inequality and wealth and income taxation. While academic literature makes a prominent distinction between income and wealth taxation, such arguments are not reflected in the views of the general public, at least in the Netherlands. This matters to the policy debate on inequality, and may help explain the relative unpopularity of wealth taxes over the last few decades in OECD countries (Andre, 2018; Scheuer and Slemrod, 2021). Garnering support for particular policies (e.g. taxes on inheritances or capital gains) will require politicians to better explain and highlight the differences between both types of inequality.

To the best of our knowledge, we are the first to study the distinction between income and wealth perceptions and the role of information about both types of inequality. There is a large literature on perceptions of income inequality (Cruces et al., 2013; Kuziemko et al., 2015; Karadja

et al., 2017; Hvidberg et al., 2023; Fehr et al., 2022). However, wealth inequality has received scant attention, as underlined in a recent review by Mengel and Weidenholzer (2023). An exception is Stantcheva (2021), who asks a U.S. sample to estimate the share of income and wealth going to the top 1%. Her paper focuses on perceptions of the tax system, and she does not study the role of information on income and wealth distributions, nor people’s perception of their own rank in these distributions. She finds that subjects overestimate both income and wealth inequality, whereas we find that subjects underestimate wealth inequality. Norton and Ariely (2011) study perceptions about wealth inequality and contrast those beliefs with people’s ideal wealth distribution. Fehr and Reichlin (2023) show that perceptions of relative wealth ranking matter for risk preferences.

Other papers investigate attitudes towards estate taxation (Kuziemko et al., 2015; Sides, 2016; Alesina et al., 2018). In a representative Swedish sample linked to registry data, Bastani and Waldenström (2021) show that people underestimate the share of inherited wealth, and that providing information about it increases support for inheritance taxation. Fisman et al. (2020) use a survey-experiment to elicit preferences for income and wealth taxation in the U.S. and show that people like to tax both income and wealth at approximately linear rates. Instead, our respondents prefer to tax income from labor and wealth progressively, and at approximately the same rate. More generally, we contribute to a literature on how the general public understands and reasons about redistribution and taxation (Stantcheva, 2021).

2 Data

2.1 Survey Sample

The study combines data from a large-scale survey-experiment implemented in the online Longitudinal Internet studies for the Social Sciences (LISS) panel with high-quality administrative data from the Centraal Bureau voor de Statistiek (CBS), linked at the individual level. Combining the two data sources allows us to study how people’s *perceptions* align with *actual* levels of inequality, and their own position within the income and wealth distributions.

The survey-experiment was implemented as a module in the June–July 2023 wave of the LISS

panel. The panel is based on a representative (true probability) sample of Dutch households drawn from the population register of Statistics Netherlands. To achieve a high-quality representative sample, participation is invite-base only, survey completion is incentivized, and (poorer) households that could otherwise not participate are provided with computers and internet connection.

The median completion time of the survey was 13.7 minutes. Of the 6,351 individuals who were invited to participate, 4,501 responded to our survey (i.e., 70.9%). Out of the 4,501 respondents, 3.15% of the responses are incomplete.⁴ As shown in Table A.3 there is no selective attrition by treatment conditions. Finally, 3,987 respondents accepted that their answers be linked to the CBS data, of which 3,796 and 3,926 could be successfully matched to their income and wealth records respectively. Thus, in most of the analysis we work with our full sample of 4,501 respondents (minus the few who did not answer a specific question), except when our analysis relies on the linked CBS data in which case up to 16.1% (when both income and wealth records are necessary) of respondents are excluded.

Descriptive statistics of our sample compared to the general Dutch population are provided in Table A.1 in Appendix. Our respondents are on average a little older, richer, and more educated than the average Dutch population, but we see no substantial difference between the respondents who were linked to the CBS data and the ones who were not.

2.2 Survey Design

Our survey-experiment is divided into four main parts, meant to i) provide explicit definitions of income and wealth to respondents, ii) study their perceptions about income and wealth inequality, iii) study their perceptions about their own rank in these distributions, and iv) elicit their fairness views and policy preferences. In this section we provide the main features of our survey-experiment in the order in which they appeared in the survey. The full questionnaire can be found in Appendix D, and Appendix C provides details about the exact sequence and randomization of all questions and treatments.

⁴A response is defined as incomplete if at least one of the questions Q2a–Q11 is not answered.

Definitions. For all participants, the survey starts with a video that includes illustrations, audio, and subtitles.⁵ All videos begin with explicit definitions of both income and wealth. To make the distinction between the two terms as clear as possible, our text and illustrations provide conceptual definitions as well as examples of what constitutes income (e.g., income from labor, Social Security benefits) and wealth (e.g., real-estate, cars, savings). For a full description of these definitions, see Appendix D.

For income, we provide the same definition to all participants. For wealth, respondents are randomly assigned to a definition that excludes pensions (our baseline) or includes it (Pension treatment). Whether pensions should be accounted for when measuring wealth inequality is subject to debate: we leverage this fact in the survey to provide information treatments with different levels of wealth inequality and analyze the implications for fairness views and policy preferences in Section 3.2.⁶

Perceived inequality. The second part of the survey aims to document discrepancies between people’s perceptions of inequalities and the actual extent of inequality in the Netherlands. To contrast perceptions of income and wealth inequality, we randomize participants into four inequality treatments: Income, Wealth, Both income and wealth, and No information.

For participants in the No information condition, the introductory video stops after the definitions of income and wealth. For participants in the inequality treatments (Income, Wealth, Both), the video continues by introducing a measure of inequality: we ask respondents to imagine that the Netherlands is represented by 10 persons that can be ranked from the lowest to the highest income/wealth. We say that total income/wealth can be represented by a pie, and that we can measure inequality by looking at the share of the pie that goes to the richest person in terms of income/wealth. Again, we accompany the audio with subtitles and an illustration of

⁵Respondents were not allowed to skip or speed up the video. For respondents who indicated that they could not see a test video shown at the start of the survey (3% of total sample), the script of the video and illustrations were provided.

⁶See Appendix D for the exact definitions. While the OECD does not include pension wealth in its definition, other sources like the World Inequality Database do so (Alvaredo et al., 2024).

the inequality measure alongside a slider similar to the one later used when eliciting participants' perceptions of inequality.

In the Income treatment, we ask participants about the share of total income earned by the top 10% in the Netherlands. After they answer, we provide the correct response based on the best available estimates: 26%.^{7,8} To make the information more salient, we complement the text with an illustration similar to the one featured in the video: displaying a pie chart indicating the portion attributed to the top 10%. We also make the information provision interactive by adapting the text to state whether the actual level of inequality is lower/higher or as the participant perceived it to be.

Similarly, in the Wealth treatment we ask participants about the share of total wealth owned by the top 10% in the Netherlands, followed by the correct response (based on the best available estimates) in a similar fashion: 62% excluding pensions. In the Pension treatment, the corresponding number is 48%.⁹ In the Both treatment, we successively ask about income and wealth inequality as explained above, and then provide the correct answers for both. In the control group, we neither ask questions nor provide responses about income and wealth inequality, to avoid making inequality salient as in the other groups. We then evaluate the impact of the inequality treatments by asking all groups to rate the level of income and wealth inequality in the Netherlands from 0 to 10.

Perceived rank. The third part of our survey-experiment serves to document the accuracy of individuals' perceptions of their placement within the income and wealth distributions. Indepen-

⁷Income inequality is estimated based on post-tax and transfer income reported in Bruil et al. (2022). These data closely match those from WID.world, the Dutch Bureau of Statistics (CBS) as well as our own computations from the CBS data.

⁸All our inequality measures are computed at the individual level. We make this clear to respondents in our definitions, and explain that “when two individuals hold an asset together, we consider that each individual is entitled to half of the value of this asset.”

⁹The levels for wealth inequality with and without pensions are based on estimates from the CBS, found here <https://www.cbs.nl/nl-nl/longread/statistische-trends/2020/pensioenvermogen-en-vermogensongelijkheid?onepage=true>, last accessed February 28, 2024.

dent of the treatment condition, we ask all participants to place themselves in both distributions by stating a specific percentile. Having done so, participants in the Rank treatment are provided with feedback on what level of income and/or wealth corresponds to their answer.¹⁰ Whether participants in the Rank treatment receive information on income and/or wealth depends on their Inequality treatment: participants from the Income treatment receive information about their income rank, participants from the Wealth treatment receive information about their wealth rank, and participants from the Both and No Info groups receive information about both their income and wealth rank. After this feedback, respondents in the Rank treatment are asked to re-assess their perceived rank.

Preferences and policy attitudes. Lastly, in the fourth part of the survey all participants answered a list of questions eliciting their beliefs about the causes of inequality, their meritocratic beliefs, their perceptions of inequality, their fiscal policy preferences, and an incentivized donation to a charity that supports the poor.

Treatment summary. Taken together, our treatments lead to a 4×3 between-subject design. The first dimension refers to the four inequality information conditions (None, Income, Wealth, Both). The second dimension includes the Pension treatment (giving an alternative definition of wealth with pensions) and the Rank treatment, or none of these two (Control condition). The sample size per treatment condition is approximately 375, but see Table A.2 in the Appendix for the precise numbers in each cell. When studying the effect of a specific treatment (e.g., Income vs. Wealth information on perceived inequality) we pool the sub-conditions, enabling us to work with larger sample sizes per treatment ($N > 1,000$) throughout the paper.

¹⁰Information about the actual income and wealth of participants is confidential and cannot be used to condition our survey treatment. Given that we again ask about perceived rank after the treatment, the information we provide (the income/wealth that corresponds to the respondent’s guess) also induces a lower demand-effect than providing the true rank directly. It also avoids giving respondents the impression that we were “spying” on their actual details.

3 Results

We start with an analysis of the perceptions of income and wealth inequality (3.1), and the information treatments on these measures (3.2). We then turn to perceptions of personal income and wealth rank (3.3), and the associated information treatments (3.4). Section 3.5 documents respondents’ open-ended responses on the causes of economic inequality, and Section 3.6 compares their preferred taxes on capital and labor. We provide further evidence about the quality of our data in Section A in the appendix.

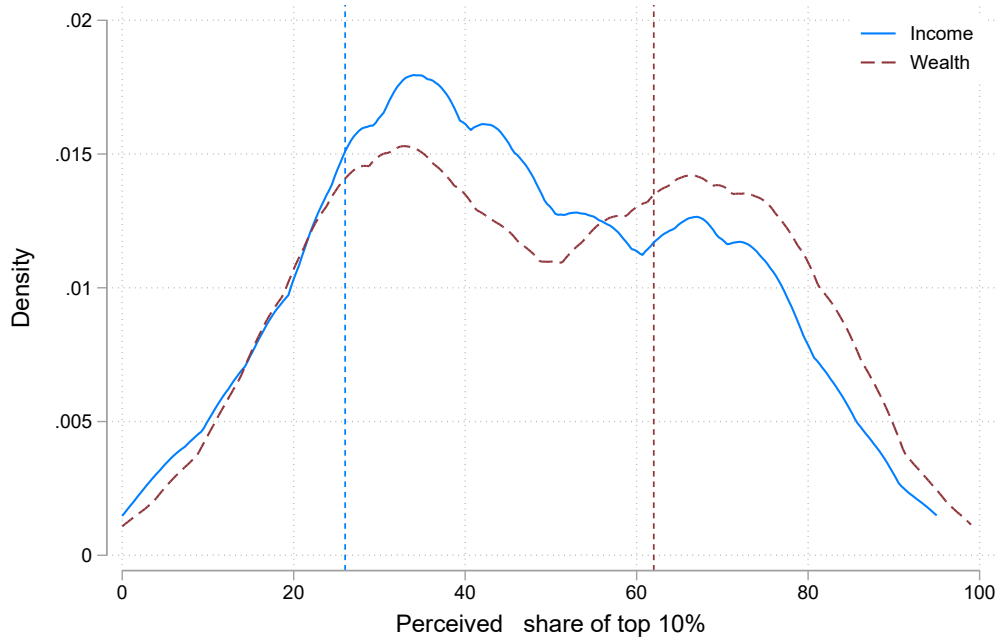
3.1 Perceptions of Income and Wealth Inequality

Figure I shows the distributions of perceived income and wealth inequality across conditions (except the Both treatment that we analyze separately), before any information about these distributions was communicated. Vertical dashed lines indicate the true income/wealth shares. There are two main takeaways. First, respondents correctly perceive wealth inequality to be higher than income inequality, by about 3.4 p.p., a difference which is statistically significant ($t = -16.68$, $p < 0.001$). Second, respondents underestimate the difference between income and wealth inequality by a factor of 10, as the true difference is 36 p.p. (using wealth without pensions as baseline). In particular, respondents largely overestimate the level of income inequality, with an average perceived share of 46.4% instead of 26%, and underestimate the level of wealth inequality, at an average of 49.8% instead of 62%.¹¹ In addition, while 65% thinks (correctly) that wealth inequality is higher than income inequality, 22% instead thinks income inequality is higher.

In the appendix, we show a series of additional analyses. First, in Figure A.1 we investigate what happens if we make the difference between income and wealth more salient. While all respondents see definitions of both income and wealth at the beginning of the survey, respondents in the Both treatment are asked explicitly about inequality levels for both measures. As a result, the perceived difference increases slightly to 7.6 p.p., a change that is fully driven by higher

¹¹For a full overview of summary statistics about the perceptions of wealth and income inequality for the different inequality treatments, see Table A.4 in Appendix A.

Figure I: Perceived level of income and wealth inequality



Note: The figure shows perceived levels of income (blue) and wealth (red) inequality as measured by the perceived share of total income/wealth held by the top 10% highest earners/wealthiest in the Netherlands. Vertical lines in the corresponding color mark the actual share (26% for income, and 62% for wealth). The sample is restricted to participants who are either in the Income or Wealth treatments, $N = 2,193$.

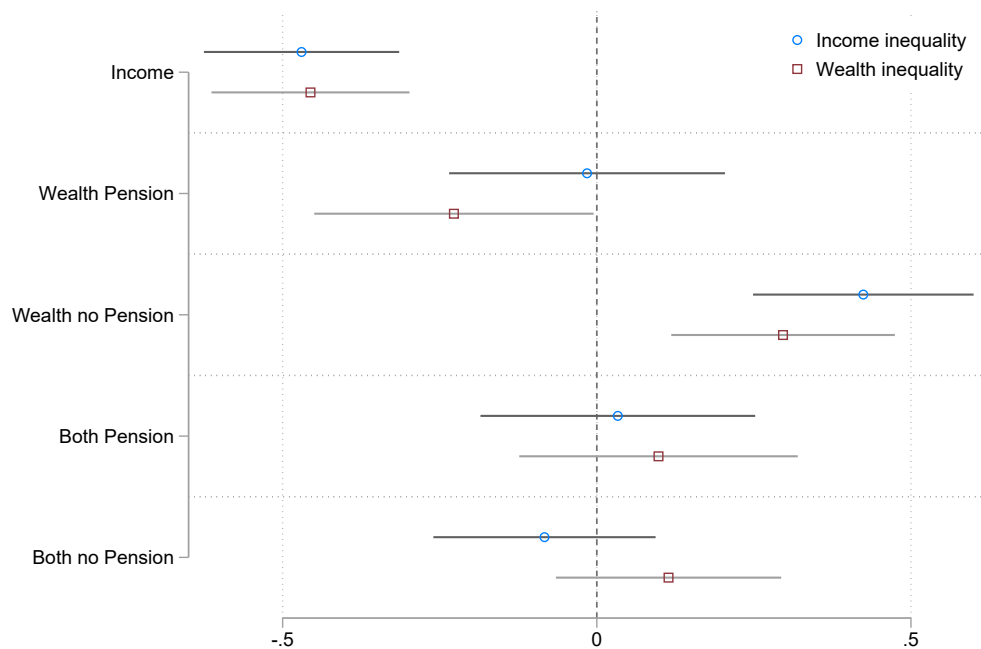
perceptions about wealth inequality, but remains much smaller than the actual difference. Second, when we include pensions in the definition of wealth (see Figure A.2), we do not see any difference in perceived wealth inequality. Third, our heterogeneity analysis shows that respondents who are more educated, older, and to the left of the political spectrum perceive higher levels of income and wealth inequality (see Figures A.3, A.4, and A.5). For highly educated respondents and people classified as Left, the effect is stronger for wealth, hence they make a clearer distinction between the two (at 4.5 and 5.9 p.p. respectively) though still far from the actual difference.

3.2 Information about Inequality

Figure II shows the impact of our various inequality information treatments on the subjectively perceived inequality of the income and wealth distributions. This manipulation check confirms that our treatments did indeed affect subjectively perceived inequality. In particular, we find that

information about income reduces subjective perceptions of inequality, which makes sense given that participants, on average, overestimate income inequality. Moreover, the effect of income information on perceptions of wealth inequality are also negative and of similar size as income inequality, indicating that people treat income as a proxy for wealth. The effect of information on wealth (excluding pensions) goes in the opposite direction, reflecting the fact that participants initially underestimated wealth inequality. When we include pensions in the definition of wealth, thus decreasing the level of inequality from 62% to 48%—a value consistent with respondents’ average prior—the point estimates are reduced and become zero for income inequality and even slightly negative for wealth. This shows that conditional on the type of inequality, levels of inequality indeed matter for perceptions.

Figure II: Impact of information on perceived inequality



Note: The figure shows the estimated average effects of information (y-axis) on perceived income inequality (blue) and wealth inequality (red), where the No information condition is used as base. Subjective income/wealth inequality is measured on a scale from 0 (very equal) to 10 (very unequal). Error bars mark the 95% confidence intervals. In the No information condition, the average perceived level of income and wealth inequality are 6.4 and 6.8 respectively. Sample size: $N = 4,425$.

Figure II also provides further evidence of respondents’ confusion between income and wealth.

Respondents in the Both treatment receive the same information about income inequality as respondents in the Income treatment, but additionally receive information about wealth inequality. Despite the emphasis on the distinction between the two measures in the treatment, being informed about higher levels of wealth inequality increases both their perceptions of income and wealth inequality relative to respondents of the Income group.¹² Conversely, respondents in the Both group perceive both income and wealth inequality as lower than respondents in the Wealth group, despite receiving the same information about wealth inequality. As we will discuss in more detail in Section 4, this seems to indicate that people’s mental model includes a single notion of economic inequality, and that they see both types of data as informative about this.

Next we investigate the effect of information on perceptions of fairness and policy preferences. Table I shows OLS regressions of the information treatments on beliefs that inequality is due to merit or luck (column 1), ratings of fairness (column 2), and an index for the desired progressivity of taxes.¹³ The treatments do not cause significant changes in perceptions about the role of merit and luck or preferences for redistribution. When it comes to fairness, we do see that information about high levels of wealth inequality (Wealth excluding pensions) makes respondents judge inequality as less fair, while exposure to income information has the opposite effect. There is no significant effect when exposed to levels of inequality consistent with their prior (Wealth including pensions) or a mix of high and low levels of inequality (Both treatment).

¹²Note that if respondents in the Both group initially reported levels of inequality for income and wealth in between the two true levels, the information treatment made it explicit that they overestimated income inequality but underestimated wealth inequality.

¹³The progressivity index measures the preferred level of progressivity across the income tax, the wealth tax, and the inheritance tax based on answers to questions Q8a–Q10c (see Appendix D). For each of these three taxes, progressivity is measured as the difference between the top and the bottom tax rate chosen by respondents. The index is the sum of normalized differences divided by the number of policies.

Table I: Estimated treatment effects of inequality information treatments

	(1)	(2)	(3)
	Meritocratic belief	Inequality unfair	Progressivity index
Income	0.048 (0.074)	-0.187* (0.098)	-0.069* (0.037)
Wealth Pension	-0.061 (0.103)	0.019 (0.131)	-0.067 (0.048)
Wealth no Pension	0.050 (0.083)	0.257** (0.107)	-0.010 (0.041)
Both Pension	0.006 (0.100)	0.198 (0.139)	-0.041 (0.050)
Both no Pension	-0.026 (0.086)	-0.059 (0.114)	-0.046 (0.041)
Constant	5.776*** (0.051)	6.172*** (0.069)	0.036 (0.026)
Observations	4394	4389	4366
R^2	(0.000)	(0.004)	(0.001)

Note: The table reports the estimated treatment effects of the inequality information treatments, with the No information condition used as base. Column (1) reports estimates for meritocratic beliefs which is measured on a scale from 0–10, where 0(10) is believing only luck (hard work) is important for economic success. Column (2) reports estimates for perceiving economic inequality in the Netherlands to be unfair, measured on a scale from 0 (completely disagree) to 10 (fully agree). Column (3) reports estimates for the progressivity index which is defined as the sum of normalized differences between the top and the bottom tax rate chosen by respondents, divided by the number of policies (the income tax, the wealth tax, and the inheritance tax). Robust standard errors are reported in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

3.3 Perceptions about Income and Wealth Rankings

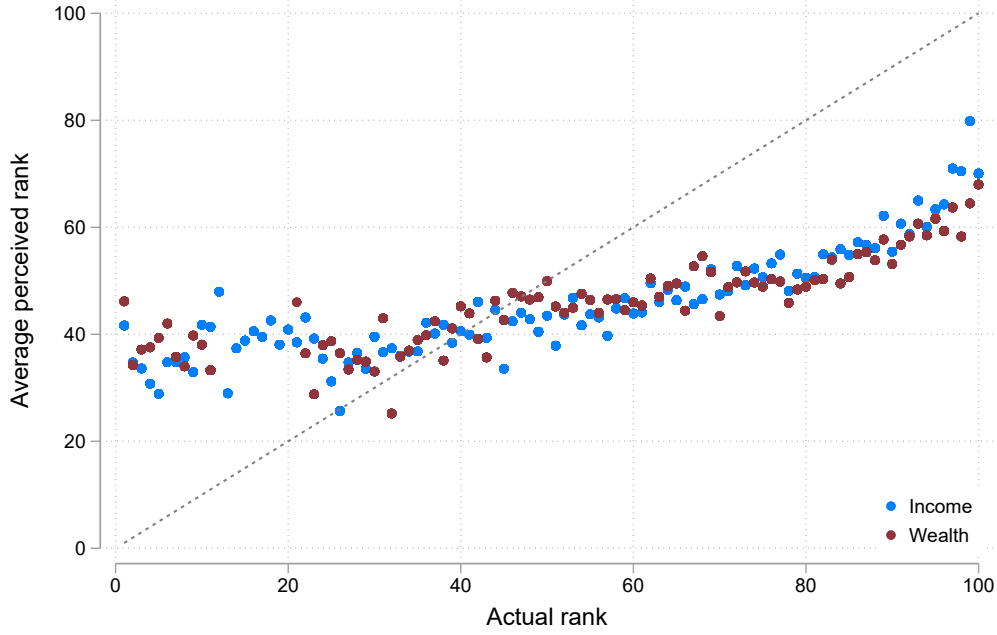
We also study perceptions of one’s own rank in the income or wealth distribution. A sizable literature has looked at such perceptions in the case of the income distribution (Cruces et al., 2013; Karadja et al., 2017; Fehr et al., 2022; Hvidberg et al., 2023), and documented a center- or middle-class bias whereby perceptions of income ranks are much compressed relative to actual ranks. To look at this in our context, we obtain actual wealth and income levels of our survey participants from the registry data of the Dutch Bureau of Statistics (CBS).

We replicate the center-bias in our data for both income and wealth (see Figure III). Perceptions on both measures are highly compressed: an improvement of one rank leads to an average perceived increase in ranks of 0.31 for income and 0.27 for wealth (see Panel A of Table II). In the appendix, we check robustness using median answers instead of averages, as this reduces the mechanical bias towards the center induced by the boundaries of the scale (see Figure A.6 in Appendix B). We also provide more information on the distribution of perceptions by wealth/income decile. Figure A.7 in Appendix B shows that misperceptions about own income are more prevalent among low-income respondents, while misperceptions about own wealth are relatively uniformly distributed along the wealth distribution.

As a gauge of the strength of the compression of the distribution, we find that 34.1% of the bottom wealth decile (who have no, or negative wealth) rate themselves among the 50% richest people, while 29.4% of the top wealth decile rate themselves among the poorest 50%. The numbers for the income distribution are 28.9% and 20.6% respectively. These results highlight that people are unsure about their place in either distribution. The compression may also be indicative of “cognitive uncertainty”. Enke and Graeber (2023) show that subjective uncertainty about the underlying concepts or even one’s own preferences, will attenuate the impact of relevant contextual variables on judgments and decisions.

We also find that the confusion documented above about income and wealth *inequality* extends to people’s *personal* income and wealth. Panel A of Table II reports the associations between respondent’s perceived and actual income and/or wealth ranks. Strikingly, perceived wealth rank

Figure III: Perceived rank as a function of actual rank, for income and wealth



Note: The figure shows average perceived ranks in the income (blue) and wealth (red) distributions as a function of actual ranks in these distributions. The sample is restricted to respondents consenting to linking the survey responses to CBS registry data for whom we could observe income and wealth records, $N = 3,796$ for income, $N = 3,926$ for wealth.

depends about as much on actual income than on actual wealth: when considering the joint effect of actual income and wealth ranks, we find that an additional income rank increases perceived wealth rank by 0.169 ($t = 13.80$) while an additional wealth rank increases perceived wealth rank by 0.195 ($t = 16.03$). The pattern is similar although significantly less pronounced for perceived income, where the effects of actual income and wealth ranks are 0.282 ($t = 24.14$) and 0.065 ($t = 5.59$) respectively.

3.4 Information about Income and Wealth Rankings

As reported in Panel B of Table II, our rank treatment significantly affects respondents' perceived rank: when a respondent overestimates their rank by 10 percentiles, giving the rank feedback—i.e., the actual level of income/wealth that corresponds to the respondent's initial guess—leads to an updated guess 2.5 percentiles lower for both income and wealth, with no statistically significant

difference between the two. Like with inequality information, we observe that respondents who receive information on both income and wealth ranks use information about income to make inferences about wealth, despite information about wealth being directly provided. When they overestimated their income and wealth rank by 10 percentiles, they update their beliefs about wealth rank by -0.72 percentiles ($t = -2.32$) and -2.18 percentiles ($t = -7.74$) respectively. The pattern is again less pronounced in the other direction: respondents update their income rank by -2.36 percentiles ($t = -9.18$) and -0.14 percentiles ($t = -0.59$) when they overestimated their income and wealth rank by 10 percentiles. These results provide further evidence that there is a strong overlap in people's beliefs about income and wealth. They also suggest that income is an easier concept for people to use when thinking about distributional issues, including about their own situation.

Table II: Perceived rank as a function of actual rank and rank treatments

Panel A				
	Perceived Income Rank		Perceived Wealth Rank	
	(1)	(2)	(3)	(4)
Actual Income Rank	0.306***	0.282***		0.169***
	(0.011)	(0.012)		(0.012)
Actual Wealth Rank		0.065***	0.265***	0.195***
		(0.012)	(0.011)	(0.012)
Observations	3,724	3,705	3,851	3,704
R^2	(0.180)	(0.188)	(0.127)	(0.167)

Panel B				
	Updated Income Rank		Updated Wealth Rank	
	(1)	(2)	(3)	(4)
Income overestimation	-0.247***	-0.236***		-0.072**
	(0.019)	(0.026)		(0.031)
Wealth overestimation		-0.014	-0.245***	-0.218***
		(0.023)	(0.022)	(0.028)
Observations	905	597	928	597
R^2	(0.156)	(0.145)	(0.121)	(0.130)

Note: The dependent variables of Panel A are respondents' perceived rank in the income distribution (columns 1–2) and wealth distribution (columns 3–4), and for Panel B they are the updated income (columns 1–2) and wealth (columns 3–4) ranks reported for respondents in the Rank treatments post treatment, all taking values 0–100. The independent variables of Panel A are the actual income and wealth rank of the respondents, and for Panel B they are the overestimation of income and wealth ranks defined by the difference between the respective perceived and actual rank taking values from -100 to 100. Panel A consists of all participants for which we have CBS data on actual income and wealth. Panel B is in addition restricted to participants in the Rank treatments and columns (2) and (4) to participants in the subset who received both their income and wealth ranks. Robust standard errors are reported in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Since our rank treatments lead to partial corrections of misperceptions of relative income and wealth, we investigate whether this has an effect on respondents’ policy views. Table A.5 in Appendix B shows the effect of the rank treatments on fairness views and policy preferences. We find little evidence of treatment effects, in line with previous research using information provision in survey-experiments (Haaland et al., 2023). While factual information does matter for beliefs about facts—such as the level of inequality or one’s position in the income or wealth distribution—it may not be enough to significantly change worldviews and policy preferences.

3.5 Wealth vs. Income: A Hidden Distinction

The above findings suggest that individuals do not clearly differentiate between income and wealth when assessing the extent of inequality or estimating their own economic position, even when the distinction is explicitly stated in our survey. The analysis of responses to our open-ended question on the causes of economic inequality in the Netherlands further illustrates this ambiguity. Displaying the most prominent causes mentioned across treatment conditions, Figure A.10 provides two main takeaways: (i) across all treatment conditions, people focus significantly more on income than on wealth as a cause of economic inequality, and (ii) our information treatments did not change whether respondents explained economic inequality in terms of either income or wealth. The word “income” was mentioned 3.1 times as often as “wealth” in respondents’ explanations. The proportion of responses mentioning the two concepts do not differ between treatments both in case of income ($\chi^2(3) = 1.9338$, $p = 0.5863$) and wealth ($\chi^2(3) = 2.8964$, $p = 0.4079$). These results provide further evidence that the distinction between income and wealth is not very salient in people’s minds when they think about inequality, and that they rather use income as a reference concept.

3.6 Preferences for Taxation

An important follow-up question is the extent to which people distinguish between different forms of economic resources when making public policy choices. Fisman et al. (2020) analyze Americans’ preferences for income versus capital taxes. Although this distinction is well in line with the

concepts we are analyzing, the difference in tax bases between income and wealth makes it difficult to make a clear comparison between tax preferences in these two domains. To address this issue, in the last part of our survey we asked respondents for their preferred (average) tax rates for total income derived from *labor* and *capital*, at three different monthly income levels—EUR 2,000, 5,000, 50,000. Table A.6 in Appendix B provides the average desired rates, and Figure A.11 the full distributions. Respondents prefer to tax labor slightly less than capital income for the lowest income level (at 19.93% vs. 20.34%), but preferences reverse for the higher income levels (32.44%, and 50.38% for labor against 30.14%, and 45.15% for wealth). While all these differences are statistically significant, they are economically small with a maximal difference of just a few percentage points: preferred rates on labor and capital income are largely overlapping.¹⁴

4 Discussion and Conclusion

We compare perceptions of income and wealth inequality in the Dutch population. Our results suggest that people struggle to distinguish the income from the wealth distribution when asked about inequality measures or their own position, even if the distinction is highlighted in our survey. Moreover, they do not see larger inequalities in wealth as direct target for policy making.

Several findings support these claims. First, while the two inequalities differ strikingly in size, respondents do not perceive much difference between them. They overestimate income inequality and underestimate wealth inequality. Moreover, supplying respondents with information about inequality has an impact on perceived fairness of the distribution, but little on policy preferences.

Second, respondents average out information about income and wealth. They update their views of one type of inequality less if information about the other type of inequality is also provided, resulting in an “average” assessment of both types of inequality, instead of an accurate estimate of either. This is particularly striking when looking at the effect of our Both treatment, where we would expect people’s views on income versus wealth inequality to polarize, while they

¹⁴It is worth noting that compared to U.S. respondents in Fisman et al. (2020), Dutch respondents seem to prefer higher, more progressive taxes on average.

actually converge compared to the case where only income or wealth information is given. A similar pattern holds for the perceived wealth rank, which depends about as much on information about the actual income rank as it does on information about the actual wealth rank. These patterns are consistent with a mental model that includes a single notion of economic inequality, about which both types of data are informative.

Third, people want to tax gains from capital similarly to gains from labor, indicating that the distinction is not so relevant for people when expressing policy preferences. Finally, income seems to be a more salient concept than wealth. Respondents weigh information about income more heavily than information about wealth, both when forming views of inequality and on their relative ranks. Moreover, in open-ended reflections, the word “Income” is more prevalent than “Wealth”, even in experimental conditions where wealth was highlighted.

These conclusions have implications for the political debate on wealth taxation on “the rich” that takes place in many Western countries (Scheuer and Slemrod, 2020, 2021). Politicians who want to make the case for progressive wealth taxation will face several hurdles. First, we find little evidence that information about inequalities induces a shift in policy preferences. Given that our intervention was relatively short, follow-up research with more extensive forms of information provision is important. Second, as we argued above, our data indicate that people see income and wealth as components of a broader measure of inequality, making it potentially harder for politicians to single out wealth in fiscal policy.¹⁵ A third hurdle is the misperception among the poor that they are of average wealth, which may mute enthusiasm for general wealth taxation schemes. Proposals to “tax the rich” may receive more popular support, although our survey does not bear this out, as desired rates of taxation of income derived from wealth are below those of labor income for the highest income brackets.

Finally, our results have implications for research on inequality. Researchers who are interested in inequality generally may focus on a single measure of public perceptions. In addition, research should try to understand what causes citizens to appreciate the difference between income and

¹⁵Such measures have been used in the academic literature to assess tax progressivity, see for example the “augmented-income” concept used in Bozio et al. (2018).

wealth distributions. Further research on wealth may also focus on its role in popular culture, which often spotlights the possessions and lifestyles of the wealthy. Such attention may trigger either admiration and attempts at emulation, or disgust and calls for redistribution. Understanding such responses may yield a better understanding of the public's attitudes towards inequality.

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Online Appendix for

“Do People Distinguish Income from Wealth Inequality? Evidence from the Netherlands.”

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A Data Quality

The LISS panel is a well-established institution, known for their high-quality survey data, as participants are screened and paid to complete surveys. Nevertheless, one may worry that the lack of difference between income and wealth perceptions, or the small effect of the information treatments on policy preferences, are the results of participants’ inattention or lack of engagement. Here, we report several analyses to address this concern.

As first proxy for attention and engagement, we use the survey completion time and the effort in open-ended questions. To this end, we exclude respondents belonging to the: i) bottom 10% regarding time spent on survey, and/or ii) the top 10% regarding time spent (as this may indicate people engaged in distractions), and/or iii) the bottom quintile with respect to the length of their open-ended response on the causes of economic inequality (Q5).¹⁶ Together, this excludes 39.8% of the sample. Still, our main results are robust, as shown in Figure A.8 and Figure A.9 in Appendix B.

Second, to investigate whether people “click through” the survey as fast as possible, we count how many respondents give the same response to all six questions in the battery of survey questions (Q7a–Q7f, see Appendix D). Only 5.9% do so, indicating that most participants paid attention to these questions.

Third, to validate our Progressivity Index, we correlate it with the survey question asking to what degree they agree with a statement that the rich should bear a larger share of the tax burden compared to the poor (Q7d). The two are positively correlated ($\beta_{Pindex} = 0.83$, $p < 0.001$).

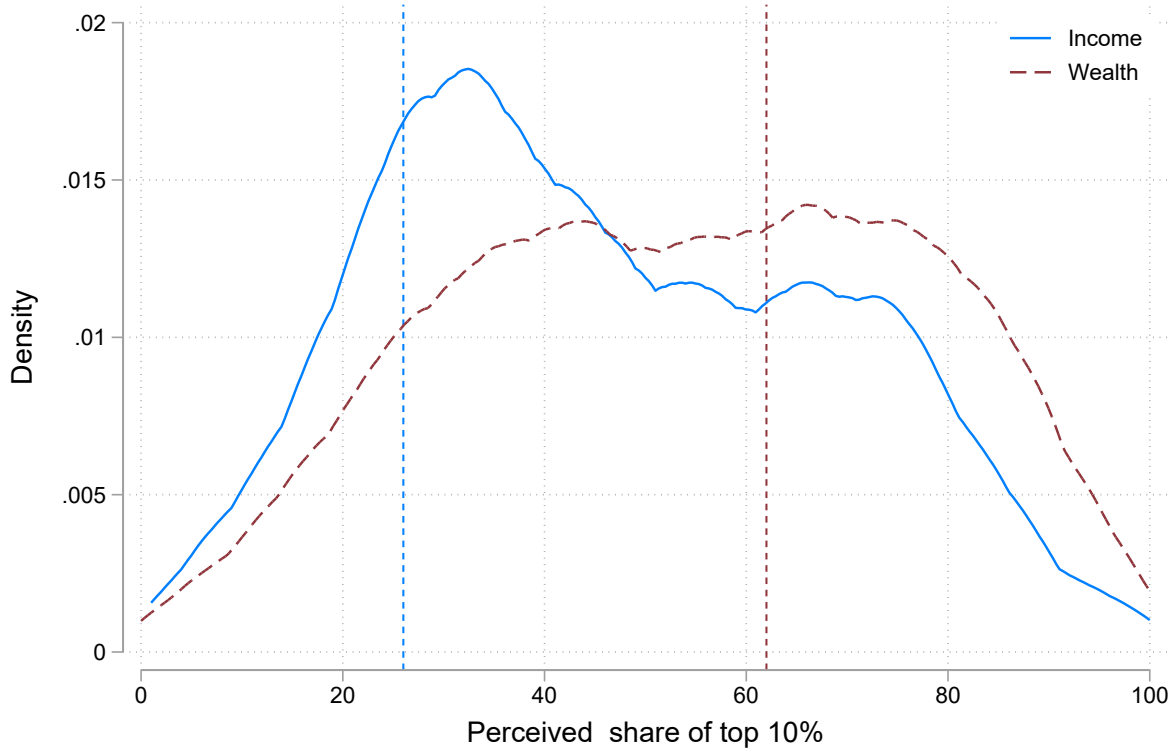
Fourth, our heterogeneity analysis shows that education has little effect on the perceived difference between income and wealth inequality, which suggests that our results are unlikely to be driven by a misunderstanding of our questions. Taken together, these findings give no indication that our results are due to a lack of attention or comprehension from respondents.

¹⁶More specifically, the sample restrictions exclude respondents for which i) time spent completing the survey (t_s), $t_s \leq 5.7$ minutes, $t_s \geq 24.3$ hours (with the median $t_s = 13.7$ minutes), and ii) respondents with the number of words (N_w), $N_w \leq 3$ (with the median $N_w = 8$).

Finally, note that we did not implement incentives for correct answers. This was partially to avoid people searching online for the answers. For the case of personal ranks, we could only match answers to confidential data ex-post. We believe the absence of incentives does not bias the results: Stantcheva (2021) reports that in a survey with related questions on a U.S. sample, answers were not affected by incentives for accuracy.

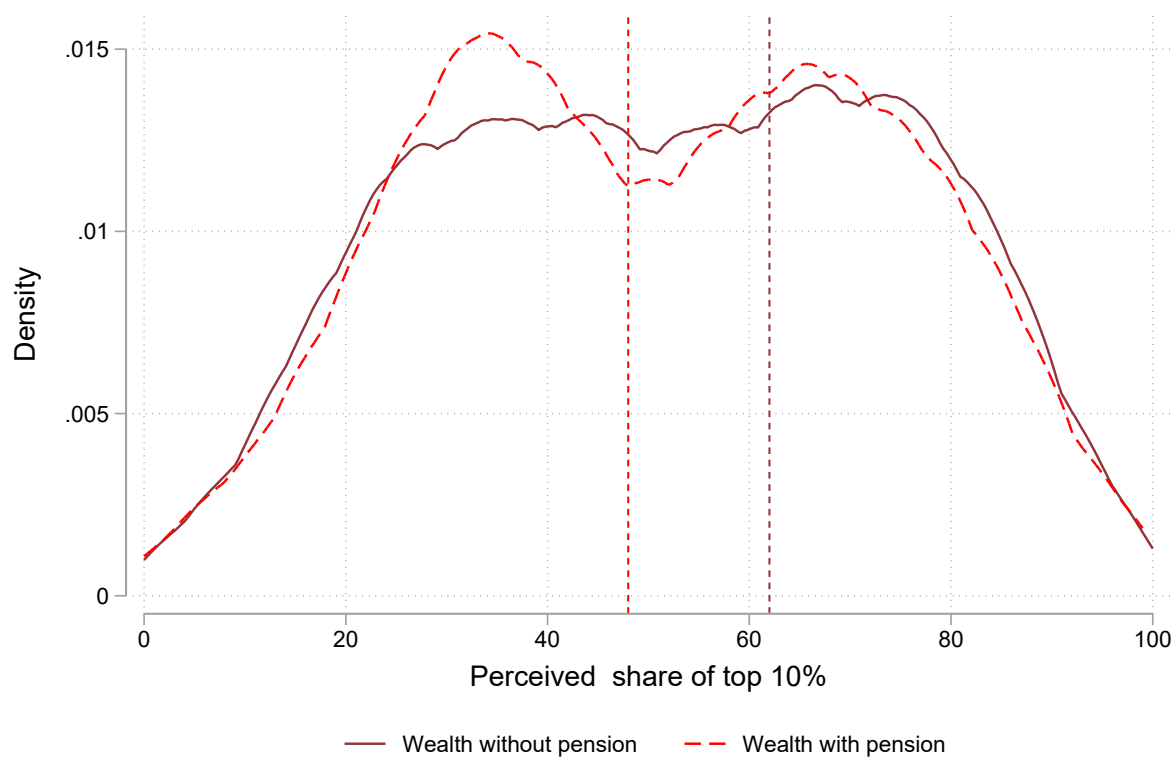
B Additional Tables and Figures

Figure A.1: Perceived level of income and wealth inequality in the Both treatment



Note: The figure shows perceived levels of income (blue) and wealth (red) inequality as measured by the perceived share of total income/wealth held by the top 10% highest earners/wealthiest in the Netherlands. Vertical lines in the corresponding color mark the actual share (26% for income, and 62% for wealth). The sample is restricted to participants in the Both treatment, $N = 1,077$.

Figure A.2: Perceived levels of wealth inequality, including and excluding pensions



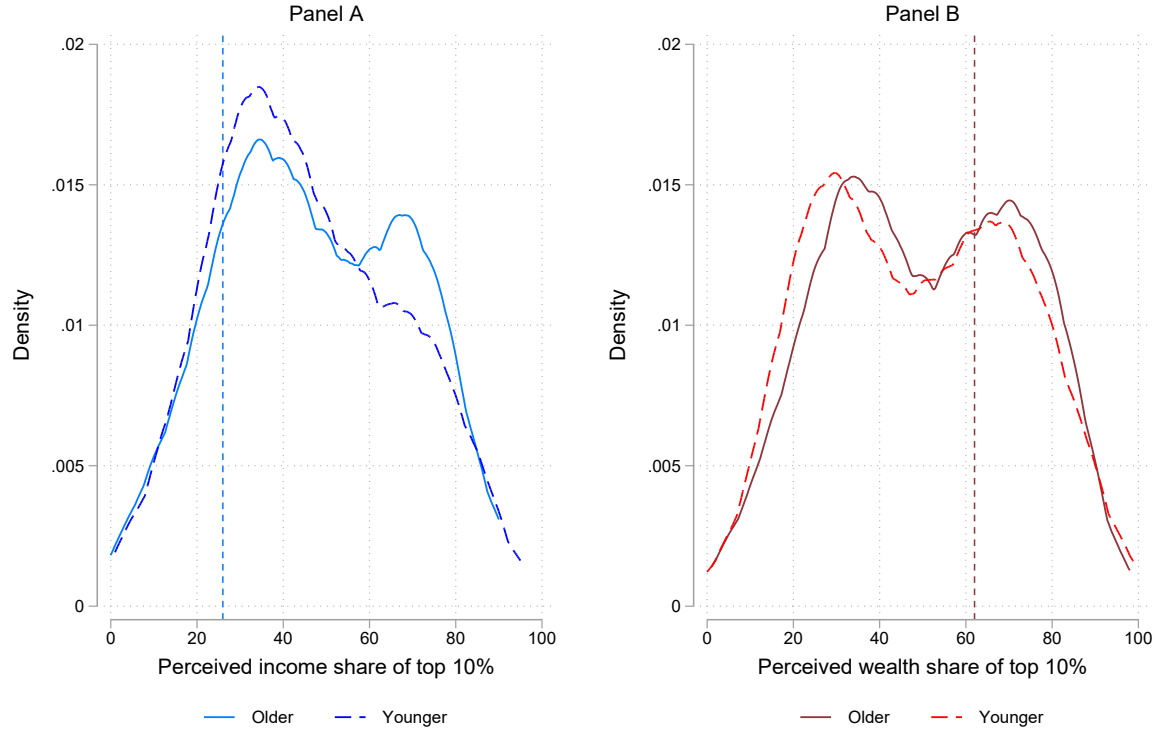
Note: The figure shows the perceived levels of wealth inequality for definitions of wealth including/excluding pensions separately. Vertical lines in the corresponding color mark the actual share of the top 10%: 48% including pensions, and 62% excluding pensions. The sample is restricted to participants who are either in the Wealth or Both treatments, $N = 2,170$.

Figure A.3: Perceived level of income and wealth inequality by obtained education



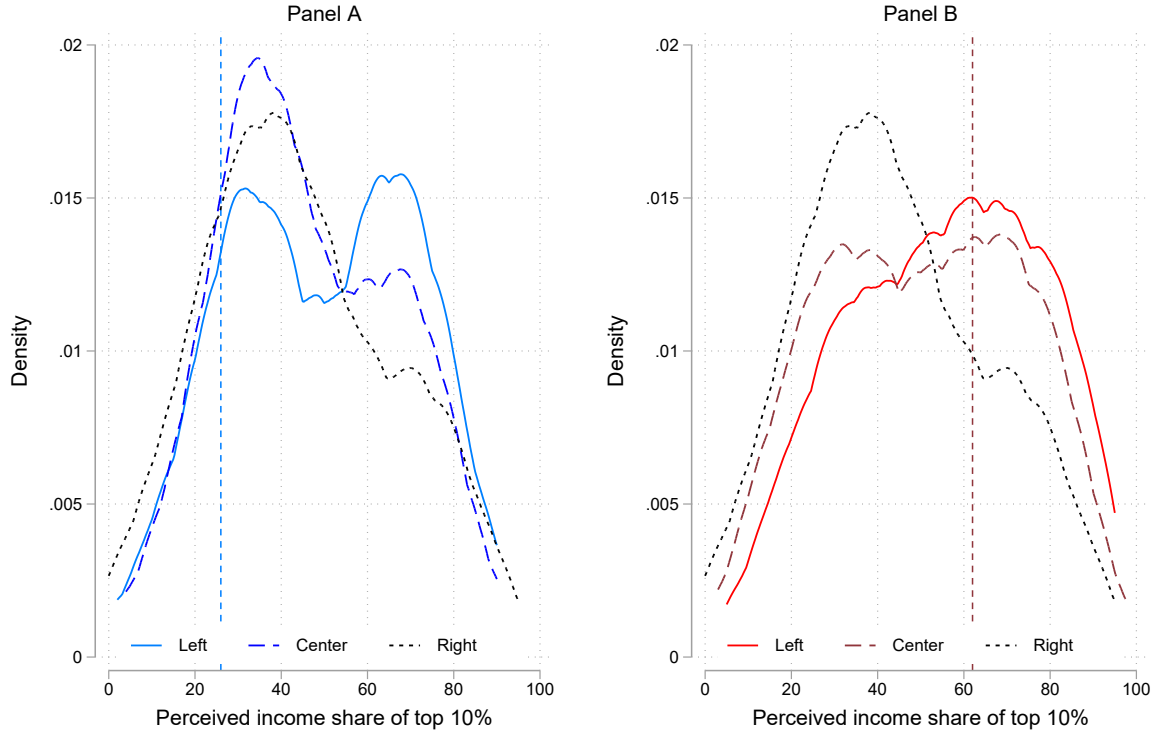
Note: The figures show the distributions of perceived levels of income inequality (Panel A) and wealth inequality (Panel B) for respondents with a high and low education, separately. High education is defined as having obtained at least HBO or WO (i.e., a Bachelor degree). The perceived level of inequality is measured by the perceived share of total income/wealth held by the top 10% highest earners/wealthiest in the Netherlands. Vertical lines in the corresponding color mark the actual share (26% for income, and 62% for wealth). The sample is restricted to participants who are either in the Income or Wealth treatments, $N = 2,193$.

Figure A.4: Perceived level of income and wealth inequality by age



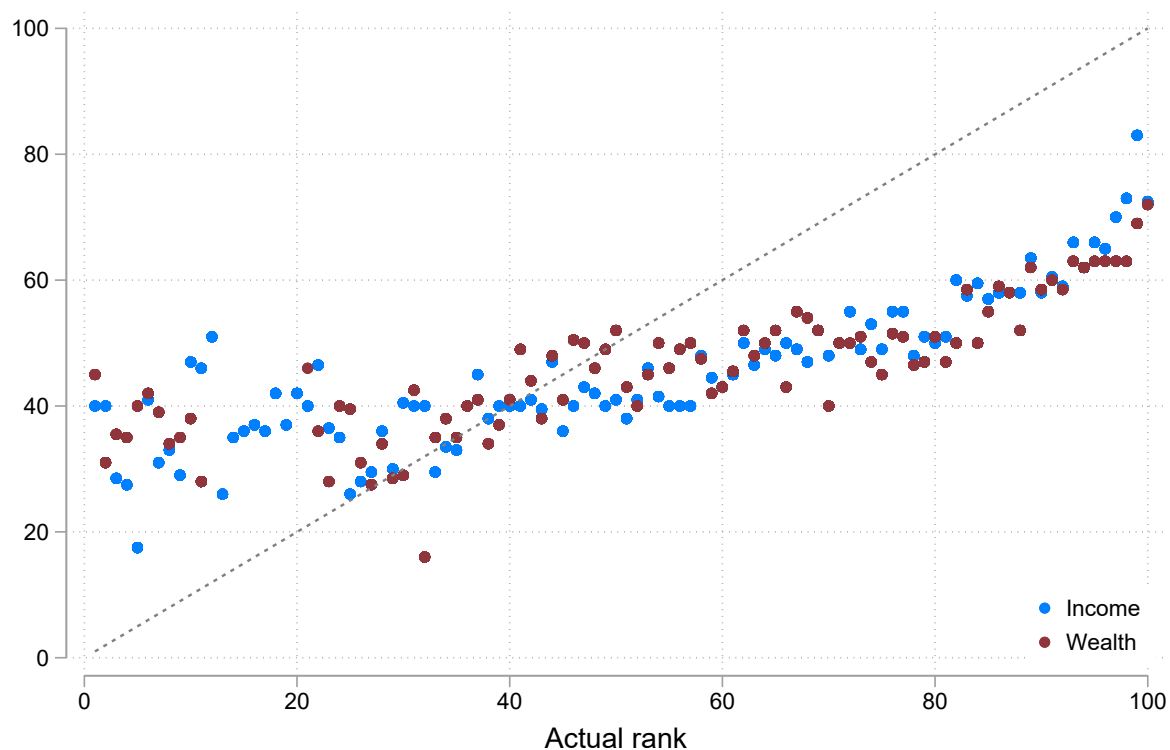
Note: The figures show the distributions of perceived levels of income inequality (Panel A) and wealth inequality (Panel B) for respondents below and above the sample median age (58), separately. The perceived level of inequality is measured by the perceived share of total income/wealth held by the top 10% highest earners/wealthiest in the Netherlands. Vertical lines in the corresponding color mark the actual share (26% for income, and 62% for wealth). The sample is restricted to participants who are either in the Income or Wealth treatments, $N = 2,193$.

Figure A.5: Perceived level of income and wealth inequality by political leaning



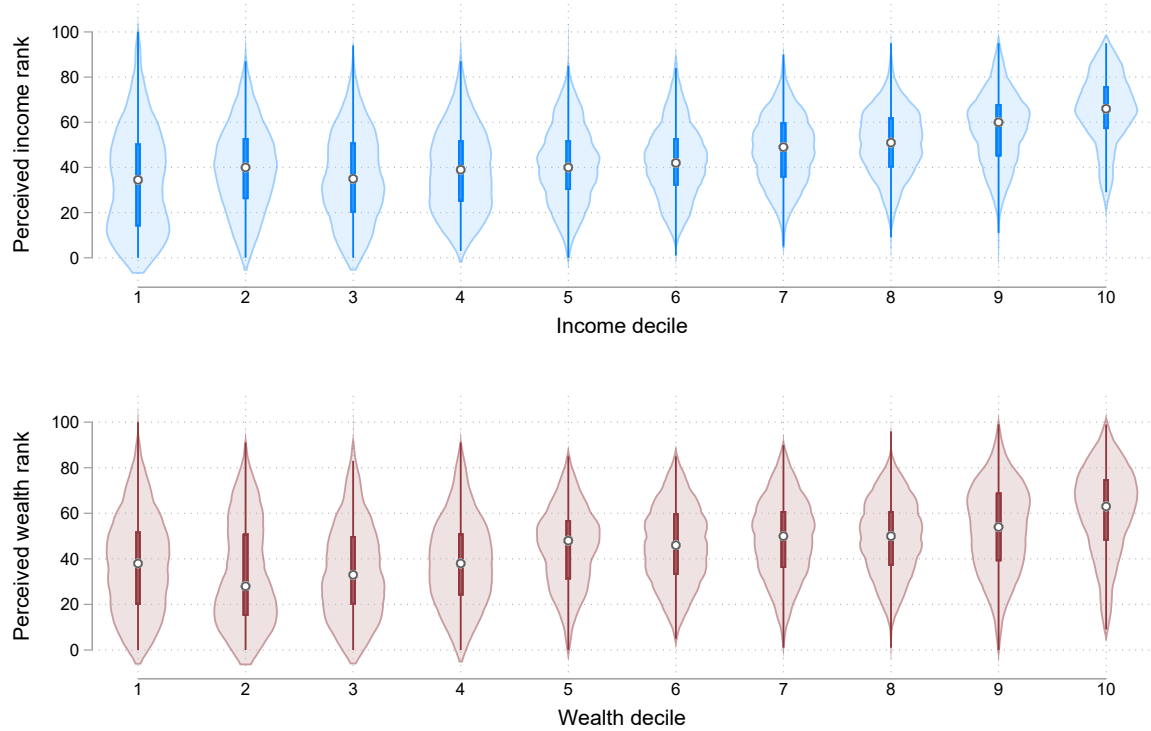
Note: The figures show the distributions of perceived levels of income inequality (Panel A) and wealth inequality (Panel B) by political leaning, defined based on the party voted in the last (2021) election obtained from the LISS Politics and Values survey. *GroenLinks*, *SP*, *PvdA*, *Parij voor de Dieren*, *DENK* are classified as Left; *CDA*, *D66*, *ChristenUnie*, *50PLUS*, *Volt Nederland* are classified as Center; *VVD*, *PVV*, *SGP*, *Forum voor Democratie*, *JA21* are classified as Right; *Blank* and *Other party* are omitted. The perceived level of inequality is measured by the perceived share of total income/wealth held by the top 10% highest earners/wealthiest in the Netherlands. Vertical lines in the corresponding color mark the actual share (26% for income, and 62% for wealth). The sample is restricted to participants in the Income and Wealth treatments who could be merged to one of these parties from the LISS Politics and Values survey, $N = 1,533$.

Figure A.6: Median perceived rank as a function of actual rank, for income and wealth



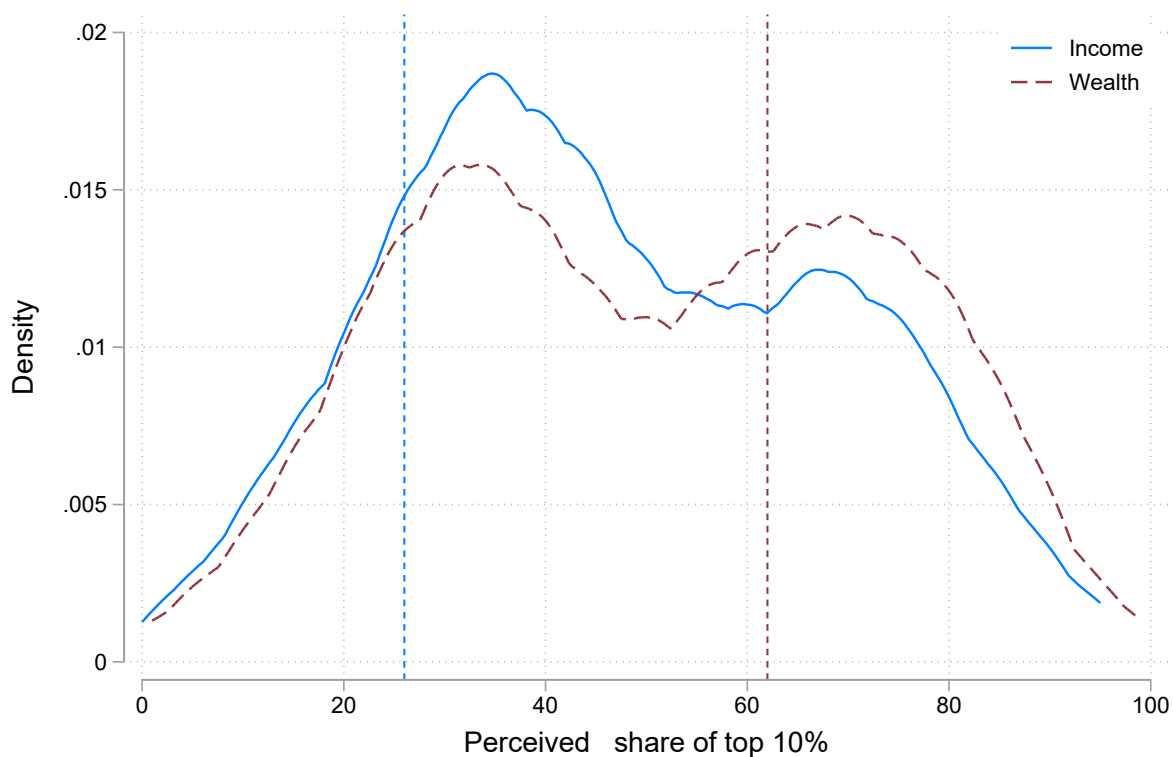
Note: The figure shows median perceived ranks in the income (blue) and wealth (red) distributions as a function of actual ranks in these distributions. The sample is restricted to respondents consenting to linking the survey responses to CBS registry data for whom we could observe income and wealth records, $N = 3,796$ for income, $N = 3,926$ for wealth.

Figure A.7: Distribution of perceived rank, by income and wealth decile



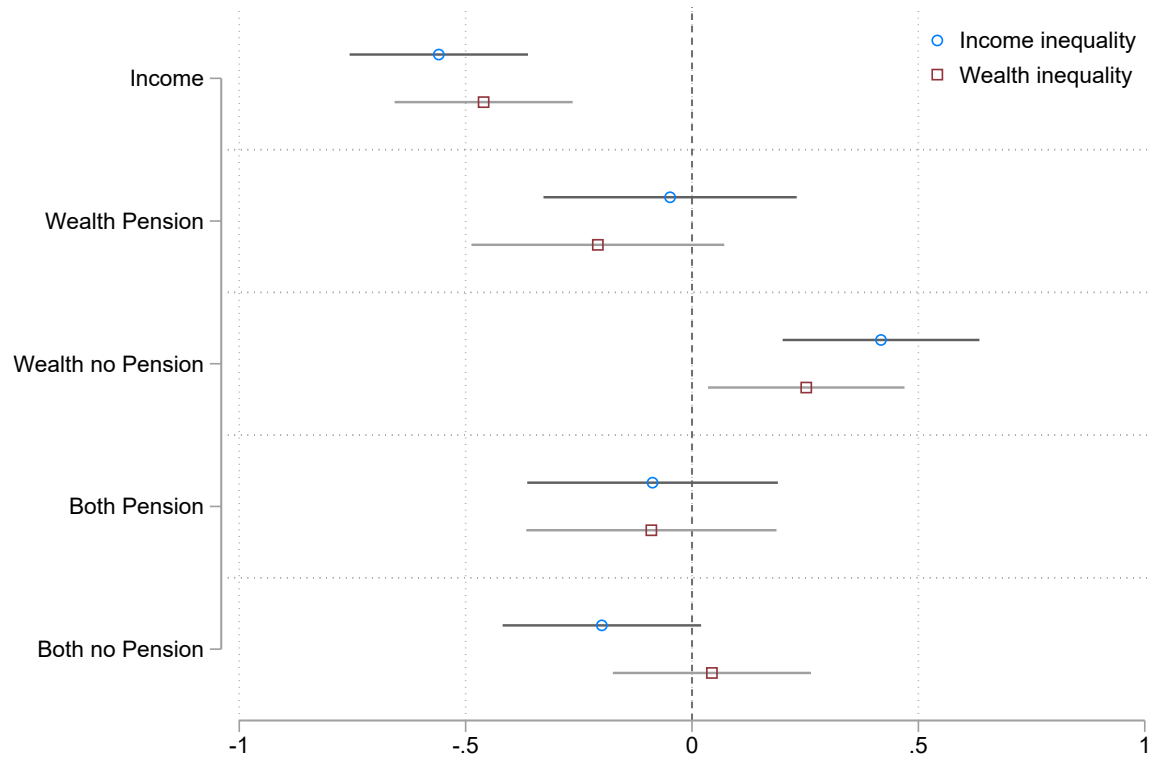
Note: The figure depicts the distributions of perceived rank for each decile of the respective distribution; income for the top panel and wealth for the bottom panel. Circles mark the median perceived rank, and thick lines marks the interquartile range. The sample is restricted to respondents consenting to linking the survey responses to CBS registry data for whom we could observe income and wealth records, $N = 3,796$ for income, $N = 3,926$ for wealth.

Figure A.8: Perceived level of income and wealth inequality, strict sample restrictions



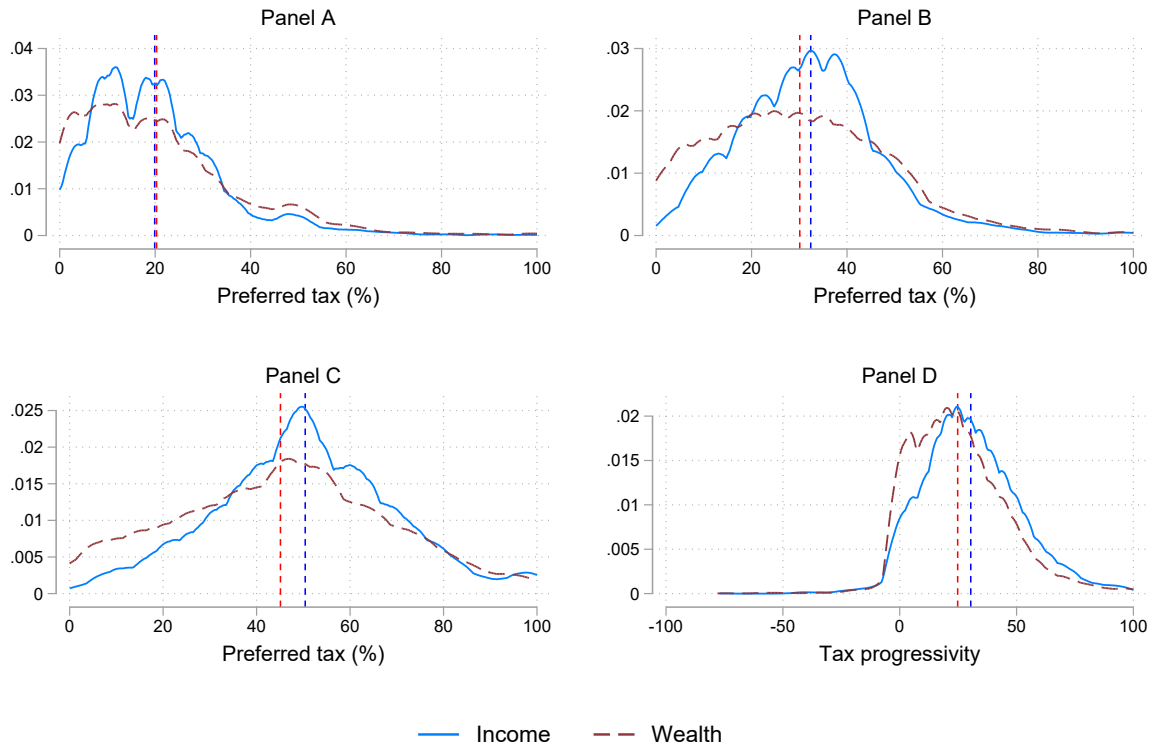
Note: The figure shows perceived levels of income (blue) and wealth (red) inequality as measured by the perceived share of total income/wealth held by the top 10% highest earners/wealthiest in the Netherlands. Vertical lines in the corresponding color mark the actual share (26% for income, and 62% for wealth). The sample excludes participants in the Both treatment, participants that: i) Belong to the top/bottom 10 percentiles in the distribution of completion time for the survey, and/or ii) belong to the bottom quintile of number of words written in Q5, resulting in a sample size of $N = 1,300$.

Figure A.9: Impact of information on perceived inequality, strict sample restrictions



Note: The figure shows the estimated average effects of information (y-axis) on perceived income inequality (blue) and wealth inequality (red), where the No information condition is used as base. Subjective income/wealth inequality is measured on a scale from 0 (very equal) to 10 (very unequal). Error bars mark the 95% confidence intervals. In the No information condition, the average perceived level of income and wealth inequality are 6.4 and 6.8 respectively. The sample excludes participants that: i) Belong to the top/bottom 10 percentiles in the distribution of completion time for the survey, and/or ii) belong to the bottom quintile of number of words written in Q5, resulting in a sample of $N = 2,712$.

Figure A.11: Preferences for income and wealth taxation



Note: The figure depicts the distribution of preferred tax rates for total income derived from labor (blue) and wealth (red) and the average preferred tax rate for the respective tax (marked by vertical lines in the same color). Panel A shows the distributions of preferred taxes for a someone with a gross monthly income from labor/capital of EUR 2,000; Panel B for EUR 5,000 per month, and Panel C for EUR 50,000 per month. Panel D gives the distribution of preferred tax progressivity, as measured by the difference in the tax rate preferred for someone with EUR 50,000 vs. EUR 2,000. For all panels, $N = 4,369$.

Table A.1: Descriptive Statistics

	Scale	Full Sample	CBS Sample	Dutch Population
Age	Years	54.9	55.7	50.1
Male	Dummy	0.49	0.50	0.50
High education	Dummy	0.48	0.49	0.35
Home ownership	Dummy	0.72	0.72	0.69
Income rank	Rank	—	55.7	50.0
Wealth rank	Rank	—	56.9	50.0

Note: The table reports descriptive statistics for our full sample ($N = 4,501$), the sub-sample matched with both income and wealth records from the CBS ($N = 3,777$), and the Dutch population.

Table A.2: Sample size for each treatment condition

	Income	Wealth	Both	No info	
Pension	369	378	385	398	1,530
Rank	367	368	346	386	1,467
Control	383	362	368	391	1,504
	1,119	1,108	1,099	1,175	4,501

Note: The table shows the 12 between-subject treatment conditions of the survey experiment, with the corresponding number of participants in parentheses, for the total sample of $N=4,501$. The conditions are randomized with equal probability.

Table A.3: Selective attrition across treatment conditions

Dependent variable: Missing response	
	(1)
Income	0.001 (0.007)
Wealth	0.002 (0.007)
Both	0.005 (0.007)
Placebo	0.003 (0.006)
Pension	0.005 (0.006)
Constant	0.027*** (0.006)
Observations	4501

Note: The table reports regression estimates where the dependent variable is an indicator variable taking the value 1 if a respondent has not answered at least one of the questions Q2a–Q11, and 0 otherwise. The independent variables are the different treatment conditions, where No Information and Control are used as base. Standard errors are reported in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A.4: Summary statistics for perceived inequality measure by inequality treatment

	Inequality		Wealth		Both		Wealth + Both	
	Income inequality	Wealth inequality	Income inequality	Wealth inequality	Income inequality	Wealth inequality	Wealth (no pension)	Wealth (pension)
25 th percentile	30	30	30	36	36	32	33	33
50 th percentile	44	50	42	55	55	51	50.5	50.5
75 th percentile	64	70	65	73	73	70	70	70
Average	46.4	49.8	46.3	53.9	53.9	52.1	51.4	51.4
Standard deviation	21.5	22.6	22.1	22.9	22.9	23.0	22.6	22.6

Note: The table reports summary statistics for the distribution of perceived income and wealth, for each of the information treatments: Income treatment (column 1), Wealth treatment (column 2), Both treatment (columns 3–4), and Wealth and Both treatments taken together (columns 5–6). The inequality measure is the perceived income/wealth share of the top 10% in the Netherlands.

Table A.5: Estimated treatment effects of Rank treatment

	Income			Wealth		
	(1)	(2)	(3)	(4)	(5)	(6)
	Meritocratic belief	Unfair	Progressivity index	Meritocratic belief	Unfair	Progressivity index
Income overestimation	0.004** (0.001)	0.002 (0.002)	-0.001 (0.001)			
Rank treatment	0.020 (0.064)	0.092 (0.084)	-0.003 (0.031)	0.063 (0.065)	0.073 (0.084)	-0.006 (0.031)
Rank treatment \times Income overestimation	-0.001 (0.002)	0.002 (0.003)	0.000 (0.001)			
Wealth overestimation				-0.001 (0.001)	0.004** (0.002)	-0.003*** (0.0006)
Rank treatment \times Wealth overestimation				0.003 (0.002)	-0.003 (0.003)	-0.008 (0.001)
Constant	5.841*** (0.037)	6.179*** (0.048)	0.002 (0.018)	5.794*** (0.037)	6.180** (0.048)	-0.023 (0.018)
Observations	3,702	3,698	2,676	3,829	3,826	3,804
R^2	(0.002)	(0.002)	(0.001)	(0.001)	(0.002)	(0.008)

Note: The table reports regression estimates of the effects caused by the Rank treatment. “Rank-treatment” is an indicator, taking the value 1 if a participant is randomly assigned to the Rank treatment, and 0 otherwise. “Income/Wealth overestimation” are variables (-100–100) measuring the difference between a participant’s perceived income/wealth rank and their actual rank in the respective distribution. The columns give the estimates for changes in (1) “Meritocratic belief”; the degree to which one believes economic success to be the result of hard work as opposed to luck (0–10), (2) “Inequality unfair”; the degree to which one finds economic inequality in the Netherlands to be unfair (0–10), and (3) the “Progressivity Index”; the sum of normalized differences between the top and the bottom tax rate chosen by respondents, divided by the number of policies (the income tax, the wealth tax, and the inheritance tax). Robust standard errors are reported in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A.6: Preferred share of labor and capital income paid in taxes at different income levels

	(1)	(2)	(3)
	Average labor income tax	Average capital income tax	p
EUR 2 000	19.93	20.34	< 0.05
EUR 5 000	32.44	30.14	< 0.01
EUR 50 000	50.38	45.15	< 0.01
Progressivity	30.45	24.79	< 0.01

Note: The table shows the average preferred tax (%) for different levels of monthly (gross) labor/capital income, and the respective tax progressivity (pp). Column (1) reports the average preferred tax on labor income, column (2) the average preferred tax on capital income, and column (3) reports the p-value of a two-sided t-test of the difference. No sample restrictions are employed.

C Survey structure and randomization

Table A.7: Survey structure and randomization

	Income			Wealth			Both			Control		
	R	0	P	R	0	P	R	0	P	R	0	P
Info 1a (def no pension)										✓	✓	
Info 1b (def pension)												✓
Info 1c (def no pension + inc ineq)	✓	✓										
Info 1d (def pension + inc ineq)			✓									
Info 1e (def no pension + we ineq)				✓	✓							
Info 1f (def pension + we ineq)						✓						
Info 1g (def no pension + inc & we ineq)							✓	✓				
Info 1h (def no pension + inc & we ineq)									✓			
Q1a (inc share 10%)	✓	✓	✓				✓	✓	✓	✓	✓	✓
Q1b (wel share 10%)				✓	✓	✓	✓	✓	✓	✓	✓	✓
Info 2a (10% inc comparison)	✓	✓	✓									
Info 2b (10% we no pension comparison)				✓	✓							
Info 2c (10% we pension comparison)						✓						
Info 2d (10% inc & we no pension comparison)							✓	✓				
Info 2e (10% inc & we pension comparison)									✓			
Q2a (subjective inc ineq)	✓	✓	✓				✓	✓	✓	✓	✓	✓
Q2b (subjective we ineq)				✓	✓	✓	✓	✓	✓	✓	✓	✓
RE:Q2a (subjective inc ineq)				✓	✓	✓						
RE:Q2b (subjective we ineq)	✓	✓	✓									
Q3a (subjective inc rank)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q3b (subjective we rank)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q4a (feedback + update inc rank)	✓						✓			✓		
Q4b (feedback + update we rank)				✓			✓			✓		
Q5 (open-ended causes ineq)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q6 (effort vs luck)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q7a-f (agreement with statements)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q8 (inc tax policy)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q9 (we tax policy)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q10 (inheritance tax policy)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q11 (property tax policy)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q12 (interest rate subsidy)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q13 (incentivized donation)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Note: The table provides, in chronological order, all the treatments and questions of the survey. ✓ means that the treatment/question was displayed to respondents of the corresponding group. Abbreviations used: “def”=definition; “inc”=income; “ineq”=inequality; “we”=wealth. Qx and RE:Qx refer to the same question asked at different moments in the survey.

D Survey (English translation)

Survey Economic Inequality and Fiscal Preferences

- *Welcome to this survey on economic inequality and fiscal preferences. We will now show you a short video with information about income and wealth. This video is important for filling out the rest of the survey.*

Instructions for video playback

Video with definitions of income and wealth and inequality measures, see section 0.1 for the different video scripts.

Q1a What percentage of the total yearly **income** in The Netherlands do you think is earned by the 10% biggest earners in The Netherlands? Give your best guess between 0% and 100%.

– Slider from 0% to 100%

Q1b What percentage of the total **wealth** in The Netherlands do you think is owned by the 10% richest people in The Netherlands? Give your best guess between 0% and 100%.

– Slider from 0% to 100%.

- **Treatment-dependent information about inequality, illustrated with a pie-chart.**

[Example: Income inequality is higher/lower than you thought, and wealth inequality is higher/lower than you thought! In The Netherlands, 26% of the total income goes to the 10% highest earners, and 62% of total wealth is owned by the 10% richest people.]

Q2a On a scale from 0 to 10, how equal do you think **income** is distributed in the Netherlands? 0 means very equal, 10 means very unequal.

– Answer with a slider from 0 to 10, where, if needed, default is 5.

Q2b On a scale from 0 to 10, how equal do you think **wealth** is distributed in the Netherlands?

0 means very equal, 10 means very unequal.

- Answer with a slider from 0 to 10, where, if needed, default is 5.

Q3a What percent of the Dutch population (18 years or older) has a lower **income** than you?

Give your best guess using the following scale.

- Slider from 0% to 100% that explicitly reports percentages of population with higher and lower income.

Q3b What percent of the Dutch population (18 years or older) has a lower **wealth** than you?

Give your best guess using the following scale.

- Slider from 0% to 100% that explicitly reports percentages of population with higher and lower wealth.

Q4a You just answered that [response]% of the Dutch population has a total yearly **income** which is lower than yours. Actually, this would correspond to an income of y . This information may give you more insight into your position. Please answer the question again.

- Slider from 0% to 100% that explicitly reports percentages of population with higher and lower income.

Q4b You just answered that [response]% of the Dutch population has a total **wealth** which is lower than yours. Actually, this would correspond to a total wealth of y . This information may give you more insight into your position. Please answer the question again.

- Slider from 0% to 100% that explicitly reports percentages of population with higher and lower wealth.

Q5 What do you see as the most important causes of economic inequality in the Netherlands?

Please use full sentences in your answer.

- Answer: open text box.

Q6 In your opinion, is economic success mostly determined by luck or by effort? Give your answer on the following scale, where 0 means that only luck matters, 10 means that only effort matters.

– Answer with a slider from 0 to 10.

Q7 Give your agreement with the following statements, where 0 means that you fully disagree, 10 that you fully agree.

- a In the Netherlands, the economic differences between the rich and poor are *too large*.
- b In the Netherlands, the economic differences between the rich and poor are *unfair*.
- c It is the role of the government to reduce the economic differences between the rich and the poor.
- d Taxes and transfers are effective tools to reduce inequality.
- e People with higher income should pay a larger share (higher percentage) of their income in taxes than people with low income.
- f In the Netherlands, if the government increases the taxes that the rich have to pay, the rich will work less and invest less.

– Answer with a slider from 0 to 10

➤ *We will now ask you questions about specific Dutch policies. We will ask you about your preferences for the level of taxes for different kinds of incomes and wealth. There are no right or wrong answers, we are only interested in your opinion.*

Q8 This question is about tax on income earned through labor, such as a wage. How much tax should people pay per month over the following (gross) incomes?

1. Someone with an income from labor of 2,000 per month.
2. Someone with an income from labor of 5,000 per month.

3. Someone with an income from labor of 50,000 per month.

– For each level, answer with a slider from 0 to 100%.

Q9 This question is about tax on income earned derived from wealth, such as interest from savings, dividends and income from sales of equities, or real estate. How much tax should people pay per month over the following (gross) incomes?

1. Someone with an income from wealth of 2,000 per month.

2. Someone with an income from wealth of 5,000 per month.

3. Someone with an income from wealth of 50,000 per month.

– For each level, answer with a slider from 0 to 100%.

Q10 This question is about taxes on inheritances. Consider a parent who wants to leave money to one of his/her children. How much tax should people pay for each of the following inheritances?

1. For an inheritance of 10.000 euros.

2. For an inheritance of 100.000 euros.

3. For an inheritance of 1.000.000 euros.

– For each level, answer with a slider from 0 to 100%.

Q11 The Dutch tax system charges homeowners a tax on the property in which they live, based on the value of the house (WOZ waarde). How much tax do you think people should pay for each of the following WOZ values?

1. For a WOZ waarde below 300.000 euros.

2. For a WOZ waarde between 300.000 and 1.000.000 euros.

3. For a WOZ waarde over 1.000.000 euros.

- For each level, answer with a slider from 0 to 100%.

Q12 In The Netherlands, people can partially deduct the interest paid on a mortgage from your taxable income. This measure is meant to stimulate home-ownership, as it reduces the tax burden of home-owners. However, there are strong differences of opinion about this policy in The Netherlands. Some people say it gives homeowners an unfair advantage compared to people without a house.

On the following scale you can indicate your preferred rate of deduction. Here 0% means no deduction and 100% means full deduction of interest paid.

- Answer with a slider from 0 to 100%.

Q13 By taking this survey, you are automatically entered into a lottery to win 100€. Within a month after the conclusion of the survey you will hear if you have won the prize. The prize will be added to your account at a later date.

Should you be selected to win the prize, you can donate a part it to Stichting Urgente Noden Nederland (SUN Nederland), see <https://www.sunnederland.nl>. SUN Nederland gives (one-off financial) support to people in financial distress who threaten to fall through the cracks. The gift or interest-free loan serves as a spring-board or safety-net and can be requested by social service professionals. The researchers will transfer your donation on your behalf to SUN Nederland.

In case you win 100 euros, how much would you like to donate to SUN Nederland?

- Slider from 0 to 100.

E Video scripts

Below we list the components to be included in scripts and give **descriptions of the displays** of each specific video. In total there are 8 different videos.

List of **items** per video:

- Info1a: welcome, income definition, wealth definition excluding pensions.
- Info1b: welcome, income definition, wealth definition including pensions.
- Info1c: welcome, income definition, wealth definition excluding pensions, income inequality
- Info1d: welcome, income definition, wealth definition including pensions, income inequality
- Info1e: welcome, income definition, wealth definition excluding pensions, wealth inequality
- Info1f: welcome, income definition, wealth definition including pensions, wealth inequality
- Info1g: welcome, income definition, wealth definition excluding pensions, income and wealth inequality
- Info1h: welcome, income definition, wealth definition including pensions, income and wealth inequality

Welcome: Welcome to our survey on income and wealth in the Netherlands. What do we mean by income and wealth?

[Income definition:] By an individual's income, we mean the total after tax income received each month. This includes income from labor, including after tax salary and self-employment earnings, income from the government, such as Social Security benefits, pensions, and welfare payments, and income from assets and investments.

Visualization — Build up the video in different steps:

1. Show a person in the middle of the screen.

2. When video refers to labor income, add a (stylized/cartoon) factory building and an arrow with a money bag going to the person in the middle.
3. When video refers to government incomes, add a (stylized/cartoon) government building and an arrow with a money bag going to the person in the middle.
4. When video refers to capital income and investment income, add a (stylized/cartoon) bank building and an arrow with a money bag going to the person in the middle.

[Wealth definition excluding (including) pensions:] By an individual's wealth, we mean the value of all assets accumulated over time minus debt. Assets include all possessions, such as real-estate, cars, savings, stocks, and other forms of capital(, including pensions). When two individuals hold an asset together, we consider that each individual is entitled to half of the value of this asset.

Visualization — Build up the video in different steps:

1. Show a person in the middle of the screen.
2. When video refers to a house, add a (stylized/cartoon) house.
3. When video refers to a car, add a (stylized/cartoon) car.
4. When the video refers to savings, add a (stylized/cartoon) pile of money.
5. When the video refers to stocks, add a (stylized/cartoon) stock market index.
6. When the video refers to other forms of capital, add a (stylized/cartoon) version of painting/jewelry.
7. (When the video refers to pensions, add an old person with a stick.)
8. When the video mentions joint ownership, put every assets in a circle, and add a vertical dashed line through all the separate assets.

Income Inequality: Let us now focus on income inequality. How can we measure income inequality?

Imagine that society is represented by 10 people, ordered from the lowest to the highest earner. Thus, the person on the right [make the last one red and write highest earner below] represents the 10% highest earners. Now, let us represent the total income that everyone receives in society by a pie [move the ten people at the top of the screen, and display a pie in the middle of the screen]. We can measure inequality by looking at the share of the pie that goes to the highest earners. In a perfectly equal society, the highest earner would get exactly 10% of the pie [represent that dividing the pie in 10 equal parts with a person next to each slice on the outside of the circle (with their feet on the circumference). Slider at the bottom as in the previous video]. As inequality increases, the highest earner gets a higher share of the pie [represent that with making the richest person and slice red, increasing that slice, with the share remaining for the 9 other people shrinking and no longer divided in 9 slices. Increase the slider at the bottom.]. Please now use the slider to answer the following question about income inequality in the Netherlands.

Wealth Inequality: Let us now focus on wealth inequality. How can we measure wealth inequality?

Imagine that society is represented by 10 people, ordered from the lowest to the highest wealth [show ten blue people next to each other]. Thus, the person on the right [make the last one red and write wealthiest below] represents the 10% with highest wealth. Now, let us represent the total wealth in society by a pie [move the ten people at the top of the screen, and display a pie in the middle of the screen]. We can measure inequality by looking at the share of the pie that is owned by the wealthiest. In a perfectly equal society, the wealthiest would get exactly 10% of the pie [represent that dividing the pie in 10 equal parts with a person next to each slice on the outside of the circle (with their feet on the circumference). Slider at the bottom as in the previous video]. As inequality increases, the wealthiest own a higher share of the pie [represent

that with making the richest person and slice red, increasing that slice, with the share remaining for the 9 other people shrinking and no longer divided in 9 slices. Increase the slider at the bottom.].

Please now use the slider to answer the following question about wealth inequality in the Netherlands.

Income and wealth inequality: Let us now focus on income and wealth inequality.

How can we measure inequality?

Imagine that society is represented by 10 people, ordered from the poorest to the richest in terms of income or wealth [show ten blue people next to each other]. Thus, the person on the right [make the last one red and write richest below] represents the 10% with the highest income or wealth. Now, let us represent the total income or wealth in society by a pie [move the ten people at the top of the screen, and display a pie in the middle of the screen]. We measure inequality by looking at the share of the total income or wealth that goes to the richest. In a perfectly equal society, the richest would get exactly 10% of the pie [represent that dividing the pie in 10 equal parts with a person next to each slice on the outside of the circle (with their feet on the circumference). Slider at the bottom as in the previous video]. As inequality increases, the richest gets a higher share of the pie [represent that with making the richest person and slice red, increasing that slice, with the share remaining for the 9 other people shrinking and no longer divided in 9 slices. Increase the slider at the bottom.].

Please now use the slider to answer the following question about income and wealth inequality in the Netherlands.